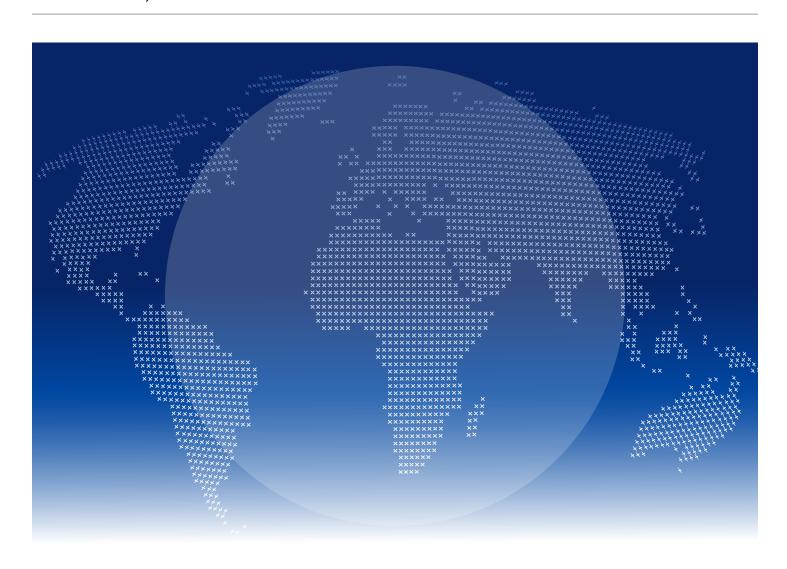


# The Global Competitiveness Report 2017–2018

Klaus Schwab, World Economic Forum





**Insight Report** 

# The Global Competitiveness Report 2017–2018

Professor Klaus Schwab
World Economic Forum
Editor

Professor Xavier Sala-i-Martín
Columbia University

Chief Advisor of The Global Competitiveness Report

The Global Competitiveness Report 2017–2018 is published by the World Economic Forum within the framework of the System Initiative on Shaping the Future of Economic Progress.

#### Professor Klaus Schwab

Executive Chairman

#### Professor Xavier Sala-i-Martín

Chief Advisor of The Global Competitiveness Report

#### **Richard Samans**

Head of Global Agenda, Member of the Managing Board

## THE SYSTEM INITIATIVE ON SHAPING THE FUTURE OF ECONOMIC PROGRESS

Margareta Drzeniek Hanouz, Head of the Future of Economic Progress System Initiative

Silja Baller, Practice Lead, Digital Economy and Innovation

Markus Burke, Project Specialist

Aengus Collins, Head, Content Strategy

Gemma Corrigan, Practice Lead, Inclusive Growth

Jonathan Eckart, Project Specialist, Inclusive Business Strategies

Roberto Crotti, Practice Lead, Competitiveness Research

Attilio Di Battista, Practice Lead, Trade and Competitiveness

Thierry Geiger, Head of Research and Regional Impact

Daniel Gómez Gaviria, Lead, Competitiveness Research

Liana Melchenko, Acting Head of Partnerships

Ciara Porawski, Head of Partnerships

Katherine Shaw, Project Specialist

Jessica Toscani, Project Specialist

Jean-Francois Trinh Tan, Quantitative Analyst,

Competitiveness Research

Stéphanie Verin, Community Specialist

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## **Preface**

#### **RICHARD SAMANS**

Head of Global Agenda, Member of the Managing Board

The Global Competitiveness Report 2017–2018 comes out at a time when the global economy has started to show signs of robust recovery but growth continues to be well below historic trends. Governments, businesses, and individuals are experiencing high levels of uncertainty as technology and geopolitical forces reshape the liberal economic and political order that has underpinned international relations and economic policy for the past 25 years. In this context, it remains critically important to monitor closely the factors that determine economic growth, which enables countries to offer more equal opportunities and higher living standards.

The World Economic Forum, the international organization for public-private collaboration, seeks to provide guidance, inform future-oriented solutions, and shed light on trade-offs. Our flagship report, presenting the results of the Global Competitiveness Index, offers impartial information that allows leaders from the public and private sectors to better understand the main drivers of growth. This year it includes the usual 12 pillars of competitiveness, scores and rankings for close to 140 countries, and comparable time series.

Consolidating the current economic recovery will require better diagnosis of the bottlenecks to inclusive growth in both advanced and emerging economies; it will also require solutions that are more creative than any we have seen so far. In many advanced economies the value of economic growth for society has come into question as a result of slow growth, increasing inequality, the challenges of technological change, and the challenges of globalization—including those related to trade in goods, services, data, and the movement of people and capital. In emerging economies, record decreases in poverty and a growing middle class have fueled higher aspirations and demands for better public goods; these demands are now clashing with slower growth and tightening government budgets.

In light of these challenges, this Report identifies insights from the 12 pillars that are particularly relevant to growth and development in the context of the Fourth Industrial Revolution. It assesses factors that contribute not only to productivity but also to other societal goals, such as inclusion, mobility, and sustainability.

We invite policymakers, business leaders, civil society leaders, young entrepreneurs, and the public at large to consult the performance of their countries in the Global Competitiveness Index and, together, identify the main challenges and barriers to growth facing their economies. Beyond the rankings, we invite all stakeholders to analyze the evolution of each indicator, each concept covered, and each pillar reported, identifying areas of improvement and areas where economies are lagging. Only through benchmarking and monitoring can public-private collaboration work to design and implement more forward-looking policies that balance market, state, and community to make economies more competitive, productive, and prosperous.

As well as the usual thought leadership of Professor Xavier Sala-i-Martín, The Global Competitiveness Report 2017–2018 has benefited from the dedication and collaboration of 160 Partner Institutes worldwide. We would like to convey our appreciation to all the business executives who responded to our Executive Opinion Survey, one of the unique inputs to the Index. Appreciation also goes to Professor Klaus Schwab, the World Economic Forum's Executive Chairman, who developed the original concept back in 1979; Margareta Drzeniek Hanouz, Head of the Future of Economic Progress System Initiative; and team members Silja Baller, Aengus Collins, Roberto Crotti, Attilio Di Battista, Thierry Geiger, Daniel Gómez Gaviria, Hassen Naas, Jean Francois Trinh, and Stéphanie Verin.

## Introduction

As we approach the 10th anniversary of the global financial crisis, the world economy is showing encouraging signs of recovery, with GDP growth accelerating to 3.5 percent in 2017. Despite this positive development, leaders are facing major predicaments when it comes to economic policy. Uneven distribution of the benefits of economic progress, generational divides, rising income inequality in advanced economies, and increasing environmental degradation have heightened the sense that the economic policies of past years have not served citizens or society well. Coupled with growth rates that remain below historical levels, these quandaries put many prevalent models of economic growth and related policies into question. Major technological disruption and the new fault lines emerging in the global economic and political order add further uncertainty about the types of policies that will make economies future-proof. Taken together, all of these factors are challenging decision makers to find new approaches and policies to advance economic progress.

The emerging consensus is that economic growth once again needs to focus more on human well-being. Such human-centric economic progress is multidimensional by nature—it is broad based by benefitting the vast majority of people, environmentally sustainable, and equitable in terms of creating opportunities for all and not disadvantaging future generations. In this new context, competitiveness remains an important contribution to the broader goal of human-centric economic progress by creating the resources needed for increased well-being, including better education, health, and security, and higher per capita income.

The Global Competitiveness Index (GCI) tracks the performance of close to 140 countries on 12 pillars of competitiveness. It assesses the factors and institutions identified by empirical and theoretical research as determining improvements in productivity, which in turn is the main determinant of long-term growth and an essential factor in economic growth and prosperity. The Global Competitiveness Report hence seeks to help decision makers understand the complex and multifaceted nature of the development challenge;

to design better policies, based on public-private collaboration; and to take action to restore confidence in the possibilities of continued economic progress.

Improving the determinants of competitiveness, as identified in the 12 pillars of the GCI, requires the coordinated action of the state, the business community, and civil society. All societal actors need to be engaged to make progress on all factors of competitiveness in parallel, which is necessary to achieve long-lasting results. This year the GCI points to three main challenges and lessons that are relevant for economic progress, public-private collaboration, and policy action: first, financial vulnerabilities pose a threat to competitiveness and to economies' ability to finance innovation and technological adoption; second, emerging economies are becoming better at innovation but more can be done to spread the benefits; third, labor market flexibility and worker protection are needed for competitiveness and shared prosperity in the Fourth Industrial Revolution.

The Report starts by laying out the current landscape on economic progress and key future challenges in Chapter 1, followed by deep dives into selected topics based on the results of the GCI in Chapter 2. The Report then analyses the results of the GCI for the world's geographic regions and selected countries in Chapter 3. Finally, the Report presents the Economy Profiles with detailed scores and rankings for all economies covered in all indicators, subpillars, pillars, and the overall GCI; it also provides comparisons between relevant reference groups. The appendices present detailed methodological notes and the World Economic Forum's latest thinking on new concepts and measurements of competitiveness.

# The Global Competitiveness Index 2017–2018 Rankings

Covering 137 economies, the Global Competitiveness Index 2017–2018 measures national competitiveness—defined as the set of institutions, policies and factors that determine the level of productivity.

Economy	Score <sup>1</sup>	Prev. <sup>2</sup>	Trend <sup>3</sup>	Economy	Score <sup>1</sup>	Prev. <sup>2</sup>	Trend <sup>3</sup>		Argontina	Score <sup>1</sup>	Prev. <sup>2</sup>	Т
Switzerland	5.86	1		Brunei Darussalam	4.52	58		92	Argentina	3.95	104	
United States	5.85	3		Costa Rica	4.50	54		93	Nicaragua	3.95	103	
Singapore	5.71	2		Slovenia	4.48	56		94	Cambodia	3.93	89	
Netherlands	5.66	4		Bulgaria	4.46	50		95	Tunisia	3.93	95	
Germany	5.65	5		Panama	4.44	42		96	Honduras	3.92	88	
Hong Kong SAR	5.53	9		Mexico	4.44	51		97	Ecuador	3.91	91	
Sweden	5.52	6		52 Kuwait	4.43	38		98	Lao PDR	3.91	93	
United Kingdom	5.51	7	***************************************	Turkey	4.42	55		99	Bangladesh	3.91	106	
Japan	5.49	8		Latvia	4.40	49	~	100	Egypt	3.90	115	
Finland	5.49	10		55 Vietnam	4.36	60		101	Mongolia	3.90	102	-
Norway	5.40	11		56 Philippines	4.35	57		102	Kyrgyz Republic	3.90	111	
Denmark	5.39	12		57 Kazakhstan	4.35	53		103	Bosnia and Herzegovina	3.87	107	
New Zealand	5.37	13		58 Rwanda	4.35	52		104	Dominican Republic	3.87	92	
Canada	5.35	15		59 Slovak Republic	4.33	65		105	Lebanon	3.84	101	
Taiwan, China	5.33	14		60 Hungary	4.33	69		106	Senegal	3.81	112	
Israel	5.31	24	***************************************	61 South Africa	4.32	47		107	Seychelles	3.80	n/a	
United Arab Emirates	5.30	16		62 Oman	4.31	66		108	Ethiopia	3.78	109	
Austria	5.25	19		Botswana	4.30	64	~	109	El Salvador	3.77	105	
Luxembourg	5.23	20		64 Cyprus	4.30	83		110	Cape Verde	3.76	110	
Belgium	5.23	17		Jordan	4.30	63	**********	111	Ghana	3.72	114	
Australia	5.19	22		Colombia	4.29	61		112	Paraguay	3.71	117	
		21				59		113	Tanzania		116	
France	5.18				4.28			114		3.71		
Malaysia	5.17	25		Romania	4.28	62			Uganda	3.70	113	
Ireland	5.16	23		lran, Islamic Rep.	4.27	76		115	Pakistan	3.67	122	
Qatar	5.11	18		Jamaica	4.25	75		116	Cameroon	3.65	119	
Korea, Rep.	5.07	26		Morocco	4.24	70	**********	117	Gambia, The	3.61	123	
China	5.00	28		72 Peru	4.22	67		118	Zambia	3.52	118	
Iceland	4.99	27		Armenia	4.19	79		119	Guinea	3.47	n/a	
Estonia	4.85	30		74 Croatia	4.19	74		120	Benin	3.47	124	
Saudi Arabia	4.83	29	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	75 Albania	4.18	80		121	Madagascar	3.40	128	
Czech Republic	4.77	31		Uruguay	4.15	73		122	Swaziland	3.35	n/a	
Thailand	4.72	34	******	77 Montenegro	4.15	82	-	123	Mali	3.33	125	
Chile	4.71	33		78 Serbia	4.14	90		124	Zimbabwe	3.32	126	
Spain	4.70	32		79 Tajikistan	4.14	77		125	Nigeria	3.30	127	
Azerbaijan	4.69	37		Brazil	4.14	81	-	126	Congo, Democratic Rep.	3.27	129	
Indonesia	4.68	41		81 Ukraine	4.11	85		127	Venezuela	3.23	130	-
Malta	4.65	40		82 Bhutan	4.10	97		128	Haiti	3.22	n/a	
Russian Federation	4.64	43	***********	Trinidad and Tobago	4.09	94		129	Burundi	3.21	135	
Poland	4.59	36		84 Guatemala	4.08	78		130	Sierra Leone	3.20	132	
India	4.59	39		Sri Lanka	4.08	71	~~~	131	Lesotho	3.20	120	
Lithuania	4.58	35	************	Algeria	4.07	87		132	Malawi	3.11	134	
Portugal	4.57	46			4.02			133		3.09	137	
-	*					86				***************************************		
Italy	4.54	44		Nepal	4.02	98		134	Liberia	3.08	131	
Bahrain	4.54	48		Moldova	3.99	100		135	Chad	2.99	136	
Mauritius	4.52	45		90 Namibia	3.99	84		136	Mozambique	2.89	133	
				91 Kenya	3.98	96	*****	137	Yemen	2.87	138	
East Asia and			Eu	ope and Lat			Middle Ea					

Note: The Global Competitiveness Index captures the determinants of long-term growth. Recent developments are reflected only in-so-far as they have an impact on data measuring these determinants. Results should be interpreted in this context.

<sup>1</sup> Scale ranges from 1 to 7.

<sup>2 2016-2017</sup> rank out of 138 economies.

<sup>3</sup> Evolution in percentile rank since 2007 or earliest edition available.

#### **CHAPTER 1**

# The Quest for More and Better Growth

The Global Competitiveness Index has been measuring the factors that drive long-term growth and prosperity for over four decades, helping policymakers identify challenges to be addressed and strengths to build on when designing the economic growth strategies for their countries. And while the notion of competitiveness and the economic environment in which economic policy and investment decisions are made have continuously evolved, the past decade has seen a buildup of significant shifts that are fundamentally transforming the context in which policy decisions to foster economic growth are made.

After a long period of low growth following the global financial crisis, the world economy appears to have picked up speed.1 This is welcome news. Yet despite this gradual improvement, policymakers in many countries are concerned about the prospects for longterm economic development. This is partly because the current expansion appears to be cyclical, bolstered by exceptionally low interest rates rather than by the fundamental drivers of structural growth. Productivity improvements appear to remain sluggish and are not expected to return to the levels experienced in past decades.

In a related challenge, prevailing growth strategies and models of economic progress are increasingly being called into question. In advanced economies, distributional questions have moved to the foreground, occasionally with political consequences. In emerging markets, such questioning could be fueled by the unfulfilled aspirations of a broadening middle class.

However, there is widespread agreement that economic growth is important for human development and well-being. Growth creates the resources needed for better education, health, and security, and for higher incomes. Although growth does not guarantee human development, there are no examples of countries improving the welfare of their populations without growth.2 Often the deep web of connections that link growth to broader societal values remains unspoken. Instead of focusing on welfare, the measurement of economic progress and consequently economic analysis and policy are dominated by headline GDP numbers, encouraging the confusion of means and ends. Yet economic growth should not be an end in itself. It should contribute to human welfare, be rooted in political legitimacy, and be defined and measured based on a multidimensional notion of economic progress that includes values such as:3

- · a broad-based distribution of economic gains,
- environmental sustainability, and
- intergenerational equity for young people and future generations.

#### Box 1: The Global Future Council on Economic Progress

The evolution of the global economy has been largely motivated and justified by its enormous contribution to economic growth over the past few decades. To the extent that broad-based social inclusion was given any consideration in that process, it was primarily limited to an ex-post re-distribution of any economic gains. With the evolving global political context and the advent of the Fourth Industrial Revolution, that approach will need to change not only to make globalization work for more people than it has benefited to date, but also to ensure that globalization has a large enough constituency going forward to allow it to continue driving economic growth in the first place. We must shift the economic policy debate and interventions to unlock productivity and deliver broad-based prosperity by simultaneously solving for economic growth and social inclusion before the fact, not after it. This must be the case even if it results in a substantially modified form of globalization with potentially dampened growth but more buyin and inclusion. In order to succeed, we must also establish modern venues and means for deliberating about the impacts of future policy efforts that include a fuller set of stakeholders than currently play a role in driving change.

To that end, the World Economic Forum's Global Future Council on Economic Progress has identified and is exploring four interrelated themes:

- Making globalization more inclusive, which includes proposals to improve skilling, re-skilling, and dealing with job displacements; taxation, social protection, and addressing inequality; financial markets that work for all; competition and avoiding capture; and fostering a new era of international cooperation.
- Unleashing productivity and economic potential in the context of the Fourth Industrial Revolution, which is fundamentally changing the constructs and limits of productivity growth, and raising questions about the future potential for improved well-being and how to best capture and share the rewards of new efficiencies, especially in light of the evolving nature of employment and jobs.
- Promoting and achieving multidimensional inclusion, notably by developing a multidimensional tool that is informed by tested aggregate-level indices of inclusive growth and well-being and that can be used to evaluate the degree to which countries and communities are inclusive at the household level.
- Evolving communications, connectivity, and organizations to incorporate new developments in social media, counteracting self-reinforcing echo chambers and the increasing polarization of ideas, thus expanding the set of channels and messages that resonate with people whose lives are affected in order to improve broad-based engagement and ensure buy-in for sound policy choices.

Contributed by Diana Farrell, Council Co-Chair.

Delivering growth is difficult at the best of times, and it is complicated now by various tensions and transformations that characterize the contemporary world (Box 1). Four of these stand out and are likely to shape economic discourse in the year ahead: structural headwinds to growth, the disruptions of rapid technological change, the need for greater economic inclusiveness, and uncertainties about the future evolution of globalization.

## STRUCTURAL HEADWINDS AND MEASUREMENT **CHALLENGES**

Ten years ago, the global financial crisis interrupted a period of sustained economic growth dating back to the 1960s. Since then, despite unorthodox monetary policy and fiscal stimulus packages, advanced economies have experienced prolonged comparatively sluggish growth.4 In emerging markets, the impact of the global financial crisis was lessened in part by interest rate differentials, with advanced economies fueling capital inflows in the form of foreign direct investment, the commodity superboom, and-related to this-the rapid growth of China.<sup>5</sup> Only recently have advanced and emerging economies begun to show signs of recovery.6

We are still in the process of understanding the causes of change in the way economies have performed over the last decade. There are demand-side explanations, focusing on the ways that high savings and low investment tend to depress demand and, hence, growth. Investment has been below historical levels in recent years: between 2008 and 2015, for example, Europe experienced an average annual decline of €260

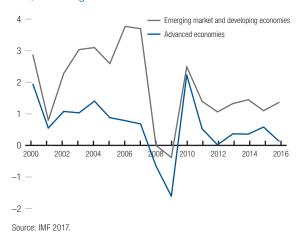
billion in real terms in business, residential, and public investment. In the United States, net business investment was down to 2.8 percent in 2014 from an average of 4.8 percent between 1960 and 2000.7

Advanced and emerging markets alike appear to have also experienced a slowdown in productivity, despite significant technological progress.8 Figure 1 illustrates how total factor productivity has declined on average in both advanced economies and emerging markets following the financial crisis. Many possible explanations for the productivity slowdown have been advanced. Some argue that today's technologies do not have the same productivity-enhancing potential as inventions of the past;9 or, as discussed in the productivity paradox literature, they could take more time to impact productivity and show up in statistics.<sup>10</sup> Other explanations include the long-term effects of deskilling, particularly among younger workers, in countries where the slowdown led to sustained unemployment; inadequate investment, due to high levels of indebtedness and near-zero interest rates encouraging the misallocation of capital;11 and policymakers relying on exceptionally accommodative monetary policy and shying away from productivity-enhancing reforms.

An additional explanation behind the productivity slowdown is that the traditional GDP measurement fails to account for much of the value created in recent years. Recently the share of goods and services offered at no direct cost to the consumer is increasing. For example, web-based search engines or online information or the value created through social media channels are not priced at the value they create for the consumer, but at the value of advertisements they generate for the companies that run these services. Moreover, as technological progress accelerates, we fail to properly account for the embedded improvements in the quality of products—such as smartphones. 12 Finally, services are inherently more difficult to measure than physical goods, and the share of services in the economy has been increasing. Given that total factor productivity is calculated based on GDP data, the resulting measurement errors could lead to an underestimation of productivity growth. With these several sources of measurement uncertainty, the error in productivity measures could be substantial.

Putting growth back on a sustainable path will require reforms to build up human and physical capital and leverage new technologies. One possible contributor to recent declines in aggregate productivity has been a reallocation of resources toward less-productive sectors; to reverse this trend, policymakers will need to remove regulatory rigidities that hinder structural adjustments.<sup>13</sup> Recent evidence also shows a large productivity dispersion across firms within industries, including

Figure 1: Total Factor Productivity 2000-2016 PPP, GDP-weighted



between frontier technologies and older technologies; policies and institutions that help firms transition toward higher-productivity areas will also generate growth.<sup>14</sup>

#### INNOVATION CHALLENGES

The pace and disruptiveness of technological change are creating unprecedented opportunities and challenges that are set to be amplified by the convergence of digital, physical, and biological technologies that are characterizing the emerging Fourth Industrial Revolution.<sup>15</sup>

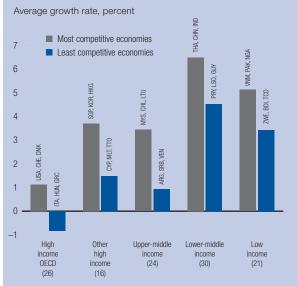
These emerging technologies have immense potential to be a source of growth, but their future evolution is uncertain. A key challenge is how to unlock their potential in a way that benefits society as a whole given that they can profoundly reshape the national and global distributions of income and opportunities and lead to significant structural transformations. The effects of future technologies are unknown, but policy challenges related to current technologies illustrate the magnitude of the shifts. Job losses are expected as technology transforms manufacturing and services in the coming years, raising questions about how quickly new jobs will be created and about the future of economic development models based on exporting labor-intensive manufacturing products. At the same time, technological advances are creating significant value for consumers, more than is currently reflected in national statistics.<sup>16</sup>

The technology frontier is expanding quickly, with recent breakthroughs in self-learning artificial intelligence fueled by the rising amounts of data being generated by mobile phones and sensors on machinery and equipment.<sup>17</sup> Small and remote players can disrupt the status quo, while ever-tighter interconnectedness

## **Box 2: Global Convergence and Competitiveness**

The Global Competitiveness Index (GCI) aims to measure factors that determine productivity, because this has been found to be the main determinant of long-term growth. But does strong performance on the GCI in fact predict future growth? Comparing the results of the GCI in 2007 with economic growth over the following 10 years suggests that it does. Within each income group, the three most competitive economies in the 2007 GCI have since grown significantly more strongly than the three least competitive countries. In the case of high-income economies, the three least competitive economies actually had negative growth (Figure 1).

Figure 1: Competitiveness and 10-year average growth rates, 2007-2016



Source: Calculations based on the results of the Global Competitiveness Index 2007-2008 through 2016-2017.

Note: The three-letter economy codes refer to the ISO Country Codes. These are: ARG = Argentina; BDI = Burundi; CHE = Switzerland; CHL = Chile; CHN = China; CYP = Cyprus; DNK = Denmark; GRC = Greece; GUY = Guyana; HKG = Hong Kong; HUN = Hungary; IND = India; ITA = Italy; KOR = Republic of Korea; LSO = Lesotho; LTU = Lithuania; MLT = Malta; MYS = Malaysia; NGA = Nigeria; PAK = Pakistan; PRY = Paraguay; SGP = Singapore; SRB = Serbia; TCD = Chad; THA = Thailand; TTO = Trinidad and Tobago; USA = the United States; VEN = Venezuela; VNM = Vietnam: 7WF = 7imbabwe.

The comparison also shows evidence of convergence, with lower-middle and low-income economies growing at faster rates than high-income and upper-middle-income economies. The most competitive countries in the lower-middle and low-income groups are catching up more quickly, showing the importance of a comprehensive competitiveness agenda for reducing between-country inequality.

is creating increasingly complex systems. As a result, technology is making the political and economic environment more asymmetric and uncertain.<sup>18</sup> It is difficult for policymakers to predict future developments or work out how best to shape them.

One emerging challenge that will require policymakers' attention is the growing concentration in some market structures as a result of network effects.<sup>19</sup> This will likely have macroeconomic impacts on productivity, growth, and inequality.<sup>20</sup> Economic concentration is also linked to political power and influence, creating the risk that policies will be skewed in favor of incumbents. Policymakers will need to renew their focus on antitrust regulations—and increase their understanding of the impact of new technologies and business models on costs, production functions, and industry structures—to preserve dynamic markets, broad-based participation, and the power of creative destruction.21

#### **DISRUPTIVE INEQUALITIES**

There are already clear signs that technology is contributing to labor market polarization, with a drop in the number of middle-skilled jobs and growth in both low- and high-skilled jobs.<sup>22</sup> In many countries, distributional considerations have emerged as one of the most pressing challenges for policymaking on competitiveness and growth.

Globally, inequality has decreased over recent decades, because the growth of the very poor and highly populated economies of Asia has been substantially larger than the growth rates of the advanced economies, bringing about what economists have dubbed "the great convergence" (Box 2). Within countries, however, inequality has on average increased.<sup>23</sup> In many advanced economies, income inequality has widened or plateaued at a high level in the last two decades—often with large regional discrepancies, for example between rural and urban areas—as richer households pull away from their middle- and lower-income peers. The trend is more mixed for emerging economies, though absolute levels of inequality remain much higher there than in advanced countries. In countries where data allow comparisons, wealth is significantly more unequally distributed than income.<sup>24</sup> Figure 2 shows the level of inequality and evolution over past years for selected economies.

The combination of stagnating economies and rising income inequality has led to considerable political disaffection and tension around the world. In some countries this has begun to undermine the smooth functioning of political institutions and processes, complicating the formulation and implementation of policy. In advanced economies, frustration has focused on the relative gains made by those at the top of the

60 — ■ Latest year available minus 10 years (*t*–10) Latest year available (t) 50 30 Russian Federation Germany† Australia† Turkey<sup>‡</sup> Brazil<sup>‡</sup> United Japan† Canada<sup>‡</sup> Mexico<sup>†</sup> United

Ren.§

Africa<sup>\*</sup>

States<sup>‡</sup>

Figure 2: Income inequality and its evolution over past decade in selected countries Gini Index, Income inequality = 100

Source: SWIID (Standardized World Income Inequality Database), available at http://fsolt.org/swiid/. Note: GINI coefficients are for the latest year available over the previous decade: \*2002-2012; †2004-2014; ‡2005-2015, §2006-2016.

domestic wealth and income distributions, as well as those made by foreign workers in a globalized world. This has prepared the ground for populist movements and politicians on both the left and right of the political spectrum, who have proposed a return to more isolationist and interventionist policies.<sup>25</sup>

Kinadom<sup>§</sup>

How to address income inequality forms an integral part of the World Economic Forum's economic progress agenda. The Forum's Inclusive Growth and Development Report proposes a set of policies and institutional features to ensure a more inclusive outcome of the growth process and a multidimensional measure of economic progress, the Inclusive Development Index (see Box 3 on pages 6-7).<sup>26</sup>

#### TRADE PRESSURES

Trade and investment flows have been important drivers of economic growth in the past, but the relationship between globalization and growth remains imperfectly understood. Policies that revive growth will require a better understanding of the interactions between trade liberalization, factor liberalization, technological change, and domestic policy frameworks across dimensions of economic progress such as employment, income, inequality, health, and education.

This is important because growth in international trade has not recovered to pre-crisis levels—after falling close to 15 percent in 2009 it is currently growing more slowly than global GDP. Global investment has also

stagnated since the crisis.<sup>27</sup> Uncertainty about the future evolution of the global economic order is likely to continue to weigh on international trade and investment flows. Many countries have experienced a popular backlash against further liberalization as a result of concerns about the negative impact of globalization on living standards, particularly in advanced economies, and claims that it adversely affects fundamental socio-political values such as national identity and sovereignty.<sup>28</sup> New forms of protectionism are emerging, with an increase in the use of laws, regulations, standards, border controls, and other forms of non-tariff protection.<sup>29</sup>

Two other factors have been mooted as additional contributors to the post-crisis slowdown in trade that may change influence economic policy decisions. One hypothesis is that there are now diminishing returns from dividing production into global value chains spanning numerous jurisdictions, which has been a key driver of trade in recent decades. Technological developments such as 3D printing may further reduce trade in the future by moving the production of physical goods closer to consumers. Another hypothesis is a change in consumer preferences, because younger people strive less toward owning internationally traded physical assets and prefer to consume locally produced services such as leisure.

#### LOOKING TO THE FUTURE

Rising to the challenge of sustainable and equitable economic progress will require ingenuity and application from diverse stakeholders across the world as well as

#### **Box 3: Inclusive Development Index**

The Inclusive Development Index (IDI) was introduced by the World Economic Forum in 2017. It attempts to benchmark the socioeconomic development of countries in a way that provides a more nuanced vision for inclusive economic progress.

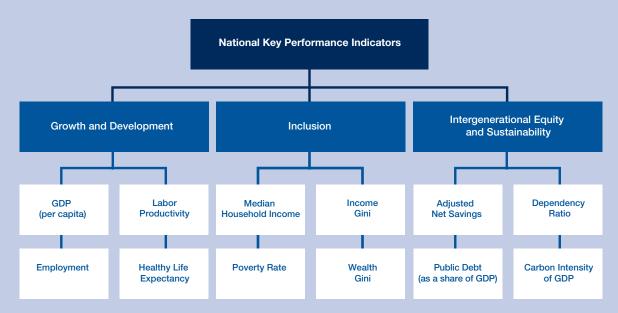
The IDI ranks countries based on 12 key performance indicators of inclusive development (Figure 1). Providing a more multidimensional measure of economic development than GDP growth alone, the IDI has three pillars: Growth and Development, including GDP per capita growth, labor force participation and productivity, and healthy life expectancy; Inclusion, including median household income, poverty, and two inequality measures; and Intergenerational Equity and Sustainability, including adjusted net savings (which adjusts for factors such as natural capital depletion and human capital investment), demographic dependency ratio, public debt, and carbon intensity.

When some economies score significantly better on the IDI than others with higher GDP per capita, this suggests they have done a relatively good job of making their growth processes more inclusive. Examples include economies at very different stages of economic development, such as Cambodia, the Czech Republic, New Zealand, the Republic of Korea, and Vietnam. By contrast, when economies rank significantly lower on the IDI than peers with lower GDP per capita, it indicates that their growth has not translated as well into social inclusion; examples include Brazil, Ireland, Japan, Mexico, Nigeria, South Africa, and the United States.

IDI data can be compared over time to show whether an economy is becoming more or less inclusive (Figure 2). Of the 103 economies for which data are available, 51 percent saw their scores decline over the last five years. This attests to the legitimacy of public concern about translating economic growth into broad social progress and underlines

(Cont'd.)

Figure 1: National Key Performance Indicators for Inclusive Development



Source: World Economic Forum 2017.

#### Box 3: Inclusive Development Index (cont'd.)

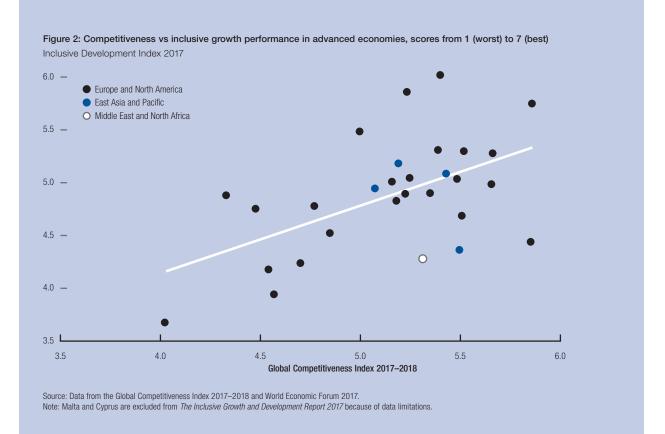
the challenge facing policymakers. In 42 percent of countries, the IDI overall score decreased even as GDP per capita increased. In three-quarters of these cases, wealth inequality was a chief culprit; across all economies, it rose 6.3 percent on average during this period.

Efficient markets and macroeconomic stability are essential for economic growth. But how well growth benefits society as a whole depends on the framework of rules, incentives, and institutional capacities that shape the quality and equity of human capital formation: level and patience of real-economy investment, pace and breadth of innovation, effectiveness and flexibility of worker protections, coverage and adequacy of social insurance systems, quality and breadth of access to infrastructure and basic services, probity of business and political ethics, and breadth and depth of household asset-building.

Because many of these factors promote socioeconomic inclusion as well as growth and competitiveness, there is no

inherent trade-off between the two: it is possible to be proequity and pro-growth at the same time. Governments need to recognize this, and rebalance policy priorities accordingly, if they are to respond more effectively to decelerating growth and rising inequality.

The social frustrations increasingly being expressed, through the ballot box and on the streets, have an essential validity—the implicit income distribution system within many countries is severely underperforming or relatively underdeveloped. This is due to a lack of attention rather than an ironclad law of capitalism. Inequality is largely an endogenous, not exogenous, challenge for policymakers; addressing it with urgency needs to be prioritized to sustain public confidence in the capacity of technological progress and international economic integration to support rising living standards for all.



a truly collaborative approach. The competitiveness agenda that lies at the heart of the Global Competitiveness Index (GCI) is an important starting point, and not only because long-term productivity and growth generates the resources for wider societal goals. The competitiveness agenda, as part of the wider economic progress agenda, has intrinsic as well as instrumental value for human development and wellbeing: for example, health and education are among the 12 pillars of the GCI.

The following two chapters highlight the results of the 2017-2018 GCI, as well as key trends from a thematic and geographic perspective. Chapter 2 looks back over the last 10 years to identify the key legacies of the global financial crisis, while Chapter 3 analyses GCI results by region and in selected economies.

#### **NOTES**

- 1 IMF 2017.
- See Baumol 1986 and updates of The Maddison Project Database at http://www.ggdc.net/maddison/maddison-project/home.htm.
- These dimensions are captured in the Inclusive Development Index, presented in Box 3.
- 4 For a comparison of recent recessions in the United States, epicentre of the Great Recession of 2007-09, see Federal Reserve Bank of Minneapolis 2017. An explanation of the spread of the Great Recession can be found in Bacchetta and Eric van Wincoop
- 5 UNCTAD 2009.
- 6 IMF 2017.
- 7 McKinsey Global Institute 2016.
- 8 IMF 2017.
- 9 Gordon 2014.
- 10 McAfee and Brynjolfsson 2017.
- 11 IMF 2017.
- 12 Boskin et al. 1996.
- 13 McMillan and Rodrik 2011.
- 14 Andrews, Criscuolo, and Gal 2016.
- 15 Schwab 2016.
- 16 For a new measurement approach using Massive Online Choice Experiments, see Brynjolfsson, Eggers, and Gannameneni 2017, referenced in the Economist 2017b. See also Boskin et al. 1996.
- 17 McAfee and Brynjolfsson 2017; Ito and Howe 2016.
- 18 Ito and Howe 2016.
- See De Loecker and Jan Eeckhout 2017, cited in Schechter 2017. See also Chen 2016.
- 20 De Loecker and Eeckhout 2017.
- 21 The Economist 2017a.
- 22 Darvas and Wolff 2016; OECD 2017.
- 23 Sala-i-Martin 2006; Lakner and Milanovic 2016.
- 24 OECD 2017.
- 25 For an analysis of the sources of populism, see Rodrik 2017.
- 26 World Economic Forum 2017.
- 27 Hoekman, ed. 2015.

- 28 For a recent review of the link between trade and inequality see Helpman et al. 2017.
- 29 Baldwin and Evenett, eds. 2009.

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#### **CHAPTER 2**

# **Key Findings of the Global** Competitiveness Index 2017-2018

The Global Competitiveness Report has been measuring competitiveness for over four decades. This year also marks the 10th anniversary of the global financial crisis and comes at a time of increased uncertainty and rapid transformations for the global economy. With slow and uncertain growth recoveries, the end of the commodity boom, shifting geopolitics, global imbalances, and increasing inequality in some economies, understanding the factors that determine growth continues to be a pressing global issue.

In this chapter we present the methodology, the rankings, and the three main findings of the Global Competitiveness Index 2017–2018.

#### **METHODOLOGY**

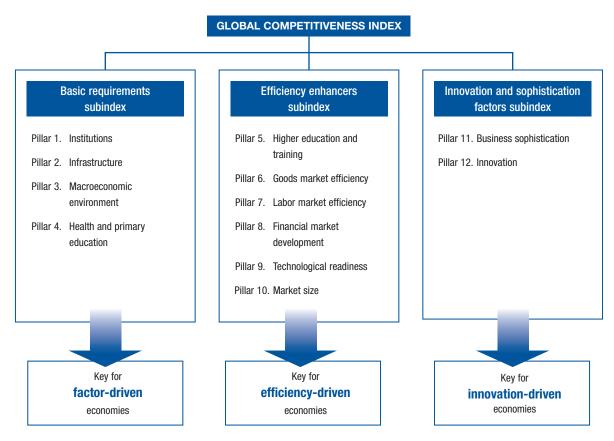
We define *competitiveness* as the set of institutions, policies, and factors that determine the level of productivity of an economy, which in turn sets the level of prosperity that the economy can achieve.

Building on Klaus Schwab's original work of 1979, the World Economic Forum has used the Global Competitiveness Index (GCI) developed by Xavier Salai-Martín in collaboration with the Forum since 2005. The GCI combines 114 indicators that capture concepts that matter for productivity and long-term prosperity (described in greater detail in Appendix A).

These indicators are grouped into 12 pillars (Figure 1): institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, market size, business sophistication, and innovation. These pillars are in turn organized into three subindexes; basic requirements. efficiency enhancers, and innovation and sophistication factors. The three subindexes are given different weights in the calculation of the overall Index, depending on each economy's stage of development, as proxied by its GDP per capita and the share of exports represented by raw materials. Appendix A presents a description of each pillar, a classification of economies by stage of development, the detailed structure of the GCI, and a description of the various steps of its computation, including normalization and aggregation.

The GCI includes statistical data from internationally recognized organizations, notably the International Monetary Fund (IMF); the World Bank; and various United Nations' specialized agencies, including the International Telecommunication Union, UNESCO, and the World Health Organization. The Index also includes indicators derived from the World Economic Forum's Executive Opinion Survey that reflect qualitative aspects of competitiveness, or for which comprehensive and comparable statistical data are not available for a sufficiently large number of economies (see Appendix C).

Figure 1: The Global Competitiveness Index framework



See Appendix A for the detailed structure of the GCI.

The Report this year covers 137 economies, based on data availability. Countries excluded because of insufficient data this year are Barbados, Bolivia, Côte d'Ivoire, Gabon, and FYR Macedonia. Reinstated countries are Guinea, Haiti, Seychelles, and Swaziland. Altogether, the combined output of the economies covered in the GCI accounts for 98 percent of world GDP.1

Table 1 presents the rankings of the GCI 2017-2018.2

#### **RESULTS OVERVIEW AND MAIN FINDINGS**

Ten years after the financial crisis, what are the most pressing issues related to the health of the global economy and its ability to provide sustained economic growth and well-being? Analysis of the Global Competitiveness Index (GCI) points to three main challenges and lessons that are relevant for economic progress, public-private collaboration, and policy action.

First, 10 years after the crisis, the financial sector remains vulnerable. GCI indicators of bank soundness have not recovered to pre-crisis levels, new sources of vulnerability have emerged-such as increasing private

debt in emerging economies and the growth of nonregulated capital markets—and governments have less bandwidth than they did 10 years ago to cope with another crisis. Maintaining a sound financial sector is not only important to prevent recessions with deep and long-lasting effects on productivity and growth, but also to sustain innovation. In fact, providing adequate funds and instruments to support the most productive and innovative ideas is essential to take advantage of the Fourth Industrial Revolution (4IR).

Second, more countries are able to innovate, but they must do more to spread the benefits. Major emerging markets such as China, India, and Indonesia are becoming centers for innovation, catching up with advanced economies. However, they would benefit from accelerating progress in increasing the readiness of their people and firms to adopt new technology, which is necessary to widely spread innovation's potential economic and societal benefits.

Third, both labor market flexibility and worker protection are needed to ensure shared prosperity in the 4IR era.

Table 1: Global Competitiveness Index 2017–2018 rankings and 2016–2017 comparisons

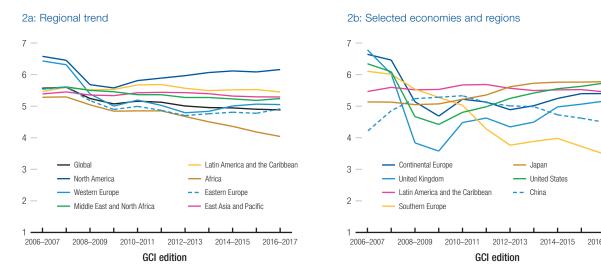
	GCI 2017	7–2018	GCI 2016	6–2017
	Rank	Score	Rank	Score
Economy	(out of 137)	(1-7)	(out of 138)	(1-7)
Switzerland	1	5.86	1	5.81
United States	2	5.85	3	5.70
Singapore	3	5.71	2	5.72
Netherlands	4	5.66	4	5.57
Germany	5	5.65	5	5.57
Hong Kong SAR	6	5.53	9	5.48
Sweden United Kingdom	7 8	5.52 5.51	6 7	5.53 5.49
Japan	9	5.49	8	5.48
Finland	10	5.49	10	5.44
Norway	11	5.40	11	5.44
Denmark	12	5.39	12	5.35
New Zealand	13	5.37	13	5.31
Canada	14	5.35	15	5.27
Taiwan, China	15	5.33	14	5.28
Israel	16	5.31	24	5.18
United Arab Emirates	17	5.30	16	5.26
Austria	18	5.25	19	5.22
Luxembourg	19	5.23	20	5.20
Belgium	20	5.23	17	5.25
Australia	21	5.19	22	5.19
France	22	5.18	21	5.20
Malaysia	23	5.17	25	5.16
Ireland	24	5.16	23	5.18
Qatar Koron Bon	25	5.11	18	5.23
Korea, Rep. China	26 27	5.07 5.00	26 28	5.03 4.95
Iceland	28		28	
Estonia	28	4.99 4.85	30	4.96 4.78
Saudi Arabia	30	4.83	29	4.76
Czech Republic	31	4.03	31	4.72
Thailand	32	4.72	34	4.64
Chile	33	4.71	33	4.64
Spain	34	4.70	32	4.68
Azerbaijan	35	4.69	37	4.55
Indonesia	36	4.68	41	4.52
Malta	37	4.65	40	4.52
Russian Federation	38	4.64	43	4.51
Poland	39	4.59	36	4.56
India	40	4.59	39	4.52
Lithuania	41	4.58	35	4.60
Portugal	42	4.57	46	4.48
Italy	43	4.54	44	4.50
Bahrain	44	4.54	48	4.47
Mauritius	45	4.52	45	4.49
Brunei Darussalam	46	4.52	58	4.35
Costa Rica	47	4.50	54	4.41
Slovenia	48	4.48	56	4.39
Bulgaria	49	4.46	50	4.44
Panama Mayina	50	4.44	42	4.51
Mexico	51 52	4.44	51	4.41
Kuwait Turkey	52	4.43 4.42	38 55	4.53 4.39
Latvia	54	4.42	49	4.45
Vietnam	55	4.40	60	4.43
Philippines	56	4.35	57	4.36
Kazakhstan	57	4.35	53	4.41
Rwanda	58	4.35	52	4.41
Slovak Republic	59	4.33	65	4.28
Hungary	60	4.33	69	4.20
South Africa	61	4.32	47	4.47
Oman	62	4.31	66	4.28
Botswana	63	4.30	64	4.29
Cyprus	64	4.30	83	4.04
Jordan	65	4.30	63	4.29
Colombia	66	4.29	61	4.30
	67	4.28	59	4.32
Georgia	- 01			
Georgia Romania	68	4.28	62	4.30

	GCI 2017	<b>-2018</b>	GCI 2016	6–2017
	Rank	Score	Rank	Score
Economy	(out of 137)	(1-7)	(out of 138)	(1–7)
Jamaica Morocco	70 71	4.25 4.24	75 70	4.13 4.20
Peru	72	4.24	67	4.23
Armenia	73	4.19	79	4.07
Croatia	74	4.19	74	4.15
Albania	75	4.18	80	4.06
Uruguay	76	4.15	73	4.17
Montenegro Serbia	77 78	4.15 4.14	82 90	4.05 3.97
Tajikistan	79	4.14	77	4.12
Brazil	80	4.14	81	4.06
Ukraine	81	4.11	85	4.00
Bhutan	82	4.10	97	3.87
Trinidad and Tobago	83	4.09	94	3.93
Guatemala	84	4.08	78	4.08
Sri Lanka Algeria	85 86	4.08 4.07	71 87	4.19 3.98
Greece	87	4.07	86	4.00
Nepal	88	4.02	98	3.87
Moldova	89	3.99	100	3.86
Namibia	90	3.99	84	4.02
Kenya	91	3.98	96	3.90
Argentina	92	3.95	104	3.81
Nicaragua Cambodia	93 94	3.95 3.93	103 89	3.81
Tunisia	95	3.93	95	3.92
Honduras	96	3.92	88	3.98
Ecuador	97	3.91	91	3.96
Lao PDR	98	3.91	93	3.93
Bangladesh	99	3.91	106	3.80
Egypt	100	3.90	115	3.67
Mongolia Kyrgyz Republic	101 102	3.90	102 111	3.84
Bosnia and Herzegovina	103	3.87	107	3.80
Dominican Republic	104	3.87	92	3.94
Lebanon	105	3.84	101	3.84
Senegal	106	3.81	112	3.74
Seychelles	107	3.80	n/a	n/a
Ethiopia	108	3.78	109	3.77
El Salvador Cape Verde	109 110	3.77 3.76	105 110	3.81
Ghana Ghana	111	3.70	110	3.68
Paraguay	112	3.71	117	3.65
Tanzania	113	3.71	116	3.67
Uganda	114	3.70	113	3.69
Pakistan	115	3.67	122	3.49
Cameroon Cambia Tha	116	3.65	119	3.58
Gambia, The Zambia	117	3.61 3.52	123 118	3.47
Guinea	118 119	3.52	n/a	3.60 n/a
Benin	120	3.47	124	3.47
Madagascar	121	3.40	128	3.33
Swaziland	122	3.35	n/a	n/a
Mali	123	3.33	125	3.46
Zimbabwe	124	3.32	126	3.41
Nigeria Congo Democratic Rep	125	3.30	127	3.39
Congo, Democratic Rep. Venezuela	126 127	3.27 3.23	129 130	3.29 3.27
Haiti	128	3.22	n/a	n/a
Burundi	129	3.21	135	3.06
Sierra Leone	130	3.20	132	3.16
Lesotho	131	3.20	120	3.57
Malawi	132	3.11	134	3.08
Mauritania Liberia	133	3.09	137	2.94
Liberia Chad	134 135	3.08 2.99	131 136	3.21 2.95
Mozambique	136	2.89	133	3.13
Yemen	137	2.87	138	2.74
	101	2.07	100	2.7 1

Source: World Economic Forum.

Note: The Global Competitiveness Index captures the determinants of long-term growth. Recent developments are reflected only in so far as they have an impact on the data measuring these determinants. The Index should be interpreted in this context. See Chapter 3, Regional Analysis and Selected Economy Highlights, on pages 21–35 for a brief analysis of the performance of selected economies and the Economy Profiles for detailed results for all economies. "n/a" (not available) indicates that the economy was not covered in the 2016-2017 edition.

Figure 2: Soundness of banks, 2006-2017



Source: Calculations based on the results of the Global Competitiveness Index 2006-2007 through 2016-2017.

As globalization and rapid technological progress continue to test the ability of labor markets to reallocate workers between tasks and occupations, the GCI shows three parallel trends. First, measures of labor market flexibility are converging between advanced and emerging economies; second, more openness and economic integration has been accompanied by increased labor market flexibility; and third, contrary to widespread perception, greater labor market flexibility can coexist with protecting workers' rights and reducing inequality.

Together, these issues underscore the overall challenge for both advanced and emerging economies: to reallocate factors of production to be flexible and responsive to technological trends while protecting people's well-being during adjustment periods.

### 1: TEN YEARS AFTER THE CRISIS, THE FINANCIAL SECTOR IS STILL VULNERABLE

Financial stability matters for economic progress. As demonstrated by the prolonged slowdown in advanced economies since the 2007 crisis, it takes a long time to restore productivity and growth after a financial meltdown. Ten years ago, strained banking sectors affected the real economy first in countries where the crisis originated, and later in others. Access to credit was limited, which restrained productivity-enhancing investments and dampened appetite for high-risk, high-return ventures such as innovative companies and start-ups.

Today although progress has been made to make the financial sector sturdier, some concerns remain. First, despite the actions taken in the aftermath of the crisis restructuring and regulation or macro-prudential policies

to increase capital requirements and clean up balance sheets—the banking sector has still not fully recovered. Second, new sources of potential risk are coming from emerging economies. Third, growing segments of the financial system not subject to regulation are a potential source of vulnerabilities. Fourth, the scope for public sector intervention has narrowed.

Analysis of the GCI shows that, despite sounder asset-to-equity ratios, the banking sector remains weaker than it was before the crisis. In general, there is still too much debt in parts of the private sector, and top global banks are still "too big to fail." The largest 30 banks hold almost US\$43 trillion in assets, compared to less than US\$30 trillion in 2006, and concentration is continuing to increase in the United States, China, and some European countries.3 The GCI's soundness of banks indicator has not yet returned to its average precrisis level in any region (Figure 2a), though the picture in individual countries and subregions varies considerably (Figure 2b).

In the United States, where the crisis originated, a new wave of deregulation appears to be underway: the government is considering reducing provisions of the Dodd-Frank Act and reviewing rules on financial advisers' conflicts of interest.4 This may lead to the re-emergence of fragilities that post-crisis regulation aimed to tackle. In Europe, banks are still grappling with the consequences of 10 years of low growth and the enduring non-performance of loans in many countries.

Asian economies were less exposed to the global financial crisis, but they are facing new problems of their own. Amid a private-sector credit boom in India, the proportion of loans classed as non-performing went from 4 percent to 9 percent in two years; in China, business

Figure 3: General government debt Percent GDP

Source: IMF 2017.

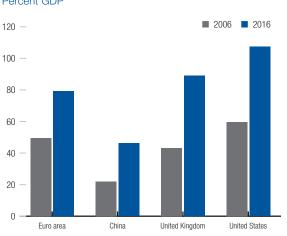
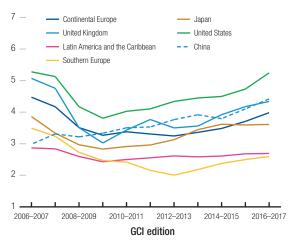


Figure 4: Venture capital availability, selected areas, 2006-2017

Score (1-7)



Source: Calculations based on the results of the Global Competitiveness Index 2006-2007 through 2016-2017.

credit is building up similarly to the United States precrisis, and could be a new source of vulnerability. African banks, although not hit severely 10 years ago, have recently been affected by the weaker global financial system and lower commodity prices<sup>5</sup>—a factor also impacting the solidity of banks in Latin America.

Potential new sources of vulnerability also derive from the way in which post-crisis regulation of the banking sector has moved some activities to the nonbank sector, where supervisory and regulatory standards are less stringent.6 Liquidity could become a problem for non-bank systems with overleveraged positions if market sentiment suddenly changes. The possible implications of emerging and relatively less-regulated financial technologies, such as blockchain, are also not yet fully understood.

Compounding these reasons for concern, public authorities have less flexibility to respond to crises than they did 10 years ago. The space for intervention in case of another recession is somewhat reduced due to higher public debts and deficits in almost all countries (Figure 3), while non-conventional monetary policies may also reach a limit if another crisis hits. In this event, it may be harder today for governments to intervene than it was 10 years ago.

Maintaining stability in the financial sector is important not only for firm-level productivity,7 but also to stimulate investment in innovation. The financial crisis impacted both traditional loans and venture capital availability (Figure 4), leading to a decade-long stagnation in total investments in non-financial assets (Figure 5). Further development of Fourth Industrial Revolution technologies depends on sound foundations in the banking sector.

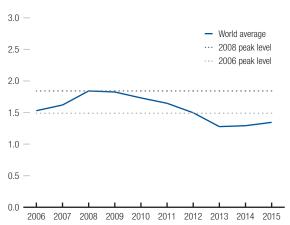
## 2: MORE COUNTRIES ARE ABLE TO INNOVATE, BUT THEY MUST DO MORE TO SPREAD THE

The last decade has seen some important emerging markets move closer to the technology frontier—although a clear gap remains with the leading advanced countries, which continue to benefit from their historically strong innovation ecosystems.

Figure 6 shows how selected countries have performed over the last decade on the innovation environment pillar of the GCI, which comprises indicators on the capacity for innovation, the quality

Figure 5: Net investment in non-financial assets, 2006-2015

Percent GDP

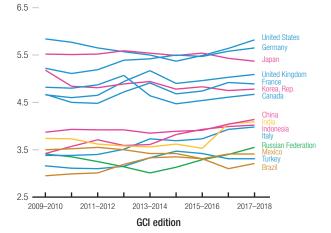


Source: Calculations based on World Bank, World Development Indicators, available at https:// data.worldbank.org/data-catalog/world-development-indicators

Note: Non-financial assets include fixed assets, inventories, valuables, and non-produced assets

Figure 6: Evolution of innovation environment in large advanced economies and large emerging economies, 2009-2017

Score (1-7)



Source: Calculations based on the results of the Global Competitiveness Index 2009–2010 through 2017-2018

Note: Colors correspond to regional classifications: ■ Europe and North America; ■ East Asia and Pacific; ■ Latin American and the Caribbean; ■ Eurasia; and ■ South Asia

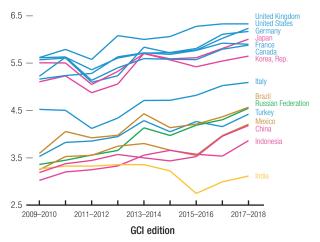
of scientific research institutions, company spending on R&D, university-industry collaboration, government procurement of advanced technology, the availability of scientists and engineers, and patent applications. Japan and the Republic of Korea, while still in this top group, appear to have lost ground. Among the emerging markets seen as having great potential in the early 2000s, Brazil and Turkey have now lost much of the ground they gained before 2013, but China, India, and Indonesia continue to improve.

Other sources confirm the growing importance of China and India as centers of innovation. In a recent study on which geographical clusters are generating the most patents,8 Shenzen-Hong Kong comes in at 2nd place—between Tokyo-Yokohama and San Jose-San Francisco-while Beijing comes in 7th. In both cases activity is concentrated in the field of digital communications. Three Indian locations appear in the top 100 of the cluster study: Bengaluru at 43rd (with patent activity focused on computer technology), Mumbai at 95th, and Pune at 96th (both registering among the most patents in organic fine chemistry).

During the last decade, the nature of innovation has shifted: from being driven by individuals working within the well-defined boundaries of corporate or university labs, innovation increasingly emerges from the distributed intelligence of a global crowd.9 McAfee and Brynjolfsson (2017) identify this as one of three major trends, along with the move from product to platform and from brain to machine. High-profile successes in artificial intelligence (AI), such as AlphaGo's improvement past the best human Go players, point to the expanding ability of machine intelligence to learn

Figure 7: Evolution of technological readiness in large advanced economies and large emerging economies, 2009-2017

Score (1-7)



Source: Calculations based on the results of the Global Competitiveness Index 2009–2010 through 2017-2018

Note: Colors correspond to regional classifications: ■ Europe and North America; ■ East Asia and Pacific; ■ Latin American and the Caribbean; ■ Eurasia; and ■ South Asia

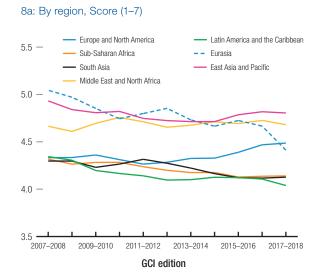
from ever-expanding datasets and improve themselves by running their own simulations.<sup>10</sup>

The economic impact of the current wave of innovation remains difficult to measure. Innovation should ultimately affect competitiveness and raise productivity, but does not yet appear to be doing so. There are two plausible reasons for this. One is that it will take time for systems to adapt to a new order so they can take full advantage of the advances: analogously, it took decades to realize productivity gains from electrification through complementary innovations such as the re-organization of production lines. The other reason is that many of the benefits of digital services-including the ability to use search engines, email, digital maps, and social mediado not have a market price, so they are not captured in GDP or reflected in productivity estimates, even though alternative measures confirm they are providing significant value to individuals.11

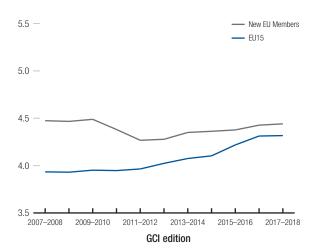
One clear requirement for innovations to translate into broad-based economic and societal benefits is that a country's people and firms must be capable of adopting them. The GCI's technological readiness pillar captures this ability through indicators on the availability of latest technologies, firm-level technology absorption, foreign direct investment (FDI) and tech transfer, individuals using the Internet, fixed broadband Internet subscriptions, international Internet bandwidth, and mobile broadband subscriptions. Technological readiness also feeds back into innovation capacity, because it reflects the extent to which a core of professional researchers can tap into the crowd.

Although technological readiness is generally trending upward globally, Figure 7 shows that some

Figure 8: Evolution of labor market flexibility, 2007-2017



#### 8b: Within the European Union, Score (1-7)



Source: Calculations based on the results of the Global Competitiveness Index 2007-2008 through 2017-2018. Note to 8a: Based on a constant sample of 114 economies

Note to 8b: New EU Members include Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, the Slovak Republic, and Slovenia. EU15 includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

of the large emerging markets that are doing well on innovation are leaving sections of their populations behind. The level of technological readiness of individuals and firms in China, India, and Indonesia remains relatively low, suggesting that the benefits of these innovative activities are not widely shared. Societal gains from innovation breakthroughs do not happen automatically: they need complementary efforts to ensure that more people and firms have the means to access and use new technologies.

## 3: THERE NEED BE NO TRADE-OFF BETWEEN LABOR MARKET FLEXIBILITY AND WORKERS' **RIGHTS**

In the 1990s, governments in many high-income countries-especially in Western Europe-began to discuss reforms intended to make labor markets less rigid. The financial crisis and restructuring imposed by technological change triggered a second round of reforms. Figure 8 shows how labor market flexibility (measured by business executives' perceptions of unionemployer cooperation, flexible hiring and firing practices, and the alignment between wages and productivity) accelerated after 2013 in many advanced economies, with average flexibility in Europe and North America converging with East Asia and the Middle East and North Africa. In contrast, other regions tightened labor regulations, in particular Eurasia and Latin America and the Caribbean. Data collected by the International Labour Organization confirm these results.<sup>12</sup>

Although causal links are difficult to establish, the positive correlation between international openness and labor market flexibility suggests that economic

integration increases competitive pressure in labor markets. In the European Union (EU), over the past decade, flexibility in older EU members increased significantly to converge with the new members that joined between 2004 and 2007 (Figure 8b). This contributed not only to lower levels of unemployment in many countries, especially in Southern Europe, but also to a backlash against economic integration: it exacerbated some groups' perception that the EU project did not sufficiently prioritize labor protection.

However, GCI and labor protection data show that there need be no trade-off between flexible labor markets and the protection of workers' rights. Figure 9 on page 19 plots countries' labor market flexibility against the International Trade Union Confederation (ITUC) Global Workers' Rights Index, which proxies more inclusive decision making on labor markets. It overlays these indicators with data on inequality, as measured by the Gini coefficient and the share of the population who are employed. Two-thirds of countries with high levels of inequality have below-median protection of workers' rights, while two-thirds with lower levels of inequality protect rights more strongly.

Most importantly, 60 percent of countries in the top-right quadrant of Figure 9—that is, with high levels of both rights protection and flexibility—achieve both high employment and low inequality. These include Denmark, Norway, Sweden, Switzerland, the Netherlands and Germany. This pattern supports the finding that workers' rights can be well protected in flexible labor markets, and governments that pursue both these objectives can achieve efficient labor markets as well as low levels of inequality. Most of the countries that achieve

#### Box 1: How to use the GCI to accelerate competitiveness agendas

The Global Competitiveness Index (GCI) tracks over 100 indicators for close to 140 economies. By establishing a common framework and comparable data, and allowing decision makers to monitor their annual progress, the Report draws attention to the long-term determinants of productivity, growth, income levels, and well-being. How should policymakers and businesses use the GCI to accelerate competitiveness agendas and make progress?

- Scores not only ranks. The GCI measures all indicators on a 1-7 scale and aggregates the scores to find a final overall GCI score. This score leads to the ranking that is so widely reported. Although the ranking is useful to gauge relative performance, the score itself is more informative for policymakers as a guide to action: is the economy improving? Are we making progress on the subindexes, pillars, concepts, and individual indicators? The score is a better indication of the direction of change than the rank: because all countries could become more or less competitive simultaneously, countries can fall in the rankings even while improving their score or rise in the rankings despite a deteriorating score.
- Aggregates rather than indicators. The GCI seeks to promote improvements in the fundamental determinants of productivity and growth. While individual indicators reflect important levers for boosting competitiveness, it is critical not to lose sight of the bigger picture as captured in the concepts that are defined in the index pillars and subpillars. To make real progress, programs and action should target aggregates: concepts, subpillars, pillars, and subindexes.
- Identifying priorities. Because factors of competitiveness are complementary, an economy cannot make sustained progress without advancing simultaneously on all pillars—but governments and the private sector have limited resources, so they have to define priorities. The GCI is a good starting point to identify the most binding constraints, but only the first step of the analysis.

One method is to identify trends. Which pillar score is deteriorating? Which pillar is falling behind others? Another is to identify a reference economy or group for comparison. For example, policymakers could consider that the Organisation for Economic Co-operation and Development (OECD) is the appropriate benchmark representing best practices and decide to invest the most on those factors where their economy lags furthest behind the OECD average. Other possible references could be the regional leader, or the regional average, or the performance of economies with similar income levels.

More sophisticated methods are possible. For example, recent work by the OECD Development Centre, outlined in The Global Competitiveness Report 2016–2017, uses statistical techniques to identify the factors that set apart economies that have made it out of the middleincome trap from those that have not. Those economies could choose to prioritize the factors that seem to explain escape from the trap. We invite researchers and policymakers to further investigate how best to guide their prioritization efforts.

 Understanding the drivers of competitiveness. Policymakers and the private sector need to understand

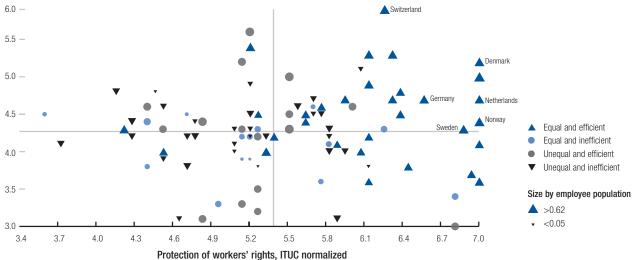
- the policies, actions, inactions, and external shocks that explain an economy's performance on the GCI. They should map these factors onto the GCI to get clues into the drivers of pillar score changes and evaluate, adjust, eliminate, or start programs and policies accordingly.
- Solving market failures. The GCI can help to identify areas that need improvement, but then the question is whether there is a role for government to enable the private sector to achieve an efficient outcome. Once the rationale for government action is identified—whether based on externalities, incomplete markets, information asymmetries, or coordination problems—the GCI can be used to allocate scarce government resources toward the resolution of the market failure.
- Public-private collaboration. Governments can resolve market failures more effectively if solutions emerge from an understanding between the public and the private sectors. The GCI can serve as a catalyst for collaboration. It can help to set the agenda, lead discussions, bring together actors around common objectives, and facilitate structured dialogue. It can change the nature of the interactions between the private and public sectors by focusing them on long-term objectives, rather than lobbying for short-term and sector-specific gains. The long-term focus tends to draw attention to elements of the economic policy space where everyone wins, not those where some gain but others lose (such as tariff protection).

The GCI can also be used independently by the private sector to keep government accountable, evaluate performance, and incentivize needed reforms. Some pillars in the GCI have a natural owner or leader within government—for example, the Minister of Infrastructure on road and port construction and maintenance-so the GCI can be used to catalyze action and help those leaders to identify areas of emphasis.

- · Coordination. While some areas have natural leaders within government, most areas require coordinated efforts between several government agencies as well as timely information and efforts on the part of the private sector. By helping to identify issues and bring together decision makers, the GCI can be used to improve coordination and achieve faster progress.
- Institutional arrangements. Finally, the GCI can be the starting point for a permanent institutional arrangement for policy prioritization, coordination, and action. In many countries, "national competitiveness systems" with public and private participation have proved to be effective mechanisms to lead the design and implementation of competitiveness agendas. They have even used the GCI methodology to produce subnational competitiveness indexes and to identify local-level agendas for action.

The GCI is a starting point—a tool for policymakers and the private sector, providing information based on our best knowledge of what is needed to increase growth and drive poverty reduction. How exactly each economy uses it depends on the idiosyncrasies of its institutions, history, and culture. The principles apply to all countries; the specific implementation and policies must come from policy analysis and discussions within countries using the GCI as a point of

Figure 9: Labor market flexibility, protection of workers' rights, inequality and employee population Labor market flexibility, average



Sources: Calculations based on the results of the Global Competitiveness Index 2017-2018 and the 2017 ITUC Global Rights Index. Note: Countries with a Gini coefficient lower than the median have been defined as "Equal". Countries with an employee population ratio above the median have been defined as "Efficient".

both have strong active labor market policies in place. Governments should therefore not pull back from labor market reforms or economic integration, when faced with worsening social conditions. Rather they should introduce complementary active labor market policies that help workers who are between jobs to acquire new skills and competences.

#### THE ROLE OF THE GCI IN TURNING KEY FINDINGS INTO ACTION

Countries can use the GCI to reflect on the key findings that emerge from this year's analysis and determine how best they can advance the goal of implementing policies that help progress in competitiveness benefit their entire populations (Box 1). Taken together, the insights from the data can allow governments to design policies that support growth and encourage the reallocation of factors of production to take advantage of technological trends for the benefit of their populations.

#### NOTES

- 1 IMF 2017.
- 2 When interpreting the data, it is important to keep in mind that we consider economies with small changes in ranking of one or two places as stable because this small ranking change often reflects only small changes in score. This is the case in particular in the middle of the rankings, where economies' scores are relatively close together and small changes in score can translate to relatively large changes in rank. Another key consideration is that the ranking is relative, so both score and rank need to be considered together when interpreting the results.

- 3 Calculations are based on the Bankers Almanac 2017 database. available at https://www.bba.org.uk/about-us/associates/ bankersalmanac-com/, and the World Bank's World Development Indicators, Bank concentration (%).
- 4 Pozen 2017.
- 5 For details about the impact of the weaker global financial system, see Cetorelli and Goldberg 2011; Iyer and Peydró 2011; for details about the impact of lower commodity prices, see Christensen 2016.
- 6 This and the following statements are based on El-Erian 2016.
- 7 Dörr, Raissi, and Weber 2017.
- 8 Bergquist, Fink, and Raffo 2017.
- 9 Ito and Howe 2016.
- 10 Ito and Howe 2016; McAfee and Brynjolfsson 2017.
- 11 Brynjolfsson, Eggers, and Gannamaneni 2017.
- 12 ILO 2017.

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#### **CHAPTER 3**

# Regional Analysis and **Selected Economy Highlights**

The Global Competitiveness Report has monitored and benchmarked the factors and institutions that determine productivity in close to 140 countries for the past 40 years. In this chapter, we present the results by region, as well as results for the top 10 ranked economies and G20 countries. Additional economies are described in the Economy Profiles.

The results show that growth is starting to recover, but still is not yet sufficient to provide the foundations needed for continued reductions in poverty and broad-based improvements in the quality of life of the many. With emerging markets having a greater participation in global production and growth, progress in competitiveness among the large growing economies of Asia, Africa, and Latin America will be fundamental to the ability to provide a new boost to global growth.

In the context of the global challenges presented in Chapter 1, understanding the determinants and priorities at a regional level is a necessity for striving for faster global convergence toward higher incomes and greater well-being. Making globalization work for all requires making progress in all the pillars of competitiveness across regions. Emerging economies need to close the gaps with advanced economies in order to benefit from the possibilities of international trade and mobility of labor and capital as well as the latest technological developments available worldwide. On the other hand, advanced economies need to prioritize competitivenessenhancing reforms. In particular in the current rapidly changing and still challenging socioeconomic context, inaction will undermine future prosperity. Our data show that all countries have room for improvement while some are even falling back in specific areas.

#### **EUROPE**

Ten years on from the financial crisis, European economies are at last showing cautious signs of recovery, with the euro area predicted to grow by 1.9 percent this year (versus 1.8 percent in 2016) and emerging European markets by 3.5 percent (versus 3.0 percent in 2016).1 However, the pick-up in economic activity still looks fragile, and sustained momentum cannot be taken for granted. In particular, European labor markets remain under pressure, with high levels of youth unemployment and a growing polarization of demand for skills as middle-skilled employment falls in several countries.<sup>2</sup> Investment levels are low compared with previous recovery periods, given the depth of monetary stimulus, with particular shortfalls in digital, energy, and transport infrastructure.3 The competitiveness landscape in Europe is shown in Figure 1.

The challenge now is to leverage the momentum of the current recovery to strengthen the fundamental drivers of competitiveness. To this end, Box 1

Finland Hong Kong China Norway Luxembourg Singapore Switzerland Switzerland Netherlands Switzerland New Zealand inland Singapore German 0 0 Luxembourg Finlan Best global Best Europe Average Europe 0 Median Furone Worst Europe Institutions Infrastructure Macro Health and Higher Goods Labor Financial Technological Market Rusiness Innovation economic primary education market market market readiness size sophistication education and training efficiency

Figure 1: GCI score range for Europe across the 12 pillars, 2017-2018 edition Score (1-7)

Source: Calculations based on the results of the Global Competitiveness Index 2017-2018.

Note: The name of the best global economy is mentioned at the top; where the best European country does not coincide with the best global, the best European country is mentioned separately.

GCI pillar

summarizes recommendations from an in-depth analysis of bottlenecks to competitiveness and inclusive growth in Europe, carried out in 2017 by the World Economic Forum and the European Investment Bank, with contributions from Bruegel.

This year's GCI performance of the European region—which includes the EU28, the Balkans, Iceland. Norway, Switzerland, and Turkey—is stable overall relative to last year. The region's top performers remain at the competitiveness frontier, with six European countries in the top 10: Switzerland (1), the Netherlands (4), Germany (5), Sweden (7), the United Kingdom (8), and Finland (10). However, there is little sign of the region's southeastern economies closing the gap with its northwestern ones. Iceland, Estonia, and the Czech Republic continue to occupy the middle ground between these two blocs.

Taking a longer view, over the last decade many European countries have improved aspects of their innovation ecosystems, such as the quality of scientific institutions, company spending on research and development (R&D), and firms' capacity for innovation. The last 10 years of data also show some recovery in the macroeconomic environment across the region as well as the availability of venture capital, an important ingredient for a thriving innovation ecosystem. However, over the same period the Global Competitiveness Index (GCI) shows a worrying deterioration for a number of

European economies in some education indicators, such as the quality of the education system, of primary education, and of math and science education. Perceived transparency of the policymaking process and the security situation have also weakened across several European countries.

Switzerland (1st) continues to top the overall rankings, with strong results evenly balanced across the different components of competitiveness. Economic performance benefits from extremely strong fundamentals including public health, primary education, and a comparatively solid macroeconomic environment. Its economy has a high level of flexibility, with its labor markets being ranked as the best-functioning globally. Absorptive capacity for new technologies is high, with an overall 2nd place ranking in the tech readiness of citizens and businesses. Switzerland further improves its scores for business sector sophistication and its innovation environment, thereby defending its top global ranking on those two important pillars.

The **Netherlands** (4th) maintains its position with the support of a strong education system and high levels of tech readiness among businesses and individuals. Its thriving innovation ecosystem, ranked 6th globally, puts the country in an excellent position to shape the unfolding Fourth Industrial Revolution.

Germany (5th) remains in the same position as last year, while slightly increasing its overall score. The

#### Box 1: Key findings from the Europe Inclusive Growth and Competitiveness Lab

The Europe Inclusive Growth and Competitiveness Lab (the Lab) aims to support the design, launch, and implementation of actionable agendas for public-private collaboration to increase competitiveness and inclusive growth in Europe in response to rapid technological change. The Lab was a joint initiative between the World Economic Forum and the European Investment Bank Group (EIB Group), with contributions from the economic think tank Bruegel.

The Lab's white paper, "Beyond the Equity-Efficiency Trade-Off: Practical Ideas for Inclusive Growth and Competitiveness in Europe." identifies five concrete actions and presents practical examples as starting points. These are:

- not just encouraging more open innovation systems, but also increasing efforts to diffuse existing general-purpose technologies more rapidly across all types of firms—the objective of the Austrian Pilotfabrik 4.0, for example;
- not just offering the right framework conditions for entrepreneurship, but also ensuring a successful transition from start-up to scale-up—as supported, for example, by the TechCity Upscale Programme in the United Kingdom;
- creating conditions that enable inclusion and competitiveness through smarter infrastructure, including better-connected digital, transport, and energy

- networks—for instance, initiatives such as Superfast Cornwall, Real Time Passenger Information systems in Madrid, Enexis, and the Dutch smart grids for electric cars:
- equipping people with the best possible cognitive and digital skills to enable them to benefit from technological progress—as recognized by the programs of the European Institute of Innovation & Technology, for example; and
- providing ready capital to innovative firms, tailored to their needs at different stages of the life cycle, from more venture and growth capital funding for start-ups to credit guarantee schemes for small and medium-sized enterprises—such as the InnovFin SME Guarantee Facility.

The Lab calls on the community of European stakeholders to collaborate in further developing these ideas.

Source: World Economic Forum and EIB, 2017.

Note: Information about these programs is available at https://www. weforum.org/whitepapers/beyond-the-equity-efficiency-trade-offpractical-ideas-for-inclusive-growth-and-competitiveness-in-europe.

excellent performance of its innovation and business ecosystem is particularly noteworthy: Germany's innovation capacity and business sophistication are assessed as 5th best in the world, supported by high levels of technological readiness (8th) and high-quality infrastructure (10th).

The **United Kingdom (UK)** (8th) falls one spot. This drop does not yet reflect the outcome of the Brexit negotiations, which is likely to further undermine the country's competitiveness. Currently the country performs very well on technological readiness and the sophistication of its business sector (4th and 7th overall). Its macroeconomic environment remains challenging (68th) and could become an important constraint in the future as the timeline for a reduction of the fiscal deficit is repeatedly pushed back.

Sweden (7th) is overtaken by Hong Kong SAR this year, dropping one spot while retaining its absolute score. The Swedish economy performs best in absolute terms on the set of basic requirements, although the data show a deterioration in the perception of the institutional environment. This is true for both public and private institutions, with the economy dropping seven spots on this set of indicators. Sweden's macroeconomic environment (4th) continues to improve as both the government's budget deficit and debt fell in 2016. Furthermore, the country is well positioned to contribute to and benefit from technological advances,

with top 10 ranks for technological readiness, business sophistication, and innovation capacity.

Finland (10th) rounds out the top 10 for the second year in a row, helped by its top global ranking for public health and primary education, and a higher education performance that is second only to Singapore's. Finland's approach to preparing the younger generation for the challenges of the Fourth Industrial Revolution through novel teaching approaches has been particularly noteworthy. Its high levels of investment in human capital are complemented by a sophisticated innovation environment (ranked 4th globally).

Norway (11th) tops the macroeconomic environment pillar, a factor that has been a consistent weakness for most of its high-income peers in recent years. The country can further rely on strong institutions and a high-performing education system, both ranking among the top 10 in the world. With high levels of information and communication technology use and a very dynamic business sector, it is well placed to capitalize on the opportunities of the digital transformation.

France (22nd) remains stable in terms of score. Its strong points are infrastructure, a large and globally integrated market, and a top-20 innovation ecosystem. Of particular concern are a weak macroeconomic environment (63rd) and historically fairly rigid labor markets (56th). In a continuation of last year's trend, the

Figure 2: Eurasia average score: Gap and evolution by pillar

Gap between Eurasia score and global	average	Pillar	Eurasia average score change since the 2016–2017 edition	
	-0.94	GCI total		0.08
	-0.20	1. Institutions		0.07
	-0.15	2. Infrastructure		0.10
	-0.28	3. Macroeconomic environment		0.01
	0.22	4. Health and primary education		0.20
	0.14	5. Higher education and training		0.03
1	-0.03	6. Goods market efficiency		0.04
	0.09	7. Labor market efficiency		-0.07
	-0.46	8. Financial market development		0.08
	-0.20	9. Technological readiness		0.18
	-0.25	10. Market size		0.10
	-0.37	11. Business sophistication		0.11
	-0.33	12. Innovation		0.05

Source: Calculations based on the results of the Global Competitiveness Index 2016–2017 and 2017–2018. Notes: Based on a constant sample. Gray bars correspond to negative values and blue bars to positive values.

country's perceived capacity to attract talent falls 10 spots to 61st.

Italy (43rd) improves one place in the rankings slightly increasing its score, notably through improved goods market efficiency (up seven places to 60th) and higher education and training (up two to 41st). Its longstanding competitiveness advantages include health and primary education (25th), large market size (12th), infrastructure (27th), and business sophistication (25th). Despite recent reforms, labor markets (116th) and financial markets (126th) remain weak points.

Turkey (53rd) rises by two places but remains below historical highs (the country ranked 43rd in 2012). This year, it sees the strongest improvements in the take up of the latest technologies as well as in mobile broadband subscriptions-from 51 percent in 2015 to 67 percent of the population in 2016. Going forward, Turkey must improve its institutional framework, continue to remove the significant rigidities that exist in its labor markets, and strengthen the efficiency and stability of financial markets. In 2017, the Turkish economy is expected to grow by 2.9 percent. In the first half of the year, the depreciation of the lira has helped Turkish exports and the government boosted domestic demand through monetary and fiscal policies.

#### **EURASIA**

Eurasia's competitiveness performance has improved slightly over the last year, and it will have mostly recovered from the 2015 recession by the end of this year. GDP growth, barely positive in 2016, is projected to reach 1.7 percent in 2017. On average, Eurasia has progressed in almost all competitiveness factors,

benefiting especially from lower inflation (the average dropped from 15.5 percent in 2016 to 8.2 percent in 2017) and progress in technological readiness, innovation, and primary education.<sup>4</sup> Better-than-expected performances in the region's two main commercial partners, China and Russian Federation, have also made business sentiment more upbeat.

Nonetheless, not all factors are improving-labor market efficiency has diminished in most countries—and the overall competitiveness of Eurasia remains below the global average. In particular, despite progress this year, the region lags significantly behind most economies in infrastructure, macroeconomic environment, financial development, and the innovation ecosystem (see Figure 2). In a reality of persistently low commodity prices and geopolitical uncertainties, Eurasian economies should accelerate reforms to foster diversification and innovation while continuing to consolidate their public finances.

Although the overall trend is positive for most Eurasian economies, there is little sign of convergence within the region. Its most competitive economies, including the Russian Federation (38th, up five), are maintaining their edge. This year's most improved Eurasian economy started from a low base: Moldova moves up 11 places to 89th. Others that had been catching up in past years are slipping back, with Georgia (67th) and Kazakhstan (57th) losing eight and four places respectively.

There has been convergence in some pillars, including the macroeconomic environment—where gaps were large—and in one of the most homogenous dimensions, health and primary education. There is,

**GCI edition:** ■ 2016–2017 ■ 2017–2018 6.0 5.5 5.0 45 4.0 3.5 3.0 China EAP Singapore Hona Korea. Japan New Taiwan. Australia Malavsia Thailand Indonesia Brunei Vietnam Philippines Cambodia Mongolia China Kona (9th) Zealand (21st) (23rd) Rep. (27th) Average (32nd) (36th) Darussalam (55th) (56th) PDR (101nd) (3rd) SAR (46th) (98th) (13th) (15th) (26th) (6th)

Figure 3: Overall GCI scores for East Asia and Pacific (EAP) for 2016-2017 and 2017-2018

Source: Calculations based on the results of the Global Competitiveness Index 2016-2017 and 2017-2018

however, not much narrowing of the wide gaps in technological readiness and infrastructure.

The Russian Federation (38th) improves five positions, mostly driven by the macroeconomic environment (up 38 positions to 53rd), rebounding strongly from the 2015-16 recession. However, its economy remains highly dependent on mineral exports and prospects remain uncertain. Weak links continue to include the financial market (107th), in particular the banking sector, along with aspects of institutional quality such as property rights (106th), judicial independence (90th), and corruption, which remains one of the most problematic factors for doing business. Russia has passed new laws to increase the minimum wage (2015) and protect temporary employment (2016), which have lowered labor market flexibility (75th, down 18 places); however, this may have a beneficial overall effect by restoring domestic purchasing power, which had been hit by inflation and the weak ruble.

#### **EAST ASIA AND PACIFIC**

Among the 17 East Asia and Pacific economies covered by the GCI, 13 have increased their score-albeit marginally—with Indonesia and Brunei Darussalam making the largest strides. Only Singapore, the Philippines, Cambodia, and Lao People's Democratic Republic have seen their scores decrease (Figure 3). Even with China's gradual slowdown, economic growth has continued to be robust in the region as a result of sustained domestic demand and increased exports from emerging economies.

Singapore falls behind the United States to rank 3rd globally, but remains the most competitive economy in

the region. Hong Kong SAR is closing the gap, rising from 9th to 6th, while Japan slips back one place for the second year in a row and now ranks 9th. The lowest-ranked performer among the region's advanced economies continues to be the Republic of Korea, which remains 26th for a fourth consecutive year, placing it behind Malaysia (23rd), the region's top emerging economy, and just ahead of China (27th).

Many of the region's advanced economies including Korea, Hong Kong SAR, and Taiwan (China), but not Japan—and a few emerging economies have benefited from a favorable macroeconomic context. This could be partly explained by a regional financial market stabilizing after the volatility of late 2016, although the recent escalation of tensions in the Korean peninsula has again raised uncertainty. High levels of household debt in many advanced economies may also eventually threaten the region's economic and financial stability.5

There have been signs of a productivity slowdown among the region's advanced economies and in China,6 suggesting the need for greater focus on advancing technological readiness and promoting innovation. For instance, greater access to mobile technology in China has fostered the expansion of the "sharing economy," which is expected to reach 10 percent of GDP by 2020. Hong Kong SAR is the region's only economy among the top 10 globally in technological readiness, a category dominated by European economies—but all the others, except Singapore, have made tremendous progress since last year.

On innovation, Taiwan (China) rebounds this year after several years of decline, Hong Kong SAR and New Zealand continue to make steady progress, and Korea's score improves slightly. Both Japan and Singapore maintain their places among the top 10 innovators, despite their scores falling this year-Japan's for the third consecutive year. Innovation and sophistication are not the only priorities, however: Vietnam, Cambodia, the Philippines, Lao PDR, and Mongolia could all make large gains in competitiveness at a relatively lower cost by improving their performance on infrastructure, health, and education.

Singapore (3rd) posts a strong performance across the board, with many of its pillars scoring among the top three. The country possesses superior transport infrastructure (2nd), its product and labor markets are extremely efficient, and its financial sector is stable and trustworthy (3rd). Since the last edition of the GCI, Singapore's macroeconomic environment has slightly deteriorated as a result of rising government debt-which is already among the highest in the world when measured as a share of GDP-and a persisting deflationary spell. The country is also falling marginally behind in terms of technological readiness compared with other advanced economies. There is also room for improvement among innovation and sophistication factors, where it ranks 12th, especially given that one of the most problematic factors for doing business perceived by firms is their insufficient capacity to innovate.

Hong Kong SAR (6th) has made the largest leap among the top 10 economies this year, moving ahead of Sweden (7th), the United Kingdom (8th), and Japan (9th). Hong Kong is still endowed with the world's best physical infrastructure and its healthy level of competition and openness ensure extremely efficient markets (2nd), which in turn are supported by strong and stable financial markets (5th). Hong Kong's labor market is highly flexible and efficient, though it could do better in terms of harnessing talent from its workforce (17th). Hong Kong has also advanced its macroeconomic environment by slightly bringing down its inflation rate in 2016. Its most significant improvement can be observed across the business sophistication (11th) and innovation (26th) pillars, which is a step in the right direction given that the business community consistently cites their insufficient capacity to innovate as one of the most problematic factors for doing business.

Japan (9th), with a minor improvement in score, loses one place as a result of Hong Kong SAR's larger improvement. The country's overall performance is largely driven by high-quality physical and digital infrastructure (4th), a healthy and educated workforce, and a fertile innovation ecosystem. Despite these attributes, Japan's performance is dragged down by its poor macroeconomic environment (93rd), caused mostly by a period of deflation in 2016 and persistently troubled public finances. The situation has improved slightly since last year as a result of better government budget balance and higher gross national savings. Japan also made strides in the technological readiness pillar (15th, up four) as a result of higher levels of ICT usage. A drop in the rankings in the labor market efficiency pillar, however, points to certain difficulties among firms in retaining talent.

Australia (21st) moves up one place in the rankings with a stable score. When considering Australia's performance by pillar, its results are rather less static. The country posts a noticeable drop in the infrastructure pillar, more specifically its communications' infrastructure, while several other pillars increase only marginally. Australia's overall performance is not remarkable: in most pillars it does not rank among the top 25 countries. Similar to last year, Australia performs comparatively better in the higher education and training pillar (9th), which reflects its capacity to produce a large pool of qualified workers. It also performs well in the financial market development (6th) pillar, which is driven mostly by a stable and well-regulated banking sector.

China (27th) has gained one place as a result of steady, albeit incremental, improvements to its overall competitiveness score. Since last year, China has made progress in all pillars except its macroeconomic environment and infrastructure. A decline in the former is explained by a worsening of the government budget deficit, which has been slightly higher than the expected target for 2016.7 The score for the infrastructure pillar decreases for the second year in a row, the result in part of a decline in the quality of port infrastructure and the reliability of electricity supply as perceived by the business community. The largest gains are observed in technological readiness, owing to higher ICT penetration and the extent to which foreign direct investments have been bringing new technologies to China. Despite the remarkable progress already made, further improvement on this front would foster the growth of emerging digital industries and create the conditions necessary to kickstart new ones. Other significant advances have been made in the goods market efficiency pillar as a result of a slight reduction in the number of procedures for starting a business compared to last year.

The Republic of Korea's (26th) overall performance has improved slightly since last year, with all 12 pillars obtaining a higher score. For an advanced economy, however, the country still presents large disparities between pillars. Its performance is largely driven by its remarkable infrastructure (8th) and a highly favorable macroeconomic environment (2nd). This year's political turmoil and corruption scandals highlighted the challenges in the country's institutional environment, yet the score of the institutions pillar advanced marginally. Another area in which Korea consistently underperforms is labor market efficiency, in which it ranks 73rd, hiding deeper challenges with regard to labor market flexibility—in which it ranks 106th—caused notably by conflictual labor-employer relations and high redundancy

## **Box 2: The Philippines: Building City Competitiveness**

The Philippines created the Task Force on Competitiveness in 2006, which it upgraded to create the National Competitiveness Council (NCC) in 2011 through an Executive Order issued by the President. The NCC is a public-private partnership body, with government represented by the Secretary of Trade and Industry, the Secretary of Finance, the Director-General of the National Economic Development Authority (the country's planning agency), the Secretary of Education, the Secretary of Tourism, and the Secretary of Energy, while the private sector is represented by five business executives appointed by the President.

The Council closely monitors the global competitiveness ranking of the Philippines across a number of major reports, including the World Economic Forum's Global Competitiveness Report, Travel & Tourism Competitiveness Report, and Global Information and Technology Report. Over a dozen global indices are tracked so data can be used for benchmarking the country's progress in the competitiveness rankings across indicators as diverse as governance, infrastructure, education, science and technology, and the ease of doing business.

Working groups, task forces, and special projects have been created to focus on specific issues or problems that need special attention. These groups have also been created as public-private partnership committees, with co-chairs from government and the private sector and membership drawn almost equally from both sides.

One of the projects launched by the Council was the Cities/Municipalities Competitiveness Index, in the belief that local competitiveness is a key building block for overall national competitiveness. The Council also believes that, in a country the size of the Philippines—with over 100 million people spread out over 7,000 islands—it is important to create more economic engines built around cities or clusters of cities to drive long-term economic growth and development. Building these economic engines would disperse investment and job opportunities and spur inclusive growth. It would also spread risk for companies looking for new business locations and create a better investment environment for the country as a whole because there would now be more options available.

The problem was that the identification of which cities were likely to be good candidates for their own region's growth engines was not easy. Moreover, cities themselves could not tell how they compared against others or whether their competitive positions were improving or not over

time. So, in 2012, the Council conceptualized the Cities/ Municipalities Competitiveness Index and started organizing Regional Competitiveness Committees across the nation to oversee a review. Although there were earlier attempts to measure subnational competitiveness, those projects covered only a few cities (the conventional choices) and could be carried out only once every three years. These early projects eventually faded away.

The goal was to measure all cities and municipalities (the Philippines has 1,634) annually and to eventually institutionalize and embed this data-gathering and analysis activity in cities so they could use their own data to plan their futures. Following an initial set of discussions with industry and experts, the Council worked jointly with Regional Competitiveness Committees to draw up a list of indicators that would measure the competitiveness of cities and municipalities. These were categorized in three broad pillars-Economic Dynamism, Government Efficiency, and Infrastructure—for a total of 30 indicators. At first, not all data were readily available because records were not well maintained. Thus, many cities had difficulty submitting data for measurement. Nonetheless, the work continued and a total of 285 cities and municipalities entered the Index; an announcement of the first ranking report was made in 2013. Since then some adjustments have been made to the indicators to focus on readily available data. A fourth pillar-Resiliency—was also added because this issue has become increasingly important for cities in the age of climate change.

This year, the Council is running the fifth annual Cities/ Municipalities Competitiveness Index awards, with 1,487 cities and municipalities—over 90 percent of the countrynow covered. The award ceremony has become a muchanticipated event by mayors and city administrators and almost 2,000 people were expected to attend the ceremony in August 2017. More importantly, the data and results generated by the award have become a benchmark for both government agencies and investors to more closely monitor cities and make decisions, whether for budgeting or investing.

The old adage that "what gets measured, gets managed" rings true for more and more cities in the Philippines. Local competitiveness will lead to better delivery of services and economic development in cities—the building blocks of nations.

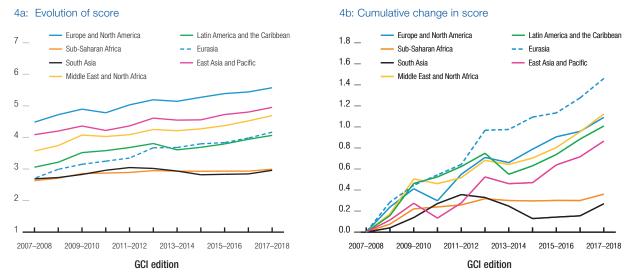
Contributed by Guillermo M. Luz, Private Sector Co-Chairman, National Competitiveness Council of the Philippines.

costs. Looking back at Korea's performance over the last decade, it is one of the few advanced economies that have experienced a general decline in performance for a majority of its pillars of competitiveness. It is hoped that this year's rebound signals a shift toward a more positive trend overall.

Indonesia (36th) is inching its way up the competitiveness ladder, moving ahead five places since last year. Similar to Korea, Indonesia has improved its performance across all of its pillars. Its position in the rankings is driven mainly by its large market size (9th)

and a relatively robust macroeconomic environment (26th). Ranking 31st and 32nd in innovation and business sophistication respectively, Indonesia is one of the top innovators among the emerging economies. In contrast, the country is lagging quite far behind in terms of technological readiness (80th) despite having made steady progress on that front over the last decade. Significant advances are also needed in the labor market efficiency pillar (96th), which is dragged down by excessive redundancy costs, limited flexibility of wage

Figure 4: Technological readiness by region



Source: Calculations based on the results of the Global Competitiveness Index 2007–2008 through 2017–2018. Note: Based on a constant sample of 114 economies.

determination, and a limited representation of women in the labor force.

With a relatively modest increase in its overall score, Vietnam (55th) moves up five places to narrowly surpass the Philippines (56th). Vietnam's competitiveness is significantly driven by its market size (31st). Although the withdrawal of the United States from the Trans-Pacific Partnership (TPP) earlier in 2017 eliminated significant trade opportunities, the country's growth is nonetheless projected to remain robust from strong exports.8 Significant improvements are necessary across all pillars, notably among the basic requirement factors (75th) and higher education (84th), as firms perceive that the lack of an educated workforce constitute a significant hurdle for doing business. Vietnam could also boost its competitiveness by closing gaps in innovation and sophistication factors with countries at a similar stage of development, such as the Philippines (see Box 2 for a description of how the latter is working with the GCI to advance its competitiveness agenda).

#### **SOUTH ASIA**

Competitiveness has improved across most countries in South Asia (as seen in Figure 4a and 4b), in particular in the two Himalayan countries of Bhutan (82nd, up 15) and Nepal (88th, up 10). On a similarly positive trend, Pakistan (115th, up seven) and Bangladesh (99th, up seven) have both improved their scores across all pillars of competitiveness. Upgrading ICT infrastructure and increasing ICT use remain among the biggest challenges for the region: over the past decade, South Asia has been the area where technological readiness stagnated

the most, with a performance similar to that of sub-Saharan Africa.

India (40th) stabilizes this year after its big leap forward of the previous two years. The score improves across most pillars of competitiveness, particularly infrastructure (66th, up two), higher education and training (75th, up six), and technological readiness (107th, up three), reflecting recent public investments in these areas. Performance also improves in ICT indicators, particularly Internet bandwidth per user, mobile phone and broadband subscriptions, and Internet access in schools. The quality of institutions has increased further, especially in terms of efficiency of public spending (20th), but the private sector still considers corruption to be the most problematic factor for doing business in India.

## LATIN AMERICA AND THE CARIBBEAN

After two years of recession in many countries in the region, Latin America and the Caribbean's GDP is expected to grow by 1.1 percent on average in 2017 according to the International Monetary Fund (IMF).9 After being hit hard by the end of the commodity boom and seeing exports plummet, current account deficits soar, and government revenues contract, the region is slowly adjusting to new international conditions. The fall in commodity prices and the deterioration of terms of trade led to sharp depreciations of the major currencies in the region. Many believed that the exchange rate would serve as an automatic stabilizer and help boost new export sectors that would reignite growth. This effect was not strong enough to meet expectations and it failed to prevent the steep drop in growth.

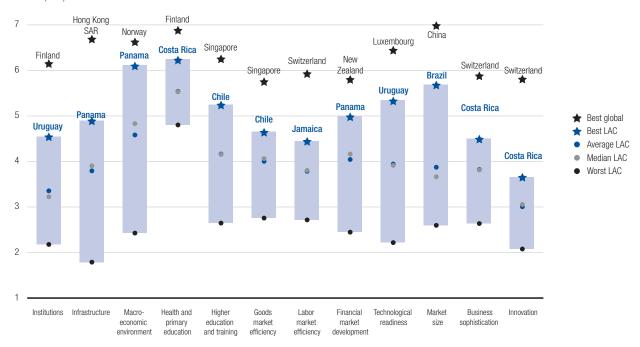


Figure 5: GCI score range for Latin America and the Caribbean (LAC) across the 12 pillars, 2017-2018 edition Score (1-7)

GCI pillar

Source: Calculations based on the results of the Global Competitiveness Index 2017-2018.

The slow response of exports revealed the competitiveness challenges in the region (Figure 5). Large gaps in all of the pillars of competitiveness persist, especially in institutions, infrastructure, labor market efficiency, and innovation. The wide range of performance exhibited in the region also contributes to regional inequality. Latin America's poor performance and the region's lack of progress in closing gaps with global leaders are associated with low productivity, high informality, insufficient export diversification, and growth that is insufficient to create employment and fund the growing demand for more and better public goods.

As Latin America strives to consolidate the social gains it has made in the past decade—a record reduction in poverty and a growing middle class-it must strengthen its capacity to adapt to changing international conditions and rediscover new sources of sustainable growth based on a coherent competitiveness agenda that enables entrepreneurship and new innovative businesses to emerge. The results in the report can help guide the identification of priorities and catalyze public-private collaboration (see Box 3 for examples in Colombia and Mexico).

As we look back at a decade of competitiveness monitoring in the region, we see that many of the fundamentals of competitiveness and growth have worsened in Latin America and the Caribbean. Basic

requirements such as institutions have deteriorated. with democratic institutions failing in Venezuela and corruption scandals throughout the region, as shown in Figure 6. Trust in government and a crisis in governance continue to represent significant challenges for a region in need of effective public-private collaboration.

Efficiency enhancers, measuring how well markets work, have also deteriorated in the region—goods, labor, and financial development have failed to consistently improve. Although, on average, goods markets and financial markets have marginally improved, the distance between the best and the worst in the region continues to increase as Venezuela continues to fall into chaos. Finally, business sophistication has also continued to weaken, reflecting the region's dearth of structural transformation and lack of truly transformational new sectors and business models.

Despite the deterioration of some of the fundamental pillars of competitiveness, the region has made progress in infrastructure and also in human capital—in both health and education (Figure 6). Together with improvements in technological readiness and innovation, these developments will help Latin America and the Caribbean discover new sources of growth and guarantee inclusive and broad-based growth. Unequal performance on the macroeconomic pillar reflects the

## Box 3: Using the Global Competitiveness Report in Latin America

## Mobilizing for prosperity: The use of the GCI for Colombia's competitiveness agenda

In 2006, Colombia defined a vision for the year 2032 in which the country would be one of the three most competitive in Latin America, with a per capita income equivalent to that of a medium-high-income country and an economy that exports high-value-added goods and services. To achieve this aim, the national government and the private sector-led by a group of entrepreneurs—decided to create an institutional arrangement for competitiveness, now called the National System of Competitiveness, Science, Technology and Innovation. Following the establishment of this arrangement, the same group of entrepreneurs formed the Private Council on Competitiveness to work hand in hand with the government in identifying and coordinating initiatives to help the country achieve the 2032 goal.

The most salient challenge in this type of long-term, collaborative work between public officials and private-sector leaders is the absence of measurable and objective indicators for progress. Usually reforms in the areas of competitiveness have impacts that are not evident in the short term, and they require continuous work that goes beyond the scope of a single administration. Hence the Global Competitiveness Index (GCI) quickly became a guiding tool for the country, and its results are reviewed and monitored by the President of Colombia, leaders from the private sector, and civil society representatives in the National System's Commission at the end of each year.

The GCI is also used systematically by the Private Council on Competitiveness, which publishes an Annual Report that analyzes the performance of Colombia in each one of the GCI pillars. This report presents a comprehensive diagnosis of the issues that need to be reformed, an analysis of opportunities to promote productivity, and a possible set of solutions that could advance Colombia's agenda with the collaboration of governments and firms.

Furthermore, in 2013 the Private Council on Competitiveness partnered with Universidad del Rosario to design a subnational Department Competitiveness Index based on the GCI framework. Now in its fourth edition, this regional index has become a tool for local governments and private-sector organizations to monitor their performance, replicating the role that the GCI plays at a national level.

The GCI became a central tool for the National System in its first decade, and has helped to shape the way that public and private actors are mobilized toward the joint objective of prosperity.1

#### The Mexico Competitiveness Lab

Across the world, growth and productivity have slowed while middle classes in some industrialized countries face rising levels of inequality and insecurity. An expanding middle class in emerging markets also has higher aspirations and increased demand for quality public goods. Middle classes across both industrialized and emerging countries are putting increased pressure on governments. As a consequence, electorates are pushing back against some of the features of globalization. Policymakers must work urgently to identify priorities for public policy action jointly with the private sector. Based on the findings of World Economic Forum's Global Competitiveness Report and Inclusive Growth and Development Report, the methodology of workshops and competitiveness labs, and new work with the OECD Development Centre on policy prioritization, the Competitiveness Lab helps to develop public-private action plans for growth and inclusion.

The Competitiveness Lab Latin America is the largest and most advanced workstream under the Reform Agendas for Growth and Social Inclusion Project at the World Economic Forum. The initiative was launched in 2013 to create actionable agendas for public-private collaboration to enhance innovation and related skills. It has convened a steering board whose recommendations were revealed at the World Economic Forum's 2015 Annual Meeting in Davos. Mexico is the second country that has been supported in its efforts to develop a public-private financing scheme for innovation following the recommendations of the Insight Report based on the Global Competitiveness Index. As a result, the working group, with the participation of several ministries and the private sector, presented a proposal for a new public-private financing model for innovation with multistakeholder governance, a mechanism for project selection, and an implementation agenda. The proposal was presented to Mexico's Secretary of the Economy, Chair of the Steering Committee, by the Working Groups and assigned to the Under-Secretary of Industry for implementation.<sup>2</sup>

- Contributed by the Colombian Private Council on Competitiveness.
- The full report can be found at http://www3.weforum.org/  ${\tt docs/WEF\_White\_Paper\_Mexico\_Competitiveness\_Lab.pdf}.$

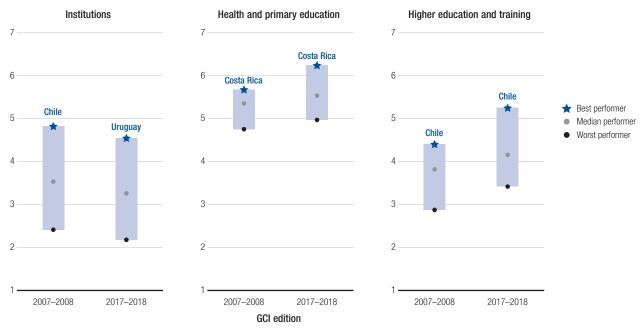
size of the negative macroeconomic shock of the last couple of years and the challenge of restoring stability.

Mexico places 51st with an overall score that increases, indicating that the country has continued to make progress but at a relatively slower rate than other countries. The main reduction in score is in the institutions pillar, with efficiency in government spending falling in both score and rank. Private institutions also worsen, with deteriorations in corporate ethics and

responsibility. After significant efforts to implement efficiency-enhancing reforms, the slow progress this year signals the need to increase the speed and depth of reforms that will improve the allocation of factors of production and the competitive forces driving innovation and rivalry in product markets.

Brazil improves to 80th position, leveling off after several years of falling in the rankings. After being rocked by corruption scandals and political instability,

Figure 6: Evolution of competitiveness in Latin American and the Caribbean in selected pillars Score (1-7)



Source: Calculations based on the results of the Global Competitiveness Index 2007–2008 through 2017–2018.

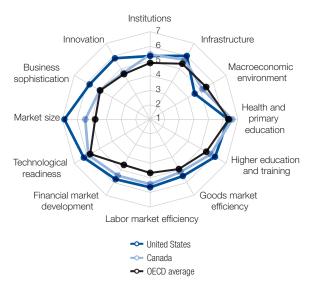
the institutions pillar recovers 11 positions, showing the effects of investigations leading to more transparency and a perception of successful proceedings to curb corruption within the institutional limits of Brazil's constitution. Following two years of falling GDP growth and worsening macroeconomic conditions, Brazil this year improves slightly, bringing inflation and government deficits back under control. Efficiency enhancers also advance this year, with improvements in goods market efficiency. Brazil's largest progress comes in the innovation pillar, with upturns in many of the indicators, indicating an enhanced capacity for innovation, more industryuniversity-business collaboration, a higher quality of research, and better-trained scientists and engineers.

Argentina improves 10 positions to rank 92nd this year, boosted by a better performance in basic requirements. In particular, institutions improve significantly and consistently, reflecting renewed trust in public and private institutions. Technological adoption, business sophistication, and innovation all improve, signaling a reconversion process in Argentina and reflecting new sources of growth. As the government implements reforms that target distortions affecting market efficiency, some indicators of goods markets, labor markets, and financial development are starting to improve. These small improvements are indicative of the road ahead.

#### NORTH AMERICA

The two countries of North America—Canada and the United States—are two of the GCI's top performers. Both countries consistently rank high on most pillars of the Index (Figure 7). However, in order to remain in the top of the rankings, both countries face important challenges, including securing the free flow of goods, people, capital, and services within the North America Free Trade

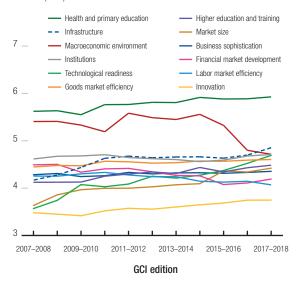
Figure 7: Performance of North America and OECD countries, 2017-2018 edition



Source: Calculations based on the results of the Global Competitiveness Index 2017-2018. Note: OECD = Organisation for Economic Co-operation and Development

Figure 8: Evolution of pillar scores in the Middle East and North Africa, 2007-2017

Score (1-7)



Source: Calculations based on the results of the Global Competitiveness Index 2007-2008 through 2017-2018.

Note: Based on a constant sample of 11 countries: Algeria, Bahrain, Egypt, Israel, Jordan, Kuwait, Morocco, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

Agreement with Mexico, investing in human capital, both health and education; and consolidating the basic requirements of competitiveness that lag relative to other advanced economies while at the same time protecting their advantage in innovation and business sophistication and the efficiency of their markets.

Although technological progress and innovation place North America at the top of the competitiveness rankings and serve as an engine of not only local, but also global growth, the region also faces the challenges of increasing industry concentration, inequality, and sustainability. The issue of the quality of growth, not only its quantity, is particularly important in countries such as the United States. If these issues are not addressed, the institutional underpinnings of the system, as well as the performance of the region on pillars of competitiveness related to competition, human capital, and the efficient use of talent, could affect future growth and undermine growth prospects.

It is no time for complacency. Achieving a competitiveness agenda that can lay the foundation for future inclusive and sustainable growth should be at the top of the agenda-even for leading countries.

The United States ranks 2nd overall this year, displaying a constant improvement in score since 2010. Although ranking high overall, the country ranks 25th in basic requirements, with institutions, coming in below the top 10 and the macroeconomic environment placing 83rd. The macroeconomic environment pillar, out of all the components of the basic requirements subindex, has advanced the least and is one of the country's

worst-ranked areas. Compared with other top-ranked countries, the United States performs poorly in health and primary education, coming in 29th despite an improvement of 0.15 in score over the last year. The strength of the United States comes from its performance in efficiency enhancers and innovation and sophistication factors, where it comes in at 1st and 2nd respectively. These two subindexes reflect sound and well-functioning factors of production and product markets and a vibrant innovation ecosystem. The United States faces numerous policy uncertainties moving forward, many of which are in the areas where it is relatively weakest. Successfully meeting institutional challenges relating to both public and private institutions, improving the macroeconomic environment, and investing in human capital-particularly in the areas of health and primary education—will be crucial for the United States to maintain its position near the top of the competitiveness rankings.

Canada ranks 14th this year, a very slight improvement over last year's ranking. The main changes with respect to last year are in the efficiency of government spending (where it falls 13 places) and the macroeconomic environment (where it falls six spots), reflecting the negative international shocks via termsof-trade deterioration and their impact on government revenues and national savings. Uncertainties regarding the United States' trade policy present challenges to Canada, with trade disruptions potentially affecting regional value chains. Canada's main challenges to continue making progress toward the top 10 lie in the macroeconomic environment pillar, ranking 47th; the quantity of education subpillar, where it ranks 28th; and the technological readiness, business sophistication, and innovation pillars where it ranks in the 20s. On the other hand, Canada ranks a high 7th in labor market efficiency, driven mainly by the efficient use of talent (3rd).

#### MIDDLE EAST AND NORTH AFRICA

The Middle East and North Africa improves its average performance this year, in part because the new normal of low oil and gas prices is forcing many countries to implement reforms to increase diversification. Across the region, the most-improved country this year is Egypt (101st, up 14).

Looking at the data over the past decade, it becomes clear how the fall in oil prices has affected the macroeconomic environment in the region, which used to lead the way in this dimension (Figure 8). This has mainly affected some Gulf Cooperation Council economies' macroeconomic performance negatively. In many other countries, the fall in oil prices has increased the fiscal space because energy subsidies could be reduced. On the positive side, heavy investment in digital and technological infrastructure has allowed major improvements in technological readiness, but these have not yet led to an equally large turnaround in the region's

Gap between sub-Saharan Africa score Sub-Saharan Africa average score change since the 2016–2017 edition and global average Pillar -0.73 -0.01 GCI total -0.41 1 Institutions -0.07 -1.302. Infrastructure 0.09 -0.25 -0.823. Macroeconomic environment -1.19 4. Health and primary education 0.10 -1.225. Higher education and training 0.00 -0.40 6. Goods market efficiency -0.02 -0.04 7. Labor market efficiency 0.00 -0.52 -0.05 8. Financial market development -1.34 9. Technological readiness 0.05 -0.95 10. Market size 0.09 -0.54 0.05 11. Business sophistication -0.50 12. Innovation -0.03

Figure 9: Sub-Saharan Africa average score: Gap and evolution by pillar, 2016-2017 and 2017-2018

Source: Calculations based on the results of the Global Competitiveness Index 2016-2017 and 2017-2018. Notes: Based on a constant sample. Gray bars correspond to negative values and blue bars to positive values

level of innovation. The growth in market size also slowed down after 2015 with the decrease in oil prices.

The United Arab Emirates (UAE) (17th) improves its absolute assessment and continues to lead the Arab World in terms of competitiveness, but it loses one place as other countries post even larger gains. This improvement shows the resilience of the UAE economy, in part due to increased diversification, which is reflected in its strengthening macroeconomic environment and its ability to weather the double shock of lower oil and gas prices and reduced global trade. Although the IMF predicts GDP growth to drop to 1.3 percent this year. non-oil growth is expected to pick up, suggesting that the country's diversification strategy is bearing fruit.<sup>10</sup> To further increase its competitiveness, the UAE will have to speed up progress in terms of spreading the latest digital technologies (36th) and upgrading education (36th).

Saudi Arabia (30th) slips one position, with a relatively stable overall performance. The macroeconomic environment has improved slightly after the 2015 oil price shock, but financial market efficiency (down 10, at 57th) has deteriorated as interest rates increased in 2016 and credit growth slowed. The country has stable institutions (27th), good-quality infrastructure (29th), and the largest market in the Arab world (15th). Saudi executives see restrictive labor regulations as their most problematic factor for doing business: the labor market is segmented among different population groups, and women remain largely excluded. Another concern is the lack of adequately educated workers: although tertiary enrollment is strong at 63 percent, more efforts are needed to advance the quality of education and align it with economic needs.

#### SUB-SAHARAN AFRICA

On average, sub-Saharan Africa's competitiveness has not changed significantly over the past decade: while a little ground was gained between 2011 and 2015, it has been partially lost again over the past two years. Only four countries (Ethiopia, Senegal, Tanzania, and Uganda) have improved their performance for five consecutive years since 2010. Africa's recent decline in overall competitiveness is reflected in subdued growth rates only 1.4 percent in 2016 and a modest 2.6 percent projected for 2017.11 Gross capital formation is now lower than at any other point in the last 10 years. 12

Continued deterioration in the macroeconomic environment (Figure 9) is behind most of this year's fall in competitiveness. Average inflation grew to double digits in 2016 and remains above 10 percent. Public finances are still being affected by past slower global growth and commodity prices, which—although picking up somewhat-remain well below the commodity price levels of the 2005-14 period. As a consequence, African public revenues fell from an average of 26.5 percent of GDP in 2006 to 17 percent in 2016, and many countries are running deficits. In just two years public debt has risen from an average of 31.5 percent to 42.5 percent of GDP, and 22 of the 31 countries assessed by the GCI this year report higher debt than last year.

These challenges are affecting the banking sector, with financial market efficiency continuing to decline. In addition, after four years of improvement, performance in the institutions pillar has worsened this yearparticularly in South Africa, Lesotho, and Zambia-while elections in 2017 in Rwanda, Kenya, Liberia, and the Democratic Republic of Congo have increased volatility and uncertainty in the African business environment.

These negative trends have been partly compensated by improvements in infrastructure, health, technological readiness, and business sophistication, although Africa remains below the global average in these areas.

There is significant variation across countries. Mauritius is again the most competitive country in Africa, at 45th in the overall GCI, with its main rivals falling back: South Africa drops 14 places to 61st and Rwanda drops seven places to 58th. The most improved African countries year-on-year are Madagascar (121st, up seven), Gambia (117th, up six), Kenya (91st, up five), and Senegal (106th, up six), thanks either to an improved macroeconomic environment (Madagascar and Senegal) or to the efficiency of goods, labor, and financial markets (Gambia, and to a lesser extent Kenya).

In general, restoring macroeconomic stability and institutional trust are short-term priorities to reignite competitiveness and growth in Africa. In the long run, continued investment in infrastructure, human capital, and technological adoption will be needed to reduce productivity gaps (Figure 9).

South Africa (61st) remains one of the most competitive countries in sub-Saharan Africa, and among the region's most innovative (39th)—but it drops 14 positions in the overall rankings this year. South Africa's economy is nearly at a standstill, with GDP growth forecast at just 1.0 percent in 2017 and 1.2 percent in 2018—hit by persistently low international demand for its commodities, while its unemployment rate is currently estimated above 25 percent and rising. Political uncertainty in 2017 has decreased the confidence of South African business leaders: although still relatively good in the African context, the country's institutional environment (76th), financial markets (44th), and goods market efficiency (54th) are all rated as weaker than last year, also partially due to a structural break in the Executive Opinion Survey sample.

Nigeria (125th) moves up two positions in the rankings despite its score having fallen every year since 2012. Its macroeconomic conditions are worsening (122nd, down 14), inflation (131st) is high at 15.7 percent, and its budget deficit (99th) has reached 4.4 percent. Institutions appear more fragile (125th, down seven), adding uncertainty to the business environment. Nigeria is struggling to adapt to lower commodity prices, with the potential for structural change impeded by low scores on infrastructure (132nd), technological readiness (112th, down seven), higher education (116th), and innovation capacity (112th). However, new prudential requirements have strengthened the banking sector's soundness, and the Economic Recovery and Growth Plan (ERGP) for 2017–2020 contains much-needed reforms on transport and power infrastructure, the business environment, and education investment.

#### CONCLUSIONS

As the challenges facing economies around the globe are varied, agendas to improve competitiveness need to be defined locally. Public-private collaboration must, however, also explore regional factors: multinational corporations can engage with several jurisdictions, while regional organizations, such as trade blocs, are able to coordinate countries. The Global Competitiveness Index can help to guide and structure these long-term dialogues, leading to actionable agendas-not only at the national level, but also subnationally and regionally.

#### **NOTES**

- 1 IMF 2017d.
- 2 See Eurostat 2016 for data on youth unemployment; see Darvas and Wolff 2016 and OECD 2017 for details about the fall of middleskilled employment.
- 3 World Economic Forum and EIB 2017; EIB 2016.
- 4 Some of this improvement is due to the statistical revision of specific indicators. See Appendix A, Methodology and Computation of the GCI 2017-2018.
- 5 IMF 2017a.
- 6 IMF 2017a.
- 7 Yao 2017.
- 8 World Bank 2017.
- 9 IMF 2017b.
- 10 IMF 2017e.
- 11 IMF 2017c.
- 12 Inflation, government revenues, investment, and GDP growth statistics in this section are from the IMF World Economic Outlook, April 2017 (IMF 2017c).

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# Economy Profiles

## How to Read the Economy Profiles

The Economy Profiles section presents a two-page profile for each of the 137 economies covered in The Global Competitiveness Report 2017-2018.

#### PAGE 1

## • Key indicators

The first section presents a selection of key indicators for the economy under review. All data in this section are for 2016 and sourced from the April 2017 edition of the International Monetary Fund (IMF)'s World Economic Outlook (WEO) Database.

## 2 Performance overview

This section details the economy's performance on the main components of the Global Competitiveness Index (GCI). The table at the top of this section shows the economy's overall GCI rank and score, and its evolution since the 2012-2013 edition (or the earliest edition available). Below, the left-hand side shows a table with a breakdown of the economy's performance in the 12 pillars of the GCI. The right-hand side charts the economy's score in each pillar (blue line) measured against the region's average scores. See page ix for group composition. For selected economies, a brief commentary of the performance appears at the bottom part of this section.

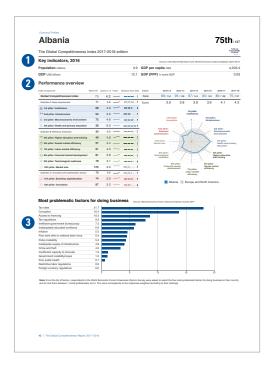
## 3 The most problematic factors for doing business

This chart summarizes those factors seen by business executives as the most problematic for doing business in their economy. The information is drawn from the World Economic Forum's Executive Opinion Survey (the Survey). From a list of 16 factors, respondents were asked to select the five most problematic and rank them from 1 (most problematic) to 5. The results were then tabulated and weighted according to the ranking assigned by respondents.

## PAGE 2

## The Global Competitiveness Index in detail

This page details the country's performance on each of the indicators entering the composition of the GCI.





Indicators are organized by pillar. For indicators entering the GCI in two different pillars, only the first instance is shown on this page. See Appendix A for the detailed structure of the GCI and methodology.

Indicators derived from the Survey are always expressed as scores on a 1-7 scale, with 7 being the most desirable outcome. For those, units are omitted for the sake of readability. For indicators that are not derived from the Survey, the units are displayed next to the indicator name. A line depicts the evolution of this value since the 2013-2014 edition of the Report (or the earliest period available).

## **ONLINE RESOURCES**

Interactive profiles and sortable rankings with detailed meta information, as well as downloadable datasets, are available at http://gcr.weforum.org.

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Cambodia	78	Kuwait	170	Singapore	262
Cameroon	80	Kyrgyz Republic	172	Slovak Republic	264
Canada	82	Lao PDR	174	Slovenia	266
Cape Verde	84	Latvia	176	South Africa	268
Chad	86	Lebanon	178	Spain	270
Chile	88	Lesotho	180	Sri Lanka	272
China	90	Liberia	182	Swaziland	274
Colombia	92	Lithuania	184	Sweden	276
Congo, Democratic Rep.	94	Luxembourg	186	Switzerland	278
Costa Rica	96	Madagascar	188	Taiwan, China	280
Croatia	98	Malawi	190	Tajikistan	282
Cyprus	100	Malaysia	192	Tanzania	284
Czech Republic	102	Mali	194	Thailand	286
Denmark	104	Malta	196	Trinidad and Tobago	288
Dominican Republic	106	Mauritania	198	Tunisia	290
Ecuador	108	Mauritius	200	Turkey	292
Egypt	110	Mexico	202	Uganda	294
El Salvador	112	Moldova	204	Ukraine	296
Estonia	114	Mongolia	206	United Arab Emirates	298
Ethiopia	116	Montenegro	208	United Kingdom	300
Finland	118	Morocco	210	United States	302
France	120	Mozambique	212	Uruguay	304
Gambia, The	122	Namibia	214	Venezuela	306
Georgia	124	Nepal	216	Vietnam	308
Germany	126	Netherlands	218	Yemen	310
Ghana	128	New Zealand	220	Zambia	312
Greece	130	Nicaragua	222	Zimbabwe	314
Guatemala	132	Nigeria	224		

## **Albania**



The Global Competitiveness Index 2017-2018 edition



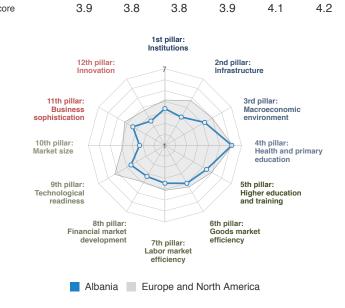
2017-18

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Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (A			
Population millions	2.9	GDP per capita US\$	4,203.4		
GDP US\$ billions	12.1	GDP (PPP) % world GDP	0.03		

#### Performance overview

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition
Global Competitiveness Index	75	4.2			Rank
Subindex A: Basic requirements	71	4.6	_		Score
â 1st pillar: Institutions	68	3.9	_		
	94	3.6			
3rd pillar: Macroeconomic environment	75	4.6	~		
3 4th pillar: Health and primary education	36	6.2			
Subindex B: Efficiency enhancers	80	4.0			
⇒ 5th pillar: Higher education and training	49	4.8	_		
	57	4.4			
7th pillar: Labor market efficiency	91	4.0	_		
8th pillar: Financial market development	81	3.8			
9th pillar: Technological readiness	78	4.1	_		
್ಘೆ 10th pillar: Market size	105	3.0			
Subindex C: Innovation and sophistication factors	76	3.6	_		
مر 11th pillar: Business sophistication	74	3.9			
** 12th pillar: Innovation	87	3.2			



2014-15

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2015-16

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2016-17

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## Most problematic factors for doing business

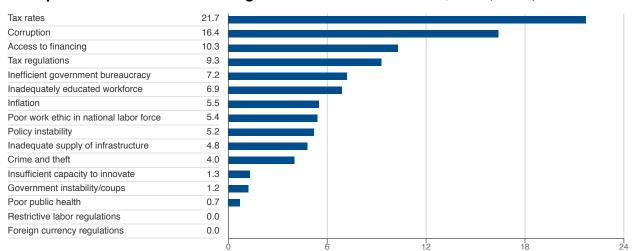


2012-13

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2013-14

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## **Albania**

Index Component	Rank/137	Value	e Trend	Inde	x Component	Rank/137	Value	Trei
☆ 1st pillar: Institutions	68	3.9	<u></u>	1	6th pillar: Goods market efficiency	57	4.4	_
1.01 Property rights	107	3.7	_	6.0	Intensity of local competition	100	4.7	_
1.02 Intellectual property protection	113	3.4			2 Extent of market dominance	115	3.1	_
1.03 Diversion of public funds	93	3.1			3 Effectiveness of anti-monopoly policy	102	3.3	_
1.04 Public trust in politicians	56	3.3			4 Effect of taxation on incentives to invest	123	2.7	
1.05 Irregular payments and bribes	69	3.9			5 Total tax rate % profits	67	36.5	~
1.06 Judicial independence	123	2.6			No. of procedures to start a business	36	5	~
1.07 Favoritism in decisions of government officials	73	2.9			7 Time to start a business days	22	5.0	Č
1.08 Efficiency of government spending	38	3.9			B Agricultural policy costs	20	4.7	
1.09 Burden of government regulation	14	4.6			Prevalence of non-tariff barriers	75	4.3	_
1.10 Efficiency of legal framework in settling disputes	100				Trade tariffs % duty	40	2.3	_
1.11 Efficiency of legal framework in challenging regulations	97				1 Prevalence of foreign ownership	92		_
		2.8					4.2	~
1.12 Transparency of government policymaking	32	4.7			2 Business impact of rules on FDI	24	5.3	_
1.13 Business costs of terrorism	43	5.5			Burden of customs procedures	77	4.0	_
1.14 Business costs of crime and violence	67		~		4 Imports % GDP	48	52.6	~
1.15 Organized crime	92	4.3			5 Degree of customer orientation	33	5.1	$\sim$
1.16 Reliability of police services	43		_	6.16	Buyer sophistication	80	3.3	/
1.17 Ethical behavior of firms	43	4.3	$\overline{}$	250	7th pillar: Labor market efficiency	91	4.0	_
1.18 Strength of auditing and reporting standards	90	4.3	$\overline{}$	al,				
1.19 Efficacy of corporate boards	96	4.5	<b>~</b>		1 Cooperation in labor-employer relations	31	4.9	_
1.20 Protection of minority shareholders' interests	66	4.0			2 Flexibility of wage determination	80	4.7	$\sim$
1.21 Strength of investor protection 0-10 (best)	18	7.2	_		Hiring and firing practices	35	4.2	_
	2.1	2.0		7.0	4 Redundancy costs weeks of salary	90	20.8	
1 2nd pillar: Infrastructure	94	3.6		7.05	5 Effect of taxation on incentives to work	115	3.1	$\overline{}$
2.01 Quality of overall infrastructure	60	4.3	_	7.06	Pay and productivity	36	4.5	~
2.02 Quality of roads	57	4.3		7.0	Reliance on professional management	61	4.4	_
2.03 Quality of railroad infrastructure	101	1.2		7.08	Country capacity to retain talent	116	2.6	/
2.04 Quality of port infrastructure	67	4.1	_		Country capacity to attract talent	121	2.3	/
2.05 Quality of air transport infrastructure	83	4.1	~		Female participation in the labor force ratio to men	98	0.68	_
2.06 Available airline seat kilometers millions/week	120	24.5	~					
2.07 Quality of electricity supply	81	4.6	~		8th pillar: Financial market development	81	3.8	_
2.08 Mobile-cellular telephone subscriptions /100 pop.	94	105.1		8.0	Availability of financial services	79	4.1	_
2.09 Fixed-telephone lines /100 pop.	89	7.6		8.02	2 Affordability of financial services	72	3.8	_
2.03 Fixed telephone lines 7100 pop.	00	7.0			Financing through local equity market	137	1.3	~
	75	4.6	~		4 Ease of access to loans	94	3.5	_
3.01 Government budget balance % GDP	43	-1.7	~		5 Venture capital availability	103	2.5	
3.02 Gross national savings % GDP	101	14.8			Soundness of banks	55	5.3	_
3.03 Inflation annual % change	1	1.3			Regulation of securities exchanges	88	4.0	_
3.04 Government debt % GDP	104	71.5			B Legal rights index 0-10 (best)	31	7.0	$\overline{}$
3.05 Country credit rating 0-100 (best)	78	39.3		0.00	a Legal rights index 0-10 (best)	01		,
3.05 Country Credit rating 0-100 (best)	76	39.3		e8/2s	9th pillar: Technological readiness	78	4.1	_
4th pillar: Health and primary education	36	6.2		9.0	Availability of latest technologies	89	4.4	_
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02	2 Firm-level technology absorption	71	4.4	/
4.02 Business impact of malaria	n/a	6.5		9.03	FDI and technology transfer	34	4.9	$\overline{}$
4.03 Tuberculosis incidence cases/100,000 pop.	47	19.0	/	9.04	4 Internet users % pop.	59	66.4	
4.04 Business impact of tuberculosis	32	6.4	_	9.05	Fixed-broadband Internet subscriptions /100 pop.	79	8.2	_
4.05 HIV prevalence % adult pop.	1	0.1		9.06	5 Internet bandwidth kb/s/user	69	57.0	_^
4.06 Business impact of HIV/AIDS	18	6.5	_		7 Mobile-broadband subscriptions /100 pop.	79	52.6	_
4.07 Infant mortality deaths/1,000 live births	69	12.5						
4.08 Life expectancy years	40	78.0		43	10th pillar: Market size	105	3.0	
4.09 Quality of primary education	24	5.1		10.0	1 Domestic market size index	105	2.7	_
4.10 Primary education enrollment rate net %	68	95.5			2 Foreign market size index	102	3.7	_
and thinking deduction of the motivation and the		00.0	•	10.0	03 GDP (PPP) PPP \$ billions	108	34.2	_
⇒ 5th pillar: Higher education and training	49	4.8			04 Exports % GDP	63	37.7	_
5.01 Secondary education enrollment rate gross %	60	95.8	~		•			_
5.02 Tertiary education enrollment rate gross %	47	58.1		ood	11th pillar: Business sophistication	74	3.9	_
5.03 Quality of the education system	42	4.3		11.0	1 Local supplier quantity	39	4.8	_
5.04 Quality of math and science education	58	4.3			2 Local supplier quality	48	4.6	_
5.05 Quality of management schools	77	4.1			3 State of cluster development	115	3.1	
5.06 Internet access in schools	28	5.3			04 Nature of competitive advantage	96	3.1	_
5.07 Local availability of specialized training services	94	4.0			D5 Value chain breadth	115	3.2	_
					Control of international distribution	100	3.2	_
5.08 Extent of staff training	72	3.8	_		77 Production process sophistication	60	4.0	_
					28 Extent of marketing	34	4.0	
				11.0	9 Willingness to delegate authority	85	4.1	
				***	12th pillar: Innovation	87	3.2	_
				12.0	1 Capacity for innovation	46	4.4	_
					22 Quality of scientific research institutions	118		^
					33 Company spending on R&D	57		_
					24 University industry collaboration in DSD		0.1	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

69

25

113

3.4

3.9

# **Algeria**



The Global Competitiveness Index 2017-2018 edition

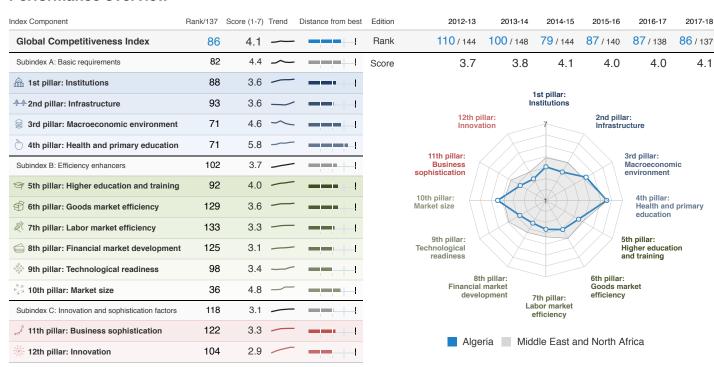


2017-18

4.1

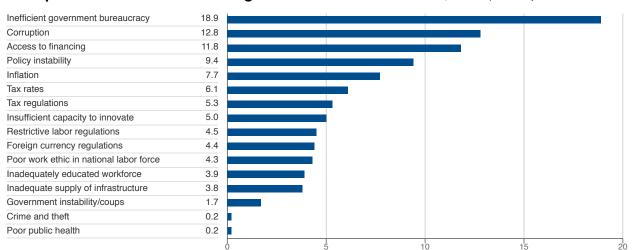
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April		
Population millions	40.8	GDP per capita US\$	3,944.4	
GDP US\$ billions	160.8	GDP (PPP) % world GDP	0.51	

#### Performance overview



## Most problematic factors for doing business





# **Algeria**

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Trend
â 1st pillar: Institutions	88	3.6	_	1	6th pillar: Goods market efficiency	129	3.6	
1.01 Property rights	101	3.8	_	6.0	Intensity of local competition	131	4.1	
1.02 Intellectual property protection	92	3.7		6.02	2 Extent of market dominance	65	3.7	
1.03 Diversion of public funds	83	3.2	_	6.03	Effectiveness of anti-monopoly policy	104	3.2	_
1.04 Public trust in politicians	80	2.8		6.04	4 Effect of taxation on incentives to invest	90	3.4	_
1.05 Irregular payments and bribes	92	3.4		6.05	5 Total tax rate % profits	132	65.6	$\overline{}$
1.06 Judicial independence	91	3.5	_	6.06	No. of procedures to start a business	126	12	
1.07 Favoritism in decisions of government officials	64	3.1			7 Time to start a business days	99	20.0	
1.08 Efficiency of government spending	75	3.1	_		Agricultural policy costs	110	3.3	
1.09 Burden of government regulation	84	3.2			Prevalence of non-tariff barriers	103	4.0	~
1.10 Efficiency of legal framework in settling disputes	55				Trade tariffs % duty	128	14.0	~
1.11 Efficiency of legal framework in challenging regulations	62	3.4			1 Prevalence of foreign ownership	125	3.3	
1.12 Transparency of government policymaking	121	3.2			2 Business impact of rules on FDI	133	3.1	_
1.13 Business costs of terrorism	71	5.1			Burden of customs procedures	110	3.4	
1.14 Business costs of crime and violence	48				4 Imports % GDP	91	35.5	~
1.15 Organized crime	50	5.1			5 Degree of customer orientation	123	3.8	_
1.16 Reliability of police services	56	4.7			Buyer sophistication	92	3.1	_
1.17 Ethical behavior of firms	103	3.4		0.10	buyer sophistication	32	0.1	_
	129		_	P.	7th pillar: Labor market efficiency	133	3.3	
1.18 Strength of auditing and reporting standards	135		_	7.0	1 Cooperation in labor-employer relations	107	3.9	
1.19 Efficacy of corporate boards					2 Flexibility of wage determination	94	4.6	~
1.20 Protection of minority shareholders' interests	85	3.8	$\leq$		3 Hiring and firing practices	104	3.3	
1.21 Strength of investor protection 0-10 (best)	132	3.3	_		4 Redundancy costs weeks of salary	74	17.3	
1 2nd pillar: Infrastructure	93	3.6			5 Effect of taxation on incentives to work	85	3.7	
2.01 Quality of overall infrastructure	97	3.5	~		6 Pay and productivity	116	3.3	
2.02 Quality of roads	89				7 Reliance on professional management	132	2.9	_
2.03 Quality of railroad infrastructure	49	3.4				123	2.5	
	96	3.4			Country capacity to attract talent	127	2.0	
2.04 Quality of port infrastructure					Country capacity to attract talent	135		
2.05 Quality of air transport infrastructure	107 65		_	7.10	Female participation in the labor force ratio to men	135	0.24	
2.06 Available airline seat kilometers millions/week		241.9	$\sim$		8th pillar: Financial market development	125	3.1	
2.07 Quality of electricity supply	93	4.2		8.0-	1 Availability of financial services	126	3.3	
2.08 Mobile-cellular telephone subscriptions /100 pop.	70	117.0	~		2 Affordability of financial services	91	3.5	
2.09 Fixed-telephone lines /100 pop.	87	8.2	_		Financing through local equity market	113	2.7	
	71	4.6	$\sim$		4 Ease of access to loans	111	3.2	_
3.01 Government budget balance % GDP	128	-11.6	$\overline{}$		5 Venture capital availability	78	2.8	
3.02 Gross national savings % GDP	18	32.6	~~		Soundness of banks	115	3.7	_
3.03 Inflation annual % change	108	6.4	~		7 Regulation of securities exchanges	120	3.4	
3.04 Government debt % GDP	100	20.4	,			107	2	$\preceq$
	70	47.8	$\overline{}$	0.00	3 Legal rights index 0-10 (best)	107		
3.05 Country credit rating 0-100 (best)	70	47.0	_	o8\$\$0	9th pillar: Technological readiness	98	3.4	_
4th pillar: Health and primary education	71	5.8			Availability of latest technologies	119	3.8	
4.01 Malaria incidence cases/100,000 pop.	15	0.0	_	9.02	2 Firm-level technology absorption	121	3.8	
4.02 Business impact of malaria	3	6.0	_	9.03	FDI and technology transfer	114	3.7	~
4.03 Tuberculosis incidence cases/100,000 pop.	86	75.0		9.04	4 Internet users % pop.	91	42.9	
4.04 Business impact of tuberculosis	55	5.8	$\overline{)}$	9.05	5 Fixed-broadband Internet subscriptions /100 pop.	81	6.9	_
4.05 HIV prevalence % adult pop.	1	<0.1		9.06	Internet bandwidth kb/s/user	82	40.0	
4.06 Business impact of HIV/AIDS	44	5.9	$\overline{}$	9.07	7 Mobile-broadband subscriptions /100 pop.	88	46.8	
4.07 Infant mortality deaths/1,000 live births	93	21.9	<u> </u>	,57	ADD THE BELLEVIE	36	4.8	
4.08 Life expectancy years	63	75.0	~	13	10th pillar: Market size	36	4.0	
4.09 Quality of primary education	95	3.4		10.0	1 Domestic market size index	32	4.7	_
4.10 Primary education enrollment rate net %	51	97.1	_	10.0	2 Foreign market size index	48	5.0	
	00	4.0		10.0	03 GDP (PPP) PPP \$ billions	34	612.5	
5th pillar: Higher education and training	92	4.0		10.0	04 Exports % GDP	106	20.1	
5.01 Secondary education enrollment rate gross %	47	99.9	~	8	11th piller, Business conhiction	122	3.3	_
5.02 Tertiary education enrollment rate gross %	75	36.9	~/		11th pillar: Business sophistication			
5.03 Quality of the education system	97	3.2			1 Local supplier quantity	109	4.0	_
5.04 Quality of math and science education	92	3.6			2 Local supplier quality	124	3.5	_
5.05 Quality of management schools	112	3.6			33 State of cluster development	107	3.1	_
5.06 Internet access in schools	114	3.3			Nature of competitive advantage	105	2.9	
5.07 Local availability of specialized training services	119			11.0	5 Value chain breadth	85	3.6	
5.08 Extent of staff training	129		_	11.0	Control of international distribution	125	2.9	_
·				11.0	77 Production process sophistication	100	3.3	
				11.0	08 Extent of marketing	128	3.7	_
				11.0	9 Willingness to delegate authority	132	3.1	
				386	12th pillar: Innovation	104	2.9	_
								_
					1 Capacity for innovation	111	3.6	
					22 Quality of scientific research institutions	99	3.3	_
				12.0	O3 Company spending on R&D	104	2.9	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

125

94

83

2.6

3.0

# **Argentina**



The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World	d Economic Outlook Database (April 2017)
Population millions	43.6	GDP per capita US\$	12,502.8
GDP US\$ billions	545.1	GDP (PPP) % world GDP	0.73

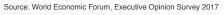
#### Performance overview

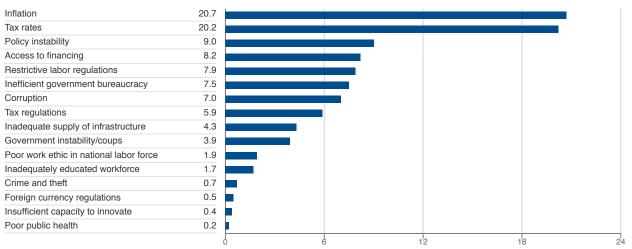
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	92	4.0	_		Rank	94 / 144	104 / 148	104 / 144	106 / 140	104 / 138	92 / 137
Subindex A: Basic requirements	103	4.1	_		Score	3.9	3.8	3.8	3.8	3.8	4.0
â 1st pillar: Institutions	113	3.3	_								
<b>1</b> 2nd pillar: Infrastructure	81	3.9	_					1st pillar: Institutions			
	125	3.4	~				h pillar: ovation	7	2nd pill Infrastr		
3 4th pillar: Health and primary education	64	5.9	_						$\bigwedge$		
Subindex B: Efficiency enhancers	81	4.0	_			11th pillar: Business sophistication		009		3rd pillar: Macroeconom environment	nic
⇒ 5th pillar: Higher education and training	38	5.0									
fth pillar: Goods market efficiency	133	3.4				10th pillar: Market size	1			4th pillar: Health and education	primary
7th pillar: Labor market efficiency	132	3.3	_					000			
8th pillar: Financial market development	121	3.1				9th pillar: Technological readiness			< / / I	5th pillar: Higher educati and training	on
% 9th pillar: Technological readiness	66	4.3				readifieds	8th pillar:		6th pillar		
ੀ 10th pillar: Market size	32	4.9					cial market velopment	7th pillar:	Goods m	arket	
Subindex C: Innovation and sophistication factors	75	3.6	_					Labor market efficiency			
√ 11th pillar: Business sophistication	78	3.8	_			Augus	ation o	atia Amazuia	and the Co	مره و طوانده	
* 12th pillar: Innovation	72	3.3				Arge	numa 🔛 L	atin America	and the Ca	aribbean	

Argentina improves 10 positions to rank 92nd this year, boosted by a better performance in basic requirements. In particular, institutions improve significantly and consistently, reflecting renewed trust in public and private institutions. Technological adoption, business sophistication, and innovation all improve, signaling a reconversion

process in Argentina and reflecting new sources of growth. As the government implements reforms that target distortions affecting market efficiency, some indicators of goods markets, labor markets, and financial development are starting to improve. These small improvements are indicative of the road ahead.

## Most problematic factors for doing business





# **Argentina**

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Trer
â 1st pillar: Institutions	113	3.3	_		6th pillar: Goods market efficiency	133	3.4	
1.01 Property rights	118	3.6	_	6.01	Intensity of local competition	123	4.3	
1.02 Intellectual property protection	89	3.7			2 Extent of market dominance	103	3.3	
1.03 Diversion of public funds	121	2.4			Effectiveness of anti-monopoly policy	121	2.9	_
1.04 Public trust in politicians	118	1.9	_		Effect of taxation on incentives to invest	134	2.1	_
1.05 Irregular payments and bribes	98	3.3			5 Total tax rate % profits	138	106.0	_/
1.06 Judicial independence	100	3.2			No. of procedures to start a business	135	14	_
1.07 Favoritism in decisions of government officials	98	2.6			7 Time to start a business days	107	25.0	$\neg$
1.08 Efficiency of government spending	96		_		3 Agricultural policy costs	30	4.3	_
1.09 Burden of government regulation	128	2.4			Prevalence of non-tariff barriers	125	3.7	
1.10 Efficiency of legal framework in settling disputes	114	2.8			) Trade tariffs % duty	120	11.7	
	99	2.8			Prevalence of foreign ownership	81	4.4	$\overline{}$
1.11 Efficiency of legal framework in challenging regulations								
1.12 Transparency of government policymaking	102	3.6			2 Business impact of rules on FDI	103	4.1	$\sim$
1.13 Business costs of terrorism	45	5.5	_		B Burden of customs procedures	131	2.8	$\simeq$
1.14 Business costs of crime and violence	114	3.5	~		I Imports % GDP	135	13.8	~
1.15 Organized crime	105	4.1	~		Degree of customer orientation	103	4.2	
1.16 Reliability of police services	120			6.16	Buyer sophistication	77	3.3	_
1.17 Ethical behavior of firms	130	2.9	_	25%	7th pillar: Labor market efficiency	132	3.3	_
1.18 Strength of auditing and reporting standards	102	4.0		of,				
1.19 Efficacy of corporate boards	80	4.7			Cooperation in labor-employer relations	114	3.8	
1.20 Protection of minority shareholders' interests	115	3.5	~		2 Flexibility of wage determination	133	3.1	_
1.21 Strength of investor protection 0-10 (best)	49	6.2	_		Hiring and firing practices	135	2.3	
	0.1	2.0		7.04	Redundancy costs weeks of salary	123	30.3	_
2nd pillar: Infrastructure	81	3.9		7.05	Effect of taxation on incentives to work	134	2.5	_
2.01 Quality of overall infrastructure	106	3.3	_	7.06	Pay and productivity	114	3.3	~
2.02 Quality of roads	96	3.3		7.07	Reliance on professional management	56	4.5	_
2.03 Quality of railroad infrastructure	83	2.1		7.08	Country capacity to retain talent	48	3.7	_
2.04 Quality of port infrastructure	80	3.7	_		Country capacity to attract talent	94	2.9	_
2.05 Quality of air transport infrastructure	78	4.2			Female participation in the labor force ratio to men	94	0.69	_
2.06 Available airline seat kilometers millions/week		1,001.4	_					
2.07 Quality of electricity supply	113	3.0			8th pillar: Financial market development	121	3.1	
2.08 Mobile-cellular telephone subscriptions /100 pop.	16	150.7	~	8.01	Availability of financial services	130	3.0	_
2.09 Fixed-telephone lines /100 pop.	42	23.4	~		2 Affordability of financial services	124	2.9	
2.09 Tixed telephone lines 7100 pop.	72	20.4			Financing through local equity market	106	2.9	_
	125	3.4	$\sim$		Ease of access to loans	116	3.1	
3.01 Government budget balance % GDP	109	-5.8	~		5 Venture capital availability	120	2.2	
3.02 Gross national savings % GDP	113	12.8	_		Soundness of banks	81	4.6	_
3.03 Inflation annual % change	125	10.6	_		Regulation of securities exchanges	107	3.6	_
3.04 Government debt % GDP	71	51.3	_^		B Legal rights index 0-10 (best)	107	2	$\overline{}$
	110	27.7	$\leq$	0.00	Legal rights index 5-10 (best)	107		,
3.05 Country credit rating 0-100 (best)		21.1		e\${\$?	9th pillar: Technological readiness	66	4.3	_
4th pillar: Health and primary education	64	5.9		9.01	Availability of latest technologies	100	4.2	_
4.01 Malaria incidence cases/100,000 pop.	1	0.0	_	9.02	2 Firm-level technology absorption	101	4.1	_
4.02 Business impact of malaria	n/a	6.1	$\overline{}$	9.03	FDI and technology transfer	119	3.5	_
4.03 Tuberculosis incidence cases/100,000 pop.	56	25.0	$\sim$	9.04	Internet users % pop.	52	70.2	
4.04 Business impact of tuberculosis	37	6.2	_	9.05	Fixed-broadband Internet subscriptions /100 pop.	52	16.9	_
4.05 HIV prevalence % adult pop.	73	0.4		9.06	Internet bandwidth kb/s/user	81	41.1	_^
4.06 Business impact of HIV/AIDS	51	5.8			7 Mobile-broadband subscriptions /100 pop.	39	80.5	
4.07 Infant mortality deaths/1,000 live births	63	11.1	~		• • • • • • • • • • • • • • • • • • • •			
4.08 Life expectancy years	52	76.3	_	43	10th pillar: Market size	32	4.9	
4.09 Quality of primary education	101	3.3	_	10.0	1 Domestic market size index	26	4.9	
4.10 Primary education enrollment rate net %	13	99.3	7		2 Foreign market size index	50	4.9	_
	10	55.5			03 GDP (PPP) PPP \$ billions	26	874.1	
⇒ 5th pillar: Higher education and training	38	5.0			04 Exports % GDP	126	12.9	
5.01 Secondary education enrollment rate gross %	27	106.8	_	0	•			
5.02 Tertiary education enrollment rate gross %	15	82.9	_	ood	11th pillar: Business sophistication	78	3.8	
5.03 Quality of the education system	102	3.2		11.0	1 Local supplier quantity	92	4.2	_
5.04 Quality of math and science education	102	3.1			2 Local supplier quality	111	3.7	_
			=		3 State of cluster development	103	3.3	_
5.05 Quality of management schools	39	4.8			24 Nature of competitive advantage	91	3.2	=
5.06 Internet access in schools	80	4.0			25 Value chain breadth	84	3.6	
5.07 Local availability of specialized training services	39	4.9	$\simeq$		66 Control of international distribution	98	3.2	_
5.08 Extent of staff training	81	3.7			77 Production process sophistication	66	3.8	_
					08 Extent of marketing	50	4.6	
				11.0	9 Willingness to delegate authority	66	4.4	
				***	12th pillar: Innovation	72	3.3	_
					1 Capacity for innovation	71	4.1	_
					2 Quality of scientific research institutions	37	4.6	
					33 Company spending on R&D	88		=
				12.0	33 Company spending on Had	00	0.1	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

81

104 67

3.3

2.8

## **Armenia**



The Global Competitiveness Index 2017-2018 edition



2017-18

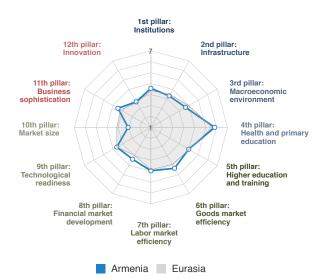
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Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April			
Population millions	3.0	GDP per capita US\$	3,510.7		
GDP US\$ billions	10.5	GDP (PPP) % world GDP	0.02		

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15
Global Competitiveness Index	73	4.2			Rank	82 / 144	<b>79</b> / 148	85 / 144
Subindex A: Basic requirements	77	4.5	~		Score	4.0	4.1	4.0
☐ 1st pillar: Institutions	55	4.1						
↑↑ 2nd pillar: Infrastructure	80	3.9	_					1st pillar: Institutions
	101	4.1	~			12th p Innov		7
3 4th pillar: Health and primary education	55	6.0	_				$\Lambda$	
Subindex B: Efficiency enhancers	78	4.0				11th pillar: Business sophistication	$\langle \langle \rangle \rangle$	100
⇒ 5th pillar: Higher education and training	69	4.4				/		
	35	4.7				10th pillar: Market size		
7th pillar: Labor market efficiency	51	4.4	_			\		
8th pillar: Financial market development	78	3.9	$\sim$			9th pillar: Technological readiness	$\langle \rangle \rangle$	
🕉 9th pillar: Technological readiness	77	4.1					th pillar:	
្សុំ 10th pillar: Market size	115	2.8	_			Financia		7th pillar:
Subindex C: Innovation and sophistication factors	67	3.6	_					Labor market efficiency
ூ 11th pillar: Business sophistication	68	4.0					Δ 11100	ania 🔳 🗆
12th pillar: Innovation	70	3.3	_				ienia 🔙 E	



2015-16

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4.0

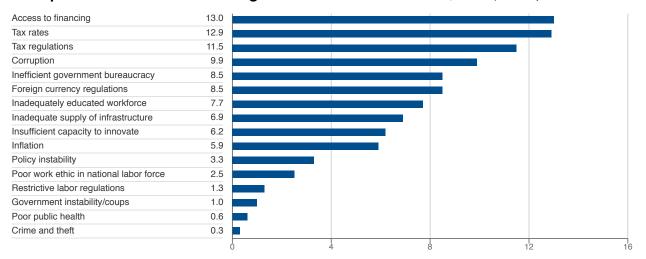
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4.1

## Most problematic factors for doing business





# **Armenia**

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Trei
	55	4.1		1	6th pillar: Goods market efficiency	35	4.7	_
1.01 Property rights	61	4.4	~	6.0	Intensity of local competition	66	5.1	_
1.02 Intellectual property protection	75	4.0			2 Extent of market dominance	28	4.3	_
1.03 Diversion of public funds	62	3.7	_		3 Effectiveness of anti-monopoly policy	40	4.2	_
1.04 Public trust in politicians	57	3.2	_		4 Effect of taxation on incentives to invest	60	3.7	
1.05 Irregular payments and bribes	61	4.1			5 Total tax rate % profits	9	18.5	$\neg$
1.06 Judicial independence	96	3.3			No. of procedures to start a business	7	3	$\overline{}$
1.07 Favoritism in decisions of government officials	53	3.4			7 Time to start a business days	12	4.0	$\neg$
1.08 Efficiency of government spending	64	3.3			B Agricultural policy costs	53	4.0	_
1.09 Burden of government regulation	43	3.7	$\approx$		Prevalence of non-tariff barriers	52	4.6	
		3.6			Trade tariffs % duty	54		
1.10 Efficiency of legal framework in settling disputes	66						4.0	=
1.11 Efficiency of legal framework in challenging regulations	63	3.4	$\sim$		1 Prevalence of foreign ownership	105	3.9	
1.12 Transparency of government policymaking	52	4.3	~		2 Business impact of rules on FDI	93	4.2	~
1.13 Business costs of terrorism	31	5.7	_		Burden of customs procedures	91	3.8	_
1.14 Business costs of crime and violence	33	5.2	_		4 Imports % GDP	59	47.6	_
1.15 Organized crime	62	5.0	_		Degree of customer orientation	45	5.0	_
1.16 Reliability of police services	67	4.4	_	6.16	Buyer sophistication	43	3.8	
1.17 Ethical behavior of firms	54	4.0		25	7th miller, I abou moulest officional	51	4.4	_
1.18 Strength of auditing and reporting standards	76	4.5		ex.	7th pillar: Labor market efficiency			_
1.19 Efficacy of corporate boards	82	4.6	~	7.0	1 Cooperation in labor-employer relations	40	4.7	
1.20 Protection of minority shareholders' interests	92	3.8	$\overline{}$	7.02	2 Flexibility of wage determination	52	5.1	$\sim$
1.21 Strength of investor protection 0-10 (best)	51	6.0	$\overline{}$	7.03	Hiring and firing practices	26	4.5	~
				7.0	4 Redundancy costs weeks of salary	40	11.0	
4 2nd pillar: Infrastructure	80	3.9		7.05	Effect of taxation on incentives to work	57	4.1	_
2.01 Quality of overall infrastructure	57	4.3	_	7.06	Pay and productivity	62	4.1	_
2.02 Quality of roads	85	3.7	_	7.0	Reliance on professional management	71	4.2	_
2.03 Quality of railroad infrastructure	64	2.9	_		Country capacity to retain talent	97	3.0	
2.04 Quality of port infrastructure	125	2.5	~		Ountry capacity to attract talent	96	2.9	_
2.05 Quality of air transport infrastructure	52	4.8	~		Female participation in the labor force ratio to men	82	0.77	_
2.06 Available airline seat kilometers millions/week	98	53.9	~	7.10	Tomalo participation in the labor lorge ratio to their	O.E.	0.77	
2.07 Quality of electricity supply	77	4.8	~		8th pillar: Financial market development	78	3.9	
, , , , ,			_	8.0	Availability of financial services	96	3.8	_
2.08 Mobile-cellular telephone subscriptions /100 pop.	74	114.8	_		2 Affordability of financial services	98	3.4	
2.09 Fixed-telephone lines /100 pop.	59	17.8	$\overline{}$		Financing through local equity market	115	2.7	
	101	4.1	~		4 Ease of access to loans	65	3.9	
	106	E 6	~			76		_
3.01 Government budget balance % GDP	106	-5.6	- >		5 Venture capital availability		2.8	
3.02 Gross national savings % GDP	85	18.3	$\sim$		Soundness of banks	75	4.6	
3.03 Inflation annual % change	92	-1.4	~		7 Regulation of securities exchanges	79	4.1	~
3.04 Government debt % GDP	73	51.8		8.08	B Legal rights index 0-10 (best)	31	7	
3.05 Country credit rating 0-100 (best)	84	36.9		2888	9th pillar: Technological readiness	77	4.1	_
3 4th pillar: Health and primary education	55	6.0	_		1 Availability of latest technologies	77	4.5	~
4.01 Malaria incidence cases/100,000 pop.	1	0.0		9.02	2 Firm-level technology absorption	77	4.3	~
4.02 Business impact of malaria	n/a	5.2	_	9.03	FDI and technology transfer	90	4.1	^
4.03 Tuberculosis incidence cases/100,000 pop.	64	41.0	/		4 Internet users % pop.	63	62.0	_
4.04 Business impact of tuberculosis	77	5.2			5 Fixed-broadband Internet subscriptions /100 pop.	71	10.1	
4.05 HIV prevalence % adult pop.	1	0.2			6 Internet bandwidth kb/s/user	68	59.9	_^
4.06 Business impact of HIV/AIDS	67	5.4			7 Mobile-broadband subscriptions /100 pop.	77	53.9	
4.07 Infant mortality deaths/1,000 live births	71	12.6						_
	69	74.8	$\rightarrow$	+ x x	10th pillar: Market size	115	2.8	
4.08 Life expectancy years					1 Domestic market size index	116	2.6	_
4.09 Quality of primary education	54	4.3			22 Foreign market size index	113	3.5	_
4.10 Primary education enrollment rate net %	65	96.1			03 GDP (PPP) PPP \$ billions	117	25.8	
⇒ 5th pillar: Higher education and training	69	4.4			04 Exports % GDP	73	32.0	
5.01 Secondary education enrollment rate gross %	79	88.5	~		•			_
5.02 Tertiary education enrollment rate gross %	66	44.3		~0 <sup>8</sup>	11th pillar: Business sophistication	68	4.0	
	57		$\stackrel{\sim}{\sim}$	11 (	1 Local supplier quantity	56	4.6	~
5.03 Quality of the education system			_		22 Local supplier quality	58	4.5	_
5.04 Quality of math and science education	33				3 State of cluster development	95	3.4	_
5.05 Quality of management schools	106				24 Nature of competitive advantage	46	4.0	_
5.06 Internet access in schools	65				D5 Value chain breadth	68	3.8	
5.07 Local availability of specialized training services	82		_					
5.08 Extent of staff training	96	3.6	$\sim$		Control of international distribution	73	3.6	
					77 Production process sophistication	65	3.8	
					08 Extent of marketing	94	4.1	
				11.0	9 Willingness to delegate authority	103	3.9	
				1	12th pillar: Innovation	70	3.3	_
					1 Capacity for innovation	59	4.2	
					22 Quality of scientific research institutions	88	3.5	
					33 Company spending on R&D	71		
				16.0	33 Company Spending on Hab	00	0.2	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

88

80

48

3.2

3.2

## **Australia**



The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (Apr				
Population millions	24.3	GDP per capita US\$	51,850.3			
GDP US\$ billions	1,259.0	GDP (PPP) % world GDP	0.99			

#### Performance overview

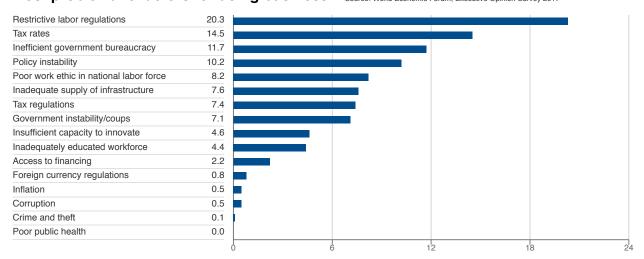
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18				
Global Competitiveness Index	21	5.2	_		Rank	20 / 144	<b>21</b> / 148	<mark>22</mark> / 144	<b>21</b> / 140	<b>22</b> / 138	21 / 137				
Subindex A: Basic requirements	18	5.7	_		Score	5.1	5.1	5.1	5.1	5.2	5.2				
â 1st pillar: Institutions	18	5.4													
<b>↑</b> 2nd pillar: Infrastructure	28	5.3	_					1st pillar: Institutions							
	27	5.7	~			12th p Innov		7	2nd pill Infrastr						
3 4th pillar: Health and primary education	12	6.5	_			4411	$\wedge$			0.1.30					
Subindex B: Efficiency enhancers	13	5.3				11th pillar: Business sophistication				3rd pillar: Macroeconor environment	nic				
⇒ 5th pillar: Higher education and training	9	5.9	_			/									
	28	4.9	_			Market size					4th pillar: Health and primary				
7th pillar: Labor market efficiency	28	4.7	~												
8th pillar: Financial market development	6	5.5				9th pillar: Technological readiness		-		5th pillar: Higher educat and training	ion				
🕸 9th pillar: Technological readiness	27	5.7	~				th pillar:		6th pillar						
$\sqrt[6]{3}$ 10th pillar: Market size	22	5.1				Financia		7th pillar:	Goods m	arket					
Subindex C: Innovation and sophistication factors	27	4.7				Labor market efficiency									
ℳ 11th pillar: Business sophistication	28	4.9	_		Australia East Asia and Pacific										
** 12th pillar: Innovation	27	4.5	_												

Australia (21st) moves up one place in the rankings with a stable score. When considering Australia's performance by pillar, its results are rather less static. The country posts a noticeable drop in the infrastructure pillar, more specifically its communications' infrastructure, while several other pillars increase only marginally. Australia's overall performance is not remarkable: in most pillars it

does not rank among the top 25 countries. Similar to last year, Australia performs comparatively better in the higher education and training pillar (9th), which reflects its capacity to produce a large pool of qualified workers. It also performs well in the financial market development (6th) pillar, which is driven mostly by a stable and wellregulated banking sector.

## Most problematic factors for doing business





# **Australia**

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	е
â 1st pillar: Institutions	18	5.4	_		28	4.9	-
1.01 Property rights	18	5.8	_	6.01 Intensity of local competition	8	5.9	
.02 Intellectual property protection	17	5.8		6.02 Extent of market dominance	47	4.0	-
.03 Diversion of public funds	14	5.7	$\overline{}$	6.03 Effectiveness of anti-monopoly policy	26	4.5	-
.04 Public trust in politicians	22	4.6		6.04 Effect of taxation on incentives to invest	94	3.3	
.05 Irregular payments and bribes	12			6.05 Total tax rate % profits	102	47.6	
.06 Judicial independence	8	6.3		6.06 No. of procedures to start a business	7	3	
.07 Favoritism in decisions of government officials	21	4.5		6.07 Time to start a business days	4	2.5	
	47				12		
.08 Efficiency of government spending		3.6		6.08 Agricultural policy costs		4.9	
.09 Burden of government regulation	80		$\sim$	6.09 Prevalence of non-tariff barriers	28	4.9	
.10 Efficiency of legal framework in settling disputes	25	4.7	~	6.10 Trade tariffs % duty	39	2.2	
11 Efficiency of legal framework in challenging regulations	34	4.0	~	6.11 Prevalence of foreign ownership	15	5.5	
.12 Transparency of government policymaking	21	5.2		6.12 Business impact of rules on FDI	60	4.7	
.13 Business costs of terrorism	47	5.5	_	6.13 Burden of customs procedures	31	5.0	
.14 Business costs of crime and violence	43	5.1	$\sim$	6.14 Imports % GDP	124	20.0	
15 Organized crime	30	5.5	_	6.15 Degree of customer orientation	23	5.5	
16 Reliability of police services	14	6.2		6.16 Buyer sophistication	32	4.0	
17 Ethical behavior of firms	11	5.7	~	one Bayer depinionation			
		6.1		7th pillar: Labor market efficiency	28	4.7	
18 Strength of auditing and reporting standards	10			7.01 Cooperation in labor-employer relations	72	4.3	
19 Efficacy of corporate boards	8	6.1		7.02 Flexibility of wage determination	109	4.4	
20 Protection of minority shareholders' interests	21	5.1	_				
21 Strength of investor protection 0-10 (best)	61	5.8		7.03 Hiring and firing practices	110	3.2	
2nd nillar: Infractructure	28	5.3	_	7.04 Redundancy costs weeks of salary	46	12.0	
2nd pillar: Infrastructure				7.05 Effect of taxation on incentives to work	102	3.4	
01 Quality of overall infrastructure	39	4.7	_	7.06 Pay and productivity	31	4.5	
02 Quality of roads	35	4.8	_	7.07 Reliance on professional management	6	6.1	
03 Quality of railroad infrastructure	35	4.1	_	7.08 Country capacity to retain talent	23	4.6	
04 Quality of port infrastructure	35	4.9		7.09 Country capacity to attract talent	17	4.7	
05 Quality of air transport infrastructure	36	5.2		7.10 Female participation in the labor force ratio to men	55	0.86	
06 Available airline seat kilometers millions/week		5,007.4		7.10 T Official participation in the labor force factors from		0.00	
		5.7	$\subseteq$	8th pillar: Financial market development	6	5.5	
07 Quality of electricity supply	44			8.01 Availability of financial services	26	5.1	
08 Mobile-cellular telephone subscriptions /100 pop.	86	109.6		8.02 Affordability of financial services	38	4.3	
09 Fixed-telephone lines /100 pop.	31	33.8	_		14	5.2	
3rd pillar: Macroeconomic environment	27	5.7	~	8.03 Financing through local equity market			
•				8.04 Ease of access to loans	15	5.0	
.01 Government budget balance % GDP	67	-2.7		8.05 Venture capital availability	40	3.4	
.02 Gross national savings % GDP	62	21.8	_	8.06 Soundness of banks	4	6.5	
.03 Inflation annual % change	1	1.3	$\sim$	8.07 Regulation of securities exchanges	7	6.0	
04 Government debt % GDP	51	41.1		8.08 Legal rights index 0-10 (best)	4	11	
05 Country credit rating 0-100 (best)	11	90.0		% Other iller Technological modification	27	5.7	
4th pillar: Health and primary education	12	6.5		9th pillar: Technological readiness	27		
· · · · · · · · · · · · · · · · · · ·				9.01 Availability of latest technologies		5.7	
01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02 Firm-level technology absorption	24	5.3	
02 Business impact of malaria	n/a	6.7		9.03 FDI and technology transfer	27	5.0	
03 Tuberculosis incidence cases/100,000 pop.	13	6.0	~~	9.04 Internet users % pop.	17	88.2	
04 Business impact of tuberculosis	12	6.8		9.05 Fixed-broadband Internet subscriptions /100 pop.	24	30.4	
05 HIV prevalence % adult pop.	1	0.1	_	9.06 Internet bandwidth kb/s/user	49	88.3	
.06 Business impact of HIV/AIDS	9	6.6		9.07 Mobile-broadband subscriptions /100 pop.	6	130.2	
.07 Infant mortality deaths/1,000 live births	17		_	•			
08 Life expectancy years	10	82.5		10th pillar: Market size	22	5.1	
09 Quality of primary education	18		_	10.01 Domestic market size index	20	5.1	
	52		$\sim$	10.02 Foreign market size index	34	5.3	
10 Primary education enrollment rate net %	52	97.0		10.03 GDP (PPP) PPP \$ billions		1,187.3	
₹ 5th pillar: Higher education and training	9	5.9	_	10.04 Exports % GDP	108	19.3	
01 Secondary education enrollment rate gross %	4	137.6					
02 Tertiary education enrollment rate gross %	5	90.3		A 11th pillar: Business sophistication	28	4.9	
03 Quality of the education system	16	5.1		11.01 Local supplier quantity	79	4.4	
04 Quality of math and science education	30	4.8		11.02 Local supplier quality	22	5.3	
D5 Quality of management schools				11.03 State of cluster development	51	4.0	
	17	5.4		11.04 Nature of competitive advantage	24	4.7	
06 Internet access in schools	5		_	11.05 Value chain breadth	48	4.2	
77 Local availability of specialized training services	15		~				
08 Extent of staff training	22	4.9		11.06 Control of international distribution	27	4.5	
				11.07 Production process sophistication	26	5.2	
				11.08 Extent of marketing	19	5.2	
				11.09 Willingness to delegate authority	9	5.7	
				12th pillar: Innovation	27	4.5	
				12.01 Capacity for innovation	24	5.1	
				12.02 Quality of scientific research institutions	10	5.7	
					25	4.4	
				12.03 Company spending on R&D			
				12.04 University-industry collaboration in R&D	33	4.3	
				12 US 130VT procurement of advanced technology products			

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

71

16

3.3

## **Austria**



The Global Competitiveness Index 2017-2018 edition



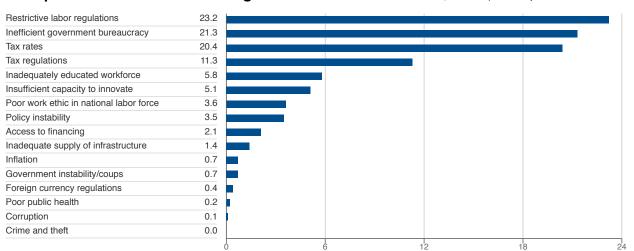
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April				
Population millions	8.7	GDP per capita ∪s\$	44,498.4			
GDP US\$ billions	386.8	GDP (PPP) % world GDP	0.35			

## **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	18	5.2	_		Rank	<b>16</b> / 144	<b>16</b> / 148	21 / 144	23 / 140	19 / 138	18 / 137
Subindex A: Basic requirements	19	5.7			Score	5.2	5.2	5.2	5.1	5.2	5.2
â 1st pillar: Institutions	22	5.2	_								
<b>↑</b> 2nd pillar: Infrastructure	14	5.7						1st pillar: Institutions			
	32	5.5	~~			12th բ Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	22	6.4	_			4411	$\wedge$			0.4	
Subindex B: Efficiency enhancers	22	5.0				11th pillar: Business sophistication		7		3rd pillar: Macroeconon environment	nic
⇒ 5th pillar: Higher education and training	16	5.7				/					
	26	4.9	_			10th pillar: Market size			1	4th pillar: Health and education	l primary
7th pillar: Labor market efficiency	42	4.5	_			\					
8th pillar: Financial market development	30	4.6	~			9th pillar: Technological readiness			( / / ।	5th pillar: Higher educati and training	ion
% 9th pillar: Technological readiness	17	6.0					th pillar:		6th pillar		
$\stackrel{\nwarrow}{\downarrow}$ 3 10th pillar: Market size	42	4.6				Financia		7th pillar:	Goods m	arket	
Subindex C: Innovation and sophistication factors	10	5.3	_					Labor market efficiency			
ூ 11th pillar: Business sophistication	8	5.6	_			Δ.,	otrio 🔲 I	Europo and	North Ama	rico	
** 12th pillar: Innovation	13	5.0			Austria Europe and North America						

## Most problematic factors for doing business





# **Austria**

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	e Tr
â 1st pillar: Institutions	22	5.2	_		26	4.9	-
1.01 Property rights	17	5.9	_	6.01 Intensity of local competition	18	5.6	_
1.02 Intellectual property protection	11	5.9	_	6.02 Extent of market dominance	12	5.0	_
1.03 Diversion of public funds	31	4.7		6.03 Effectiveness of anti-monopoly policy	16	4.9	_
1.04 Public trust in politicians	34	4.1		6.04 Effect of taxation on incentives to invest	120	2.9	_
1.05 Irregular payments and bribes	20	5.9		6.05 Total tax rate % profits	113	51.6	_
1.06 Judicial independence	21	5.6	_	6.06 No. of procedures to start a business	92	8	_
1.07 Favoritism in decisions of government officials	36	3.8		6.07 Time to start a business days	100	21.0	_
1.08 Efficiency of government spending	92	2.7	_	6.08 Agricultural policy costs	28	4.4	
1.09 Burden of government regulation	65	3.5		6.09 Prevalence of non-tariff barriers	24	4.9	=
1.10 Efficiency of legal framework in settling disputes	24	4.7	_	6.10 Trade tariffs % duty	6	1.1	_
1.11 Efficiency of legal framework in settling disputes	39	3.9	~	6.11 Prevalence of foreign ownership	41	5.0	_
1.12 Transparency of government policymaking	20	5.2		• '	26	5.3	
1.13 Business costs of terrorism			_	6.12 Business impact of rules on FDI			_
	32	5.6		6.13 Burden of customs procedures	16	5.3	_
.14 Business costs of crime and violence	27	5.3		6.14 Imports % GDP	45	53.2	_
.15 Organized crime	19	5.7		6.15 Degree of customer orientation	3	5.9	
.16 Reliability of police services	18	6.1		6.16 Buyer sophistication	45	3.8	_
.17 Ethical behavior of firms	18	5.4		7th pillar: Labor market efficiency	42	4.5	_
.18 Strength of auditing and reporting standards	11	6.0					
19 Efficacy of corporate boards	5	6.1		7.01 Cooperation in labor-employer relations	13	5.6	_
20 Protection of minority shareholders' interests	22	5.1	$\overline{}$	7.02 Flexibility of wage determination	136	2.3	~
21 Strength of investor protection 0-10 (best)	31	6.5		7.03 Hiring and firing practices	124	3.0	_
On double the second	4.4	E 7		7.04 Redundancy costs weeks of salary	4	2.0	_
2nd pillar: Infrastructure	14	5.7		7.05 Effect of taxation on incentives to work	130	2.7	-
01 Quality of overall infrastructure	9	5.9		7.06 Pay and productivity	30	4.5	-
02 Quality of roads	9	6.0		7.07 Reliance on professional management	24	5.4	-
03 Quality of railroad infrastructure	13	5.3	_	7.08 Country capacity to retain talent	35	4.3	_
04 Quality of port infrastructure	76	3.9	_	7.09 Country capacity to attract talent	40	3.9	-
05 Quality of air transport infrastructure	38	5.2	_	7.10 Female participation in the labor force ratio to men	38	0.89	-
06 Available airline seat kilometers millions/week	49	512.2	_				
07 Quality of electricity supply	14	6.6	_	8th pillar: Financial market development	30	4.6	-
08 Mobile-cellular telephone subscriptions /100 pop.	8	166.1	~	8.01 Availability of financial services	21	5.2	-
	15	41.5	~	8.02 Affordability of financial services	8	5.2	_
09 Fixed-telephone lines /100 pop.	10	41.5	~	8.03 Financing through local equity market	28	4.6	_
3rd pillar: Macroeconomic environment	32	5.5	~~	8.04 Ease of access to loans	26	4.7	
.01 Government budget balance % GDP	38	-1.4	~~	8.05 Venture capital availability	46	3.2	
•	43						_
02 Gross national savings % GDP	1	26.1	$\leq$	8.06 Soundness of banks	57	5.2	
.03 Inflation annual % change		1.0		8.07 Regulation of securities exchanges	38	5.0	-
04 Government debt % GDP	115	83.9		8.08 Legal rights index 0-10 (best)	70	5	
05 Country credit rating 0-100 (best)	14	87.4		9th pillar: Technological readiness	17	6.0	-
4th pillar: Health and primary education	22	6.4		9.01 Availability of latest technologies	21	5.9	-
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	19	5.4	-
02 Business impact of malaria	n/a	6.8	_	9.03 FDI and technology transfer	46	4.7	-
03 Tuberculosis incidence cases/100,000 pop.	24	7.6	~	9.04 Internet users % pop.	23	84.3	_
			~				_
04 Business impact of tuberculosis	16	6.7		9.05 Fixed-broadband Internet subscriptions /100 pop.	26	29.4	_
05 HIV prevalence % adult pop.	73	0.4		9.06 Internet bandwidth kb/s/user		150.0	-
06 Business impact of HIV/AIDS	13	6.6		9.07 Mobile-broadband subscriptions /100 pop.	33	88.3	-
07 Infant mortality deaths/1,000 live births	13	2.9		10th pillar: Market size	42	4.6	_
08 Life expectancy years	17	81.8	_				
09 Quality of primary education	31	4.8		10.01 Domestic market size index	45	4.3	-
10 Primary education enrollment rate net %	31	98.1	_	10.02 Foreign market size index	35	5.3	-
S =	40			10.03 GDP (PPP) PPP \$ billions	45	417.2	_
5th pillar: Higher education and training	16	5.7		10.04 Exports % GDP	27	54.8	-
01 Secondary education enrollment rate gross %	46	100.0	$\sim$	data utilian Business sankistisation	0	E 6	
02 Tertiary education enrollment rate gross %	18	81.5		√ 11th pillar: Business sophistication	8	5.6	
03 Quality of the education system	44	4.2	~	11.01 Local supplier quantity	8	5.4	_
04 Quality of math and science education	42	4.6	_	11.02 Local supplier quality	3	6.0	-
OS Quality of management schools	29	5.0	_	11.03 State of cluster development	18	4.9	-
06 Internet access in schools	35	5.0	~	11.04 Nature of competitive advantage	3	6.3	-
77 Local availability of specialized training services	11	5.8		11.05 Value chain breadth	2	5.9	-
8 Extent of staff training	17	5.1	_	11.06 Control of international distribution	10	5.2	-
2. 2. 2. 10 Oldir training	17	J. I		11.07 Production process sophistication	7	6.1	-
				11.08 Extent of marketing	20	5.2	-
				11.09 Willingness to delegate authority	19	5.4	
				11.00 Triminghood to delegate authority	19	J. <del>4</del>	
				※ 12th pillar: Innovation	13	5.0	-
				12.01 Capacity for innovation	9	5.6	
				12.02 Quality of scientific research institutions	17	5.4	
				12.03 Company spending on R&D	19	4.9	-
							-
				12.04 University-industry collaboration in R&D	19 67	4.8	_
				THE LEGIST PROCUREMENT OF Advanced technology products	₩ 7	30	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

67

36

3.3

# Azerbaijan



2015-16

40 / 140

4.5

2nd pillar: Infrastructure

2016-17

37 / 138

4.6

3rd pillar: Macroeconomic environment

5th pillar: Higher education and training

6th pillar: Goods market efficiency

Eurasia

4th pillar: Health and primary education

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4.7

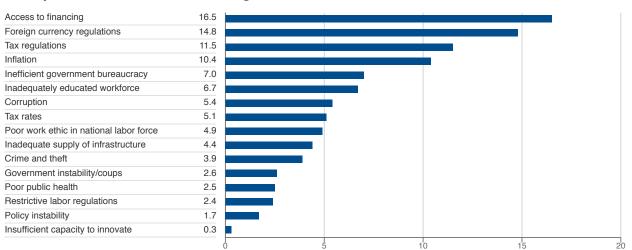
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April :			
Population millions 9.5		GDP per capita US\$	3,956.4		
GDP US\$ billions	37.6	GDP (PPP) % world GDP	0.14		

## **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15
Global Competitiveness Index	35	4.7			Rank	46 / 144	39 / 148	38 / 144
Subindex A: Basic requirements	47	4.9			Score	4.4	4.5	4.5
≟ 1st pillar: Institutions	33	4.6						
1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	51	4.5						1st pillar: Institutions
	65	4.8	_			12th p Innov		7
3 4th pillar: Health and primary education	74	5.7	_~				$\Lambda$	
Subindex B: Efficiency enhancers	46	4.4	_			11th pillar: Business sophistication	$\langle \langle \rangle \rangle$	
⇒ 5th pillar: Higher education and training	68	4.5				/		
	31	4.8	_			10th pillar: Market size		
7th pillar: Labor market efficiency	17	5.0	_			\		
8th pillar: Financial market development	79	3.8	~			9th pillar: Technological readiness		
🕉 9th pillar: Technological readiness	56	4.6					th pillar:	
10th pillar: Market size	63	4.0				Financia		7th pillar:
Subindex C: Innovation and sophistication factors	33	4.2	_					Labor market efficiency
→ 11th pillar: Business sophistication	40	4.4	_				Δ = ···	haiian <b>-</b>
★ 12th pillar: Innovation	33	4.0	~				Azeri	baijan







# **Azerbaijan**

dex Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	e Ti
â 1st pillar: Institutions	33	4.6	_	8	6th pillar: Goods market efficiency	31	4.8	_
1.01 Property rights	42	4.8	_	6.01	Intensity of local competition	106	4.7	_
1.02 Intellectual property protection	37	4.8	_	6.02	Extent of market dominance	36	4.2	_
1.03 Diversion of public funds	37	4.3		6.03	Effectiveness of anti-monopoly policy	38	4.3	_
1.04 Public trust in politicians	20	4.7	_	6.04	Effect of taxation on incentives to invest	29	4.4	_
1.05 Irregular payments and bribes	63	4.1			5 Total tax rate % profits	79	39.8	_
1.06 Judicial independence	50	4.4	_	6.06	No. of procedures to start a business	2	2	$\neg$
1.07 Favoritism in decisions of government officials	24	4.4	~		7 Time to start a business days	6	3.0	_
1.08 Efficiency of government spending	17	4.7			Agricultural policy costs	13	4.8	_
1.09 Burden of government regulation	15	4.6			Prevalence of non-tariff barriers	48	4.6	_
1.10 Efficiency of legal framework in settling disputes	26				Trade tariffs % duty	95	7.9	_
					•			
1.11 Efficiency of legal framework in challenging regulations	22		_		Prevalence of foreign ownership	50	4.8	
1.12 Transparency of government policymaking	31	4.7			2 Business impact of rules on FDI	62	4.6	^
1.13 Business costs of terrorism	41	5.5			Burden of customs procedures	57	4.4	_
.14 Business costs of crime and violence	23	5.4			Imports % GDP	68	44.3	_
1.15 Organized crime	43				Degree of customer orientation	51	4.9	
.16 Reliability of police services	54	4.7	_	6.16	Buyer sophistication	24	4.2	_
.17 Ethical behavior of firms	37	4.5	_	P3.	7th pillar: Labor market efficiency	17	5.0	_
.18 Strength of auditing and reporting standards	86	4.3						
.19 Efficacy of corporate boards	68	4.9	~		Cooperation in labor-employer relations	32	4.9	_
.20 Protection of minority shareholders' interests	43	4.4	_		2 Flexibility of wage determination	39	5.3	_
21 Strength of investor protection 0-10 (best)	31	6.5	~	7.03	Hiring and firing practices	14	4.7	_
				7.04	1 Redundancy costs weeks of salary	93	21.7	-
<sup>▶</sup> 2nd pillar: Infrastructure	51	4.5			Effect of taxation on incentives to work	21	4.6	_
01 Quality of overall infrastructure	26	5.0			6 Pay and productivity	16	4.8	_
02 Quality of roads	36	4.8			Reliance on professional management	46		_
03 Quality of railroad infrastructure	20	4.7			3 Country capacity to retain talent	26	4.5	
04 Quality of port infrastructure	40	4.7			Country capacity to attract talent	18	4.7	Ξ
05 Quality of air transport infrastructure						20	0.93	_
	24	5.6	=	7.10	Female participation in the labor force ratio to men	20	0.93	
06 Available airline seat kilometers millions/week	88	92.7			8th pillar: Financial market development	79	3.8	-
Of Quality of electricity supply	50	5.5	_			44	4.5	
08 Mobile-cellular telephone subscriptions /100 pop.	93	106.3	~		Availability of financial services	44	4.5	_
09 Fixed-telephone lines /100 pop.	62	17.5			2 Affordability of financial services	41	4.3	-
3rd pillar: Macroeconomic environment	65	4.8	$\overline{}$		Financing through local equity market	60	3.7	_
'					Ease of access to loans	57	4.0	_
01 Government budget balance % GDP	37	-1.4	_	8.05	Venture capital availability	22	3.9	_
02 Gross national savings % GDP	64	21.4		8.06	Soundness of banks	85	4.5	_
03 Inflation annual % change	127	12.4	$\overline{}$	8.07	Regulation of securities exchanges	68	4.3	-
04 Government debt % GDP	43	37.7	_	8.08	3 Legal rights index 0-10 (best)	107	2	
05 Country credit rating 0-100 (best)	65	53.7		ુલ્લિક	9th pillar: Technological readiness	56	4.6	
4th pillar: Health and primary education	74	5.7	_~		Availability of latest technologies	44	5.2	
01 Malaria incidence cases/100,000 pop.	1	0.0	_		2 Firm-level technology absorption	44	4.9	_
			_		,			_
D2 Business impact of malaria	n/a	4.9	~		3 FDI and technology transfer	29	5.0	
O3 Tuberculosis incidence cases/100,000 pop.	84	69.0	_		Internet users % pop.	35	78.2	_
4 Business impact of tuberculosis	91	5.0			Fixed-broadband Internet subscriptions /100 pop.	49	18.6	-
5 HIV prevalence % adult pop.	1	0.1			Internet bandwidth kb/s/user	84	34.3	-
06 Business impact of HIV/AIDS	95	4.9		9.07	Mobile-broadband subscriptions /100 pop.	74	57.4	-
7 Infant mortality deaths/1,000 live births	101	27.9	~	47	10th pillar: Market size	63	4.0	_
08 Life expectancy years	95	70.8						
9 Quality of primary education	58	4.2	_	10.0	1 Domestic market size index	65	3.7	-
0 Primary education enrollment rate net %	81		_	10.0	2 Foreign market size index	64	4.7	-
•				10.0	03 GDP (PPP) PPP \$ billions	66	165.5	
7 5th pillar: Higher education and training	68	4.5		10.0	04 Exports % GDP	55	40.6	
1 Secondary education enrollment rate gross %	35	102.8		208	11th pillar: Business sophistication	40	4.4	-
22 Tertiary education enrollment rate gross %	91	25.5			·			
O3 Quality of the education system	35	4.4			1 Local supplier quantity	70	4.5	-
04 Quality of math and science education	66	4.2	_		2 Local supplier quality	49	4.6	-
5 Quality of management schools	72	4.2	_		3 State of cluster development	35	4.3	-
6 Internet access in schools	41	4.9			Nature of competitive advantage	45	4.1	-
7 Local availability of specialized training services	44	4.7	$\overline{}$	11.0	5 Value chain breadth	31	4.4	-
8 Extent of staff training	51	4.2		11.0	06 Control of international distribution	35	4.2	-
<b>y</b>				11.0	7 Production process sophistication	35	4.6	-
					08 Extent of marketing	48		
					9 Willingness to delegate authority	55	4.5	
					12th pillar: Innovation	33	4.0	-
					1 Capacity for innovation	36	4.7	
				12.0	2 Quality of scientific research institutions	48	4.2	-
				12.0	3 Company spending on R&D	30	4.4	
				12.0	04 University-industry collaboration in R&D	34	4.2	
					05 Gov't procurement of advanced technology products	14	4.3	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers 12.07 PCT patents applications/million pop.

4.3 4.7

14

## **Bahrain**

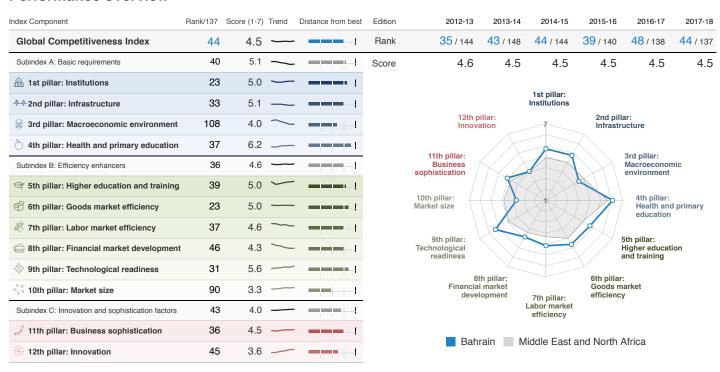


The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2				
Population millions	1.3	GDP per capita ∪s\$	24,182.9			
GDP US\$ billions	31.9	GDP (PPP) % world GDP	0.06			

#### Performance overview

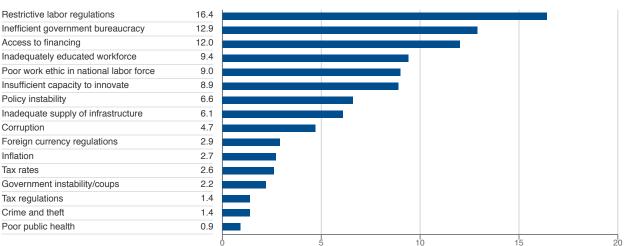


Bahrain ranks 44th overall. The country's business environment remains largely unchanged with persisting challenges related to the macroeconomic environment, and in particular the large fiscal deficit, but also to some aspects of security, innovation and market size. The country improves this year on a number of indicators, in particular

those related to the macroeconomic environment and technological readiness, where some of the changes are also due to a revision of the data previously published by the International Telecommunication Union (ITU).

## Most problematic factors for doing business





# **Bahrain**

Index Component	Rank/137	7 Value	Trend	Inde	x Component	Rank/137	Value	e Tre
☆ 1st pillar: Institutions	23	5.0	_	1	6th pillar: Goods market efficiency	23	5.0	_
1.01 Property rights	26	5.5		6.0	Intensity of local competition	62	5.2	_
1.02 Intellectual property protection	29	5.0	_		Extent of market dominance	35	4.2	_
1.03 Diversion of public funds	22	5.2	_		Effectiveness of anti-monopoly policy	25	4.6	_
1.04 Public trust in politicians	24	4.5	_		Effect of taxation on incentives to invest	2	6.1	_
1.05 Irregular payments and bribes	25	5.6			5 Total tax rate % profits	4	13.5	_
1.06 Judicial independence	32	5.1	_		6 No. of procedures to start a business	71	7	_
1.07 Favoritism in decisions of government officials	25	4.3			Time to start a business days	58	9.3	
								_
1.08 Efficiency of government spending	22	4.3			Agricultural policy costs	29	4.4	
1.09 Burden of government regulation	13	4.7			Prevalence of non-tariff barriers	19	5.0	_
1.10 Efficiency of legal framework in settling disputes	21	4.8			Trade tariffs % duty	55	4.0	
1.11 Efficiency of legal framework in challenging regulations	15	4.7			Prevalence of foreign ownership	18	5.5	_
1.12 Transparency of government policymaking	26	4.9	$\overline{}$		Business impact of rules on FDI	18	5.5	_
1.13 Business costs of terrorism	90	4.8	<u> </u>		Burden of customs procedures	24	5.2	_
1.14 Business costs of crime and violence	22	5.4	$\overline{}$	6.14	Imports % GDP	96	32.7	$\hat{}$
1.15 Organized crime	17	5.8	$\overline{}$	6.15	Degree of customer orientation	38	5.1	~
1.16 Reliability of police services	30	5.7	_	6.16	Buyer sophistication	40	3.8	_
1.17 Ethical behavior of firms	24	5.1	_	-C3				_
1.18 Strength of auditing and reporting standards	29	5.4	_	W.	7th pillar: Labor market efficiency	37	4.6	
1.19 Efficacy of corporate boards	37	5.2		7.0	Cooperation in labor-employer relations	23	5.2	_
1.20 Protection of minority shareholders' interests	23	5.1			Flexibility of wage determination	21	5.6	_
1.21 Strength of investor protection 0-10 (best)	91	5.0	$\sim$		B Hiring and firing practices	29	4.4	
1.21 On ongui of investor protection 0-10 (best)	91	5.0			Redundancy costs weeks of salary	16	6.7	_
1 2nd pillar: Infrastructure	33	5.1			5 Effect of taxation on incentives to work	7	5.3	=
2.01 Quality of overall infrastructure	25	5.2			Pay and productivity	24	4.7	
2.02 Quality of roads	25	5.1				35	4.8	_
2.02 Quality of Todas	23				Reliance on professional management			
2.03 Quality of railroad infrastructure	n/a	not assessed			3 Country capacity to retain talent	31	4.4	_
2.04 Quality of port infrastructure	30	5.1	_		Country capacity to attract talent	22	4.6	_
	49	4.9	_	7.10	Female participation in the labor force ratio to men	121	0.47	
2.05 Quality of air transport infrastructure			$\overline{}$		8th pillar: Financial market development	46	4.3	_
2.06 Available airline seat kilometers millions/week	72	184.8						
2.07 Quality of electricity supply	31	6.2			Availability of financial services	24	5.1	_
2.08 Mobile-cellular telephone subscriptions /100 pop.	2	216.9		8.02	Affordability of financial services	25	4.8	
2.09 Fixed-telephone lines /100 pop.	49	20.8	$\sim$	8.03	Financing through local equity market	51	4.0	_
	108	4.0	~	8.0	Ease of access to loans	22	4.7	/
				8.08	Venture capital availability	23	3.8	_
3.01 Government budget balance % GDP	136	-17.7		8.0	Soundness of banks	46	5.4	~
3.02 Gross national savings % GDP	67	21.1	$\sim$	8.0	Regulation of securities exchanges	23	5.5	~
3.03 Inflation annual % change	1	2.8	~		Legal rights index 0-10 (best)	128	1	
3.04 Government debt % GDP	114	82.1	_/					
3.05 Country credit rating 0-100 (best)	66	53.3	_	888	9th pillar: Technological readiness	31	5.6	
<i>§</i>	07	0.0		9.0	Availability of latest technologies	34	5.6	_
4th pillar: Health and primary education	37	6.2		9.02	Firm-level technology absorption	34	5.1	/
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.			FDI and technology transfer	36	4.9	_
4.02 Business impact of malaria	n/a	6.2			Internet users % pop.	2	98.0	
4.03 Tuberculosis incidence cases/100,000 pop.	44	18.0	~~		5 Fixed-broadband Internet subscriptions /100 pop.	54	16.8	Ĺ
4.04 Business impact of tuberculosis	51	5.9			6 Internet bandwidth kb/s/user	40	112.8	_
4.05 HIV prevalence % adult pop.	1	<0.1						
4.06 Business impact of HIV/AIDS	45	5.9			Mobile-broadband subscriptions /100 pop.	1	162.1	
4.07 Infant mortality deaths/1,000 live births	38	5.3	$\overline{}$	£ 7.3	10th pillar: Market size	90	3.3	_
•	49							
4.08 Life expectancy years		76.8			1) Domestic market size index	93	3.0	_
4.09 Quality of primary education	34	4.7	~		2 Foreign market size index	80	4.2	
4.10 Primary education enrollment rate net %	57	96.4			3 GDP (PPP) PPP \$ billions	87	66.9	=
⇒ 5th pillar: Higher education and training	39	5.0	_	10.0	04 Exports % GDP	38	47.4	
			7 -	. 8	11th pillar: Business sophistication	36	4.5	_
5.01 Secondary education enrollment rate gross %	40	102.1	$\overline{}$					
5.02 Tertiary education enrollment rate gross %	69	43.3			1 Local supplier quantity	58	4.6	_
5.03 Quality of the education system	24		_		2 Local supplier quality	45	4.6	_
5.04 Quality of math and science education	31	4.8		11.0	3 State of cluster development	25	4.6	_
5.05 Quality of management schools	34	4.9	_	11.0	Nature of competitive advantage	49	4.0	_
5.06 Internet access in schools	36	5.0	$\sim$	11.0	5 Value chain breadth	41	4.3	_
5.07 Local availability of specialized training services	36	5.0	_	11.0	06 Control of international distribution	34	4.3	_
5.08 Extent of staff training	28		<u></u>		7 Production process sophistication	38	4.5	_
· · · · · · · · · · · · · · · · · · ·					8 Extent of marketing	41	4.7	
					-			
				11.0	9 Willingness to delegate authority	39	4.7	
				385	12th pillar: Innovation	45	3.6	_
					11 Capacity for innovation	67	4.1	
					2 Quality of scientific research institutions	73	3.7	
				12.0	3 Company spending on R&D	56	3.4	_
				40.	A Link consists in december and laboration in DOD		0.7	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

45

22

45

3.7

4.0

## Bangladesh

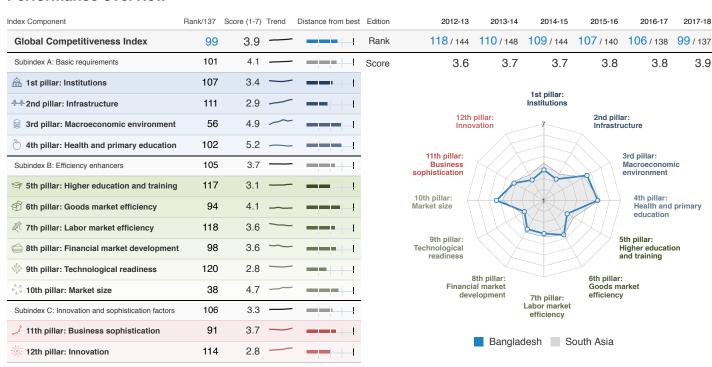


The Global Competitiveness Index 2017-2018 edition



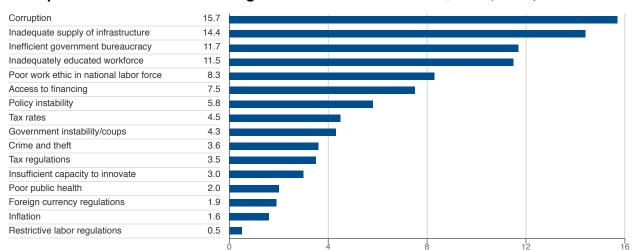
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2017)			
Population millions	161.5	GDP per capita US\$	1,411.0		
GDP US\$ billions	227.9	GDP (PPP) % world GDP	0.52		

#### Performance overview



## Most problematic factors for doing business





# Bangladesh

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
☆ 1st pillar: Institutions	107	3.4	_	1	6th pillar: Goods market efficiency	94	4.1	_
1.01 Property rights	85	4.0	_	6.0	Intensity of local competition	77	5.0	_
1.02 Intellectual property protection	124	3.2			2 Extent of market dominance	118	3.0	_
1.03 Diversion of public funds	75	3.4			6.03 Effectiveness of anti-monopoly policy		3.1	$\overline{}$
1.04 Public trust in politicians	100	2.3			6.04 Effect of taxation on incentives to invest		3.9	_
1.05 Irregular payments and bribes	126				6.05 Total tax rate % profits		34.4	
1.06 Judicial independence	95	3.3			No. of procedures to start a business	57 105	9	
1.07 Favoritism in decisions of government officials	106	2.4			7 Time to start a business days	97	19.5	=
1.08 Efficiency of government spending	66	3.3			B Agricultural policy costs	23	4.5	Ť
1.09 Burden of government regulation	78	3.3			Prevalence of non-tariff barriers	35	4.8	_
1.10 Efficiency of legal framework in settling disputes	97		~		Trade tariffs % duty	127	13.1	
			$\sim$		•			
1.11 Efficiency of legal framework in challenging regulations	84	3.1	$\sim$		1 Prevalence of foreign ownership	107	3.9	_
1.12 Transparency of government policymaking	91	3.7			2 Business impact of rules on FDI	58	4.7	
1.13 Business costs of terrorism	115	4.2			Burden of customs procedures	98	3.6	$\widehat{}$
1.14 Business costs of crime and violence	104	3.8	$\sim$		4 Imports % GDP	120	21.8	
1.15 Organized crime	98	4.2	$\sim$		5 Degree of customer orientation	108	4.1	
1.16 Reliability of police services	117		_	6.16	Buyer sophistication	71	3.4	
1.17 Ethical behavior of firms	106	3.3		250	7th pillar: Labor market efficiency	118	3.6	_
1.18 Strength of auditing and reporting standards	120	3.7		25,				
1.19 Efficacy of corporate boards	115	4.2			1 Cooperation in labor-employer relations	76	4.3	
1.20 Protection of minority shareholders' interests	120	3.4			2 Flexibility of wage determination	58	5.0	_
1.21 Strength of investor protection 0-10 (best)	66	5.7	$\sim$		Hiring and firing practices	40	4.2	_
A A		0.0			4 Redundancy costs weeks of salary	125	31.0	
1 2nd pillar: Infrastructure	111	2.9		7.05	Effect of taxation on incentives to work	39	4.3	_
2.01 Quality of overall infrastructure	116	2.9		7.06	Pay and productivity	80	3.8	_
2.02 Quality of roads	105	3.1		7.0	Reliance on professional management	87	3.9	_
2.03 Quality of railroad infrastructure	60	2.9	_	7.08	Country capacity to retain talent	85	3.2	_
2.04 Quality of port infrastructure	85	3.6	_		Country capacity to attract talent	102	2.7	_
2.05 Quality of air transport infrastructure	115	3.3	_		Female participation in the labor force ratio to men	119	0.54	_
2.06 Available airline seat kilometers millions/week	57	333.5	_					
2.07 Quality of electricity supply	101		_		8th pillar: Financial market development	98	3.6	
2.08 Mobile-cellular telephone subscriptions /100 pop.	122	77.9	_	8.0	Availability of financial services	77	4.1	_
2.09 Fixed-telephone lines /100 pop.	125	0.5			2 Affordability of financial services	86	3.6	_
2.09 Tixed-telepriorie lines 7100 pop.	123	0.5			Financing through local equity market	68	3.6	_
	56	4.9	_		4 Ease of access to loans	85	3.6	
3.01 Government budget balance % GDP	79	-3.4	~~		5 Venture capital availability	107	2.4	
3.02 Gross national savings % GDP	29	28.8	~~		Soundness of banks	111	3.9	
3.03 Inflation annual % change	106	6.4			7 Regulation of securities exchanges	101	3.8	
3.04 Government debt % GDP	30	33.1	_			70	5.6	_
			$\stackrel{\sim}{=}$	0.00	B Legal rights index 0-10 (best)	70	5	
3.05 Country credit rating 0-100 (best)	95	30.8		e8/3;	9th pillar: Technological readiness	120	2.8	
4th pillar: Health and primary education	102	5.2	_	9.0	Availability of latest technologies	106	4.1	_
4.01 Malaria incidence cases/100,000 pop.	24	5.3		9.02	2 Firm-level technology absorption	96	4.2	_
4.02 Business impact of malaria	13	5.5		9.03	FDI and technology transfer	110	3.7	_
4.03 Tuberculosis incidence cases/100,000 pop.	118	225.0	~^	9.04	4 Internet users % pop.	122	18.2	_
4.04 Business impact of tuberculosis	78	5.2	~	9.05	Fixed-broadband Internet subscriptions /100 pop.	93	3.8	_
4.05 HIV prevalence % adult pop.	1	<0.1			Internet bandwidth kb/s/user	112	9.2	_^
4.06 Business impact of HIV/AIDS	57	5.6			7 Mobile-broadband subscriptions /100 pop.	124	17.8	
4.07 Infant mortality deaths/1,000 live births	103	30.7	~					_
4.08 Life expectancy years	88	72.0	_	£ 7 X	10th pillar: Market size	38	4.7	_
4.09 Quality of primary education	108	3.1			1 Domestic market size index	33	4.7	_
4.09 Quality of primary education 4.10 Primary education enrollment rate net %	108	90.5			22 Foreign market size index	53	4.9	_
4.10 Primary education enrollment rate net %	103	90.5	_		03 GDP (PPP) PPP \$ billions	33	628.4	
⇒ 5th pillar: Higher education and training	117	3.1			04 Exports % GDP	121	16.2	_
5.01 Secondary education enrollment rate gross %	105	63.5	_		•			
5.02 Tertiary education enrollment rate gross %	108	13.4	~	000	11th pillar: Business sophistication	91	3.7	
5.03 Quality of the education system	84		_	11.0	1 Local supplier quantity	62	4.6	_
5.04 Quality of math and science education	107		_		2 Local supplier quality	78	4.2	_
5.05 Quality of management schools	104	3.7			3 State of cluster development	65	3.8	_
5.06 Internet access in schools		3.7			24 Nature of competitive advantage	132	2.3	_
	115				55 Value chain breadth	83	3.6	
5.07 Local availability of specialized training services	129		_		Control of international distribution	107	3.1	_
5.08 Extent of staff training	119	3.3				79	3.7	
					77 Production process sophistication			
					08 Extent of marketing	93	4.1	_
				11.0	99 Willingness to delegate authority	114	3.8	
				燕	12th pillar: Innovation	114	2.8	_
				12.0	1 Capacity for innovation	97	3.8	_
					22 Quality of scientific research institutions	117	2.9	_
					33 Company spending on R&D	113		_
				16.0	33 Company Spending on Hab	100	2.0	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

130

92

76

2.5

3.0

# **Belgium**



The Global Competitiveness Index 2017-2018 edition



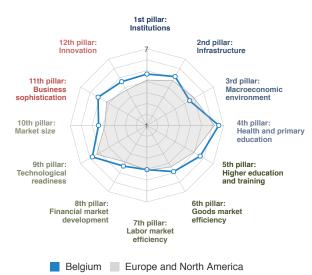
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5.2

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2017)			
Population millions 11.3		GDP per capita US\$	41,283.3		
GDP US\$ billions	467.0	GDP (PPP) % world GDP	0.43		

#### Performance overview

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition
Global Competitiveness Index	20	5.2	_		Rank
Subindex A: Basic requirements	27	5.5			Score
â 1st pillar: Institutions	25	5.0	_		
<b>1</b> 2nd pillar: Infrastructure	24	5.4	_		
	59	4.9			
3 4th pillar: Health and primary education	5	6.6			
Subindex B: Efficiency enhancers	18	5.1	_		
⇒ 5th pillar: Higher education and training	11	5.8	_		
6th pillar: Goods market efficiency	16	5.2			
7th pillar: Labor market efficiency	44	4.5	_		
8th pillar: Financial market development	26	4.7			
💖 9th pillar: Technological readiness	19	5.9	_		
್ಘೆತೆ 10th pillar: Market size	34	4.8	_		
Subindex C: Innovation and sophistication factors	14	5.2			
္တေနီ 11th pillar: Business sophistication	9	5.4	_		
** 12th pillar: Innovation	16	5.0	_		



2014-15

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5.2

2015-16

19/140

5.2

2016-17

17/138

5.3

## Most problematic factors for doing business



2012-13

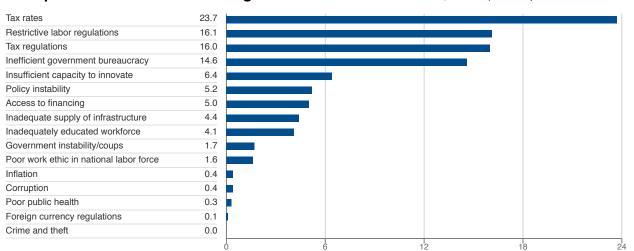
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2013-14

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5.1



# **Belgium**

Index Component	Rank/137	Value	e Trend	Inde	x Component	Rank/137	Value	Tre
☆ 1st pillar: Institutions	25	5.0	_	1	6th pillar: Goods market efficiency	16	5.2	_
1.01 Property rights	19	5.7		6.0	Intensity of local competition	11	5.8	_
1.02 Intellectual property protection	8	6.0	_		2 Extent of market dominance	9	5.0	_
1.03 Diversion of public funds	27	4.9	_		Effectiveness of anti-monopoly policy	14	5.0	_
1.04 Public trust in politicians	32	4.2			Effect of taxation on incentives to invest	101	3.2	
1.05 Irregular payments and bribes	22	5.7			5 Total tax rate % profits	122	58.7	_
1.06 Judicial independence	20	5.6			No. of procedures to start a business	7	3	_
1.07 Favoritism in decisions of government officials	30	4.1			7 Time to start a business days	12	4.0	_
1.08 Efficiency of government spending	62	3.3			3 Agricultural policy costs	42	4.1	
1.09 Burden of government regulation	99	3.1			Prevalence of non-tariff barriers	39	4.7	$\equiv$
1.10 Efficiency of legal framework in settling disputes	41	4.2			Trade tariffs % duty	6	1.1	
1.11 Efficiency of legal framework in challenging regulations	27	4.2			Prevalence of foreign ownership	7	5.8	_
1.12 Transparency of government policymaking	28	4.2			2 Business impact of rules on FDI	12	5.6	_
	116		$\simeq$		Burden of customs procedures	21	5.0	
1.13 Business costs of terrorism		4.2	_		•			_
1.14 Business costs of crime and violence	65	4.8	_		I Imports % GDP	6	101.7	
1.15 Organized crime	42	5.3	$\overline{}$		5 Degree of customer orientation	16	5.6	_
1.16 Reliability of police services	31	5.6		6.16	Buyer sophistication	18	4.5	_
1.17 Ethical behavior of firms	21	5.3	_	7	7th pillar: Labor market efficiency	44	4.5	_
1.18 Strength of auditing and reporting standards	17	5.8		- ·				
1.19 Efficacy of corporate boards	12	6.0			Cooperation in labor-employer relations	43	4.7	)
1.20 Protection of minority shareholders' interests	20	5.1	_		2 Flexibility of wage determination	115	4.3	
1.21 Strength of investor protection 0-10 (best)	61	5.8	_		Hiring and firing practices	114	3.2	_
AA	0.4	A		7.04	Redundancy costs weeks of salary	84	19.7	_
1 2nd pillar: Infrastructure	24	5.4		7.05	Effect of taxation on incentives to work	129	2.8	_
2.01 Quality of overall infrastructure	33	4.9		7.06	Pay and productivity	32	4.5	_
2.02 Quality of roads	46	4.5		7.07	Reliance on professional management	14	5.8	_
2.03 Quality of railroad infrastructure	18	4.8	_	7.08	Country capacity to retain talent	33	4.3	_
2.04 Quality of port infrastructure	7	6.1	_	7.09	Country capacity to attract talent	30	4.2	_
2.05 Quality of air transport infrastructure	20	5.7			Female participation in the labor force ratio to men	48	0.87	_
2.06 Available airline seat kilometers millions/week	39	670.8	_					
2.07 Quality of electricity supply	19	6.5			8th pillar: Financial market development	26	4.7	_
2.08 Mobile-cellular telephone subscriptions /100 pop.	82	111.0	~	8.0	Availability of financial services	17	5.3	_
2.09 Fixed-telephone lines /100 pop.	21	39.0	~		2 Affordability of financial services	13	5.1	
2.09 Tixed-teleprione lines 7100 pop.	21	33.0			Financing through local equity market	16	5.0	
	59	4.9			Ease of access to loans	25	4.7	
3.01 Government budget balance % GDP	66	-2.7			5 Venture capital availability	20	3.9	
3.02 Gross national savings % GDP	52	23.4			Soundness of banks	56	5.3	
· · · · · · · · · · · · · · · · · · ·								
3.03 Inflation annual % change	1	1.8	$\sim$		7 Regulation of securities exchanges	25	5.4	_
3.04 Government debt % GDP	125	105.5	_	8.08	3 Legal rights index 0-10 (best)	86	4	
3.05 Country credit rating 0-100 (best)	21	81.5		e\$\$5	9th pillar: Technological readiness	19	5.9	_
4th pillar: Health and primary education	5	6.6		9.0	Availability of latest technologies	12	6.2	_
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02	Firm-level technology absorption	25	5.3	_
4.02 Business impact of malaria	n/a	6.9		9.03	FDI and technology transfer	18	5.2	_
4.03 Tuberculosis incidence cases/100,000 pop.	31	9.4	~	9.04	1 Internet users % pop.	21	86.5	_
4.04 Business impact of tuberculosis	10	6.8		9.05	Fixed-broadband Internet subscriptions /100 pop.	10	38.0	_
4.05 HIV prevalence % adult pop.	1	0.1	_		6 Internet bandwidth kb/s/user	20	189.3	-
4.06 Business impact of HIV/AIDS	17	6.5			Mobile-broadband subscriptions /100 pop.	61	66.7	_
4.07 Infant mortality deaths/1,000 live births	23	3.3					55.7	
•	26	81.3		F 7 7	10th pillar: Market size	34	4.8	
4.08 Life expectancy years					1 Domestic market size index	37	4.4	
4.09 Quality of primary education	6	5.7			2 Foreign market size index	22	5.8	_
4.10 Primary education enrollment rate net %	19	98.9	~		33 GDP (PPP) PPP \$ billions	36	509.5	
⇒ 5th pillar: Higher education and training	11	5.8	_		04 Exports % GDP	5	108.1	=
5.01 Secondary education enrollment rate gross %	1	166.8		0	•			
5.02 Tertiary education enrollment rate gross %	24	75.0		000	11th pillar: Business sophistication	9	5.4	-
5.03 Quality of the education system	15	5.1		11.0	1 Local supplier quantity	14	5.1	-
5.04 Quality of math and science education	7	5.6			2 Local supplier quality	8	5.6	-
					3 State of cluster development	19	4.8	_
5.05 Quality of management schools	5	5.9			24 Nature of competitive advantage	8	5.9	
5.06 Internet access in schools	37	4.9			55 Value chain breadth	13	5.3	
5.07 Local availability of specialized training services	8	5.9						
5.08 Extent of staff training	16	5.1			06 Control of international distribution	21	4.8	_
					77 Production process sophistication	8	6.0	_
					08 Extent of marketing	11	5.5	_
				11.0	9 Willingness to delegate authority	12	5.6	
				**	12th pillar: Innovation	16	5.0	-
					1 Capacity for innovation	12	5.5	
					22 Quality of scientific research institutions	6	5.8	
				12.0	33 Company spending on R&D	9	5.2	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

5.3

3.6

4.5

44 42

## **Benin**



The Global Competitiveness Index 2017-2018 edition



2017-18

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Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (Ap.			
Population millions 11.1		GDP per capita ∪s\$	770.8		
GDP US\$ billions	8.6	GDP (PPP) % world GDP	0.02		

Edition

Rank

2012-13

119 / 144

2013-14

130 / 148

2015-16

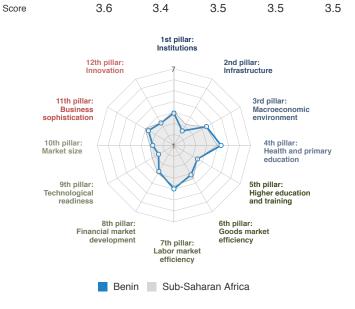
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2016-17

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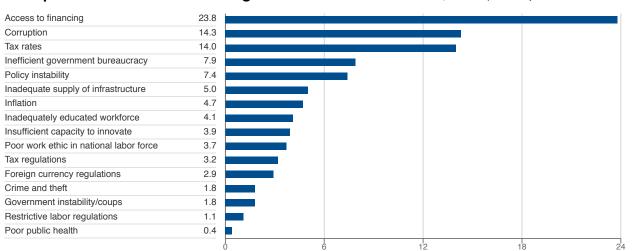
#### Performance overview

Index Component	Rank/137	Score (1-7)	Trend	Distance from best
Global Competitiveness Index	120	3.5		
Subindex A: Basic requirements	117	3.6	_	
â 1st pillar: Institutions	91	3.5	~	<del></del>
<b>↑</b> 2nd pillar: Infrastructure	128	2.3	_	
	110	3.9	~	
3 4th pillar: Health and primary education	117	4.7	_	
Subindex B: Efficiency enhancers	125	3.3	_	
⇒ 5th pillar: Higher education and training	114	3.1		
	127	3.7	~	
7th pillar: Labor market efficiency	50	4.4		
8th pillar: Financial market development	112	3.4	_	
	129	2.4	_	
$\mathcal{L}_{\mathcal{S}}^{7}$ 10th pillar: Market size	121	2.7		
Subindex C: Innovation and sophistication factors	115	3.2	~	
ூ 11th pillar: Business sophistication	124	3.3	_	
** 12th pillar: Innovation	100	3.0	_	<del></del>



### Most problematic factors for doing business





# **Benin**

Index Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	Trend
â 1st pillar: Institutions	91	3.5	~	<b>❸</b> 6th pillar: Goods market efficiency	127	3.7	~
1.01 Property rights	91	4.0	<u> </u>	6.01 Intensity of local competition	96	4.8	_
1.02 Intellectual property protection	96	3.6	~	6.02 Extent of market dominance	73	3.6	~~
1.03 Diversion of public funds	95	3.0		6.03 Effectiveness of anti-monopoly policy	123	2.8	_
1.04 Public trust in politicians	103	2.2	~	6.04 Effect of taxation on incentives to invest	130	2.6	
1.05 Irregular payments and bribes	130	2.4	_	6.05 Total tax rate % profits	119	57.4	$\overline{}$
1.06 Judicial independence	107	3.0	~	6.06 No. of procedures to start a business	53	6	<b>~</b>
1.07 Favoritism in decisions of government officials	75	2.9	~	6.07 Time to start a business days	50	8.5	~
1.08 Efficiency of government spending	82	3.0	_	6.08 Agricultural policy costs	124	2.9	
1.09 Burden of government regulation	86	3.2		6.09 Prevalence of non-tariff barriers	127	3.6	
1.10 Efficiency of legal framework in settling disputes	64			6.10 Trade tariffs % duty	109	10.8	
1.11 Efficiency of legal framework in challenging regulations	74		_	6.11 Prevalence of foreign ownership	115	3.8	~
1.12 Transparency of government policymaking	115	3.3		6.12 Business impact of rules on FDI	72	4.5	
1.13 Business costs of terrorism	72	5.1		6.13 Burden of customs procedures	106	3.5	_
1.14 Business costs of terrorism	101	4.0		6.14 Imports % GDP	93	34.4	$\sim$
1.15 Organized crime	103	4.2		6.15 Degree of customer orientation	76	4.5	-~
· ·	75			-	137	1.8	_
1.16 Reliability of police services		4.3		6.16 Buyer sophistication	137	1.0	
1.17 Ethical behavior of firms	76	3.7	_	7th pillar: Labor market efficiency	50	4.4	~
1.18 Strength of auditing and reporting standards	111	3.8		7.01 Cooperation in labor-employer relations	53	4.5	
1.19 Efficacy of corporate boards	64	4.9		7.02 Flexibility of wage determination	17	5.8	
1.20 Protection of minority shareholders' interests	89	3.8	~~	7.03 Hiring and firing practices	54	4.0	
1.21 Strength of investor protection 0-10 (best)	117	4.0		7.04 Redundancy costs weeks of salary	43	11.6	=
<b>↑</b> 2nd pillar: Infrastructure	128	2.3	_				
·				7.05 Effect of taxation on incentives to work	58	4.1	
2.01 Quality of overall infrastructure	129			7.06 Pay and productivity	132	2.8	
2.02 Quality of roads	113	2.9		7.07 Reliance on professional management	126	3.3	$\simeq$
2.03 Quality of railroad infrastructure	99	1.4		7.08 Country capacity to retain talent	128	2.2	_
2.04 Quality of port infrastructure	75	3.9	~	7.09 Country capacity to attract talent	109	2.6	
2.05 Quality of air transport infrastructure	113	3.4	$\sim$	7.10 Female participation in the labor force ratio to men	8	0.97	
2.06 Available airline seat kilometers millions/week	125	16.3	~	8th pillar: Financial market development	112	3.4	
2.07 Quality of electricity supply	131	2.1	$\widetilde{}$		110	2.4	
2.08 Mobile-cellular telephone subscriptions /100 pop.	121	79.6	^	8.01 Availability of financial services	119 117	3.4	
2.09 Fixed-telephone lines /100 pop.	120	1.1		8.02 Affordability of financial services		3.0	$\overline{}$
	110	3.9	$\overline{}$	8.03 Financing through local equity market	84	3.2	
•			_	8.04 Ease of access to loans	133	2.3	$\overline{}$
3.01 Government budget balance % GDP	113	-6.1	$\stackrel{\sim}{\sim}$	8.05 Venture capital availability	135	1.7	_
3.02 Gross national savings % GDP	89	17.4		8.06 Soundness of banks	100	4.3	$\sim$
3.03 Inflation annual % change	83	-0.8	1	8.07 Regulation of securities exchanges	106	3.7	$\stackrel{\sim}{=}$
3.04 Government debt % GDP	68	50.3	~	8.08 Legal rights index 0-10 (best)	50	6	
3.05 Country credit rating 0-100 (best)	115	24.8		% 9th pillar: Technological readiness	129	2.4	_
→ 4th pillar: Health and primary education	117	4.7	_	9.01 Availability of latest technologies	124	3.5	_
				, ,	125	3.6	
4.01 Malaria incidence cases/100,000 pop. 4.02 Business impact of malaria	55	,424.6	$\overline{}$	9.02 Firm-level technology absorption	128	3.0	_
	80	3.0	$\sim$	9.03 FDI and technology transfer 9.04 Internet users % pop.	129		
4.03 Tuberculosis incidence cases/100,000 pop.			$\rightarrow$			12.0	_
4.04 Business impact of tuberculosis	98	4.7		9.05 Fixed-broadband Internet subscriptions /100 pop.	109	0.8	=
4.05 HIV prevalence % adult pop.	106	1.0		9.06 Internet bandwidth kb/s/user	133	1.7	
4.06 Business impact of HIV/AIDS	97	4.8	$\overline{}$	9.07 Mobile-broadband subscriptions /100 pop.	137	5.6	
4.07 Infant mortality deaths/1,000 live births	130	64.2		10th pillar: Market size	121	2.7	
4.08 Life expectancy years	124	59.7			100	2.5	
4.09 Quality of primary education	113	3.0	_	10.01 Domestic market size index	122	2.5	
4.10 Primary education enrollment rate net %	67	95.9	~	10.02 Foreign market size index	121	3.2	
	114	3.1		10.03 GDP (PPP) PPP \$ billions	119	23.6	
				10.04 Exports % GDP	107	20.1	_ \
5.01 Secondary education enrollment rate gross %	112	56.8		مراج على 11th pillar: Business sophistication	124	3.3	
5.02 Tertiary education enrollment rate gross %	104	15.4	_	11.01 Local supplier quantity	126	3.6	~
5.03 Quality of the education system	126	2.6		11.02 Local supplier quality	93	4.1	
5.04 Quality of math and science education	93	3.6					_
5.05 Quality of management schools	73	4.2		11.03 State of cluster development	118	3.0	
5.06 Internet access in schools	127	2.9		11.04 Nature of competitive advantage	115	2.7	
5.07 Local availability of specialized training services	58	4.5	_	11.05 Value chain breadth	120	3.1	
5.08 Extent of staff training	134	3.0	$\overline{}$	11.06 Control of international distribution	121	3.0	_
				11.07 Production process sophistication	136	2.0	
				11.08 Extent of marketing	67	4.4	_
				11.09 Willingness to delegate authority	106	3.9	
				* 12th pillar: Innovation	100	3.0	
							~
				12.01 Capacity for innovation	47	4.4	
				12.02 Quality of scientific research institutions	70	3.8	
				12.03 Company spending on R&D	128	2.5	~

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

109

85

118

2.8

3.1

## **Bhutan**



The Global Competitiveness Index 2017-2018 edition



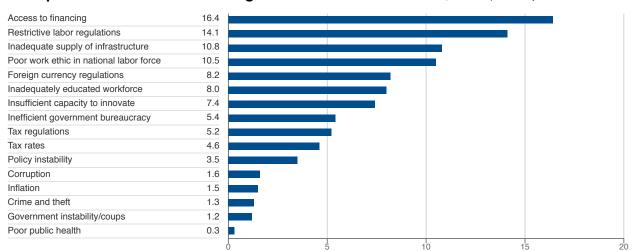
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database			
Population millions	0.8	GDP per capita US\$	2,673.5		
GDP US\$ billions	2.1	GDP (PPP) % world GDP	0.01		

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	82	4.1			Rank	109 / 148	103 / 144	105 / 140	97 / 138	82 / 137
Subindex A: Basic requirements	66	4.6	_		Score	3.7	3.8	3.8	3.9	4.1
â 1st pillar: Institutions	32	4.8								
<b>↑</b> 2nd pillar: Infrastructure	89	3.6	_				1st pilla Institution			
	78	4.6	_			12th pillar: Innovation	7		d pillar: rastructure	
3 4th pillar: Health and primary education	95	5.4	_			/				
Subindex B: Efficiency enhancers	101	3.7				11th pillar: Business sophistication			3rd pillar: Macroecono environment	
⇒ 5th pillar: Higher education and training	90	4.0							\\	
	88	4.2				10th pillar: Market size			4th pillar: Health an education	d primary
7th pillar: Labor market efficiency	24	4.7	_							
8th pillar: Financial market development	t 67	4.0				9th pillar: Technological readiness			5th pillar: Higher educa and training	tion
% 9th pillar: Technological readiness	105	3.2	_			8th pil	lar.	6th	oillar:	
$\mathcal{L}_{\varphi}^{\gamma,\gamma}$ 10th pillar: Market size	132	1.9				Financial mar developm	ket	Goo	ds market iency	
Subindex C: Innovation and sophistication factors	78	3.5					Labor ma efficien	arket		
A 11th pillar: Business sophistication	77	3.8	_			_	Phyton	Courth Asia		
** 12th pillar: Innovation	79	3.2			Bhutan South Asia					

### Most problematic factors for doing business





# **Bhutan**

dex Component	Rank/137	7 Value	Trend	Inde	x Component	Rank/137	Value	э Т
â 1st pillar: Institutions	32	4.8		1	6th pillar: Goods market efficiency	88	4.2	-
1.01 Property rights	36	5.0		6.0	1 Intensity of local competition	107	4.7	-
1.02 Intellectual property protection	42	4.7	_		2 Extent of market dominance	99	3.4	_
1.03 Diversion of public funds	24	5.1			3 Effectiveness of anti-monopoly policy	51	3.9	_
1.04 Public trust in politicians	25	4.5			4 Effect of taxation on incentives to invest	54	3.8	_
1.05 Irregular payments and bribes	38	4.9	_		5 Total tax rate % profits	63	35.3	_
	39	4.9				92	8	_
.06 Judicial independence			_		6 No. of procedures to start a business			_
.07 Favoritism in decisions of government officials	34	4.0			7 Time to start a business days	86	15.0	
.08 Efficiency of government spending	12	5.0			8 Agricultural policy costs	14	4.8	_
.09 Burden of government regulation	35	3.9	_	6.09	Prevalence of non-tariff barriers	83	4.2	_
.10 Efficiency of legal framework in settling disputes	23	4.8		6.10	Trade tariffs % duty	137	22.4	
.11 Efficiency of legal framework in challenging regulations	51	3.6	$\sim$	6.1	Prevalence of foreign ownership	132	3.0	_
.12 Transparency of government policymaking	44	4.5		6.12	2 Business impact of rules on FDI	121	3.7	-
1.13 Business costs of terrorism	33	5.6	$\sim$	6.13	Burden of customs procedures	54	4.5	_
.14 Business costs of crime and violence	17	5.5	~		4 Imports % GDP	38	57.7	_
.15 Organized crime	13	6.0	_		5 Degree of customer orientation	86	4.4	_
· ·	26	5.8	_		Buyer sophistication	88	3.1	
16 Reliability of police services				0.10	buyer sopriistication	00	3.1	_
.17 Ethical behavior of firms	29	4.8		1	7th pillar: Labor market efficiency	24	4.7	-
18 Strength of auditing and reporting standards	52	4.9						
19 Efficacy of corporate boards	65	4.9			1 Cooperation in labor-employer relations	29	5.1	-
20 Protection of minority shareholders' interests	39	4.5			2 Flexibility of wage determination	63	5.0	-
21 Strength of investor protection 0-10 (best)	96	4.8	~	7.03	3 Hiring and firing practices	38	4.2	-
				7.04	4 Redundancy costs weeks of salary	19	8.3	-
2nd pillar: Infrastructure	89	3.6		7.05	5 Effect of taxation on incentives to work	23	4.6	-
01 Quality of overall infrastructure	54	4.3	~		6 Pay and productivity	48	4.3	_
02 Quality of roads	67	4.1	~		7 Reliance on professional management	58	4.5	-
·		not			B Country capacity to retain talent	37	4.1	
03 Quality of railroad infrastructure	n/a	assessed						-
04 Quality of port infrastructure	133	2.0	_		9 Country capacity to attract talent	48	3.7	
05 Quality of air transport infrastructure	84	4.1		7.10	Female participation in the labor force ratio to men	71	0.80	
·			_		8th pillar: Financial market development	67	4.0	
06 Available airline seat kilometers millions/week	134	3.9						
7 Quality of electricity supply	38	5.8		8.0	1 Availability of financial services	66	4.2	-
Mobile-cellular telephone subscriptions /100 pop.	107	88.8	/	8.02	2 Affordability of financial services	68	3.8	-
09 Fixed-telephone lines /100 pop.	109	2.7	_	8.03	Financing through local equity market	50	4.0	-
	70	4.0		8.04	4 Ease of access to loans	60	4.0	
3rd pillar: Macroeconomic environment	78	4.6	_		5 Venture capital availability	48	3.2	
01 Government budget balance % GDP	50	-2.1			6 Soundness of banks	71	4.9	
02 Gross national savings % GDP	15	33.4	$\sim$		7 Regulation of securities exchanges	47	4.7	
03 Inflation annual % change	82	4.2			· ·			-
04 Government debt % GDP	128	110.2	_	8.08	B Legal rights index 0-10 (best)	86	4	-
05 Country credit rating 0-100 (best)	107	28.0	_	25%	9th pillar: Technological readiness	105	3.2	-
so country croan raining a roo (soot)					Availability of latest technologies	99	4.2	
4th pillar: Health and primary education	95	5.4			2 Firm-level technology absorption	99	4.1	
01 Malaria incidence cases/100,000 pop.	23	4.8	\		• • • • • • • • • • • • • • • • • • • •			-
22 Business impact of malaria	22	5.2			3 FDI and technology transfer	113	3.7	_
			=		4 Internet users % pop.	92	41.8	
03 Tuberculosis incidence cases/100,000 pop.	105	155.0		9.05	5 Fixed-broadband Internet subscriptions /100 pop.	92	3.9	
Business impact of tuberculosis	83	5.2	_	9.06	6 Internet bandwidth kb/s/user	99	18.1	
05 HIV prevalence % adult pop.	1	0.1	_	9.07	7 Mobile-broadband subscriptions /100 pop.	85	47.9	
06 Business impact of HIV/AIDS	87	5.0						
77 Infant mortality deaths/1,000 live births	100	27.2	\	43	10th pillar: Market size	132	1.9	
08 Life expectancy years	99	69.8	_	10.0	1 Domestic market size index	134	1.7	
09 Quality of primary education	33	4.8	_		02 Foreign market size index	133	2.7	
10 Primary education enrollment rate net %	118	85.6	~		03 GDP (PPP) PPP \$ billions	134	6.5	
•					04 Exports % GDP	89	28.9	
₹ 5th pillar: Higher education and training	90	4.0			· · · · · · · · · · · · · · · · · · ·		20.0	
of Secondary education enrollment rate gross %	86	84.2	_	000	11th pillar: Business sophistication	77	3.8	
02 Tertiary education enrollment rate gross %	111	10.9	_	11.0	1 Local supplier quantity	115	3.9	
3 Quality of the education system	30	4.5	_		22 Local supplier quality	103	3.9	
24 Quality of math and science education	54	4.4	$\overline{}$		33 State of cluster development	78	3.7	
•					•			
55 Quality of management schools	54				04 Nature of competitive advantage	43	4.1	
106 Internet access in schools	70	4.1			05 Value chain breadth	77	3.7	•
7 Local availability of specialized training services	104				Control of international distribution	111	3.0	
8 Extent of staff training	54	4.1		11.0	7 Production process sophistication	90	3.5	
				11.0	08 Extent of marketing	113	3.9	
					09 Willingness to delegate authority	52	4.5	
					12th pillar: Innovation	79	3.2	
				12.0	1 Capacity for innovation	78	4.0	
				12.0	02 Quality of scientific research institutions	103	3.3	
				12.0	O3 Company spending on R&D	58	3.4	
					04 University-industry collaboration in R&D	92	3.2	,
					Gov't procurement of advanced technology products	28	3.8	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

28

115

3.8

# **Bosnia and Herzegovina**

103rd<sub>/137</sub>

2016-17

3.8

3rd pillar:

Macroeconomic

education

Higher education and training

5th pillar:

6th pillar: Goods market efficiency

4th pillar: Health and primary

environment

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2nd pillar: Infrastructure

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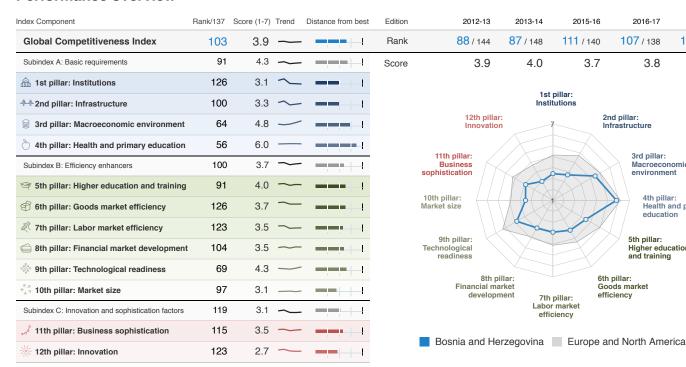
2017-18

3.9

103 / 137

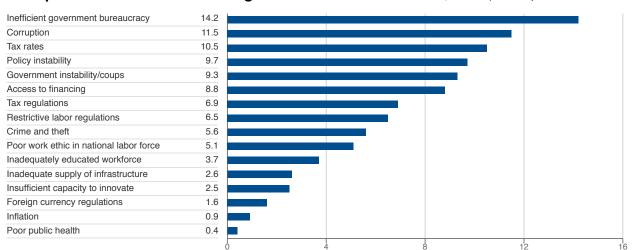
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (Apr		
Population millions	3.9	GDP per capita US\$	4,308.2	
GDP US\$ billions	16.6	GDP (PPP) % world GDP	0.04	

#### Performance overview



### Most problematic factors for doing business





# **Bosnia and Herzegovina**

Index Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	, -
☆ 1st pillar: Institutions	126	3.1	~	<b> </b>	126	3.7	-
1.01 Property rights	129	3.2	~_	6.01 Intensity of local competition	117	4.5	-
1.02 Intellectual property protection	133	3.0	_	6.02 Extent of market dominance	107	3.2	
1.03 Diversion of public funds	113	2.5	$\sim$	6.03 Effectiveness of anti-monopoly policy	88	3.4	-
1.04 Public trust in politicians	117	1.9	_	6.04 Effect of taxation on incentives to invest	128	2.6	
·							_
1.05 Irregular payments and bribes	90	3.4		6.05 Total tax rate % profits	19	22.6	_
1.06 Judicial independence	117	2.8	_	6.06 No. of procedures to start a business	126	12	_
1.07 Favoritism in decisions of government officials	113	2.3	_	6.07 Time to start a business days	131	65.0	-
1.08 Efficiency of government spending	112	2.4	$\overline{}$	6.08 Agricultural policy costs	109	3.3	-
1.09 Burden of government regulation	127	2.5	$\sim$	6.09 Prevalence of non-tariff barriers	114	3.8	-
1.10 Efficiency of legal framework in settling disputes	124	2.6	$\sim$	6.10 Trade tariffs % duty	71	4.9	-
1.11 Efficiency of legal framework in challenging regulations	130	2.2	~	6.11 Prevalence of foreign ownership	106	3.9	
	131	2.8		6.12 Business impact of rules on FDI	122	3.7	
1.12 Transparency of government policymaking				·			
1.13 Business costs of terrorism	69	5.1	$\sim$	6.13 Burden of customs procedures	116	3.3	-
1.14 Business costs of crime and violence	95	4.1	~	6.14 Imports % GDP	37	57.8	•
1.15 Organized crime	111	3.9	$\sim$	6.15 Degree of customer orientation	96	4.2	•
1.16 Reliability of police services	102	3.6	$\sim$	6.16 Buyer sophistication	134	2.1	•
1.17 Ethical behavior of firms	120	3.1		5%			
1.18 Strength of auditing and reporting standards	130	3.3	~	7th pillar: Labor market efficiency	123	3.5	
	122		~	7.01 Cooperation in labor-employer relations	117	3.8	
1.19 Efficacy of corporate boards		4.1		7.02 Flexibility of wage determination	26	5.5	
1.20 Protection of minority shareholders' interests	134		~	7.03 Hiring and firing practices	105	3.3	-
1.21 Strength of investor protection 0-10 (best)	74	5.5	_				
AA 0	100	2.2	~ -	7.04 Redundancy costs weeks of salary	26	9.2	_
2nd pillar: Infrastructure	100	3.3		7.05 Effect of taxation on incentives to work	123	3.0	
2.01 Quality of overall infrastructure	98	3.4		7.06 Pay and productivity	127	3.0	•
2.02 Quality of roads	109	3.0	~	7.07 Reliance on professional management	131	3.0	•
2.03 Quality of railroad infrastructure	89	2.0	~	7.08 Country capacity to retain talent	135	1.8	
2.04 Quality of port infrastructure	129	2.1		7.09 Country capacity to attract talent	136	1.6	
	129						
2.05 Quality of air transport infrastructure		2.7		7.10 Female participation in the labor force ratio to men	110	0.63	
2.06 Available airline seat kilometers millions/week	123	22.0	/	8th pillar: Financial market development	104	3.5	
2.07 Quality of electricity supply	74	4.8	~				
2.08 Mobile-cellular telephone subscriptions /100 pop.	106	89.2		8.01 Availability of financial services	122	3.4	_
2.09 Fixed-telephone lines /100 pop.	53	19.5	/	8.02 Affordability of financial services	114	3.1	
				8.03 Financing through local equity market	117	2.7	
	64	4.8		8.04 Ease of access to loans	83	3.6	٦.
3.01 Government budget balance % GDP	15	0.0		8.05 Venture capital availability	104	2.5	
3.02 Gross national savings % GDP	119	10.8	~	8.06 Soundness of banks	108	4.0	-
•							
3.03 Inflation annual % change	87	-1.1	$\geq$	8.07 Regulation of securities exchanges	122	3.3	
3.04 Government debt % GDP	57	44.4		8.08 Legal rights index 0-10 (best)	31	7	
3.05 Country credit rating 0-100 (best)	102	29.0		Oth piller, Technological readiness	69	4.3	
& 445 -: !! !! !!	FC	6.0		9th pillar: Technological readiness			
4th pillar: Health and primary education	56	6.0		9.01 Availability of latest technologies	82	4.5	-
4.01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02 Firm-level technology absorption	92	4.2	
4.02 Business impact of malaria	n/a	6.3		9.03 FDI and technology transfer	107	3.8	-
4.03 Tuberculosis incidence cases/100,000 pop.	62	37.0	_	9.04 Internet users % pop.	55	69.3	
4.04 Business impact of tuberculosis	45	6.1	$\overline{}$	9.05 Fixed-broadband Internet subscriptions /100 pop.	51	17.4	
•							
4.05 HIV prevalence % adult pop.	n/a	n/a		9.06 Internet bandwidth kb/s/user	44	98.5	
4.06 Business impact of HIV/AIDS	37	6.1		9.07 Mobile-broadband subscriptions /100 pop.	98	37.4	
4.07 Infant mortality deaths/1,000 live births	36	5.1	_	10th pillers Market size	97	3.1	
4.08 Life expectancy years	50	76.6	_	્રૈંગ 10th pillar: Market size			
4.09 Quality of primary education	84	3.6	~	10.01 Domestic market size index	97	2.9	
4.10 Primary education enrollment rate net %	43	97.5		10.02 Foreign market size index	95	3.9	
THE THINALY COUCCIDE CHICAMON CHICAGO HEL 76	40	31.3	_	10.03 GDP (PPP) PPP \$ billions	98	42.2	
⇒ 5th pillar: Higher education and training	91	4.0	~	10.04 Exports % GDP	47		-
				10.04 LXPUITS % GDP	47	42.3	
5.01 Secondary education enrollment rate gross %	78	88.7		್ಯಾರೆ 11th pillar: Business sophistication	115	3.5	ſ,
5.02 Tertiary education enrollment rate gross %	61	47.6					
5.03 Quality of the education system	131	2.4		11.01 Local supplier quantity	100	4.1	
5.04 Quality of math and science education	97	3.4	~	11.02 Local supplier quality	80	4.2	
5.05 Quality of management schools	122	3.3	~	11.03 State of cluster development	92	3.5	
· · · · · · · · · · · · · · · · · · ·				11.04 Nature of competitive advantage	114	2.7	
5.06 Internet access in schools	84	3.9		11.05 Value chain breadth	114	3.2	
5.07 Local availability of specialized training services	122		~				
5.08 Extent of staff training	131	3.1	$\sim$	11.06 Control of international distribution	108	3.1	
				11.07 Production process sophistication	105	3.2	
				11.08 Extent of marketing	124	3.7	
				11.09 Willingness to delegate authority	117	3.7	
				: \			
				12th pillar: Innovation	123	2.7	
				12.01 Capacity for innovation	132	3.2	
				12.02 Quality of scientific research institutions	106	3.2	_
				12.03 Company spending on R&D	126	2.6	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D 12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

111

123

107

2.8

2.6

## **Botswana**

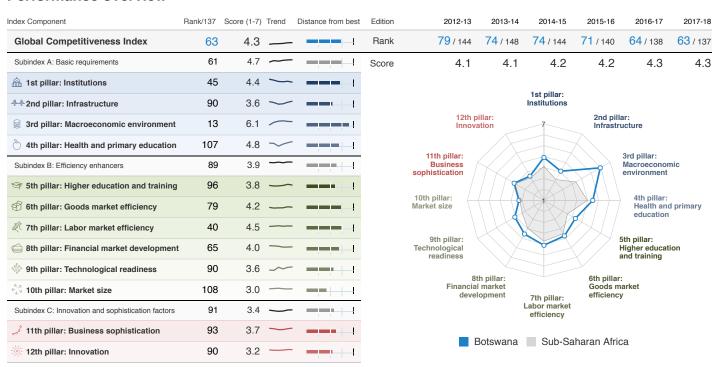


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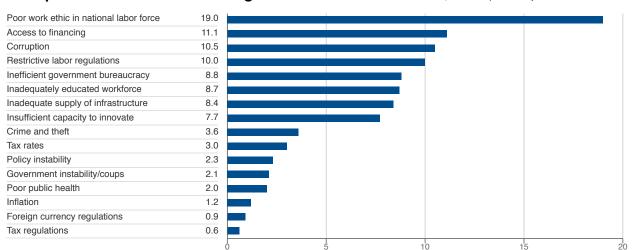
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database			
Population millions	2.2	GDP per capita US\$	6,972.1		
GDP US\$ billions	15.0	GDP (PPP) % world GDP	0.03		

#### Performance overview



### Most problematic factors for doing business





## **Botswana**

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
☆ 1st pillar: Institutions	45	4.4	~	1	6th pillar: Goods market efficiency	79	4.2	_
1.01 Property rights	34	5.1		6.0	Intensity of local competition	76	5.0	_
1.02 Intellectual property protection	65	4.2	_		Extent of market dominance	110	3.2	_
1.03 Diversion of public funds	45	4.1			Effectiveness of anti-monopoly policy	65	3.7	_
1.04 Public trust in politicians	43	3.7	_		Effect of taxation on incentives to invest	26	4.5	_
1.05 Irregular payments and bribes	50	4.4	_		5 Total tax rate % profits	25	25.1	
1.06 Judicial independence	57	4.2	_		No. of procedures to start a business	105	9	$\overline{}$
1.07 Favoritism in decisions of government officials	52	3.4			7 Time to start a business days	127	48.0	_
1.08 Efficiency of government spending	37	3.9	_		3 Agricultural policy costs	50	4.0	_
1.09 Burden of government regulation	56	3.6	~		Prevalence of non-tariff barriers	70	4.4	$\overline{}$
1.10 Efficiency of legal framework in settling disputes	32	4.5	_		Trade tariffs % duty	84	6.6	_
1.11 Efficiency of legal framework in settling disputes	37	3.9	$\sim$		Prevalence of foreign ownership	33	5.1	_
, ,	34	4.6				68	4.5	
1.12 Transparency of government policymaking	23		<u> </u>		2 Business impact of rules on FDI 3 Burden of customs procedures	56		
1.13 Business costs of terrorism		5.8			•		4.4	7
1.14 Business costs of crime and violence	83	4.3			I Imports % GDP	67	44.4	_
1.15 Organized crime	53	5.1	$\sim$		5 Degree of customer orientation	120	3.8	
1.16 Reliability of police services	59	4.6	\ \	6.16	Buyer sophistication	73	3.3	_
1.17 Ethical behavior of firms	45	4.2		975.	7th pillar: Labor market efficiency	40	4.5	_
1.18 Strength of auditing and reporting standards	61	4.7	~	w,				
1.19 Efficacy of corporate boards	49	5.0			Cooperation in labor-employer relations	64	4.4	
1.20 Protection of minority shareholders' interests	49	4.3	$\sim$		2 Flexibility of wage determination	67	4.9	
1.21 Strength of investor protection 0-10 (best)	74	5.5	~		Hiring and firing practices	60	3.9	
A A	00	0.0		7.0	Redundancy costs weeks of salary	95	21.7	
♣♣ 2nd pillar: Infrastructure	90	3.6	~	7.05	Effect of taxation on incentives to work	22	4.6	
2.01 Quality of overall infrastructure	80	3.9	$\overline{}$	7.06	Pay and productivity	106	3.5	
2.02 Quality of roads	80	3.8	$\overline{}$	7.0	Reliance on professional management	45	4.6	_
2.03 Quality of railroad infrastructure	54	3.3	_	7.08	Country capacity to retain talent	55	3.7	_
2.04 Quality of port infrastructure	109	3.1	$\sim$	7.09	Country capacity to attract talent	38	3.9	
2.05 Quality of air transport infrastructure	88	4.1			Female participation in the labor force ratio to men	21	0.93	_
2.06 Available airline seat kilometers millions/week	132	7.0	~~					
2.07 Quality of electricity supply	99	3.7			8th pillar: Financial market development	65	4.0	
2.08 Mobile-cellular telephone subscriptions /100 pop.	14	158.5		8.0	Availability of financial services	60	4.3	_
2.09 Fixed-telephone lines /100 pop.	93	6.9	_	8.02	Affordability of financial services	74	3.8	_
2.09 Tixed telepriorie lines 7100 pap.	30	0.5			Financing through local equity market	52	3.9	_
	13	6.1			Ease of access to loans	75	3.8	_
3.01 Government budget balance % GDP	46	-1.9	~		5 Venture capital availability	68	2.9	_
3.02 Gross national savings % GDP	9	36.1	^		Soundness of banks	66	4.9	_
3.03 Inflation annual % change	1	2.8	_		Regulation of securities exchanges	54	4.6	
3.04 Government debt % GDP	5	13.9	~~		B Legal rights index 0-10 (best)	70	5	_
	45	64.5		0.00	s Legal rights index 8-10 (best)	70	3	
8.05 Country credit rating 0-100 (best)				8/2/	9th pillar: Technological readiness	90	3.6	~
4th pillar: Health and primary education	107	4.8	~		Availability of latest technologies	95	4.3	_
1.01 Malaria incidence cases/100,000 pop.	32	33.5	_	9.02	2 Firm-level technology absorption	98	4.2	_
1.02 Business impact of malaria	28	4.9	$\sim$	9.03	FDI and technology transfer	91	4.0	_
1.03 Tuberculosis incidence cases/100,000 pop.	129	356.0	_	9.04	1 Internet users % pop.	93	39.4	_
1.04 Business impact of tuberculosis	111	4.3	_	9.05	Fixed-broadband Internet subscriptions /100 pop.	98	2.8	_
1.05 HIV prevalence % adult pop.	135	21.9	~^	9.06	Internet bandwidth kb/s/user	115	7.9	_/
1.06 Business impact of HIV/AIDS	115	4.0	_		Mobile-broadband subscriptions /100 pop.	54	67.9	1
1.07 Infant mortality deaths/1,000 live births	108		~		•			
1.08 Life expectancy years	114	64.5		+ x x	10th pillar: Market size	108	3.0	
1.09 Quality of primary education	79	3.8		10.0	1 Domestic market size index	112	2.6	_
1.10 Primary education enrollment rate net %	99	91.0	~		2 Foreign market size index	89	4.0	_
Timary oddodion emolinem rate net %	33	91.0	~		03 GDP (PPP) PPP \$ billions	106	36.7	
⇒ 5th pillar: Higher education and training	96	3.8	_		04 Exports % GDP	26	57.1	
5.01 Secondary education enrollment rate gross %	94	76.9	-		•			
5.02 Tertiary education enrollment rate gross %	93	23.4	_	000	11th pillar: Business sophistication	93	3.7	
5.03 Quality of the education system	74	3.6		11.0	1 Local supplier quantity	119	3.8	_
5.04 Quality of math and science education	86	3.7			2 Local supplier quality	117	3.6	_
5.05 Quality of management schools	109	3.6	$\sim$		3 State of cluster development	102	3.3	_
5.06 Internet access in schools	109	3.6			04 Nature of competitive advantage	70	3.5	_
					55 Value chain breadth	104	3.4	
5.07 Local availability of specialized training services	80				66 Control of international distribution	104	3.2	=
5.08 Extent of staff training	61	4.1						
					77 Production process sophistication	93	3.4	
					08 Extent of marketing	90	4.2	_
				11.0	9 Willingness to delegate authority	58	4.5	
				**	12th pillar: Innovation	90	3.2	_
				12.0	1 Capacity for innovation	108	3.7	_
					2 Quality of scientific research institutions	92	3.5	_
					3 Company spending on R&D	91	3.0	_
				16.0	of University is diverse collaboration in DOD	- 00	0.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

82

30

99

3.3

3.8

## Brazil

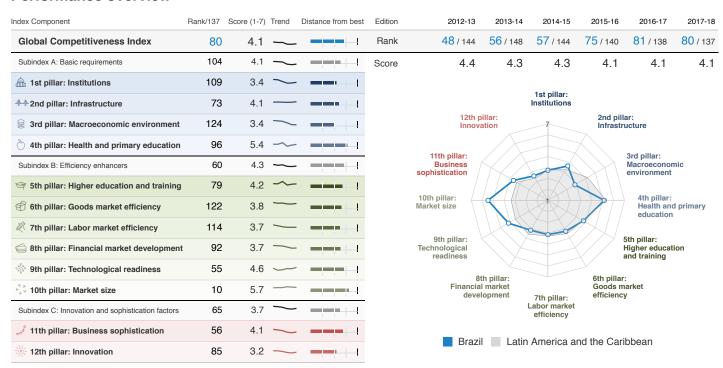


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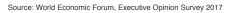
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (			
Population millions	206.1	GDP per capita US\$	8,726.9		
GDP US\$ billions	1,798.6	GDP (PPP) % world GDP	2.62		

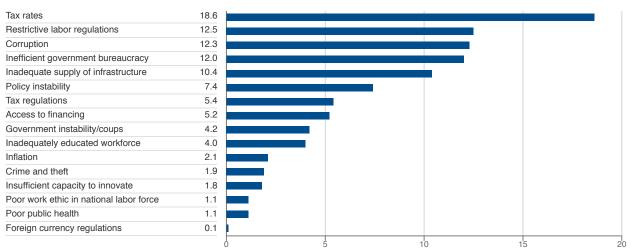
#### Performance overview



Brazil improves to 80th position, leveling off after several years of falling in the rankings. After being rocked by corruption scandals and political instability, the institutions pillar recovers 11 positions, showing the effects of investigations leading to more transparency and a perception of successful proceedings to curb corruption within the institutional limits of Brazil's constitution. Following two years of falling GDP growth and worsening macroeconomic conditions, Brazil this year improves slightly, bringing inflation and government deficits back under control. Efficiency enhancers also advance this year, with improvements in goods market efficiency. Brazil's largest progress comes in the innovation pillar, with upturns in many of the indicators, indicating an enhanced capacity for innovation, more industryuniversity-business collaboration, a higher quality of research, and better-trained scientists and engineers.

### Most problematic factors for doing business





# **Brazil**

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	Т
â 1st pillar: Institutions	109	3.4	~		122	3.8	-
1.01 Property rights	69	4.3	$\sim$	6.01 Intensity of local competition	53	5.3	_
1.02 Intellectual property protection	63	4.2		6.02 Extent of market dominance	48	4.0	_
1.03 Diversion of public funds	134	1.8	_	6.03 Effectiveness of anti-monopoly policy	55	3.9	_
1.04 Public trust in politicians	137	1.3		6.04 Effect of taxation on incentives to invest	136	1.8	_
1.05 Irregular payments and bribes	107	3.1	_	6.05 Total tax rate % profits	135	68.4	^
1.06 Judicial independence	59	4.1	~	6.06 No. of procedures to start a business	122	11	_
1.07 Favoritism in decisions of government officials	112	2.3	$\sim$	6.07 Time to start a business days	134	79.5	
1.08 Efficiency of government spending	133	1.8	$\overline{}$	6.08 Agricultural policy costs	36	4.2	
1.09 Burden of government regulation	136	1.7	_	6.09 Prevalence of non-tariff barriers	130	3.4	_
1.10 Efficiency of legal framework in settling disputes	110	2.8	_	6.10 Trade tariffs % duty	122	12.1	_
1.11 Efficiency of legal framework in challenging regulations	98	2.8	_	6.11 Prevalence of foreign ownership	95	4.2	_
1.12 Transparency of government policymaking	127	3.1	_	6.12 Business impact of rules on FDI	107	4.0	_
1.13 Business costs of terrorism	8		~~	6.13 Burden of customs procedures	124	3.0	_
1.14 Business costs of crime and violence	132	2.7	_	6.14 Imports % GDP	137	11.4	/
1.15 Organized crime	121	3.6		6.15 Degree of customer orientation	87	4.4	_
1.16 Reliability of police services	103	3.6		6.16 Buyer sophistication	61	3.5	_
.17 Ethical behavior of firms	126	2.9	~	2.		0.0	
1.18 Strength of auditing and reporting standards	58	4.8	~	7th pillar: Labor market efficiency	114	3.7	
.19 Efficacy of corporate boards	75	4.8		7.01 Cooperation in labor-employer relations	106	4.0	_
	62	4.1	$\sim$	7.02 Flexibility of wage determination	121	4.1	_
.20 Protection of minority shareholders' interests				7.03 Hiring and firing practices	136	1.8	_
.21 Strength of investor protection 0-10 (best)	31	6.5		7.04 Redundancy costs weeks of salary	65	15.4	
1 2nd pillar: Infrastructure	73	4.1	_	7.05 Effect of taxation on incentives to work	137	2.2	
.01 Quality of overall infrastructure	108	3.1	_	7.06 Pay and productivity	89	3.7	-
.02 Quality of roads	103	3.1		7.07 Reliance on professional management	49	4.6	_
•		2.0			47		
.03 Quality of railroad infrastructure	88			7.08 Country capacity to retain talent		3.8	
.04 Quality of port infrastructure	106	3.1		7.09 Country capacity to attract talent	98	2.8	
.05 Quality of air transport infrastructure	95	3.9	$\leq$	7.10 Female participation in the labor force ratio to men	87	0.75	
.06 Available airline seat kilometers millions/week		3,563.4		8th pillar: Financial market development	92	3.7	-
.07 Quality of electricity supply	84	4.5	$\sim$	8.01 Availability of financial services	98	3.8	_
.08 Mobile-cellular telephone subscriptions /100 pop.	65	118.9	^	•		2.6	
.09 Fixed-telephone lines /100 pop.	50	20.4		8.02 Affordability of financial services	130		
	124	3.4	_	8.03 Financing through local equity market	72	3.5	-
•			_	8.04 Ease of access to loans	87	3.6	
.01 Government budget balance % GDP	125	-9.0	. ~	8.05 Venture capital availability	105	2.5	_
.02 Gross national savings % GDP	97	16.1		8.06 Soundness of banks	26	5.7	
.03 Inflation annual % change	119	8.7		8.07 Regulation of securities exchanges	44	4.9	_
.04 Government debt % GDP	111	78.3	~	8.08 Legal rights index 0-10 (best)	107	2	
.05 Country credit rating 0-100 (best)	59	55.5	_	💖 9th pillar: Technological readiness	55	4.6	_
4th pillar: Health and primary education	96	5.4	~	9.01 Availability of latest technologies	78	4.5	-
.01 Malaria incidence cases/100,000 pop.	38	90.3	~	9.02 Firm-level technology absorption	59	4.6	-
.02 Business impact of malaria	5	5.9		9.03 FDI and technology transfer	53	4.6	-
.03 Tuberculosis incidence cases/100,000 pop.	64	41.0	~	9.04 Internet users % pop.	68	59.7	
.04 Business impact of tuberculosis	44	6.2	_	9.05 Fixed-broadband Internet subscriptions /100 pop.	62	13.0	_
.05 HIV prevalence % adult pop.	91	0.6	_	9.06 Internet bandwidth kb/s/user	63	66.2	
.06 Business impact of HIV/AIDS	59	5.5		9.07 Mobile-broadband subscriptions /100 pop.	31	89.5	
.07 Infant mortality deaths/1,000 live births	80	14.6	_				
.08 Life expectancy years	72	74.7		10th pillar: Market size	10	5.7	_
.09 Quality of primary education	127			10.01 Domestic market size index	7	5.7	-
.10 Primary education enrollment rate net %	94		1	10.02 Foreign market size index	27	5.6	_
·			_	10.03 GDP (PPP) PPP \$ billions	7 3	3,141.3	_
₹ 5th pillar: Higher education and training	79	4.2		10.04 Exports % GDP	128	12.1	-
.01 Secondary education enrollment rate gross %	50	99.7	$\sim$	→ 11th pillar: Business sophistication	56	4.1	_
.02 Tertiary education enrollment rate gross %	57	50.6					
03 Quality of the education system	125	2.6	$\sim$	11.01 Local supplier quantity	40	4.8	_
04 Quality of math and science education	131	2.6		11.02 Local supplier quality	75	4.3	-
05 Quality of management schools	95	3.8	~	11.03 State of cluster development	41	4.1	
06 Internet access in schools	90	3.7	_	11.04 Nature of competitive advantage	110	2.8	
07 Local availability of specialized training services	118	3.7	$\sim$	11.05 Value chain breadth	63	3.9	_
08 Extent of staff training	62	4.0	_	11.06 Control of international distribution	53	3.8	-
				11.07 Production process sophistication	62	3.9	_
				11.08 Extent of marketing	39	4.8	-
				11.09 Willingness to delegate authority	50	4.5	
				<b>※ 12th pillar: Innovation</b>	85	3.2	-
				12.01 Capacity for innovation	73	4.1	_
				12.02 Quality of scientific research institutions	77	3.7	
				12.03 Company spending on R&D	62	3.4	
				12.04 University-industry collaboration in R&D	70	3.4	
				12.05 Gov't procurement of advanced technology products	110	2.7	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

118

90

2.7

## **Brunei Darussalam**



The Global Competitiveness Index 2017-2018 edition



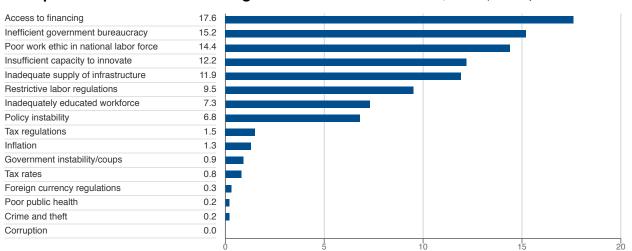
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20:			
Population millions	0.4	GDP per capita US\$	26,424.4		
GDP US\$ billions	11.2	GDP (PPP) % world GDP	0.03		

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2016-17	2017-18		
Global Competitiveness Index	46	4.5	~		Rank	28 / 144	<b>26</b> / 148	58 / 138	46 / 137		
Subindex A: Basic requirements	42	5.1	$\sim$		Score	4.9	4.9	4.3	4.5		
☆ 1st pillar: Institutions	40	4.4	~								
<b>↑</b> 2nd pillar: Infrastructure	60	4.3	~				1st pillar: Institutions				
	45	5.1	~	1		12th pillar: Innovation	7	2nd pillar: Infrastructure			
3 4th pillar: Health and primary education	31	6.3			4411	11th pillar:					
Subindex B: Efficiency enhancers	74	4.1	_			iness	100	3rd pillar: Macroecond environmen			
⇒ 5th pillar: Higher education and training	67	4.5	_			10th pillar: Market size		Alba millions			
	67	4.3	~					4th pillar: Health and primary education			
7th pillar: Labor market efficiency	47	4.4	~					<u></u>			
8th pillar: Financial market development	87	3.7	~		Technolo	pillar: ogical liness		5th pillar: Higher educa and training	ation		
9th pillar: Technological readiness	60	4.5	_			8th pillar:		6th pillar:			
10th pillar: Market size	110	2.9	_			Financial market development	7th pillar:	Goods market efficiency			
Subindex C: Innovation and sophistication factors	88	3.5	~		Labor market efficiency						
ூ 11th pillar: Business sophistication	92	3.7	~					Nois and Daoifia	and Desition		
※ 12th pillar: Innovation	80	3.2			Brunei Darussalam East Asia and Pacific						

### Most problematic factors for doing business

Source: World Economic Forum, Executive Opinion Survey 2017



## **Brunei Darussalam**

ndex Component	Rank/137	Value	Trend	Inde	ex Component	Rank/137	Value	e Tre
	40	4.4	~	1	6th pillar: Goods market efficiency	67	4.3	~
1.01 Property rights	62	4.4		6.0	1 Intensity of local competition	104	4.7	_
1.02 Intellectual property protection	55	4.4			2 Extent of market dominance	102	3.3	~
1.03 Diversion of public funds	28	4.9	_		3 Effectiveness of anti-monopoly policy	89	3.4	$\overline{}$
1.04 Public trust in politicians	31	4.2	$\overline{}$		4 Effect of taxation on incentives to invest	23	4.6	
			_~					$\overline{}$
1.05 Irregular payments and bribes	32	5.2	_		5 Total tax rate % profits	1 74	8.7	`
1.06 Judicial independence	60	4.1	$\sim$		6 No. of procedures to start a business	71	7	`
1.07 Favoritism in decisions of government officials	40	3.7	$\sim$	6.0	7 Time to start a business days	84	14.5	
1.08 Efficiency of government spending	23	4.3		6.0	8 Agricultural policy costs	47	4.1	
1.09 Burden of government regulation	70	3.4	$\sim$	6.0	9 Prevalence of non-tariff barriers	94	4.1	
1.10 Efficiency of legal framework in settling disputes	51	3.9	$\sim$	6.1	0 Trade tariffs % duty	36	1.9	/
1.11 Efficiency of legal framework in challenging regulations	127	2.3	/	6.1	1 Prevalence of foreign ownership	103	4.0	
1.12 Transparency of government policymaking	71	4.0	~		2 Business impact of rules on FDI	96	4.2	
1.13 Business costs of terrorism	34		~		•	73	4.0	_
		5.6			3 Burden of customs procedures			
1.14 Business costs of crime and violence	28	5.3	$\sim$		4 Imports % GDP	72	42.2	$\sim$
1.15 Organized crime	18	5.8	$\sim$		5 Degree of customer orientation	64	4.6	
1.16 Reliability of police services	47	4.9	$\sim$	6.1	6 Buyer sophistication	100	2.9	
1.17 Ethical behavior of firms	33	4.7		⊊C	b			
1.18 Strength of auditing and reporting standards	75	4.5	$\sim$		7th pillar: Labor market efficiency	47	4.4	
1.19 Efficacy of corporate boards	99	4.5	~	7.0	Cooperation in labor-employer relations	39	4.8	_
	71	4.0	_		2 Flexibility of wage determination	27	5.4	_
.20 Protection of minority shareholders' interests					3 Hiring and firing practices	61	3.8	_
.21 Strength of investor protection 0-10 (best)	88	5.2				5		_
↑↑ 2nd pillar: Infrastructure	60	4.3			4 Redundancy costs weeks of salary		3.0	
		4.0			5 Effect of taxation on incentives to work	16	4.9	
2.01 Quality of overall infrastructure	51	4.4	$\sim$	7.0	6 Pay and productivity	67	3.9	
2.02 Quality of roads	33	4.8		7.0	7 Reliance on professional management	85	4.0	
.03 Quality of railroad infrastructure	n/a	not		7.0	8 Country capacity to retain talent	54	3.7	_
.03 Quality of railload illifastructure	n/a	ssessed		7.0	9 Country capacity to attract talent	41	3.9	_
.04 Quality of port infrastructure	74	3.9	$\sim$		Female participation in the labor force ratio to men	96	0.69	_
.05 Quality of air transport infrastructure	63	4.5	$\sim$	7.1	o i emale participation in the labor force ratio to men	30	0.03	
06 Available airline seat kilometers millions/week	100	49.6	_		8th pillar: Financial market development	87	3.7	_
	53	5.4				00	4.0	
.07 Quality of electricity supply			$\sim$		1 Availability of financial services	83	4.0	=
08 Mobile-cellular telephone subscriptions /100 pop.	61	120.7	~		2 Affordability of financial services	63	3.9	
.09 Fixed-telephone lines /100 pop.	63	17.1	$\sim$	8.0	3 Financing through local equity market	130	2.4	_
2 Ond willow Manager and a sender and a	45	5.1	$\overline{}$	8.0	4 Ease of access to loans	89	3.5	
3rd pillar: Macroeconomic environment	40	5.1		8.0	5 Venture capital availability	67	2.9	_
.01 Government budget balance % GDP	138	-21.9	_		6 Soundness of banks	76	4.6	_
.02 Gross national savings % GDP	1	56.5			7 Regulation of securities exchanges	69	4.3	
.03 Inflation annual % change	80	-0.7	_			70	5	_
.04 Government debt % GDP	2	3.1		0.0	8 Legal rights index 0-10 (best)	70	- 5	
.05 Country credit rating 0-100 (best)	n/a	n/a		288	9th pillar: Technological readiness	60	4.5	_
100 Country Credit rating 6-100 (best)	π.α	11/a						
4th pillar: Health and primary education	31	6.3	_		1 Availability of latest technologies	75	4.6	_
	-1-	6		9.0	2 Firm-level technology absorption	78	4.3	
01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.0	3 FDI and technology transfer	103	3.9	
.02 Business impact of malaria	n/a	5.4		9.0	4 Internet users % pop.	44	75.0	_
03 Tuberculosis incidence cases/100,000 pop.	79	58.0	~	9.0	5 Fixed-broadband Internet subscriptions /100 pop.	77	8.3	
04 Business impact of tuberculosis	73	5.3			6 Internet bandwidth kb/s/user	57	76.2	
05 HIV prevalence % adult pop.	n/a	n/a						
06 Business impact of HIV/AIDS	65	5.4	$\overline{}$	9.0	7 Mobile-broadband subscriptions /100 pop.	13	116.6	_
•	55	8.6		4.3	10th pillar: Market size	110	2.9	_
07 Infant mortality deaths/1,000 live births								
08 Life expectancy years	36	79.0			01 Domestic market size index	114	2.6	_
09 Quality of primary education	27	5.0		10.	02 Foreign market size index	99	3.8	
10 Primary education enrollment rate net %	46	97.3		10.	03 GDP (PPP) PPP \$ billions	110	32.5	_
~					04 Exports % GDP	36	48.7	_
₹ 5th pillar: Higher education and training	67	4.5		10.	- Experte % dBi			
01 Secondary education enrollment rate gross %	59	96.1	$\overline{}$	مومو	11th pillar: Business sophistication	92	3.7	-
02 Tertiary education enrollment rate gross %	81	30.8	$\overline{}$			120	2.0	_
			_		01 Local supplier quantity	120	3.8	_
03 Quality of the education system	34	4.4	_		02 Local supplier quality	104	3.9	_
4 Quality of math and science education	34	4.7		11.	03 State of cluster development	76	3.7	_
OS Quality of management schools	64	4.3	$\overline{}$	11.	04 Nature of competitive advantage	62	3.6	_
06 Internet access in schools	40	4.9	$\sim$	11.	05 Value chain breadth	108	3.3	_
77 Local availability of specialized training services	98	4.0	_		06 Control of international distribution	105	3.2	_
08 Extent of staff training	55	4.1			07 Production process sophistication	110	3.1	_
2.10.11 or otali training	33	7.1						
					08 Extent of marketing	112	3.9	_
				11.	09 Willingness to delegate authority	51	4.5	
				200	12th pillar: Innovation	80	3.2	_
					01 Capacity for innovation	100	3.7	_
				12.	02 Quality of scientific research institutions	86	3.6	_
				12.	03 Company spending on R&D	92	3.0	_
					04 University-industry collaboration in R&D	86	3.3	-
					05 Gov't procurement of advanced technology products	41	3.6	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

41

89

3.6

# Bulgaria



The Global Competitiveness Index 2017-2018 edition



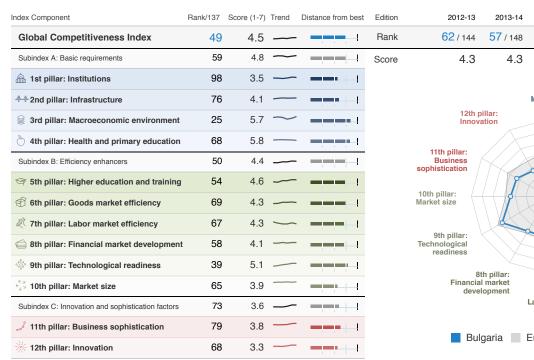
2017-18

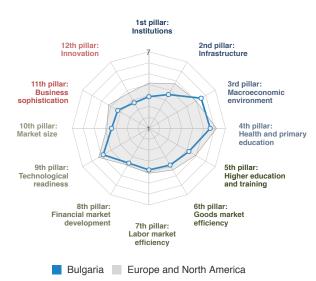
49 / 137

4.5

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2017)			
Population millions		GDP per capita US\$	7,368.5		
GDP US\$ billions	52.4	GDP (PPP) % world GDP	0.12		

#### Performance overview





2014-15

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4.4

2015-16

**54** / 140

4.3

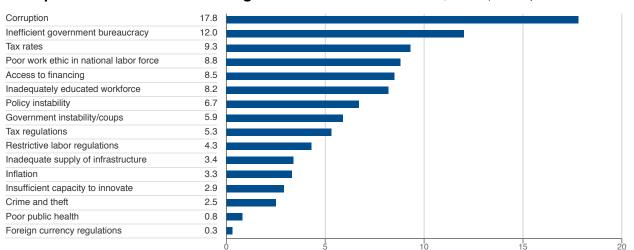
2016-17

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4.4

### Most problematic factors for doing business





# Bulgaria

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
☆ 1st pillar: Institutions	98	3.5	_	8	6th pillar: Goods market efficiency	69	4.3	_
1.01 Property rights	120	3.5		6.01	Intensity of local competition	91	4.8	^
1.02 Intellectual property protection	125	3.2	_		Extent of market dominance	61	3.8	_
1.03 Diversion of public funds	97	2.9			Effectiveness of anti-monopoly policy	85	3.5	_
1.04 Public trust in politicians	88	2.6	~		Effect of taxation on incentives to invest	58	3.8	
1.05 Irregular payments and bribes	87	3.5	~		5 Total tax rate % profits	28	27.0	~
1.06 Judicial independence	108	3.0			No. of procedures to start a business	53	6	
1.07 Favoritism in decisions of government officials	90	2.7			7 Time to start a business days	104	23.0	
1.08 Efficiency of government spending	76	3.1			3 Agricultural policy costs	98	3.4	$\overline{}$
1.09 Burden of government regulation	72	3.3			Prevalence of non-tariff barriers	82	4.2	_
	98				Trade tariffs % duty	6	1.1	
1.10 Efficiency of legal framework in settling disputes								_
1.11 Efficiency of legal framework in challenging regulations	87	3.0			Prevalence of foreign ownership	76	4.4	=
1.12 Transparency of government policymaking	107	3.5			2 Business impact of rules on FDI	110	3.9	
1.13 Business costs of terrorism	101	4.5	$\sim$		Burden of customs procedures	85	3.9	
1.14 Business costs of crime and violence	102	3.9	=		I Imports % GDP	26	63.7	_
1.15 Organized crime	119	3.7			Degree of customer orientation	84	4.5	_
1.16 Reliability of police services	105		_	6.16	Buyer sophistication	94	3.1	_
1.17 Ethical behavior of firms	91	3.5	_	250	7th pillar: Labor market efficiency	67	4.3	
1.18 Strength of auditing and reporting standards	68	4.6		al,				
1.19 Efficacy of corporate boards	77	4.8			Cooperation in labor-employer relations	111	3.9	_
1.20 Protection of minority shareholders' interests	83	3.9	~		2 Flexibility of wage determination	53	5.1	
1.21 Strength of investor protection 0-10 (best)	13	7.3	_		Hiring and firing practices	67	3.7	_
AA Oo d willow lefter to	70	4.4			Redundancy costs weeks of salary	20	8.6	_
2nd pillar: Infrastructure	76	4.1			Effect of taxation on incentives to work	96	3.5	_
2.01 Quality of overall infrastructure	78	3.9		7.06	Pay and productivity	88	3.7	_
2.02 Quality of roads	93	3.4		7.07	Reliance on professional management	112	3.6	
2.03 Quality of railroad infrastructure	58	3.0	_	7.08	Country capacity to retain talent	119	2.5	_
2.04 Quality of port infrastructure	68	4.1	_	7.09	Country capacity to attract talent	118	2.3	_
2.05 Quality of air transport infrastructure	73	4.3			Female participation in the labor force ratio to men	34	0.89	_
2.06 Available airline seat kilometers millions/week	76	159.7	~/					
2.07 Quality of electricity supply	78	4.8	_		8th pillar: Financial market development	58	4.1	
2.08 Mobile-cellular telephone subscriptions /100 pop.	46	127.2	$\overline{}$	8.01	Availability of financial services	84	4.0	_
2.09 Fixed-telephone lines /100 pop.	48	21.0	~	8.02	Affordability of financial services	82	3.6	_
2.09 Tixed telephone lines 7100 pop.	40	21.0	_		Financing through local equity market	67	3.6	
	25	5.7	$\sim$		Ease of access to loans	63	3.9	_
3.01 Government budget balance % GDP	6	1.6	$\sim$		5 Venture capital availability	45	3.2	_
3.02 Gross national savings % GDP	46	24.5	~		Soundness of banks	96	4.3	_
3.03 Inflation annual % change	91	-1.3			Regulation of securities exchanges	87	4.0	_
3.04 Government debt % GDP	20	27.8	~		B Legal rights index 0-10 (best)	13	9	-
	58	55.9		0.00	s Legal rights index 8-10 (best)	10	9	_
3.05 Country credit rating 0-100 (best)		33.9		e\${\$p	9th pillar: Technological readiness	39	5.1	_
4th pillar: Health and primary education	68	5.8		9.01	Availability of latest technologies	68	4.7	_
4.01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02	Firm-level technology absorption	66	4.5	_
4.02 Business impact of malaria	n/a	n/a		9.03	FDI and technology transfer	47	4.7	_
4.03 Tuberculosis incidence cases/100,000 pop.	55	24.0	_	9.04	Internet users % pop.	67	59.8	^
4.04 Business impact of tuberculosis	99	4.7		9.05	Fixed-broadband Internet subscriptions /100 pop.	41	23.3	_
4.05 HIV prevalence % adult pop.	1	<0.1		9.06	Internet bandwidth kb/s/user	26	175.9	_/
4.06 Business impact of HIV/AIDS	96	4.8			Mobile-broadband subscriptions /100 pop.	32	88.4	
4.07 Infant mortality deaths/1,000 live births	58	9.3	$\overline{}$					
4.08 Life expectancy years	75	74.5		E 3	10th pillar: Market size	65	3.9	
4.09 Quality of primary education	76	3.9		10.0	1 Domestic market size index	72	3.6	_
4.10 Primary education enrollment rate net %	88	93.3	~		2 Foreign market size index	55	4.9	_
The Firmary Coucation of Comment rate liet %	00	55.5	$\overline{}$		03 GDP (PPP) PPP \$ billions		144.6	_
⇒ 5th pillar: Higher education and training	54	4.6			04 Exports % GDP	20	65.7	
5.01 Secondary education enrollment rate gross %	52	99.0	~	0	•			
5.02 Tertiary education enrollment rate gross %	25	73.9		ood	11th pillar: Business sophistication	79	3.8	
5.03 Quality of the education system	87		_	11.0	1 Local supplier quantity	76	4.5	_
5.04 Quality of math and science education	81	3.8			2 Local supplier quality	65	4.4	_
5.05 Quality of management schools	117	3.4			3 State of cluster development	70	3.7	_
5.06 Internet access in schools	56	4.5	~		04 Nature of competitive advantage	85	3.2	_
					5 Value chain breadth	82	3.7	_
5.07 Local availability of specialized training services	112	3.7			66 Control of international distribution	89	3.3	_
5.08 Extent of staff training	118	3.3	$\overline{}$		77 Production process sophistication	71	3.7	
					·			
					08 Extent of marketing	107	4.0	
				11.0	9 Willingness to delegate authority	100	3.9	
				1	12th pillar: Innovation	68	3.3	_
				12.0	1 Capacity for innovation	56	4.2	
					22 Quality of scientific research institutions	59	3.9	_
					33 Company spending on R&D	44	3.6	
					of University industry collection in DOD	74	0.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

3.4

3.3

3.6

66

93

## **Burundi**

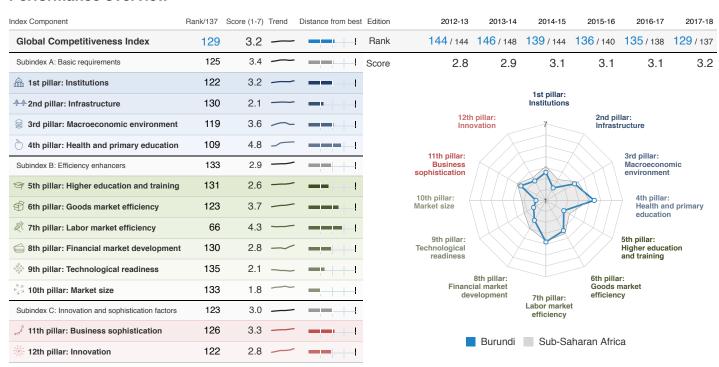


The Global Competitiveness Index 2017-2018 edition



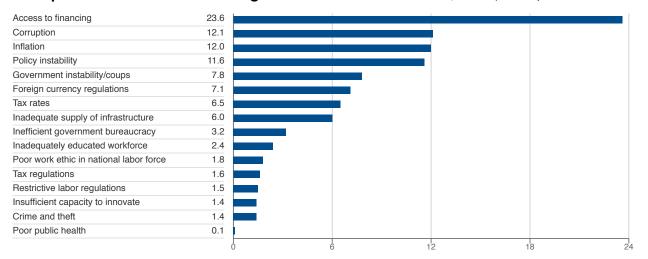
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201		
Population millions 9.0		GDP per capita US\$	324.8	
GDP US\$ billions	3.1	GDP (PPP) % world GDP	0.01	

#### Performance overview



### Most problematic factors for doing business





# **Burundi**

dex Component	Rank/137	7 Value	Trend	Inde	x Component	Rank/137	Value	э Т
☆ 1st pillar: Institutions	122	3.2		\$	6th pillar: Goods market efficiency	123	3.7	_
1.01 Property rights	131	3.0		6.0	1 Intensity of local competition	132	3.9	~
1.02 Intellectual property protection	128	3.2			2 Extent of market dominance	94	3.4	_
1.03 Diversion of public funds	101	2.9			3 Effectiveness of anti-monopoly policy	101	3.3	_
1.04 Public trust in politicians	54	3.3			4 Effect of taxation on incentives to invest	112	3.0	_
1.05 Irregular payments and bribes	112	3.1			5 Total tax rate % profits	82	40.3	
		2.3				7	3	$\overline{}$
.06 Judicial independence	131				6 No. of procedures to start a business			$\overline{}$
.07 Favoritism in decisions of government officials	80	2.9			7 Time to start a business days	12	4.0	_
.08 Efficiency of government spending	46	3.7			Agricultural policy costs	126	2.9	_
.09 Burden of government regulation	98	3.1		6.0	Prevalence of non-tariff barriers	134	3.2	_
.10 Efficiency of legal framework in settling disputes	103	3.0	_	6.1	Trade tariffs % duty	99	9.5	_
11 Efficiency of legal framework in challenging regulations	106	2.6	~	6.1	1 Prevalence of foreign ownership	126	3.3	-
12 Transparency of government policymaking	130	2.9	_		2 Business impact of rules on FDI	129	3.4	_
13 Business costs of terrorism	106	4.5	_		Burden of customs procedures	113	3.3	
.14 Business costs of crime and violence	106	3.8	~~		4 Imports % GDP	104	30.0	
					•			_
15 Organized crime	118	3.8	$\sim$		5 Degree of customer orientation	98	4.2	_
16 Reliability of police services	121	3.0	_	6.1	Buyer sophistication	135	2.1	-
17 Ethical behavior of firms	122	3.1	_	59	70	66	4.0	
18 Strength of auditing and reporting standards	116	3.7	_	Ex.	7th pillar: Labor market efficiency	66	4.3	
19 Efficacy of corporate boards	86	4.6		7.0	1 Cooperation in labor-employer relations	95	4.1	-
20 Protection of minority shareholders' interests	116	3.4		7.0	2 Flexibility of wage determination	28	5.4	•
•	112	4.2	~		3 Hiring and firing practices	112	3.2	
21 Strength of investor protection 0-10 (best)	112	4.2	_		4 Redundancy costs weeks of salary	69	15.9	-
↑ 2nd pillar: Infrastructure	130	2.1						
•					5 Effect of taxation on incentives to work	77	3.8	_
O1 Quality of overall infrastructure	128	2.4	$\sim$		Pay and productivity	128	3.0	
02 Quality of roads	112	3.0	$\overline{}$	7.0	7 Reliance on professional management	116	3.5	
33 Quality of railroad infrastructure	n/a	not		7.0	8 Country capacity to retain talent	120	2.5	
03 Quality of famoad inmastructure	11/4 8	assessed		7.0	Country capacity to attract talent	123	2.3	
04 Quality of port infrastructure	117	2.8	$\sim$		Female participation in the labor force ratio to men	3	1.02	
5 Quality of air transport infrastructure	122	3.0	_	7.1	or official participation in the labor lorde ratio to men		1.02	
06 Available airline seat kilometers millions/week	135	1.3	~~		8th pillar: Financial market development	130	2.8	
	123	2.4				400	0.0	٠,
7 Quality of electricity supply			_		1 Availability of financial services	133	2.8	
08 Mobile-cellular telephone subscriptions /100 pop.	135	48.0	_		2 Affordability of financial services	122	2.9	_
09 Fixed-telephone lines /100 pop.	130	0.2		8.0	3 Financing through local equity market	112	2.8	
0	119	3.6		8.0	4 Ease of access to loans	124	2.8	
3rd pillar: Macroeconomic environment	119	3.0	_	8.0	5 Venture capital availability	92	2.6	٠,
01 Government budget balance % GDP	115	-6.2	$\sim$	8.0	Soundness of banks	128	3.2	-
02 Gross national savings % GDP	136	-8.1	~		7 Regulation of securities exchanges	125	3.3	-
03 Inflation annual % change	101	5.5	\		· ·	107	2	-
04 Government debt % GDP	64	47.2	- /	0.0	B Legal rights index 0-10 (best)	107		
05 Country credit rating 0-100 (best)	113	26.6	_	388	9th pillar: Technological readiness	135	2.1	
00 Country credit rating 0-100 (best)	110	20.0				100	0.0	
4th pillar: Health and primary education	109	4.8			1 Availability of latest technologies	129	3.3	_
	F7 .	1 4 000 F			2 Firm-level technology absorption	136	2.9	_
01 Malaria incidence cases/100,000 pop.		14,989.5	~	9.0	3 FDI and technology transfer	125	3.3	
02 Business impact of malaria	53	3.2		9.0	4 Internet users % pop.	136	5.2	
03 Tuberculosis incidence cases/100,000 pop.	98	122.0	^	9.0	5 Fixed-broadband Internet subscriptions /100 pop.	132	0.0	
04 Business impact of tuberculosis	113	4.2			6 Internet bandwidth kb/s/user	117	6.1	
05 HIV prevalence % adult pop.	109	1.1						_
06 Business impact of HIV/AIDS	117	3.9	_	9.0	7 Mobile-broadband subscriptions /100 pop.	134	8.3	_
•	126	54.1	_	47	10th pillar: Market size	133	1.8	
07 Infant mortality deaths/1,000 live births			$\rightarrow$					
08 Life expectancy years	131	57.1			1 Domestic market size index	133	1.8	
09 Quality of primary education	115	3.0		10.	02 Foreign market size index	138	1.7	
10 Primary education enrollment rate net %	80	94.1	/	10.0	03 GDP (PPP) PPP \$ billions	132	7.9	
S					04 Exports % GDP	137	4.4	-
₹ 5th pillar: Higher education and training	131	2.6						
01 Secondary education enrollment rate gross %	123	42.5	_	oos	11th pillar: Business sophistication	126	3.3	
02 Tertiary education enrollment rate gross %	127	5.0	_		1 Local supplier quantity	134	3.4	1
•		3.1			., ,			-
Ouglity of the education system	105				D2 Local supplier quality	133	3.1	
24 Quality of math and science education	87		_		3 State of cluster development	110	3.1	
5 Quality of management schools	87		_	11.0	Nature of competitive advantage	92	3.2	
16 Internet access in schools	132	2.5	_	11.0	05 Value chain breadth	122	3.1	
7 Local availability of specialized training services	133	3.0	~	11.0	06 Control of international distribution	106	3.1	
08 Extent of staff training	124				77 Production process sophistication	124	2.8	
· · · · · · · · · · · · · · · · · · ·		0.0						
					08 Extent of marketing	129	3.7	
				11.0	9 Willingness to delegate authority	104	3.9	
				辮	12th pillar: Innovation	122	2.8	
				12.0	01 Capacity for innovation	124	3.4	
					02 Quality of scientific research institutions	123	2.7	
					O3 Company spending on R&D	98	3.0	
						103		
					04 University-industry collaboration in R&D		3.0	
				121	05 Gov't procurement of advanced technology products	102	29	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

102

123

2.9

## Cambodia



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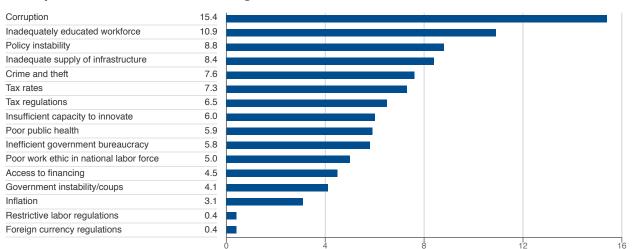
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201		
Population millions 15.8		GDP per capita US\$	1,229.6	
GDP US\$ billions	19.4	GDP (PPP) % world GDP	0.05	

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	
Global Competitiveness Index	94	3.9	_		Rank	85 / 144	88 / 148	95 / 144	90 / 140	89 / 138	94 / 137	
Subindex A: Basic requirements	102	4.1	~~		Score	4.0	4.0	3.9	3.9	4.0	3.9	
â 1st pillar: Institutions	106	3.4	~									
<b>↑</b> 2nd pillar: Infrastructure	106	3.1	~					1st pillar: Institutions				
	70	4.6	_			12th բ Innov		7	2nd pill Infrastr			
3 4th pillar: Health and primary education	101	5.3	_				$\wedge$					
Subindex B: Efficiency enhancers	96	3.7	_			11th pillar: Business sophistication	4/)			3rd pillar: Macroeconor environment	nic	
⇒ 5th pillar: Higher education and training	124	2.9	_			/	///۴					
	85	4.2				10th pillar: Market size			4th pillar: Health and primary education			
7th pillar: Labor market efficiency	48	4.4	_									
8th pillar: Financial market development	61	4.1	_			9th pillar: Technological readiness				5th pillar: Higher educat and training	ion	
💖 9th pillar: Technological readiness	97	3.4	~						6th pillar			
್ಘೆ 10th pillar: Market size	84	3.4	_			Financia	th pillar: Il market Iopment	7th pillar:	Goods m	arket		
Subindex C: Innovation and sophistication factors	111	3.2	~			Labor market efficiency						
مر 11th pillar: Business sophistication	106	3.6	~			_ 0	مائم مامسم	■ Foot Ac	is and Das	iti o		
** 12th pillar: Innovation	110	2.9	_		Cambodia East Asia and Pacific					illic		

### Most problematic factors for doing business





## Cambodia

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	e Tre
☆ 1st pillar: Institutions	106	3.4	~	1	6th pillar: Goods market efficiency	85	4.2	_
1.01 Property rights	102	3.8	~	6.0	Intensity of local competition	93	4.8	_
1.02 Intellectual property protection	130	3.1	_		2 Extent of market dominance	80	3.6	_
1.03 Diversion of public funds	81	3.2	~		Effectiveness of anti-monopoly policy	69	3.7	~
1.04 Public trust in politicians	72	2.9	<u> </u>		Effect of taxation on incentives to invest	56	3.8	_
1.05 Irregular payments and bribes	113	3.0			5 Total tax rate % profits	15	21.0	_
1.06 Judicial independence	122	2.6			No. of procedures to start a business	105	9	~
1.07 Favoritism in decisions of government officials	84	2.9	_		7 Time to start a business days	137	99.0	_/
1.08 Efficiency of government spending	89	2.9	_		3 Agricultural policy costs	97	3.4	
1.09 Burden of government regulation	68	3.4	_		Prevalence of non-tariff barriers	93	4.1	
1.10 Efficiency of legal framework in settling disputes	108	2.9	_		Trade tariffs % duty	97	9.3	~
	96	2.8	_		Prevalence of foreign ownership	68	4.5	_
1.11 Efficiency of legal framework in challenging regulations	120	3.2	$\subset$			77		_
1.12 Transparency of government policymaking 1.13 Business costs of terrorism	108				Business impact of rules on FDI	127	4.4 2.9	_
		4.5	~		B Burden of customs procedures			
1.14 Business costs of crime and violence	98	4.0			I Imports % GDP	19	75.0	_
1.15 Organized crime	97	4.2	~		5 Degree of customer orientation	79	4.5	
1.16 Reliability of police services	122	3.0	_	6.16	Buyer sophistication	52	3.7	_
1.17 Ethical behavior of firms	77	3.7		975	7th pillar: Labor market efficiency	48	4.4	_
1.18 Strength of auditing and reporting standards	125	3.6	~	- ·				
1.19 Efficacy of corporate boards	118	4.2	~		Cooperation in labor-employer relations	67	4.4	_
1.20 Protection of minority shareholders' interests	104	3.6	_		2 Flexibility of wage determination	100	4.5	
1.21 Strength of investor protection 0-10 (best)	96	4.8	$\overline{}$		Hiring and firing practices	32	4.3	
AA	100	0.4		7.04	Redundancy costs weeks of salary	83	19.4	-
◆ 2nd pillar: Infrastructure	106	3.1	~	7.05	Effect of taxation on incentives to work	69	3.9	_
2.01 Quality of overall infrastructure	99	3.4	$\overline{}$	7.06	Pay and productivity	64	4.0	_
2.02 Quality of roads	99	3.2	_	7.07	Reliance on professional management	90	3.9	
2.03 Quality of railroad infrastructure	94	1.6	_	7.08	Country capacity to retain talent	50	3.7	-
2.04 Quality of port infrastructure	81	3.7	_	7.09	Country capacity to attract talent	45	3.8	_
2.05 Quality of air transport infrastructure	106	3.7	_		Female participation in the labor force ratio to men	45	0.88	_
2.06 Available airline seat kilometers millions/week	80	130.5						
2.07 Quality of electricity supply	106	3.5			8th pillar: Financial market development	61	4.1	
2.08 Mobile-cellular telephone subscriptions /100 pop.	52	124.9	~	8.0	Availability of financial services	75	4.1	_
2.09 Fixed-telephone lines /100 pop.	116	1.4	~	8.02	Affordability of financial services	78	3.7	_
2.09 Tixed telephone lines 7100 pop.	110	1.7	_		Financing through local equity market	125	2.5	_
	70	4.6	$\overline{}$		Ease of access to loans	74	3.8	_
3.01 Government budget balance % GDP	70	-2.9	~		5 Venture capital availability	65	2.9	_
3.02 Gross national savings % GDP	104	14.2	~		Soundness of banks	86	4.4	_
3.03 Inflation annual % change	44	3.0			Regulation of securities exchanges	119	3.4	
3.04 Government debt % GDP	29	33.0	Ž			4	11	
				0.00	3 Legal rights index 0-10 (best)	4	- ''	_
3.05 Country credit rating 0-100 (best)	96	30.7		e\$\$30	9th pillar: Technological readiness	97	3.4	_
4th pillar: Health and primary education	101	5.3	$\overline{}$	9.0	Availability of latest technologies	93	4.3	_
4.01 Malaria incidence cases/100,000 pop.	45	774.3	~	9.02	2 Firm-level technology absorption	90	4.2	_
4.02 Business impact of malaria	34	4.4		9.03	FDI and technology transfer	54	4.6	_
4.03 Tuberculosis incidence cases/100,000 pop.	130	380.0	_	9.04	1 Internet users % pop.	108	25.6	
4.04 Business impact of tuberculosis	114	4.2	_		Fixed-broadband Internet subscriptions /100 pop.	112	0.6	
4.05 HIV prevalence % adult pop.	91	0.6	_		6 Internet bandwidth kb/s/user	93	23.6	
4.06 Business impact of HIV/AIDS	110	4.3			Mobile-broadband subscriptions /100 pop.	82	50.2	_
4.07 Infant mortality deaths/1,000 live births	98	24.6				02	00.2	
	103		$\sim$	K 7 7	10th pillar: Market size	84	3.4	_
4.08 Life expectancy years		68.7			1 Domestic market size index	91	3.0	
4.09 Quality of primary education	112	3.0	_		2 Foreign market size index	74	4.4	
4.10 Primary education enrollment rate net %	73	94.9			•	93	59.0	
⇒ 5th pillar: Higher education and training	124	2.9			O3 GDP (PPP) PPP \$ billions O4 Exports % GDP	18	71.6	_
5.01 Secondary education enrollment rate gross %	118	45.1	<u> </u>		<u> </u>			
5.02 Tertiary education enrollment rate gross %	109	13.1		ممح	11th pillar: Business sophistication	106	3.6	
5.03 Quality of the education system	79	3.5	_	11.0	1 Local supplier quantity	127	3.6	_
5.04 Quality of math and science education	111	3.1			2 Local supplier quality	122	3.6	_
5.05 Quality of management schools	123	3.2			3 State of cluster development	48	4.0	_
5.06 Internet access in schools		3.6	=		04 Nature of competitive advantage	90	3.2	_
	101				55 Value chain breadth	90	3.6	_
5.07 Local availability of specialized training services	117		~		66 Control of international distribution	115	3.0	_
5.08 Extent of staff training	84	3.7	$\sim$					_
					77 Production process sophistication	114	3.1	
					08 Extent of marketing	86	4.2	
				11.0	9 Willingness to delegate authority	112	3.8	
				**	12th pillar: Innovation	110	2.9	_
					1 Capacity for innovation	107	3.7	_
					2 Quality of scientific research institutions	114	2.9	
					33 Company spending on R&D	82	3.2	_
				12.0	33 Company spending on Had	02	0.2	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

96

83

116

3.1

3.2

## Cameroon

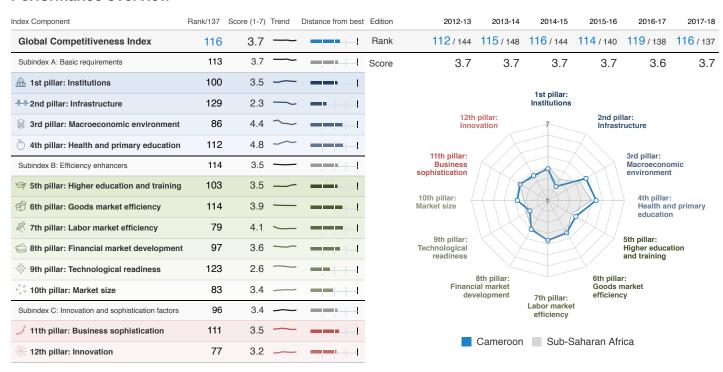


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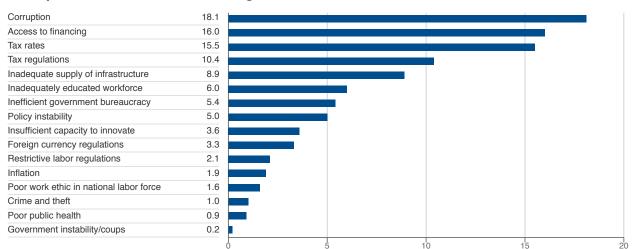
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20		
Population millions	23.7	GDP per capita US\$	1,238.5	
GDP US\$ billions	29.3	GDP (PPP) % world GDP	0.06	

#### Performance overview



### Most problematic factors for doing business





## Cameroon

Index Component	Rank/137	' Value	e Trend	Index Component	Rank/137	Value	Trend
â 1st pillar: Institutions	100	3.5	_	<b>❸</b> 6th pillar: Goods market efficiency	114	3.9	
1.01 Property rights	84	4.1		6.01 Intensity of local competition	85	4.9	~
1.02 Intellectual property protection	48	4.5		6.02 Extent of market dominance	57	3.9	~
1.03 Diversion of public funds	123	2.4	~	6.03 Effectiveness of anti-monopoly policy	86	3.4	_
1.04 Public trust in politicians	71	2.9	/	6.04 Effect of taxation on incentives to invest	107	3.1	_
1.05 Irregular payments and bribes	120		_	6.05 Total tax rate % profits	120	57.7	
1.06 Judicial independence	104	3.1		6.06 No. of procedures to start a business	53	6	
1.07 Favoritism in decisions of government officials	92	2.7	~	6.07 Time to start a business days	88	15.5	
1.08 Efficiency of government spending	85	2.9		6.08 Agricultural policy costs	74	3.7	
1.09 Burden of government regulation	71	3.4		6.09 Prevalence of non-tariff barriers	115	3.8	~
1.10 Efficiency of legal framework in settling disputes	63			6.10 Trade tariffs % duty	134	15.5	~
1.11 Efficiency of legal framework in challenging regulations	68	3.4		6.11 Prevalence of foreign ownership	66	4.5	_
1.12 Transparency of government policymaking	61	4.1		6.12 Business impact of rules on FDI	82	4.3	~
1.13 Business costs of terrorism	127	3.4		6.13 Burden of customs procedures	111	3.4	_
					102	30.5	$\overline{}$
1.14 Business costs of crime and violence	112	3.6		6.14 Imports % GDP			
1.15 Organized crime	106	4.1	_	6.15 Degree of customer orientation	89	4.4	
1.16 Reliability of police services	81	4.2		6.16 Buyer sophistication	118	2.7	
1.17 Ethical behavior of firms	108	3.3		₹ 7th pillar: Labor market efficiency	79	4.1	_
1.18 Strength of auditing and reporting standards	113	3.8					
1.19 Efficacy of corporate boards	72	4.8		7.01 Cooperation in labor-employer relations	103	4.0	
1.20 Protection of minority shareholders' interests	78	3.9		7.02 Flexibility of wage determination	50	5.1	_
1.21 Strength of investor protection 0-10 (best)	112	4.2	~	7.03 Hiring and firing practices	57	3.9	
◆◆ 2nd pillar: Infrastructure	129	2.3	_	7.04 Redundancy costs weeks of salary	85	19.9	_/
•			Ŭ	7.05 Effect of taxation on incentives to work	33	4.4	
2.01 Quality of overall infrastructure	132	2.3		7.06 Pay and productivity	121	3.3	$\sim$
2.02 Quality of roads	126	2.6	$\sim$	7.07 Reliance on professional management	124	3.4	_
2.03 Quality of railroad infrastructure	78	2.3	$\sim$	7.08 Country capacity to retain talent	115	2.6	_
2.04 Quality of port infrastructure	107	3.1	$\sim$	7.09 Country capacity to attract talent	111	2.5	$\sim$
2.05 Quality of air transport infrastructure	128	2.8	_	7.10 Female participation in the labor force ratio to men	44	0.88	
2.06 Available airline seat kilometers millions/week	99	50.5	_	A	07	0.0	_
2.07 Quality of electricity supply	127	2.2	_	8th pillar: Financial market development	97	3.6	
2.08 Mobile-cellular telephone subscriptions /100 pop.	128	68.1	/	8.01 Availability of financial services	86	4.0	
2.09 Fixed-telephone lines /100 pop.	104	4.4	~	8.02 Affordability of financial services	111	3.2	
			_	8.03 Financing through local equity market	83	3.3	_
	86	4.4	~	8.04 Ease of access to loans	109	3.2	
3.01 Government budget balance % GDP	102	-4.7	$\sim$	8.05 Venture capital availability	109	2.4	
3.02 Gross national savings % GDP	93	16.4	~	8.06 Soundness of banks	90	4.3	~
3.03 Inflation annual % change	1	0.9	$\sim$	8.07 Regulation of securities exchanges	103	3.8	_
3.04 Government debt % GDP	28	32.8	_	8.08 Legal rights index 0-10 (best)	50	6	
3.05 Country credit rating 0-100 (best)	91	32.9					
				🍀 9th pillar: Technological readiness	123	2.6	
4th pillar: Health and primary education	112	4.8		9.01 Availability of latest technologies	117	3.8	_
4.01 Malaria incidence cases/100,000 pop.	63 2	22,819.8	~	9.02 Firm-level technology absorption	112	4.0	$\overline{}$
4.02 Business impact of malaria	42	4.0		9.03 FDI and technology transfer	117	3.6	_
4.03 Tuberculosis incidence cases/100,000 pop.	116	212.0	/	9.04 Internet users % pop.	111	25.0	
4.04 Business impact of tuberculosis	106	4.4		9.05 Fixed-broadband Internet subscriptions /100 pop.	122	0.2	
4.05 HIV prevalence % adult pop.	125	3.8		9.06 Internet bandwidth kb/s/user	128	2.5	_
4.06 Business impact of HIV/AIDS	107	4.4		9.07 Mobile-broadband subscriptions /100 pop.	131	9.6	
			$\sim$		131	9.0	_
4.07 Infant mortality deaths/1,000 live births	128	57.1	$\Rightarrow$	10th pillar: Market size	83	3.4	_
4.08 Life expectancy years	132	55.9	_	10.01 Domestic market size index	82	3.3	
4.09 Quality of primary education	65	4.1		10.02 Foreign market size index	103	3.7	=
4.10 Primary education enrollment rate net %	97	92.0	~	•			
⇒ 5th pillar: Higher education and training	103	3.5		10.03 GDP (PPP) PPP \$ billions	83	76.9	=
				10.04 Exports % GDP	117	16.7	_
5.01 Secondary education enrollment rate gross %	110	58.1		√ 11th pillar: Business sophistication	111	3.5	_
5.02 Tertiary education enrollment rate gross %	101	17.5		11.01 Local supplier quantity	96	4.2	
5.03 Quality of the education system	82	3.5			106		$\subseteq$
5.04 Quality of math and science education	59	4.3		11.02 Local supplier quality		3.8	
5.05 Quality of management schools	44		$\sim$	11.03 State of cluster development	106	3.2	
5.06 Internet access in schools	91	3.7	_	11.04 Nature of competitive advantage	117		$\sim$
5.07 Local availability of specialized training services	62	4.4	~	11.05 Value chain breadth	102	3.4	$\sim$
5.08 Extent of staff training	82	3.7		11.06 Control of international distribution	97	3.2	~
				11.07 Production process sophistication	115	3.1	$\sim$
				11.08 Extent of marketing	62	4.5	
				11.09 Willingness to delegate authority	120	3.6	
				* 12th pillar: Innovation	77	3.2	
				12.01 Capacity for innovation	52	4.3	
				12.02 Quality of scientific research institutions	80		
				12.03 Company spending on R&D	81	3.2	
				12.04 University-industry collaboration in R&D	85		~
				12.05 Gov't procurement of advanced technology products	82	3.2	1

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

82

97

3.2

## Canada



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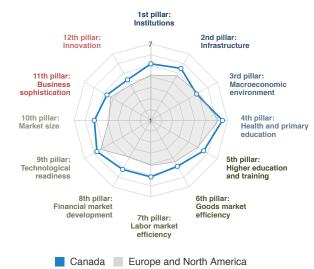
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5.3

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April				
Population millions	36.2	GDP per capita US\$	42,210.1			
GDP US\$ billions	1,529.2	GDP (PPP) % world GDP	1.40			

#### Performance overview

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14
Global Competitiveness Index	14	5.3			Rank	<b>14</b> / 144	<b>14</b> / 148
Subindex A: Basic requirements	17	5.7			Score	5.3	5.2
1st pillar: Institutions	15	5.4	_				
↑ 2nd pillar: Infrastructure	16	5.7					
	47	5.1	_			12th p Innov	
3 4th pillar: Health and primary education	8	6.6				4411	$\wedge$
Subindex B: Efficiency enhancers	7	5.5	_			11th pillar: Business sophistication	
⇒ 5th pillar: Higher education and training	13	5.8	_			1011-111-1	
6th pillar: Goods market efficiency	18	5.2				10th pillar: Market size	
7th pillar: Labor market efficiency	7	5.4	_			\ \	
8th pillar: Financial market development	7	5.4				9th pillar: Technological readiness	
9th pillar: Technological readiness	23	5.9				8	th pillar:
្ស៊ី <sup>7</sup> 10th pillar: Market size	16	5.4				Financia	al market elopment
Subindex C: Innovation and sophistication factors	24	4.8					
√ 11th pillar: Business sophistication	23	5.0				Co	nada
** 12th pillar: Innovation	23	4.7				■ Ca	iiaud



2014-15 15 / 144

5.2

2015-16

13 / 140

5.3

2016-17

15 / 138

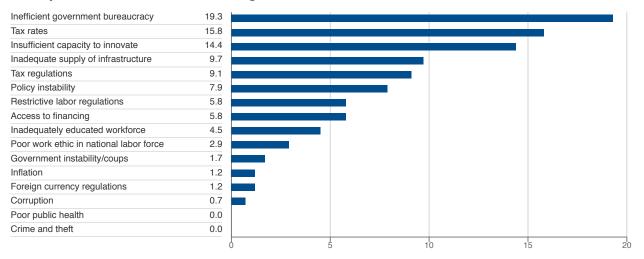
5.3

Canada ranks 14th this year, a very slight improvement over last year's ranking. The main changes with respect to last year are in the efficiency of government spending (where it falls 13 places) and the macroeconomic environment (where it falls six spots), reflecting the negative international shocks via terms-of-trade deterioration and their impact on government revenues and national savings. Uncertainties regarding the United States' trade policy present challenges to Canada, with trade disruptions potentially affecting regional value

chains. Canada's main challenges to continue making progress toward the top 10 lie in the macroeconomic environment pillar, ranking 47th; the quantity of education subpillar, where it ranks 28th; and the technological readiness, business sophistication, and innovation pillars where it ranks in the 20s. On the other hand, Canada ranks a high 7th in labor market efficiency, driven mainly by the efficient use of talent (3rd).

### Most problematic factors for doing business





## Canada

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	Э
â 1st pillar: Institutions	15	5.4	_	€ 6th pillar: Goods market efficiency	18	5.2	
1.01 Property rights	11	6.0		6.01 Intensity of local competition	34	5.4	
1.02 Intellectual property protection	16	5.8	_	6.02 Extent of market dominance	24	4.4	
1.03 Diversion of public funds	17	5.4		6.03 Effectiveness of anti-monopoly policy	17	4.8	٠
.04 Public trust in politicians	15	5.0		6.04 Effect of taxation on incentives to invest	49	3.9	-
.05 Irregular payments and bribes	19	6.0		6.05 Total tax rate % profits	15	21.0	-
.06 Judicial independence	9	6.2		6.06 No. of procedures to start a business	2	2	
	27	4.2	$\equiv$	·	2	1.5	
.07 Favoritism in decisions of government officials				6.07 Time to start a business days			
.08 Efficiency of government spending	36	3.9	_	6.08 Agricultural policy costs	19	4.7	
.09 Burden of government regulation	38	3.8		6.09 Prevalence of non-tariff barriers	49	4.6	
.10 Efficiency of legal framework in settling disputes	20	5.0	$\sim$	6.10 Trade tariffs % duty	44	2.8	
.11 Efficiency of legal framework in challenging regulations	17	4.7	_	6.11 Prevalence of foreign ownership	17	5.5	
.12 Transparency of government policymaking	11	5.7		6.12 Business impact of rules on FDI	48	5.0	
.13 Business costs of terrorism	73	5.1			23	5.2	
				6.13 Burden of customs procedures			
.14 Business costs of crime and violence	40	5.1	$\sim$	6.14 Imports % GDP	94	33.6	
.15 Organized crime	45	5.2	$\sim$	6.15 Degree of customer orientation	20	5.5	
.16 Reliability of police services	10	6.3		6.16 Buyer sophistication	21	4.4	
17 Ethical behavior of firms	13	5.6		5%	_		
18 Strength of auditing and reporting standards	5	6.3		7th pillar: Labor market efficiency	7	5.4	
				7.01 Cooperation in labor-employer relations	15	5.4	
19 Efficacy of corporate boards	11		_	7.02 Flexibility of wage determination	25	5.5	
20 Protection of minority shareholders' interests	7		~				
21 Strength of investor protection 0-10 (best)	7	7.7	$\overline{}$	7.03 Hiring and firing practices	10	4.9	
A contract of the contract of	4.0			7.04 Redundancy costs weeks of salary	31	10.0	
2nd pillar: Infrastructure	16	5.7		7.05 Effect of taxation on incentives to work	26	4.5	
01 Quality of overall infrastructure	23	5.2	_	7.06 Pay and productivity	9	5.1	
2 Quality of roads	22	5.4	_	7.07 Reliance on professional management	12	6.0	
•	16	4.9			15	5.0	
03 Quality of railroad infrastructure				7.08 Country capacity to retain talent			
04 Quality of port infrastructure	19	5.4	_	7.09 Country capacity to attract talent	10	5.2	
05 Quality of air transport infrastructure	12	5.9		7.10 Female participation in the labor force ratio to men	25	0.91	
06 Available airline seat kilometers millions/week	10	4,132.3	_	A	-	- A	
07 Quality of electricity supply	13	6.6	_	8th pillar: Financial market development	7	5.4	
08 Mobile-cellular telephone subscriptions /100 pop.	115	84.1	~	8.01 Availability of financial services	18	5.2	
	16	41.4	$\overline{}$	8.02 Affordability of financial services	21	4.9	
09 Fixed-telephone lines /100 pop.	10	41.4	_	8.03 Financing through local equity market	11	5.2	
3rd pillar: Macroeconomic environment	47	5.1	_				
•				8.04 Ease of access to loans	19	4.9	
01 Government budget balance % GDP	48	-1.9		8.05 Venture capital availability	25	3.7	
02 Gross national savings % GDP	78	19.5		8.06 Soundness of banks	2	6.6	
.03 Inflation annual % change	1	1.4	$\sim$	8.07 Regulation of securities exchanges	3	6.1	
.04 Government debt % GDP	119	92.3	~~	8.08 Legal rights index 0-10 (best)	13	9	
05 Country credit rating 0-100 (best)	8	92.3					
00 Country Credit rating 0-100 (best)		32.0		9th pillar: Technological readiness	23	5.9	
4th pillar: Health and primary education	8	6.6		9.01 Availability of latest technologies	14	6.1	
	2/0						
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	26	5.3	
02 Business impact of malaria	n/a	6.8		9.03 FDI and technology transfer	20	5.2	
03 Tuberculosis incidence cases/100,000 pop.	8	5.1		9.04 Internet users % pop.	13	89.8	
04 Business impact of tuberculosis	15	6.7		9.05 Fixed-broadband Internet subscriptions /100 pop.	12	37.3	
05 HIV prevalence % adult pop.	63	0.3		9.06 Internet bandwidth kb/s/user	35	141.9	
.06 Business impact of HIV/AIDS	23	6.4	_	9.07 Mobile-broadband subscriptions /100 pop.	63	66.1	
					00	50.1	
.07 Infant mortality deaths/1,000 live births	31		_	10th pillar: Market size	16	5.4	
08 Life expectancy years	13	82.1					
09 Quality of primary education	9	5.6		10.01 Domestic market size index	16	5.3	
10 Primary education enrollment rate net %	10	99.5	~	10.02 Foreign market size index	25	5.8	
				10.03 GDP (PPP) PPP \$ billions	17	1,682.4	
₹ 5th pillar: Higher education and training	13	5.8		10.04 Exports % GDP	80	30.7	
01 Secondary education enrollment rate gross %	21	109.9					
02 Tertiary education enrollment rate gross %	29	68.8	- /	11th pillar: Business sophistication	23	5.0	
•				11.01 Local supplier quantity	28	4.9	
03 Quality of the education system	8	5.4					
04 Quality of math and science education	14	5.3	$\overline{}$	11.02 Local supplier quality	10	5.5	
D5 Quality of management schools	8	5.8		11.03 State of cluster development	24	4.6	
06 Internet access in schools	14	5.8	$\overline{}$	11.04 Nature of competitive advantage	41	4.1	
77 Local availability of specialized training services	6		_	11.05 Value chain breadth	39	4.3	
		4.9		11.06 Control of international distribution	23	4.6	
08 Extent of staff training	23	4.9	-	11.07 Production process sophistication	18	5.6	
				·			
				11.08 Extent of marketing	27	5.0	
				11.09 Willingness to delegate authority	10	5.6	
				12th pillar: Innovation	23	4.7	
				12th pillar: Innovation		4.7	
				12.01 Capacity for innovation	23	5.1	
				12.02 Quality of scientific research institutions	9	5.7	
				12.03 Company spending on R&D	31	4.3	
				12.04 University-industry collaboration in R&D	24	4.6	
				· · · · · · · · · · · · · · · · · · ·			
				12.05 Gov't procurement of advanced technology products	68	2 2	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

68

3.3

# Cape Verde

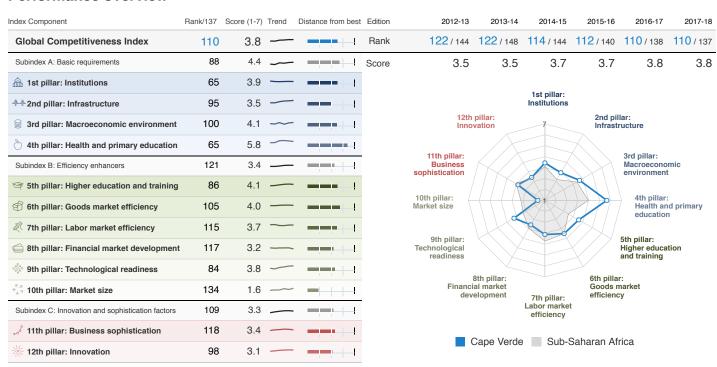


The Global Competitiveness Index 2017-2018 edition



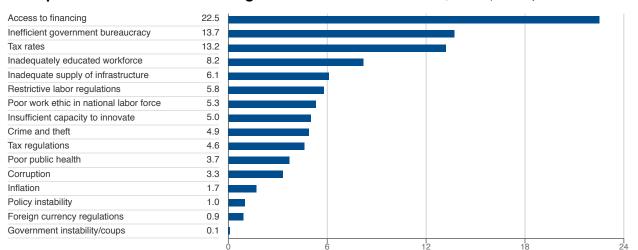
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20			
Population millions 0.5		GDP per capita US\$	3,078.3		
GDP US\$ billions	1.6	GDP (PPP) % world GDP	0.00		

#### Performance overview



### Most problematic factors for doing business





# **Cape Verde**

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
☆ 1st pillar: Institutions	65	3.9	_	1	6th pillar: Goods market efficiency	105	4.0	_
1.01 Property rights	76	4.2		6.0	Intensity of local competition	119	4.4	
1.02 Intellectual property protection	79	3.9			2 Extent of market dominance	85	3.5	_
1.03 Diversion of public funds	55	3.9	_		3 Effectiveness of anti-monopoly policy	96	3.3	_
1.04 Public trust in politicians	45	3.6	_		4 Effect of taxation on incentives to invest	106	3.1	_
1.05 Irregular payments and bribes	64	4.1	_		5 Total tax rate % profits	68	36.6	_
1.06 Judicial independence	54	4.3	_		No. of procedures to start a business	92	8	$\neg$
•	58	3.3				69	11.0	$\neg$
1.07 Favoritism in decisions of government officials					7 Time to start a business days			
1.08 Efficiency of government spending	41	3.7			Agricultural policy costs	48	4.1	_
1.09 Burden of government regulation	44	3.7			Prevalence of non-tariff barriers	105	3.9	
1.10 Efficiency of legal framework in settling disputes	86	3.3	$\sim$		Trade tariffs % duty	105	10.3	_
1.11 Efficiency of legal framework in challenging regulations	79	3.1	_	6.1	Prevalence of foreign ownership	73	4.4	_
1.12 Transparency of government policymaking	56	4.2	$\overline{}$	6.12	2 Business impact of rules on FDI	59	4.7	_
1.13 Business costs of terrorism	65	5.1	$\overline{}$	6.13	Burden of customs procedures	101	3.6	_
1.14 Business costs of crime and violence	100	4.0	_	6.14	4 Imports % GDP	31	61.5	/
1.15 Organized crime	87	4.5	~	6.15	Degree of customer orientation	124	3.8	_
1.16 Reliability of police services	80		_		Buyer sophistication	103	2.9	_
1.17 Ethical behavior of firms	58	4.0	_	0.	,,			
1.18 Strength of auditing and reporting standards	105	4.0	_		7th pillar: Labor market efficiency	115	3.7	
	112	4.3		7.0	Cooperation in labor-employer relations	86	4.2	_
1.19 Efficacy of corporate boards			=		2 Flexibility of wage determination	47	5.2	_
1.20 Protection of minority shareholders' interests	103	3.6			3 Hiring and firing practices	83	3.6	_
1.21 Strength of investor protection 0-10 (best)	125	3.7			4 Redundancy costs weeks of salary	121	29.5	_
<b>1</b> 2nd pillar: Infrastructure	95	3.5						Ξ
•					5 Effect of taxation on incentives to work	76	3.8	
2.01 Quality of overall infrastructure	84	3.7			Pay and productivity	112	3.4	
2.02 Quality of roads	77	3.9			Reliance on professional management	114	3.5	_
2.03 Quality of railroad infrastructure	n/a	not		7.08	Country capacity to retain talent	73	3.3	
	a	ssessed	_	7.09	Ountry capacity to attract talent	88	3.0	_
2.04 Quality of port infrastructure	90	3.6	_	7.10	Female participation in the labor force ratio to men	100	0.66	_
2.05 Quality of air transport infrastructure	97	3.9	_			447	0.0	
2.06 Available airline seat kilometers millions/week	92	73.0	_	€	8th pillar: Financial market development	117	3.2	
2.07 Quality of electricity supply	107	3.5		8.0	Availability of financial services	124	3.3	_
2.08 Mobile-cellular telephone subscriptions /100 pop.	59	122.0	/	8.02	2 Affordability of financial services	115	3.0	_
2.09 Fixed-telephone lines /100 pop.	78	11.6	_		Financing through local equity market	97	3.1	_
					4 Ease of access to loans	117	3.0	_
	100	4.1	~~		5 Venture capital availability	88	2.6	
3.01 Government budget balance % GDP	74	-3.2	~/					
3.02 Gross national savings % GDP	11	34.6	~		Soundness of banks	102	4.2	_
3.03 Inflation annual % change	94	-1.5			7 Regulation of securities exchanges	83	4.0	=
3.04 Government debt % GDP	135		$\overline{}$	8.08	3 Legal rights index 0-10 (best)	107	2	
		133.8	$\leq$	9899	9th pillar: Technological readiness	84	3.8	_
3.05 Country credit rating 0-100 (best)	98	29.7	_					
3 4th pillar: Health and primary education	65	5.8			1 Availability of latest technologies	80	4.5	
			~	9.02	2 Firm-level technology absorption	74	4.3	_
4.01 Malaria incidence cases/100,000 pop.	21	2.9		9.03	FDI and technology transfer	70	4.4	
4.02 Business impact of malaria	21	5.2		9.04	4 Internet users % pop.	86	48.2	_
4.03 Tuberculosis incidence cases/100,000 pop.	100	139.0	~	9.05	Fixed-broadband Internet subscriptions /100 pop.	97	3.0	_
4.04 Business impact of tuberculosis	86	5.0	$\overline{}$		5 Internet bandwidth kb/s/user	94	23.4	
4.05 HIV prevalence % adult pop.	100	0.8	~~		7 Mobile-broadband subscriptions /100 pop.	52	70.0	_
4.06 Business impact of HIV/AIDS	86	5.0	_	6.	· · · · · · · · · · · · · · · · · · ·		, 5.0	
4.07 Infant mortality deaths/1,000 live births	92	20.7	~	+ x x	10th pillar: Market size	134	1.6	_
4.08 Life expectancy years	83	73.4	~		1 Domestic market size index	137	1.3	
4.09 Quality of primary education	72	4.0				135		
					22 Foreign market size index		2.5	
4.10 Primary education enrollment rate net %	49	97.1			03 GDP (PPP) PPP \$ billions	136	3.5	_
⇒ 5th pillar: Higher education and training	86	4.1	_	10.0	04 Exports % GDP	59	38.7	~
, ,				8	11th pillar: Business sophistication	118	3.4	
5.01 Secondary education enrollment rate gross %	67	92.9						
5.02 Tertiary education enrollment rate gross %	97	21.7			1 Local supplier quantity	135	3.4	
5.03 Quality of the education system	54	4.0		11.0	2 Local supplier quality	120	3.6	_
5.04 Quality of math and science education	77	3.9	_	11.0	3 State of cluster development	99	3.4	_
5.05 Quality of management schools	70	4.2	_	11.0	04 Nature of competitive advantage	78	3.3	_
5.06 Internet access in schools	63	4.3	_		05 Value chain breadth	92	3.5	_
5.07 Local availability of specialized training services	97		_		Control of international distribution	118	3.0	_
5.08 Extent of staff training	114	3.4			77 Production process sophistication	117	3.0	
5.55 Extent of ottall training	117	0.4						
					08 Extent of marketing	123	3.7	
				11.0	9 Willingness to delegate authority	91	4.0	
				-366	12th pillar: Innovation	98	3.1	_
					•			
					1 Capacity for innovation	105	3.7	
					2 Quality of scientific research institutions	93	3.4	_
				12.0	O3 Company spending on R&D	90	3.0	_
				40.4	A Hairanika industra allabantian in DOD	00	0.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

90

62

108

3.2

3.4

## Chad

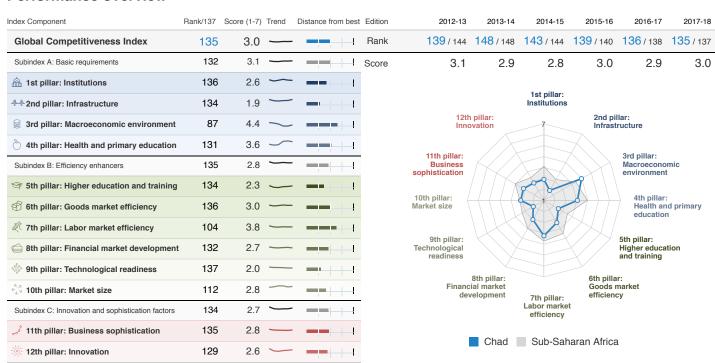


The Global Competitiveness Index 2017-2018 edition



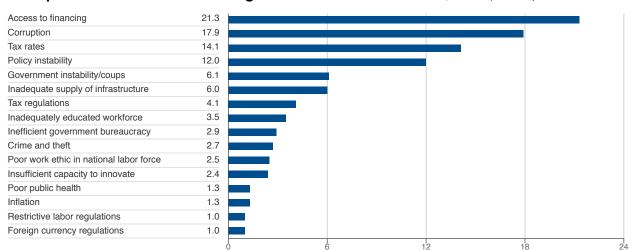
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20			
Population millions 11.9		GDP per capita US\$	852.2		
GDP US\$ billions	10.1	GDP (PPP) % world GDP	0.02		

#### Performance overview



### Most problematic factors for doing business





## Chad

ndex Component	Rank/13	7 Value	Trend	Index Component	Rank/137	Value
â 1st pillar: Institutions	136	2.6	~		136	3.0
1.01 Property rights	133	2.9	_	6.01 Intensity of local competition	135	3.7
1.02 Intellectual property protection	134	2.9	_	6.02 Extent of market dominance	133	2.3
1.03 Diversion of public funds	136	1.8		6.03 Effectiveness of anti-monopoly policy	131	2.6
1.04 Public trust in politicians	97	2.4		6.04 Effect of taxation on incentives to invest	126	2.7
1.05 Irregular payments and bribes	137	2.1		6.05 Total tax rate % profits	129	63.5
	134	2.1		6.06 No. of procedures to start a business	105	9
.06 Judicial independence			$\sim$	·		
.07 Favoritism in decisions of government officials	109	2.4	$\overline{}$	6.07 Time to start a business days	129	60.0
.08 Efficiency of government spending	128	2.0		6.08 Agricultural policy costs	131	2.8
.09 Burden of government regulation	96	3.1		6.09 Prevalence of non-tariff barriers	135	3.0
.10 Efficiency of legal framework in settling disputes	102	3.0		6.10 Trade tariffs % duty	133	15.2
11 Efficiency of legal framework in challenging regulations	125	2.5	$\sim$	6.11 Prevalence of foreign ownership	131	3.0
12 Transparency of government policymaking	133	2.7	_	6.12 Business impact of rules on FDI	131	3.1
.13 Business costs of terrorism	135	2.6	_	6.13 Burden of customs procedures	134	2.4
			$\overline{}$	·		
.14 Business costs of crime and violence	126	2.9		6.14 Imports % GDP	65	44.9
15 Organized crime	130	3.1		6.15 Degree of customer orientation	135	2.9
16 Reliability of police services	128	2.7		6.16 Buyer sophistication	129	2.4
17 Ethical behavior of firms	133	2.7	$\overline{}$	so	101	0.0
18 Strength of auditing and reporting standards	135	2.8	_	7th pillar: Labor market efficiency	104	3.8
19 Efficacy of corporate boards	133	3.5	~	7.01 Cooperation in labor-employer relations	134	3.4
			_	7.02 Flexibility of wage determination	84	4.7
20 Protection of minority shareholders' interests	122			7.03 Hiring and firing practices	95	3.5
21 Strength of investor protection 0-10 (best)	123	3.8	_~			
2nd nillar: Infractructure	134	1.9	_	7.04 Redundancy costs weeks of salary	52	13.0
2nd pillar: Infrastructure		1.9		7.05 Effect of taxation on incentives to work	104	3.4
01 Quality of overall infrastructure	136	1.8	$\sim$	7.06 Pay and productivity	131	2.8
02 Quality of roads	124	2.6	~	7.07 Reliance on professional management	135	2.4
0 -15 - 1 - 1 - 1 - 1 - 1 - 1 - 1		not		7.08 Country capacity to retain talent	110	2.7
03 Quality of railroad infrastructure	n/a	assessed		7.09 Country capacity to attract talent	91	3.0
04 Quality of port infrastructure	131	2.0	~			
05 Quality of air transport infrastructure	121	3.1		7.10 Female participation in the labor force ratio to men	66	0.82
•			$\sim$	8th pillar: Financial market development	132	2.7
06 Available airline seat kilometers millions/week	130	9.9	~			
07 Quality of electricity supply	126	2.2	_	8.01 Availability of financial services	135	2.4
08 Mobile-cellular telephone subscriptions /100 pop.	136	44.5		8.02 Affordability of financial services	135	2.3
09 Fixed-telephone lines /100 pop.	134	0.1		8.03 Financing through local equity market	128	2.4
				8.04 Ease of access to loans	131	2.5
3rd pillar: Macroeconomic environment	87	4.4	$\sim$	8.05 Venture capital availability	128	2.0
01 Government budget balance % GDP	34	-1.3	\ \ \	·		
02 Gross national savings % GDP	115	11.9	~~	8.06 Soundness of banks	132	2.8
· · · · · · · · · · · · · · · · · · ·				8.07 Regulation of securities exchanges	133	2.6
03 Inflation annual % change	88	-1.1	~	8.08 Legal rights index 0-10 (best)	50	6
04 Government debt % GDP	70	51.2	~	٥٩م	407	0.0
05 Country credit rating 0-100 (best)	133	15.5		9th pillar: Technological readiness	137	2.0
h	101	0.6		9.01 Availability of latest technologies	136	2.7
4th pillar: Health and primary education	131	3.6	_	9.02 Firm-level technology absorption	134	3.0
01 Malaria incidence cases/100,000 pop.	58	16,462.3	~	9.03 FDI and technology transfer	134	2.9
02 Business impact of malaria	60	2.5	_			
03 Tuberculosis incidence cases/100,000 pop.	103	152.0	_	9.04 Internet users % pop.	137	5.0
			_	9.05 Fixed-broadband Internet subscriptions /100 pop.	128	0.1
04 Business impact of tuberculosis	127	3.7	_	9.06 Internet bandwidth kb/s/user	127	3.8
05 HIV prevalence % adult pop.	113	1.3		9.07 Mobile-broadband subscriptions /100 pop.	132	9.5
06 Business impact of HIV/AIDS	132	2.9	$\overline{}$			
07 Infant mortality deaths/1,000 live births	137	85.0	~	10th pillar: Market size	112	2.8
08 Life expectancy years	135	51.9	_	10.01 Domestic market size index	108	2.7
09 Quality of primary education	131		_	10.02 Foreign market size index	122	3.2
		79.1	_	·		
10 Primary education enrollment rate net %	128	79.1		10.03 GDP (PPP) PPP \$ billions	112	29.0
₹ 5th pillar: Higher education and training	134	2.3		10.04 Exports % GDP	120	16.3
				1 440 W B C C C C C C C C C C C C C C C C C C	105	0.0
01 Secondary education enrollment rate gross %	135	22.4	~	3 11th pillar: Business sophistication	135	2.8
02 Tertiary education enrollment rate gross %	133	3.4		11.01 Local supplier quantity	81	4.4
03 Quality of the education system	129	2.5		11.02 Local supplier quality	135	3.0
24 Quality of math and science education	126			11.03 State of cluster development	133	2.7
05 Quality of management schools	129			·		
				11.04 Nature of competitive advantage	131	2.4
06 Internet access in schools	136		_	11.05 Value chain breadth	135	2.5
77 Local availability of specialized training services	123	3.6	$\overline{}$	11.06 Control of international distribution	136	2.4
08 Extent of staff training	132	3.0		11.07 Production process sophistication	134	2.2
				11.08 Extent of marketing	135	3.2
				11.09 Willingness to delegate authority	134	3.0
				11.00 Willinghood to delegate authority	104	5.0
				※ 12th pillar: Innovation	129	2.6
				12.01 Capacity for innovation	135	3.0
				12.02 Quality of scientific research institutions	113	2.9
				12.03 Company spending on R&D	121	2.7
				12.04 University-industry collaboration in R&D	128	2.6
				12.05 Gov't procurement of advanced technology products	120	2.7

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

120

124

2.7

## Chile



The Global Competitiveness Index 2017-2018 edition



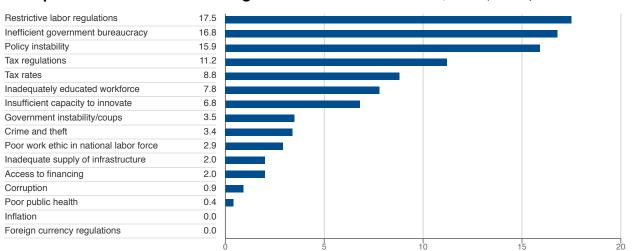
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April				
Population millions	18.2	GDP per capita US\$	13,576.0			
GDP US\$ billions	247.0	GDP (PPP) % world GDP	0.37			

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	
Global Competitiveness Index	33	4.7	_		Rank	33 / 144	34 / 148	33 / 144	<b>35</b> / 140	33 / 138	33 / 137	
Subindex A: Basic requirements	36	5.1	_		Score	4.6	4.6	4.6	4.6	4.6	4.7	
â 1st pillar: Institutions	35	4.5	_									
<b>1</b> 2nd pillar: Infrastructure	41	4.8	_					1st pillar: Institutions				
	36	5.4	_			12th p Innov		7	2nd pill Infrastr			
3 4th pillar: Health and primary education	66	5.8							$\langle \cdot \rangle$			
Subindex B: Efficiency enhancers	31	4.8	_			11th pillar: Business sophistication	$\langle \langle \rangle \rangle$			3rd pillar: Macroeconor environment	mic	
⇒ 5th pillar: Higher education and training	26	5.3				. /						
6th pillar: Goods market efficiency	39	4.7	_			10th pillar: Market size				4th pillar: Health and primary education		
7th pillar: Labor market efficiency	49	4.4				\						
8th pillar: Financial market development	17	4.9	~~			9th pillar: Technological readiness				5th pillar: Higher educat and training	ion	
্ঠি 9th pillar: Technological readiness	38	5.2	_						6th pillar			
્રૈંઢ 10th pillar: Market size	44	4.5	_			8th pillar: Financial market development 7th pillar:		Goods n	narket			
Subindex C: Innovation and sophistication factors	50	3.9	~			Zing pilar: Labor market efficiency						
್ಯೂಕಿ 11th pillar: Business sophistication	50	4.3				Chile	Lotin	Amorico or	ad tha Cari	bboon		
** 12th pillar: Innovation	52	3.5	~		Chile Latin America and the Caribb			DDEail				

### Most problematic factors for doing business





## Chile

ndex Component	Rank/137	Value	Trend	Index C	omponent	Rank/137	Value	Э
â 1st pillar: Institutions	35	4.5	_	<b>1</b> 61	th pillar: Goods market efficiency	39	4.7	~
1.01 Property rights	31	5.2		6.01 <b>ln</b>	itensity of local competition	61	5.2	
.02 Intellectual property protection	56	4.4		6.02 E	xtent of market dominance	109	3.2	-
.03 Diversion of public funds	39	4.3	_		ffectiveness of anti-monopoly policy	35	4.4	*
.04 Public trust in politicians	66	3.0	/		ffect of taxation on incentives to invest	76	3.5	•
.05 Irregular payments and bribes	27	5.5			otal tax rate % profits	39	30.5	_
.06 Judicial independence	37	4.9			lo. of procedures to start a business	71	7	-
	43	3.6			•	25	5.5	
.07 Favoritism in decisions of government officials			_		ime to start a business days			
.08 Efficiency of government spending	80	3.0			gricultural policy costs	15	4.8	
.09 Burden of government regulation	69	3.4	_		revalence of non-tariff barriers	7	5.3	
.10 Efficiency of legal framework in settling disputes	48	4.0	~	6.10 <b>T</b> I	rade tariffs % duty	48	3.2	
.11 Efficiency of legal framework in challenging regulations	52	3.6		6.11 P	revalence of foreign ownership	14	5.5	
.12 Transparency of government policymaking	35	4.6	_	6.12 B	usiness impact of rules on FDI	14	5.6	
.13 Business costs of terrorism	75	5.0	_	6.13 B	urden of customs procedures	33	5.0	
.14 Business costs of crime and violence	93	4.1	/		nports % GDP	107	29.1	
.15 Organized crime	46	5.2			egree of customer orientation	70	4.6	
-					-	34		
16 Reliability of police services	24	5.9		6.16 B	uyer sophistication	34	3.9	
17 Ethical behavior of firms	39	4.4	$\sim$	<b>₹</b> 71	th pillar: Labor market efficiency	49	4.4	
18 Strength of auditing and reporting standards	26	5.6		,	·			
19 Efficacy of corporate boards	35	5.3			cooperation in labor-employer relations	63	4.4	
20 Protection of minority shareholders' interests	27	4.9	~	7.02 FI	lexibility of wage determination	3	6.1	
21 Strength of investor protection 0-10 (best)	31	6.5	~	7.03 H	liring and firing practices	123	3.0	
				7.04 R	ledundancy costs weeks of salary	112	27.4	
2nd pillar: Infrastructure	41	4.8			ffect of taxation on incentives to work	20	4.7	
01 Quality of overall infrastructure	35	4.7			ay and productivity	38	4.4	
02 Quality of roads	24	5.2	$\overline{}$			32	4.4	
•					deliance on professional management			
03 Quality of railroad infrastructure	74	2.5	$\sim$		ountry capacity to retain talent	14	5.0	
04 Quality of port infrastructure	36	4.9		7.09 C	ountry capacity to attract talent	28	4.3	
05 Quality of air transport infrastructure	62	4.5	$\overline{}$	7.10 F	emale participation in the labor force ratio to men	91	0.72	
06 Available airline seat kilometers millions/week	35	762.8	_/	A		47	4.0	
07 Quality of electricity supply	32	6.1	_	₩ 81	th pillar: Financial market development	17	4.9	
08 Mobile-cellular telephone subscriptions /100 pop.	48	127.1	~	8.01 A	vailability of financial services	9	5.5	
09 Fixed-telephone lines /100 pop.	56	19.2		8.02 A	ffordability of financial services	15	5.1	
109 Fixed-telepriorie lines 7100 pop.	30	19.2	~		inancing through local equity market	17	5.0	
3rd pillar: Macroeconomic environment	36	5.4	_		ase of access to loans	16	5.0	
'	00	0.0	_					
01 Government budget balance % GDP	69	-2.9	_		enture capital availability	41	3.3	
.02 Gross national savings % GDP	73	20.2	_	8.06 S	oundness of banks	5	6.4	
.03 Inflation annual % change	71	3.8	~	8.07 R	legulation of securities exchanges	14	5.8	
04 Government debt % GDP	12	21.2	_	8.08 Le	egal rights index 0-10 (best)	86	4	
05 Country credit rating 0-100 (best)	23	77.3	_	a <sup>Q</sup> a				
-	66	F 0			th pillar: Technological readiness	38	5.2	
4th pillar: Health and primary education	66	5.8		9.01 <b>A</b>	vailability of latest technologies	28	5.6	
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Fi	irm-level technology absorption	37	5.0	
02 Business impact of malaria	n/a	6.9		9.03 F	DI and technology transfer	21	5.2	
03 Tuberculosis incidence cases/100,000 pop.	40	16.0	\		nternet users % pop.	61	66.0	
04 Business impact of tuberculosis	8	6.8	=		ixed-broadband Internet subscriptions /100 pop.	56	16.0	
05 HIV prevalence % adult pop.	85		_		nternet bandwidth kb/s/user		175.6	
06 Business impact of HIV/AIDS	29	6.2		9.07 M	lobile-broadband subscriptions /100 pop.	53	69.0	
07 Infant mortality deaths/1,000 live births	47	7.0	$\sim$	A7 41	Oth pillar: Market size	44	4.5	
08 Life expectancy years	18	81.8						
09 Quality of primary education	103	3.2	_	10.01	Domestic market size index	40	4.4	
10 Primary education enrollment rate net %	78	94.3		10.02 F	Foreign market size index	47	5.0	
•			-	10.03 (	GDP (PPP) PPP \$ billions	42	438.8	
₹ 5th pillar: Higher education and training	26	5.3		10.04 <b>E</b>	Exports % GDP	92	28.2	
01 Secondary education enrollment rate gross %	45	100.6		8 4	1th pillar: Business sophistication	50	4.3	
02 Tertiary education enrollment rate gross %	7	88.6						
03 Quality of the education system	86	3.4	$\sim$	11.01 <b>L</b>	Local supplier quantity	66	4.6	
04 Quality of math and science education	99		~	11.02 <b>l</b>	Local supplier quality	38	4.9	
D5 Quality of management schools	27		_	11.03	State of cluster development	96	3.4	
06 Internet access in schools					Nature of competitive advantage	77	3.3	
	58		~		Value chain breadth	59	3.9	
7 Local availability of specialized training services	30							
08 Extent of staff training	53	4.1	$\overline{}$		Control of international distribution	48	3.9	
					Production process sophistication	44	4.4	
				11.08 <b>E</b>	Extent of marketing	25	5.1	
				11.09 \	Willingness to delegate authority	42	4.6	
				-86- 40	2th pillar: Innovation	52	3.5	
					Capacity for innovation	76	4.0	
					Quality of scientific research institutions	43	4.4	
					Company spending on R&D	99	3.0	
				12.04 <b>l</b>	University-industry collaboration in R&D	58	3.5	
				1205 (	Gov't procurement of advanced technology products	110	2.8	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

110

22

2.8

## China



### The Global Competitiveness Index 2017-2018 edition

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2				
Population millions	1,382.7	GDP per capita US\$	8,113.3			
GDP US\$ billions	11,218.3	GDP (PPP) % world GDP	17.76			

#### Performance overview

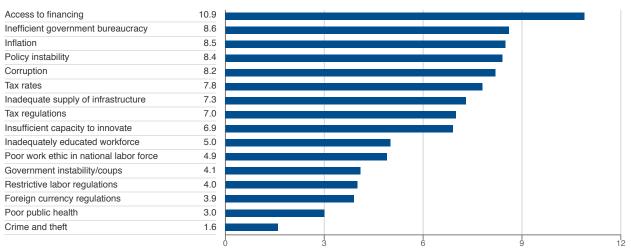
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18		
Global Competitiveness Index	27	5.0			Rank	29 / 144	29 / 148	28 / 144	28 / 140	28 / 138	<b>27</b> / 137		
Subindex A: Basic requirements	31	5.3			Score	4.8	4.8	4.9	4.9	5.0	5.0		
â 1st pillar: Institutions	41	4.4											
<b>↑</b> 2nd pillar: Infrastructure	46	4.7	_					1st pillar: Institutions					
	17	6.0	_			12th Innov	pillar: vation	7	2nd pill Infrastr				
3 4th pillar: Health and primary education	40	6.2	_			4400 - 2000 -	$\wedge$			0.4.30			
Subindex B: Efficiency enhancers	28	4.9				11th pillar: Business sophistication	H/)		79	3rd pillar: Macroeconor environment	mic		
⇒ 5th pillar: Higher education and training	47	4.8				. /							
	46	4.5				10th pillar: Market size				4th pillar: Health and education			
7th pillar: Labor market efficiency	38	4.5	_			\	No.						
8th pillar: Financial market development	48	4.2				9th pillar: Technological readiness				5th pillar: Higher educat and training	ion		
% 9th pillar: Technological readiness	73	4.2	_				8th pillar:		6th pillar				
$\stackrel{\nwarrow}{\downarrow}$ 3 10th pillar: Market size	1	7.0				Financia	al market elopment	7th pillar:	Goods m	arket			
Subindex C: Innovation and sophistication factors	29	4.3						Labor market efficiency					
್ಯಿ 11th pillar: Business sophistication	33	4.5					China	East Asia	and Dacific				
** 12th pillar: Innovation	28	4.1			China East Asia and Pacific				,				

China (27th) has gained one place as a result of steady, albeit incremental, improvements to its overall competitiveness score. Since last year, China has made progress in all pillars except its macroeconomic environment and infrastructure. A decline in the former is explained by a worsening of the government budget deficit, which has been slightly higher than the expected target for 2016.7 The score for the infrastructure pillar decreases for the second year in a row, the result in part of a decline in the quality of port infrastructure and the reliability of electricity supply as perceived by the business community.

The largest gains are observed in technological readiness, owing to higher ICT penetration and the extent to which foreign direct investments have been bringing new technologies to China. Despite the remarkable progress already made, further improvement on this front would foster the growth of emerging digital industries and create the conditions necessary to kick-start new ones. Other significant advances have been made in the goods market efficiency pillar as a result of a slight reduction in the number of procedures for starting a business compared to last year.

### Most problematic factors for doing business





# China

ndex Component	Rank/137	' Value	Trend	Inde	x Component	Rank/137	Value	Tre
🗎 1st pillar: Institutions	41	4.4		8	6th pillar: Goods market efficiency	46	4.5	_
1.01 Property rights	53	4.6	_	6.01	Intensity of local competition	33	5.5	_
1.02 Intellectual property protection	49	4.5			Extent of market dominance	22	4.5	_
1.03 Diversion of public funds	43	4.1			B Effectiveness of anti-monopoly policy	30	4.5	_
1.04 Public trust in politicians	27	4.5			Effect of taxation on incentives to invest	27	4.4	
1.05 Irregular payments and bribes	49	4.5			5 Total tax rate % profits	133	68.0	
1.06 Judicial independence	46	4.5			6 No. of procedures to start a business	105	9	=
1.07 Favoritism in decisions of government officials	20	4.5			Time to start a business days	117	28.9	_
								_
1.08 Efficiency of government spending	19	4.6			Agricultural policy costs	22	4.5	
1.09 Burden of government regulation	18	4.4	_		Prevalence of non-tariff barriers	58	4.5	_
1.10 Efficiency of legal framework in settling disputes	45	4.1			Trade tariffs % duty	119	11.6	_
1.11 Efficiency of legal framework in challenging regulations	30	4.1	_		Prevalence of foreign ownership	71	4.5	_
1.12 Transparency of government policymaking	45	4.5		6.12	Business impact of rules on FDI	64	4.6	~
1.13 Business costs of terrorism	80	5.0		6.13	Burden of customs procedures	44	4.6	_
1.14 Business costs of crime and violence	64	4.8		6.14	Imports % GDP	129	18.2	-
1.15 Organized crime	79	4.6		6.15	Degree of customer orientation	69	4.6	_
1.16 Reliability of police services	60	4.6	~		Buyer sophistication	16	4.5	_
1.17 Ethical behavior of firms	49	4.2		7.				
1.18 Strength of auditing and reporting standards	71	4.5			7th pillar: Labor market efficiency	38	4.5	
1.19 Efficacy of corporate boards	126	4.0	_	7.01	Cooperation in labor-employer relations	50	4.6	_
	38	4.0	-		Plexibility of wage determination	89	4.6	)
.20 Protection of minority shareholders' interests			=		B Hiring and firing practices	24		_
.21 Strength of investor protection 0-10 (best)	103	4.5	$\sim$		Redundancy costs weeks of salary	112	27.4	_
↑↑ 2nd pillar: Infrastructure	46	4.7	_			45	4.3	_
·					5 Effect of taxation on incentives to work			
2.01 Quality of overall infrastructure	47	4.5			S Pay and productivity	26	4.6	
2.02 Quality of roads	42	4.6			Reliance on professional management	53	4.5	
2.03 Quality of railroad infrastructure	17	4.8			Country capacity to retain talent	34	4.3	_
2.04 Quality of port infrastructure	49	4.6			Country capacity to attract talent	23	4.5	-
2.05 Quality of air transport infrastructure	45	4.9		7.10	Female participation in the labor force ratio to men	59	0.83	
2.06 Available airline seat kilometers millions/week	2 1	19,341.9				40	4.0	
.07 Quality of electricity supply	65	5.0			8th pillar: Financial market development	48	4.2	
.08 Mobile-cellular telephone subscriptions /100 pop.	102	96.9	_	8.01	Availability of financial services	54	4.4	_
2.09 Fixed-telephone lines /100 pop.	71	14.7	_	8.02	Affordability of financial services	30	4.5	_
_				8.03	Financing through local equity market	31	4.5	_
	17	6.0			Ease of access to loans	34	4.5	_
3.01 Government budget balance % GDP	86	-3.7	~		Venture capital availability	10	4.4	_
3.02 Gross national savings % GDP	2	45.8	~		Soundness of banks	82	4.5	_
3.03 Inflation annual % change	1	2.0			Regulation of securities exchanges	60	4.5	
3.04 Government debt % GDP	63					86		=
		46.2	_	8.08	B Legal rights index 0-10 (best)	00	4	
8.05 Country credit rating 0-100 (best)	26	76.0		2888	9th pillar: Technological readiness	73	4.2	_
4th pillar: Health and primary education	40	6.2			Availability of latest technologies	81	4.5	
· · · · ·	- 44		_		, ,			Ξ
1.01 Malaria incidence cases/100,000 pop.	14	0.0	_~		2 Firm-level technology absorption	58	4.6	
1.02 Business impact of malaria	35	4.4			B FDI and technology transfer	49	4.7	_
1.03 Tuberculosis incidence cases/100,000 pop.	83	67.0	_	9.04	Internet users % pop.	81	53.2	_
.04 Business impact of tuberculosis	102	4.6		9.05	Fixed-broadband Internet subscriptions /100 pop.	42	22.9	_
1.05 HIV prevalence % adult pop.	1	<0.1		9.06	Internet bandwidth kb/s/user	107	14.7	_
4.06 Business impact of HIV/AIDS	109	4.3		9.07	Mobile-broadband subscriptions /100 pop.	59	66.8	_
.07 Infant mortality deaths/1,000 live births	57	9.2	_	,47	AND THE RESERVE		7.0	_
1.08 Life expectancy years	54	76.0	_	£ 7 3	10th pillar: Market size	1	7.0	
1.09 Quality of primary education	38		_	10.0	1 Domestic market size index	1	7.0	
1.10 Primary education enrollment rate net %	1	100.0		10.0	2 Foreign market size index	1	7.0	_
. , , , , , , , , , , , , , , , , , , ,				10.0	3 GDP (PPP) PPP \$ billions	1 2	1,291.8	_
⇒ 5th pillar: Higher education and training	47	4.8			04 Exports % GDP	103	20.6	-
.01 Secondary education enrollment rate gross %	66	94.3			·			
.02 Tertiary education enrollment rate gross %	68	43.4	_ /	ood	11th pillar: Business sophistication	33	4.5	-
	29	4.5		11.0	1 Local supplier quantity	52	4.7	-
.03 Quality of the education system					2 Local supplier quality	56	4.5	_
.04 Quality of math and science education	50				3 State of cluster development	27	4.6	_
.05 Quality of management schools	50	4.5	_		·			
06 Internet access in schools	50	4.6	_		4 Nature of competitive advantage	30	4.4	-
07 Local availability of specialized training services	55	4.6			5 Value chain breadth	29	4.5	_
.08 Extent of staff training	36	4.5			6 Control of international distribution	29	4.4	-
					7 Production process sophistication	39	4.5	-
				11.0	8 Extent of marketing	57	4.6	-
				11.0	9 Willingness to delegate authority	47	4.5	
				384	12th niller: Innovation	28	11	
					12th pillar: Innovation		4.1	
					1 Capacity for innovation	44	4.5	_
					2 Quality of scientific research institutions	36	4.6	_
				12.0	3 Company spending on R&D	21	4.6	_
				12.0	university-industry collaboration in R&D	28	4.4	-
				10.0	5 Gov't procurement of advanced technology products	10	4.5	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

4.5

4.7

10

29

## Colombia

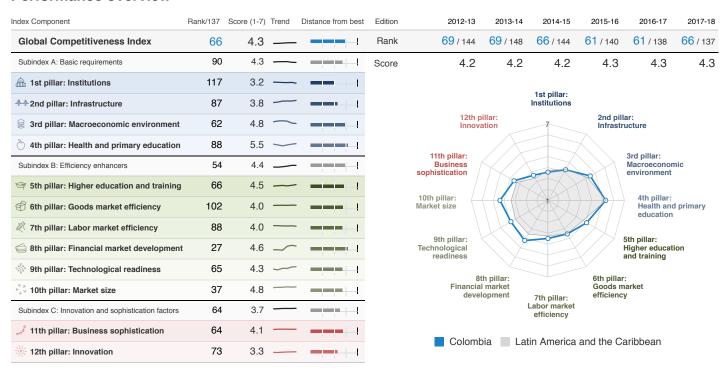


The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201			
Population millions	48.7	GDP per capita US\$	5,792.2		
GDP US\$ billions	282.4	GDP (PPP) % world GDP	0.58		

#### Performance overview

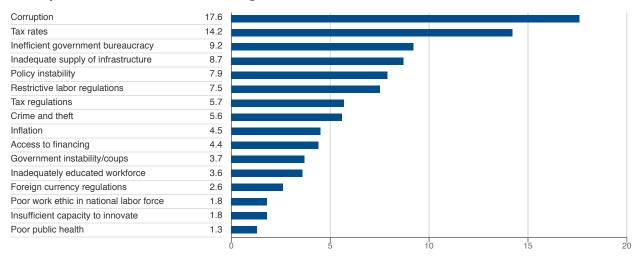


Colombia (66th) falls five positions this year in the Global Competitiveness Index. The fall is mainly explained by a deteriorating macroeconomic environment due to rising budget deficit and inflation as well as deterioration of the labour market efficiency pillar. Finally,

the efficiency of the country's institutions is assessed more negatively, falling to 117th and reflecting news of alleged corruption cases currently under investigation. Indicators of government efficiency have also deteriorated affecting the institutions pillar of the Index.

### Most problematic factors for doing business





## Colombia

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value
â 1st pillar: Institutions	117	3.2		<b>❸</b> 6th pillar: Goods market efficiency	102	4.0
1.01 Property rights	99	3.9	_	6.01 Intensity of local competition	22	5.5
.02 Intellectual property protection	74	4.0		6.02 Extent of market dominance	86	3.5
03 Diversion of public funds	131	2.1		6.03 Effectiveness of anti-monopoly policy	71	3.7
04 Public trust in politicians	124	1.7	_	6.04 Effect of taxation on incentives to invest	131	2.5
05 Irregular payments and bribes	96	3.3		6.05 Total tax rate % profits	136	69.8
06 Judicial independence	111	3.0		6.06 No. of procedures to start a business	53	6
07 Favoritism in decisions of government officials	119	2.2	_	6.07 Time to start a business days	54	9.0
	129	1.9	$\overline{}$		125	2.9
08 Efficiency of government spending			_	6.08 Agricultural policy costs		
09 Burden of government regulation	123	2.6		6.09 Prevalence of non-tariff barriers	98	4.0
10 Efficiency of legal framework in settling disputes	122	2.7		6.10 Trade tariffs % duty	82	6.5
11 Efficiency of legal framework in challenging regulations	105	2.6		6.11 Prevalence of foreign ownership	85	4.3
12 Transparency of government policymaking	86	3.8		6.12 Business impact of rules on FDI	86	4.3
13 Business costs of terrorism	132	3.0	_	6.13 Burden of customs procedures	89	3.8
14 Business costs of crime and violence	128	2.9		6.14 Imports % GDP	126	19.7
15 Organized crime	131	2.9		6.15 Degree of customer orientation	46	4.9
16 Reliability of police services	114		$\overline{}$	6.16 Buyer sophistication	90	3.1
17 Ethical behavior of firms	113	3.3		2		
	59	4.8		7th pillar: Labor market efficiency	88	4.0
18 Strength of auditing and reporting standards				7.01 Cooperation in labor-employer relations	66	4.4
19 Efficacy of corporate boards	44	5.1		7.02 Flexibility of wage determination	71	4.9
20 Protection of minority shareholders' interests	69	4.0		, ,	106	
21 Strength of investor protection 0-10 (best)	13	7.3	_	7.03 Hiring and firing practices		3.3
2nd nillar, Infrastructure	87	3.8		7.04 Redundancy costs weeks of salary	71	16.7
<sup>→</sup> 2nd pillar: Infrastructure				7.05 Effect of taxation on incentives to work	118	3.1
Ol Quality of overall infrastructure	109	3.1		7.06 Pay and productivity	94	3.6
02 Quality of roads	110	3.0		7.07 Reliance on professional management	86	4.0
03 Quality of railroad infrastructure	96	1.5	_	7.08 Country capacity to retain talent	64	3.5
04 Quality of port infrastructure	77	3.8		7.09 Country capacity to attract talent	79	3.2
05 Quality of air transport infrastructure	81	4.1	_	7.10 Female participation in the labor force ratio to men	85	0.75
Of Available airline seat kilometers millions/week	37	721.5		7.10 Formate participation in the labor lorde ratio to men		0.70
	79	4.8		8th pillar: Financial market development	27	4.6
77 Quality of electricity supply				8.01 Availability of financial services	69	4.2
08 Mobile-cellular telephone subscriptions /100 pop.	68	117.1		·	99	3.4
09 Fixed-telephone lines /100 pop.	75	14.2	<b>~</b>	8.02 Affordability of financial services		
3rd pillar: Macroeconomic environment	62	4.8	$\overline{}$	8.03 Financing through local equity market	77	3.4
· ·				8.04 Ease of access to loans	61	4.0
01 Government budget balance % GDP	80	-3.4	~	8.05 Venture capital availability	73	2.8
02 Gross national savings % GDP	68	21.0	~	8.06 Soundness of banks	30	5.6
03 Inflation annual % change	115	7.5	~	8.07 Regulation of securities exchanges	59	4.6
04 Government debt % GDP	65	47.6	_	8.08 Legal rights index 0-10 (best)	1	12
05 Country credit rating 0-100 (best)	43	65.2		No Other Harry Tarabara I are discovered	65	4.3
4th pillar: Health and primary education	88	5.5		9th pillar: Technological readiness	85	
			$\neg$	9.01 Availability of latest technologies		4.4
01 Malaria incidence cases/100,000 pop.	39	164.6	_	9.02 Firm-level technology absorption	83	4.3
02 Business impact of malaria	7	5.8		9.03 FDI and technology transfer	77	4.3
03 Tuberculosis incidence cases/100,000 pop.	60	31.0	$\sim$	9.04 Internet users % pop.	73	58.1
04 Business impact of tuberculosis	71	5.4		9.05 Fixed-broadband Internet subscriptions /100 pop.	65	11.8
05 HIV prevalence % adult pop.	73	0.4		9.06 Internet bandwidth kb/s/user	32	150.9
06 Business impact of HIV/AIDS	73			9.07 Mobile-broadband subscriptions /100 pop.	93	45.5
07 Infant mortality deaths/1,000 live births	77		_			
	80			10th pillar: Market size	37	4.8
08 Life expectancy years				10.01 Domestic market size index	31	4.7
09 Quality of primary education	91			10.07 Bornestic market size index 10.02 Foreign market size index	56	4.7
10 Primary education enrollment rate net %	102	90.6	~			
₹ 5th pillar: Higher education and training	66	4.5		10.03 GDP (PPP) PPP \$ billions 10.04 Exports % GDP	31 125	688.8 13.7
01 Secondary education enrollment rate gross %	56	98.1	~			
02 Tertiary education enrollment rate gross %	50	55.7	_	√ 11th pillar: Business sophistication	64	4.1
03 Quality of the education system	83		_	11.01 Local supplier quantity	23	4.9
04 Quality of math and science education	100		$\sim$	11.02 Local supplier quality	41	4.8
•				11.03 State of cluster development	79	3.7
05 Quality of management schools	63		$\sim$			
106 Internet access in schools	71	4.1		11.04 Nature of competitive advantage	73	3.4
7 Local availability of specialized training services	79	4.2		11.05 Value chain breadth	55	3.9
8 Extent of staff training	92	3.6	$\sim$	11.06 Control of international distribution	69	3.6
				11.07 Production process sophistication	78	3.7
				11.08 Extent of marketing	78	4.4
				11.09 Willingness to delegate authority	73	4.3
				* 12th pillar: Innovation	73	3.3
				12.01 Capacity for innovation	89	3.8
				12.02 Quality of scientific research institutions	64	3.9
				12.03 Company spending on R&D	89	3.1
				12.04 University-industry collaboration in R&D	53	3.6
				12.05 Gov't procurement of advanced technology products	Ω1	3 2

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

81

72

3.2

# Congo, Democratic Rep.

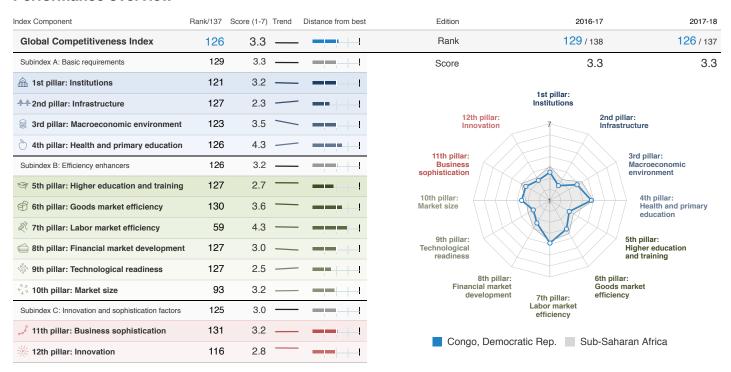
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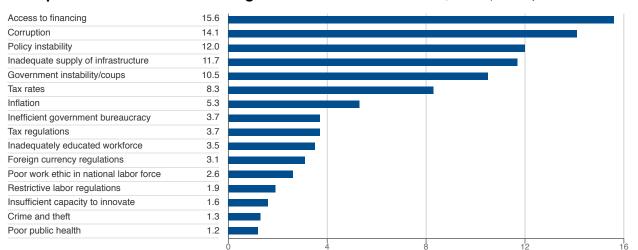
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2			
Population millions	84.1	GDP per capita US\$	494.7		
GDP US\$ billions	41.6	GDP (PPP) % world GDP	0.05		

#### Performance overview



### Most problematic factors for doing business





# Congo, Democratic Rep.

idex Component	Rank/137	7 Value	e Trend	Index Component	Rank/137	Value
â 1st pillar: Institutions	121	3.2			130	3.6
1.01 Property rights	123	3.4	_	6.01 Intensity of local competition	105	4.7
.02 Intellectual property protection	111	3.4		6.02 Extent of market dominance	117	3.0
.03 Diversion of public funds	110	2.6		6.03 Effectiveness of anti-monopoly policy	113	3.1
.04 Public trust in politicians	95	2.4		6.04 Effect of taxation on incentives to invest	117	2.9
.05 Irregular payments and bribes	128	2.5		6.05 Total tax rate % profits	117	54.6
06 Judicial independence	127	2.4		6.06 No. of procedures to start a business	71	7.
07 Favoritism in decisions of government officials	87	2.8		6.07 Time to start a business days	73	11.5
08 Efficiency of government spending	105	2.5		6.08 Agricultural policy costs	132	2.8
09 Burden of government regulation	100	3.0	_	6.09 Prevalence of non-tariff barriers	129	3.4
10 Efficiency of legal framework in settling disputes	92		_	6.10 Trade tariffs % duty	106	10.4
11 Efficiency of legal framework in challenging regulations	108	2.6		6.11 Prevalence of foreign ownership	58	4.7
12 Transparency of government policymaking	108	3.5		6.12 Business impact of rules on FDI	98	4.2
13 Business costs of terrorism	63	5.2		6.13 Burden of customs procedures	123	3.1
14 Business costs of crime and violence	73	4.4		6.14 Imports % GDP	131	17.0
15 Organized crime	88	4.4		6.15 Degree of customer orientation	121	3.8
16 Reliability of police services	113	3.4		6.16 Buyer sophistication	131	2.3 .
7 Ethical behavior of firms	129	2.9		7th pillar: Labor market efficiency	59	4.3
8 Strength of auditing and reporting standards	131	3.3				
9 Efficacy of corporate boards	81	4.7		7.01 Cooperation in labor-employer relations	127	3.6
Protection of minority shareholders' interests	79	3.9		7.02 Flexibility of wage determination	49	5.2
1 Strength of investor protection 0-10 (best)	125	3.7		7.03 Hiring and firing practices	42	4.1
€ 2nd pillar: Infrastructure	127	2.3		7.04 Redundancy costs weeks of salary	36	10.3
•				7.05 Effect of taxation on incentives to work	64	4.0
1 Quality of overall infrastructure	135	2.0		7.06 Pay and productivity	135	2.4
2 Quality of roads	136	2.1		7.07 Reliance on professional management	115	3.5
3 Quality of railroad infrastructure	92	1.9		7.08 Country capacity to retain talent	108	2.8
4 Quality of port infrastructure	120	2.7		7.09 Country capacity to attract talent	97	2.8
5 Quality of air transport infrastructure	123	3.0		7.10 Female participation in the labor force ratio to men	6	0.99
6 Available airline seat kilometers millions/week	101	48.9		8th pillar: Financial market development	127	3.0 -
7 Quality of electricity supply	130	2.1		8.01 Availability of financial services	132	3.0
8 Mobile-cellular telephone subscriptions /100 pop.	79	113.3	_	8.02 Affordability of financial services	127	2.7
9 Fixed-telephone lines /100 pop.	126	0.4		8.03 Financing through local equity market	129	2.4
3rd pillar: Macroeconomic environment	123	3.5	_	8.04 Ease of access to loans	126	2.8
1 Government budget balance % GDP	28	-0.8	_	8.05 Venture capital availability	99	2.5
2 Gross national savings % GDP	127		_	8.06 Soundness of banks	130	2.9
3 Inflation annual % change	136	22.4		8.07 Regulation of securities exchanges	123	3.3
4 Government debt % GDP	130	21.5		8.08 Legal rights index 0-10 (best)	50	6
5 Country credit rating 0-100 (best)	132	16.6		6.06 Legal rights index 0-10 (best)	30	- 0
•			_	% 9th pillar: Technological readiness	127	2.5
4th pillar: Health and primary education	126	4.3		9.01 Availability of latest technologies	131	3.1
1 Malaria incidence cases/100,000 pop.	64	22,926.2	_	9.02 Firm-level technology absorption	127	3.4
2 Business impact of malaria	51	3.3		9.03 FDI and technology transfer	124	3.4
3 Tuberculosis incidence cases/100,000 pop.	128	324.0	_	9.04 Internet users % pop.	134	8.1 .
4 Business impact of tuberculosis	115	4.1		9.05 Fixed-broadband Internet subscriptions /100 pop.	136	0.0
5 HIV prevalence % adult pop.	97	0.7		9.06 Internet bandwidth kb/s/user	138	0.2
6 Business impact of HIV/AIDS	126	3.5		9.07 Mobile-broadband subscriptions /100 pop.	111	25.1 .
7 Infant mortality deaths/1,000 live births	135	74.5		10th pillar: Market size	93	3.2
8 Life expectancy years	128	59.0		10th pillar: Market size		3.2
9 Quality of primary education	99	3.3		10.01 Domestic market size index	89	3.1 .
Primary education enrollment rate net %	112	87.0		10.02 Foreign market size index	111	3.5
	407	0.7		10.03 GDP (PPP) PPP \$ billions	89	65.0
5th pillar: Higher education and training	127	2.7		10.04 Exports % GDP	124	14.3
1 Secondary education enrollment rate gross %	120	43.5		→ 11th pillar: Business sophistication	131	3.2
2 Tertiary education enrollment rate gross %	123	6.6				
Quality of the education system	113	2.9		11.01 Local supplier quantity	125	3.7
4 Quality of math and science education	98	3.4		11.02 Local supplier quality	125	3.5
Quality of management schools	107	3.6		11.03 State of cluster development	111	3.1 .
Internet access in schools	125	3.1		11.04 Nature of competitive advantage	121	2.6
7 Local availability of specialized training services	105	3.9		11.05 Value chain breadth	133	2.6
8 Extent of staff training	128	3.2		11.06 Control of international distribution	134	2.4
				11.07 Production process sophistication	131	2.5
				11.08 Extent of marketing	68	4.4
				11.09 Willingness to delegate authority	123	3.6
				<b>※ 12th pillar: Innovation</b>	116	2.8
				12.01 Capacity for innovation	127	3.3
				12.02 Quality of scientific research institutions	101	3.3
				12.02 Company enending on R&D	110	2.7

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.03 Company spending on R&D 12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

118

110

128

82

2.7

2.8 2.5

## **Costa Rica**

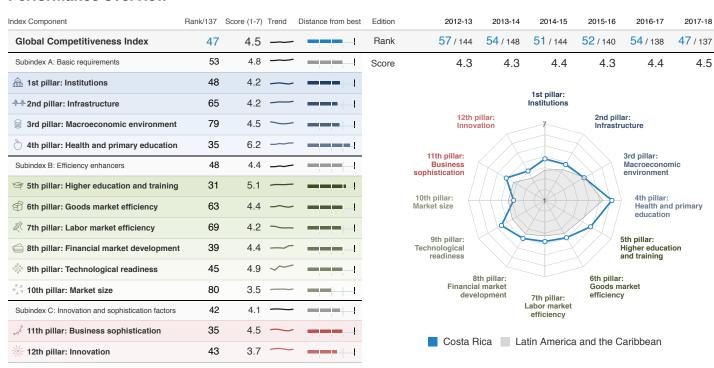


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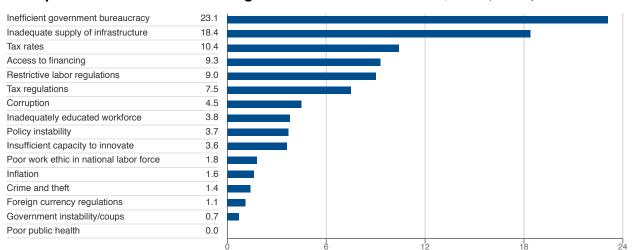
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2				
Population millions 4.9		GDP per capita US\$	11,834.8			
GDP US\$ billions	58.1	GDP (PPP) % world GDP	0.07			

#### Performance overview



### Most problematic factors for doing business





## **Costa Rica**

ndex Component	Rank/13	7 Value	Trend	Inde	ex Component	Rank/137	Value	e Tre
∴ 1st pillar: Institutions	48	4.2		1	6th pillar: Goods market efficiency	63	4.4	_
1.01 Property rights	43	4.8		6.0	1 Intensity of local competition	49	5.3	_
1.02 Intellectual property protection	33	4.8			2 Extent of market dominance	38	4.2	_
1.03 Diversion of public funds	64	3.6	~		3 Effectiveness of anti-monopoly policy	48	4.0	_
1.04 Public trust in politicians	61	3.2			4 Effect of taxation on incentives to invest	102	3.2	_
1.05 Irregular payments and bribes	55				5 Total tax rate % profits	121	58.3	
	26	5.4	_		6 No. of procedures to start a business	105	9	$\dashv$
1.06 Judicial independence					•			$\overline{}$
1.07 Favoritism in decisions of government officials	51	3.4	$\sim$		7 Time to start a business days	103	22.5	_
1.08 Efficiency of government spending	101	2.6	$\overline{}$		8 Agricultural policy costs	96	3.5	
1.09 Burden of government regulation	125	2.5	$\sim$		9 Prevalence of non-tariff barriers	117	3.8	_
1.10 Efficiency of legal framework in settling disputes	74	3.5	$\sim$		0 Trade tariffs % duty	52	3.6	_
1.11 Efficiency of legal framework in challenging regulations	45	3.7	$\overline{}$	6.1	Prevalence of foreign ownership	27	5.2	
1.12 Transparency of government policymaking	38	4.6	$\overline{}$	6.1	2 Business impact of rules on FDI	41	5.1	_
1.13 Business costs of terrorism	21	5.9	$\overline{}$	6.1	3 Burden of customs procedures	94	3.7	_
1.14 Business costs of crime and violence	86	4.2		6.1	4 Imports % GDP	99	31.5	_
1.15 Organized crime	74	4.7	$\overline{}$		5 Degree of customer orientation	32	5.1	_
1.16 Reliability of police services	57	4.7	$\overline{}$		6 Buyer sophistication	41	3.8	_
1.17 Ethical behavior of firms	46	4.2	_	0.1	o Bayor coprilotication		0.0	
	47	5.0		A PA	7th pillar: Labor market efficiency	69	4.2	_
1.18 Strength of auditing and reporting standards				7.0	1 Cooperation in labor-employer relations	28	5.1	
.19 Efficacy of corporate boards	42	5.1				83	4.7	
.20 Protection of minority shareholders' interests	52	4.2			2 Flexibility of wage determination			
.21 Strength of investor protection 0-10 (best)	127	3.5			Hiring and firing practices	59	3.9	_
<sup>1</sup> 2nd pillar: Infrastructure	65	4.2			4 Redundancy costs weeks of salary	79	18.7	_
•					5 Effect of taxation on incentives to work	100	3.4	_
.01 Quality of overall infrastructure	110	3.1	_		6 Pay and productivity	41	4.4	_
.02 Quality of roads	123	2.6		7.0	7 Reliance on professional management	36	4.8	
03 Quality of railroad infrastructure	n/a	not	_	7.0	8 Country capacity to retain talent	25	4.6	_
•		assessed		7.0	9 Country capacity to attract talent	39	3.9	_
04 Quality of port infrastructure	98	3.4			Female participation in the labor force ratio to men	107	0.64	-
05 Quality of air transport infrastructure	64	4.5	_					
06 Available airline seat kilometers millions/week	74	161.3	~		8th pillar: Financial market development	39	4.4	-
07 Quality of electricity supply	37	5.9	_	8.0	1 Availability of financial services	80	4.0	_
.08 Mobile-cellular telephone subscriptions /100 pop.	12	159.2	/		2 Affordability of financial services	70	3.8	_
.09 Fixed-telephone lines /100 pop.	65	16.3			3 Financing through local equity market	116	2.7	_
					4 Ease of access to loans	92	3.5	
	79	4.5	$\overline{}$		5 Venture capital availability	98	2.5	
.01 Government budget balance % GDP	104	-5.1	$\sim$		6 Soundness of banks	25	5.7	=
.02 Gross national savings % GDP	96	16.2	~					
.03 Inflation annual % change	58	0.0	~		7 Regulation of securities exchanges	39	5.0	
.04 Government debt % GDP	56	43.7	_	8.0	8 Legal rights index 0-10 (best)	8	10	_
.05 Country credit rating 0-100 (best)	60	55.1		388	9th pillar: Technological readiness	45	4.9	~
.03 Country Credit rating 0-100 (best)	00	33.1						_
4th pillar: Health and primary education	35	6.2			1 Availability of latest technologies	46	5.1	_
.01 Malaria incidence cases/100,000 pop.	1	0.0	$\neg$		2 Firm-level technology absorption	40	5.0	_
			_		3 FDI and technology transfer	19	5.2	
.02 Business impact of malaria	n/a	6.4		9.0	4 Internet users % pop.	60	66.0	_
.03 Tuberculosis incidence cases/100,000 pop.	34	11.0	_	9.0	5 Fixed-broadband Internet subscriptions /100 pop.	66	11.6	_
04 Business impact of tuberculosis	33	6.4		9.0	6 Internet bandwidth kb/s/user	61	68.4	_
.05 HIV prevalence % adult pop.	73	0.4		9.0	7 Mobile-broadband subscriptions /100 pop.	15	109.5	_
.06 Business impact of HIV/AIDS	52	5.8						
07 Infant mortality deaths/1,000 live births	54	8.5	$\overline{}$	t.	10th pillar: Market size	80	3.5	_
.08 Life expectancy years	33	79.6	~	10.	01 Domestic market size index	84	3.2	
.09 Quality of primary education	36	4.7	_		02 Foreign market size index	85	4.1	_
10 Primary education enrollment rate net %	58	96.4	~		03 GDP (PPP) PPP \$ billions	82	80.7	
·					04 Exports % GDP	79	30.8	_
₹ 5th pillar: Higher education and training	31	5.1	_	10.	04 Exports 76 db1	7.5	00.0	
01 Secondary education enrollment rate gross %	11	123.1	/	ممح	11th pillar: Business sophistication	35	4.5	-
02 Tertiary education enrollment rate gross %	53	53.6	_	11	01 Local supplier quantity	35	4.8	-
03 Quality of the education system	27	4.5			02 Local supplier quality	37	4.0	_
			_					-
04 Quality of math and science education	52	4.4			03 State of cluster development	45	4.1	_
05 Quality of management schools	21		$\sim$		04 Nature of competitive advantage	25	4.7	_
06 Internet access in schools	42	4.9			05 Value chain breadth	35	4.4	_
07 Local availability of specialized training services	21	5.4		11.	06 Control of international distribution	82	3.5	-
08 Extent of staff training	37	4.4	$\sim$	11.	07 Production process sophistication	37	4.5	_
				11.	08 Extent of marketing	35	4.8	_
					09 Willingness to delegate authority	37	4.7	
				1	12th pillar: Innovation	43	3.7	_
				12.	01 Capacity for innovation	40	4.5	_
					02 Quality of scientific research institutions	33	4.8	_
					03 Company spending on R&D	50	3.5	_
					03 Company spending on A&D 04 University-industry collaboration in R&D	50	3.6	_
					04 Offiversity-industry collaboration in hab	115	2.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

2.8 4.7

115

27

## Croatia



The Global Competitiveness Index 2017-2018 edition



2017-18 74 / 137 4.2

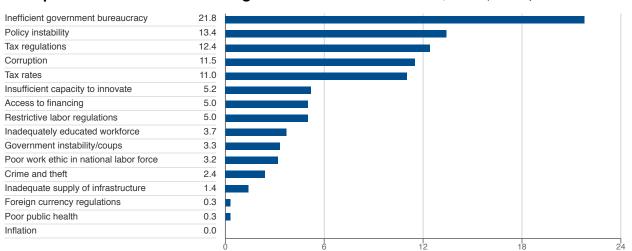
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Databa					
Population millions	4.2	GDP per capita ∪s\$	12,095.5				
GDP US\$ billions	50.4	GDP (PPP) % world GDP	0.08				

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trond	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-1
Global Competitiveness Index	74	` '	116110	Distance noni best	Rank	81 / 144	75 / 148	77 / 144	77 / 140	74 / 138	74 / 13
Global Competitiveness index	74	4.2			панк	017144	73 / 146	/ / / 144	77 / 140	74/130	74713
Subindex A: Basic requirements	58	4.8	_		Score	4.0	4.1	4.1	4.1	4.1	4.2
1st pillar: Institutions	102	3.5	_								
1 2nd pillar: Infrastructure	48	4.6	_					1st pillar: Institutions			
	60	4.8	$\sim$			12th p Innov		7	2nd pil Infrast		
3 4th pillar: Health and primary education	44	6.1	_			ddala adllaas				Oud willow	
Subindex B: Efficiency enhancers	69	4.1				11th pillar: Business sophistication	$\langle \langle \rangle \rangle$			3rd pillar: Macroeconor environment	mic
⇒ 5th pillar: Higher education and training	60	4.5					///۴			\	
	99	4.0	_			10th pillar: Market size	1			4th pillar: Health and education	d primary
7th pillar: Labor market efficiency	107	3.8	_			\					
8th pillar: Financial market development	t 95	3.6	~			9th pillar: Technological readiness	//			5th pillar: Higher educat and training	ion
9th pillar: Technological readiness	43	5.0				Q	th pillar:		6th pilla		
10th pillar: Market size	77	3.6				Financia		7th pillar:	Goods r	narket	
Subindex C: Innovation and sophistication factors	99	3.4						Labor market efficiency			
ூ 11th pillar: Business sophistication	82	3.8	_			Cre	notio 🔳 [	-urono ond	North Am	orioo	
★ 12th pillar: Innovation	106	2.9	_			■ Cro	oatia E	Europe and	INOTHI AM	enca	

### Most problematic factors for doing business





## Croatia

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Trend
â 1st pillar: Institutions	102	3.5	_	1	6th pillar: Goods market efficiency	99	4.0	
1.01 Property rights	113	3.6	_	6.0	Intensity of local competition	102	4.7	/
1.02 Intellectual property protection	84	3.8		6.02	Extent of market dominance	113	3.1	_
1.03 Diversion of public funds	105	2.8	_	6.03	Effectiveness of anti-monopoly policy	91	3.4	~
1.04 Public trust in politicians	116	2.0	_	6.04	Effect of taxation on incentives to invest	125	2.7	
1.05 Irregular payments and bribes	77	3.8		6.05	Total tax rate % profits	14	20.9	~
1.06 Judicial independence	114	2.9			No. of procedures to start a business	92	8	
1.07 Favoritism in decisions of government officials	122	2.1	$\sim$		7 Time to start a business days	41	7.0	~^
1.08 Efficiency of government spending	114	2.4	~		Agricultural policy costs	134	2.6	_
1.09 Burden of government regulation	135	1.9			Prevalence of non-tariff barriers	23	5.0	_
1.10 Efficiency of legal framework in settling disputes	135	2.1			Trade tariffs % duty	5	1.0	$\sim$
1.11 Efficiency of legal framework in challenging regulations	135	2.1	~	6.1	Prevalence of foreign ownership	89	4.3	
1.12 Transparency of government policymaking	128	3.1	~		2 Business impact of rules on FDI	99	4.2	_
1.13 Business costs of terrorism	18	5.9	_		B Burden of customs procedures	64	4.2	
1.14 Business costs of crime and violence	24	5.3			Imports % GDP	53	50.7	
1.15 Organized crime	67	4.9	_		Degree of customer orientation	102	4.2	
1.16 Reliability of police services	58	4.6	~		Buyer sophistication	116	2.7	$\sim$
1.17 Ethical behavior of firms	97	3.4	$\overline{}$		<u> </u>			
1.18 Strength of auditing and reporting standards	91	4.2			7th pillar: Labor market efficiency	107	3.8	
1.19 Efficacy of corporate boards	101	4.5		7.0	Cooperation in labor-employer relations	135	3.4	_
1.20 Protection of minority shareholders' interests	102	3.6		7.02	2 Flexibility of wage determination	66	4.9	_
1.21 Strength of investor protection 0-10 (best)	26	6.7			Hiring and firing practices	131	2.6	
1.21 Strength of investor protection 6-10 (best)	20	0.7	~		1 Redundancy costs weeks of salary	63	15.1	
◆◆ 2nd pillar: Infrastructure	48	4.6	_		Effect of taxation on incentives to work	133	2.6	
2.01 Quality of overall infrastructure	37	4.7			6 Pay and productivity	101	3.5	$\overline{}$
2.02 Quality of roads	19		_		Reliance on professional management	101	3.7	~~
2.03 Quality of railroad infrastructure	70	2.8			Country capacity to retain talent	131	2.1	
2.04 Quality of port infrastructure	45	4.6			Country capacity to attract talent	135	1.8	
2.05 Quality of air transport infrastructure	74	4.2			Female participation in the labor force ratio to men	50	0.87	
2.06 Available airline seat kilometers millions/week	78	138.2		7.10	Tomale participation in the labor force ratio to men		0.07	
2.07 Quality of electricity supply	39	5.8	_		8th pillar: Financial market development	95	3.6	~
2.08 Mobile-cellular telephone subscriptions /100 pop.	96	104.1	$\neg$	8.0	Availability of financial services	110	3.6	
2.09 Fixed-telephone lines /100 pop.	30	33.9	_		Affordability of financial services	105	3.3	
2.09 Tixeu-telephone lines 7100 pop.	30	55.5	_		Financing through local equity market	99	3.0	
	60	4.8	$\sim$		Ease of access to loans	97	3.4	_
3.01 Government budget balance % GDP	39	-1.5	~		Venture capital availability	117	2.3	_
3.02 Gross national savings % GDP	56	22.8	\\ \		Soundness of banks	69	4.9	_
3.03 Inflation annual % change	89	-1.1	~		Regulation of securities exchanges	77	4.1	
3.04 Government debt % GDP	116	84.4	/		B Legal rights index 0-10 (best)	70	5	$\neg$
3.05 Country credit rating 0-100 (best)	67	53.3	_					
				8/28	9th pillar: Technological readiness	43	5.0	_
4th pillar: Health and primary education	44	6.1			Availability of latest technologies	65	4.8	_
4.01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02	2 Firm-level technology absorption	91	4.2	_
4.02 Business impact of malaria	n/a	6.9		9.03	FDI and technology transfer	111	3.7	_
4.03 Tuberculosis incidence cases/100,000 pop.	37	13.0	_	9.04	Internet users % pop.	49	72.7	<u></u>
4.04 Business impact of tuberculosis	11	6.8		9.05	Fixed-broadband Internet subscriptions /100 pop.	38	24.6	
4.05 HIV prevalence % adult pop.	1	<0.1		9.06	Internet bandwidth kb/s/user	38	119.0	
4.06 Business impact of HIV/AIDS	5	6.8		9.07	Mobile-broadband subscriptions /100 pop.	41	79.7	
4.07 Infant mortality deaths/1,000 live births	29	3.6	_	47	10th pillar: Market size	77	3.6	
4.08 Life expectancy years	44	77.3	_					
4.09 Quality of primary education	71	4.0			1 Domestic market size index	81	3.3	$\overline{}$
4.10 Primary education enrollment rate net %	27	98.4	/		2 Foreign market size index	70	4.5	_
	60	4.5			03 GDP (PPP) PPP \$ billions	76	95.1	/
5th pillar: Higher education and training	60	4.5		10.0	04 Exports % GDP	28	54.0	
5.01 Secondary education enrollment rate gross %	55	98.2	_		11th pillar: Business sophistication	82	3.8	
5.02 Tertiary education enrollment rate gross %	28	69.1						
5.03 Quality of the education system	112	2.9			1 Local supplier quantity	103	4.1	
5.04 Quality of math and science education	57	4.3	$\overline{}$		2 Local supplier quality	50	4.6	
5.05 Quality of management schools	93	3.8	_		3 State of cluster development	130	2.9	
5.06 Internet access in schools	109	3.4			Nature of competitive advantage	60	3.7	_
5.07 Local availability of specialized training services	78	4.2			5 Value chain breadth	76	3.7	_
5.08 Extent of staff training	130	3.1	~		06 Control of international distribution	70	3.6	$\sim$
					7 Production process sophistication	74	3.7	
					8 Extent of marketing	101	4.1	
				11.0	9 Willingness to delegate authority	115	3.7	
				385	12th pillar: Innovation	106	2.9	
					11 Capacity for innovation	120	3.4	
								=
					22 Quality of scientific research institutions	66	3.8	
				12.0	33 Company spending on R&D	97	3.0	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

118

134

95

2.7

2.3

# Cyprus



The Global Competitiveness Index 2017-2018 edition



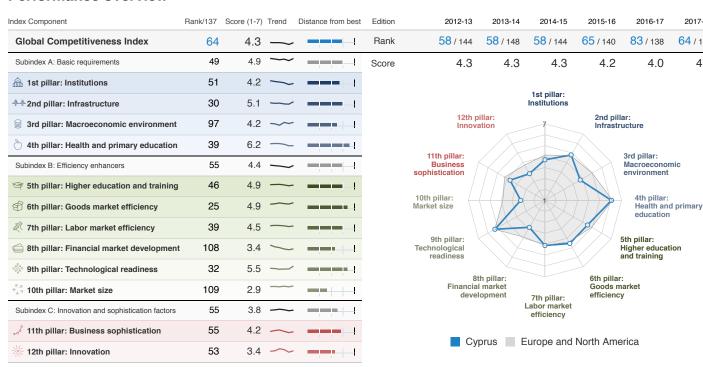
2017-18

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4.3

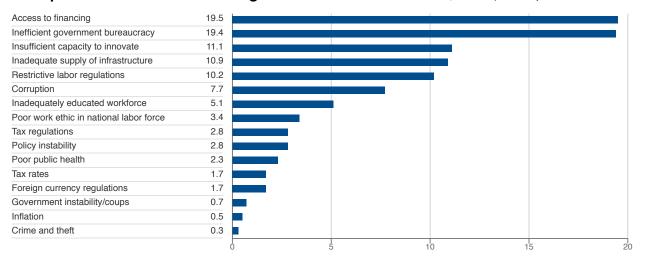
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201				
Population millions	0.8	GDP per capita US\$	23,351.9			
GDP US\$ billions	19.8	GDP (PPP) % world GDP	0.03			

#### Performance overview



#### Most problematic factors for doing business





# Cyprus

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
☆ 1st pillar: Institutions	51	4.2	~	\$	6th pillar: Goods market efficiency	25	4.9	_
1.01 Property rights	55	4.5		6.0	Intensity of local competition	24	5.5	_
1.02 Intellectual property protection	47	4.5			2 Extent of market dominance	44	4.1	
1.03 Diversion of public funds	53	4.0	$\sim$		3 Effectiveness of anti-monopoly policy	44	4.1	_
1.04 Public trust in politicians	84	2.8	~		4 Effect of taxation on incentives to invest	13	5.0	
1.05 Irregular payments and bribes	47	4.6	_		5 Total tax rate % profits	22	24.7	
1.06 Judicial independence	40	4.7			No. of procedures to start a business	36	5	_
•	72	3.0			7 Time to start a business days	30	6.0	_
1.07 Favoritism in decisions of government officials								
1.08 Efficiency of government spending	42	3.7			Agricultural policy costs	60	3.8	
1.09 Burden of government regulation	36	3.9			Prevalence of non-tariff barriers	29	4.9	
1.10 Efficiency of legal framework in settling disputes	85	3.3	$\sim$		Trade tariffs % duty	6	1.1	_
1.11 Efficiency of legal framework in challenging regulations	44	3.7	$\sim$		Prevalence of foreign ownership	62	4.6	
1.12 Transparency of government policymaking	47	4.4	$\sim$	6.1	2 Business impact of rules on FDI	45	5.0	_
1.13 Business costs of terrorism	61	5.3	$\overline{}$	6.1	Burden of customs procedures	39	4.7	
1.14 Business costs of crime and violence	39	5.1	$\sim$	6.1	4 Imports % GDP	34	60.5	_
1.15 Organized crime	70	4.8		6.1	Degree of customer orientation	52	4.9	_
1.16 Reliability of police services	55	4.7		6.1	Buyer sophistication	33	4.0	_
1.17 Ethical behavior of firms	61	3.9			· ·			
1.18 Strength of auditing and reporting standards	92	4.2	_	Sep.	7th pillar: Labor market efficiency	39	4.5	
1.19 Efficacy of corporate boards	116	4.2		7.0	1 Cooperation in labor-employer relations	49	4.6	_
1.20 Protection of minority shareholders' interests	68	4.0	_		2 Flexibility of wage determination	85	4.7	_
•	26	6.7			Hiring and firing practices	66	3.8	_
1.21 Strength of investor protection 0-10 (best)	∠0	0.7	_		4 Redundancy costs weeks of salary	13	5.7	_
◆◆ 2nd pillar: Infrastructure	30	5.1	_		5 Effect of taxation on incentives to work	25	4.5	
2.01 Quality of overall infrastructure	36	4.7	_		6 Pay and productivity	72	3.8	_
•						97		
2.02 Quality of roads	26	5.1			7 Reliance on professional management		3.8	_
2.03 Quality of railroad infrastructure	n/a	not assessed			3 Country capacity to retain talent	56	3.7	
2.04 Quality of port infrastructure	46	4.6	~		Country capacity to attract talent	72	3.3	
2.05 Quality of air transport infrastructure	27	5.5		7.10	Female participation in the labor force ratio to men	54	0.86	
, ,					8th pillar: Financial market development	108	3.4	_
2.06 Available airline seat kilometers millions/week	64	243.5						
2.07 Quality of electricity supply	45		~~		1 Availability of financial services	90	3.9	
2.08 Mobile-cellular telephone subscriptions /100 pop.	35	134.5		8.0	2 Affordability of financial services	77	3.7	_
2.09 Fixed-telephone lines /100 pop.	23	38.0	)	8.0	Financing through local equity market	120	2.6	_
<b>3rd pillar: Macroeconomic environment</b>	97	12	~~	8.0	4 Ease of access to loans	123	2.9	/
<b>.</b>				8.0	Venture capital availability	110	2.4	
3.01 Government budget balance % GDP	22	-0.3	~	8.0	Soundness of banks	127	3.3	/
3.02 Gross national savings % GDP	108	13.1	_	8.0	Regulation of securities exchanges	110	3.5	_
3.03 Inflation annual % change	90	-1.2	$\sim$		B Legal rights index 0-10 (best)	31	7	$\overline{}$
3.04 Government debt % GDP	127	108.0		0				
3.05 Country credit rating 0-100 (best)	82	38.3		8/3	9th pillar: Technological readiness	32	5.5	
2	00	0.0		9.0	Availability of latest technologies	66	4.8	_
4th pillar: Health and primary education	39	6.2		9.0	2 Firm-level technology absorption	63	4.5	_
4.01 Malaria incidence cases/100,000 pop.	n/a	m.f.			3 FDI and technology transfer	79	4.3	_
4.02 Business impact of malaria	n/a	6.0	_		4 Internet users % pop.	42	75.9	
4.03 Tuberculosis incidence cases/100,000 pop.	16	6.2	~~		5 Fixed-broadband Internet subscriptions /100 pop.	16	33.0	
4.04 Business impact of tuberculosis	47	6.0						_
4.05 HIV prevalence % adult pop.	1	<0.1			6 Internet bandwidth kb/s/user	21	188.9	_
4.06 Business impact of HIV/AIDS	47	5.8		9.0	7 Mobile-broadband subscriptions /100 pop.	23	97.5	_
4.06 Business impact of HIV/AIDS 4.07 Infant mortality deaths/1,000 live births	11	2.5		47	10th pillar: Market size	109	2.9	_
•					·			
4.08 Life expectancy years	30	80.3			1 Domestic market size index	115	2.6	
4.09 Quality of primary education	56	4.2	~		22 Foreign market size index	96	3.9	
4.10 Primary education enrollment rate net %	45	97.4	~		03 GDP (PPP) PPP \$ billions	111	29.7	_
⇒ 5th pillar: Higher education and training	46	4.9		10.0	04 Exports % GDP	25	58.6	_
				1	11th willow Duciness combinationalism	55	4.0	
5.01 Secondary education enrollment rate gross %	48	99.8			11th pillar: Business sophistication		4.2	
5.02 Tertiary education enrollment rate gross %	45	60.1			1 Local supplier quantity	33	4.8	_
5.03 Quality of the education system	55	3.9	$\sim$	11.0	2 Local supplier quality	51	4.6	
5.04 Quality of math and science education	69	4.1	$\sim$	11.0	3 State of cluster development	82	3.6	-
5.05 Quality of management schools	74	4.1	$\sim$	11.0	04 Nature of competitive advantage	38	4.3	1
5.06 Internet access in schools	53	4.5	$\sim$		5 Value chain breadth	40	4.3	_
5.07 Local availability of specialized training services	50	4.7	$\sim$		06 Control of international distribution	65	3.7	_
5.08 Extent of staff training	50		~		77 Production process sophistication	59	4.0	_
						83	4.2	
					28 Extent of marketing			
				11.0	9 Willingness to delegate authority	81	4.2	
				385	12th pillar: Innovation	53	3.4	-
					•			
					1 Capacity for innovation	110	3.7	
					22 Quality of scientific research institutions	50	4.2	
				12.0	O3 Company spending on R&D	96	3.0	
				40	at I being weiter in directors and belongsting in DOD		0.4	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products 12.06 Availability of scientists and engineers

72 88

33

# Czech Republic

The Global Competitiveness Index 2017-2018 edition



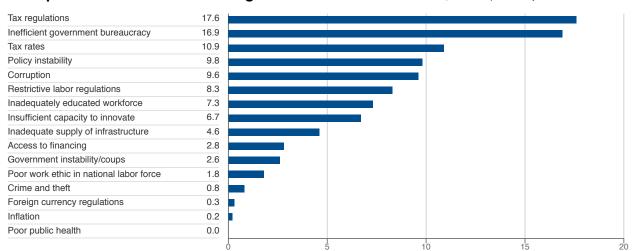
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (A					
Population millions	10.6	GDP per capita ∪S\$	18,286.3				
GDP US\$ billions	193.0	GDP (PPP) % world GDP	0.29				

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	31	4.8			Rank	39 / 144	46 / 148	<b>37</b> / 144	31 / 140	31 / 138	31 / 137
Subindex A: Basic requirements	30	5.4	_		Score	4.5	4.4	4.5	4.7	4.7	4.8
🖮 1st pillar: Institutions	52	4.2	_								
<b>1</b> 2nd pillar: Infrastructure	49	4.6	_					1st pillar: Institutions			
	8	6.2				12th p Innov		7	2nd pil Infrastr		
3 4th pillar: Health and primary education	23	6.4	_								
Subindex B: Efficiency enhancers	29	4.9	_			11th pillar: Business sophistication	4/2			3rd pillar: Macroeconor environment	
⇒ 5th pillar: Higher education and training	27	5.2				. /					
	38	4.7	_			10th pillar: Market size	1			4th pillar: Health an education	d primary
7th pillar: Labor market efficiency	41	4.5	_								
8th pillar: Financial market development	t 23	4.8	_			9th pillar: Technological readiness				5th pillar: Higher educat and training	tion
💖 9th pillar: Technological readiness	33	5.5	_				th pillar:		6th pillar	_	
$\overset{\overset{\kappa}{\downarrow}_{\nearrow}}{\downarrow}$ 10th pillar: Market size	46	4.5	_			Financia	l market lopment	7th pillar:	Goods n	narket	
Subindex C: Innovation and sophistication factors	32	4.2	_					Labor market efficiency			
→ 11th pillar: Business sophistication	30	4.6	_			Canab	Danublia	Гимара	and North	A 100 0 11 0 0	
** 12th pillar: Innovation	36	3.9	_			Czecn	Republic	Europe	and North	America	

### Most problematic factors for doing business





# **Czech Republic**

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	e Tre
â 1st pillar: Institutions	52	4.2	_		6th pillar: Goods market efficiency	38	4.7	_
1.01 Property rights	48	4.6		6.0	Intensity of local competition	14	5.8	~
1.02 Intellectual property protection	31	5.0			2 Extent of market dominance	31	4.3	_
1.03 Diversion of public funds	99	2.9	_		Effectiveness of anti-monopoly policy	46	4.0	
1.04 Public trust in politicians	89	2.6			Effect of taxation on incentives to invest	48	3.9	_
1.05 Irregular payments and bribes	46	4.7			5 Total tax rate % profits	110	50.0	_
1.06 Judicial independence	45	4.5			No. of procedures to start a business	92	8	_
1.07 Favoritism in decisions of government officials	95	2.6			7 Time to start a business days	54	9.0	_
1.08 Efficiency of government spending	81	3.0			3 Agricultural policy costs	93	3.5	_
1.09 Burden of government regulation	119	2.6			Prevalence of non-tariff barriers	14	5.1	
1.10 Efficiency of legal framework in settling disputes	94	3.1			Trade tariffs % duty	6	1.1	
1.11 Efficiency of legal framework in settling disputes	112	2.6			*	5	6.0	
					Prevalence of foreign ownership			
1.12 Transparency of government policymaking	73		$\sim$		2 Business impact of rules on FDI	16	5.5	_
1.13 Business costs of terrorism	14	6.0			Burden of customs procedures	34	4.9	
1.14 Business costs of crime and violence	19	5.5			I Imports % GDP	13	83.9	
1.15 Organized crime	16	5.9			Degree of customer orientation	43	5.0	_
1.16 Reliability of police services	52			6.16	Buyer sophistication	106	2.9	
1.17 Ethical behavior of firms	60	4.0		250	7th pillar: Labor market efficiency	41	4.5	_
1.18 Strength of auditing and reporting standards	31	5.4		od,				
1.19 Efficacy of corporate boards	20	5.7			Cooperation in labor-employer relations	34	4.8	~
.20 Protection of minority shareholders' interests	48	4.4			2 Flexibility of wage determination	10	5.9	_
.21 Strength of investor protection 0-10 (best)	51	6.0	_	7.03	Hiring and firing practices	108	3.3	-
A A	40	4.0		7.04	Redundancy costs weeks of salary	86	20.2	-
<sup>↑↑</sup> 2nd pillar: Infrastructure	49	4.6		7.05	Effect of taxation on incentives to work	113	3.1	_
2.01 Quality of overall infrastructure	43	4.6		7.06	Pay and productivity	21	4.7	_
2.02 Quality of roads	74	4.0	_	7.07	Reliance on professional management	26	5.4	_
2.03 Quality of railroad infrastructure	26	4.4	_	7.08	Country capacity to retain talent	51	3.7	_
2.04 Quality of port infrastructure	94	3.5	_		Country capacity to attract talent	74	3.3	_
2.05 Quality of air transport infrastructure	35	5.3	/		Female participation in the labor force ratio to men	64	0.82	-
2.06 Available airline seat kilometers millions/week	63	267.6	/					
2.07 Quality of electricity supply	18	6.5			8th pillar: Financial market development	23	4.8	_
2.08 Mobile-cellular telephone subscriptions /100 pop.	72	115.5	$\sim$	8.0	Availability of financial services	28	5.0	-
2.09 Fixed-telephone lines /100 pop.	67	15.6	~		Affordability of financial services	23	4.8	_
2.09 Fixed-teleprione lines 7100 pop.	07	15.0	_		Financing through local equity market	63	3.7	_
	8	6.2			Ease of access to loans	32	4.5	_
3.01 Government budget balance % GDP	13	0.2			5 Venture capital availability	36	3.4	_
3.02 Gross national savings % GDP	36	27.3			Soundness of banks	12	6.0	
3.03 Inflation annual % change	1	0.7			Regulation of securities exchanges	26	5.4	
	42	37.7	$\sim$			31		
3.04 Government debt % GDP				8.08	3 Legal rights index 0-10 (best)	31	7	-
3.05 Country credit rating 0-100 (best)	22	78.4		e\$\$50	9th pillar: Technological readiness	33	5.5	_
4th pillar: Health and primary education	23	6.4		9.0	Availability of latest technologies	32	5.6	_
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02	2 Firm-level technology absorption	33	5.1	_
1.02 Business impact of malaria	n/a	6.9		9.03	FDI and technology transfer	30	5.0	_
1.03 Tuberculosis incidence cases/100,000 pop.	9	5.2	~~	9.04	Internet users % pop.	38	76.5	_
1.04 Business impact of tuberculosis	9	6.8		9.05	Fixed-broadband Internet subscriptions /100 pop.	32	27.7	_
1.05 HIV prevalence % adult pop.	1	<0.1		9.06	Internet bandwidth kb/s/user	24	180.7	_
1.06 Business impact of HIV/AIDS	4				Mobile-broadband subscriptions /100 pop.	46	76.0	_
4.07 Infant mortality deaths/1,000 live births	12	2.8	_					-
1.08 Life expectancy years	35			£ 7 3	10th pillar: Market size	46	4.5	-
4.09 Quality of primary education	28	4.9		10.0	1 Domestic market size index	53	4.1	_
4.10 Primary education enrollment rate net %	21	98.9	_		22 Foreign market size index	28	5.6	_
i.10 Primary education enrollment rate het %	21	96.9			03 GDP (PPP) PPP \$ billions		350.7	
⇒ 5th pillar: Higher education and training	27	5.2			04 Exports % GDP	8	96.7	_
5.01 Secondary education enrollment rate gross %	29	105.6	_~		•			
5.02 Tertiary education enrollment rate gross %	37	65.0	~~	ood	11th pillar: Business sophistication	30	4.6	-
5.03 Quality of the education system	59	3.8	$\sim$	11.0	1 Local supplier quantity	20	4.9	-
5.04 Quality of math and science education	48	4.5			2 Local supplier quality	13	5.5	-
5.05 Quality of management schools	61	4.3			3 State of cluster development	52	3.9	_
5.06 Internet access in schools		5.3	_		04 Nature of competitive advantage	53	3.9	_
	24				55 Value chain breadth	42	4.3	_
5.07 Local availability of specialized training services	19		_		66 Control of international distribution	37	4.2	_
5.08 Extent of staff training	29	4.7						-
					77 Production process sophistication	31	4.8	_
					08 Extent of marketing	43	4.7	_
				11.0	9 Willingness to delegate authority	27	5.0	
				***	12th pillar: Innovation	36	3.9	-
				12 (	1 Capacity for innovation	27	4.9	_
					2 Quality of scientific research institutions	27	5.0	_
					3 Company spending on R&D	34	4.2	
				12.0	of University is diverse collaboration in DOD	44	0.0	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

3.9

3.0

3.8

97

73

## **Denmark**



The Global Competitiveness Index 2017-2018 edition



2017-18

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Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April					
Population millions	5.7	GDP per capita US\$	53,744.0				
GDP US\$ billions	306.7	GDP (PPP) % world GDP	0.23				

Edition

Rank

2012-13

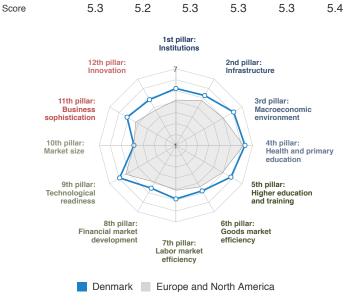
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2013-14

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#### Performance overview

Index Component	Rank/137	Score (1-7)	Trend	Distance from best
Global Competitiveness Index	12	5.4		
Subindex A: Basic requirements	13	5.9		
â 1st pillar: Institutions	13	5.5	_	
◆◆2nd pillar: Infrastructure	21	5.5	_	
	10	6.2	~	
3 4th pillar: Health and primary education	21	6.4		
Subindex B: Efficiency enhancers	15	5.3	_	
⇒ 5th pillar: Higher education and training	6	6.0		
	19	5.1		
7th pillar: Labor market efficiency	10	5.2		
8th pillar: Financial market development	21	4.9		
9th pillar: Technological readiness	12	6.1	_	
್ಭೆ 10th pillar: Market size	57	4.3		
Subindex C: Innovation and sophistication factors	11	5.3	_	
ം 11th pillar: Business sophistication	10	5.4	_	1
* 12th pillar: Innovation	10	5.1	_	



2014-15

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2015-16

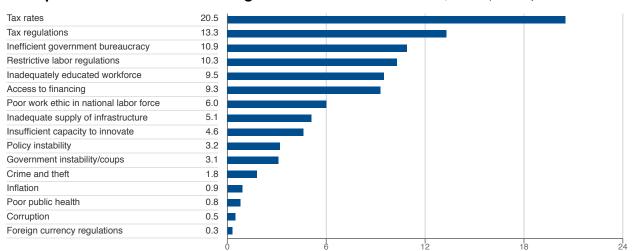
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2016-17

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#### Most problematic factors for doing business

Source: World Economic Forum, Executive Opinion Survey 2017



## **Denmark**

ndex Component	Rank/137	Value	Trend	Index Componer	nt	Rank/137	Value	е
â 1st pillar: Institutions	13	5.5	_	<b>❸</b> 6th pillar	: Goods market efficiency	19	5.1	-
1.01 Property rights	15	5.9		6.01 Intensity	of local competition	40	5.4	-
.02 Intellectual property protection	24	5.6		6.02 Extent of	market dominance	8	5.1	-
03 Diversion of public funds	12	5.7	_	6.03 Effectiver	ness of anti-monopoly policy	11	5.2	-
04 Public trust in politicians	14	5.1		6.04 Effect of t	taxation on incentives to invest	110	3.1	٠.
05 Irregular payments and bribes	7	6.4		6.05 Total tax		24	25.0	-
06 Judicial independence	11	6.1	~		ocedures to start a business	18	4	
77 Favoritism in decisions of government officials	12	4.9	-		tart a business days	6	3.0	
	33	4.0				21		
08 Efficiency of government spending					ral policy costs		4.6	
9 Burden of government regulation	63		~		ce of non-tariff barriers	26	4.9	
10 Efficiency of legal framework in settling disputes	19	5.1		6.10 Trade tari		6	1.1	
11 Efficiency of legal framework in challenging regulations	31	4.1	$\sim$		ce of foreign ownership	13	5.6	
12 Transparency of government policymaking	24	5.0	_	6.12 Business	impact of rules on FDI	23	5.4	
13 Business costs of terrorism	85	4.9	$\overline{}$	6.13 Burden of	f customs procedures	22	5.2	
14 Business costs of crime and violence	37	5.2	$\sim$	6.14 Imports 9	% GDP	63	45.9	
15 Organized crime	39	5.4	<u> </u>	6.15 Degree of	f customer orientation	9	5.8	
16 Reliability of police services	27	5.8		6.16 Buyer sor		39	3.8	
17 Ethical behavior of firms	5	6.1						
	20	5.7		🍂 7th pillar	: Labor market efficiency	10	5.2	
18 Strength of auditing and reporting standards				7.01 Cooperat	ion in labor-employer relations	4	6.0	
19 Efficacy of corporate boards	4	6.2			of wage determination	101	4.5	
20 Protection of minority shareholders' interests	24		_		•			
21 Strength of investor protection 0-10 (best)	18	7.2			d firing practices	7	5.2	
A 2nd nillary Infrastructure	21	5.5			ncy costs weeks of salary	1	0.0	
1 2nd pillar: Infrastructure					taxation on incentives to work	122	3.0	
1 Quality of overall infrastructure	11	5.8	_	7.06 Pay and	productivity	11	4.9	
2 Quality of roads	13	5.5	$\sim$	7.07 Reliance	on professional management	11	6.0	
3 Quality of railroad infrastructure	22	4.6	$\sim$	7.08 Country of	capacity to retain talent	20	4.7	
04 Quality of port infrastructure	10	5.7	_	7.09 Country of	capacity to attract talent	32	4.0	
D5 Quality of air transport infrastructure	8	6.1	_		participation in the labor force ratio to men	19	0.93	
06 Available airline seat kilometers millions/week	44	618.7	_	7.10 Tollialo p	and parent in the labor letter had to men		0.00	
	5	6.8		8th pillar	: Financial market development	21	4.9	
7 Quality of electricity supply			~~	8 ∩1 Availahilit	ty of financial services	31	5.0	
08 Mobile-cellular telephone subscriptions /100 pop.	55	122.9	V		•	29	4.6	
9 Fixed-telephone lines /100 pop.	37	27.4			lity of financial services			
3rd pillar: Macroeconomic environment	10	6.2			g through local equity market	46	4.2	
•					access to loans	40	4.3	
01 Government budget balance % GDP	32	-1.0			capital availability	47	3.2	
02 Gross national savings % GDP	30	28.3	_	8.06 Soundnes	ss of banks	18	5.8	
03 Inflation annual % change	51	0.3	_	8.07 Regulatio	on of securities exchanges	17	5.6	
04 Government debt % GDP	49	39.9	$\sim$	8.08 Legal righ	nts index 0-10 (best)	23	8	
05 Country credit rating 0-100 (best)	10	90.7		લીવ		40	0.4	
Ath village blooks and primary advection	21	6.4			: Technological readiness	12	6.1	
4th pillar: Health and primary education		6.4			ty of latest technologies	18	6.0	
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-leve	el technology absorption	9	5.7	
D2 Business impact of malaria	n/a	6.8		9.03 FDI and t	echnology transfer	33	4.9	
33 Tuberculosis incidence cases/100,000 pop.	13	6.0	~	9.04 Internet u	ISERS % pop.	5	97.0	
04 Business impact of tuberculosis	4	6.8		9.05 Fixed-bro	padband Internet subscriptions /100 pop.	2	42.8	
05 HIV prevalence % adult pop.	1	0.2			pandwidth kb/s/user		239.9	
06 Business impact of HIV/AIDS	3	6.8			roadband subscriptions /100 pop.		124.2	
07 Infant mortality deaths/1,000 live births	13	2.9				10	T	
				10th pilla	ar: Market size	57	4.3	
08 Life expectancy years	27	0			ic market size index	58	4.0	
9 Quality of primary education	29	4.8			market size index	44	5.1	
10 Primary education enrollment rate net %	28	98.4			PP) PPP \$ billions			
₹ 5th pillar: Higher education and training	6	6.0		10.03 GDP (PI	•	57 33	273.9 50.1	
of Secondary education enrollment rate gross %	6	130.8		0			50.1	
02 Tertiary education enrollment rate gross %	16	82.8			r: Business sophistication	10	5.4	
33 Quality of the education system	17	5.0		11.01 Local su	ipplier quantity	25	4.9	
•				11.02 Local su		9	5.6	
04 Quality of math and science education	12				cluster development	23	4.7	
5 Quality of management schools	14	5.6	=		of competitive advantage	5	6.2	
6 Internet access in schools	12	5.9						
7 Local availability of specialized training services	7	5.9		11.05 Value ch		17	5.2	
8 Extent of staff training	12	5.2			of international distribution	15	5.0	
					on process sophistication	13	5.8	
				11.08 Extent o	f marketing	26	5.0	
				11.09 Willingne	ess to delegate authority	1	6.2	
				* 19th nills	ar: Innovation	10	5.1	
					y for innovation	16	5.3	
					of scientific research institutions	16	5.6	
					ny spending on R&D	16	5.0	
					ty-industry collaboration in R&D	21	4.8	
				12.05 Gov4 pr	ocurement of advanced technology products	30	36	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

39

44

3.6

## **Dominican Republic**



2016-17

92 / 138

3.9

98 / 140

3.9

3.8

The Global Competitiveness Index 2017-2018 edition



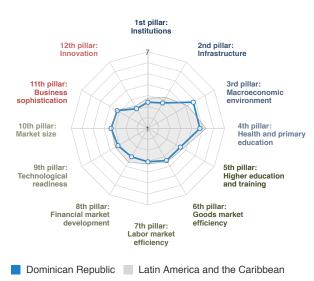
104 / 137

3.9

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20		
Population millions	10.1	GDP per capita US\$	7,159.5	
GDP US\$ billions	72.2	GDP (PPP) % world GDP	0.14	

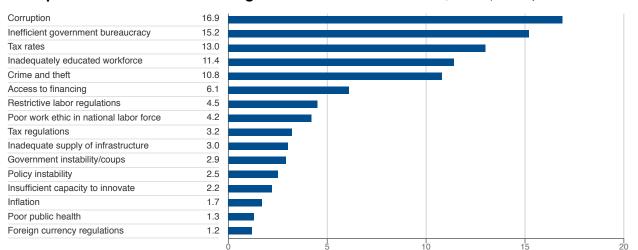
#### Performance overview





#### Most problematic factors for doing business





# **Dominican Republic**

Index Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	Trend
â 1st pillar: Institutions	129	3.0	_	<b>❸</b> 6th pillar: Goods market efficiency	115	3.9	_
1.01 Property rights	97	3.9	_	6.01 Intensity of local competition	42	5.4	_
1.02 Intellectual property protection	82		_	6.02 Extent of market dominance	131	2.6	_
1.03 Diversion of public funds	135			6.03 Effectiveness of anti-monopoly policy	133	2.4	$\overline{}$
1.04 Public trust in politicians	136	1.5	$\overline{}$	6.04 Effect of taxation on incentives to invest	114	3.0	_
1.05 Irregular payments and bribes	116	3.0	_	6.05 Total tax rate % profits	89	42.4	$\sim$
1.06 Judicial independence	130	2.3		6.06 No. of procedures to start a business	71	7	_
1.07 Favoritism in decisions of government officials	136	1.7		6.07 Time to start a business days	84	14.5	$\overline{}$
1.08 Efficiency of government spending	131	1.8			108	3.3	$\sim$
				6.08 Agricultural policy costs	88		_
1.09 Burden of government regulation	117	2.7		6.09 Prevalence of non-tariff barriers		4.2	_
1.10 Efficiency of legal framework in settling disputes	112	2.8		6.10 Trade tariffs % duty	80	6.4	_
1.11 Efficiency of legal framework in challenging regulations	115	2.6	$\sim$	6.11 Prevalence of foreign ownership	45	4.9	
1.12 Transparency of government policymaking	89	3.8		6.12 Business impact of rules on FDI	54	4.9	$\overline{}$
1.13 Business costs of terrorism	15	6.0	~	6.13 Burden of customs procedures	58	4.4	
1.14 Business costs of crime and violence	125	3.0		6.14 Imports % GDP	109	28.1	~
1.15 Organized crime	115	3.9		6.15 Degree of customer orientation	107	4.1	_
1.16 Reliability of police services	132	2.5	_	6.16 Buyer sophistication	98	3.0	$\sim$
1.17 Ethical behavior of firms	132	2.8	_				_
1.18 Strength of auditing and reporting standards	84	4.3	~	7th pillar: Labor market efficiency	117	3.6	
1.19 Efficacy of corporate boards	91			7.01 Cooperation in labor-employer relations	84	4.2	_
1.20 Protection of minority shareholders' interests	100	3.7		7.02 Flexibility of wage determination	79	4.8	_
1.21 Strength of investor protection 0-10 (best)	79	5.3	_	7.03 Hiring and firing practices	119	3.1	_
1.21 Strength of investor protection 6-10 (best)	13	5.5		7.04 Redundancy costs weeks of salary	108	26.2	
1 2nd pillar: Infrastructure	101	3.3		7.05 Effect of taxation on incentives to work	110	3.3	
2.01 Quality of overall infrastructure	93	3.6		7.06 Pay and productivity	123		~
•	56		_		104		$\sim$
2.02 Quality of roads	30			7.07 Reliance on professional management		3.7	
2.03 Quality of railroad infrastructure	n/a	not ssessed		7.08 Country capacity to retain talent	98	3.0	_
2.04 Quality of port infrastructure	38	4.8	_	7.09 Country capacity to attract talent	75	3.2	
	48	4.9		7.10 Female participation in the labor force ratio to men	95	0.69	
2.05 Quality of air transport infrastructure	52			8th pillar: Financial market development	99	3.6	~~
2.06 Available airline seat kilometers millions/week		436.9	•	_			
2.07 Quality of electricity supply	125	2.3		8.01 Availability of financial services	68	4.2	
2.08 Mobile-cellular telephone subscriptions /100 pop.	120	80.8	~	8.02 Affordability of financial services	89	3.5	
2.09 Fixed-telephone lines /100 pop.	76	12.5		8.03 Financing through local equity market	89	3.1	_
	49	5.1		8.04 Ease of access to loans	59	4.0	~
·				8.05 Venture capital availability	96	2.5	_
3.01 Government budget balance % GDP	75		<u> </u>	8.06 Soundness of banks	60	5.2	$\sim$
3.02 Gross national savings % GDP	55	23.0		8.07 Regulation of securities exchanges	67	4.4	~
3.03 Inflation annual % change	1	1.6	~	8.08 Legal rights index 0-10 (best)	128	1	$\overline{}$
3.04 Government debt % GDP	36	34.4					
3.05 Country credit rating 0-100 (best)	72	43.5		♦ 9th pillar: Technological readiness	87	3.7	
2	105	F 4		9.01 Availability of latest technologies	69	4.7	_
4th pillar: Health and primary education	105	5.1		9.02 Firm-level technology absorption	82	4.3	~
4.01 Malaria incidence cases/100,000 pop.	26	8.7	~	9.03 FDI and technology transfer	50	4.7	~
4.02 Business impact of malaria	2	6.2	_	9.04 Internet users % pop.	64	61.3	_
4.03 Tuberculosis incidence cases/100,000 pop.	80	60.0	_	9.05 Fixed-broadband Internet subscriptions /100 pop.	83	6.5	_
4.04 Business impact of tuberculosis	47	6.0	_	9.06 Internet bandwidth kb/s/user	95	22.1	^
4.05 HIV prevalence % adult pop.	106	1.0			95 84	49.2	
4.06 Business impact of HIV/AIDS	53	5.7		9.07 Mobile-broadband subscriptions /100 pop.	04	45.2	
4.07 Infant mortality deaths/1,000 live births	99			- €3 10th pillar: Market size	68	3.9	
4.08 Life expectancy years	82	73.7		10.01 Domestic market size index	67	3.7	
4.09 Quality of primary education	124	2.7	_		75	4.4	
			~	10.02 Foreign market size index			_
4.10 Primary education enrollment rate net %	113	86.9	~	10.03 GDP (PPP) PPP \$ billions	67	161.8	_
⇒ 5th pillar: Higher education and training	93	3.9	_	10.04 Exports % GDP	97	24.6	_
5.01 Secondary education enrollment rate gross %	92	77.8	_ ^	್ಯಾಸಿ 11th pillar: Business sophistication	85	3.8	_
5.02 Tertiary education enrollment rate gross %	59	50.1		11.01 Local supplier quantity	51	4.7	
5.03 Quality of the education system	128			11.02 Local supplier quality	101	3.9	
5.04 Quality of math and science education	133	2.6		11.03 State of cluster development	63	3.8	
5.05 Quality of management schools	97	3.8		11.04 Nature of competitive advantage	123	2.5	$\sim$
5.06 Internet access in schools	107	3.5		11.05 Value chain breadth	96	3.5	
5.07 Local availability of specialized training services	81	4.2		11.06 Control of international distribution	76	3.5	$\sim$
5.08 Extent of staff training	110	3.4	~	11.07 Production process sophistication	83	3.5	_
				11.08 Extent of marketing	60	4.5	~
				11.09 Willingness to delegate authority	86	4.0	
				17			
				12th pillar: Innovation	120	2.8	
				12.01 Capacity for innovation	98	3.7	
				12.02 Quality of scientific research institutions	128	2.7	_
				12.03 Company spending on R&D	119		$\sim$
				10.04 University industry callaboration in DOD	44.4		

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

114

124

106

2.8

2.6

## **Ecuador**



The Global Competitiveness Index 2017-2018 edition



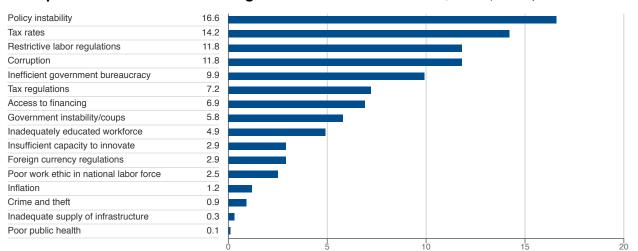
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201		
Population millions	16.5	GDP per capita US\$	5,929.7	
GDP US\$ billions	98.0	GDP (PPP) % world GDP	0.15	

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2015-16	2016-17	2017-18	
Global Competitiveness Index	97	3.9	_		Rank	86 / 144	<b>71</b> / 148	<b>76</b> / 140	91 / 138	97 / 137	
Subindex A: Basic requirements	87	4.4	~		Score	3.9	4.2	4.1	4.0	3.9	
☆ 1st pillar: Institutions	128	3.1	~								
	72	4.1	_				1st pil Institut				
	91	4.3	~			12th pillar: Innovation	7		pillar: astructure		
3 4th pillar: Health and primary education	61	5.9	~			4411			0.1.111.		
Subindex B: Efficiency enhancers	98	3.7				11th pillar: Business sophistication			3rd pillar: Macroecono environment		
⇒ 5th pillar: Higher education and training	77	4.3	_				AND THE STREET				
	128	3.7	~			10th pillar: Market size			4th pillar: Health and primary education		
🍂 7th pillar: Labor market efficiency	126	3.4	~				1000		/		
8th pillar: Financial market development	113	3.3	~			9th pillar: Technological readiness		$\Delta / / $	5th pillar: Higher educa and training	tion	
9th pillar: Technological readiness	92	3.6	_			8th pilla	,	6th p			
10th pillar: Market size	66	3.9				Financial mark developme	et	Good	s market		
Subindex C: Innovation and sophistication factors	110	3.2	~				Labor m efficie	arket			
ℳ 11th pillar: Business sophistication	105	3.6	~			Ecuador	Latin Ama	rica and the	Caribbaan		
★ 12th pillar: Innovation	111	2.9	~			Ecuauor	Laun Ame	nica anu ine	Calibbeati		

### Most problematic factors for doing business Source: World Economic Forum, Executive Opinion Survey 2017





## **Ecuador**

ndex Component	Rank/137	' Value	Trend	Index	x Component	Rank/137	Value	е
â 1st pillar: Institutions	128	3.1	~	8	6th pillar: Goods market efficiency	128	3.7	-
1.01 Property rights	127	3.3	$\overline{}$	6.01	Intensity of local competition	68	5.1	
1.02 Intellectual property protection	108	3.4		6.02	Extent of market dominance	120	3.0	
1.03 Diversion of public funds	129	2.2	~		Effectiveness of anti-monopoly policy	99	3.3	
1.04 Public trust in politicians	132	1.6	~		Effect of taxation on incentives to invest	133	2.2	
1.05 Irregular payments and bribes	97	3.3	^		5 Total tax rate % profits	45	32.5	-
1.06 Judicial independence	135	1.7	~		6 No. of procedures to start a business	122	11	-
			$\sim$		·			
1.07 Favoritism in decisions of government officials	135	1.8			7 Time to start a business days	128	48.5	
1.08 Efficiency of government spending	127	2.0			Agricultural policy costs	115	3.1	
1.09 Burden of government regulation	132	2.3	~		Prevalence of non-tariff barriers	136	2.9	
1.10 Efficiency of legal framework in settling disputes	119	2.7	$\overline{}$	6.10	Trade tariffs % duty	115	11.2	
1.11 Efficiency of legal framework in challenging regulations	136	1.9	$\sim$	6.11	Prevalence of foreign ownership	128	3.3	
1.12 Transparency of government policymaking	117	3.3	~	6.12	Business impact of rules on FDI	135	2.8	
1.13 Business costs of terrorism	35	5.6	_		B Burden of customs procedures	105	3.5	
.14 Business costs of crime and violence	107	3.7			Imports % GDP	125	19.8	
			_		·			
.15 Organized crime	83	4.5			Degree of customer orientation	106	4.1	
.16 Reliability of police services	94	3.9	_	6.16	Buyer sophistication	108	2.9	
.17 Ethical behavior of firms	125	3.0		58	745 -: !!! ! -b	126	3.4	
.18 Strength of auditing and reporting standards	50	5.0	_	ex.	7th pillar: Labor market efficiency	120	3.4	
.19 Efficacy of corporate boards	73	4.8	_	7.01	Cooperation in labor-employer relations	80	4.3	
.20 Protection of minority shareholders' interests	101	3.7	~	7.02	Plexibility of wage determination	74	4.8	
.21 Strength of investor protection 0-10 (best)	100				B Hiring and firing practices	134	2.3	
.21 Strength of investor protection 0-10 (best)	100	4.7	_		Redundancy costs weeks of salary	126	31.8	
<sup>▶</sup> 2nd pillar: Infrastructure	72	4.1						
•					Effect of taxation on incentives to work	109	3.3	
.01 Quality of overall infrastructure	49	4.5			Pay and productivity	86	3.7	
.02 Quality of roads	29	5.1		7.07	Reliance on professional management	113	3.6	
.03 Quality of railroad infrastructure	n/a	not		7.08	Country capacity to retain talent	95	3.1	
.03 Quality of Fallioad IIIII astructure	n/a a	assessed		7.09	Country capacity to attract talent	92	3.0	
.04 Quality of port infrastructure	44	4.6			Female participation in the labor force ratio to men	112	0.63	
.05 Quality of air transport infrastructure	40	5.1	_	7.110	Tomale paraelpater in the laber level take to men		0.00	
.06 Available airline seat kilometers millions/week	73	178.4	~~		8th pillar: Financial market development	113	3.3	
07 Quality of electricity supply	70	4.9				105	0.7	
			_		Availability of financial services	105	3.7	
.08 Mobile-cellular telephone subscriptions /100 pop.	114	84.3			2 Affordability of financial services	102	3.3	
.09 Fixed-telephone lines /100 pop.	70	14.8	_	8.03	Financing through local equity market	86	3.2	
<b>3rd pillar: Macroeconomic environment</b>	91	4.3	_	8.04	Ease of access to loans	101	3.4	
•	31			8.05	Venture capital availability	119	2.2	
.01 Government budget balance % GDP	116	-6.6	~	8.06	Soundness of banks	62	5.1	
.02 Gross national savings % GDP	53	23.1	~		Regulation of securities exchanges	93	3.9	
.03 Inflation annual % change	1	1.7	~		B Legal rights index 0-10 (best)	128	1	
.04 Government debt % GDP	24	29.2		0.00	s Legal rights index 0-10 (best)	120		
.05 Country credit rating 0-100 (best)	101	29.1	_	2880	9th pillar: Technological readiness	92	3.6	
Country Grount rating to 100 (Bost)	101	20.1			-	07	4.0	
4th pillar: Health and primary education	61	5.9			Availability of latest technologies	97	4.3	
- •	00		$\overline{}$		Firm-level technology absorption	94	4.2	
.01 Malaria incidence cases/100,000 pop.	22	4.1	_	9.03	FDI and technology transfer	120	3.5	
.02 Business impact of malaria	4	5.9		9.04	Internet users % pop.	76	54.1	
1.03 Tuberculosis incidence cases/100,000 pop.	75	52.0	_		Fixed-broadband Internet subscriptions /100 pop.	74	9.7	
.04 Business impact of tuberculosis	60	5.7	_		6 Internet bandwidth kb/s/user	78	43.7	
.05 HIV prevalence % adult pop.	63	0.3						
.06 Business impact of HIV/AIDS	66	5.4		9.07	Mobile-broadband subscriptions /100 pop.	87	47.2	
.00 Business impact of HIV/AIDS .07 Infant mortality deaths/1.000 live births				47	10th pillar: Market size	66	3.9	
	87	18.4						
.08 Life expectancy years	53	76.1	~	10.0	1 Domestic market size index	63	3.8	
.09 Quality of primary education	85	3.6		10.0	2 Foreign market size index	77	4.3	
.10 Primary education enrollment rate net %	35	98.0	$\sim$	10.0	3 GDP (PPP) PPP \$ billions	62	183.6	
~					04 Exports % GDP	110	19.2	
	77	4.3						
.01 Secondary education enrollment rate gross %	26	107.2	/	محمح	11th pillar: Business sophistication	105	3.6	
.02 Tertiary education enrollment rate gross %	72		_		1 Local supplier quantity	97	4.2	
	88	3.4	~					
03 Quality of the education system					2 Local supplier quality	99	3.9	
04 Quality of math and science education	94	3.6	~		3 State of cluster development	113	3.1	
05 Quality of management schools	91	4.0		11.0	Nature of competitive advantage	89	3.2	
06 Internet access in schools	75	4.1	_	11.0	5 Value chain breadth	118	3.2	
07 Local availability of specialized training services	88	4.1	_	11.0	6 Control of international distribution	112	3.0	
08 Extent of staff training	100		~		7 Production process sophistication	101	3.3	
	100	0.0	_		·			
					8 Extent of marketing	69	4.4	
				11.0	9 Willingness to delegate authority	89	4.0	
				**	12th pillar: Innovation	111	2.9	
					of Capacity for innovation	104	3.7	
					2 Quality of scientific research institutions	98	3.3	
					3 Company spending on R&D	112	2.8	
				12.0	4 University-industry collaboration in R&D	102	3.0	
				100	E Gov't procurement of advanced technology products	112	2.8	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

113

111

2.8

# **Egypt**

100th/137

The Global Competitiveness Index 2017-2018 edition



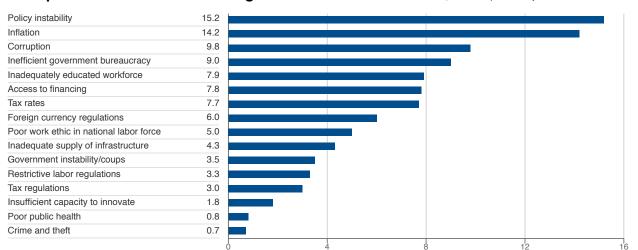
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20			
Population millions 90		GDP per capita US\$	3,684.6		
GDP US\$ billions	332.3	GDP (PPP) % world GDP	0.95		

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18			
Global Competitiveness Index	100	3.9	_		Rank	107 / 144	118 / 148	119 / 144	116 / 140	115 / 138	100 / 137			
Subindex A: Basic requirements	106	4.0			Score	3.7	3.6	3.6	3.7	3.7	3.9			
â 1st pillar: Institutions	64	3.9												
<b>1</b> 2nd pillar: Infrastructure	71	4.1	_					1st pillar: Institutions						
	132	2.6	_				pillar: ovation	7	2nd pi Infrast	llar: ructure				
3 4th pillar: Health and primary education	87	5.5				4411			$\Delta$	0.1.20				
Subindex B: Efficiency enhancers	87	3.9	_			11th pillar: Business sophistication		199		3rd pillar: Macroecono environment				
🥞 5th pillar: Higher education and training	100	3.6								\				
	90	4.1	—			10th pillar: Market size	10th pillar: Market size			4th pillar: Health and primary education				
7th pillar: Labor market efficiency	134	3.2												
8th pillar: Financial market development	: 77	3.9	$\overline{}$			9th pillar: Technological readiness				5th pillar: Higher educa and training	ition			
ু 9th pillar: Technological readiness	94	3.5					8th pillar:		6th pilla					
$\stackrel{\nwarrow}{\leftarrow}_{\!$	25	5.1				Financ	ial market relopment	7th pillar:	Goods i	market				
Subindex C: Innovation and sophistication factors	101	3.4						Labor marke efficiency	t					
ூ 11th pillar: Business sophistication	84	3.8	_				avet NA	iddlo East	and North	Λ frico				
★ 12th pillar: Innovation	109	2.9	_			Egypt Middle East and North Africa			чша					

### Most problematic factors for doing business







Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	7 Value	Tren
â 1st pillar: Institutions	64	3.9		1	6th pillar: Goods market efficiency	90	4.1	_
1.01 Property rights	94	3.9		6.0	Intensity of local competition	88	4.8	_
1.02 Intellectual property protection	132	3.0	~		2 Extent of market dominance	51	3.9	~
1.03 Diversion of public funds	52	4.0			Effectiveness of anti-monopoly policy	115	3.1	_
1.04 Public trust in politicians	67	3.0			Effect of taxation on incentives to invest	63	3.7	_
1.05 Irregular payments and bribes	57	4.2			5 Total tax rate % profits	92	43.5	~
1.06 Judicial independence	31	5.1			No. of procedures to start a business	18	4	_
1.07 Favoritism in decisions of government officials	48	3.5			7 Time to start a business days	36	6.5	_
1.08 Efficiency of government spending	63	3.3			3 Agricultural policy costs	88	3.5	_
1.09 Burden of government regulation	87	3.2			Prevalence of non-tariff barriers	85	4.2	_
1.10 Efficiency of legal framework in settling disputes	77				Trade tariffs % duty	132	14.9	$\overline{}$
1.11 Efficiency of legal framework in challenging regulations	61	3.4	_		Prevalence of foreign ownership	116	3.7	_
			=					$\sim$
1.12 Transparency of government policymaking	129	3.0			2 Business impact of rules on FDI	126	3.4	=
1.13 Business costs of terrorism	104	4.5			Burden of customs procedures	81	3.9	~
1.14 Business costs of crime and violence	79				I Imports % GDP	121	21.6	~
1.15 Organized crime	60	5.0			Degree of customer orientation	72	4.6	
1.16 Reliability of police services	50	4.8	_	6.16	Buyer sophistication	91	3.1	_
1.17 Ethical behavior of firms	69	3.8	$\overline{}$	250	7th pillar: Labor market efficiency	134	3.2	
1.18 Strength of auditing and reporting standards	82	4.4		at,				
1.19 Efficacy of corporate boards	107	4.4	_		Cooperation in labor-employer relations	104	4.0	
1.20 Protection of minority shareholders' interests	64	4.1			2 Flexibility of wage determination	98	4.5	_
1.21 Strength of investor protection 0-10 (best)	96	4.8	~		Hiring and firing practices	70	3.7	
	7.			7.04	Redundancy costs weeks of salary	129	36.8	
2nd pillar: Infrastructure	71	4.1	_	7.05	Effect of taxation on incentives to work	55	4.1	_
2.01 Quality of overall infrastructure	73	4.0	$\overline{}$	7.06	Pay and productivity	107	3.4	_
2.02 Quality of roads	75	3.9	_	7.07	Reliance on professional management	92	3.9	_
2.03 Quality of railroad infrastructure	50	3.3		7.08	Country capacity to retain talent	103	2.9	
2.04 Quality of port infrastructure	41	4.7			Country capacity to attract talent	116	2.4	_
2.05 Quality of air transport infrastructure	42	5.1			Female participation in the labor force ratio to men	132	0.31	
2.06 Available airline seat kilometers millions/week	41	648.2	~~		,			
2.07 Quality of electricity supply	63	5.0			8th pillar: Financial market development	77	3.9	~
2.08 Mobile-cellular telephone subscriptions /100 pop.	77	113.7	~	8.0	Availability of financial services	73	4.2	_
2.09 Fixed-telephone lines /100 pop.	91	7.1	<u> </u>		Affordability of financial services	85	3.6	_
2.09 Fixed-telephone lines 7100 pop.	91	7.1	_		Financing through local equity market	41	4.3	_
	132	2.6			Ease of access to loans	66	3.9	_
3.01 Government budget balance % GDP	129	-12.0	~~		5 Venture capital availability	74	2.8	~
3.02 Gross national savings % GDP	122	9.4	~		Soundness of banks	49	5.4	
3.03 Inflation annual % change	124	10.2			Regulation of securities exchanges	50	4.7	
ū .	122		<i>~</i>			107		$\overline{}$
3.04 Government debt % GDP		97.1		8.08	3 Legal rights index 0-10 (best)	107	2	
3.05 Country credit rating 0-100 (best)	93	32.1		e\${\$0	9th pillar: Technological readiness	94	3.5	_
♦ 4th pillar: Health and primary education	87	5.5		9.0	Availability of latest technologies	91	4.3	_
4.01 Malaria incidence cases/100,000 pop.	1	0.0		9.02	Firm-level technology absorption	100	4.1	_
4.02 Business impact of malaria	n/a	6.6		9.03	FDI and technology transfer	75	4.3	<u></u>
4.03 Tuberculosis incidence cases/100,000 pop.	39	15.0	_	9.04	1 Internet users % pop.	94	39.2	1
4.04 Business impact of tuberculosis	25	6.5		9.05	Fixed-broadband Internet subscriptions /100 pop.	89	5.2	_
4.05 HIV prevalence % adult pop.	1	<0.1		9.06	Internet bandwidth kb/s/user	101	17.2	$\neg \wedge$
4.06 Business impact of HIV/AIDS	16	6.6			Mobile-broadband subscriptions /100 pop.	78	52.6	
4.07 Infant mortality deaths/1,000 live births	91	20.3						
4.08 Life expectancy years	92	71.3		43	10th pillar: Market size	25	5.1	
4.09 Quality of primary education	133	2.4		10.0	1 Domestic market size index	19	5.1	_
4.10 Primary education enrollment rate net %	33	98.0	~		2 Foreign market size index	45	5.0	_
4.10 Tilliary education emoliment rate het /6		30.0	_		03 GDP (PPP) PPP \$ billions	21	1,132.4	
⇒ 5th pillar: Higher education and training	100	3.6			04 Exports % GDP	129	11.9	
5.01 Secondary education enrollment rate gross %	84	86.1	_		·			
5.02 Tertiary education enrollment rate gross %	77	36.2	_	000	11th pillar: Business sophistication	84	3.8	
5.03 Quality of the education system	130		_	11.0	1 Local supplier quantity	85	4.3	
5.04 Quality of math and science education	122		_		2 Local supplier quality	95	4.0	_
5.05 Quality of management schools	124		_		3 State of cluster development	56	3.9	
5.06 Internet access in schools	119		$\sim$		04 Nature of competitive advantage	95	3.1	~
					5 Value chain breadth	56	3.9	_
5.07 Local availability of specialized training services	135	2.8			66 Control of international distribution	92	3.3	_
5.08 Extent of staff training	116	3.4	_		77 Production process sophistication	70	3.8	_
						104		_
					08 Extent of marketing		4.1	
				11.0	9 Willingness to delegate authority	118	3.7	
				***	12th pillar: Innovation	109	2.9	_
				12.0	1 Capacity for innovation	123	3.4	_
					22 Quality of scientific research institutions	121	2.8	~
					3 Company spending on R&D	103		_
				12.0	of University industry collection in DOD	100	2.3	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.06 Availability of scientists and engineers

12.05 Gov't procurement of advanced technology products

117

61

55

2.8

## **El Salvador**



The Global Competitiveness Index 2017-2018 edition



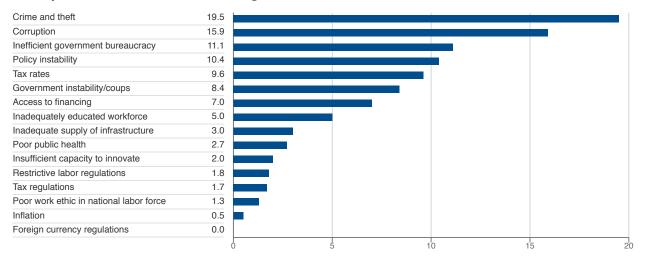
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201		
Population millions 6.1		GDP per capita US\$	4,343.4	
GDP US\$ billions	26.7	GDP (PPP) % world GDP	0.05	

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18		
Global Competitiveness Index	109	3.8	_		Rank	101 / 144	97 / 148	84 / 144	95 / 140	105 / 138	109 / 137		
Subindex A: Basic requirements	99	4.1	~		Score	3.8	3.8	4.0	3.9	3.8	3.8		
â 1st pillar: Institutions	133	2.7	~										
<b>1</b> 2nd pillar: Infrastructure	77	4.0	_					1st pillar: Institutions					
	85	4.5				12th p Innov		7	2nd p Infras	illar: tructure			
3 4th pillar: Health and primary education	100	5.3	~			440				0.1.2			
Subindex B: Efficiency enhancers	107	3.6	~			11th pillar: Business sophistication	$\langle \langle \rangle \rangle$			3rd pillar: Macroecond environmen			
⇒ 5th pillar: Higher education and training	104	3.5	~			/				\			
€ 6th pillar: Goods market efficiency	109	4.0	~			10th pillar: Market size				4th pillar: Health and primary education			
7th pillar: Labor market efficiency	125	3.4	~			\							
8th pillar: Financial market development	57	4.2		-,-,-		9th pillar: Technological readiness				5th pillar: Higher educa and training	ation		
9th pillar: Technological readiness	95	3.4					th pillar:		6th pill				
$\stackrel{\nwarrow}{\leftarrow}_{\!$	91	3.3	_			Financia		7th pillar:		market			
Subindex C: Innovation and sophistication factors	120	3.1	^					Labor marke efficiency	t				
္တီ 11th pillar: Business sophistication	104	3.6	~			■ El Salva	dor I	atin Americ	and the	Caribbean			
** 12th pillar: Innovation	130	2.6	~			EI Salva	luul <u> </u>	aun Amen	a anu me	Campbean			

### Most problematic factors for doing business





## **El Salvador**

Index Component	Rank/13	7 Value	Trend	Inde	x Component	Rank/137	Value	Trend
â 1st pillar: Institutions	133	2.7	~	1	6th pillar: Goods market efficiency	109	4.0	~
1.01 Property rights	121	3.5	$\sim$	6.0	Intensity of local competition	58	5.3	
1.02 Intellectual property protection	123	3.2	_		2 Extent of market dominance	123	2.9	$\sim$
1.03 Diversion of public funds	130	2.1			3 Effectiveness of anti-monopoly policy	110	3.2	$\sim$
1.04 Public trust in politicians	135	1.5			4 Effect of taxation on incentives to invest	116	2.9	
	104	3.2			5 Total tax rate % profits	75	38.8	_
1.05 Irregular payments and bribes							8	
1.06 Judicial independence	98	3.2			6 No. of procedures to start a business	92		_
1.07 Favoritism in decisions of government officials	134	1.8	$\sim$		7 Time to start a business days	88	15.5	
1.08 Efficiency of government spending	135	1.6			8 Agricultural policy costs	133	2.7	
1.09 Burden of government regulation	121	2.6	~		9 Prevalence of non-tariff barriers	116	3.8	_
1.10 Efficiency of legal framework in settling disputes	125	2.5	$\sim$	6.1	0 Trade tariffs % duty	64	4.3	~
1.11 Efficiency of legal framework in challenging regulations	113	2.6	$\sim$	6.1	Prevalence of foreign ownership	87	4.3	_
1.12 Transparency of government policymaking	123	3.2	$\sim$	6.1	2 Business impact of rules on FDI	108	4.0	_
1.13 Business costs of terrorism	136	2.6		6.1	3 Burden of customs procedures	130	2.8	~
1.14 Business costs of crime and violence	137	1.5	$\sim$	6.1	4 Imports % GDP	71	43.2	~
1.15 Organized crime	137	1.5			5 Degree of customer orientation	71	4.6	_
1.16 Reliability of police services	135	2.4			6 Buyer sophistication	112	2.8	$\overline{}$
			~	0.11	buyer sopriistication	112	2.0	
1.17 Ethical behavior of firms	128	2.9		F	7th pillar: Labor market efficiency	125	3.4	~
1.18 Strength of auditing and reporting standards	74	4.5		,	· ·	404	0.0	
1.19 Efficacy of corporate boards	95	4.5	~		1 Cooperation in labor-employer relations	124	3.6	
1.20 Protection of minority shareholders' interests	124	3.2	<b>~</b>		2 Flexibility of wage determination	45	5.2	$\sim$
1.21 Strength of investor protection 0-10 (best)	123	3.8	_~	7.0	3 Hiring and firing practices	116	3.1	~
<u> </u>			_	7.0	4 Redundancy costs weeks of salary	99	22.9	
↑↑ 2nd pillar: Infrastructure	77	4.0	_	7.0	5 Effect of taxation on incentives to work	107	3.3	_
2.01 Quality of overall infrastructure	104	3.3	~		6 Pay and productivity	129	3.0	
2.02 Quality of roads	72	4.0	~		7 Reliance on professional management	117	3.4	^
·		not			8 Country capacity to retain talent	117	2.5	
2.03 Quality of railroad infrastructure	n/a	assessed						_
2.04 Quality of port infrastructure	99	3.4	^		9 Country capacity to attract talent	124	2.2	_
2.05 Quality of air transport infrastructure	99	3.8	_	7.10	O Female participation in the labor force ratio to men	105	0.64	
• •			~~		8th pillar: Financial market development	57	4.2	
2.06 Available airline seat kilometers millions/week	85	104.1	$\sim$					
2.07 Quality of electricity supply	73	4.8		8.0	Availability of financial services	56	4.4	
2.08 Mobile-cellular telephone subscriptions /100 pop.	29	140.7	~	8.0	2 Affordability of financial services	69	3.8	
2.09 Fixed-telephone lines /100 pop.	73	14.4	_	8.0	3 Financing through local equity market	88	3.2	$\sim$
0	25	4.5			4 Ease of access to loans	81	3.7	_
	85	4.5	_		5 Venture capital availability	116	2.3	~
3.01 Government budget balance % GDP	61	-2.4			6 Soundness of banks	65	5.0	
3.02 Gross national savings % GDP	117	11.4	~		7 Regulation of securities exchanges	82	4.1	_
3.03 Inflation annual % change	1	0.6	~			13		
3.04 Government debt % GDP	87	59.9	_	8.0	8 Legal rights index 0-10 (best)	13	9	~
3.05 Country credit rating 0-100 (best)	80	38.6		2883	9th pillar: Technological readiness	95	3.4	_
5.55 Country Grount runing 5 100 (5656)		00.0				101	4.0	
4th pillar: Health and primary education	100	5.3	$\overline{}$		1 Availability of latest technologies		4.2	_
4.01 Malaria incidence cases/100,000 pop.	16	0.1	_		2 Firm-level technology absorption	115	3.9	
4.02 Business impact of malaria					3 FDI and technology transfer	116	3.6	~
	8			9.0	4 Internet users % pop.	102	29.0	~~
4.03 Tuberculosis incidence cases/100,000 pop.	68		~	9.0	5 Fixed-broadband Internet subscriptions /100 pop.	85	6.0	
4.04 Business impact of tuberculosis	69	5.4	_	9.0	6 Internet bandwidth kb/s/user	66	63.6	_/_
4.05 HIV prevalence % adult pop.	91	0.6	_	9.0	7 Mobile-broadband subscriptions /100 pop.	107	28.5	_^
4.06 Business impact of HIV/AIDS	77	5.2	$\sim$					
4.07 Infant mortality deaths/1,000 live births	79	14.4	~~	+	10th pillar: Market size	91	3.3	
4.08 Life expectancy years	87	73.0			01 Domestic market size index	90	3.1	_
4.09 Quality of primary education	128	2.6			02 Foreign market size index	98	3.8	
4.10 Primary education enrollment rate net %	98	91.2	_		•			
4.10 Filmary education enrollment rate net %	96	91.2	~~		03 GDP (PPP) PPP \$ billions	94	54.8	
⇒ 5th pillar: Higher education and training	104	3.5	~	10.0	04 Exports % GDP	88	29.0	
, ,			~	8	11th pillar: Business sophistication	104	3.6	~
5.01 Secondary education enrollment rate gross %	91	79.4						
5.02 Tertiary education enrollment rate gross %	83			11.0	01 Local supplier quantity	82	4.4	~
5.03 Quality of the education system	132	2.3	^	11.0	02 Local supplier quality	90	4.1	~
5.04 Quality of math and science education	129	2.6	$\sim$	11.0	03 State of cluster development	124	3.0	$\overline{}$
5.05 Quality of management schools	114	3.5	$\sim$		04 Nature of competitive advantage	130	2.4	_
5.06 Internet access in schools	116		$\sim$		05 Value chain breadth	95	3.5	_
5.07 Local availability of specialized training services	126	3.4			06 Control of international distribution	80		_
5.08 Extent of staff training			$\sim$				3.5	
5.00 LAIGHT OF STAIL TRAINING	112	3.4			07 Production process sophistication	96	3.4	
				11.0	08 Extent of marketing	63	4.5	_
				11.0	09 Willingness to delegate authority	109	3.8	
				-386	12th pillar: Innovation	130	2.6	^
						95		_
					01 Capacity for innovation		3.8	
					02 Quality of scientific research institutions	133	2.4	
					03 Company spending on R&D	115	2.8	
				12.0	04 University-industry collaboration in R&D	120	2.7	
				121	05 Gov't procurement of advanced technology products	132	24	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

132

134

2.4

## **Estonia**



The Global Competitiveness Index 2017-2018 edition



2017-18 **29** / 137

4.8

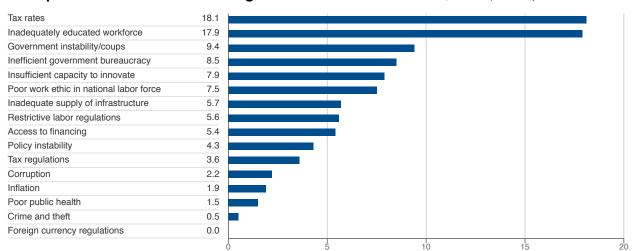
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20			
Population millions	1.3	GDP per capita ∪S\$	17,632.7		
GDP US\$ billions	23.1	GDP (PPP) % world GDP	0.03		

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-1
Global Competitiveness Index	29	4.8			Rank	34 / 144	32 / 148	<b>29</b> / 144	30 / 140	30 / 138	29 / 13
Subindex A: Basic requirements	22	5.7	_		Score	4.6	4.7	4.7	4.7	4.8	4.8
☆ 1st pillar: Institutions	24	5.0									
	32	5.1	_					1st pillar: Institutions			
	15	6.1	_			12th p Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	19	6.4	_								
Subindex B: Efficiency enhancers	27	4.9				11th pillar: Business sophistication	$\langle \langle \rangle \rangle$			3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	19	5.5	_			. /			M		
	21	5.1	_			10th pillar: Market size	1			4th pillar: Health and education	
₹ 7th pillar: Labor market efficiency	15	5.0	_								
8th pillar: Financial market development	22	4.9				9th pillar: Technological readiness				5th pillar: Higher educat and training	ion
9th pillar: Technological readiness	20	5.9	_				th pillar:		6th pillar		
્રેંગ 10th pillar: Market size	98	3.1	_			Financia		7th pillar:	Goods m	narket	
Subindex C: Innovation and sophistication factors	35	4.2						Labor market efficiency			
ூ 11th pillar: Business sophistication	45	4.4	_			<b>.</b> Ear	tonia 🔽 I	Europo and	North Ame	orioo	
★ 12th pillar: Innovation	30	4.0				ES	tonia 📗 E	Europe and	NOTELL ATTE	HICA	

#### Most problematic factors for doing business





# **Estonia**

dex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	T
── 1st pillar: Institutions	24	5.0	_		21	5.1	_
1.01 Property rights	28	5.4	_	6.01 Intensity of local competition	13	5.8	_
1.02 Intellectual property protection	25	5.4		6.02 Extent of market dominance	40	4.1	_
1.03 Diversion of public funds	33	4.6	_	6.03 Effectiveness of anti-monopoly policy	21	4.7	_
1.04 Public trust in politicians	38	3.8	$\sim$	6.04 Effect of taxation on incentives to invest	31	4.3	_
1.05 Irregular payments and bribes	16	6.1		6.05 Total tax rate % profits	104	48.7	^
.06 Judicial independence	18	5.7		6.06 No. of procedures to start a business	7	3	_
.07 Favoritism in decisions of government officials	28	4.2		6.07 Time to start a business days	9	3.5	_
1.08 Efficiency of government spending	55	3.5	=	6.08 Agricultural policy costs	38	4.2	_
					9	5.2	_
1.09 Burden of government regulation	25	4.1	$\sim$	6.09 Prevalence of non-tariff barriers			_
.10 Efficiency of legal framework in settling disputes	39	4.4		6.10 Trade tariffs % duty	6	1.1	-
.11 Efficiency of legal framework in challenging regulations	25	4.3	_	6.11 Prevalence of foreign ownership	9	5.7	
.12 Transparency of government policymaking	27	4.9		6.12 Business impact of rules on FDI	9	5.7	-
1.13 Business costs of terrorism	10	6.1		6.13 Burden of customs procedures	10	5.5	-
.14 Business costs of crime and violence	14	5.6	~	6.14 Imports % GDP	15	82.6	_
.15 Organized crime	10	6.2	$\overline{}$	6.15 Degree of customer orientation	21	5.5	-
.16 Reliability of police services	20	6.0	_	6.16 Buyer sophistication	50	3.7	-
.17 Ethical behavior of firms	30	4.8	_	59		- 0	
.18 Strength of auditing and reporting standards	25	5.6	_	7th pillar: Labor market efficiency	15	5.0	
19 Efficacy of corporate boards	19			7.01 Cooperation in labor-employer relations	25	5.2	-
20 Protection of minority shareholders' interests	47	4.4		7.02 Flexibility of wage determination	2	6.2	-
21 Strength of investor protection 0-10 (best)	51	6.0	~~	7.03 Hiring and firing practices	17	4.6	-
2.1 On ongati of investor proteodion 0-10 (best)	31	0.0		7.04 Redundancy costs weeks of salary	47	12.9	-
1 2nd pillar: Infrastructure	32	5.1		7.05 Effect of taxation on incentives to work	59	4.1	_
01 Quality of overall infrastructure	20	5.4		7.06 Pay and productivity	17	4.1	-
02 Quality of roads	38	4.7		7.06 Pay and productivity 7.07 Reliance on professional management	28	5.3	
·							_ '
03 Quality of railroad infrastructure	33	4.1		7.08 Country capacity to retain talent	69	3.4	_
04 Quality of port infrastructure	11	5.6		7.09 Country capacity to attract talent	59	3.5	-
05 Quality of air transport infrastructure	41	5.1		7.10 Female participation in the labor force ratio to men	29	0.90	
06 Available airline seat kilometers millions/week	115	31.8		8th pillar: Financial market development	22	4.9	
7 Quality of electricity supply	40	5.8		·			Щ
08 Mobile-cellular telephone subscriptions /100 pop.	20	148.7	$\sim$	8.01 Availability of financial services	30	5.0	_
09 Fixed-telephone lines /100 pop.	36	29.0	_	8.02 Affordability of financial services	22	4.9	_
				8.03 Financing through local equity market	36	4.3	
3rd pillar: Macroeconomic environment	15	6.1		8.04 Ease of access to loans	27	4.7	
1 Government budget balance % GDP	12	0.3	$\sim$	8.05 Venture capital availability	24	3.8	٠,
02 Gross national savings % GDP	50	23.8	~	8.06 Soundness of banks	28	5.7	
03 Inflation annual % change	1	0.8	<u> </u>	8.07 Regulation of securities exchanges	30	5.3	
04 Government debt % GDP	3	9.5		8.08 Legal rights index 0-10 (best)	31	7	
05 Country credit rating 0-100 (best)	24	76.8	_		01		
33 Country Credit rating 6-100 (best)	24	70.0	_	9th pillar: Technological readiness	20	5.9	
4th pillar: Health and primary education	19	6.4	_	9.01 Availability of latest technologies	25	5.7	
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	20	5.3	_
02 Business impact of malaria	n/a	6.8		9.03 FDI and technology transfer	43	4.7	
	44	18.0	_		20	87.2	
03 Tuberculosis incidence cases/100,000 pop.			$\overline{}$	9.04 Internet users % pop.			_
04 Business impact of tuberculosis	21	6.6		9.05 Fixed-broadband Internet subscriptions /100 pop.	23	31.1	-
05 HIV prevalence % adult pop.	113	1.3		9.06 Internet bandwidth kb/s/user	16	210.8	_
06 Business impact of HIV/AIDS	36	6.1		9.07 Mobile-broadband subscriptions /100 pop.	9	125.0	
77 Infant mortality deaths/1,000 live births	9	2.3	_	10th pillar: Market size	98	3.1	
08 Life expectancy years	47	77.1	_				
09 Quality of primary education	5	5.8		10.01 Domestic market size index	107	2.7	
10 Primary education enrollment rate net %	75	94.7	~	10.02 Foreign market size index	79	4.2	
				10.03 GDP (PPP) PPP \$ billions	101	38.5	,
₹ 5th pillar: Higher education and training	19	5.5		10.04 Exports % GDP	15	83.2	
1 Secondary education enrollment rate gross %	16	115.2	_	8	45		
22 Tertiary education enrollment rate gross %	27	69.6		11th pillar: Business sophistication	45	4.4	
03 Quality of the education system	23	4.7		11.01 Local supplier quantity	50	4.7	
04 Quality of math and science education	8			11.02 Local supplier quality	20	5.3	
25 Quality of management schools	32	5.0		11.03 State of cluster development	73	3.7	
6 Internet access in schools	7	6.0		11.04 Nature of competitive advantage	54	3.9	
				11.05 Value chain breadth	54	3.9	
77 Local availability of specialized training services	28	5.2		11.06 Control of international distribution	59	3.8	-
8 Extent of staff training	31	4.6		11.07 Production process sophistication	52	4.2	
				11.08 Extent of marketing	75	4.4	
				11.09 Willingness to delegate authority	28	5.0	
				12th pillar: Innovation	30	4.0	
				12.01 Capacity for innovation	26	4.9	
				12.02 Quality of scientific research institutions	21	5.3	-,
				12.03 Company spending on R&D	38	3.8	
				12.04 University-industry collaboration in R&D	40	3.9	
				12.04 University-industry Collaboration in NaD	54	3.9	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

54

46

3.5

# **Ethiopia**

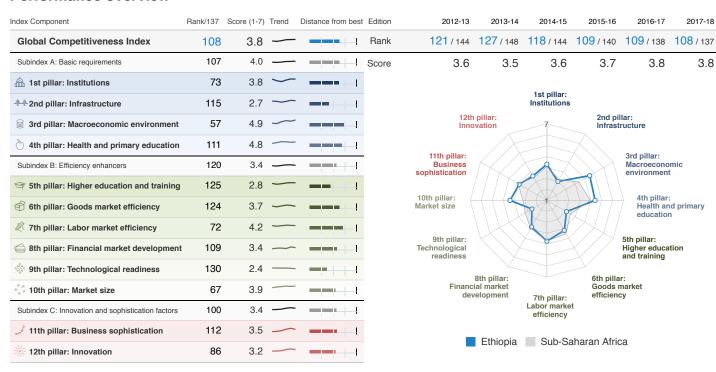


The Global Competitiveness Index 2017-2018 edition



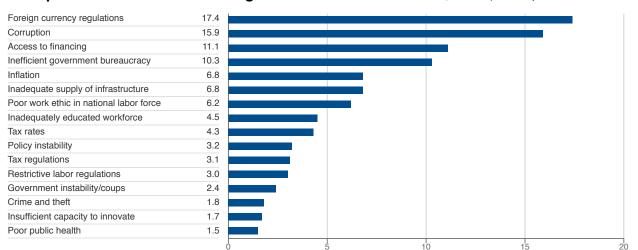
Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	91.2	GDP per capita ∪S\$	795.2
GDP US\$ billions	72.5	GDP (PPP) % world GDP	0.15

#### Performance overview



#### Most problematic factors for doing business





# **Ethiopia**

dex Component	Rank/137	7 Value	Trend	Index Component	Rank/137	Value	е
☆ 1st pillar: Institutions	73	3.8	<u> </u>		124	3.7	-
1.01 Property rights	75	4.2		6.01 Intensity of local competition	134	3.7	-
1.02 Intellectual property protection	86	3.8	~	6.02 Extent of market dominance	83	3.5	-
1.03 Diversion of public funds	56	3.9	_	6.03 Effectiveness of anti-monopoly policy	80	3.5	-
.04 Public trust in politicians	41	3.7	_	6.04 Effect of taxation on incentives to invest	80	3.5	-
.05 Irregular payments and bribes	101	3.2	<u> </u>	6.05 Total tax rate % profits	74	38.6	-
.06 Judicial independence	78	3.7	_	6.06 No. of procedures to start a business	135	14	
07 Favoritism in decisions of government officials	44	3.6		6.07 Time to start a business days	121	35.0	
08 Efficiency of government spending	48	3.6	$\overline{}$	6.08 Agricultural policy costs	51	4.0	
.09 Burden of government regulation	40		_	6.09 Prevalence of non-tariff barriers	118	3.8	
• •			$\sim$				
10 Efficiency of legal framework in settling disputes	57	3.7		6.10 Trade tariffs % duty	126	13.1	
11 Efficiency of legal framework in challenging regulations	60	3.4		6.11 Prevalence of foreign ownership	117	3.7	
12 Transparency of government policymaking	84	3.8	~	6.12 Business impact of rules on FDI	124	3.6	
13 Business costs of terrorism	107	4.5	$\sim$	6.13 Burden of customs procedures	97	3.6	
14 Business costs of crime and violence	76	4.4	$\sim$	6.14 Imports % GDP	111	27.8	
15 Organized crime	84	4.5	_	6.15 Degree of customer orientation	132	3.5	•
16 Reliability of police services	92	4.0	_	6.16 Buyer sophistication	87	3.2	
17 Ethical behavior of firms	65	3.9	<u></u>	-/la			
8 Strength of auditing and reporting standards	107	3.9		7th pillar: Labor market efficiency	72	4.2	
	129	3.9		7.01 Cooperation in labor-employer relations	119	3.8	
9 Efficacy of corporate boards				7.02 Flexibility of wage determination	110	4.3	
O Protection of minority shareholders' interests	113		_	7.03 Hiring and firing practices	74	3.7	
1 Strength of investor protection 0-10 (best)	134	3.2	~~	7.04 Redundancy costs weeks of salary	82	19.1	
↑ 2nd pillar: Infrastructure	115	2.7					
•				7.05 Effect of taxation on incentives to work	75	3.8	
1 Quality of overall infrastructure	94		$\sim$	7.06 Pay and productivity	75	3.8	
2 Quality of roads	97	3.3		7.07 Reliance on professional management	111	3.6	
3 Quality of railroad infrastructure	61	2.9	_	7.08 Country capacity to retain talent	71	3.4	
Quality of port infrastructure	119	2.7	~	7.09 Country capacity to attract talent	53	3.5	
05 Quality of air transport infrastructure	77	4.2	$\sim$	7.10 Female participation in the labor force ratio to men	41	0.88	
6 Available airline seat kilometers millions/week	51	442.5	_				
7 Quality of electricity supply	109	3.2		8th pillar: Financial market development	109	3.4	
8 Mobile-cellular telephone subscriptions /100 pop.	134		_	8.01 Availability of financial services	103	3.7	
9 Fixed-telephone lines /100 pop.	119	1.1		8.02 Affordability of financial services	79	3.7	
os Fixeu-telepriorie lilles 7100 pop.	119	1.1		8.03 Financing through local equity market	78	3.4	
3rd pillar: Macroeconomic environment	57	4.9		8.04 Ease of access to loans	95	3.5	
01 Government budget balance % GDP	57	-2.4	~	8.05 Venture capital availability	50	3.2	
· · · · · · · · · · · · · · · · · · ·							
02 Gross national savings % GDP	20	32.0		8.06 Soundness of banks	118	3.6	
03 Inflation annual % change	114	7.3	~	8.07 Regulation of securities exchanges	92	3.9	
04 Government debt % GDP	80	54.9		8.08 Legal rights index 0-10 (best)	96	3	
05 Country credit rating 0-100 (best)	119	23.6		% 9th pillar: Technological readiness	130	2.4	
4th pillar: Health and primary education	111	4.8	_	9.01 Availability of latest technologies	123	3.6	
01 Malaria incidence cases/100,000 pop.	50	3,087.3	~	9.02 Firm-level technology absorption	132	3.3	
1 11							
2 Business impact of malaria	12	5.6		9.03 FDI and technology transfer	115		
3 Tuberculosis incidence cases/100,000 pop.	112	192.0	_	9.04 Internet users % pop.	126	15.4	
04 Business impact of tuberculosis	81	5.2	_	9.05 Fixed-broadband Internet subscriptions /100 pop.	113	0.6	
05 HIV prevalence % adult pop.	109	1.1	_	9.06 Internet bandwidth kb/s/user	131	2.2	
6 Business impact of HIV/AIDS	112	4.2		9.07 Mobile-broadband subscriptions /100 pop.	138	5.3	
7 Infant mortality deaths/1,000 live births	115	41.4		^7 A01 - 11 - 14 - 1 - 1 - 1 - 1 - 1 - 1 - 1	07	0.0	
8 Life expectancy years	112	64.6	/	્રૈંગે 10th pillar: Market size	67	3.9	
9 Quality of primary education	109		~	10.01 Domestic market size index	61	3.9	
Primary education enrollment rate net %	117		~	10.02 Foreign market size index	94	3.9	
of Finnary Suddention Smollmone rate flee 78	117	00.0		10.03 GDP (PPP) PPP \$ billions	63	177.5	
5th pillar: Higher education and training	125	2.8		10.04 Exports % GDP	132	10.2	
1 Secondary education enrollment rate gross %	130	35.2	~	→ 11th pillar: Business sophistication	112	3.5	
22 Tertiary education enrollment rate gross %	120	8.1	~~	·			
3 Quality of the education system	80	3.5	~	11.01 Local supplier quantity	123	3.7	
4 Quality of math and science education	101	3.4	$\sim$	11.02 Local supplier quality	112	3.7	
5 Quality of management schools	101	3.8		11.03 State of cluster development	86	3.6	
6 Internet access in schools	105	3.5	_	11.04 Nature of competitive advantage	80	3.3	
7 Local availability of specialized training services	103		_	11.05 Value chain breadth	93	3.5	
				11.06 Control of international distribution	81	3.5	
8 Extent of staff training	99	3.6		11.07 Production process sophistication	102	3.3	
				·			
				11.08 Extent of marketing	132		
				11.09 Willingness to delegate authority	130	3.4	
				* 12th pillar: Innovation	86	3.2	
				12.01 Capacity for innovation	118	3.5	
				12.02 Quality of scientific research institutions	85	3.6	
				12.03 Company spending on R&D	68	3.3	
				12.04 University-industry collaboration in R&D	47	3.6	
				12.04 Onliversity-industry collaboration in hab	47		

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

45

92

3.6

## **Finland**



The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World	d Economic Outlook Database (April 2017)
Population millions	5.5	GDP per capita US\$	43,169.2
GDP US\$ billions	236.9	GDP (PPP) % world GDP	0.19

#### Performance overview

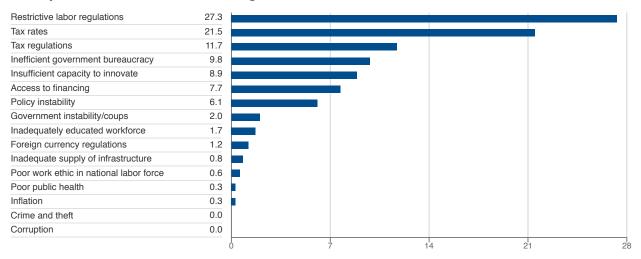
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	10	5.5	_		Rank	3 / 144	3 / 148	4 / 144	8 / 140	10 / 138	10 / 137
Subindex A: Basic requirements	9	6.0	_		Score	5.5	5.5	5.5	5.5	5.4	5.5
â 1st pillar: Institutions	1	6.2									
<b>1</b> 2nd pillar: Infrastructure	26	5.4	~					1st pillar: Institutions			
	33	5.5	~			12th p Innov		1	2nd pi Infras	illar: tructure	
3 4th pillar: Health and primary education	1	6.9	_			440	P			0.1.71	
Subindex B: Efficiency enhancers	11	5.3				11th pillar: Business sophistication	$\langle \langle f \rangle \rangle$			3rd pillar: Macroeconor environment	mic
⇒ 5th pillar: Higher education and training	2	6.2	_			. /				\	
	17	5.2	_			10th pillar: Market size	1			4th pillar: Health an education	d primary
7th pillar: Labor market efficiency	23	4.8	_			\ 					
8th pillar: Financial market development	: 4	5.5				9th pillar: Technological readiness				5th pillar: Higher educat and training	ion
💖 9th pillar: Technological readiness	16	6.0					th pillar:		6th pilla		
$\zeta_{\psi}^{\pi_{\mathcal{A}}}$ 10th pillar: Market size	60	4.2	_			Financia		7th pillar:	Goods efficien	market	
Subindex C: Innovation and sophistication factors	8	5.5	_					Labor market efficiency	t		
್ಯೂ 11th pillar: Business sophistication	14	5.3	_			■ Cin	nland	Europe and	North Am	orioo	
* 12th pillar: Innovation	4	5.7				FII	IIaiiu 🔛	Europe and	I NOI (II AII	letica	

Finland (10th) rounds out the top 10 for the second year in a row, helped by its top global ranking for public health and primary education, and a higher education performance that is second only to Singapore's. Finland's approach to preparing the younger generation

for the challenges of the Fourth Industrial Revolution through novel teaching approaches has been particularly noteworthy. Its high levels of investment in human capital are complemented by a sophisticated innovation environment (ranked 4th globally).

#### Most problematic factors for doing business





## **Finland**

ndex Component	Rank/137	Value	e Trend	Index Component	Rank/137	Value	Tr
â 1st pillar: Institutions	1	6.2		6th pillar: Goods market efficiency	17	5.2	_
1.01 Property rights	1	6.6		6.01 Intensity of local competition	97	4.7	_
1.02 Intellectual property protection	2	6.5		6.02 Extent of market dominance	33	4.3	_
1.03 Diversion of public funds	2			6.03 Effectiveness of anti-monopoly policy	1	5.7	_
1.04 Public trust in politicians	5	5.8	_	6.04 Effect of taxation on incentives to invest	35	4.3	_
1.05 Irregular payments and bribes	1	6.8	_	6.05 Total tax rate % profits	71	38.1	^
1.06 Judicial independence	1	6.8	_	6.06 No. of procedures to start a business	7	3	_
1.07 Favoritism in decisions of government officials	4	5.6		6.07 Time to start a business days	82	14.0	_
1.08 Efficiency of government spending	16	4.8	_	6.08 Agricultural policy costs	45	4.1	
	8	4.7	$\sim$		3		
1.09 Burden of government regulation				6.09 Prevalence of non-tariff barriers		5.7	
1.10 Efficiency of legal framework in settling disputes	2	6.0		6.10 Trade tariffs % duty	6	1.1	
1.11 Efficiency of legal framework in challenging regulations	1	5.6	~~	6.11 Prevalence of foreign ownership	28	5.2	
1.12 Transparency of government policymaking	8	5.8	_	6.12 Business impact of rules on FDI	3	6.0	_
1.13 Business costs of terrorism	2	6.5	$\overline{}$	6.13 Burden of customs procedures	2	6.3	_
1.14 Business costs of crime and violence	3	6.3	$\sim$	6.14 Imports % GDP	86	37.5	
1.15 Organized crime	1	6.8		6.15 Degree of customer orientation	24	5.5	_
1.16 Reliability of police services	1	6.8		6.16 Buyer sophistication	12	4.7	
1.17 Ethical behavior of firms	2	6.2	_	8	00	4.0	
1.18 Strength of auditing and reporting standards	1	6.6	_	7th pillar: Labor market efficiency	23	4.8	
1.19 Efficacy of corporate boards	2	6.2		7.01 Cooperation in labor-employer relations	22	5.2	_
1.20 Protection of minority shareholders' interests	1			7.02 Flexibility of wage determination	137	2.2	_
1.21 Strength of investor protection 0-10 (best)	66	5.7		7.03 Hiring and firing practices	86	3.5	/
		0.,		7.04 Redundancy costs weeks of salary	34	10.1	_
<sup>↑</sup> 2nd pillar: Infrastructure	26	5.4	_	7.05 Effect of taxation on incentives to work	111	3.3	_
2.01 Quality of overall infrastructure	7	6.1		7.06 Pay and productivity	23	4.7	_
2.02 Quality of roads	21	5.4		7.07 Reliance on professional management	3	6.2	_
2.03 Quality of railroad infrastructure	8	5.6	_	7.08 Country capacity to retain talent	11	5.1	_
•							_
2.04 Quality of port infrastructure	5	6.2		7.09 Country capacity to attract talent	49	3.6	_
2.05 Quality of air transport infrastructure	5	6.3		7.10 Female participation in the labor force ratio to men	10	0.96	
2.06 Available airline seat kilometers millions/week	47	540.9		8th pillar: Financial market development	4	5.5	_
2.07 Quality of electricity supply	9	6.7					
.08 Mobile-cellular telephone subscriptions /100 pop.	36	134.5	$\sim$	8.01 Availability of financial services	3	5.8	
2.09 Fixed-telephone lines /100 pop.	86	8.3	_	8.02 Affordability of financial services	3	5.5	_
0	00			8.03 Financing through local equity market	21	4.9	_
	33	5.5	~	8.04 Ease of access to loans	4	5.4	_
3.01 Government budget balance % GDP	47	-1.9	$\rightarrow$	8.05 Venture capital availability	3	4.8	_
3.02 Gross national savings % GDP	69	20.9	~	8.06 Soundness of banks	1	6.6	_
3.03 Inflation annual % change	46	0.4	~	8.07 Regulation of securities exchanges	2	6.3	_
3.04 Government debt % GDP	96	63.6	_	8.08 Legal rights index 0-10 (best)	31	7	_
0.05 Country credit rating 0-100 (best)	12	89.3	_	9th pillar: Technological readiness	16	6.0	_
3 4th pillar: Health and primary education	1	6.9		9.01 Availability of latest technologies	1	6.6	_
	n/o			·	6	5.9	_
1.01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption			
1.02 Business impact of malaria	n/a	7.0	_	9.03 FDI and technology transfer	42	4.8	
1.03 Tuberculosis incidence cases/100,000 pop.	10	5.6	_	9.04 Internet users % pop.	18	87.7	
.04 Business impact of tuberculosis	1	7.0		9.05 Fixed-broadband Internet subscriptions /100 pop.	22	31.2	_
.05 HIV prevalence % adult pop.	1	0.1	_	9.06 Internet bandwidth kb/s/user		216.4	_
1.06 Business impact of HIV/AIDS	1	7.0		9.07 Mobile-broadband subscriptions /100 pop.	3	153.0	_
.07 Infant mortality deaths/1,000 live births	4	1.9	_	್ಕೆ 10th pillar: Market size	60	4.2	
.08 Life expectancy years	25	81.4					
.09 Quality of primary education	1	6.7	_	10.01 Domestic market size index	60	4.0	-
.10 Primary education enrollment rate net %	8	99.6	_	10.02 Foreign market size index	61	4.8	_
·				10.03 GDP (PPP) PPP \$ billions	60	231.4	_
⇒ 5th pillar: Higher education and training	2	6.2	_	10.04 Exports % GDP	66	35.1	_
.01 Secondary education enrollment rate gross %	2	149.5		→ 11th pillar: Business sophistication	14	5.3	_
.02 Tertiary education enrollment rate gross %	8	87.3	$\sim$				
.03 Quality of the education system	3	5.8	$\sim$	11.01 Local supplier quantity	78	4.4	_
04 Quality of math and science education	2	6.2		11.02 Local supplier quality	15	5.4	_
05 Quality of management schools	11	5.6	~	11.03 State of cluster development	17	5.0	-
06 Internet access in schools	9	5.9	$\sim$	11.04 Nature of competitive advantage	14	5.7	-
07 Local availability of specialized training services	3	6.0	_	11.05 Value chain breadth	19	5.1	-
08 Extent of staff training	11		~~	11.06 Control of international distribution	11	5.1	-
	• •	0.0		11.07 Production process sophistication	6	6.1	_
				11.08 Extent of marketing	87	4.2	-
				11.09 Willingness to delegate authority	4	5.9	
				N/			_
				12th pillar: Innovation	4	5.7	
				12.01 Capacity for innovation	7	5.6	_
				12.02 Quality of scientific research institutions	8	5.8	
				12.03 Company spending on R&D	7	5.3	-
				12.04 University-industry collaboration in R&D	4	5.6	_
				12.05 Gov't procurement of advanced technology products	20	4.0	-

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

20

4.0

## **France**



The Global Competitiveness Index 2017-2018 edition



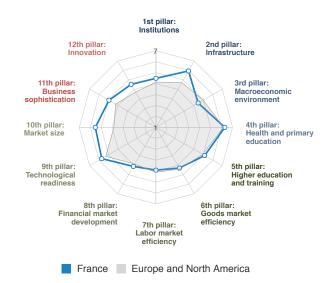
22 / 137

5.2

Key indicators, 2016		Source: International Monetary Fund; World	d Economic Outlook Database (April 2017)
Population millions	64.6	GDP per capita US\$	38,127.7
GDP US\$ billions	2,463.2	GDP (PPP) % world GDP	2.28

#### Performance overview

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition
Global Competitiveness Index	22	5.2	_		Rank
Subindex A: Basic requirements	26	5.5	_		Score
â 1st pillar: Institutions	31	4.8			
<b>↑</b> 2nd pillar: Infrastructure	7	6.1			
	63	4.8			
3 4th pillar: Health and primary education	24	6.4	_		
Subindex B: Efficiency enhancers	20	5.1	_		
⇒ 5th pillar: Higher education and training	22	5.4			
	36	4.7			
7th pillar: Labor market efficiency	56	4.3			
8th pillar: Financial market development	33	4.5	~~		
্য 9th pillar: Technological readiness	21	5.9			
੍ਰਿੰਡ 10th pillar: Market size	8	5.7			
Subindex C: Innovation and sophistication factors	17	5.1			
ூ 11th pillar: Business sophistication	16	5.2	_		
** 12th pillar: Innovation	17	4.9	_		



2014-15

23 / 144

5.1

2015-16

22 / 140

5.1

2016-17

**21** / 138

5.2

France (22nd) remains stable in terms of score. Its strong points are infrastructure, a large and globally integrated market, and a top-20 innovation ecosystem. Of particular concern are a weak macroeconomic

environment (63rd) and historically fairly rigid labor markets (56th). In a continuation of last year's trend, the country's perceived capacity to attract talent falls 10 spots to 61st.

#### Most problematic factors for doing business



2012-13

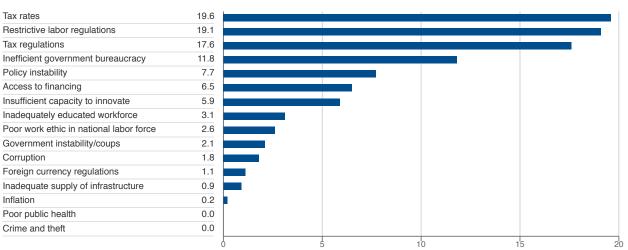
21 / 144

5.1

2013-14

23 / 148

5.1



## **France**

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	е
â 1st pillar: Institutions	31	4.8	~		36	4.7	-
1.01 Property rights	29	5.4	_	6.01 Intensity of local competition	12	5.8	-
.02 Intellectual property protection	15	5.8	_	6.02 Extent of market dominance	25	4.4	-
.03 Diversion of public funds	26	5.0	_	6.03 Effectiveness of anti-monopoly policy	18	4.8	-
.04 Public trust in politicians	44	3.6	~	6.04 Effect of taxation on incentives to invest	124	2.7	-
.05 Irregular payments and bribes	26	5.6		6.05 Total tax rate % profits	128	62.8	-
06 Judicial independence	28	5.3	_	6.06 No. of procedures to start a business	36	5	-
07 Favoritism in decisions of government officials	33	4.0		6.07 Time to start a business days	9	3.5	
	67				67		
08 Efficiency of government spending		3.3	=	6.08 Agricultural policy costs		3.8	
09 Burden of government regulation	115	2.7		6.09 Prevalence of non-tariff barriers	81	4.2	
10 Efficiency of legal framework in settling disputes	30	4.6		6.10 Trade tariffs % duty	6	1.1	
11 Efficiency of legal framework in challenging regulations	28		$\sim$	6.11 Prevalence of foreign ownership	19	5.5	
12 Transparency of government policymaking	53	4.3	$\sim$	6.12 Business impact of rules on FDI	33	5.2	
13 Business costs of terrorism	118	4.2	$\overline{}$	6.13 Burden of customs procedures	36	4.8	
14 Business costs of crime and violence	54	4.9	$\sim$	6.14 Imports % GDP	95	32.8	
15 Organized crime	48	5.1	$\sim$	6.15 Degree of customer orientation	29	5.2	
16 Reliability of police services	29		_~	6.16 Buyer sophistication	31	4.0	
17 Ethical behavior of firms	27	4.9	_	- Dayor deprilosidation			
				7th pillar: Labor market efficiency	56	4.3	
18 Strength of auditing and reporting standards	19	5.7		7.01 Cooperation in labor-employer relations	109	3.9	
19 Efficacy of corporate boards	13	6.0	_				
20 Protection of minority shareholders' interests	31		~	7.02 Flexibility of wage determination	59	5.0	
21 Strength of investor protection 0-10 (best)	31	6.5	_~	7.03 Hiring and firing practices	133	2.4	
A On durilland Information of	7	6.4		7.04 Redundancy costs weeks of salary	44	11.8	
◆ 2nd pillar: Infrastructure	7	6.1	_	7.05 Effect of taxation on incentives to work	119	3.0	
01 Quality of overall infrastructure	8	6.1		7.06 Pay and productivity	63	4.0	
02 Quality of roads	7	6.0	_	7.07 Reliance on professional management	22	5.4	
03 Quality of railroad infrastructure	5	5.8	_	7.08 Country capacity to retain talent	75	3.3	
04 Quality of port infrastructure	27		~	7.09 Country capacity to attract talent	61	3.4	
05 Quality of air transport infrastructure	18	5.7	_	7.10 Female participation in the labor force ratio to men	32	0.90	
, ,				7.10 Female participation in the labor force ratio to men	32	0.90	
06 Available airline seat kilometers millions/week		4,096.4	_	8th pillar: Financial market development	33	4.5	
Of Quality of electricity supply	7	6.8	~		00	4.7	
08 Mobile-cellular telephone subscriptions /100 pop.	98	103.5		8.01 Availability of financial services	36	4.7	
09 Fixed-telephone lines /100 pop.	1	59.7	/	8.02 Affordability of financial services	28	4.6	
2	63	4.0		8.03 Financing through local equity market	22	4.9	
3rd pillar: Macroeconomic environment		4.8		8.04 Ease of access to loans	53	4.1	
01 Government budget balance % GDP	77	-3.3		8.05 Venture capital availability	35	3.4	
02 Gross national savings % GDP	63	21.7	<u></u>	8.06 Soundness of banks	31	5.6	
03 Inflation annual % change	49	0.3	_	8.07 Regulation of securities exchanges	21	5.5	
04 Government debt % GDP	121	96.6		8.08 Legal rights index 0-10 (best)	86	4	
05 Country credit rating 0-100 (best)	16	84.0	_	^			
		0 1.0		💖 9th pillar: Technological readiness	21	5.9	
3 4th pillar: Health and primary education	24	6.4		9.01 Availability of latest technologies	19	6.0	
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	30	5.1	
	n/a	6.7		0, 1	28	5.0	
02 Business impact of malaria				9.03 FDI and technology transfer			
03 Tuberculosis incidence cases/100,000 pop.	26	8.2	<u> </u>	9.04 Internet users % pop.	22	85.6	
04 Business impact of tuberculosis	26	6.5	_	9.05 Fixed-broadband Internet subscriptions /100 pop.	3	42.4	
05 HIV prevalence % adult pop.	73	0.4		9.06 Internet bandwidth kb/s/user	45	97.7	
06 Business impact of HIV/AIDS	41	6.0		9.07 Mobile-broadband subscriptions /100 pop.	38	81.7	
07 Infant mortality deaths/1,000 live births	26	3.5		<sup>A</sup> 7 101 111 111 111 111 111 111 111 111 11	_		
08 Life expectancy years	7	82.7	~	੍ਹੈ 10th pillar: Market size	8	5.7	
09 Quality of primary education	37		$\overline{}$	10.01 Domestic market size index	10	5.6	
10 Primary education enrollment rate net %	22		~	10.02 Foreign market size index	10	6.1	
		50.0	-	10.03 GDP (PPP) PPP \$ billions		2,733.7	
₹ 5th pillar: Higher education and training	22	5.4		10.04 Exports % GDP	85	29.9	
01 Secondary education enrollment rate gross %	20	110.6	¬ -		00	_0.0	
				→ 11th pillar: Business sophistication	16	5.2	
02 Tertiary education enrollment rate gross %	39	64.4		11.01 Local supplier quantity	19	5.0	
03 Quality of the education system	40	4.3		11.02 Local supplier quality	11	5.5	
24 Quality of math and science education	21		_				
5 Quality of management schools	10	5.6		11.03 State of cluster development	21	4.7	
ne Internet access in schools	43	4.8		11.04 Nature of competitive advantage	16	5.7	
7 Local availability of specialized training services	20	5.4	~	11.05 Value chain breadth	10	5.4	
08 Extent of staff training	26	4.8	_	11.06 Control of international distribution	13	5.1	
				11.07 Production process sophistication	17	5.6	
				11.08 Extent of marketing	12	5.4	
				11.09 Willingness to delegate authority	35	4.8	
				11.00 Willinghess to delegate authority	00	4.0	
				12th pillar: Innovation	17	4.9	
				12.01 Capacity for innovation	10	5.5	
				12.02 Quality of scientific research institutions	7	5.8	
				12.03 Company spending on R&D	12	5.2	
				12.04 University-industry collaboration in R&D	35	4.2	
				12.04 Onliversity-industry collaboration in R&D	42	3.6	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

42

31

3.6

4.6

# Gambia, The



The Global Competitiveness Index 2017-2018 edition

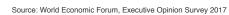


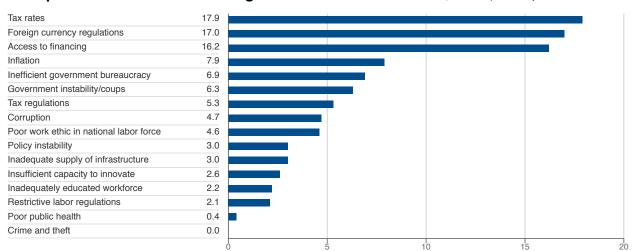
Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	2.1	GDP per capita US\$	469.3
GDP US\$ billions	1.0	GDP (PPP) % world GDP	0.00

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	
Global Competitiveness Index	117	3.6	_		Rank	98 / 144	<b>116</b> / 148	125 / 144	123 / 140	123 / 138	<b>117</b> / 137	
Subindex A: Basic requirements	115	3.6	_		Score	3.8	3.7	3.5	3.5	3.5	3.6	
â 1st pillar: Institutions	46	4.3	_									
<b>1</b> 2nd pillar: Infrastructure	91	3.6	_					1st pillar: Institutions				
	135	2.4	~				h pillar: ovation	7	2nd pi Infrast	llar: ructure		
3 4th pillar: Health and primary education	127	4.2	_			4411	$\rightarrow$		X	0.1.211.		
Subindex B: Efficiency enhancers	111	3.6	~			11th pillar: Business sophistication		1		3rd pillar: Macroecono environment		
😂 5th pillar: Higher education and training	109	3.4	~				///~		X       X	\		
	52	4.5				10th pillar: Market size	$\langle \langle $		4th pillar: Health and primary education			
7th pillar: Labor market efficiency	31	4.6										
8th pillar: Financial market development	t 66	4.0	_			9th pillar: Technological readiness				5th pillar: Higher educa and training	tion	
9th pillar: Technological readiness	104	3.2	_				8th pillar:		6th pilla			
$\zeta_{\psi}^{\pi}$ 10th pillar: Market size	136	1.5	~				cial market evelopment	7th pillar:	Goods i	market		
Subindex C: Innovation and sophistication factors	83	3.5	_					Labor marke efficiency	et			
ூ 11th pillar: Business sophistication	63	4.1	_			_	Gambia. Th	ao Esch	-Saharan A	frico		
** 12th pillar: Innovation	107	2.9	_				Gambia, m	ie Sub	-Sanaran A	iiica		

### Most problematic factors for doing business





# Gambia, The

ndex Component	Rank/13	7 Value	Trend	Inde	x Component	Rank/137	Value	Tr
â 1st pillar: Institutions	46	4.3	_	1	6th pillar: Goods market efficiency	52	4.5	_
1.01 Property rights	57	4.5	$\overline{}$	6.0	1 Intensity of local competition	30	5.5	_
1.02 Intellectual property protection	87	3.8	_		2 Extent of market dominance	55	3.9	_
1.03 Diversion of public funds	48	4.1	_		3 Effectiveness of anti-monopoly policy	34	4.4	_
1.04 Public trust in politicians	36	3.9	_		4 Effect of taxation on incentives to invest	62	3.7	
1.05 Irregular payments and bribes	56	4.3			5 Total tax rate % profits	112	51.3	_
	73	3.8			6 No. of procedures to start a business	71	7	$\overline{}$
1.06 Judicial independence			$\equiv$			107		_
1.07 Favoritism in decisions of government officials	38	3.7			7 Time to start a business days		25.0	_
1.08 Efficiency of government spending	32	4.0			8 Agricultural policy costs	18	4.7	_
1.09 Burden of government regulation	10	4.7	_		Prevalence of non-tariff barriers	73	4.4	_
1.10 Efficiency of legal framework in settling disputes	36	4.5	$\sim$	6.10	Trade tariffs % duty	129	14.2	_
1.11 Efficiency of legal framework in challenging regulations	48	3.7	$\sim$	6.1	1 Prevalence of foreign ownership	23	5.4	_
1.12 Transparency of government policymaking	41	4.5	$\overline{}$	6.12	2 Business impact of rules on FDI	39	5.1	_
1.13 Business costs of terrorism	62	5.2	$\overline{}$	6.13	Burden of customs procedures	41	4.7	/
.14 Business costs of crime and violence	35	5.2	~~	6.14	4 Imports % GDP	35	59.9	
1.15 Organized crime	44	5.3	~		5 Degree of customer orientation	47	4.9	
.16 Reliability of police services	32	5.6			Buyer sophistication	65	3.4	
				0.10	buyer sopriistication	03	5.4	
.17 Ethical behavior of firms	52	4.1	_	£8	7th pillar: Labor market efficiency	31	4.6	-
.18 Strength of auditing and reporting standards	62	4.7	$\sim$	,	•			_
1.19 Efficacy of corporate boards	28	5.6	_		1 Cooperation in labor-employer relations	60	4.4	
.20 Protection of minority shareholders' interests	63	4.1	~		2 Flexibility of wage determination	22	5.6	
.21 Strength of investor protection 0-10 (best)	127	3.5	_~		Hiring and firing practices	65	3.8	_
			_	7.0	4 Redundancy costs weeks of salary	107	26.0	
2nd pillar: Infrastructure	91	3.6	$\overline{}$	7.05	5 Effect of taxation on incentives to work	31	4.5	_
.01 Quality of overall infrastructure	70	4.1	~		6 Pay and productivity	29	4.5	_
02 Quality of roads	69	4.1			7 Reliance on professional management	31	4.9	_
·	00				B Country capacity to retain talent	39	4.0	
.03 Quality of railroad infrastructure	n/a	not assessed						_
.04 Quality of port infrastructure	61	4.4	< .		9 Country capacity to attract talent	31	4.2	=
	65			7.10	Female participation in the labor force ratio to men	43	0.88	
05 Quality of air transport infrastructure		4.5	$\sim$		9th niller, Einensiel market development	66	4.0	_
06 Available airline seat kilometers millions/week	129	10.6	~		8th pillar: Financial market development		4.0	
07 Quality of electricity supply	105	3.5	$\sim$	8.0	Availability of financial services	53	4.4	_
08 Mobile-cellular telephone subscriptions /100 pop.	32	139.6		8.02	2 Affordability of financial services	49	4.1	_
.09 Fixed-telephone lines /100 pop.	113	1.9	$\overline{}$	8.03	3 Financing through local equity market	124	2.5	_
			_		4 Ease of access to loans	102	3.4	_
3rd pillar: Macroeconomic environment	135	2.4	_		5 Venture capital availability	112	2.4	_
01 Government budget balance % GDP	126	-10.2	$\sim$		6 Soundness of banks	63	5.0	_
02 Gross national savings % GDP	124	8.7	~~					_
.03 Inflation annual % change	113	7.2			7 Regulation of securities exchanges	74	4.2	_
04 Government debt % GDP	132	116.1	~	8.08	B Legal rights index 0-10 (best)	23	8	_
			_	9899	9th pillar: Technological readiness	104	3.2	_
05 Country credit rating 0-100 (best)	127	19.5						
4th pillar: Health and primary education	127	4.2		9.0	1 Availability of latest technologies	83	4.5	
			_	9.02	2 Firm-level technology absorption	57	4.6	_
01 Malaria incidence cases/100,000 pop.		20,879.2		9.03	FDI and technology transfer	58	4.5	_
02 Business impact of malaria	49	3.4		9.04	4 Internet users % pop.	121	18.5	_
03 Tuberculosis incidence cases/100,000 pop.	109	174.0	$\overline{}$		5 Fixed-broadband Internet subscriptions /100 pop.	123	0.2	
04 Business impact of tuberculosis	121	4.0	$\overline{}$		6 Internet bandwidth kb/s/user	109	13.3	Ξ
05 HIV prevalence % adult pop.	118	1.7	~					_
06 Business impact of HIV/AIDS	106	4.5		9.0	7 Mobile-broadband subscriptions /100 pop.	119	21.3	-
07 Infant mortality deaths/1,000 live births	122	47.9	~	47	10th pillar: Market size	136	1.5	_
* * *								
08 Life expectancy years	123	60.5			D1 Domestic market size index	136	1.3	-
09 Quality of primary education	57	4.2			22 Foreign market size index	136	2.3	
10 Primary education enrollment rate net %	130	74.8	~	10.0	03 GDP (PPP) PPP \$ billions	137	3.4	~
S PH. 11. 12.1	100	2.4	~	10.0	04 Exports % GDP	78	30.8	/
₹ 5th pillar: Higher education and training	109	3.4			•			
01 Secondary education enrollment rate gross %	111	57.5	_	್ಯಾರ	11th pillar: Business sophistication	63	4.1	_
22 Tertiary education enrollment rate gross %	134	3.1	/	11.0	1 Local supplier quantity	18	5.0	-
O3 Quality of the education system	37	4.4	_		02 Local supplier quality	43	4.7	_
24 Quality of math and science education	102	3.4						
•					33 State of cluster development	50	4.0	_
05 Quality of management schools	60	4.3			Nature of competitive advantage	86	3.2	_
106 Internet access in schools	73	4.1			05 Value chain breadth	70	3.8	-
7 Local availability of specialized training services	69	4.3		11.0	06 Control of international distribution	116	3.0	-
8 Extent of staff training	76	3.8	$\overline{}$	11.0	7 Production process sophistication	104	3.2	-
					08 Extent of marketing	110	4.0	_
					09 Willingness to delegate authority	22	5.3	
						22	3.3	
				辮	12th pillar: Innovation	107	2.9	-
				12.0	1 Capacity for innovation	61	4.2	_
					02 Quality of scientific research institutions	112	3.0	-
					O3 Company spending on R&D	129	2.5	-
						135	2.3	_
					04 University-industry collaboration in R&D			_
				12 (	05 Gov't procurement of advanced technology products	27	3.9	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

27

114

3.9

# Georgia



The Global Competitiveness Index 2017-2018 edition



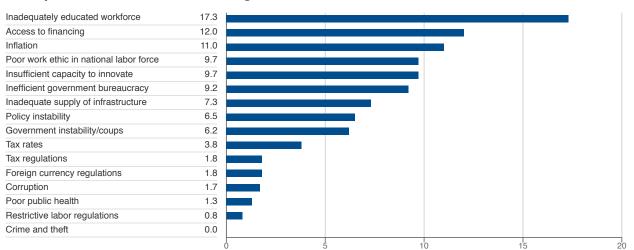
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20					
Population millions	3.7	GDP per capita US\$	3,842.4				
GDP US\$ billions	14.2	GDP (PPP) % world GDP	0.03				

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	67	4.3			Rank	<b>77</b> / 144	<b>72</b> / 148	69 / 144	66 / 140	<b>59</b> / 138	<b>67</b> / 137
Subindex A: Basic requirements	54	4.8	_		Score	4.1	4.2	4.2	4.2	4.3	4.3
â 1st pillar: Institutions	50	4.2	_								
<b>1</b> 2nd pillar: Infrastructure	69	4.2						1st pillar: Institutions			
	48	5.1				12th p Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	69	5.8				4411			$\langle \rangle$	0.4.30	
Subindex B: Efficiency enhancers	75	4.1	_			11th pillar: Business sophistication	$\langle \langle \rangle \rangle$	1		3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	87	4.0				/					
	50	4.5	_			10th pillar: Market size	1			4th pillar: Health and education	
7th pillar: Labor market efficiency	53	4.4				\					
8th pillar: Financial market development	63	4.1				9th pillar: Technological readiness	$\backslash \backslash \backslash$			5th pillar: Higher educat and training	ion
% 9th pillar: Technological readiness	70	4.3					th pillar:		6th pillar		
ึ่ง 10th pillar: Market size	100	3.1				Financia	l market lopment	7th pillar:	Goods m	narket	
Subindex C: Innovation and sophistication factors	112	3.2	_					Labor market efficiency			
್ಯೆ 11th pillar: Business sophistication	99	3.7		<del></del>			Goo	orgio E	ırasia		
12th pillar: Innovation	118	2.8					- Ged	orgia 📗 Eu	มเสรเส		

### Most problematic factors for doing business





# Georgia

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tren
â 1st pillar: Institutions	50	4.2	_	\$	6th pillar: Goods market efficiency	50	4.5	_
1.01 Property rights	46	4.7	_	6.0	1 Intensity of local competition	94	4.8	
1.02 Intellectual property protection	95	3.7		6.02	2 Extent of market dominance	67	3.7	_
1.03 Diversion of public funds	51	4.0	_	6.03	3 Effectiveness of anti-monopoly policy	112	3.2	
1.04 Public trust in politicians	73	2.9		6.0	4 Effect of taxation on incentives to invest	14	4.9	_
1.05 Irregular payments and bribes	30	5.4	$\overline{}$	6.05	5 Total tax rate % profits	8	16.4	_
1.06 Judicial independence	87	3.6	_	6.0	No. of procedures to start a business	7	3	
1.07 Favoritism in decisions of government officials	57	3.3	_	6.0	7 Time to start a business days	6	3.0	
1.08 Efficiency of government spending	79	3.0		6.08	B Agricultural policy costs	104	3.3	
1.09 Burden of government regulation	9	4.7	_		Prevalence of non-tariff barriers	25	4.9	_
1.10 Efficiency of legal framework in settling disputes	79	3.5			Trade tariffs % duty	4	0.9	_
1.11 Efficiency of legal framework in challenging regulations	67	3.4			1 Prevalence of foreign ownership	70	4.5	_
1.12 Transparency of government policymaking	46	4.5	_		2 Business impact of rules on FDI	29	5.2	
1.13 Business costs of terrorism	54	5.3			Burden of customs procedures	14	5.4	_
1.14 Business costs of crime and violence	30	5.2			4 Imports % GDP	29	62.7	
					•			=
1.15 Organized crime	38	5.4			5 Degree of customer orientation	111	4.0	
1.16 Reliability of police services	42	5.2	_	6.16	Buyer sophistication	85	3.2	
1.17 Ethical behavior of firms	66	3.9		£8	7th pillar: Labor market efficiency	53	4.4	_
1.18 Strength of auditing and reporting standards	78	4.5	_	,	•			
1.19 Efficacy of corporate boards	92	4.6	_		1 Cooperation in labor-employer relations	87	4.2	_
1.20 Protection of minority shareholders' interests	112	3.6	~		2 Flexibility of wage determination	35	5.4	
1.21 Strength of investor protection 0-10 (best)	7	7.7	~		3 Hiring and firing practices	28	4.4	_
AAA . I . W I . C I I	00	4.0			4 Redundancy costs weeks of salary	20	8.6	_/
2nd pillar: Infrastructure	69	4.2		7.05	5 Effect of taxation on incentives to work	14	5.0	_
2.01 Quality of overall infrastructure	76	3.9	$\overline{}$	7.06	Pay and productivity	95	3.6	_
2.02 Quality of roads	82	3.8	_	7.0	7 Reliance on professional management	70	4.2	_
2.03 Quality of railroad infrastructure	39	3.8		7.08	B Country capacity to retain talent	99	3.0	
2.04 Quality of port infrastructure	69	4.1		7.09	9 Country capacity to attract talent	101	2.7	_
2.05 Quality of air transport infrastructure	69	4.3	_		Female participation in the labor force ratio to men	84	0.76	_
2.06 Available airline seat kilometers millions/week	91		_					
2.07 Quality of electricity supply	68	5.0			8th pillar: Financial market development	63	4.1	_
2.08 Mobile-cellular telephone subscriptions /100 pop.	43	129.1		8.0	1 Availability of financial services	92	3.9	_
	54	19.4	$\leq$		2 Affordability of financial services	81	3.6	_
2.09 Fixed-telephone lines /100 pop.	54	19.4	_		3 Financing through local equity market	131	2.4	
	48	5.1			4 Ease of access to loans	46	4.2	
3.01 Government budget balance % GDP	40	-16	~~		5 Venture capital availability	80	2.7	
•								~
3.02 Gross national savings % GDP	80		<i>~</i>		6 Soundness of banks	64	5.0	
3.03 Inflation annual % change	1	2.1			7 Regulation of securities exchanges	102	3.8	=
3.04 Government debt % GDP	59	44.9		8.08	B Legal rights index 0-10 (best)	13	9	
3.05 Country credit rating 0-100 (best)	81	38.5		28/38	9th pillar: Technological readiness	70	4.3	_
3 4th pillar: Health and primary education	69	5.8			1 Availability of latest technologies	111	4.0	_
4.01 Malaria incidence cases/100,000 pop.	1	0.0		9.02	2 Firm-level technology absorption	108	4.0	
4.02 Business impact of malaria	n/a	5.7			3 FDI and technology transfer	94	4.0	_
4.03 Tuberculosis incidence cases/100,000 pop.	94	99.0	~		4 Internet users % pop.	85	50.0	~
4.04 Business impact of tuberculosis	72	5.4			5 Fixed-broadband Internet subscriptions /100 pop.	57	15.8	_
4.05 HIV prevalence % adult pop.	85				6 Internet bandwidth kb/s/user	47	92.1	
4.05 Business impact of HIV/AIDS	80	5.1			7 Mobile-broadband subscriptions /100 pop.	73	57.7	
	62		$\leq$			73	37.7	
4.07 Infant mortality deaths/1,000 live births		10.6	$\rightarrow$	+ × ×	10th pillar: Market size	100	3.1	_
4.08 Life expectancy years	68	74.8			D1 Domestic market size index	100	2.9	_
4.09 Quality of primary education	106							
4.10 Primary education enrollment rate net %	18	99.0	~~		02 Foreign market size index	100	3.8	
⇒ 5th pillar: Higher education and training	87	4.0			03 GDP (PPP) PPP \$ billions	104	37.2	_
				10.0	04 Exports % GDP	62	37.9	~
5.01 Secondary education enrollment rate gross %	33	103.7	بِر	~8	11th pillar: Business sophistication	99	3.7	
5.02 Tertiary education enrollment rate gross %	67	43.4			·			
5.03 Quality of the education system	107	3.0			101 Local supplier quantity	129	3.6	_
5.04 Quality of math and science education	103				D2 Local supplier quality	115	3.7	
5.05 Quality of management schools	113	3.6			3 State of cluster development	127	2.9	
5.06 Internet access in schools	68	4.1	$\sim$		Nature of competitive advantage	57	3.8	_
5.07 Local availability of specialized training services	131	3.2	_	11.0	05 Value chain breadth	75	3.8	~
5.08 Extent of staff training	125	3.3		11.0	06 Control of international distribution	86	3.4	_
Ŭ				11.0	7 Production process sophistication	88	3.5	_
				11.0	08 Extent of marketing	85	4.2	_
					09 Willingness to delegate authority	102	3.9	
					12th pillar: Innovation	118	2.8	
					O1 Capacity for innovation	99	3.7	
					O2 Quality of scientific research institutions	127	2.7	
				12.0	O3 Company spending on R&D	122	2.7	_
				12.0	04 University-industry collaboration in R&D	116	2.8	_
				121	05 Gov't procurement of advanced technology products	78	3.2	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

78

125

3.2

# Germany



The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April				
Population millions	82.7	GDP per capita US\$	41,902.3			
GDP US\$ billions	3,466.6	GDP (PPP) % world GDP	3.32			

#### Performance overview

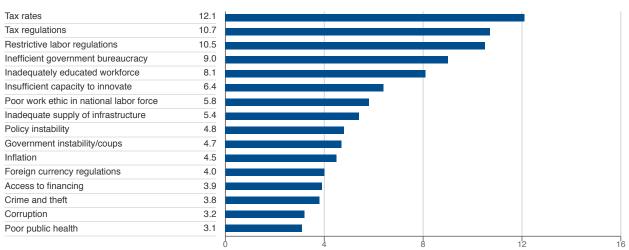
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	5	5.7	_		Rank	6 / 144	4 / 148	5 / 144	4 / 140	5 / 138	5 / 137
Subindex A: Basic requirements	11	6.0			Score	5.5	5.5	5.5	5.5	5.6	5.7
â 1st pillar: Institutions	21	5.3									
<b>1</b> 2nd pillar: Infrastructure	10	6.0	_					1st pillar: Institutions			
	12	6.1	_			12th pil Innovat		7	2nd pilla Infrastru		
3 4th pillar: Health and primary education	13	6.5	_			440.000				0.4	
Subindex B: Efficiency enhancers	6	5.5	_			11th pillar: Business sophistication				3rd pillar: Macroeconom environment	ic
⇒ 5th pillar: Higher education and training	15	5.7	~			/ ,					
fth pillar: Goods market efficiency	11	5.3				10th pillar: Market size				4th pillar: Health and education	primary
7th pillar: Labor market efficiency	14	5.0				\					
8th pillar: Financial market development	12	5.0	_			9th pillar: Technological readiness			///	th pillar: ligher education and training	on
% 9th pillar: Technological readiness	8	6.2				0+h	pillar:		6th pillar:		
್ಳೆ 10th pillar: Market size	5	6.0				Financial develo	narket	7th pillar:	Goods ma	arket	
Subindex C: Innovation and sophistication factors	3	5.6					I	abor market efficiency			
ം 11th pillar: Business sophistication	5	5.6	_			Corm	nonu III	Furana and	North Am	orioo	
* 12th pillar: Innovation	5	5.6				Germ	iaily	Europe and	INOTHI AITH	enca	

Germany (5th) remains in the same position as last year, while slightly increasing its overall score. The excellent performance of its innovation and business ecosystem is particularly noteworthy: Germany's

innovation capacity and business sophistication are assessed as 5th best in the world, supported by high levels of technological readiness (8th) and high-quality infrastructure (10th).

#### Most problematic factors for doing business





# Germany

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	e Tre
☆ 1st pillar: Institutions	21	5.3			6th pillar: Goods market efficiency	11	5.3	_
1.01 Property rights	23	5.6	~	6.01	1 Intensity of local competition	10	5.9	_
1.02 Intellectual property protection	20	5.7	~		2 Extent of market dominance	4	5.5	
1.03 Diversion of public funds	21	5.2			3 Effectiveness of anti-monopoly policy	8	5.3	_
1.04 Public trust in politicians	13	5.1			4 Effect of taxation on incentives to invest	22	4.6	_
1.05 Irregular payments and bribes	29	5.5	_		5 Total tax rate % profits	105	48.9	_
1.06 Judicial independence	24	5.5	_		6 No. of procedures to start a business	105	9	_
1.07 Favoritism in decisions of government officials	10	5.0			7 Time to start a business days	67	10.5	_
1.08 Efficiency of government spending	6	5.4			B Agricultural policy costs	8	5.0	
, , ,					• • •			
1.09 Burden of government regulation	7	4.8			9 Prevalence of non-tariff barriers	16	5.1	_
1.10 Efficiency of legal framework in settling disputes	15				Trade tariffs % duty	6	1.1	
1.11 Efficiency of legal framework in challenging regulations	9	5.1			1 Prevalence of foreign ownership	34	5.1	
1.12 Transparency of government policymaking	18	5.5			2 Business impact of rules on FDI	30	5.2	_
1.13 Business costs of terrorism	67	5.1	$\sim$		Burden of customs procedures	17	5.3	_
1.14 Business costs of crime and violence	51	5.0	$\sim$	6.14	4 Imports % GDP	80	39.4	
1.15 Organized crime	59	5.0	_	6.15	5 Degree of customer orientation	15	5.7	_
1.16 Reliability of police services	38	5.3		6.16	Buyer sophistication	8	4.8	_
1.17 Ethical behavior of firms	22	5.3	$\sim$	50				
1.18 Strength of auditing and reporting standards	24	5.7	_	W)	7th pillar: Labor market efficiency	14	5.0	
1.19 Efficacy of corporate boards	24	5.6	_	7.0	Cooperation in labor-employer relations	21	5.3	_
1.20 Protection of minority shareholders' interests	17	5.3		7.02	2 Flexibility of wage determination	114	4.3	_
1.21 Strength of investor protection 0-10 (best)	51	6.0			3 Hiring and firing practices	18	4.6	_
1.21 On ongui or investor protection 0-10 (best)	ان ا	0.0			4 Redundancy costs weeks of salary	91	21.6	_
1 2nd pillar: Infrastructure	10	6.0			5 Effect of taxation on incentives to work	34	4.4	_
2.01 Quality of overall infrastructure	12	5.7			6 Pay and productivity	7	5.2	_
2.02 Quality of roads	15	5.7			7 Reliance on professional management	17	5.6	Ξ
•			$\overline{}$					
2.03 Quality of railroad infrastructure	9	5.5			8 Country capacity to retain talent	13	5.1	
2.04 Quality of port infrastructure	18	5.5			Country capacity to attract talent	13	5.0	=
2.05 Quality of air transport infrastructure	16	5.8	_	7.10	Female participation in the labor force ratio to men	39	0.89	
2.06 Available airline seat kilometers millions/week	6	5,574.0	_		8th pillar: Financial market development	12	5.0	_
2.07 Quality of electricity supply	29	6.2	$\sim$					
2.08 Mobile-cellular telephone subscriptions /100 pop.	76	114.5	~		1 Availability of financial services	16	5.3	_
2.09 Fixed-telephone lines /100 pop.	6	53.7	/	8.02	2 Affordability of financial services	7	5.2	_
0				8.03	Financing through local equity market	8	5.4	_
	12	6.1		8.04	4 Ease of access to loans	10	5.2	_
3.01 Government budget balance % GDP	8	0.8		8.05	5 Venture capital availability	6	4.6	_
3.02 Gross national savings % GDP	33	27.6	_	8.06	Soundness of banks	53	5.3	_
3.03 Inflation annual % change	48	0.4	/	8.07	Regulation of securities exchanges	24	5.4	
3.04 Government debt % GDP	100	67.6	~		B Legal rights index 0-10 (best)	50	6	_
8.05 Country credit rating 0-100 (best)	3	94.7	_	0				
		0		88/30	9th pillar: Technological readiness	8	6.2	
💍 4th pillar: Health and primary education	13	6.5		9.0	Availability of latest technologies	16	6.1	_
1.01 Malaria incidence cases/100,000 pop.	n/a	s.l.			2 Firm-level technology absorption	12	5.7	_
1.02 Business impact of malaria	n/a	6.3			3 FDI and technology transfer	11	5.4	
1.03 Tuberculosis incidence cases/100,000 pop.	25	8.1			4 Internet users % pop.	14	89.6	
1.04 Business impact of tuberculosis	59	5.7	-		5 Fixed-broadband Internet subscriptions /100 pop.	9	38.1	
4.05 HIV prevalence % adult pop.	1 50	0.1			6 Internet bandwidth kb/s/user	43	107.5	_/
1.06 Business impact of HIV/AIDS	50	5.8		9.07	7 Mobile-broadband subscriptions /100 pop.	40	80.2	_
1.07 Infant mortality deaths/1,000 live births	20	3.1	$\sim$	K7	10th pillar: Market size	5	6.0	_
1.08 Life expectancy years	28	81.1						_
.09 Quality of primary education	20	5.3			D1 Domestic market size index	5	5.8	
1.10 Primary education enrollment rate net %	23	98.7	~~		02 Foreign market size index	3	6.5	
Sth willow Higher advertises and detailed	45	E 7	~		03 GDP (PPP) PPP \$ billions		3,980.3	_
⇒ 5th pillar: Higher education and training	15	5.7		10.0	04 Exports % GDP	41	46.4	
5.01 Secondary education enrollment rate gross %	36	102.7	$\sim$	2	11th pillary Business combinitiestics	5	5.6	_
5.02 Tertiary education enrollment rate gross %	33	68.3	_		11th pillar: Business sophistication		5.6	
0.03 Quality of the education system	9	5.4		11.0	1 Local supplier quantity	4	5.7	_
i.04 Quality of math and science education	15	5.3	_	11.0	D2 Local supplier quality	5	5.8	_
.05 Quality of management schools	23	5.3		11.0	3 State of cluster development	4	5.4	_
.06 Internet access in schools	31	5.2			04 Nature of competitive advantage	11	5.8	-
.07 Local availability of specialized training services	17	5.6			05 Value chain breadth	7	5.6	_
7 1					06 Control of international distribution	2	5.5	
.08 Extent of staff training	6	5.4	$\overline{}$		77 Production process sophistication	10	5.9	_
					08 Extent of marketing	6		_
					· ·		5.5	
				11.0	9 Willingness to delegate authority	13	5.5	
				辦	12th pillar: Innovation	5	5.6	-
				12.0	1 Capacity for innovation	5	5.8	-
					02 Quality of scientific research institutions	11	5.7	_
					03 Company spending on R&D	4	5.6	_
					04 University-industry collaboration in R&D	7	5.4	_
					05 Gov't procurement of advanced technology products	6	4.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

4.9

## Ghana

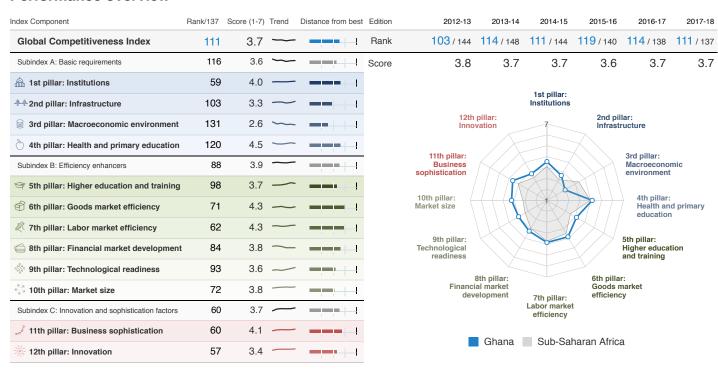
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#### The Global Competitiveness Index 2017-2018 edition



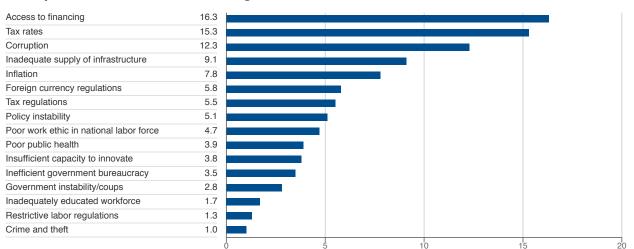
Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	27.6	GDP per capita US\$	1,569.0
GDP US\$ billions	43.3	GDP (PPP) % world GDP	0.10

#### Performance overview



#### Most problematic factors for doing business





# Ghana

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	Э
── 1st pillar: Institutions	59	4.0		<b>❸</b> 6th pillar: Goods market efficiency	71	4.3	-
1.01 Property rights	70	4.3		6.01 Intensity of local competition	81	5.0	-
1.02 Intellectual property protection	70	4.1	_	6.02 Extent of market dominance	46	4.0	_
1.03 Diversion of public funds	86	3.2	~	6.03 Effectiveness of anti-monopoly policy	62	3.8	-
.04 Public trust in politicians	52	3.4		6.04 Effect of taxation on incentives to invest	74	3.5	-
.05 Irregular payments and bribes	103	3.2	~	6.05 Total tax rate % profits	47	32.7	-
.06 Judicial independence	43	4.6		6.06 No. of procedures to start a business	92	8	
.07 Favoritism in decisions of government officials	68	3.0		6.07 Time to start a business days	82	14.0	
.08 Efficiency of government spending	61	3.3	_	6.08 Agricultural policy costs	58	3.9	_
1.09 Burden of government regulation	49			6.09 Prevalence of non-tariff barriers	74	4.3	_
· · ·							_
.10 Efficiency of legal framework in settling disputes	37	4.4	_	6.10 Trade tariffs % duty	113	10.9	
11 Efficiency of legal framework in challenging regulations	38	3.9		6.11 Prevalence of foreign ownership	31	5.2	_
.12 Transparency of government policymaking	80	3.9		6.12 Business impact of rules on FDI	66	4.6	_
.13 Business costs of terrorism	95	4.7		6.13 Burden of customs procedures	83	3.9	
.14 Business costs of crime and violence	85	4.3	$\sim$	6.14 Imports % GDP	69	43.8	-
.15 Organized crime	82	4.6	$\sim$	6.15 Degree of customer orientation	60	4.7	-
.16 Reliability of police services	48	4.9	~	6.16 Buyer sophistication	99	3.0	-
17 Ethical behavior of firms	50	4.2		-Aa			
18 Strength of auditing and reporting standards	93	4.2		₹ 7th pillar: Labor market efficiency	62	4.3	
19 Efficacy of corporate boards	50			7.01 Cooperation in labor-employer relations	59	4.4	
				7.02 Flexibility of wage determination	91	4.6	
20 Protection of minority shareholders' interests	55		~	7.03 Hiring and firing practices	22	4.5	
21 Strength of investor protection 0-10 (best)	79	5.3	_				
↑ 2nd pillar: Infrastructure	103	3.3		7.04 Redundancy costs weeks of salary	131	49.8	
•				7.05 Effect of taxation on incentives to work	49	4.2	
1 Quality of overall infrastructure	85	3.7	$\sim$	7.06 Pay and productivity	71	3.9	
2 Quality of roads	78	3.9	$\sim$	7.07 Reliance on professional management	30	5.0	
O3 Quality of railroad infrastructure	93	1.8	$\sim$	7.08 Country capacity to retain talent	43	3.9	
04 Quality of port infrastructure	84	3.6	~	7.09 Country capacity to attract talent	36	4.0	
05 Quality of air transport infrastructure	94	3.9	~	7.10 Female participation in the labor force ratio to men	7	0.97	
06 Available airline seat kilometers millions/week	81	126.1	~				
77 Quality of electricity supply	111	3.1		8th pillar: Financial market development	84	3.8	
	33	139.1		8.01 Availability of financial services	94	3.8	
08 Mobile-cellular telephone subscriptions /100 pop.			=	8.02 Affordability of financial services	110	3.2	
09 Fixed-telephone lines /100 pop.	121	0.9			59	3.8	
3rd pillar: Macroeconomic environment	131	2.6	~	8.03 Financing through local equity market			
				8.04 Ease of access to loans	113	3.1	
01 Government budget balance % GDP	124	-8.3		8.05 Venture capital availability	91	2.6	
02 Gross national savings % GDP	87	17.9	~	8.06 Soundness of banks	98	4.3	
03 Inflation annual % change	132	17.5		8.07 Regulation of securities exchanges	85	4.0	
04 Government debt % GDP	105	72.4		8.08 Legal rights index 0-10 (best)	31	7	
05 Country credit rating 0-100 (best)	106	28.1	_	% 9th pillar: Technological readiness	93	3.6	
4th pillar: Health and primary education	120	4.5		9.01 Availability of latest technologies	103	4.1	
01 Malaria incidence cases/100,000 pop.	66 0	27,163.0	_^	9.02 Firm-level technology absorption	97	4.2	
				6, 1			
D2 Business impact of malaria	50	3.4		9.03 FDI and technology transfer	78	4.3	
03 Tuberculosis incidence cases/100,000 pop.	107	160.0		9.04 Internet users % pop.	95	34.7	
04 Business impact of tuberculosis	117	4.0		9.05 Fixed-broadband Internet subscriptions /100 pop.	117	0.3	
05 HIV prevalence % adult pop.	116	1.6	$\overline{}$	9.06 Internet bandwidth kb/s/user	111	9.9	
06 Business impact of HIV/AIDS	104	4.5		9.07 Mobile-broadband subscriptions /100 pop.	50	71.3	
07 Infant mortality deaths/1,000 live births	117	42.8	~	* Z			
08 Life expectancy years	120	61.5		্ঠী 10th pillar: Market size	72	3.8	
09 Quality of primary education	96		~	10.01 Domestic market size index	73	3.5	
10 Primary education enrollment rate net %	110			10.02 Foreign market size index	71	4.5	
10 1 Illinary education enrollment rate het %	110	07.4	~	10.03 GDP (PPP) PPP \$ billions		121.7	
₹ 5th pillar: Higher education and training	98	3.7	_	10.04 Exports % GDP	57	39.9	
01 Secondary education enrollment rate gross %	106	62.1	^	•	60		
02 Tertiary education enrollment rate gross %	103	16.2		11th pillar: Business sophistication	60	4.1	
03 Quality of the education system	48	4.1	~	11.01 Local supplier quantity	60	4.6	
04 Quality of math and science education	90		$\sim$	11.02 Local supplier quality	81	4.1	
25 Quality of management schools	48		_	11.03 State of cluster development	40	4.2	
6 Internet access in schools	87			11.04 Nature of competitive advantage	64		
				11.05 Value chain breadth	61	3.9	
77 Local availability of specialized training services	47			11.06 Control of international distribution	83	3.4	
8 Extent of staff training	67	4.0					
				11.07 Production process sophistication	77	3.7	
				11.08 Extent of marketing	58	4.5	
				11.09 Willingness to delegate authority	69	4.3	
				* 12th pillar: Innovation	57	3.4	
				12.01 Capacity for innovation	63	4.2	
				12.02 Quality of scientific research institutions	74	3.7	
				12.03 Company spending on R&D	42	3.6	
				12.04 University-industry collaboration in R&D	65	3.5	
				12.05 Gov't procurement of advanced technology products	35	3.3	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

35

81

3.7

## Greece



The Global Competitiveness Index 2017-2018 edition



2017-18

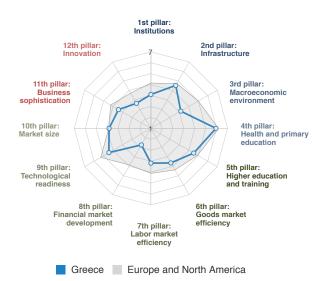
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4.0

Key indicators, 2016		Source: International Monetary Fund; World	d Economic Outlook Database (April 2017)
Population millions	10.9	GDP per capita US\$	17,900.7
GDP US\$ billions	194.2	GDP (PPP) % world GDP	0.24

#### Performance overview

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition
Global Competitiveness Index	87	4.0			Rank
Subindex A: Basic requirements	70	4.6			Score
â 1st pillar: Institutions	87	3.7	_		
↑ 2nd pillar: Infrastructure	38	4.9			
	117	3.7	~		
3 4th pillar: Health and primary education	48	6.1	_		
Subindex B: Efficiency enhancers	77	4.0	_		
⇒ 5th pillar: Higher education and training	44	4.9			
6th pillar: Goods market efficiency	93	4.1	_		
7th pillar: Labor market efficiency	110	3.7	_		
8th pillar: Financial market development	133	2.5			
9th pillar: Technological readiness	50	4.8	_		
੍ਰਿੰਤ 10th pillar: Market size	58	4.3	_		
Subindex C: Innovation and sophistication factors	71	3.6	_		
3 11th pillar: Business sophistication	73	3.9			
* 12th pillar: Innovation	75	3.3	_		



2014-15

81 / 144

4.0

2015-16

81 / 140

4.0

2016-17

86 / 138

4.0

#### Most problematic factors for doing business



2012-13

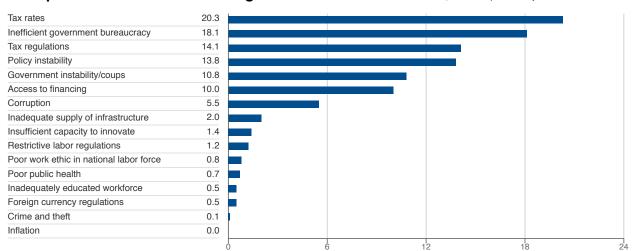
96 / 144

3.9

2013-14

3.9

91 / 148



## Greece

ex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value
1st pillar: Institutions	87	3.7	_	<b>❸</b> 6th pillar: Goods market efficiency	93	4.1
1 Property rights	98	3.9	_	6.01 Intensity of local competition	71	5.1
2 Intellectual property protection	61	4.3	_	6.02 Extent of market dominance	58	3.9
3 Diversion of public funds	79	3.3	_	6.03 Effectiveness of anti-monopoly policy	81	3.5
04 Public trust in politicians	106	2.2		6.04 Effect of taxation on incentives to invest	137	1.8
5 Irregular payments and bribes	65	4.0		6.05 Total tax rate % profits	111	50.7
06 Judicial independence	71	3.8		6.06 No. of procedures to start a business	36	5
	93	2.6	_	•	78	13.0
77 Favoritism in decisions of government officials				6.07 Time to start a business days		
8 Efficiency of government spending	132	1.8		6.08 Agricultural policy costs	128	2.9
9 Burden of government regulation	130	2.3		6.09 Prevalence of non-tariff barriers	27	4.9
10 Efficiency of legal framework in settling disputes	133	2.2	$\overline{}$	6.10 Trade tariffs % duty	6	1.1
11 Efficiency of legal framework in challenging regulations	114	2.6	$\overline{}$	6.11 Prevalence of foreign ownership	94	4.2
12 Transparency of government policymaking	122	3.2	_	6.12 Business impact of rules on FDI	115	3.8
13 Business costs of terrorism	59	5.3	_	6.13 Burden of customs procedures	70	4.1
14 Business costs of crime and violence	52	4.9		6.14 Imports % GDP	103	30.5
	55	5.1		6.15 Degree of customer orientation	48	4.9
15 Organized crime						
16 Reliability of police services	68	4.4		6.16 Buyer sophistication	83	3.2
17 Ethical behavior of firms	74	3.7		7th pillar: Labor market efficiency	110	3.7
18 Strength of auditing and reporting standards	109	3.9				0.7
19 Efficacy of corporate boards	108	4.4		7.01 Cooperation in labor-employer relations	97	4.0
20 Protection of minority shareholders' interests	84	3.9	_	7.02 Flexibility of wage determination	108	4.4
21 Strength of investor protection 0-10 (best)	41		_	7.03 Hiring and firing practices	93	3.5
	71	5.0	_	7.04 Redundancy costs weeks of salary	69	15.9
◆ 2nd pillar: Infrastructure	38	4.9		7.05 Effect of taxation on incentives to work	136	2.2
21 Quality of overall infrastructure	53		~			3.5
•		4.3	$\sim$	7.06 Pay and productivity	98	
02 Quality of roads	44	4.5		7.07 Reliance on professional management	81	4.0
O3 Quality of railroad infrastructure	66	2.8		7.08 Country capacity to retain talent	121	2.5
04 Quality of port infrastructure	52	4.5	_	7.09 Country capacity to attract talent	133	1.9
05 Quality of air transport infrastructure	53	4.8		7.10 Female participation in the labor force ratio to men	78	0.78
06 Available airline seat kilometers millions/week	34	828.5	/			
O7 Quality of electricity supply	54	5.4		8th pillar: Financial market development	133	2.5
08 Mobile-cellular telephone subscriptions /100 pop.	80	112.8	_	8.01 Availability of financial services	131	3.0
			<del></del>	8.02 Affordability of financial services	132	2.5
09 Fixed-telephone lines /100 pop.	12	46.1	_		134	2.2
3rd pillar: Macroeconomic environment	117	3.7	~	8.03 Financing through local equity market		
•				8.04 Ease of access to loans	135	1.8
O1 Government budget balance % GDP	14	0.0	~	8.05 Venture capital availability	134	1.8
02 Gross national savings % GDP	121	9.8	~	8.06 Soundness of banks	134	2.6
03 Inflation annual % change	57	0.0	$\overline{}$	8.07 Regulation of securities exchanges	129	3.1
04 Government debt % GDP	137	181.3	/	8.08 Legal rights index 0-10 (best)	96	3
05 Country credit rating 0-100 (best)	108	27.9		ર્ષ્ય ભાગમાં માના માના માના માના માના માના માના મ	50	4.8
4th pillar: Health and primary education	48	6.1		9th pillar: Technological readiness		
				9.01 Availability of latest technologies	62	4.9
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	75	4.3
D2 Business impact of malaria	n/a	6.5		9.03 FDI and technology transfer	112	3.7
03 Tuberculosis incidence cases/100,000 pop.	6	4.5	<u> </u>	9.04 Internet users % pop.	56	69.1
04 Business impact of tuberculosis	29	6.4	_	9.05 Fixed-broadband Internet subscriptions /100 pop.	17	32.5
05 HIV prevalence % adult pop.	72			9.06 Internet bandwidth kb/s/user	60	68.7
D6 Business impact of HIV/AIDS	26	6.3		9.07 Mobile-broadband subscriptions /100 pop.	81	51.3
					01	31.3
77 Infant mortality deaths/1,000 live births	29		_	🖏 10th pillar: Market size	58	4.3
08 Life expectancy years	21	81.6				
O9 Quality of primary education	77	3.9		10.01 Domestic market size index	55	4.1
10 Primary education enrollment rate net %	61	96.3		10.02 Foreign market size index	60	4.8
The niller, Higher advection and training	44	4.9		10.03 GDP (PPP) PPP \$ billions		289.4
5th pillar: Higher education and training			~	10.04 Exports % GDP	91	28.7
21 Secondary education enrollment rate gross %	28	106.5	_	مر 11th pillar: Business sophistication	73	3.9
D2 Tertiary education enrollment rate gross %	1	113.9		11.01 Local supplier quantity		4.0
O3 Quality of the education system	106	3.0			89	4.2
Quality of math and science education	53	4.4		11.02 Local supplier quality	61	4.4
D5 Quality of management schools	79	4.1		11.03 State of cluster development	121	3.0
06 Internet access in schools	99	3.6	$\overline{}$	11.04 Nature of competitive advantage	48	4.0
77 Local availability of specialized training services	100	4.0		11.05 Value chain breadth	72	3.8
8 Extent of staff training	83	3.7	_	11.06 Control of international distribution	58	3.8
Extent of stall training	00	5.7		11.07 Production process sophistication	58	4.0
				11.08 Extent of marketing	82	
				· · · · · · · · · · · · · · · · · · ·		4.2
				11.09 Willingness to delegate authority	93	4.0
				* 12th pillar: Innovation	75	3.3
				and the state of t		0.0
				12.01 Capacity for innovation	85	3.9
				12.01 Capacity for innovation 12.02 Quality of scientific research institutions	85 65	3.9
				12.02 Quality of scientific research institutions	65	3.9

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

131

10

2.5

## Guatemala



> 4th pillar: Health and primary education

The Global Competitiveness Index 2017-2018 edition



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4.1

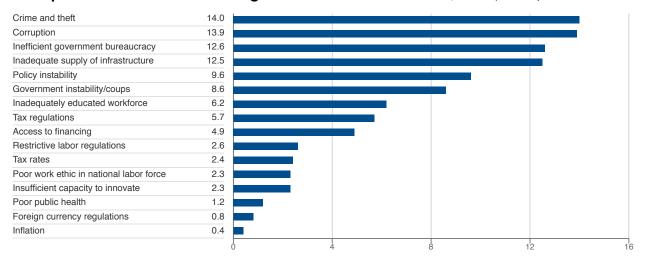
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2017				
Population millions	16.7	GDP per capita US\$	4,088.9			
GDP US\$ billions	68.2	GDP (PPP) % world GDP	0.11			

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2
Global Competitiveness Index	84	4.1			Rank	83 / 144	86 / 148	<b>78</b> / 144	<b>78</b> / 140	<b>78</b> / 138	84
Subindex A: Basic requirements	93	4.3	~		Score	4.0	4.0	4.1	4.1	4.1	
â 1st pillar: Institutions	111	3.3	_								
<b>1</b> ◆ 2nd pillar: Infrastructure	84	3.8	~					1st pillar: Institutions			
	54	4.9	_			12th pillar: Innovation		7	2nd pi Infrast		
3 4th pillar: Health and primary education	106	5.0	_						1		
Subindex B: Efficiency enhancers	79	4.0				11th pillar: Business sophistication			3rd pillar: Macroecono environment		
⇒ 5th pillar: Higher education and training	99	3.7	_			/			\		
	48	4.5	_			10th pillar: Market size				4th pillar: Health an education	d prin
7th pillar: Labor market efficiency	102	3.8	_								
8th pillar: Financial market development	18	4.9	_			9th pillar: Technological readiness	R			5th pillar: Higher educa and training	tion
9th pillar: Technological readiness	96	3.4					th pillar:		6th nille		
10th pillar: Market size	73	3.7				Financia deve	7th pillar:	Goods	6th pillar: Goods market efficiencv		
Subindex C: Innovation and sophistication factors	63	3.7	_					Labor market efficiency	i		
A 11th pillar: Business sophistication	53	4.2	_			0		. Ai		0	
12th pillar: Innovation	88	3.2	_			Guatem	atin America	America and the Caribbean			

#### Most problematic factors for doing business





## Guatemala

dex Component	Rank/13	7 Value	Trend	Index Component	Rank/137	Value
â 1st pillar: Institutions	111	3.3		6th pillar: Goods market efficiency	48	4.5
1.01 Property rights	92	4.0	_	6.01 Intensity of local competition	37	5.4
1.02 Intellectual property protection	83		_	6.02 Extent of market dominance	60	3.8
.03 Diversion of public funds	124	2.3		6.03 Effectiveness of anti-monopoly policy	105	3.2
·			=			
.04 Public trust in politicians	123	1.7	_	6.04 Effect of taxation on incentives to invest	39	4.1
.05 Irregular payments and bribes	80	3.7		6.05 Total tax rate % profits	62	35.2
.06 Judicial independence	89	3.6	_	6.06 No. of procedures to start a business	71	7
07 Favoritism in decisions of government officials	108	2.4	$\sim$	6.07 Time to start a business days	97	19.5
08 Efficiency of government spending	125	2.0	$\overline{}$	6.08 Agricultural policy costs	61	3.8
09 Burden of government regulation	102	3.0	_	6.09 Prevalence of non-tariff barriers	47	4.6
10 Efficiency of legal framework in settling disputes	109	2.8	_	6.10 Trade tariffs % duty	51	3.5
11 Efficiency of legal framework in challenging regulations	91	2.9		6.11 Prevalence of foreign ownership	65	4.5
12 Transparency of government policymaking	66	4.0	_	6.12 Business impact of rules on FDI	31	5.2
13 Business costs of terrorism	100	4.6	$\sim$	6.13 Burden of customs procedures	120	3.2
14 Business costs of crime and violence	134	2.5		6.14 Imports % GDP	106	29.2
15 Organized crime	133	2.7		6.15 Degree of customer orientation	27	5.4
16 Reliability of police services	127	2.8	$\overline{}$	6.16 Buyer sophistication	63	3.5
	93		_	6.10 Bayor coprilotication		0.0
17 Ethical behavior of firms		3.5		7th pillar: Labor market efficiency	102	3.8
18 Strength of auditing and reporting standards	34	5.3			00	
19 Efficacy of corporate boards	36	5.3		7.01 Cooperation in labor-employer relations	30	5.0
20 Protection of minority shareholders' interests	86	3.8	$\overline{}$	7.02 Flexibility of wage determination	38	5.3
21 Strength of investor protection 0-10 (best)	132	3.3		7.03 Hiring and firing practices	45	4.1
				7.04 Redundancy costs weeks of salary	109	27.0
↑ 2nd pillar: Infrastructure	84	3.8	~	7.05 Effect of taxation on incentives to work	47	4.3
1 Quality of overall infrastructure	100	3.4	_	7.06 Pay and productivity	61	4.1
•	106				67	
02 Quality of roads	106		$\overline{}$	7.07 Reliance on professional management		4.3
03 Quality of railroad infrastructure	n/a	not		7.08 Country capacity to retain talent	45	3.9
		assessed		7.09 Country capacity to attract talent	83	3.1
04 Quality of port infrastructure	89	3.6		7.10 Female participation in the labor force ratio to men	120	0.51
DS Quality of air transport infrastructure	111	3.4				
06 Available airline seat kilometers millions/week	102	48.8	~/	8th pillar: Financial market development	18	4.9
07 Quality of electricity supply	42	5.7		8.01 Availability of financial services	22	5.1
08 Mobile-cellular telephone subscriptions /100 pop.	73	115.3	~	8.02 Affordability of financial services	24	4.8
· · · · · · · · · · · · · · · · · · ·				•		
09 Fixed-telephone lines /100 pop.	82	10.1	~	8.03 Financing through local equity market	105	3.0
3rd pillar: Macroeconomic environment	54	4.9		8.04 Ease of access to loans	29	4.6
· ·			_	8.05 Venture capital availability	60	3.0
01 Government budget balance % GDP	33	-1.1		8.06 Soundness of banks	11	6.0
02 Gross national savings % GDP	112	13.0	~	8.07 Regulation of securities exchanges	22	5.5
03 Inflation annual % change	86	4.5	~	8.08 Legal rights index 0-10 (best)	13	9
04 Government debt % GDP	17	25.3	~	6.00 Legar rights index 6-10 (best)	10	
05 Country credit rating 0-100 (best)	73	42.5		% 9th pillar: Technological readiness	96	3.4
oo oodhay oroda raang o 100 (best)	7.0	12.0			F-1	F 0
4th pillar: Health and primary education	106	5.0	$\overline{}$	9.01 Availability of latest technologies	51	5.0
	00	70.0	_	9.02 Firm-level technology absorption	41	4.9
01 Malaria incidence cases/100,000 pop.	33	70.2	$\sim$	9.03 FDI and technology transfer	64	4.4
02 Business impact of malaria	14	5.4		9.04 Internet users % pop.	96	34.5
03 Tuberculosis incidence cases/100,000 pop.	56	25.0		9.05 Fixed-broadband Internet subscriptions /100 pop.	96	3.0
04 Business impact of tuberculosis	63	5.6	$\overline{}$	9.06 Internet bandwidth kb/s/user	92	24.0
05 HIV prevalence % adult pop.	85	0.5				
	70	5.3	~	9.07 Mobile-broadband subscriptions /100 pop.	127	13.9
06 Business impact of HIV/AIDS				10th pillar: Market size	73	3.7
07 Infant mortality deaths/1,000 live births	97	24.3	~~			
08 Life expectancy years	90	72.0		10.01 Domestic market size index	71	3.6
09 Quality of primary education	130	2.6		10.02 Foreign market size index	84	4.1
10 Primary education enrollment rate net %	119	85.5	~	10.03 GDP (PPP) PPP \$ billions	71	131.7
				10.04 Exports % GDP	109	19.2
₹ 5th pillar: Higher education and training	99	3.7		10.04 Exports % GDF	109	13.2
01 Secondary education enrollment rate gross %	103	65.6	~	√ 11th pillar: Business sophistication	53	4.2
			,	·		
02 Tertiary education enrollment rate gross %	96	21.8		11.01 Local supplier quantity	32	4.8
O3 Quality of the education system	123	2.6		11.02 Local supplier quality	40	4.8
04 Quality of math and science education	132	2.6		11.03 State of cluster development	75	3.7
D5 Quality of management schools	46	4.5	$\overline{}$	11.04 Nature of competitive advantage	97	3.1
06 Internet access in schools	108	3.5		11.05 Value chain breadth	57	3.9
	38					
77 Local availability of specialized training services				11.06 Control of international distribution	47	4.0
08 Extent of staff training	40	4.3	$\overline{}$	11.07 Production process sophistication	53	4.1
				11.08 Extent of marketing	28	5.0
				11.09 Willingness to delegate authority	63	4.4
				1/		
				12th pillar: Innovation	88	3.2
				12.01 Capacity for innovation	43	4.5
				12.02 Quality of scientific research institutions	94	3.4
				•		
				12.03 Company spending on R&D	70	3.3
				12.04 University-industry collaboration in R&D	71	3.4
				12.05 Gov't procurement of advanced technology products	126	26

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

126

70

2.6

## Guinea



The Global Competitiveness Index 2017-2018 edition



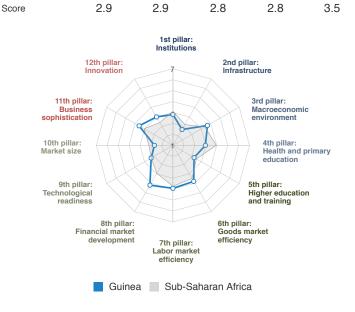
2017-18

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Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (Ap				
Population millions	12.7	GDP per capita US\$	514.6			
GDP US\$ billions	6.5	GDP (PPP) % world GDP	0.01			

#### Performance overview

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition
Global Competitiveness Index	119	3.5	_		Rank
Subindex A: Basic requirements	126	3.4	_		Score
â 1st pillar: Institutions	105	3.4			
<b>1</b> 2nd pillar: Infrastructure	125	2.4	_		
	102	4.1			
3 4th pillar: Health and primary education	133	3.5	~		
Subindex B: Efficiency enhancers	109	3.6			
⇒ 5th pillar: Higher education and training	122	2.9	~		
6th pillar: Goods market efficiency	78	4.3	_		
7th pillar: Labor market efficiency	54	4.4	~		
8th pillar: Financial market development	29	4.6			
∜ 9th pillar: Technological readiness	113	3.0	_		
્રૈંગ 10th pillar: Market size	127	2.4	_		
Subindex C: Innovation and sophistication factors	53	3.8	_		
ூ8 11th pillar: Business sophistication	66	4.1	_		
★ 12th pillar: Innovation	48	3.6	_		



### Most problematic factors for doing business



2012-13

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2013-14

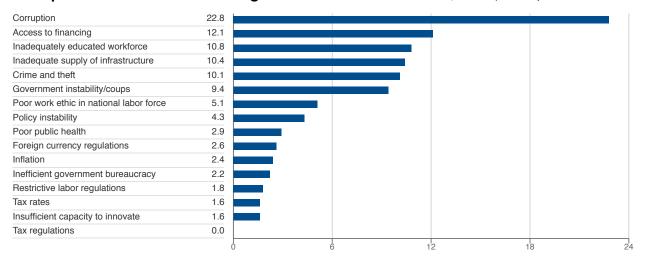
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2014-15

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2015-16

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## Guinea

ndex Component	Rank/13	7 Value	Trend	Inde	x Component	Rank/137	Value	Tre
â 1st pillar: Institutions	105	3.4	~	1	6th pillar: Goods market efficiency	78	4.3	_
1.01 Property rights	54	4.5	_	6.0	Intensity of local competition	20	5.6	
1.02 Intellectual property protection	69	4.1	_	6.02	Extent of market dominance	68	3.7	_
1.03 Diversion of public funds	122	2.4	$\sim$	6.03	Effectiveness of anti-monopoly policy	119	3.0	_
1.04 Public trust in politicians	81	2.8	$\sim$	6.04	4 Effect of taxation on incentives to invest	20	4.6	_
1.05 Irregular payments and bribes	136	2.3	_		5 Total tax rate % profits	134	68.3	/
1.06 Judicial independence	125	2.5	$\overline{}$	6.06	No. of procedures to start a business	53	6	/
1.07 Favoritism in decisions of government officials	45	3.6	$\sim$		7 Time to start a business days	46	8.0	
1.08 Efficiency of government spending	106	2.5	_		Agricultural policy costs	113	3.2	_
1.09 Burden of government regulation	62	3.5	_		Prevalence of non-tariff barriers	122	3.7	
1.10 Efficiency of legal framework in settling disputes	127	2.4	_		Trade tariffs % duty	121	11.9	
1.11 Efficiency of legal framework in challenging regulations	88	3.0	$\sim$		1 Prevalence of foreign ownership	29	5.2	_
	114	3.4			2 Business impact of rules on FDI	73	4.5	
1.12 Transparency of government policymaking 1.13 Business costs of terrorism	126	3.7	$\simeq$			19	5.3	
			`		Burden of customs procedures			_
1.14 Business costs of crime and violence	116	3.4			4 Imports % GDP	76	40.9	_
1.15 Organized crime	126	3.4			Degree of customer orientation	5	5.9	
1.16 Reliability of police services	136	2.2		6.16	Buyer sophistication	133	2.2	
1.17 Ethical behavior of firms	63	3.9		F.	7th pillar: Labor market efficiency	54	4.4	_
1.18 Strength of auditing and reporting standards	42	5.1	_	,				
1.19 Efficacy of corporate boards	27	5.6	~		1 Cooperation in labor-employer relations	91	4.1	
.20 Protection of minority shareholders' interests	135	2.6	_		2 Flexibility of wage determination	23	5.5	_
.21 Strength of investor protection 0-10 (best)	117	4.0	_		Hiring and firing practices	58	3.9	
	105	0.4			4 Redundancy costs weeks of salary	32	10.1	-
2nd pillar: Infrastructure	125	2.4		7.05	Effect of taxation on incentives to work	18	4.8	-
.01 Quality of overall infrastructure	122	2.6	_	7.06	Pay and productivity	134	2.5	_
2.02 Quality of roads	133	2.2	_	7.07	Reliance on professional management	133	2.7	_
.03 Quality of railroad infrastructure	n/o	not		7.08	Country capacity to retain talent	114	2.6	-
.03 Quality of failload lilliastructure	n/a	assessed		7.09	Country capacity to attract talent	99	2.8	-
.04 Quality of port infrastructure	97	3.4	$\overline{}$		Female participation in the labor force ratio to men	11	0.96	-
05 Quality of air transport infrastructure	112	3.4	$\overline{}$					
.06 Available airline seat kilometers millions/week	126	13.9			8th pillar: Financial market development	29	4.6	_
.07 Quality of electricity supply	122	2.4	_	8.0	1 Availability of financial services	27	5.1	
.08 Mobile-cellular telephone subscriptions /100 pop.	113	85.3			2 Affordability of financial services	61	3.9	
.09 Fixed-telephone lines /100 pop.	138	0.0	_		Financing through local equity market	27	4.6	
_		0.0			4 Ease of access to loans	5	5.4	_
3rd pillar: Macroeconomic environment	102	4.1			5 Venture capital availability	58	3.0	Ξ
3.01 Government budget balance % GDP	23	-0.4	~					
3.02 Gross national savings % GDP	131		~~		Soundness of banks	42	5.4	_
8.03 Inflation annual % change	118	8.2			7 Regulation of securities exchanges	41	5.0	=
.04 Government debt % GDP	81	56.0	\ \ \	8.08	B Legal rights index 0-10 (best)	50	6	
8.05 Country credit rating 0-100 (best)	134	12.2		38830	9th pillar: Technological readiness	113	3.0	_
5.05 Country credit rating 0-100 (best)	104	12.2				74		
4th pillar: Health and primary education	133	3.5	$\sim$		1 Availability of latest technologies		4.6	_
I.01 Malaria incidence cases/100,000 pop.	72	37,564.6			2 Firm-level technology absorption	64	4.5	_
1.02 Business impact of malaria	59	2.6			FDI and technology transfer	57	4.5	_
	110	177.0	\		4 Internet users % pop.	132	9.8	_
4.03 Tuberculosis incidence cases/100,000 pop.			=		Fixed-broadband Internet subscriptions /100 pop.	137	0.0	_
1.04 Business impact of tuberculosis	136	2.4		9.06	Internet bandwidth kb/s/user	137	0.6	_
1.05 HIV prevalence % adult pop.	115	1.5		9.07	7 Mobile-broadband subscriptions /100 pop.	126	15.0	_
.06 Business impact of HIV/AIDS	134	2.4		,^7,7	40th willow Manhat size	107	0.4	
1.07 Infant mortality deaths/1,000 live births	129	61.0	_	£ 7.3	10th pillar: Market size	127	2.4	
1.08 Life expectancy years	125	59.2	_	10.0	1 Domestic market size index	127	2.2	_
1.09 Quality of primary education	110	3.1	_	10.0	2 Foreign market size index	123	3.2	_
1.10 Primary education enrollment rate net %	129	75.7	~	10.0	03 GDP (PPP) PPP \$ billions	128	16.0	_
S = 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	400	0.0	_ /		04 Exports % GDP	87	29.1	/
→ 5th pillar: Higher education and training  → 1  → 1  → 2  → 2  → 3  → 3  → 3  → 3  → 3  → 3	122	2.9	_		•			
.01 Secondary education enrollment rate gross %	125	38.8	^_	0-00	11th pillar: Business sophistication	66	4.1	
.02 Tertiary education enrollment rate gross %	112	10.8	$\sim$	11.0	1 Local supplier quantity	5	5.6	-
.03 Quality of the education system	122	2.6	$\overline{}$		2 Local supplier quality	70	4.3	_
.04 Quality of math and science education	113	3.1	_		33 State of cluster development	49	4.0	
.05 Quality of management schools	128	3.1			24 Nature of competitive advantage	108	2.9	-
.06 Internet access in schools	135				55 Value chain breadth	124	3.1	
.07 Local availability of specialized training services	83		_		Control of international distribution	24	4.6	_
.08 Extent of staff training	10		$\equiv$					
200 Extern of stall training	10	5.5			77 Production process sophistication	132	2.5	
					08 Extent of marketing	7	5.5	-
				11.0	9 Willingness to delegate authority	34	4.8	
				洲	12th pillar: Innovation	48	3.6	-
				12.0	1 Capacity for innovation	13	5.4	
					22 Quality of scientific research institutions	126	2.7	_
					33 Company spending on R&D	47	3.6	_
					24 University-industry collaboration in R&D	14		
					25 Gov't procurement of advanced technology products	12	4.3	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

13

133

119

4.3

## Haiti



#### The Global Competitiveness Index 2017-2018 edition

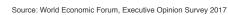


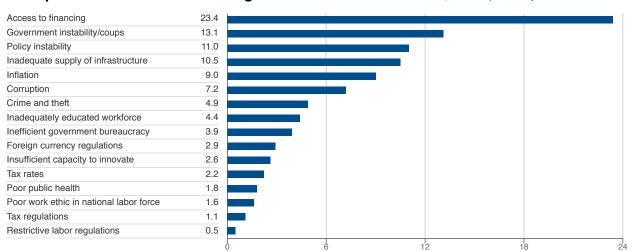
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (Apr			
Population millions	10.8	GDP per capita ∪s\$	761.2		
GDP US\$ billions	8.3	GDP (PPP) % world GDP	0.02		

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2017-18	
Global Competitiveness Index	128	3.2			Rank	142 / 144	143 / 148	137 / 144	134 / 140	128 / 137	
Subindex A: Basic requirements	121	3.5			Score	2.9	3.1	3.1	3.2	3.2	
â 1st pillar: Institutions	135	2.7									
<b>↑</b> 2nd pillar: Infrastructure	136	1.8	_					oillar: utions			
	61	4.8	~			12th pillar Innovation			d pillar: rastructure		
3 4th pillar: Health and primary education	108	4.8	_			4411			0.4.29		
Subindex B: Efficiency enhancers	134	2.8				11th pillar: Business sophistication			3rd pillar: Macroecon environme		
⇒ 5th pillar: Higher education and training	129	2.7					Poor		\\\		
6th pillar: Goods market efficiency	135	3.0	_			10th pillar: Market size	1		4th pillar: Health and primary education		
7th pillar: Labor market efficiency	99	3.9	_			\					
8th pillar: Financial market development	134	2.5				9th pillar: Technological readiness			5th pillar: Higher educ and training		
্ঠি 9th pillar: Technological readiness	134	2.2	_			8th pi	illari	6th	oillar:		
$\mathcal{L}_{\mathcal{S}}^{\mathcal{T}_{\mathcal{S}}}$ 10th pillar: Market size	124	2.6	_			Financial ma developn	ırket	Goo	ds market iency		
Subindex C: Innovation and sophistication factors	137	2.4					Labor	market ency			
္တန 11th pillar: Business sophistication	137	2.6	_			Llo:4:	Lotin Ama	rica and the (	Soribboon		
12th pillar: Innovation	137	2.1				Haiti	Laun Ame	ica and the t	anbbean		

### Most problematic factors for doing business







ndex Component	Rank/137	7 Value	Trend	Index Component	Rank/137	Value
â 1st pillar: Institutions	135	2.7			135	3.0
1.01 Property rights	134	2.7		6.01 Intensity of local competition	136	3.3
1.02 Intellectual property protection	136	2.3	_	6.02 Extent of market dominance	137	1.8
1.03 Diversion of public funds	128	2.2		6.03 Effectiveness of anti-monopoly policy	137	2.0
1.04 Public trust in politicians	119	1.9	_	6.04 Effect of taxation on incentives to invest	82	3.5
	133	2.3	$\sim$	6.05 Total tax rate % profits	82	
.05 Irregular payments and bribes				·		40.3
.06 Judicial independence	126	2.4		6.06 No. of procedures to start a business	126	12
.07 Favoritism in decisions of government officials	124	2.1	$\overline{}$	6.07 Time to start a business days	136	97.0
.08 Efficiency of government spending	123	2.1		6.08 Agricultural policy costs	136	2.5
.09 Burden of government regulation	116	2.7	$\overline{}$	6.09 Prevalence of non-tariff barriers	95	4.1
.10 Efficiency of legal framework in settling disputes	128	2.3	_	6.10 Trade tariffs % duty	78	6.3
.11 Efficiency of legal framework in challenging regulations		2.6	_	6.11 Prevalence of foreign ownership	130	
	111		=	• •		3.1
12 Transparency of government policymaking	132	2.7		6.12 Business impact of rules on FDI	112	3.9
.13 Business costs of terrorism	68	5.1	$\overline{}$	6.13 Burden of customs procedures	133	2.5
.14 Business costs of crime and violence	120	3.2	_	6.14 Imports % GDP	52	51.4
15 Organized crime	116	3.8	$\sim$	6.15 Degree of customer orientation	136	2.9
16 Reliability of police services	119	3.1	_	6.16 Buyer sophistication	132	2.3
17 Ethical behavior of firms	135	2.6		S. 10 Bayor coprilosadan	.02	2.0
			$\overline{}$	7th pillar: Labor market efficiency	99	3.9
18 Strength of auditing and reporting standards	134	2.8			100	2.4
19 Efficacy of corporate boards	131	3.8	$\sim$	7.01 Cooperation in labor-employer relations	133	3.4
20 Protection of minority shareholders' interests	136	2.5		7.02 Flexibility of wage determination	75	4.8
21 Strength of investor protection 0-10 (best)	138	2.0		7.03 Hiring and firing practices	64	3.8
				7.04 Redundancy costs weeks of salary	34	10.1
⁴ 2nd pillar: Infrastructure	136	1.8		7.05 Effect of taxation on incentives to work	46	4.3
01 Quality of overall infrastructure	134	2.0	_	7.06 Pay and productivity	133	2.5
•						
02 Quality of roads	135	2.1		7.07 Reliance on professional management	136	2.3
03 Quality of railroad infrastructure	n/a	not		7.08 Country capacity to retain talent	136	1.8
·		assessed		7.09 Country capacity to attract talent	128	2.0
04 Quality of port infrastructure	124	2.6		7.10 Female participation in the labor force ratio to men	42	0.88
05 Quality of air transport infrastructure	130	2.7				
06 Available airline seat kilometers millions/week	118	28.8	~	8th pillar: Financial market development	134	2.5
07 Quality of electricity supply	135	1.4	$\overline{}$	8.01 Availability of financial services	128	3.1
08 Mobile-cellular telephone subscriptions /100 pop.	131	60.5	_	8.02 Affordability of financial services	134	2.3
09 Fixed-telephone lines /100 pop.	137	0.1		8.03 Financing through local equity market	136	2.1
3rd pillar: Macroeconomic environment	61	4.8	$\overline{}$	8.04 Ease of access to loans	136	1.7
'			,	8.05 Venture capital availability	136	1.6
01 Government budget balance % GDP	16	0.0		8.06 Soundness of banks	123	3.6
02 Gross national savings % GDP	25	29.3	~	8.07 Regulation of securities exchanges	132	2.7
03 Inflation annual % change	128	13.4	/	8.08 Legal rights index 0-10 (best)	107	2
04 Government debt % GDP	32	33.5	_	6.00 Legal rights index 6-10 (best)	107	
05 Country credit rating 0-100 (best)	130	17.6	_	♦ 9th pillar: Technological readiness	134	2.2
03 Oddritty Credit rating 5-100 (best)	100	17.0			400	0.0
4th pillar: Health and primary education	108	4.8	_	9.01 Availability of latest technologies	130	3.3
	40	040.0	_	9.02 Firm-level technology absorption	130	3.3
01 Malaria incidence cases/100,000 pop.	43	640.9		9.03 FDI and technology transfer	131	3.0
02 Business impact of malaria	41	4.0		9.04 Internet users % pop.	128	12.2
03 Tuberculosis incidence cases/100,000 pop.	114	194.0		9.05 Fixed-broadband Internet subscriptions /100 pop.	135	0.0
04 Business impact of tuberculosis	110	4.3	_	9.06 Internet bandwidth kb/s/user	130	2.3
05 HIV prevalence % adult pop.	122	2.1				
	111	4.3		9.07 Mobile-broadband subscriptions /100 pop.	130	10.3
06 Business impact of HIV/AIDS			_	10th pillar: Market size	124	2.6
07 Infant mortality deaths/1,000 live births	124	52.2	<u></u>			
08 Life expectancy years	118	63.1		10.01 Domestic market size index	123	2.5
09 Quality of primary education	90	3.4		10.02 Foreign market size index	128	3.0
10 Primary education enrollment rate net %	n/a	n/a	/	10.03 GDP (PPP) PPP \$ billions	123	19.4
				10.04 Exports % GDP	111	19.0
₹ 5th pillar: Higher education and training	129	2.7		10.04 Exports // dbf		13.0
01 Secondary education enrollment rate gross %	n/a	n/a	_	√ 11th pillar: Business sophistication	137	2.6
			_			
02 Tertiary education enrollment rate gross %	n/a	n/a		11.01 Local supplier quantity	136	3.0
O3 Quality of the education system	136	2.2	$\overline{}$	11.02 Local supplier quality	134	3.1
Quality of math and science education	115	3.1	_	11.03 State of cluster development	137	2.4
DE Quality of management schools	125	3.2	_	11.04 Nature of competitive advantage	137	2.0
06 Internet access in schools	130		_	11.05 Value chain breadth	132	2.7
77 Local availability of specialized training services	127		_	11.06 Control of international distribution	137	2.1
08 Extent of staff training	136	2.7		11.07 Production process sophistication	137	2.0
				11.08 Extent of marketing	130	3.6
				11.09 Willingness to delegate authority	135	3.0
				1/		
				12th pillar: Innovation	137	2.1
				12.01 Capacity for innovation	136	2.8
				12.02 Quality of scientific research institutions	134	2.3
				12.03 Company spending on R&D	137	1.9
				12.04 University-industry collaboration in R&D	137	1.9
				12.05 Gov't procurement of advanced technology products	135	2.1

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

2.1

2.5

135

136

## **Honduras**



4th pillar: Health and primary education

The Global Competitiveness Index 2017-2018 edition



2017-18 96 / 137

3.9

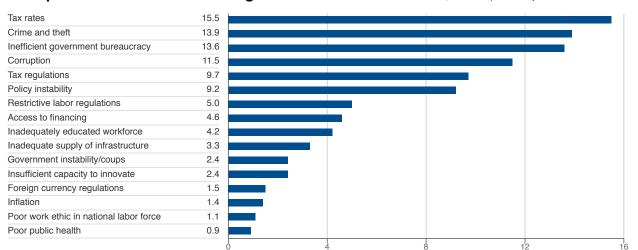
Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	8.2	GDP per capita US\$	2,608.6
GDP US\$ billions	21.4	GDP (PPP) % world GDP	0.04

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2
Global Competitiveness Index	96	3.9	_		Rank	90 / 144	<b>111</b> / 148	100 / 144	88 / 140	88 / 138	96
Subindex A: Basic requirements	94	4.3	_		Score	3.9	3.7	3.8	4.0	4.0	
â 1st pillar: Institutions	120	3.2	~								
<b>↑</b> 2nd pillar: Infrastructure	104	3.2	_					1st pillar: Institutions			
	52	5.0	~				pillar: vation	7	2nd pill Infrastr		
3 4th pillar: Health and primary education	89	5.5					$\wedge$				
Subindex B: Efficiency enhancers	103	3.7	_			11th pillar: Business sophistication				3rd pillar: Macroecono environment	
⇒ 5th pillar: Higher education and training	102	3.6	~			,	////				
	98	4.0	_			10th pillar: Market size				4th pillar: Health an education	d prin
7th pillar: Labor market efficiency	124	3.5	~								
8th pillar: Financial market development	38	4.5	_			9th pillar: Technological readiness				5th pillar: Higher educat and training	tion
্ঠি 9th pillar: Technological readiness	99	3.3					8th pillar:		6th pillar		
$\mathcal{L}_{\mathcal{S}}^{\pi}$ 10th pillar: Market size	95	3.1	_			Financ	ial market relopment	7th pillar:	Goods n	narket	
Subindex C: Innovation and sophistication factors	102	3.3	^		/tn pillar: Labor market efficiency						
ွန် 11th pillar: Business sophistication	88	3.8	_			Lland		atin America	and tha C	مد د دا داند د	
** 12th pillar: Innovation	108	2.9	~			Hondu	uras La	uin America i	and the C	anbbean	

### Most problematic factors for doing business





## **Honduras**

Index Component	Rank/13	7 Value	e Trend	Index Component	Rank/137	Value	Trend
â 1st pillar: Institutions	120	3.2	<u>~</u>	<b>❸</b> 6th pillar: Goods market efficiency	98	4.0	_
1.01 Property rights	105	3.8		6.01 Intensity of local competition	82	4.9	
1.02 Intellectual property protection	81	3.8	_	6.02 Extent of market dominance	100	3.3	_
1.03 Diversion of public funds	115	2.5	<b>~</b>	6.03 Effectiveness of anti-monopoly policy	98	3.3	$\sim$
1.04 Public trust in politicians	110	2.1	~	6.04 Effect of taxation on incentives to invest	127	2.6	_
1.05 Irregular payments and bribes	93	3.4	~	6.05 Total tax rate % profits	97	44.4	V
1.06 Judicial independence	121	2.7	$\sim$	6.06 No. of procedures to start a business	122	11	$\overline{}$
1.07 Favoritism in decisions of government officials	107	2.4	~	6.07 Time to start a business days	78	13.0	
1.08 Efficiency of government spending	102	2.6		6.08 Agricultural policy costs	87	3.6	$\overline{}$
1.09 Burden of government regulation	126	2.5	$\sim$	6.09 Prevalence of non-tariff barriers	97	4.1	_
1.10 Efficiency of legal framework in settling disputes	107	2.9	$\overline{}$	6.10 Trade tariffs % duty	60	4.1	$\sim$
1.11 Efficiency of legal framework in challenging regulations	109	2.6	$\sim$	6.11 Prevalence of foreign ownership	80	4.4	~
1.12 Transparency of government policymaking	95	3.7		6.12 Business impact of rules on FDI	57	4.8	
1.13 Business costs of terrorism	119	4.1		6.13 Burden of customs procedures	115	3.3	_
1.14 Business costs of crime and violence	135	2.3		6.14 Imports % GDP	39	57.4	_
1.15 Organized crime	136	2.4		6.15 Degree of customer orientation	75	4.6	_
1.16 Reliability of police services	131		~	6.16 Buyer sophistication	105	2.9	_
1.17 Ethical behavior of firms	92	3.5		o. 10 Buyer sopriistication	103	2.5	
1.18 Strength of auditing and reporting standards	37	5.3		7th pillar: Labor market efficiency	124	3.5	_
	46			7.01 Cooperation in labor-employer relations	48	4.6	_
1.19 Efficacy of corporate boards		5.1		7.02 Flexibility of wage determination	102	4.5	~
1.20 Protection of minority shareholders' interests	58		_	7.03 Hiring and firing practices	76	3.7	
1.21 Strength of investor protection 0-10 (best)	107	4.3			123	30.3	
<b>↑</b> • • 2nd pillar: Infrastructure	104	3.2		7.04 Redundancy costs weeks of salary 7.05 Effect of taxation on incentives to work	116	30.3	$\overline{}$
•							
2.01 Quality of overall infrastructure	90		$\sim$	7.06 Pay and productivity	78	3.8	
2.02 Quality of roads	81			7.07 Reliance on professional management	95	3.8	
2.03 Quality of railroad infrastructure	n/a	not assessed		7.08 Country capacity to retain talent	72	3.4	
2.04 Quality of port infrastructure	58	4.4		7.09 Country capacity to attract talent	93	2.9	
			_	7.10 Female participation in the labor force ratio to men	118	0.57	
2.05 Quality of air transport infrastructure	93	4.0		8th pillar: Financial market development	38	4.5	_
2.06 Available airline seat kilometers millions/week	117	29.2		_			
2.07 Quality of electricity supply	104	3.5		8.01 Availability of financial services	50	4.5	
2.08 Mobile-cellular telephone subscriptions /100 pop.	105	91.2		8.02 Affordability of financial services	55	3.9	
2.09 Fixed-telephone lines /100 pop.	100	5.2	_	8.03 Financing through local equity market	132	2.3	_
	52	5.0	_	8.04 Ease of access to loans	47	4.2	_
'				8.05 Venture capital availability	79	2.7	
3.01 Government budget balance % GDP	36	-1.3		8.06 Soundness of banks	22	5.7	
3.02 Gross national savings % GDP	79	19.5		8.07 Regulation of securities exchanges	40	5.0	$\sim$
3.03 Inflation annual % change	1	2.7		8.08 Legal rights index 0-10 (best)	13	9	
3.04 Government debt % GDP	61	45.4		of the contract of the contrac	99	3.3	
3.05 Country credit rating 0-100 (best)	103	29.0		থুটি 9th pillar: Technological readiness		3.3	_
3 4th pillar: Health and primary education	89	5.5		9.01 Availability of latest technologies	86	4.4	~
			_	9.02 Firm-level technology absorption	65	4.5	_
4.01 Malaria incidence cases/100,000 pop.	37	89.5		9.03 FDI and technology transfer	65	4.4	
4.02 Business impact of malaria	16		_	9.04 Internet users % pop.	100	30.0	
4.03 Tuberculosis incidence cases/100,000 pop.	68		$\sim$	9.05 Fixed-broadband Internet subscriptions /100 pop.	102	2.6	_
4.04 Business impact of tuberculosis	67	5.4		9.06 Internet bandwidth kb/s/user	85	33.4	$\Delta$
4.05 HIV prevalence % adult pop.	73	0.4	_	9.07 Mobile-broadband subscriptions /100 pop.	117	22.5	
4.06 Business impact of HIV/AIDS	83	5.1			0.5	٠.	
4.07 Infant mortality deaths/1,000 live births	84	17.4	$\sim$	10th pillar: Market size	95	3.1	
4.08 Life expectancy years	84	73.3	~	10.01 Domestic market size index	99	2.9	
4.09 Quality of primary education	107	3.1		10.02 Foreign market size index	88	4.0	_
4.10 Primary education enrollment rate net %	89	93.0	~	10.03 GDP (PPP) PPP \$ billions	97	43.2	_
Path willow Himbon 1	400	0.0		10.04 Exports % GDP	35	49.1	~~
5th pillar: Higher education and training	102	3.6					
5.01 Secondary education enrollment rate gross %	99	70.8	$\sim$	11th pillar: Business sophistication	88	3.8	
5.02 Tertiary education enrollment rate gross %	94	22.1		11.01 Local supplier quantity	91	4.2	~
5.03 Quality of the education system	98	3.2	_	11.02 Local supplier quality	82	4.1	~
5.04 Quality of math and science education	114	3.1	_	11.03 State of cluster development	80	3.6	_
5.05 Quality of management schools	110		~	11.04 Nature of competitive advantage	116	2.7	_
5.06 Internet access in schools	102	3.6		11.05 Value chain breadth	100	3.4	_
5.07 Local availability of specialized training services	106		_	11.06 Control of international distribution	87	3.4	_
5.08 Extent of staff training	59	4.1		11.07 Production process sophistication	98	3.4	~
				11.08 Extent of marketing	54	4.6	
							-
				11.09 Willingness to delegate authority	71	4.3	
				* 12th pillar: Innovation	108	2.9	_
				12.01 Capacity for innovation	86	3.9	_
				12.02 Quality of scientific research institutions	120		_
				12.03 Company spending on R&D	102	2.9	
				12.04 University-industry collaboration in R&D	101		^
				12.05 Gov't procurement of advanced technology products	112	2.8	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

112

96

2.8

# **Hong Kong SAR**



The Global Competitiveness Index 2017-2018 edition

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (				
Population millions	7.4	GDP per capita US\$	43,528.0			
GDP US\$ billions	320.7	GDP (PPP) % world GDP	0.36			

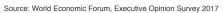
#### Performance overview

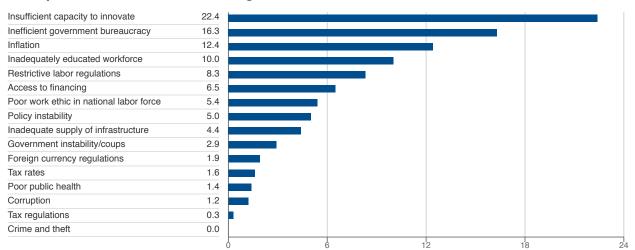
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18		
Global Competitiveness Index	6	5.5	_		Rank	9 / 144	7 / 148	7 / 144	7 / 140	9 / 138	6 / 137		
Subindex A: Basic requirements	3	6.3			Score	5.4	5.5	5.5	5.5	5.5	5.5		
â 1st pillar: Institutions	9	5.7	_										
<b>1</b> 2nd pillar: Infrastructure	1	6.7						1st pillar: Institutions					
	6	6.3				12th pill Innovat		7	2nd pilla Infrastru				
3 4th pillar: Health and primary education	26	6.4						1					
Subindex B: Efficiency enhancers	4	5.6				11th pillar: Business sophistication		3rd pillar: Macroeconomic environment					
⇒ 5th pillar: Higher education and training	14	5.7											
fth pillar: Goods market efficiency	2	5.7				10th pillar: Market size	<b>%</b>			4th pillar: Health and education	primary		
7th pillar: Labor market efficiency	4	5.6	~										
8th pillar: Financial market development	5	5.5	~			9th pillar: Technological readiness	1		// / H	th pillar: ligher education and training	on		
ু 9th pillar: Technological readiness	9	6.2	_				pillar:		6th pillar:	· ·			
ੀ 10th pillar: Market size	33	4.8				Financial r develo	narket	7th pillar:	Goods ma	arket			
Subindex C: Innovation and sophistication factors	18	5.0	~				L	_abor market efficiency					
ം 11th pillar: Business sophistication	11	5.4				Шапа	Vona CAT	D = Foot /	Voic and D	logific			
★ 12th pillar: Innovation	26	4.5	_		Hong Kong SAR East Asia and Pacific					acilic			

Hong Kong SAR (6th) has made the largest leap among the top 10 economies this year, moving ahead of Sweden (7th), the United Kingdom (8th), and Japan (9th). Hong Kong is still endowed with the world's best physical infrastructure and its healthy level of competition and openness ensure extremely efficient markets (2nd), which in turn are supported by strong and stable financial markets (5th). Hong Kong's labor market is highly flexible and efficient, though it could do better in terms of harnessing talent from its workforce (17th). Hong

Kong has also advanced its macroeconomic environment by slightly bringing down its inflation rate in 2016. Its most significant improvement can be observed across the business sophistication (11th) and innovation (26th) pillars, which is a step in the right direction given that the business community consistently cites their insufficient capacity to innovate as one of the most problematic factors for doing business.

#### Most problematic factors for doing business





# **Hong Kong SAR**

dex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	Э
∴ 1st pillar: Institutions	9	5.7	_		2	5.7	-
.01 Property rights	8	6.2	_	6.01 Intensity of local competition	3	6.2	-
02 Intellectual property protection	9	5.9		6.02 Extent of market dominance	21	4.6	
3 Diversion of public funds	11	5.8	_	6.03 Effectiveness of anti-monopoly policy	19	4.8	
4 Public trust in politicians	18	4.8		6.04 Effect of taxation on incentives to invest	3	6.0	
5 Irregular payments and bribes	9	6.3	_	6.05 Total tax rate % profits	20	22.9	
06 Judicial independence	13	6.1		6.06 No. of procedures to start a business	2	2	
	14	4.9	=	·	2	1.5	
7 Favoritism in decisions of government officials				6.07 Time to start a business days			
8 Efficiency of government spending	14	4.9	_	6.08 Agricultural policy costs	33	4.3	
09 Burden of government regulation	4	5.3	_	6.09 Prevalence of non-tariff barriers	2	5.8	
10 Efficiency of legal framework in settling disputes	4	5.9		6.10 Trade tariffs % duty	1	0.0	
11 Efficiency of legal framework in challenging regulations	8	5.1	~	6.11 Prevalence of foreign ownership	4	6.0	
12 Transparency of government policymaking	6	5.8		6.12 Business impact of rules on FDI	2	6.1	
13 Business costs of terrorism	29	5.7		6.13 Burden of customs procedures	3	6.0	
				·			
14 Business costs of crime and violence	12	5.8		6.14 Imports % GDP	1	193.9	
15 Organized crime	26		_	6.15 Degree of customer orientation	13	5.7	
16 Reliability of police services	8	6.3		6.16 Buyer sophistication	4	5.0	
17 Ethical behavior of firms	15	5.6		so			
18 Strength of auditing and reporting standards	6	6.3		7th pillar: Labor market efficiency	4	5.6	
9 Efficacy of corporate boards	23	5.6		7.01 Cooperation in labor-employer relations	10	5.6	
				7.02 Flexibility of wage determination	1	6.3	
20 Protection of minority shareholders' interests	5		$\widetilde{}$	7.03 Hiring and firing practices	1	5.8	
21 Strength of investor protection 0-10 (best)	3	8.0	<b>~</b>				
A On durilland informations	4	6.7	_	7.04 Redundancy costs weeks of salary	14	5.8	
⁴ 2nd pillar: Infrastructure	1	6.7		7.05 Effect of taxation on incentives to work	4	6.0	
O1 Quality of overall infrastructure	3	6.4	_	7.06 Pay and productivity	6	5.3	
2 Quality of roads	4	6.2		7.07 Reliance on professional management	25	5.4	
3 Quality of railroad infrastructure	3	6.3	_	7.08 Country capacity to retain talent	10	5.1	
04 Quality of port infrastructure	3		$\sim$	7.09 Country capacity to attract talent	9	5.2	
05 Quality of air transport infrastructure	2	6.6		7.10 Female participation in the labor force ratio to men	75	0.79	
06 Available airline seat kilometers millions/week	16	2,882.1		8th pillar: Financial market development	5	5.5	
O7 Quality of electricity supply	4	6.8					
08 Mobile-cellular telephone subscriptions /100 pop.	1	234.0	$\sim$	8.01 Availability of financial services	7	5.7	
09 Fixed-telephone lines /100 pop.	2	58.7	~	8.02 Affordability of financial services	6	5.3	
				8.03 Financing through local equity market	2	5.7	
3rd pillar: Macroeconomic environment	6	6.3		8.04 Ease of access to loans	13	5.1	
01 Government budget balance % GDP	2	4 Ω	~~	8.05 Venture capital availability	11	4.4	
•				·			
02 Gross national savings % GDP	39	27.0	$\sim$	8.06 Soundness of banks	7	6.3	
03 Inflation annual % change	1	2.6	~	8.07 Regulation of securities exchanges	5	6.1	
04 Government debt % GDP	1	0.1		8.08 Legal rights index 0-10 (best)	23	8	
05 Country credit rating 0-100 (best)	17	83.5		% Other iller Technological modification	9	6.2	
4th pillar: Health and primary education	26	6.4		9.01 Availability of latest technologies	29	5.6	
	2/2	m f					
01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02 Firm-level technology absorption	27	5.2	
D2 Business impact of malaria	n/a	5.7		9.03 FDI and technology transfer	10	5.4	
03 Tuberculosis incidence cases/100,000 pop.	85	71.0		9.04 Internet users % pop.	19	87.3	
04 Business impact of tuberculosis	62	5.6		9.05 Fixed-broadband Internet subscriptions /100 pop.	15	35.5	
05 HIV prevalence % adult pop.	60	0.2		9.06 Internet bandwidth kb/s/user	2	4,906.0	
06 Business impact of HIV/AIDS	58	5.6		9.07 Mobile-broadband subscriptions /100 pop.	16	105.9	
				3.07 Wobile broadband subscriptions 7100 pop.	10	100.0	
07 Infant mortality deaths/1,000 live births	1			10th pillar: Market size	33	4.8	
08 Life expectancy years	1	84.3					
9 Quality of primary education	21	5.2	_	10.01 Domestic market size index	41	4.4	
10 Primary education enrollment rate net %	76	94.6	<u></u>	10.02 Foreign market size index	9	6.1	
•				10.03 GDP (PPP) PPP \$ billions	43	429.7	
₹ 5th pillar: Higher education and training	14	5.7		10.04 Exports % GDP	1	191.8	
of Secondary education enrollment rate gross %	44	100.8	/	11th pillary Puningge combining	11	5.4	
02 Tertiary education enrollment rate gross %	32	68.5	_	3 11th pillar: Business sophistication	11	5.4	
03 Quality of the education system	21	4.7		11.01 Local supplier quantity	7	5.4	
24 Quality of math and science education	9			11.02 Local supplier quality	14	5.4	
				11.03 State of cluster development	7		
5 Quality of management schools	12		_	·			
6 Internet access in schools	18	5.7		11.04 Nature of competitive advantage	13	5.7	
7 Local availability of specialized training services	12	5.8	~	11.05 Value chain breadth	9	5.5	
8 Extent of staff training	19	5.0		11.06 Control of international distribution	7	5.3	
	• •			11.07 Production process sophistication	19	5.4	
				11.08 Extent of marketing	13	5.3	
				11.09 Willingness to delegate authority	25	5.0	
				11.09 Willinghess to delegate duffully	20	5.0	
				* 12th pillar: Innovation	26	4.5	
				12.01 Capacity for innovation	28	4.9	
				12.02 Quality of scientific research institutions	28	5.0	
				12.03 Company spending on R&D	27	4.4	
				12.04 University-industry collaboration in R&D	15		
				12.05 Gov't procurement of advanced technology products	16	4.2	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

16

23

4.2

# Hungary



The Global Competitiveness Index 2017-2018 edition



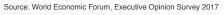
Key indicators, 2016		Source: International Monetary Fund; World	d Economic Outlook Database (April 2017)
Population millions	9.8	GDP per capita US\$	12,778.3
GDP US\$ billions	125.7	GDP (PPP) % world GDP	0.23

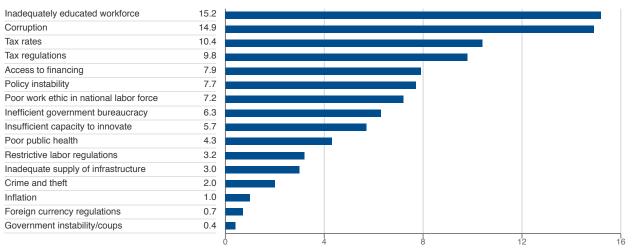
#### Performance overview

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	60	4.3			Rank	60 / 144	<b>63</b> / 148	60 / 144	63 / 140	69 / 138	60 / 137
Subindex A: Basic requirements	64	4.6	~		Score	4.3	4.2	4.3	4.2	4.2	4.3
â 1st pillar: Institutions	101	3.5	~								
<b>1</b> 2nd pillar: Infrastructure	56	4.4	~					1st pillar: Institutions			
	46	5.1	_			12th p Innov		7	2nd pil Infrasti		
3 4th pillar: Health and primary education	78	5.6	_			4411			$\langle \rangle$	0.1.2	
Subindex B: Efficiency enhancers	45	4.4				11th pillar: Business sophistication	$\langle \langle \rangle \rangle$			3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	73	4.3	_			/	1/19				
	64	4.4				10th pillar: Market size				4th pillar: Health and education	
7th pillar: Labor market efficiency	71	4.2	_			\					
8th pillar: Financial market development	45	4.3	_			9th pillar: Technological readiness				5th pillar: Higher educat and training	ion
% 9th pillar: Technological readiness	40	5.1				0	th pillar:		6th pilla		
$\stackrel{\nwarrow}{\leftarrow}_{\!$	55	4.3				Financia		7th pillar:	Goods n	narket	
Subindex C: Innovation and sophistication factors	79	3.5	~					Labor market efficiency			
္တီ 11th pillar: Business sophistication	96	3.7	_			<b>■</b> ⊔	agan/	Europo cad	I North Am	orioo	
** 12th pillar: Innovation	62	3.4	_			<b>—</b> Hur	ngary	Europe and	I INOI III AII	enca	

Hungary (60th) improves by nine places, returning to levels it held previously (63 in 2015, 60 in 2014). The rise is to a large extent due to an improvement technological readiness (an increase in technology take-up by firms from a low level - from 135 to 109 on firm-level technology absorption - and significant increases in internet take-up by individuals, from 73% of the population in 2015 to 79% in 2016). In addition, business executives are reporting improvements in the development of financial markets as well as the business and innovation environment.

#### Most problematic factors for doing business





# Hungary

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	Э
â 1st pillar: Institutions	101	3.5	~		64	4.4	-
1.01 Property rights	125	3.3	~	6.01 Intensity of local competition	127	4.2	-
.02 Intellectual property protection	73	4.0	_	6.02 Extent of market dominance	108	3.2	-
.03 Diversion of public funds	108	2.6		6.03 Effectiveness of anti-monopoly policy	73	3.7	-
.04 Public trust in politicians	105	2.2		6.04 Effect of taxation on incentives to invest	41	4.1	
.05 Irregular payments and bribes	59	4.2		6.05 Total tax rate % profits	100	46.5	-
06 Judicial independence	101	3.2		6.06 No. of procedures to start a business	53	6	
	131	1.9	=		41	7.0	
07 Favoritism in decisions of government officials				6.07 Time to start a business days			
.08 Efficiency of government spending	108	2.5		6.08 Agricultural policy costs	122	3.0	
.09 Burden of government regulation	106	2.9		6.09 Prevalence of non-tariff barriers	91	4.1	
10 Efficiency of legal framework in settling disputes	93	3.1	~	6.10 Trade tariffs % duty	6	1.1	
11 Efficiency of legal framework in challenging regulations	132	2.2	$\overline{}$	6.11 Prevalence of foreign ownership	67	4.5	
.12 Transparency of government policymaking	125	3.1	$\sim$	6.12 Business impact of rules on FDI	46	5.0	
.13 Business costs of terrorism	51	5.3	$\overline{}$	6.13 Burden of customs procedures	30	5.0	
14 Business costs of crime and violence	16	5.6	_	6.14 Imports % GDP	11	87.4	
15 Organized crime	56	5.1		6.15 Degree of customer orientation	65	4.6	
-							
16 Reliability of police services	64	4.5	_	6.16 Buyer sophistication	86	3.2	
17 Ethical behavior of firms	127	2.9	~	7th pillar: Labor market efficiency	71	4.2	
18 Strength of auditing and reporting standards	77	4.5	$\sim$	•			
19 Efficacy of corporate boards	78	4.7	$\overline{}$	7.01 Cooperation in labor-employer relations	77	4.3	
20 Protection of minority shareholders' interests	57	4.1		7.02 Flexibility of wage determination	68	4.9	
21 Strength of investor protection 0-10 (best)	74	5.5	_	7.03 Hiring and firing practices	27	4.5	
5				7.04 Redundancy costs weeks of salary	53	13.4	
⁴ 2nd pillar: Infrastructure	56	4.4	~	7.05 Effect of taxation on incentives to work	88	3.6	
01 Quality of overall infrastructure	48	4.5	~	7.06 Pay and productivity	85	3.7	
	62				98		
02 Quality of roads		4.1		7.07 Reliance on professional management		3.8	
03 Quality of railroad infrastructure	44	3.6		7.08 Country capacity to retain talent	126	2.4	
04 Quality of port infrastructure	103	3.2	~	7.09 Country capacity to attract talent	112	2.5	
05 Quality of air transport infrastructure	82	4.1	$\overline{}$	7.10 Female participation in the labor force ratio to men	62	0.83	
06 Available airline seat kilometers millions/week	70	203.5	_	A	45	4.0	
07 Quality of electricity supply	61	5.1	$\sim$	8th pillar: Financial market development	45	4.3	
08 Mobile-cellular telephone subscriptions /100 pop.	64	119.1	_	8.01 Availability of financial services	55	4.4	
09 Fixed-telephone lines /100 pop.	34	31.5		8.02 Affordability of financial services	39	4.3	
09 Fixeu-telepriorie lines 7100 pop.	34	31.3	_	8.03 Financing through local equity market	85	3.2	
3rd pillar: Macroeconomic environment	46	5.1	_	8.04 Ease of access to loans	41	4.3	
'	45	1.0	\				
01 Government budget balance % GDP	45	-1.8		8.05 Venture capital availability	43	3.3	
02 Gross national savings % GDP	47	24.3		8.06 Soundness of banks	74	4.7	
03 Inflation annual % change	47	0.4	~	8.07 Regulation of securities exchanges	111	3.5	
04 Government debt % GDP	107	74.2	~	8.08 Legal rights index 0-10 (best)	8	10	
05 Country credit rating 0-100 (best)	53	57.3		% Other iller Technological medianes	40	5.1	
4th pillar: Health and primary education	78	5.6	_	9.01 Availability of latest technologies	43	5.1	
	/-	6					
01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02 Firm-level technology absorption	109	4.0	
02 Business impact of malaria	n/a	6.7		9.03 FDI and technology transfer	48	4.7	
03 Tuberculosis incidence cases/100,000 pop.	30	9.3		9.04 Internet users % pop.	32	79.3	
04 Business impact of tuberculosis	24	6.6		9.05 Fixed-broadband Internet subscriptions /100 pop.	29	28.5	
05 HIV prevalence % adult pop.	1	< 0.2		9.06 Internet bandwidth kb/s/user	31	154.8	
06 Business impact of HIV/AIDS	10	6.6	_	9.07 Mobile-broadband subscriptions /100 pop.	95	44.5	
07 Infant mortality deaths/1,000 live births	38						
				10th pillar: Market size	55	4.3	
08 Life expectancy years	55	76.0		10.01 Domestic market size index	59	4.0	
09 Quality of primary education	87	3.5			32		
10 Primary education enrollment rate net %	101	90.6	_	10.02 Foreign market size index		5.4	
₹ 5th pillar: Higher education and training	73	4.3	_	10.03 GDP (PPP) PPP \$ billions		270.3	
				10.04 Exports % GDP	6	99.4	
01 Secondary education enrollment rate gross %	30	105.2	$\leq$	and 11th pillar: Business sophistication	96	3.7	
02 Tertiary education enrollment rate gross %	56	50.9	_ `	11.01 Local supplier quantity	100	36	
03 Quality of the education system	111	2.9			128	3.6	
Quality of math and science education	78	3.9	~	11.02 Local supplier quality	71	4.3	
D5 Quality of management schools	66	4.2	~	11.03 State of cluster development	90		
06 Internet access in schools	97	3.6	_	11.04 Nature of competitive advantage	59	3.7	
7 Local availability of specialized training services	101	4.0		11.05 Value chain breadth	98	3.5	
8 Extent of staff training	103	3.5		11.06 Control of international distribution	66	3.7	
DO EXIGHT OF STAIL HAITHING	103	3.5		11.07 Production process sophistication	84	3.5	
				·			
				11.08 Extent of marketing	134	3.3	
				11.09 Willingness to delegate authority	88	4.0	
				12th pillar: Innovation	62	3.4	
				12.01 Capacity for innovation	96	3.8	
				12.02 Quality of scientific research institutions	34	4.7	
				12.03 Company spending on R&D	85	3.1	
					68		
				12.04 University-industry collaboration in R&D		3.4	
				12.05 Gov't procurement of advanced technology products	100	2 8	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

109

91

2.8

## **Iceland**



The Global Competitiveness Index 2017-2018 edition

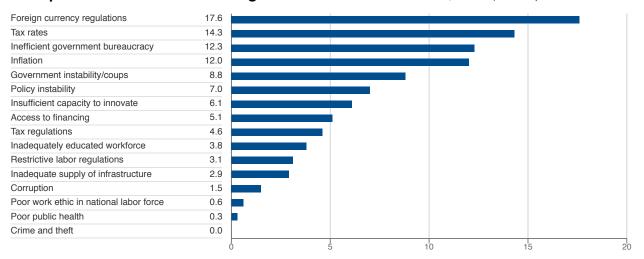
Key indicators, 2016		Source: International Monetary Fund; World	d Economic Outlook Database (April 2017)
Population millions	0.3	GDP per capita ∪S\$	59,629.0
GDP US\$ billions	20.0	GDP (PPP) % world GDP	0.01

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	28	5.0	_		Rank	30 / 144	31 / 148	30 / 144	29 / 140	27 / 138	28 / 137
Subindex A: Basic requirements	14	5.9	_		Score	4.7	4.7	4.7	4.8	5.0	5.0
1st pillar: Institutions	14	5.5	_								
<b>1</b> 2nd pillar: Infrastructure	20	5.6	_					1st pillar: Institutions			
	19	5.9	_			12th p Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	10	6.6	_			440				0.4.30	
Subindex B: Efficiency enhancers	32	4.8				11th pillar: Business sophistication				3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	12	5.8	_								
	32	4.8				10th pillar: Market size				4th pillar: Health and education	
7th pillar: Labor market efficiency	9	5.2	_			\					
8th pillar: Financial market development	49	4.2				9th pillar: Technological readiness	//		( / / 1	5th pillar: Higher educat and training	ion
% 9th pillar: Technological readiness	10	6.2	_			8	th pillar:		6th pillar		
್ಘೆ 10th pillar: Market size	126	2.5	_			Financia		7th pillar:	Goods m	arket	
Subindex C: Innovation and sophistication factors	26	4.8	_					Labor market efficiency			
→ 11th pillar: Business sophistication	27	4.9				■ loc	eland 🔲 I	Europe and	North Ama	rico	
** 12th pillar: Innovation	24	4.7	<u> </u>			ICE	tialiu   I	Europe and	NOTHE ATTE	illa	

## Most problematic factors for doing business Source: World Economic Forum, Executive Opinion Survey 2017





# **Iceland**

dex Component	Rank/13	7 Value	Trend	Inde	x Component	Rank/137	Value	э -
⋒ 1st pillar: Institutions	14	5.5		8	6th pillar: Goods market efficiency	32	4.8	-
.01 Property rights	16	5.9	_	6.01	Intensity of local competition	75	5.0	_
.02 Intellectual property protection	23	5.7	_		Extent of market dominance	54	3.9	_
1.03 Diversion of public funds	18	5.4			B Effectiveness of anti-monopoly policy	29	4.5	_
.04 Public trust in politicians	23	4.6	$\sim$		Effect of taxation on incentives to invest	36	4.2	
•								-
.05 Irregular payments and bribes	4	6.6			5 Total tax rate % profits	36	30.1	-
.06 Judicial independence	17	5.8			No. of procedures to start a business	36	5	_
.07 Favoritism in decisions of government officials	23	4.4	_	6.07	7 Time to start a business days	9	3.5	
08 Efficiency of government spending	23	4.3	$\overline{}$	6.08	Agricultural policy costs	102	3.4	-
09 Burden of government regulation	22	4.2	_	6.09	Prevalence of non-tariff barriers	90	4.1	
10 Efficiency of legal framework in settling disputes	17	5.2	_	6.10	Trade tariffs % duty	42	2.6	٠,
11 Efficiency of legal framework in challenging regulations	12	5.0			Prevalence of foreign ownership	123	3.5	
12 Transparency of government policymaking	19	5.3			2 Business impact of rules on FDI	114	3.8	_
13 Business costs of terrorism	4	6.3	_	6.13	Burden of customs procedures	32	5.0	
14 Business costs of crime and violence	8	5.9	_	6.14	Imports % GDP	66	44.5	
15 Organized crime	4	6.5	_	6.15	Degree of customer orientation	18	5.6	
16 Reliability of police services	7	6.4		6.16	Buyer sophistication	27	4.1	_
17 Ethical behavior of firms	20	5.3		0.10	2 Layor doprimendation			
				Æ.	7th pillar: Labor market efficiency	9	5.2	
8 Strength of auditing and reporting standards	32	5.4		7.04		10	F 6	
19 Efficacy of corporate boards	21	5.7			Cooperation in labor-employer relations	12	5.6	
Protection of minority shareholders' interests	28	4.9	_		2 Flexibility of wage determination	124	4.0	
21 Strength of investor protection 0-10 (best)	21	7.0	_	7.03	Hiring and firing practices	6	5.4	
				7.04	Redundancy costs weeks of salary	49	13.0	
↑ 2nd pillar: Infrastructure	20	5.6			Effect of taxation on incentives to work	50	4.2	
1 Quality of overall infrastructure	17	5.6	_		Pay and productivity	13	4.9	
•					, ,			
2 Quality of roads	47	4.5			Reliance on professional management	20	5.5	
3 Quality of railroad infrastructure	n/a	not			Country capacity to retain talent	16	5.0	
· ·		assessed		7.09	Country capacity to attract talent	33	4.0	
Quality of port infrastructure	8	5.9	_	7.10	Female participation in the labor force ratio to men	13	0.95	
DS Quality of air transport infrastructure	17	5.8	$\overline{}$	-	<u> </u>			
06 Available airline seat kilometers millions/week	61	296.1	_		8th pillar: Financial market development	49	4.2	
7 Quality of electricity supply	11	6.7	_	9.01	Availability of financial services	39	4.6	
	67	118.0			•			
08 Mobile-cellular telephone subscriptions /100 pop.			$\leq$		2 Affordability of financial services	93	3.5	
9 Fixed-telephone lines /100 pop.	11	48.4	<u></u>		Financing through local equity market	34	4.4	
3rd pillar: Macroeconomic environment	19	5.9		8.04	Ease of access to loans	30	4.6	
- · · · · · · · · · · · · · · · · · · ·				8.05	Venture capital availability	33	3.5	
1 Government budget balance % GDP	1	11.3		8.06	Soundness of banks	67	4.9	
02 Gross national savings % GDP	26	29.3			Regulation of securities exchanges	58	4.6	
03 Inflation annual % change	1	1.7	$\sim$		B Legal rights index 0-10 (best)	70	5	
04 Government debt % GDP	76	53.2	_	0.00	s Legal rights index 0-10 (best)	70	- 5	
05 Country credit rating 0-100 (best)	51	60.4		28930	9th pillar: Technological readiness	10	6.2	
oo Country Credit rating 6-100 (best)	31	00.4	_			0	0.0	
4th pillar: Health and primary education	10	6.6			Availability of latest technologies	8	6.3	
	- /-	- 1			2 Firm-level technology absorption	5	5.9	
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.03	FDI and technology transfer	73	4.3	
D2 Business impact of malaria	n/a	6.9		9.04	Internet users % pop.	1	98.2	
03 Tuberculosis incidence cases/100,000 pop.	3	2.4	~		Fixed-broadband Internet subscriptions /100 pop.	11	37.6	
04 Business impact of tuberculosis	5	6.8	_		6 Internet bandwidth kb/s/user	4	997.8	
05 HIV prevalence % adult pop.	63	0.3						
06 Business impact of HIV/AIDS	8	6.7		9.07	Mobile-broadband subscriptions /100 pop.	17	104.0	
·			_	47	10th pillar: Market size	126	2.5	
07 Infant mortality deaths/1,000 live births	3	1.6						
08 Life expectancy years	6	82.9	~	10.0	1 Domestic market size index	128	2.1	
09 Quality of primary education	17	5.4	~	10.0	2 Foreign market size index	114	3.5	
10 Primary education enrollment rate net %	17	99.1	~		03 GDP (PPP) PPP \$ billions	126	16.5	
					04 Exports % GDP	34	49.1	
₹ 5th pillar: Higher education and training	12	5.8		10.0	94 Exports % GDF	04	43.1	
01 Secondary education enrollment rate gross %	14	118.6	~	ممح	11th pillar: Business sophistication	27	4.9	
	14							
02 Tertiary education enrollment rate gross %	19	81.3			1 Local supplier quantity	94	4.2	
O3 Quality of the education system	13	5.2	$\sim$	11.0	2 Local supplier quality	31	5.0	
04 Quality of math and science education	25	4.9	$\sim$	11.0	3 State of cluster development	43	4.1	
5 Quality of management schools	20	5.4	_		04 Nature of competitive advantage	23	4.9	
6 Internet access in schools	4	6.1	$\overline{}$		5 Value chain breadth	26	4.7	
77 Local availability of specialized training services	29				06 Control of international distribution	22	4.6	
8 Extent of staff training	18	5.1		11.0	7 Production process sophistication	20	5.4	
				11.0	08 Extent of marketing	29	5.0	
					9 Willingness to delegate authority	14	5.5	
				1	12th pillar: Innovation	24	4.7	
				100	1 Capacity for innovation	25	5.0	
					22 Quality of scientific research institutions	23	5.2	
					3 Company spending on R&D	24	4.5	
				12.0	university-industry collaboration in R&D	22	4.7	
				100	Gov't procurement of advanced technology products	13	3.6	-

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

43

18

3.6

## India



The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	1,309.3	GDP per capita US\$	1,723.3
GDP US\$ billions	2,256.4	GDP (PPP) % world GDP	7.23

#### Performance overview

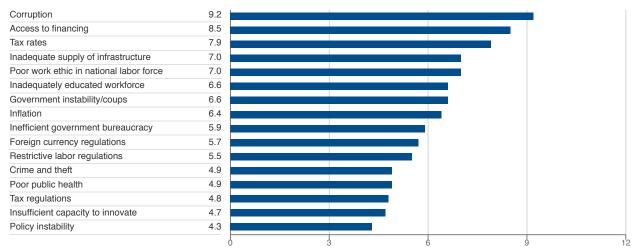
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	40	4.6	_		Rank	59 / 144	60 / 148	<b>71</b> / 144	<b>55</b> / 140	39 / 138	40 / 137
Subindex A: Basic requirements	63	4.7			Score	4.3	4.3	4.2	4.3	4.5	4.6
🖮 1st pillar: Institutions	39	4.4	_								
<b>↑</b> 2nd pillar: Infrastructure	66	4.2	_					1st pillar: Institutions			
	80	4.5	_			12th p Innov		7	2nd pill Infrastr		
4th pillar: Health and primary education	91	5.5	_				$\wedge$		$\langle \rangle$		
Subindex B: Efficiency enhancers	42	4.5	~			11th pillar: Business sophistication	$\langle \langle \rangle \rangle$			3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	75	4.3	_			/					
	56	4.5	_			10th pillar: Market size				4th pillar: Health and education	
7th pillar: Labor market efficiency	75	4.1									
8th pillar: Financial market development	42	4.4	~			9th pillar: Technological readiness				5th pillar: Higher educat and training	ion
్ళిస్త్ 9th pillar: Technological readiness	107	3.1	~				th pillar:		6th pillar		
$\overset{\overset{\leftarrow}{\downarrow}}{\downarrow}$ 10th pillar: Market size	3	6.4	_			Financia		7th pillar:	Goods n	narket	
Subindex C: Innovation and sophistication factors	30	4.3	_					Labor market efficiency			
ℳ 11th pillar: Business sophistication	39	4.5	~				■ Indi	o South	A A oi o		
** 12th pillar: Innovation	29	4.1	_				Indi	a South	i Asid		

India (40th) stabilizes this year after its big leap forward of the previous two years. The score improves across most pillars of competitiveness, particularly infrastructure (66th, up two), higher education and training (75th, up six), and technological readiness (107th, up three), reflecting recent public investments in these areas. Performance also improves in ICT indicators, particularly Internet bandwidth per user, mobile

phone and broadband subscriptions, and Internet access in schools. The quality of institutions has increased further, especially in terms of efficiency of public spending (20th), but the private sector still considers corruption to be the most problematic factor for doing business in India.

#### Most problematic factors for doing business





# India

dex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	э Т
⋒ 1st pillar: Institutions	39	4.4	_		56	4.5	_
.01 Property rights	65	4.4	~	6.01 Intensity of local competition	98	4.7	_
.02 Intellectual property protection	52	4.4	_	6.02 Extent of market dominance	23	4.4	_
1.03 Diversion of public funds	35		_	6.03 Effectiveness of anti-monopoly policy	33	4.4	_
1.04 Public trust in politicians	33	4.2	_	6.04 Effect of taxation on incentives to invest	24	4.5	_
1.05 Irregular payments and bribes	51		_	6.05 Total tax rate % profits	124	60.6	_
1.06 Judicial independence	53	4.4	~	6.06 No. of procedures to start a business	132	13	_
				·			_
.07 Favoritism in decisions of government officials	26	4.3		6.07 Time to start a business days	111	26.0	
.08 Efficiency of government spending	20	4.5		6.08 Agricultural policy costs	34	4.3	
.09 Burden of government regulation	20	4.3		6.09 Prevalence of non-tariff barriers	54		
.10 Efficiency of legal framework in settling disputes	35	4.5		6.10 Trade tariffs % duty	125	12.9	~
11 Efficiency of legal framework in challenging regulations	23	4.4		6.11 Prevalence of foreign ownership	64	4.5	-
12 Transparency of government policymaking	50	4.4	~	6.12 Business impact of rules on FDI	74	4.5	-
.13 Business costs of terrorism	117	4.2	$\sim$	6.13 Burden of customs procedures	47	4.6	-
.14 Business costs of crime and violence	80	4.4	~	6.14 Imports % GDP	119	21.8	-
15 Organized crime	89	4.4	~	6.15 Degree of customer orientation	63	4.6	-
16 Reliability of police services	62		_	6.16 Buyer sophistication	15	4.6	_
				6.16 Buyer sopriistication	13	4.0	_
17 Ethical behavior of firms	36			₹ 7th pillar: Labor market efficiency	75	4.1	-
18 Strength of auditing and reporting standards	69		$\sim$				
9 Efficacy of corporate boards	97	4.5	~	7.01 Cooperation in labor-employer relations	56	4.5	_
Protection of minority shareholders' interests	42	4.5	$\sim$	7.02 Flexibility of wage determination	104	4.5	
21 Strength of investor protection 0-10 (best)	13	7.3	$\sim$	7.03 Hiring and firing practices	19	4.6	
				7.04 Redundancy costs weeks of salary	67	15.8	
↑ 2nd pillar: Infrastructure	66	4.2		7.05 Effect of taxation on incentives to work	32	4.4	
1 Quality of overall infrastructure	46	4.6		7.06 Pay and productivity	33	4.5	
2 Quality of roads	55	4.3		7.07 Reliance on professional management	48	4.6	
•	28		~		24	4.6	
33 Quality of railroad infrastructure				7.08 Country capacity to retain talent			
04 Quality of port infrastructure	47	4.6		7.09 Country capacity to attract talent	19	4.7	_
5 Quality of air transport infrastructure	61	4.6	~	7.10 Female participation in the labor force ratio to men	130	0.35	
06 Available airline seat kilometers millions/week	8 -	4,888.9	_	Oth nilley. Financial market development	42	4.4	
7 Quality of electricity supply	80	4.7	_	8th pillar: Financial market development	42	4.4	
8 Mobile-cellular telephone subscriptions /100 pop.	111	87.0	_	8.01 Availability of financial services	43	4.5	
99 Fixed-telephone lines /100 pop.	112	1.9	_	8.02 Affordability of financial services	34	4.4	
to Find to provide into a Free pop.				8.03 Financing through local equity market	39	4.3	
3rd pillar: Macroeconomic environment	80	4.5	_	8.04 Ease of access to loans	35	4.5	
1 Government budget balance % GDP	116	-6.6		8.05 Venture capital availability	13	4.3	
-			~~				-
02 Gross national savings % GDP	23	30.5		8.06 Soundness of banks	78	4.6	
03 Inflation annual % change	93	4.9	$\sim$	8.07 Regulation of securities exchanges	64	4.5	
04 Government debt % GDP	102	69.5	~	8.08 Legal rights index 0-10 (best)	50	6	
05 Country credit rating 0-100 (best)	47	61.4		% 9th pillar: Technological readiness	107	3.1	
4th pillar: Health and primary education	91	5.5	_	9.01 Availability of latest technologies	72	4.7	
01 Malaria incidence cases/100,000 pop.	47	992.4	~	9.02 Firm-level technology absorption	73	4.4	
22 Business impact of malaria	37	4.3	~ -	9.03 FDI and technology transfer	59	4.5	
•			,	0,			
33 Tuberculosis incidence cases/100,000 pop.	117	217.0		9.04 Internet users % pop.	101	29.5	
24 Business impact of tuberculosis	109	4.3	~	9.05 Fixed-broadband Internet subscriptions /100 pop.	106	1.4	
05 HIV prevalence % adult pop.	63	0.3		9.06 Internet bandwidth kb/s/user	103	16.0	
06 Business impact of HIV/AIDS	113	4.2	$\sim$	9.07 Mobile-broadband subscriptions /100 pop.	125	16.8	
07 Infant mortality deaths/1,000 live births	113	37.9	_	<sup>5</sup> 7 400	•	0.1	
08 Life expectancy years	105	68.3	_	્રૈંગે 10th pillar: Market size	3	6.4	
9 Quality of primary education	49	4.5	_	10.01 Domestic market size index	3	6.4	
10 Primary education enrollment rate net %	95	92.3		10.02 Foreign market size index	4	6.4	
i mary oddodaion on omnontrato net %	33	J2.J		10.03 GDP (PPP) PPP \$ billions		8,662.3	
₹ 5th pillar: Higher education and training	75	4.3	_	10.04 Exports % GDP	112	18.8	
of Secondary education enrollment rate gross %	98	74.0	سر				
22 Tertiary education enrollment rate gross %	89	26.9		11th pillar: Business sophistication	39	4.5	
O3 Quality of the education system	26		~	11.01 Local supplier quantity	53	4.6	
24 Quality of math and science education	37	4.6	~	11.02 Local supplier quality	69	4.3	
S Quality of management schools			~	11.03 State of cluster development	31	4.4	
	41			11.04 Nature of competitive advantage	28	4.4	
6 Internet access in schools	51	4.6	~	11.05 Value chain breadth	30	4.5	
7 Local availability of specialized training services	49	4.7					
8 Extent of staff training	34	4.5		11.06 Control of international distribution	28	4.5	
				11.07 Production process sophistication	41	4.5	
				11.08 Extent of marketing	61	4.5	
				11.09 Willingness to delegate authority	45	4.5	
				12th pillar: Innovation	29	4.1	
				12.01 Capacity for innovation	42	4.5	
				12.02 Quality of scientific research institutions	35	4.7	
				12.03 Company spending on R&D	23	4.5	_
				12.04 University-industry collaboration in R&D	26		
				12.05 Gov't procurement of advanced technology products	Ω	17	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

8

32

4.7

## Indonesia



The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	258.7	GDP per capita US\$	3,604.3
GDP US\$ billions	932.4	GDP (PPP) % world GDP	2.53

#### Performance overview

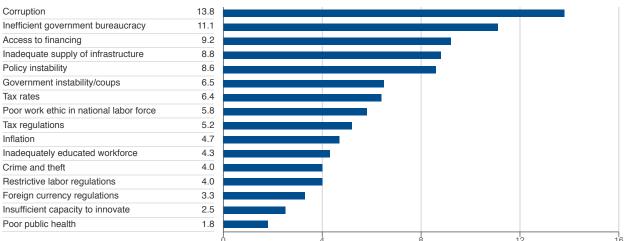
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	36	4.7			Rank	50 / 144	38 / 148	34 / 144	<b>37</b> / 140	41 / 138	<b>36</b> / 137
Subindex A: Basic requirements	46	5.0	_		Score	4.4	4.5	4.6	4.5	4.5	4.7
â 1st pillar: Institutions	47	4.3									
<b>1</b> 2nd pillar: Infrastructure	52	4.5						1st pillar: Institutions			
	26	5.7	~			12th p Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	94	5.4	~			4410	$\wedge$			0.4	
Subindex B: Efficiency enhancers	41	4.5				11th pillar: Business sophistication				3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	64	4.5				/					
fth pillar: Goods market efficiency	43	4.6				10th pillar: Market size				4th pillar: Health and education	
7th pillar: Labor market efficiency	96	3.9	_			\					
8th pillar: Financial market development	37	4.5	~			9th pillar: Technological readiness				5th pillar: Higher educat and training	ion
% 9th pillar: Technological readiness	80	3.9	_			0	th pillar:		6th pillar		
್ಳೆ 10th pillar: Market size	9	5.7				Financia		7th pillar:	Goods m	arket	
Subindex C: Innovation and sophistication factors	31	4.3						Labor market efficiency			
ം 11th pillar: Business sophistication	32	4.6					adonosio	■ Foot Aci	a and Pac	ifio	
* 12th pillar: Innovation	31	4.0	_			<b>=</b> 11	ndonesia	East As	a anu fac	IIIC	

Indonesia (36th) is inching its way up the competitiveness ladder, moving ahead five places since last year. Similar to Korea, Indonesia has improved its performance across all of its pillars. Its position in the rankings is driven mainly by its large market size (9th) and a relatively robust macroeconomic environment (26th). Ranking 31st and 32nd in innovation and business sophistication respectively. Indonesia is one of the top innovators among the emerging economies. In contrast, the

country is lagging quite far behind in terms of technological readiness (80th) despite having made steady progress on that front over the last decade. Significant advances are also needed in the labor market efficiency pillar (96th), which is dragged down by excessive redundancy costs, limited flexibility of wage determination, and a limited representation of women in the labor force.

### Most problematic factors for doing business





# Indonesia

dex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	е
â 1st pillar: Institutions	47	4.3	—	6th pillar: Goods market efficiency	43	4.6	-
.01 Property rights	50	4.6		6.01 Intensity of local competition	39	5.4	_
.02 Intellectual property protection	46	4.5		6.02 Extent of market dominance	34	4.2	-
.03 Diversion of public funds	41	4.2		6.03 Effectiveness of anti-monopoly policy	36	4.3	-
.04 Public trust in politicians	42	3.7	_	6.04 Effect of taxation on incentives to invest	38	4.2	
.05 Irregular payments and bribes	75	3.8		6.05 Total tax rate % profits	40	30.6	
.06 Judicial independence	52	4.4		6.06 No. of procedures to start a business	122	11	
	32	4.0		·	106	24.9	
.07 Favoritism in decisions of government officials				6.07 Time to start a business days			
.08 Efficiency of government spending	25	4.3		6.08 Agricultural policy costs	37	4.2	
.09 Burden of government regulation	27	4.1		6.09 Prevalence of non-tariff barriers	79	4.3	
10 Efficiency of legal framework in settling disputes	44	4.1	$\overline{}$	6.10 Trade tariffs % duty	68	4.8	•
11 Efficiency of legal framework in challenging regulations	40	3.8		6.11 Prevalence of foreign ownership	61	4.6	
12 Transparency of government policymaking	51	4.4		6.12 Business impact of rules on FDI	87	4.3	
.13 Business costs of terrorism	112	4.3	$\sim$	6.13 Burden of customs procedures	63	4.2	-
14 Business costs of crime and violence	88	4.2		6.14 Imports % GDP	130	17.8	
	101			6.15 Degree of customer orientation	44	5.0	
15 Organized crime							_
16 Reliability of police services	77		_	6.16 Buyer sophistication	36	3.9	
17 Ethical behavior of firms	42	4.3		₹ 7th pillar: Labor market efficiency	96	3.9	
18 Strength of auditing and reporting standards	67	4.6	$\sim$	, ,		0.9	
19 Efficacy of corporate boards	56	5.0		7.01 Cooperation in labor-employer relations	41	4.7	
20 Protection of minority shareholders' interests	40		$\sim$	7.02 Flexibility of wage determination	99	4.5	
21 Strength of investor protection 0-10 (best)	66	5.7		7.03 Hiring and firing practices	25	4.5	
2.1 On ongail of invosion protection 0-10 (best)	00	5.1	~	7.04 Redundancy costs weeks of salary	133	57.8	
⁴ 2nd pillar: Infrastructure	52	4.5	_	7.05 Effect of taxation on incentives to work	28	4.5	
•							
01 Quality of overall infrastructure	68	4.1		7.06 Pay and productivity	22	4.7	
02 Quality of roads	64	4.1	_	7.07 Reliance on professional management	34	4.8	
03 Quality of railroad infrastructure	30	4.2		7.08 Country capacity to retain talent	32	4.3	
04 Quality of port infrastructure	72	4.0	_	7.09 Country capacity to attract talent	25	4.5	
05 Quality of air transport infrastructure	51	4.8	~	7.10 Female participation in the labor force ratio to men	114	0.62	
06 Available airline seat kilometers millions/week	14 (	3,299.0	_				
07 Quality of electricity supply	86	4.4	_	8th pillar: Financial market development	37	4.5	
			_	8.01 Availability of financial services	33	5.0	
08 Mobile-cellular telephone subscriptions /100 pop.	18	149.1	$\subseteq$	8.02 Affordability of financial services	33		
09 Fixed-telephone lines /100 pop.	105	4.0	_				
3rd pillar: Macroeconomic environment	26	5.7	$\sim$	8.03 Financing through local equity market	30	4.5	
<u>'</u>				8.04 Ease of access to loans	33	4.5	
01 Government budget balance % GDP	64	-2.5	~	8.05 Venture capital availability	19	4.0	
02 Gross national savings % GDP	19	32.5	$\sim$	8.06 Soundness of banks	68	4.9	
03 Inflation annual % change	64	3.5	~	8.07 Regulation of securities exchanges	51	4.7	
04 Government debt % GDP	21	27.9	~~	8.08 Legal rights index 0-10 (best)	50	6	
05 Country credit rating 0-100 (best)	56	57.0		2			
		07.0		9th pillar: Technological readiness	80	3.9	
3 4th pillar: Health and primary education	94	5.4	$\sim$	9.01 Availability of latest technologies	67	4.8	
01 Malaria incidence cases/100,000 pop.	41	498.8	$\overline{}$	9.02 Firm-level technology absorption	39	5.0	
02 Business impact of malaria	32	4.7		9.03 FDI and technology transfer	44	4.7	
03 Tuberculosis incidence cases/100,000 pop.	132	395.0		9.04 Internet users % pop.	110	25.4	
04 Business impact of tuberculosis	101	4.6		9.05 Fixed-broadband Internet subscriptions /100 pop.	104	1.9	
05 HIV prevalence % adult pop.	73	0.4	_	9.06 Internet bandwidth kb/s/user	91	24.9	
06 Business impact of HIV/AIDS	102	4.6	_	9.07 Mobile-broadband subscriptions /100 pop.	56	67.3	
07 Infant mortality deaths/1,000 live births	95	22.8	~				
	102		$\overline{}$	10th pillar: Market size	9	5.7	
08 Life expectancy years				10.01 Domestic market size index	8	5.7	
09 Quality of primary education	47	4.5	$\leq$	10.02 Foreign market size index	23	5.8	
10 Primary education enrollment rate net %	106	89.7	_				
₹ 5th pillar: Higher education and training	64	4.5		10.03 GDP (PPP) PPP \$ billions		3,032.1	
				10.04 Exports % GDP	115	18.0	
01 Secondary education enrollment rate gross %	85	85.8	_	مر 11th pillar: Business sophistication	32	4.6	
02 Tertiary education enrollment rate gross %	92	24.3	$\overline{}$				
03 Quality of the education system	33	4.4		11.01 Local supplier quantity	42	4.8	
04 Quality of math and science education	40		$\sim$	11.02 Local supplier quality	54	4.6	
D5 Quality of management schools	42			11.03 State of cluster development	26	4.6	
of Internet access in schools	45	4.8	_	11.04 Nature of competitive advantage	47	4.0	
				11.05 Value chain breadth	28	4.6	
77 Local availability of specialized training services	45	4.7					
08 Extent of staff training	30	4.6	$\sim$	11.06 Control of international distribution	33	4.3	
				11.07 Production process sophistication	48	4.3	
				11.08 Extent of marketing	33	4.9	
				11.09 Willingness to delegate authority	26	5.0	
					0.4	4.0	
				12th pillar: Innovation	31	4.0	
				12.01 Capacity for innovation	31	4.8	
					40	4.4	
				12.02 Quality of scientific research institutions	40	4.4	
				12.02 Quality of scientific research institutions 12.03 Company spending on R&D 12.04 University-industry collaboration in R&D	29 30	4.4 4.4 4.3	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12

35

4.4

# Iran, Islamic Rep.

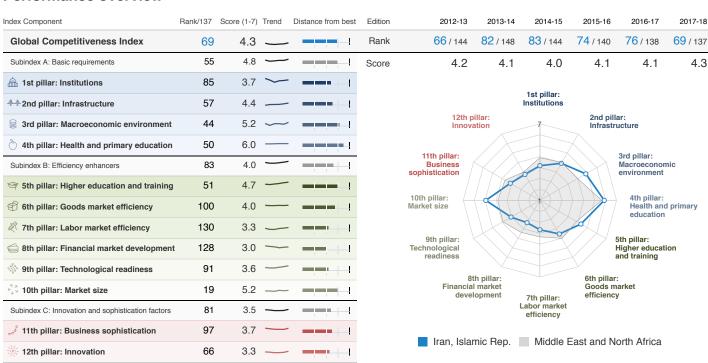


The Global Competitiveness Index 2017-2018 edition



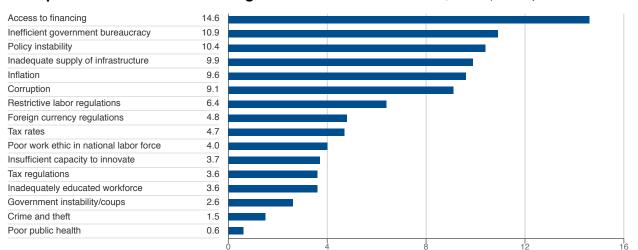
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database			
Population millions	80.5	GDP per capita US\$	4,682.5		
GDP US\$ billions	376.8	GDP (PPP) % world GDP	1.21		

#### Performance overview



## Most problematic factors for doing business





# Iran, Islamic Rep.

ndex Component	Rank/137		Trend	Index Component	Rank/137	Value
1st pillar: Institutions	85	3.7	<u> </u>	6th pillar: Goods market efficiency	100	4.0
1 Property rights	100	3.8	_	6.01 Intensity of local competition	125	4.3
22 Intellectual property protection	107	3.5		6.02 Extent of market dominance	56	3.9
03 Diversion of public funds	68		$\sim$	6.03 Effectiveness of anti-monopoly policy	50	3.9
04 Public trust in politicians	49	3.4	$\sim$	6.04 Effect of taxation on incentives to invest	68	3.6
05 Irregular payments and bribes	83			6.05 Total tax rate % profits	96	44.1
06 Judicial independence	81	3.6	~	6.06 No. of procedures to start a business	92	8
7 Favoritism in decisions of government officials	46	3.6	$\simeq$	6.07 Time to start a business days	88	15.5
08 Efficiency of government spending	45	3.7		6.08 Agricultural policy costs	82	3.6
99 Burden of government regulation	83			6.09 Prevalence of non-tariff barriers	99	4.0
10 Efficiency of legal framework in settling disputes	76		$\overline{}$	6.10 Trade tariffs % duty	138	29.5
11 Efficiency of legal framework in challenging regulations		3.1		6.11 Prevalence of foreign ownership	133	3.0
12 Transparency of government policymaking	105	3.5		6.12 Business impact of rules on FDI	125	3.5
13 Business costs of terrorism	96	4.7	$\sim$	6.13 Burden of customs procedures	99	3.6
14 Business costs of crime and violence	74	4.4	$\sim$	6.14 Imports % GDP	134	14.3
15 Organized crime	91	4.3	~	6.15 Degree of customer orientation	118	3.9
16 Reliability of police services	71		$\sim$	6.16 Buyer sophistication	51	3.7
17 Ethical behavior of firms	78	3.7	_	7th pillar: Labor market efficiency	130	3.3
18 Strength of auditing and reporting standards	118	3.7				
19 Efficacy of corporate boards	125	4.0	_	7.01 Cooperation in labor-employer relations	121	3.7
20 Protection of minority shareholders' interests	110	3.6	$\overline{}$	7.02 Flexibility of wage determination	120	4.1
21 Strength of investor protection 0-10 (best)	127	3.5	$\overline{}$	7.03 Hiring and firing practices	72	3.7
⁴ 2nd pillar: Infrastructure	57	4.4		7.04 Redundancy costs weeks of salary	100	23.1
·				7.05 Effect of taxation on incentives to work	79	3.7
1 Quality of overall infrastructure	75	4.0		7.06 Pay and productivity	100	3.5
02 Quality of roads	71	4.0		7.07 Reliance on professional management	120	3.4
O3 Quality of railroad infrastructure	42	3.7	_	7.08 Country capacity to retain talent	104	2.9
04 Quality of port infrastructure	71			7.09 Country capacity to attract talent	108	2.6
OS Quality of air transport infrastructure	105		~	7.10 Female participation in the labor force ratio to men	137	0.22
06 Available airline seat kilometers millions/week	53	422.2	_	8th pillar: Financial market development	128	3.0
Of Quality of electricity supply	67					
Mobile-cellular telephone subscriptions /100 pop.	99	100.1	_	8.01 Availability of financial services	115	3.6
99 Fixed-telephone lines /100 pop.	22	38.3	~	8.02 Affordability of financial services	104	3.3
3rd pillar: Macroeconomic environment	44	5.2		8.03 Financing through local equity market	92	3.1
<u>'</u>				8.04 Ease of access to loans	125	2.8
O1 Government budget balance % GDP	68		<u>~</u>	8.05 Venture capital availability	83	2.7
02 Gross national savings % GDP	7	37.4		8.06 Soundness of banks	122	3.6
03 Inflation annual % change	121		~	8.07 Regulation of securities exchanges	126	3.2
04 Government debt % GDP	37	35.0		8.08 Legal rights index 0-10 (best)	107	2
05 Country credit rating 0-100 (best)	100	29.2	_	9th pillar: Technological readiness	91	3.6
4th pillar: Health and primary education	50	6.0		9.01 Availability of latest technologies	105	4.1
01 Malaria incidence cases/100,000 pop.	17	0.2	~	9.02 Firm-level technology absorption	118	3.8
02 Business impact of malaria	18	5.3	~	9.03 FDI and technology transfer	74	4.3
03 <b>Tuberculosis incidence</b> cases/100,000 pop.	40		/	9.04 Internet users % pop.	79	53.2
04 Business impact of tuberculosis	76		~	9.05 Fixed-broadband Internet subscriptions /100 pop.	67	11.6
D5 HIV prevalence % adult pop.	1	0.1		9.06 Internet bandwidth kb/s/user	105	15.2
06 Business impact of HIV/AIDS	93	5.0	_	9.07 Mobile-broadband subscriptions /100 pop.	101	33.8
07 Infant mortality deaths/1,000 live births	75	13.4	~	• • • • • • • • • • • • • • • • • • • •		
08 Life expectancy years	58			10th pillar: Market size	19	5.2
De Quality of primary education	70	4.0		10.01 Domestic market size index	18	5.2
10 Primary education enrollment rate net %	14	99.2	~	10.02 Foreign market size index	31	5.5
ary oddoddon om omnont rate net 76			_	10.03 GDP (PPP) PPP \$ billions		1,454.5
5th pillar: Higher education and training	51	4.7		10.04 Exports % GDP	104	20.2
of Secondary education enrollment rate gross %	77	89.2	_		97	
22 Tertiary education enrollment rate gross %	26	71.9		11th pillar: Business sophistication		3.7
O3 Quality of the education system	94	3.3	~	11.01 Local supplier quantity	67	4.6
04 Quality of math and science education	47	4.5	~	11.02 Local supplier quality	109	3.8
5 Quality of management schools	92	3.9		11.03 State of cluster development	74	3.7
6 Internet access in schools	93	3.7	_	11.04 Nature of competitive advantage	88	3.2
7 Local availability of specialized training services	84	4.2	_	11.05 Value chain breadth	81	3.7
8 Extent of staff training	98			11.06 Control of international distribution	88	3.4
Ŭ				11.07 Production process sophistication	73	3.7
				11.08 Extent of marketing	127	3.7
				11.09 Willingness to delegate authority	128	3.5
				* 12th pillar: Innovation	66	3.3
				12.01 Capacity for innovation	88	3.9
				12.02 Quality of scientific research institutions	55	4.0
				12.03 Company spending on R&D	66 94	3.3
				12.04 University-industry collaboration in R&D		3.2
				12.05 Gov't procurement of advanced technology products	50	3.5

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

 $12.07 \ \ \textbf{PCT patents} \ \ \text{applications/million pop}.$ 

50

3.5

## **Ireland**



The Global Competitiveness Index 2017-2018 edition



2017-18

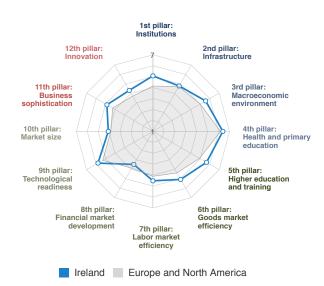
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5.2

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2				
Population millions 4.		GDP per capita US\$	62,562.3			
GDP US\$ billions	293.6	GDP (PPP) % world GDP	0.27			

#### Performance overview

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition
Global Competitiveness Index	24	5.2			Rank
Subindex A: Basic requirements	20	5.7			Score
â 1st pillar: Institutions	19	5.3	_		
<b>↑</b> 2nd pillar: Infrastructure	31	5.1	_		
	24	5.8			
3 4th pillar: Health and primary education	16	6.5	_		
Subindex B: Efficiency enhancers	21	5.1			
⇒ 5th pillar: Higher education and training	10	5.8			
	8	5.3	_		
7th pillar: Labor market efficiency	21	4.9			
8th pillar: Financial market development	69	4.0	_		
∜ 9th pillar: Technological readiness	18	6.0	_		
્રૈંઢ 10th pillar: Market size	45	4.5	_		
Subindex C: Innovation and sophistication factors	19	4.9			
ೂ 11th pillar: Business sophistication	19	5.2	_		
** 12th pillar: Innovation	19	4.7	_		



2014-15

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5.0

2015-16

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5.1

2016-17

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5.2

### Most problematic factors for doing business



2012-13

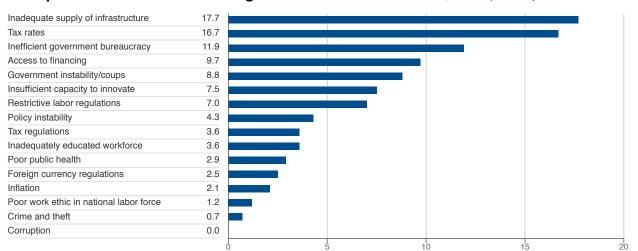
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4.9

2013-14

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4.9



## **Ireland**

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	э Т
⚠ 1st pillar: Institutions	19	5.3	_	<b>❸</b> 6th pillar: Goods market efficiency	8	5.3	_
1.01 Property rights	12	6.0	_	6.01 Intensity of local competition	52	5.3	_
1.02 Intellectual property protection	12	5.9	_	6.02 Extent of market dominance	17	4.7	_
1.03 Diversion of public funds	15	5.7	$\overline{}$	6.03 Effectiveness of anti-monopoly policy	15	4.9	_
.04 Public trust in politicians	21	4.6	/	6.04 Effect of taxation on incentives to invest	25	4.5	_
.05 Irregular payments and bribes	14	6.1	_	6.05 Total tax rate % profits	26	26.0	_
.06 Judicial independence	7	6.3		6.06 No. of procedures to start a business	7	3	_
.07 Favoritism in decisions of government officials	16	4.6	_	6.07 Time to start a business days	22	5.0	1
.08 Efficiency of government spending	49	3.6		6.08 Agricultural policy costs	9	5.0	_
.09 Burden of government regulation	26	4.1		6.09 Prevalence of non-tariff barriers	17	5.1	_
.10 Efficiency of legal framework in settling disputes	42	4.1	$\overline{}$	6.10 Trade tariffs % duty	6	1.1	
	26	4.3			8	5.8	
.11 Efficiency of legal framework in challenging regulations			=	6.11 Prevalence of foreign ownership	6		-
.12 Transparency of government policymaking	17	5.5		6.12 Business impact of rules on FDI		5.8	
.13 Business costs of terrorism	40	5.5		6.13 Burden of customs procedures	12	5.4	
.14 Business costs of crime and violence	53	4.9		6.14 Imports % GDP	10	91.0	-
.15 Organized crime	29	5.5		6.15 Degree of customer orientation	19	5.6	-
.16 Reliability of police services	25	5.8		6.16 Buyer sophistication	23	4.2	-
17 Ethical behavior of firms	14	5.6		7th pillar: Labor market efficiency	21	4.9	_
18 Strength of auditing and reporting standards	44	5.1		•		4.9	
19 Efficacy of corporate boards	16	5.9		7.01 Cooperation in labor-employer relations	27	5.1	-
20 Protection of minority shareholders' interests	35	4.7	$\overline{}$	7.02 Flexibility of wage determination	44	5.3	
21 Strength of investor protection 0-10 (best)	13	7.3	_	7.03 Hiring and firing practices	44	4.1	-
				7.04 Redundancy costs weeks of salary	56	14.3	
⁴ 2nd pillar: Infrastructure	31	5.1	_	7.05 Effect of taxation on incentives to work	112	3.2	
01 Quality of overall infrastructure	52	4.4		7.06 Pay and productivity	12	4.9	
02 Quality of roads	41	4.6	_	7.07 Reliance on professional management	10		
03 Quality of railroad infrastructure	43	3.7	_	7.08 Country capacity to retain talent	21	4.7	
•					12		_
04 Quality of port infrastructure	28	5.1	$\sim$	7.09 Country capacity to attract talent		5.0	-
05 Quality of air transport infrastructure	32	5.4		7.10 Female participation in the labor force ratio to men	69	0.81	
06 Available airline seat kilometers millions/week	40	661.3		8th pillar: Financial market development	69	4.0	
7 Quality of electricity supply	24	6.3	_				
Mobile-cellular telephone subscriptions /100 pop.	97	103.6	~	8.01 Availability of financial services	59	4.3	_
09 Fixed-telephone lines /100 pop.	19	39.7		8.02 Affordability of financial services	87	3.6	_
2	04	F 0	_	8.03 Financing through local equity market	54	3.9	
3rd pillar: Macroeconomic environment	24	5.8	_	8.04 Ease of access to loans	99	3.4	
O1 Government budget balance % GDP	29	-0.9	_	8.05 Venture capital availability	54	3.1	
02 Gross national savings % GDP	14	33.6		8.06 Soundness of banks	109	4.0	
03 Inflation annual % change	68	-0.2	$\sim$	8.07 Regulation of securities exchanges	65	4.5	٠,
04 Government debt % GDP	109	76.4		8.08 Legal rights index 0-10 (best)	31	7	-
05 Country credit rating 0-100 (best)	32	72.1		^	18	6.0	
4th pillar: Health and primary education	16	6.5	_	9th pillar: Technological readiness 9.01 Availability of latest technologies	33	5.6	
	2/2					5.3	-
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	21		
22 Business impact of malaria	n/a	6.8		9.03 FDI and technology transfer	1	6.1	
03 Tuberculosis incidence cases/100,000 pop.	20	7.2	~	9.04 Internet users % pop.	24		
04 Business impact of tuberculosis	13	6.7		9.05 Fixed-broadband Internet subscriptions /100 pop.	28	28.5	
05 HIV prevalence % adult pop.	1	0.2	_	9.06 Internet bandwidth kb/s/user	22	183.9	
06 Business impact of HIV/AIDS	21	6.5		9.07 Mobile-broadband subscriptions /100 pop.	22	98.2	
77 Infant mortality deaths/1,000 live births	17	3.0	$\sim$	A doub willow Mandada air-	45	4.5	
08 Life expectancy years	23	81.5		10th pillar: Market size	45	4.5	
09 Quality of primary education	8	5.6		10.01 Domestic market size index	50	4.2	
10 Primary education enrollment rate net %	72	95.0	^_	10.02 Foreign market size index	30	5.5	
•				10.03 GDP (PPP) PPP \$ billions	51	324.9	
5th pillar: Higher education and training	10	5.8	_	10.04 Exports % GDP	12	93.4	
01 Secondary education enrollment rate gross %	10	127.5		→ 11th pillar: Business sophistication	19	5.2	١,
02 Tertiary education enrollment rate gross %	12	83.8					4
O3 Quality of the education system	7			11.01 Local supplier quantity	47	4.7	
04 Quality of math and science education	19	5.2		11.02 Local supplier quality	26	5.2	_
D5 Quality of management schools	16	5.4	_	11.03 State of cluster development	20	4.8	_
16 Internet access in schools	33	5.1	$\overline{}$	11.04 Nature of competitive advantage	19	5.4	
7 Local availability of specialized training services	14	5.7	_	11.05 Value chain breadth	20	5.0	
8 Extent of staff training	21	4.9	_	11.06 Control of international distribution	26	4.5	_
• • • • • • • • • • • • • • • • • • •				11.07 Production process sophistication	14	5.7	
				11.08 Extent of marketing	23	5.1	-
				11.09 Willingness to delegate authority	11	5.6	
				. \/			
				12th pillar: Innovation	19	4.7	
				12.01 Capacity for innovation	19	5.2	
				12.02 Quality of scientific research institutions	19	5.4	
				12.03 Company spending on R&D	20	4.8	
				12.04 University-industry collaboration in R&D	13	5.0	
				12.05 Gov't procurement of advanced technology products	60	3.4	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

60

21

3.4

## Israel

The Global Competitiveness Index 2017-2018 edition



2017-18

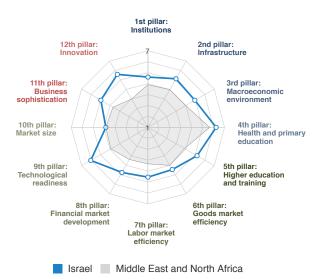
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5.3

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (Apr			
Population millions	8.5	GDP per capita ∪s\$	37,262.4		
GDP US\$ billions	318.4	GDP (PPP) % world GDP	0.25		

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13
Global Competitiveness Index	16	5.3			Rank	<b>26</b> / 144
Subindex A: Basic requirements	28	5.5			Score	5.0
☐ 1st pillar: Institutions	29	4.9	~			
↑↑ 2nd pillar: Infrastructure	25	5.4				
	39	5.2				12th Inno
3 4th pillar: Health and primary education	27	6.3	_			
Subindex B: Efficiency enhancers	19	5.1	_			11th pillar: Business sophistication
⇒ 5th pillar: Higher education and training	21	5.4				. /
6th pillar: Goods market efficiency	30	4.8	_			10th pillar: Market size
7th pillar: Labor market efficiency	18	4.9	~			
8th pillar: Financial market development	11	5.1				9th pillar: Technological readiness
9th pillar: Technological readiness	7	6.2				
੍ਰੰਡ 10th pillar: Market size	56	4.3				Financi dev
Subindex C: Innovation and sophistication factors	7	5.5	_			
್ಯಿಕಿ 11th pillar: Business sophistication	15	5.3				- lo
12th pillar: Innovation	3	5.8				Is



2014-15

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4.9

2015-16

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5.0

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5.2

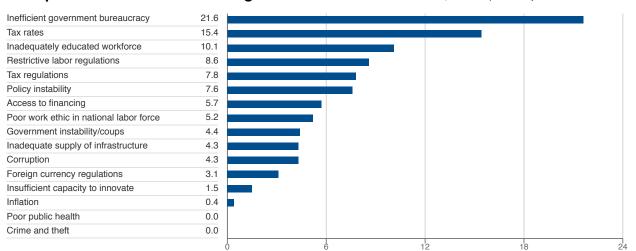
2013-14

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4.9

#### Most problematic factors for doing business





## Israel

dex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value
â 1st pillar: Institutions	29	4.9	~	6th pillar: Goods market efficiency	30	4.8
.01 Property rights	24	5.6	_	6.01 Intensity of local competition	50	5.3
02 Intellectual property protection	10	5.9	_	6.02 Extent of market dominance	66	3.7
3 Diversion of public funds	29	4.8	$\sim$	6.03 Effectiveness of anti-monopoly policy	31	4.5
04 Public trust in politicians	50	3.4	~	6.04 Effect of taxation on incentives to invest	30	4.4
05 Irregular payments and bribes	23		~	6.05 Total tax rate % profits	30	28.1
06 Judicial independence	14	6.1	_	6.06 No. of procedures to start a business	18	4
07 Favoritism in decisions of government officials	41	3.7		6.07 Time to start a business days	75	12.0
	40				31	
08 Efficiency of government spending		3.8	$\sim$	6.08 Agricultural policy costs		4.3
09 Burden of government regulation	41	3.8		6.09 Prevalence of non-tariff barriers	46	4.6
10 Efficiency of legal framework in settling disputes	28	4.6	~	6.10 Trade tariffs % duty	46	3.0
11 Efficiency of legal framework in challenging regulations	29	4.2		6.11 Prevalence of foreign ownership	32	5.2
12 Transparency of government policymaking	29	4.8		6.12 Business impact of rules on FDI	28	5.2
13 Business costs of terrorism	124	3.9	$\sim$	6.13 Burden of customs procedures	42	4.7
14 Business costs of crime and violence	49	5.0	$\overline{}$	6.14 Imports % GDP	108	29.0
15 Organized crime	51	5.1	$\overline{}$	6.15 Degree of customer orientation	55	4.9
16 Reliability of police services	44	5.1		6.16 Buyer sophistication	26	4.1
17 Ethical behavior of firms	28	4.9	$\sim$	0.10 Dayor coprilotioation		7.1
				7th pillar: Labor market efficiency	18	4.9
18 Strength of auditing and reporting standards	13	5.9		7.01 Cooperation in labor-employer relations	26	5.2
19 Efficacy of corporate boards	25		~			
20 Protection of minority shareholders' interests	16		_	7.02 Flexibility of wage determination	41	5.3
21 Strength of investor protection 0-10 (best)	9	7.5	$\overline{}$	7.03 Hiring and firing practices	20	4.5
A O T THE LET OF THE T	05	<i>-</i> .		7.04 Redundancy costs weeks of salary	116	27.4
◆ 2nd pillar: Infrastructure	25	5.4		7.05 Effect of taxation on incentives to work	27	4.5
1 Quality of overall infrastructure	31	4.9	~	7.06 Pay and productivity	19	4.8
02 Quality of roads	28	5.1	~	7.07 Reliance on professional management	19	5.5
03 Quality of railroad infrastructure	40	3.8	~	7.08 Country capacity to retain talent	19	4.8
04 Quality of port infrastructure	43		_	7.09 Country capacity to attract talent	37	4.0
	30	5.4			30	0.90
05 Quality of air transport infrastructure				7.10 Female participation in the labor force ratio to men	30	0.90
06 Available airline seat kilometers millions/week	38	685.6	_	8th pillar: Financial market development	11	5.1
7 Quality of electricity supply	23	6.4				
08 Mobile-cellular telephone subscriptions /100 pop.	38	131.7	~~	8.01 Availability of financial services	20	5.2
09 Fixed-telephone lines /100 pop.	14	41.6	~	8.02 Affordability of financial services	31	4.5
<u> </u>			_	8.03 Financing through local equity market	19	5.0
3rd pillar: Macroeconomic environment	39	5.2		8.04 Ease of access to loans	20	4.8
01 Government budget balance % GDP	65	-2.5	~~	8.05 Venture capital availability	2	5.1
02 Gross national savings % GDP	48	24.1	~	8.06 Soundness of banks	10	6.0
03 Inflation annual % change	77	-0.5		8.07 Regulation of securities exchanges	16	5.7
04 Government debt % GDP	92	62.2	~	8.08 Legal rights index 0-10 (best)	50	6
				6.06 Legal rights index 0-10 (best)	30	0
05 Country credit rating 0-100 (best)	35	71.0		🍄 9th pillar: Technological readiness	7	6.2
4th pillar: Health and primary education	27	6.3	_	9.01 Availability of latest technologies	4	6.5
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	8	5.8
2 Business impact of malaria	n/a	6.9		9.03 FDI and technology transfer	6	5.5
33 Tuberculosis incidence cases/100,000 pop.	5	4.0	^	9.04 Internet users % pop.	30	79.8
04 Business impact of tuberculosis	17	6.7		9.05 Fixed-broadband Internet subscriptions /100 pop.	31	28.1
·						
05 HIV prevalence % adult pop.	1			9.06 Internet bandwidth kb/s/user	29	158.7
06 Business impact of HIV/AIDS	6	6.7		9.07 Mobile-broadband subscriptions /100 pop.	25	93.4
07 Infant mortality deaths/1,000 live births	21		_	10th pillar: Market size	56	4.3
08 Life expectancy years	15	82.1	_			
09 Quality of primary education	39	4.7	_	10.01 Domestic market size index	56	4.1
10 Primary education enrollment rate net %	47		~	10.02 Foreign market size index	57	4.8
•				10.03 GDP (PPP) PPP \$ billions	53	300.6
₹ 5th pillar: Higher education and training	21	5.4		10.04 Exports % GDP	77	31.1
01 Secondary education enrollment rate gross %	38	102.5	~	l dan en e Berte	45	F 0
02 Tertiary education enrollment rate gross %	38	64.7	^	مر 11th pillar: Business sophistication	15	5.3
33 Quality of the education system	25			11.01 Local supplier quantity	37	4.8
24 Quality of math and science education	26			11.02 Local supplier quality	27	5.1
				11.03 State of cluster development	32	4.4
5 Quality of management schools	18			11.04 Nature of competitive advantage	4	6.2
6 Internet access in schools	22		~			
7 Local availability of specialized training services	23		_	11.05 Value chain breadth	16	5.2
8 Extent of staff training	24	4.8	$\overline{}$	11.06 Control of international distribution	14	5.0
				11.07 Production process sophistication	15	5.7
				11.08 Extent of marketing	9	5.5
				11.09 Willingness to delegate authority	23	5.2
				* 12th pillar: Innovation	3	5.8
					3	
				12.01 Capacity for innovation		5.9
				12.02 Quality of scientific research institutions	3	6.3
				12.03 Company spending on R&D	3	5.8
				12.04 University-industry collaboration in R&D	3	5.7
				10.05 Gov't progurement of advanced technology products		4.4

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

4.4

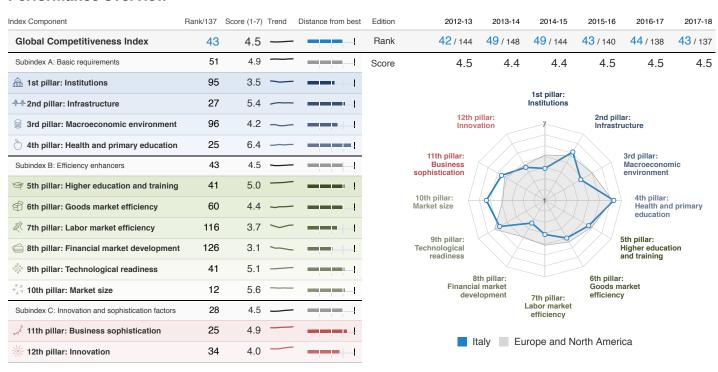
# Italy

The Global Competitiveness Index 2017-2018 edition



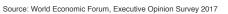
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (Ap				
Population millions	60.7	GDP per capita US\$	30,507.2			
GDP US\$ billions	1,850.7	GDP (PPP) % world GDP	1.86			

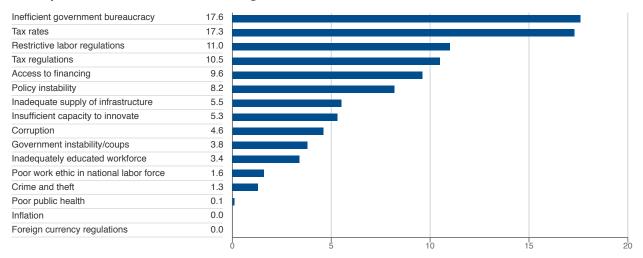
#### Performance overview



Italy (43rd) improves one place in the rankings slightly increasing its score, notably through improved goods market efficiency (up seven places to 60th) and higher education and training (up two to 41st). Its long-standing competitiveness advantages include health and primary education (25th), large market size (12th), infrastructure (27th), and business sophistication (25th). Despite recent reforms, labor markets (116th) and financial markets (126th) remain weak points.

#### Most problematic factors for doing business







ndex Component	Rank/137	' Value	Trend	Index Component	Rank/137	7 Value
⚠ 1st pillar: Institutions	95	3.5	_		60	4.4
1 Property rights	88	4.0	_	6.01 Intensity of local competition	60	5.2
.02 Intellectual property protection	50	4.4		6.02 Extent of market dominance	7	5.1
.03 Diversion of public funds	78	3.3	_	6.03 Effectiveness of anti-monopoly policy	58	3.9
.04 Public trust in politicians	122	1.9	$\sim$	6.04 Effect of taxation on incentives to invest	135	2.0
1.05 Irregular payments and bribes	52	4.3	_	6.05 Total tax rate % profits	126	62.0
1.06 Judicial independence	65	4.0	_	6.06 No. of procedures to start a business	53	6
1.07 Favoritism in decisions of government officials	118	2.2		6.07 Time to start a business days	36	6.5
-			=			
1.08 Efficiency of government spending	126	2.0		6.08 Agricultural policy costs	79	3.0
.09 Burden of government regulation	134	2.0		6.09 Prevalence of non-tariff barriers	33	4.8
1.10 Efficiency of legal framework in settling disputes	134	2.1	$\sim$	6.10 Trade tariffs % duty	6	1.1
1.11 Efficiency of legal framework in challenging regulations	128	2.3	~	6.11 Prevalence of foreign ownership	111	3.8
1.12 Transparency of government policymaking	126	3.1	$\sim$	6.12 Business impact of rules on FDI	91	4.5
1.13 Business costs of terrorism	81	4.9	_	6.13 Burden of customs procedures	59	4.3
1.14 Business costs of crime and violence	99	4.0	$\overline{}$	6.14 Imports % GDP	112	27.
.15 Organized crime	123	3.5	$\sim$	6.15 Degree of customer orientation	40	5.
.16 Reliability of police services	65	4.5	_	6.16 Buyer sophistication	37	3.8
.17 Ethical behavior of firms	94	3.5	_			
.18 Strength of auditing and reporting standards	87	4.3		7th pillar: Labor market efficiency	116	3.7
.19 Efficacy of corporate boards	113			7.01 Cooperation in labor-employer relations	102	4.0
.20 Protection of minority shareholders' interests	117	3.4	$\overline{}$	7.02 Flexibility of wage determination	131	3.4
				7.03 Hiring and firing practices	127	2.8
.21 Strength of investor protection 0-10 (best)	41	6.3	_~	7.04 Redundancy costs weeks of salary	12	4.
↑↑ 2nd pillar: Infrastructure	27	5.4				
'			~	7.05 Effect of taxation on incentives to work	127	2.
2.01 Quality of overall infrastructure	58	4.3	-	7.06 Pay and productivity	125	3.
2.02 Quality of roads	45			7.07 Reliance on professional management	94	3.
2.03 Quality of railroad infrastructure	34	4.1		7.08 Country capacity to retain talent	106	2.
2.04 Quality of port infrastructure	60	4.4	_	7.09 Country capacity to attract talent	104	2.
2.05 Quality of air transport infrastructure	60	4.6	$\overline{}$	7.10 Female participation in the labor force ratio to men	89	0.7
2.06 Available airline seat kilometers millions/week	19	2,733.4	_		100	0
2.07 Quality of electricity supply	35	5.9		8th pillar: Financial market development	126	3.
2.08 Mobile-cellular telephone subscriptions /100 pop.	31	140.4	$\overline{}$	8.01 Availability of financial services	111	3.6
2.09 Fixed-telephone lines /100 pop.	32	33.1	~	8.02 Affordability of financial services	101	3.4
_				8.03 Financing through local equity market	79	3.5
3rd pillar: Macroeconomic environment	96	4.2	$\sim$	8.04 Ease of access to loans	120	3.
8.01 Government budget balance % GDP	62	-2.4		8.05 Venture capital availability	127	2.
3.02 Gross national savings % GDP	77	19.8	_	8.06 Soundness of banks	116	3.
3.03 Inflation annual % change	60	-0.1	_	8.07 Regulation of securities exchanges	116	3.
3.04 Government debt % GDP	134		$\overline{}$		107	
		132.6	_	8.08 Legal rights index 0-10 (best)	107	
3.05 Country credit rating 0-100 (best)	37	68.4		9th pillar: Technological readiness	41	5.
3 4th pillar: Health and primary education	25	6.4		9.01 Availability of latest technologies	47	5.
4.01 Malaria incidence cases/100,000 pop.	n/o	m f			60	4.5
	n/a	m.f.		9.02 Firm-level technology absorption		
1.02 Business impact of malaria	n/a	6.6	_	9.03 FDI and technology transfer	95	4.0
4.03 Tuberculosis incidence cases/100,000 pop.	11	5.8	~	9.04 Internet users % pop.	65	61.3
4.04 Business impact of tuberculosis	31	6.4		9.05 Fixed-broadband Internet subscriptions /100 pop.	37	25.4
4.05 HIV prevalence % adult pop.	63	0.3	_	9.06 Internet bandwidth kb/s/user	54	82.
4.06 Business impact of HIV/AIDS	39	6.1	_	9.07 Mobile-broadband subscriptions /100 pop.	36	86.7
1.07 Infant mortality deaths/1,000 live births	13	2.9	_	47 10th villey Maylot circ	12	5.0
.08 Life expectancy years	3	83.5	~	्रैं 10th pillar: Market size	12	5.
1.09 Quality of primary education	32	4.8	_	10.01 Domestic market size index	12	5.
1.10 Primary education enrollment rate net %	48	97.2	~~	10.02 Foreign market size index	16	6.
				10.03 GDP (PPP) PPP \$ billions	12	2,234.
	41	5.0		10.04 Exports % GDP	83	30.
5.01 Secondary education enrollment rate gross %	34	102.9	~~			
5.02 Tertiary education enrollment rate gross %	42	62.5	~~	11th pillar: Business sophistication	25	4.
5.03 Quality of the education system	66		_	11.01 Local supplier quantity	12	5.2
5.04 Quality of math and science education	38		_	11.02 Local supplier quality	25	5.
			_	11.03 State of cluster development	8	5.0
5.05 Quality of management schools	26	5.3		11.04 Nature of competitive advantage	12	5.8
i.06 Internet access in schools	67		_	11.05 Value chain breadth	11	
.07 Local availability of specialized training services	31	5.1				5.0
5.08 Extent of staff training	97	3.6	_	11.06 Control of international distribution	30	4.0
				11.07 Production process sophistication	25	5.2
				11.08 Extent of marketing	52	4.6
				11.09 Willingness to delegate authority	116	3.7
				* 10th villey Innovation	0.4	4 4
				12th pillar: Innovation	34	4.0
				12.01 Capacity for innovation	29	4.9
				12.02 Quality of scientific research institutions	31	4.8
				12.03 Company spending on R&D	35	3.9
				12.04 University-industry collaboration in R&D	43	3.8
				12.05 Gov't procurement of advanced technology products	95	3.0

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.07 PCT patents applications/million pop.

12.06 Availability of scientists and engineers

95

37

3.0

## **Jamaica**



The Global Competitiveness Index 2017-2018 edition



2017-18 **70** / 137

4.2

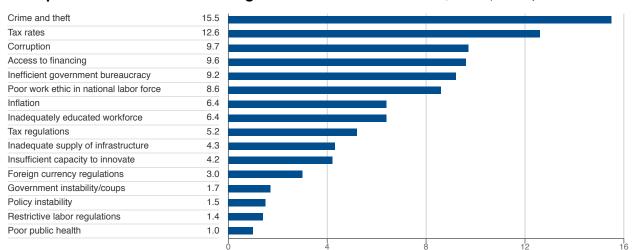
Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions		GDP per capita US\$	4,930.5
GDP US\$ billions	14.0	GDP (PPP) % world GDP	0.02

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-1
Global Competitiveness Index	70	4.2			Rank	97 / 144	94 / 148	86 / 144	86 / 140	<b>75</b> / 138	70 / 13
Subindex A: Basic requirements	76	4.5			Score	3.8	3.9	4.0	4.0	4.1	4.2
â 1st pillar: Institutions	63	3.9									
<b>1</b> 2nd pillar: Infrastructure	74	4.1						1st pillar: Institutions			
	111	3.9	_			12th p Innov		7	2nd pil Infrasti		
4th pillar: Health and primary education	46	6.1							$\langle \cdot \rangle$		
Subindex B: Efficiency enhancers	68	4.1	_			11th pillar: Business sophistication	$\langle \langle \rangle \rangle$	100		3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	72	4.4				10th pillar: Market size				AND THE	
	62	4.4							4th pilla Health educati		d primary
7th pillar: Labor market efficiency	46	4.5				\	1				
8th pillar: Financial market development	t 31	4.6				9th pillar: Technological readiness				5th pillar: Higher educat and training	ion
9th pillar: Technological readiness	76	4.1	_			0	th pillar:		6th pilla		
੍ਰਿੰਡ 10th pillar: Market size	116	2.8	~			Financia		7th pillar:	Goods n	narket	
Subindex C: Innovation and sophistication factors	54	3.8						Labor market efficiency			
್ಯೆ 11th pillar: Business sophistication	51	4.3	_			lomair	ao 🗏 Loti	in America	and the Co	ribboon	
★ 12th pillar: Innovation	64	3.4			Jamaica Latin America and the Caribbean				andbean		

#### Most problematic factors for doing business





## **Jamaica**

ndex Component	Rank/13	37 Value	Trend	Index Comp	ponent	Rank/137	Value	Tre
â 1st pillar: Institutions	63	3.9	—	⊕ 6th p	pillar: Goods market efficiency	62	4.4	_
1.01 Property rights	51	4.6	_	6.01 Inten	nsity of local competition	47	5.3	_
1.02 Intellectual property protection	57	4.4	_	6.02 Exte	ent of market dominance	75	3.6	
1.03 Diversion of public funds	71	3.5		6.03 Effec	ctiveness of anti-monopoly policy	53	3.9	_
1.04 Public trust in politicians	86	2.7		6.04 Effec	ct of taxation on incentives to invest	96	3.3	_
1.05 Irregular payments and bribes	68	3.9		6.05 Total	Il tax rate % profits	54	34.3	
1.06 Judicial independence	38	4.8		6.06 No. o	of procedures to start a business	2	2	
1.07 Favoritism in decisions of government officials	79	2.9		6.07 Time	e to start a business days	61	10.0	_
.08 Efficiency of government spending	87	2.9	$\overline{)}$	6.08 Agric	cultural policy costs	57	3.9	/
.09 Burden of government regulation	93	3.1		6.09 Prev	valence of non-tariff barriers	21	5.0	_
.10 Efficiency of legal framework in settling disputes	72	3.5		6.10 Trad	de tariffs % duty	98	9.4	_
.11 Efficiency of legal framework in challenging regulations	70	3.3	_	6.11 Prev	valence of foreign ownership	37	5.1	_
.12 Transparency of government policymaking	55	4.3			iness impact of rules on FDI	21	5.4	_
1.13 Business costs of terrorism	70	5.1	~		den of customs procedures	74	4.0	_
1.14 Business costs of crime and violence	130	2.7			orts % GDP	56	48.5	_
1.15 Organized crime	132	2.9			ree of customer orientation	109	4.1	_
1.16 Reliability of police services	99	3.7			er sophistication	69	3.4	_
.17 Ethical behavior of firms	53	4.0		o. to Duye	er sopriistication	- 00	0.4	_
	36			💐 7th p	pillar: Labor market efficiency	46	4.5	_
.18 Strength of auditing and reporting standards	38	5.2		7.01 Coor	peration in labor-employer relations	73	4.3	_
.19 Efficacy of corporate boards					sibility of wage determination	37	5.3	_
.20 Protection of minority shareholders' interests	36		~_		ng and firing practices	47	4.0	_
.21 Strength of investor protection 0-10 (best)	61	5.8			undancy costs weeks of salary	55	14.0	-
1 2nd pillar: Infrastructure	74	4.1				54	4.2	
•	66				ct of taxation on incentives to work			
.01 Quality of overall infrastructure		4.2			and productivity	79	3.8	_
.02 Quality of roads	79		_		ance on professional management	37	4.8	
.03 Quality of railroad infrastructure	n/a	not assessed			ntry capacity to retain talent	91	3.1	_
.04 Quality of port infrastructure	33	4.9			ntry capacity to attract talent	68	3.3	_
	44	5.1		7.10 Fem	nale participation in the labor force ratio to men	61	0.83	
.05 Quality of air transport infrastructure				ath r	pillar: Financial market development	31	4.6	_
.06 Available airline seat kilometers millions/week	75	160.5	-					
.07 Quality of electricity supply	76	4.8			ilability of financial services	61	4.3	-
.08 Mobile-cellular telephone subscriptions /100 pop.	71	115.6			rdability of financial services	83	3.6	_
.09 Fixed-telephone lines /100 pop.	80	11.0	~		ncing through local equity market	26	4.6	_
3rd pillar: Macroeconomic environment	111	3.9		8.04 Ease	e of access to loans	96	3.5	-
· ·			_	8.05 Vent	ture capital availability	97	2.5	_
.01 Government budget balance % GDP	30	-0.9		8.06 Sour	ndness of banks	40	5.5	_
.02 Gross national savings % GDP	116	11.9	<u>~</u>	8.07 <b>Reg</b> u	ulation of securities exchanges	27	5.4	_
.03 Inflation annual % change	73	3.8	~	8.08 Lega	al rights index 0-10 (best)	13	9	_
8.04 Government debt % GDP	130	115.2	~	ાંવ		70	4.4	
3.05 Country credit rating 0-100 (best)	92	32.3		₩° 9th p	pillar: Technological readiness	76	4.1	
♦ 4th pillar: Health and primary education	46	6.1		9.01 Avail	ilability of latest technologies	42	5.3	_
				9.02 Firm-	n-level technology absorption	61	4.5	
.01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.03 FDI a	and technology transfer	51	4.6	~
4.02 Business impact of malaria	n/a	5.6		9.04 Inter	rnet users % pop.	90	45.0	^
4.03 Tuberculosis incidence cases/100,000 pop.	7	4.6	$\overline{}$	9.05 Fixed	d-broadband Internet subscriptions /100 pop.	72	10.1	_
.04 Business impact of tuberculosis	50	5.9			rnet bandwidth kb/s/user	77	47.9	_
1.05 HIV prevalence % adult pop.	118	1.7			pile-broadband subscriptions /100 pop.	75	56.2	
.06 Business impact of HIV/AIDS	75	5.2	_					Ξ
.07 Infant mortality deaths/1,000 live births	76	13.5		10th	n pillar: Market size	116	2.8	
.08 Life expectancy years	56	75.8	_	10.01 <b>Dor</b>	mestic market size index	117	2.6	-
.09 Quality of primary education	52	4.3			reign market size index	116	3.5	_
.10 Primary education enrollment rate net %	34	98.0			PP (PPP) PPP \$ billions	118	25.4	_
-			_		ports % GDP	76	31.2	
₹ 5th pillar: Higher education and training	72	4.4	~	10.04 EXP	ports // dbi	70	01.2	_
.01 Secondary education enrollment rate gross %	88	82.1	$\sim$	್ಯಾ <sup>8</sup> 11th	pillar: Business sophistication	51	4.3	-
.02 Tertiary education enrollment rate gross %	87	27.2	~	11.01 Loc	cal supplier quantity	55	4.6	
.03 Quality of the education system	47	4.1			cal supplier quality	57	4.5	
.04 Quality of math and science education	73	4.0			ate of cluster development	69	3.8	_
05 Quality of management schools	35							
· · · · · · · · · · · · · · · · · · ·					ture of competitive advantage	51	3.9	-
06 Internet access in schools	55				lue chain breadth	50	4.0	=
07 Local availability of specialized training services	37				ntrol of international distribution	63	3.7	-
.08 Extent of staff training	49	4.2			oduction process sophistication	61	4.0	_
					tent of marketing	42	4.7	-
				11.09 Will	llingness to delegate authority	29	4.9	
				₩ 12th	n pillar: Innovation	64	3.4	-
					pacity for innovation	58	4.2	
					ality of scientific research institutions	52	4.1	-
					mpany spending on R&D	61	3.4	_
					iversity-industry collaboration in R&D	60	3.5	_
				12.05 Ca	y't procurement of advanced technology products	0.3	3 0	-

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

93

88

3.0

# Japan



The Global Competitiveness Index 2017-2018 edition

Key indicators, 2016		Source: International Monetary Fund; World	d Economic Outlook Database (April 2017)
Population millions	126.9	GDP per capita US\$	38,917.3
GDP US\$ billions	4,938.6	GDP (PPP) % world GDP	4.37

#### Performance overview

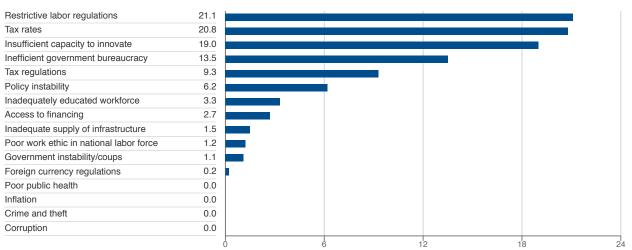
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	9	5.5			Rank	10 / 144	9 / 148	6 / 144	6 / 140	8 / 138	9 / 137
Subindex A: Basic requirements	21	5.7			Score	5.4	5.4	5.5	5.5	5.5	5.5
â 1st pillar: Institutions	17	5.4	_								
<b>↑</b> 2nd pillar: Infrastructure	4	6.3	_				ı	1st pillar: Institutions			
	93	4.3	_			12th pilla Innovatio		7	2nd pilla Infrastru		
3 4th pillar: Health and primary education	7	6.6									
Subindex B: Efficiency enhancers	10	5.4	_			11th pillar: Business sophistication				3rd pillar: Macroeconom environment	ic
⇒ 5th pillar: Higher education and training	23	5.4	_								
	13	5.2	_			10th pillar: Market size				4th pillar: Health and education	primary
7th pillar: Labor market efficiency	22	4.8	_								
8th pillar: Financial market development	20	4.9	~~			9th pillar: Technological readiness	0		/ / H	th pillar: igher education nd training	on
9th pillar: Technological readiness	15	6.0	_			9th r	oillar:		6th pillar:		
್ಘೆ 10th pillar: Market size	4	6.1	_			Financial m develop	arket	7th pillar:	Goods ma efficiency		
Subindex C: Innovation and sophistication factors	6	5.6					L	abor market efficiency			
ூசி 11th pillar: Business sophistication	3	5.7	_			<b>=</b> 1a	npan	East Asia a	nd Pacific		
** 12th pillar: Innovation	8	5.4	_								

Japan (9th), with a minor improvement in score, loses one place as a result of Hong Kong SAR's larger improvement. The country's overall performance is largely driven by high-quality physical and digital infrastructure (4th), a healthy and educated workforce, and a fertile innovation ecosystem. Despite these attributes, Japan's performance is dragged down by its poor macroeconomic environment (93rd), caused mostly by a period of deflation in 2016 and persistently

troubled public finances. The situation has improved slightly since last year as a result of better government budget balance and higher gross national savings. Japan also made strides in the technological readiness pillar (15th, up four) as a result of higher levels of ICT usage. A drop in the rankings in the labor market efficiency pillar, however, points to certain difficulties among firms in retaining talent.

#### Most problematic factors for doing business







Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	e Trer
	17	5.4	_	\$	6th pillar: Goods market efficiency	13	5.2	_
1.01 Property rights	10	6.1	_	6.0	1 Intensity of local competition	1	6.2	_
1.02 Intellectual property protection	18	5.8			2 Extent of market dominance	2	5.9	_
1.03 Diversion of public funds	19	5.3	~		3 Effectiveness of anti-monopoly policy	5	5.5	_
1.04 Public trust in politicians	26	4.5	_		4 Effect of taxation on incentives to invest	45	4.0	_
1.05 Irregular payments and bribes	15	6.1			5 Total tax rate % profits	105	48.9	~
1.06 Judicial independence	15	6.0			6 No. of procedures to start a business	92	8	
1.07 Favoritism in decisions of government officials	15	4.8	_		7 Time to start a business days	72	11.2	$\overline{}$
-								
1.08 Efficiency of government spending	29	4.1			8 Agricultural policy costs	100	3.4	
1.09 Burden of government regulation	59	3.6			Prevalence of non-tariff barriers	59	4.5	
1.10 Efficiency of legal framework in settling disputes	16	5.2			Trade tariffs % duty	37	1.9	
1.11 Efficiency of legal framework in challenging regulations	20	4.5			1 Prevalence of foreign ownership	20	5.4	
1.12 Transparency of government policymaking	13	5.6	_	6.1	2 Business impact of rules on FDI	27	5.2	_
1.13 Business costs of terrorism	66	5.1		6.1	Burden of customs procedures	29	5.0	_
1.14 Business costs of crime and violence	20	5.4	$\overline{}$	6.1	4 Imports % GDP	132	16.0	
1.15 Organized crime	35	5.4		6.1	5 Degree of customer orientation	1	6.2	_
1.16 Reliability of police services	16	6.2		6.1	Buyer sophistication	7	4.9	_
1.17 Ethical behavior of firms	12	5.7		_0				_
1.18 Strength of auditing and reporting standards	18	5.8		E CONTRACTOR OF THE PARTY OF TH	7th pillar: Labor market efficiency	22	4.8	
1.19 Efficacy of corporate boards	18	5.8	_	7.0	1 Cooperation in labor-employer relations	7	5.7	_
					2 Flexibility of wage determination	15	5.8	_
1.20 Protection of minority shareholders' interests	14	5.3	_		3 Hiring and firing practices	113	3.2	_
1.21 Strength of investor protection 0-10 (best)	51	6.0			4 Redundancy costs weeks of salary	9	4.3	
<b>↑</b> • • 2nd pillar: Infrastructure	4	6.3						
•					5 Effect of taxation on incentives to work	37	4.3	
2.01 Quality of overall infrastructure	6	6.2			6 Pay and productivity	40	4.4	
2.02 Quality of roads	6	6.1			7 Reliance on professional management	16	5.7	
2.03 Quality of railroad infrastructure	2	6.6			8 Country capacity to retain talent	44	3.9	
2.04 Quality of port infrastructure	21	5.3	_	7.0	Ountry capacity to attract talent	73	3.3	_
2.05 Quality of air transport infrastructure	26	5.6		7.10	Female participation in the labor force ratio to men	77	0.78	
2.06 Available airline seat kilometers millions/week	5	5,975.3				00	4.0	_
2.07 Quality of electricity supply	10	6.7			8th pillar: Financial market development	20	4.9	
2.08 Mobile-cellular telephone subscriptions /100 pop.	42	129.8	_	8.0	Availability of financial services	19	5.2	_
2.09 Fixed-telephone lines /100 pop.	9	50.6	_	8.0	2 Affordability of financial services	4	5.5	_
z.oc i med telepriorie inice vice pop.		00.0		8.0	Financing through local equity market	15	5.1	_
	93	4.3			4 Ease of access to loans	8	5.2	
3.01 Government budget balance % GDP	94	-42	_		5 Venture capital availability	28	3.6	
3.02 Gross national savings % GDP	37				Soundness of banks	21	5.8	
3.03 Inflation annual % change	63							_
<u> </u>			$\Rightarrow$		7 Regulation of securities exchanges	12	5.8	$\overline{}$
3.04 Government debt % GDP	138	239.2		8.0	B Legal rights index 0-10 (best)	86	4	
3.05 Country credit rating 0-100 (best)	19	82.0		388	9th pillar: Technological readiness	15	6.0	_
3 4th pillar: Health and primary education	7	6.6			1 Availability of latest technologies	11	6.3	_
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.			2 Firm-level technology absorption	15	5.5	_
4.02 Business impact of malaria	n/a	6.4			3 FDI and technology transfer	25	5.1	
4.03 Tuberculosis incidence cases/100,000 pop.	42	17.0	_		4 Internet users % pop.	9	92.0	_
			$\geq$					
4.04 Business impact of tuberculosis	38	6.2			5 Fixed-broadband Internet subscriptions /100 pop.	21	31.5	
4.05 HIV prevalence % adult pop.	1	<0.1			6 Internet bandwidth kb/s/user	53	83.0	
4.06 Business impact of HIV/AIDS	42	5.9		9.0	7 Mobile-broadband subscriptions /100 pop.	5	131.9	
4.07 Infant mortality deaths/1,000 live births	5	2.0	_	47	10th pillar: Market size	4	6.1	
4.08 Life expectancy years	2	83.8						
4.09 Quality of primary education	14	5.4	/		D1 Domestic market size index	4	6.1	_
4.10 Primary education enrollment rate net %	3	100.0			02 Foreign market size index	7	6.1	_
Sth niller, Higher education and training	23	5.4			03 GDP (PPP) PPP \$ billions		5,237.8	
5th pillar: Higher education and training				10.0	04 Exports % GDP	118	16.5	
5.01 Secondary education enrollment rate gross %	41	101.7		~8	11th pillar: Business sophistication	3	5.7	_
5.02 Tertiary education enrollment rate gross %	40	63.4						
5.03 Quality of the education system	36		~		01 Local supplier quantity	1	6.2	_
5.04 Quality of math and science education	22	5.1	_		D2 Local supplier quality	2	6.1	_
5.05 Quality of management schools	59	4.3			3 State of cluster development	11	5.1	_
5.06 Internet access in schools	29	5.2	_		Nature of competitive advantage	2	6.4	_
5.07 Local availability of specialized training services	25	5.3	$\sim$	11.0	05 Value chain breadth	1	6.1	_
5.08 Extent of staff training	13			11.0	06 Control of international distribution	5	5.4	_
		0.2		11.0	7 Production process sophistication	2	6.4	_
					08 Extent of marketing	22	5.1	_
					09 Willingness to delegate authority	31	4.9	
					• • • • • • • • • • • • • • • • • • • •			
					12th pillar: Innovation	8	5.4	
				12.	O1 Capacity for innovation	21	5.1	_
				12.	02 Quality of scientific research institutions	14	5.7	
				12.	03 Company spending on R&D	5	5.6	_
				12.0	04 University-industry collaboration in R&D	23	4.7	
					Gov't procurement of advanced technology products	23	4.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

23

4.0

## **Jordan**



The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	7.0	GDP per capita ∪s\$	5,554.0
GDP US\$ billions	38.7	GDP (PPP) % world GDP	0.07

#### Performance overview

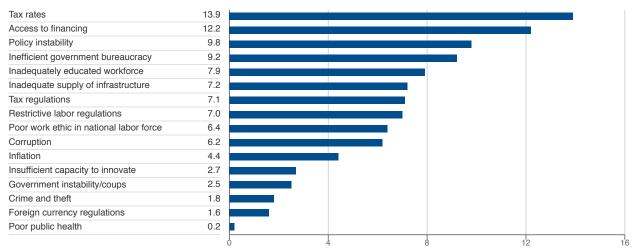
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	65	4.3			Rank	64 / 144	<b>68</b> / 148	64 / 144	<b>64</b> / 140	63 / 138	<b>65</b> / 137
Subindex A: Basic requirements	73	4.6			Score	4.2	4.2	4.3	4.2	4.3	4.3
â 1st pillar: Institutions	36	4.5	~~								
<b>1</b> 2nd pillar: Infrastructure	58	4.3	~					1st pillar: Institutions			
	115	3.8				12th p Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	80	5.6	~				$\Lambda$		$\langle \cdot \rangle$		
Subindex B: Efficiency enhancers	67	4.2				11th pillar: Business sophistication	$\langle \langle \rangle \rangle$	1		3rd pillar: Macroeconon environment	nic
⇒ 5th pillar: Higher education and training	63	4.5	~			/					
	51	4.5	_			10th pillar: Market size				4th pillar: Health and education	
7th pillar: Labor market efficiency	90	4.0	_								
8th pillar: Financial market development	70	4.0				9th pillar: Technological readiness				5th pillar: Higher educati and training	ion
% 9th pillar: Technological readiness	67	4.3	_				th pillar:		6th pillar		
$\stackrel{\kappa_{\mathcal{A}}}{\downarrow_{\mathcal{A}}}$ 10th pillar: Market size	76	3.6	_~			Financia		7th pillar:	Goods m	arket	
Subindex C: Innovation and sophistication factors	45	4.0						Labor market efficiency			
→ 11th pillar: Business sophistication	48	4.3				- low	dan N	liddle Feet e	unal Namela /	\ fui = =	
※ 12th pillar: Innovation	46	3.6			Jordan Middle East and North Africa				AIIICa		

Jordan (65th) slips two ranks but with unchanged score. The country continues to benefit from a fairly stable and efficient institutional system and relatively good infrastructure, innovation and business sophistication. Over the past year, the government has worked to consolidate the country's fiscal situation and macroeconomic environment, put under pressure also by the large influx of Syrian

refugees. This led to higher taxation and increased scrutiny on public spending by the private sector and the public at large. Following a revision of some of the ICT indicators published by the International Telecommunications Union (ITU), the country also sees an increase in internet and mobile broadband use.

#### Most problematic factors for doing business





# **Jordan**

dex Component	Rank/137	Value	e Trend	Index Component	Rank/137	Value	э -
â 1st pillar: Institutions	36	4.5	~~	<b>❸</b> 6th pillar: Goods market efficiency	51	4.5	-
.01 Property rights	38	4.9		6.01 Intensity of local competition	26	5.5	-
.02 Intellectual property protection	40	4.7		6.02 Extent of market dominance	45	4.0	_
.03 Diversion of public funds	25	5.0	_	6.03 Effectiveness of anti-monopoly policy	47	4.0	_
.04 Public trust in politicians	40	3.7	_	6.04 Effect of taxation on incentives to invest	105	3.1	/
.05 Irregular payments and bribes	42	4.7	$\sim$	6.05 Total tax rate % profits	29	27.6	_
.06 Judicial independence	33	5.0		6.06 No. of procedures to start a business	71	7	_
.07 Favoritism in decisions of government officials	42	3.7	_	6.07 Time to start a business days	77	12.5	_
08 Efficiency of government spending	56	3.4	$\overline{}$	6.08 Agricultural policy costs	55	3.9	_
09 Burden of government regulation	61	3.5	$\overline{}$	6.09 Prevalence of non-tariff barriers	108	3.9	-
10 Efficiency of legal framework in settling disputes	38	4.4		6.10 Trade tariffs % duty	91	7.5	-
	47	3.7		•	82		-
11 Efficiency of legal framework in challenging regulations			_	6.11 Prevalence of foreign ownership		4.4	
12 Transparency of government policymaking	76	3.9		6.12 Business impact of rules on FDI	81	4.3	_
13 Business costs of terrorism	105	4.5	~	6.13 Burden of customs procedures	38	4.8	-
14 Business costs of crime and violence	55	4.9	$\sim$	6.14 Imports % GDP	33	60.8	_
15 Organized crime	41	5.4	$\sim$	6.15 Degree of customer orientation	49	4.9	_
16 Reliability of police services	21	5.9	~	6.16 Buyer sophistication	68	3.4	-
17 Ethical behavior of firms	32	4.7		50	00	4.0	
18 Strength of auditing and reporting standards	57	4.8		7th pillar: Labor market efficiency	90	4.0	
19 Efficacy of corporate boards	104	4.4	_	7.01 Cooperation in labor-employer relations	38	4.8	-
20 Protection of minority shareholders' interests	44	4.4	/	7.02 Flexibility of wage determination	43	5.3	
21 Strength of investor protection 0-10 (best)	127	3.5	~~	7.03 Hiring and firing practices	43	4.1	-
Substigui of involute protocolori u-to (best)	121	0.5	~ ~	7.04 Redundancy costs weeks of salary	11	4.3	
♦ 2nd pillar: Infrastructure	58	4.3	~	7.05 Effect of taxation on incentives to work	93	3.6	
1 Quality of overall infrastructure	63	4.2	_	7.06 Pay and productivity	53	4.2	
2 Quality of roads		4.2	$\sim$				
•	68			7.07 Reliance on professional management	84	4.0	
3 Quality of railroad infrastructure	81	2.2		7.08 Country capacity to retain talent	67	3.4	
4 Quality of port infrastructure	51	4.5		7.09 Country capacity to attract talent	78	3.2	
5 Quality of air transport infrastructure	33	5.4	$\sim$	7.10 Female participation in the labor force ratio to men	136	0.23	
6 Available airline seat kilometers millions/week	69	206.9	~	Oth niller. Financial market development	70	4.0	
7 Quality of electricity supply	43	5.7	$\sim$	8th pillar: Financial market development			
8 Mobile-cellular telephone subscriptions /100 pop.	4	196.3	_	8.01 Availability of financial services	37	4.7	
9 Fixed-telephone lines /100 pop.	103	4.6	_	8.02 Affordability of financial services	53	4.0	
				8.03 Financing through local equity market	43	4.2	
3rd pillar: Macroeconomic environment	115	3.8		8.04 Ease of access to loans	28	4.7	
1 Government budget balance % GDP	81	-3.4	~~	8.05 Venture capital availability	29	3.6	
22 Gross national savings % GDP	120		~	8.06 Soundness of banks	33	5.6	
3 Inflation annual % change	81	-0.8	$\tilde{}$	8.07 Regulation of securities exchanges	49	4.7	
ů .							
4 Government debt % GDP	120	95.0		8.08 Legal rights index 0-10 (best)	137	0	
5 Country credit rating 0-100 (best)	76	41.2		🕸 9th pillar: Technological readiness	67	4.3	
4th pillar: Health and primary education	80	5.6	$\overline{}$	9.01 Availability of latest technologies	38	5.4	
of Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	43	4.9	
2 Business impact of malaria	n/a	6.0		9.03 FDI and technology transfer	56	4.5	
3 Tuberculosis incidence cases/100,000 pop.	19	7.0	~/	9.04 Internet users % pop.	62	62.3	
4 Business impact of tuberculosis	52	5.9	~	9.05 Fixed-broadband Internet subscriptions /100 pop.	86	5.8	
75 HIV prevalence % adult pop.	1	<0.1		9.06 Internet bandwidth kb/s/user	114	8.2	
6 Business impact of HIV/AIDS	46	5.9	~	9.07 Mobile-broadband subscriptions /100 pop.	12	118.8	
7 Infant mortality deaths/1,000 live births	82	15.4		10th pillar: Market size	76	3.6	
8 Life expectancy years	79	74.2					
9 Quality of primary education	60	4.1	~	10.01 Domestic market size index	75	3.4	
0 Primary education enrollment rate net %	107	89.2	~	10.02 Foreign market size index	82	4.2	
	20	4.5	~	10.03 GDP (PPP) PPP \$ billions	79	85.6	
5th pillar: Higher education and training	63	4.5		10.04 Exports % GDP	67	35.0	
11 Secondary education enrollment rate gross %	87	82.4		→ 11th pillar: Business sophistication	48	4.3	
2 Tertiary education enrollment rate gross %	65	44.9		·			
3 Quality of the education system	43		$\sim$	11.01 Local supplier quantity	24	4.9	
4 Quality of math and science education	62	4.3	~	11.02 Local supplier quality	59	4.4	
5 Quality of management schools	58	4.3	$\overline{}$	11.03 State of cluster development	30	4.4	
6 Internet access in schools	59	4.4	_	11.04 Nature of competitive advantage	35	4.3	
7 Local availability of specialized training services	57	4.5		11.05 Value chain breadth	45	4.2	
B Extent of staff training	57	4.1	_	11.06 Control of international distribution	52	3.8	
	0,	7.1		11.07 Production process sophistication	43	4.4	
				11.08 Extent of marketing	56	4.6	
				11.09 Willingness to delegate authority	92	4.0	
				.\/			
				12th pillar: Innovation	46	3.6	
				12.01 Capacity for innovation	60	4.2	
				12.02 Quality of scientific research institutions	58	3.9	
				12.03 Company spending on R&D	64	3.4	
				12.04 University-industry collaboration in R&D	64	3.5	
				12.05 Gov't procurement of advanced technology products	53	3.5	-

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

53

13

3.5

## Kazakhstan



The Global Competitiveness Index 2017-2018 edition



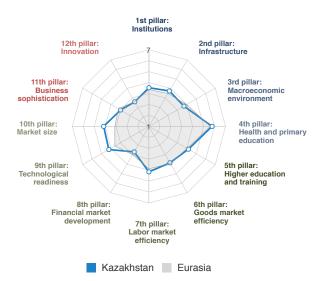
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4.3

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database				
Population millions	17.9	GDP per capita US\$	7,452.8			
GDP US\$ billions	133.8	GDP (PPP) % world GDP	0.38			

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15
Global Competitiveness Index	57	4.3	_		Rank	<b>51</b> / 144	50 / 148	50 / 144
Subindex A: Basic requirements	69	4.6	_		Score	4.4	4.4	4.4
1st pillar: Institutions	60	4.0						
↑↑ 2nd pillar: Infrastructure	68	4.2	_					1st pillar: Institutions
3rd pillar: Macroeconomic environment	98	4.2	_			12th p Innov		7
3 4th pillar: Health and primary education	59	5.9	_			4411		
Subindex B: Efficiency enhancers	56	4.3	_			11th pillar: Business sophistication	$\langle \langle \rangle \rangle$	1
⇒ 5th pillar: Higher education and training	56	4.6	_			. /		
6th pillar: Goods market efficiency	72	4.3	_			10th pillar: Market size	1	
7th pillar: Labor market efficiency	35	4.6				\		9
	114	3.3				9th pillar: Technological readiness	//	
9th pillar: Technological readiness	52	4.6	_				th pillar:	
್ಫ್ರಿತಿ 10th pillar: Market size	43	4.5				Financia		7th pillar:
Subindex C: Innovation and sophistication factors	95	3.4						Labor market efficiency
ூ 11th pillar: Business sophistication	108	3.6	_	<del></del>			■ Kazal	khstan
12th pillar: Innovation	84	3.2	_				- Nazai	KIISIAII



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4.5

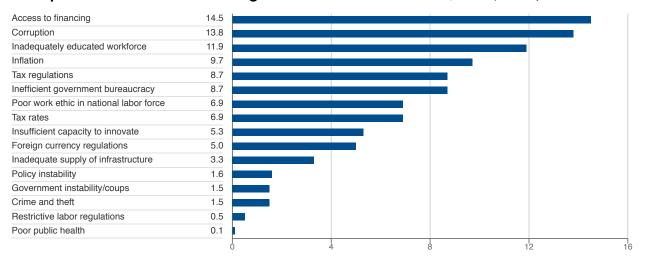
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4.4

#### Most problematic factors for doing business





## Kazakhstan

101 Property rights	ndex Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
100 Persident production   77   4.0   600   Extent of marked dominance   91   3.5   1.5	â 1st pillar: Institutions	60	4.0			6th pillar: Goods market efficiency	72	4.3	_
100 Persident production   77   4.0   600   Extent of marked dominance   91   3.5   1.5	1.01 Property rights	81	4.1	~	6.01	Intensity of local competition	114	4.5	
100   Description of public funds   77   3.4   6.5   100	. , ,								_
1.00 Public haut in politicars   98   3.8   6.0 Effect of taxaction on incentives to invest   6.9   3.6   1.0 Difference and without   7.2   3.8   6.0 Final tax cares is public   3.8   5.0				_					_
100 Intergrating programmers and bethines	·								_
10.0 Audical independence   79   3.6   6.6 No of procedures to start a business   3.6   5.	•			~					_
10.5 Favoritism in decisions of government spending   65   3.0   6.07 Time to start a business steps   9.9   9.0   10.0 Efficiency of legis framework in estillar glutons   5.9   9.0   9.0   10.0 Precisions of non-tarific barriers   5.9   9.0   9.0   10.0 Precisions of non-tarific barriers   5.9   9.0   9.0   10.0 Precisions of non-tarific barriers   5.9   9.0   10.0									_
1988						·			_
1.00 Buden of powerment regulation   44   3.6   3.6   3.0									_
1.6 Efficiency of legal framework in selling disputes						•			_
1.11   Emerge of legal framework is challenging regulations   73   3.3   3.5									_
1.12 Transparency of government policymaking   40   4.6     1.14 Blusiness costs of terrorism   44   5.5     1.14 Blusiness costs of terrorism   79   3.9     1.15 Organized of mine   70   70     1.16 Palaisably of police services   87   4.1     1.16 Palaisably of police services   87   4.1     1.17 Efficial blanked of of time   70   70     1.18 Efficial blanked of of time   70   70     1.18 Efficial blanked of time   70   70     1.18 E						*			_
1.15 Business couls of terrorism						- ·			_
1.14 Besiness costs of crime and violence  3						•			_
1.15 Organizated crime  1.5 Reliability of policie services  8.7 4.1						•			_
1.9. Reliability of police services   87						•			
1.12 Ethical behavior of firms   59	1.15 Organized crime		5.0	~		•		4.3	_
1.18 Strength of auctiting and reporting standards   69	1.16 Reliability of police services	87	4.1		6.16	Buyer sophistication	54	3.6	_
1.6   Selection of monomy shareholders interests   59   4.8   7.0   Cooperation in labor-employer relations   88   4.4   4.2   7.1   7.2	1.17 Ethical behavior of firms	59	4.0		58	7th nilley, Labor market efficiency	35	16	_
1.02 Protection of minority shareholders' interests   75   3.9	1.18 Strength of auditing and reporting standards	99	4.1	$\overline{}$					
2.1 Strongth of Investor protection 0-10 (seed)   3   8.0	1.19 Efficacy of corporate boards	69	4.8	$\sim$	7.01	Cooperation in labor-employer relations	68	4.4	_
2.12 Strength of investor protection 0-10 (peets) 2.2 A pillair: Infrastructure 3.2 A 1.2 County of overall infrastructure 4.2 County of overall infrastructure 4.3 Strength of investor protection 0-10 (peets) 5.2 Port of productivity 5.0 County of productivity 5.		75	3.9	_	7.02	Plexibility of wage determination	105	4.4	_
24 and pillar: Infrastructure  8	•			$\sim$	7.03	Hiring and firing practices	41	4.2	_
2010 Custly of overall infrastructure					7.04	Redundancy costs weeks of salary	24	8.7	-
220 Quality of order   10	1 Page 1 Page 1 Page 1 Page 1 Page 2	68	4.2	_	7.05	Effect of taxation on incentives to work	62	4.0	_
220   Cuality of reads   115   2.9   7,07 Reliance on professional management   105   3.7   220   Cuality of port intrastructure   105   3.2   220   Cuality of a transport infrastructure   105   3.2   220   Cuality of a transport infrastructure   105   3.2   220   Cuality of electricity supply   22   4.6   220   Mobile-cellular telephone subcorptions /100 pop.   17   15.0   220   Mobile-cellular telephone subcorptions /100 pop.   17   15.0   221   Malatin for pop.   14   15.0   232   323   324   311   324   322   233   324   311   344   324   234   325   325   325   325   235   326   315   325   325   236   327   327   327   237   328   327   328   238   327   328   328   239   329   329   329   230   329   329   231   329   329   232   329   329   233   329   329   234   329   329   235   329   329   236   329   329   237   329   329   238   329   329   239   329   329   230   329   329   231   329   329   232   329   329   233   329   329   234   329   329   235   329   329   236   329   329   237   329   329   238   329   329   239   329   329   230   329   329   231   329   329   232   329   329   233   329   329   234   329   329   235   329   329   237   329   329   238   329   329   239   329   329   230   329   329   230   329   329   230   329   329   230   329   329   231   329   329   232   329   329   233   329   329   234   329   329   235   329   329   236   329   329   237   329   329   238   329   329   239   329   329   230   329   329   2	2.01 Quality of overall infrastructure	77	3.9	_					_
2016   Dustily of railroads infrastructure   105   3.2   1.1   7.05   Country capacity to attract talent   57   3.5   5.2   2.00   Coultily of air transport infrastructure   90   4.0   7.05   Country capacity to attract talent   57   3.5   5.2   2.00	·	115	2.9	_	7.07	Reliance on professional management	105	3.7	_
20.00   20.	•								_
2.05   Calify of air transport infrastructure   90	•								-
2006   Available airline seat kilometers   millione/week   60   306.1   2070 wellty for electricity supply   82   4.6   2070 wellty for electricity supply   82   4.6   20.00   20.0									_
207   Cally of electricity supply   82   4.6	·				7.10	Ternale participation in the labor force ratio to men	20	0.90	
2.08 Mobile-cellular telephone subscriptions /100 pop.  43 23.2 80.2 Microdelipy for flandrial services 9.5 3.8 4 2 80.2 Financing through local equity market 10.8 2.9 80.3 Financing through local equity market 10.8 2.9 80.5 Government budget balance \$ 0.0 P 80 2.1 8.05 Government budget balance \$ 0.0 P 80 2.1 8.06 Soundness of banks 114 3.8 8.05 Government budget balance \$ 0.0 P 80 2.1 8.06 Soundness of banks 114 3.8 8.05 Country credit laring \$ 0.0 P 80 2.1 8.06 Soundness of banks 114 3.8 8.05 Country credit laring \$ 0.0 P 80 11 2.1.1 8.06 Soundness of banks 114 3.8 8.05 Country credit laring \$ 0.0 P 80 11 2.1.1 8.06 Soundness of banks 114 3.8 8.05 Country credit laring \$ 0.0 P 80 11 2.1.1 8.06 Soundness of banks 114 3.8 8.05 Country credit laring \$ 0.0 P 80 11 2.1.1 8.06 Soundness of banks 114 3.8 9.05 Country credit laring \$ 0.0 P 80 11 2.1.1 8.06 Soundness of banks 114 3.8 9.05 Country credit laring \$ 0.0 P 80 11 2.1.1 8.06 Soundness of banks 114 3.0 P 80 110 Markatis incidence cases/10.000 pop. 10 2.0 9.05 Financing through local equity market \$ 0.0 P 80 11 2.1 8.05 Country credit laring \$ 0.0 P 80 11 2.1 8.05 Country credit laring \$ 0.0 P 80 11 2.1 8.05 Country credit laring \$ 0.0 P 80 11 2.1 8.05 Country credit laring \$ 0.0 P 80 11 2.1 8.05 Country credit laring \$ 0.0 P 80 11 2.1 8.05 Country credit laring \$ 0.0 P 80 11 2.1 8.05 Country credit laring \$ 0.0 P 80 11 2.1 8.05 Country credit laring \$ 0.0 P 90 11 2.1 8.05 Country credit laring \$ 0.0 P 90 11 2.1 8.05 Country credit laring \$ 0.0 P 90 11 2.1 8.05 Country credit laring \$ 0.0 P 90 11 2.1 8.05 Country credit laring \$ 0.0 P 90 11 2.1 8.05 Country credit laring \$ 0.0 P 90 11 2.1 8.05 Country credit laring \$ 0.0 P 90 11 2.1 8.05 Country credit laring \$ 0.0 P 90 11 2.1 8.05 Country credit laring \$ 0.0 P 90 11 2.1 8.05 Country credit laring \$ 0.0 P 90 11 2.1 8.05 Country credit laring \$ 0.0 P 90 11 2.1 8.05 Country credit laring \$ 0.0 P 90 11 2.1 8.05 Country credit laring \$ 0.0 P 90 11 2.1 8.05 Country credit laring \$ 0.0 P 90 11 2.1 8.05 Country cred				$\leq$		8th pillar: Financial market development	114	3.3	_
2029   Fixed-telephone lines /100 pop.   43   23.2   8.02   Affordability of financial services   95   3.4							05	3.8	
3 or pillar: Macroeconomic environment 98 4.2 8.06 Financing through local equity market 108 2.9 9						•			_
3.1 Government budget balance % GDP 97 4.4 8.06 Ease of access to loans 88 3.4 3.01 Government budget balance % GDP 97 4.4 8.05 Venture capital availability 102 2.5 2.5 3.03 Gross national savings % GDP 60 22.1 8.05 Soundness of banks 114 3.8 8.05 Venture capital availability 102 2.5 9.03 Gross national savings % GDP 11 21.1 8.05 Soundness of banks 114 3.8 8.07 Regulation of securities exchanges 117 3.4 9.05 Government budget balance % GDP 11 21.1 8.05 Soundness of banks 114 3.8 8.07 Regulation of securities exchanges 117 3.4 9.05 Exchange 117 3.4 9.05 Fixed-broader seckhanges 117 3.4 9.05 Fixed-broader seckhanges 118 3.4 9.07 Fixed-broader seckhanges 119 3.4 9.07 Fixed-broader subscriptions //100 pop. 11 0.2 9.06 Internet users % pop. 137 76.8 9.07 Fixed-broader subscriptions //100 pop. 15 17 10 10 10 10 10 10 10 10 10 10 10 10 10	2.09 Fixed-telephone lines /100 pop.	43	23.2			•			
201 Government budget balance % GDP	3rd nillar: Macroeconomic environment	98	42	_					
3.02 Gross national savings % GDP									
3.04 Government debt % GDP 11 21.1 21.04 Sold Government debt % GDP 11 21.1 2				_					
3.04 Government debt № GDP	· · · · · · · · · · · · · · · · · · ·								_
## Sth pillar: Health and primary education	3.03 Inflation annual % change		14.6	_	8.07	Regulation of securities exchanges		3.4	
## hylllar: Health and primary education    59   5.9	3.04 Government debt % GDP	11	21.1	~	8.08	B Legal rights index 0-10 (best)	86	4	
## 4th pillar: Health and primary education   59   5.9   ## 401 Malaina incidence cases/100,000 pop.   7/a   s.l.   ## 402 Business impact of malaria   7/a   5.0   ## 403 Tuberculosis incidence cases/100,000 pop.   91   89.0   ## 89.0   9.04 Hirmet users % pop.   37   76.8   ## 404 Business impact of tuberculosis   107   4.4   ## 4.4   9.05 Fixed-broadband Internet subscriptions /100 pop.   59   13.7   ## 4.06 Business impact of HIV/AIDS   100   4.7   ## 4.07 Intant mortality deaths/1,000 live births   71   12.6   ## 4.08 Use expectancy years   89   72.0   ## 4.09 Quality of primary education enrollment rate met %   4   99.9   ## 5th pillar: Higher education and training   56   4.6   ## 50.1 Secondary education enrollment rate gross %   64   46.3   ## 50.3 Quality of the education system   77   3.5   ## 50.6 Quality of management schools   100   3.8   ## 50.6 Quality of management schools   39   4.9   ## 50.6 Lexing the internet scoses in schools   39   4.9   ## 50.6 Extent of staff training   70   3.9   ## 50.6 Extent of staff training   70   3.9   ## 50.6 Coulity of management schools   39   4.9   ## 50.6 Extent of staff training   70   3.9   ## 50.7 Local availability of specialized training services   59   4.5   ## 50.6 Extent of staff training   70   3.9   ## 50.6 Extent of staff training   70   3.9   ## 50.7 Local availability of specialized training services   59   4.5   ## 50.6 Extent of staff training   70   3.9   ## 50.7 Local availability of specialized training services   59   4.5   ## 50.6 Extent of staff training   70   3.9   ## 50.7 Local availability of specialized training services   59   4.5   ## 50.7 Local availability of specialized training services   59   4.5   ## 50.6 Extent of staff training   70   3.9   ## 50.7 Local availability of specialized training services   59   4.5   ## 50.6 Extent of staff training   70   4.1   ## 50.7 Local availability of s	3.05 Country credit rating 0-100 (best)	62	54.2		8998	9th nillar: Technological readiness	52	4.6	_
4.02 Business impact of malaria  n/a  5.0  9.03 FDI and technology transfer  9.3 4.0  4.05 Tuberculosis incidence cases/100,000 pop.  91 89.0  90.4 Internet users % pop.  90.4 Internet users % pop.  90.6 HiV prevalence % adult pop.  1 0.2  90.6 Internet bandwidth kb/s/user  90.7 Mobile-broadband subscriptions /100 pop.  50 87.2  90.7 Mobile-broadband subscriptions /100 pop.  51 71.0  90.7 Mobile-broadband subscription		59	5.9	_					_
1.02 Business impact of malaria  1.03 Tuberculosis incidence cases/10,000 pop.  1.05 Tuberculosis incidence cases/10,000 pop.  1.05 Tuberculosis incidence cases/10,000 pop.  1.05 Business impact of tuberculosis  1.07 4.4  1.08 Eusiness impact of tuberculosis  1.09 Liver adult pop.  1.00 Liver adu	4.01 Malaria incidence cases/100.000 pop.	n/a	s.l.			·	81	4.3	_
4.03 Tuberculosis incidence cases/100,000 pop. 91 89.0 9.04 Internet users % pop. 37 76.8 4.04 Business impact of tuberculosis 107 4.4 9.05 Extend for adhand intermet subscriptions /100 pop. 59 13.7 4.05 HIV prevalence % adult pop 1 1 0.2 9.06 Internet bandwidth kb/s/user 50 87.2 9.07 Mobile-broadband subscriptions /100 pop. 51 71.0 4.4 8.1 Life expectancy years 89 72.0 4.09 Quality of primary education 68 4.0 10.01 Domestic market size index 43 4.5 4.0 Primary education enrollment rate net % 4 99.9 10.02 Foreign market size index 42 5.1 10.03 GDP (PPP) PPS billions 40.04 Exports % GDP 72 32.0 50.02 Tertiary education enrollment rate gross % 64 46.3 0.20 Internet bandwidth kb/s/user 50 8.7 2 10.01 Domestic market size index 43 4.4 10.02 Foreign market size index 44 5.5 1 10.04 Exports % GDP PPS billions 40.04 Exports % GDP 72 32.0 10.04 Exports % GDP 72 10.0									_
107   4.4   9.05 Fixed-broadband Internet subscriptions /100 pop.   59   13.7	·			~					
1									
100   4.7   9.07   Mobile-broadband subscriptions /100 pop.   51   71.0   1.07   1.08   1.08   1.09   1.00   1.0						•			
4.07 Infant mortality deaths/1,000 live births 71 12.6   4.08 Life expectancy years 89 72.0   89 72.0   10.01 Domestic market size index 43 4.4   4.40 Quality of primary education enrollment rate net % 4 99.9   10.02 Foreign market size index 42 5.1   10.03 GDP (PPP) PPP \$ billions 40 451.3   10.04 Exports % GDP 72 32.0   10.05 GDP (PPP) PPP \$ billions 10.04 Exports % GDP 72 32.0   10.05 GDP (PPP) PPP \$ billions 10.05 GDP (PPP) PP									
10.0   Life expectancy years   89   72.0   10.0   Dimestic market size index   43   4.5   4.5   4.0   10.0   Dimestic market size index   42   5.1   10.0   2   Foreign market size index   43   4.4   10.0   43   10.0				_	9.07	www.iie-proadband subscriptions /100 pop.	51	71.0	_
4.09 Quality of primary education 68 4.0 99.9 10.02 Foreign market size index 43 4.4 4.4 99.9 10.02 Foreign market size index 43 4.4 4.5 10.03 GDP (PPP) PPP \$ billions 40 451.3 10.04 Exports % GDP 72 32.0 10.05 GDP (PPP) PPP \$ billions 10.06 Exports % GDP 11.07 Local supplier quantity 11.08 State of cluster development 11.09 Value chain breadth 12.1 3.1 12.04 Value chain breadth 12.1 3.1 13.05 Value chain breadth 13.06 Control of international distribution 12.07 Capacity for innovation 13.07 Capacity for innovation 14.08 Quality of primary education enrollment rate met % 15.07 Local availability of specialized training 15.08 Extent of staff training 16.08 Extent of staff training 17.09 Willingness to delegate authority 18.09 Quality of management schools 18.00 Quality of meanagement schools 19.00 Quality of meanagement schools 19.00 Quality of meanagement schools 11.00 Value chain breadth 12.01 Capacity for innovation 12.02 Quality of or market size index 19.00 Quality of poper s billions 10.00 Quality of Exports % GDP 11.00 Quantity GDP PPP \$ billions 10.00 Quantity GDP PPP \$	•				K7	10th pillar: Market size	43	4.5	_
10.02 Foreign market size index 42 5.1 10.02 Foreign market size index 42 5.1 10.03 GDP (PPP) PPP \$ billions 40 451.3 10.04 Exports % GDP 72 32.0 10.04 Exports % GDP 72 3									
10.03 GDP (PPP) PPP   billions   40   451.3									_
10.04 Exports % GDP   72   32.0	4.10 Primary education enrollment rate net %	4	99.9			-			_
5.01 Secondary education enrollment rate gross % 18 112.0   5.02 Tertiary education enrollment rate gross % 64 46.3   5.03 Quality of the education system 77 3.5   5.04 Quality of math and science education 64 4.2   5.05 Quality of management schools 100 3.8   5.06 Internet access in schools 39 4.9   5.07 Local availability of specialized training services 59 4.5   5.08 Extent of staff training 70 3.9   5.08 Extent of staff training 97 4.1   5.09 Willingness to delegate authority 72 4.3   5.00 Quality of scientific research institutions 78 3.7   5.01 Quality of scientific research institutions 78 3.7   5.02 Quality of scientific research institutions 78 3.7   5.03 Quality of the education enrollment rate gross % 64 46.3   5.04 Quality of the education system 77 3.5   5.05 Quality of management schools 100 3.8   5.06 Quality of management schools 100 3.8   5.07 Local availability of specialized training services 59 4.5   5.08 Extent of staff training 70 3.9   5.09 Quality of scientific research institutions 78 3.7   5.00 Quality of scientific research institutions 78 3.0   5.00 Quality of scientific re	Sth niller: Higher education and training	56	4.6						-
5.02 Tertiary education enrollment rate gross % 64 46.3  5.03 Quality of the education system 77 3.5  5.04 Quality of math and science education 64 4.2  5.05 Quality of management schools 100 3.8  5.06 Internet access in schools 39 4.9  5.07 Local availability of specialized training services 59 4.5  5.08 Extent of staff training 70 3.9  11.06 Control of international distribution 99 3.2  11.07 Production process sophistication 108 3.8  11.01 Local supplier quality 114 3.9  11.02 Local supplier quality 102 3.9  11.03 State of cluster development 126 3.0  11.04 Nature of competitive advantage 101 3.0  11.05 Value chain breadth 121 3.1  11.06 Control of international distribution 99 3.2  11.07 Production process sophistication 82 3.6  11.08 Extent of marketing 97 4.1  11.09 Willingness to delegate authority 72 4.3  12.01 Capacity for innovation 84 3.9  12.02 Quality of scientific research institutions 78 3.7  12.03 Company spending on R&D 95 3.0					10.0	04 Exports % GDP	/2	32.0	
11.01   Local supplier quantity   114   3.9				~	200	11th pillar: Business sophistication	108	3.6	-
11.02   11.02   11.02   11.02   11.03   11.03   11.03   11.03   11.03   11.03   11.03   11.03   11.03   11.03   11.03   11.03   11.04   11.05   11.0	•								
11.03 State of cluster development   126   3.0									
11.04 Nature of competitive advantage   101   3.0	5.04 Quality of math and science education	64		_					-
11.05 Value chain breadth   121   3.1	5.05 Quality of management schools	100	3.8	$\sim$		·			-
5.08 Extent of staff training  70 3.9 11.06 Control of international distribution  99 3.2 11.07 Production process sophistication  11.08 Extent of marketing  11.09 Willingness to delegate authority  72 4.3  12.01 Capacity for innovation  84 3.9 12.02 Quality of scientific research institutions  78 3.7 12.03 Company spending on R&D  99 3.2 11.06 Control of international distribution  99 3.2 11.07 Production process sophistication  82 3.6 11.08 Extent of marketing  97 4.1 11.09 Willingness to delegate authority  12.01 Capacity for innovation  12.02 Quality of scientific research institutions  78 3.7 12.03 Company spending on R&D	5.06 Internet access in schools	39	4.9			·			_
11.07 Production process sophistication 82 3.6 11.08 Extent of marketing 97 4.1 11.09 Willingness to delegate authority 72 4.3 12.01 Capacity for innovation 84 3.2 12.02 Quality of scientific research institutions 78 3.7 12.03 Company spending on R&D 95 3.0 12.03 Compan	5.07 Local availability of specialized training services	59	4.5	~~					_
11.07 Production process sophistication 82 3.6 11.08 Extent of marketing 97 4.1 1.09 Willingness to delegate authority 72 4.3 12.01 Capacity for innovation 84 3.2 12.01 Capacity for innovation 84 3.9 12.02 Quality of scientific research institutions 78 3.7 12.03 Company spending on R&D 95 3.0 12.03 Company	5.08 Extent of staff training	70	3.9	_	11.0	6 Control of international distribution	99	3.2	-
11.09 Willingness to delegate authority       72       4.3         ** 12th pillar: Innovation       84       3.2         12.01 Capacity for innovation       84       3.9         12.02 Quality of scientific research institutions       78       3.7         12.03 Company spending on R&D       95       3.0	Č				11.0	7 Production process sophistication	82	3.6	-
11.09 Willingness to delegate authority       72       4.3         ** 12th pillar: Innovation       84       3.2         12.01 Capacity for innovation       84       3.9         12.02 Quality of scientific research institutions       78       3.7         12.03 Company spending on R&D       95       3.0					11.0	8 Extent of marketing	97	4.1	_
12.01 Capacity for innovation 84 3.9 - 12.02 Quality of scientific research institutions 78 3.7 - 12.03 Company spending on R&D 95 3.0 -						-			
12.01 Capacity for innovation 84 3.9 - 12.02 Quality of scientific research institutions 78 3.7 - 12.03 Company spending on R&D 95 3.0 - 12.03 Company spending on R&D 84 84 84 85 85 85 85 85 85 85 85 85 85 85 85 85									_
12.02 Quality of scientific research institutions 78 3.7 - 12.03 Company spending on R&D 95 3.0									
12.03 Company spending on R&D 95 3.0 -									_
						•			_
					12.0		95	3.0	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

75

73

66

3.3

3.3

# Kenya

The Global Competitiveness Index 2017-2018 edition



2017-18

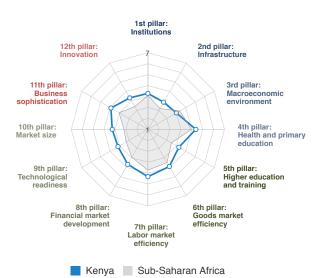
91 / 137

4.0

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April				
Population millions	45.5	GDP per capita US\$	1,516.3			
GDP US\$ billions	68.9	GDP (PPP) % world GDP	0.13			

#### Performance overview

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition
Global Competitiveness Index	91	4.0			Rank
Subindex A: Basic requirements	110	3.9			Score
â 1st pillar: Institutions	75	3.8			
<b>1</b> 2nd pillar: Infrastructure		3.5			
	120	3.6	_		
3 4th pillar: Health and primary education	114	4.8			
Subindex B: Efficiency enhancers	71	4.1	_		
⇒ 5th pillar: Higher education and training	97	3.8			
	66	4.4			
7th pillar: Labor market efficiency	27	4.7			
8th pillar: Financial market development	55	4.2	~		
9th pillar: Technological readiness	88	3.7			
ਨ੍ਹੈ 10th pillar: Market size	71	3.8			
Subindex C: Innovation and sophistication factors	41	4.1	_		
ூ 11th pillar: Business sophistication	47	4.3			
** 12th pillar: Innovation	37	3.8			



2014-15

90 / 144

3.9

2015-16

99 / 140

3.9

2016-17

96 / 138

3.9

### Most problematic factors for doing business



2012-13

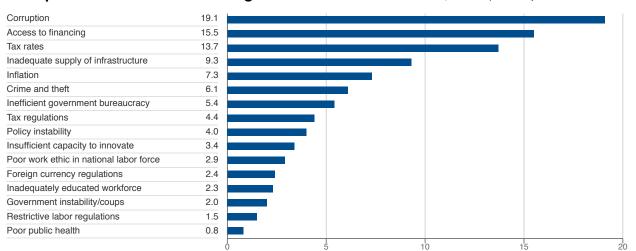
3.7

106 / 144

2013-14

96 / 148

3.8



# Kenya

ndex Component	Rank/137	7 Value	e Trend	Index	Component	Rank/137	Value	Tr
â 1st pillar: Institutions	75	3.8		8	6th pillar: Goods market efficiency	66	4.4	_
1.01 Property rights	52	4.6		6.01	Intensity of local competition	32	5.5	_
1.02 Intellectual property protection	58	4.4		6.02	Extent of market dominance	62	3.8	_
1.03 Diversion of public funds	87	3.2		6.03	Effectiveness of anti-monopoly policy	59	3.8	_
1.04 Public trust in politicians	85	2.7		6.04	Effect of taxation on incentives to invest	71	3.6	_
1.05 Irregular payments and bribes	94	3.4	_	6.05	Total tax rate % profits	70	37.4	_
1.06 Judicial independence	55	4.2	_		No. of procedures to start a business	71	7	_
1.07 Favoritism in decisions of government officials	77	2.9			Time to start a business days	101	22.0	_
1.08 Efficiency of government spending	70	3.2			Agricultural policy costs	49	4.1	_
1.09 Burden of government regulation	31	4.0			Prevalence of non-tariff barriers	87	4.2	_
1.10 Efficiency of legal framework in settling disputes	50	4.0	_		Trade tariffs % duty	102	9.9	_
1.11 Efficiency of legal framework in challenging regulations	46	3.7			Prevalence of foreign ownership	53	4.8	_
	43				· ·	70	4.5	
1.12 Transparency of government policymaking		4.5			Business impact of rules on FDI			~
1.13 Business costs of terrorism	134	3.0			Burden of customs procedures	69	4.1	
1.14 Business costs of crime and violence	123	3.1			Imports % GDP	117	24.4	
1.15 Organized crime	120		$\sim$		Degree of customer orientation	53	4.9	
1.16 Reliability of police services	90	4.1		6.16	Buyer sophistication	84	3.2	_
1.17 Ethical behavior of firms	64	3.9	~	J. C.	7th pillar: Labor market efficiency	27	4.7	_
1.18 Strength of auditing and reporting standards	81	4.4	$\sim$	,				
.19 Efficacy of corporate boards	47	5.0	_		Cooperation in labor-employer relations	69	4.3	_
.20 Protection of minority shareholders' interests	53	4.2	_		Flexibility of wage determination	64	5.0	_
.21 Strength of investor protection 0-10 (best)	79	5.3	~	7.03	Hiring and firing practices	33	4.3	_
				7.04	Redundancy costs weeks of salary	15	6.5	
2nd pillar: Infrastructure	96	3.5		7.05	Effect of taxation on incentives to work	73	3.9	_
.01 Quality of overall infrastructure	56	4.3	_	7.06	Pay and productivity	51	4.2	-
.02 Quality of roads	60	4.3			Reliance on professional management	59	4.5	_
2.03 Quality of railroad infrastructure	56	3.2			Country capacity to retain talent	38	4.0	-
2.04 Quality of port infrastructure	55				Country capacity to attract talent	35	4.0	_
.05 Quality of air transport infrastructure	47	4.9			Female participation in the labor force ratio to men	52	0.86	_
,	62		~	7.10	Ternale participation in the labor force ratio to men	32	0.00	
.06 Available airline seat kilometers millions/week			~~		8th pillar: Financial market development	55	4.2	_
.07 Quality of electricity supply	94	4.1			Availability of financial services	58	4.3	
.08 Mobile-cellular telephone subscriptions /100 pop.	119		~~		•			
2.09 Fixed-telephone lines /100 pop.	132	0.2	_		Affordability of financial services	96	3.4	_
	120	3.6	_		Financing through local equity market	32	4.4	_
· ·			_		Ease of access to loans	58	4.0	~
3.01 Government budget balance % GDP	119	-7.3	~		Venture capital availability	59	3.0	_
3.02 Gross national savings % GDP	102	14.6		8.06	Soundness of banks	92	4.3	_
8.03 Inflation annual % change	104	6.3	<u></u>	8.07	Regulation of securities exchanges	55	4.6	_
.04 Government debt % GDP	79	54.4	~	8.08	Legal rights index 0-10 (best)	31	7	
.05 Country credit rating 0-100 (best)	89	33.4	_	2880	9th pillar: Technological readiness	88	3.7	_
4th pillar: Health and primary education	114	4.8			Availability of latest technologies	48	5.1	_
.01 Malaria incidence cases/100,000 pop.	56 -	14,720.1			Firm-level technology absorption	36	5.1	_
.02 Business impact of malaria	36	4.3			FDI and technology transfer	41	4.8	-
.03 Tuberculosis incidence cases/100,000 pop.	119	233.0	_		Internet users % pop.	105	26.0	
04 Business impact of tuberculosis	108		_					
•		4.4			Fixed-broadband Internet subscriptions /100 pop.	116	0.3	-
1.05 HIV prevalence % adult pop.	127	5.4	$\overline{}$		Internet bandwidth kb/s/user	59	69.0	_
.06 Business impact of HIV/AIDS	114	4.1		9.07	Mobile-broadband subscriptions /100 pop.	109	26.2	_
.07 Infant mortality deaths/1,000 live births	110	35.5		K7 X	10th pillar: Market size	71	3.8	_
.08 Life expectancy years	119	62.1	_					
.09 Quality of primary education	62	4.1			1 Domestic market size index	66	3.7	_
.10 Primary education enrollment rate net %	120	84.9	~		2 Foreign market size index	91	4.0	_
₹ 5th pillar: Higher education and training	97	3.8			3 GDP (PPP) PPP \$ billions		152.8	=
.01 Secondary education enrollment rate gross %	109	60.4		10.04	4 Exports % GDP	127	12.9	
.02 Tertiary education enrollment rate gross %	130	4.0		~08°	11th pillar: Business sophistication	47	4.3	-
				11.01	Local supplier quantity	17	5.1	_
.03 Quality of the education system	28				2 Local supplier quality	53	4.6	_
.04 Quality of math and science education	61				3 State of cluster development	37		
05 Quality of management schools	37		~		·		4.2	
06 Internet access in schools	81		~		4 Nature of competitive advantage	56	3.8	
07 Local availability of specialized training services	34	5.0			5 Value chain breadth	47	4.2	
08 Extent of staff training	44	4.3	$\overline{}$		6 Control of international distribution	62	3.7	_
					7 Production process sophistication	69	3.8	-
				11.08	Extent of marketing	32	4.9	-
				11.09	Willingness to delegate authority	36	4.8	
				-386-	12th pillar: Innovation	37	3.8	_
					1 Capacity for innovation	38	4.7	_
					2 Quality of scientific research institutions	45	4.7	
								-
					3 Company spending on R&D	36		-
					4 University-industry collaboration in R&D	32	4.3	-
				12 05	Gov't procurement of advanced technology products	21	4.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

21

41

4.0

# Korea, Rep.



The Global Competitiveness Index 2017-2018 edition

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2017)				
Population millions	51.2	GDP per capita US\$	27,538.8			
GDP US\$ billions	1,411.2	GDP (PPP) % world GDP	1.61			

#### Performance overview

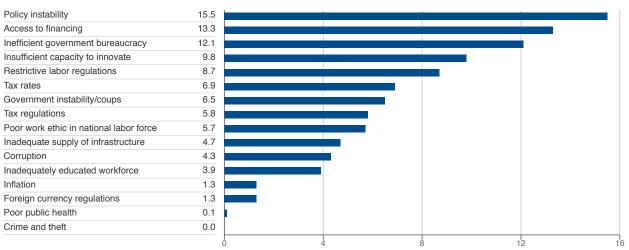
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18		
Global Competitiveness Index	26	5.1	_		Rank	19 / 144	<b>25</b> / 148	26 / 144	<b>26</b> / 140	<b>26</b> / 138	<mark>26</mark> / 137		
Subindex A: Basic requirements	16	5.8			Score	5.1	5.0	5.0	5.0	5.0	5.1		
â 1st pillar: Institutions	58	4.0											
<b>1</b> 2nd pillar: Infrastructure	8	6.1	_					1st pillar: Institutions					
	2	6.6	_			12th p Innov		7	2nd pill Infrastr				
3 4th pillar: Health and primary education	28	6.3	_				$\wedge$						
Subindex B: Efficiency enhancers	26	4.9	_			11th pillar: Business sophistication			3rd pillar: Macroeconomic environment				
⇒ 5th pillar: Higher education and training	25	5.3	_			/	sopnistication						
	24	5.0				10th pillar: Market size				4th pillar: Health and primary education			
7th pillar: Labor market efficiency	73	4.2	_			\							
8th pillar: Financial market development	74	3.9				9th pillar: Technological readiness				5th pillar: Higher educat and training	ion		
% 9th pillar: Technological readiness	29	5.6	_					6th pillar					
$\stackrel{\stackrel{\kappa}{\leftarrow}_{\mathcal{I}}}{\downarrow}$ 10th pillar: Market size	13	5.5				8th pillar: Financial market development 7th pil			Goods market efficiency				
Subindex C: Innovation and sophistication factors	23	4.8											
္တီ 11th pillar: Business sophistication	26	4.9	_				rea, Rep.	■ Fast A	sia and Pa	oifio			
※ 12th pillar: Innovation	18	4.8				■ KC	CIIIC						

The Republic of Korea's (26th) overall performance has improved slightly since last year, with all 12 pillars obtaining a higher score. For an advanced economy, however, the country still presents large disparities between pillars. Its performance is largely driven by its remarkable infrastructure (8th) and a highly favorable macroeconomic environment (2nd). This year's political turmoil and corruption scandals highlighted the challenges in the country's institutional environment, yet the score of the institutions pillar advanced marginally. Another area in which Korea consistently underperforms is labor market

efficiency, in which it ranks 73rd, hiding deeper challenges with regard to labor market flexibility—in which it ranks 106th—caused notably by conflictual labor-employer relations and high redundancy costs. Looking back at Korea's performance over the last decade, it is one of the few advanced economies that have experienced a general decline in performance for a majority of its pillars of competitiveness. It is hoped that this year's rebound signals a shift toward a more positive trend overall.

#### Most problematic factors for doing business





# Korea, Rep.

Property rights   37	ndex Component	Rank/137	' Value	Trend	Inde	x Component	Rank/137	7 Value	e Tr
December of protection   54   4.4	🖮 1st pillar: Institutions	58	4.0		1	6th pillar: Goods market efficiency	24	5.0	_
December of protection   54   4.4	1.01 Property rights	37	4.9	~	6.0	Intensity of local competition	4	6.0	_
## Distriction of public funds	. , ,								
se Public unair in politicianes  ### Seregular premium and or thore  ### Seregular premium and or the service and or the se				_					
Strengthy programmer and brithes	•								
6 Audicial independence	•								_
27 Favoritism in decisions of government officials   81   2.9   0.07 Time to start a businesse seys   12   4.0   0.00   8 Editionary of government regulation   65   3.1   0.00   Prevalence of con-carlle barriers   64   4.2   0.00   9 Editionary of legal transveck in cellular glotepies   63   3.5   0.01   Prevalence of con-carlle barriers   64   4.2   0.1   1.00   0.00   0.00   9 Favoritism of legal transveck in challenging regulations   63   3.5   0.01   Prevalence of the segal construction   64   4.3   0.1   1.00   0.00   0.00   0.00   0.00   9 Editionary of legal transveck in challenging regulations   63   4.8   0.1   Imports in Construction   64   4.5   0.00   0.00   0.00   0.00   0.00   9 Editionary of control of control and violence   63   4.8   0.1   Imports in Control of cationing procedures   64   6.4   0.00   0.0	•								_
sell Efficiency of government appealing						•			_
10   Burden of government regulation   95   3.1	-								_
10 Efficiency of legal framework in settling disputes   54   3.8   2.0 Trada turiffs sub-sub-sub-sub-sub-sub-sub-sub-sub-sub-						•			
Efficiency of legal framework in challenging regulations   56   3.5									
12 Transparency of government policymaking   98   3.6						*			
18 Business coals of terrordam									
14 Business costs of crime and voluntion									
15 Organizad crime									
15 Reliability of police services						•			
17 EPhocal behavior of firms	•					•			
18 Strength of auditing and reporting standards   63 4.7					6.16	Buyer sophistication	2	5.2	-
18  Strength of auditing and reporting standards   53					7	7th nillar: I abor market efficiency	73	4.2	_
28 Protection of menority charachotors' interests 99 3.7   27.0 Reloaditily of wage determination 22 5.0   28 Sheright of investor protection 0.10 (beat) 13 7.3   27.0 Flanding infiguration 2.0   28.0 Country capacity to ratinate interacture 2.0   28.2   27.0 Flanding infiguration 2.0   28.0 Country capacity to ratinate latent 2.0   29.0 Country capacity to attract tablent 2.0   29.0 Float-delephone lines 7.00 ppp 2.0   29.0 Float-delephone lines 7.00 ppp 3.0   29.0 Float-delephone lines 7.00 ppp 4.0   29.0 Float-delephone lines 7.00 ppp 4.0   29.0 Float-delephone lines 7.00 ppp 5.0   29.0 Float-delephone lines 7.00 ppp 5.0   29.0 Float-delephone lines 7.00 ppp 6.0   29.0 Country capacity hold ediceuty market 4.0   29.0 Float-delephone lines 7.00 ppp 6.0   29.0 Country capacity hold ediceuty market 4.0   29.0 Float-delephone lines 7.00 ppp 6.0   29.0 Country capacity hold ediceuty market 4.0   29.0 Float-delephone lines 7.00 ppp 6.0   29.0 Country capacity hold ediceuty market 4.0   29.0 Float-delephone lines 7.00 ppp 6.0   29.0 Country capacity hold ediceuty market 4.0   29.0 Country capacity hold ediceuty att	1.18 Strength of auditing and reporting standards				~ .				
28 Strength of investor protection 6-10 (best) 29 Strength of investor protection 6-10 (best) 20 Quality of reads 10 Quality of protection first intrastructure 20 Quality of roads 20 Quality of rational infrastructure 21 5.5	1.19 Efficacy of corporate boards								
And pillar: Infrastructure         8         6.1           01 Quality of overall infrastructure         14         5.7         7.06 Effect of staction on incentives to work         60         40         7.06 Pay and productivity         15         4.8           02 Quality of roads         12         5.6         7.06 Pay and productivity         15         4.8           03 Quality of roads         12         5.6         7.00 Pay and productivity         19         4.5           03 Quality of roads         12         5.6         7.00 Country capacity to retain tation         29         4.5           05 Quality of air transport infrastructure         13         5.9         7.00 Country capacity to retain tation         24         4.5           05 Quality of air transport infrastructure         18         2.830.5         7.00 Country capacity to retain tation         42         4.5           05 Quality of electricity supply         21         6.4         4.5         4.5         4.6         4.6         4.6         4.6         4.6         4.6         4.6         4.6         4.2         4.8         5.2         4.6         4.6         4.6         4.6         4.6         4.6         4.6         4.6         4.6         4.6         4.6         4.6         4.6	.20 Protection of minority shareholders' interests	99	3.7	$\sim$					
2 And plairs: Infrastructure         8         6.1         7.05 Effect of taxation on incontivities to work         0.0         4.0           10 Quality of roads         12         5.6         7.07 Reliance on professional management         39         4.6           20 Quality of rainzed infrastructure         7         7.5         7.7         7.07 Reliance on professional management         29         4.5           20 Quality of port infrastructure         13         5.9         7.00 Country capacity to retain the labor force ratio to man         90         0.0         7.00 Country capacity to retain the labor force ratio to man         90         0.73         7.00 Female participation in the labor force ratio to man         90         0.73         7.00 Female participation in the labor force ratio to man         90         0.73         7.00 Female participation in the labor force ratio to man         90         0.73         9.00 Female participation in the labor force ratio to man         90         0.73         9.00 Female participation in the labor force ratio to man         90         0.73         9.00 Female participation in the labor force ratio to man         90         0.73         9.00 Female participation in the labor force ratio to man         90         0.73         9.00 Female participation in the labor force ratio to man         90         0.73         9.00 Female participation in the labor force ratio to man         9.00 Female participation in the labor	1.21 Strength of investor protection 0-10 (best)	13	7.3						
10 Cuality of roads   14   5.7   7.06 Pay and productivity   15   4.8   8   16   16   16   16   16   16   16		0	6.1						
20 Quality of railload infrastructure 7	•								
20 Calify of railroad infrastructure	2.01 Quality of overall infrastructure	14	5.7	$\overline{}$	7.06	Pay and productivity	15	4.8	_
20	2.02 Quality of roads	12	5.6	_	7.07	Reliance on professional management	39	4.6	1
15 Quality of air transport infrastructure 18	2.03 Quality of railroad infrastructure	7	5.7	_	7.08	Country capacity to retain talent	29	4.5	-
50 Quality of air transport infrastructure   13   5.9	2.04 Quality of port infrastructure	23	5.2	_	7.09	Country capacity to attract talent	42	3.9	-
18	2.05 Quality of air transport infrastructure	13	5.9	$\sim$			90	0.73	-
27 Quality of electricity supply   21   6.4   6.4   6.4   6.4   6.4   6.4   6.4   6.4   6.4   6.5	·	18	2.830.5	_					
80 Mobile-cellular telephone subscriptions π00 ppp. 4 56.1    80 Fixed-telephone lines π00 ppp. 4 56.1    80 Addrodality of financial services   81 4.0    80 Stribancial services   81 4.0    82 Stribancial services   84 4.2    84 Stribancial services   84 4.2    85 Stribancial services   85 Stribancial services   86 Stribanc						8th pillar: Financial market development	74	3.9	-
10   10   10   10   10   10   10   10	, , , , , ,				8.0	Availability of financial services	81	4.0	_
Strip   Macroeconomic environment   2   6.6				$\overline{}$		•	44	4.2	
3 regulator Macroeconomic environment   2   6.6	2.09 Tixed-telephone lines 7100 pop.	- 4	30.1	_		•			
10 Government budget balance % GDP 11 0.3 2 6.05 Venture capital availability 64 2.9 0.05 Cross national savings % GDP 8 36.2 6.05 Country card training or lockes 91 1.0 6.07 Regulation of securities exchanges 91 4.3 0.05 Country card training or lockes 91 1.0 6.07 Regulation of securities exchanges 91 4.3 0.05 Country card training or lockes 91 1.0 6.07 Regulation of securities exchanges 91 4.3 0.05 Country card training or lockes 91 1.0 6.07 Regulation of securities exchanges 91 4.3 0.05 Country card training or lockes 91 1.0 0.05 0.05 Country card training or lockes 91 1.0 0.0 0.05 0.05 Country card training or lockes 91 1.0 0.0 0.05 0.05 0.05 0.05 0.05 0.05		2	6.6						
28 Gross national savings % GDP 8 3 62	3.01 Government hudget halance % GDP	11	0.3	_					
1	-			_					
04 Government debt % GDP	· · · · · · · · · · · · · · · · · · ·								
Style="background-color: 180%; color: 180	•								
4th pillar: Health and primary education         28         6.3           01 Malafaria incidence cases/100,000 pop.         20         2.8         3.01 Availability of latest technologies         23         5.8           02 Business impact of malaria         9         5.7         9.02 Firm-level technology absorption         23         5.3           03 Tuberculosis incidence cases/100,000 pop.         87         80.0         9.03 FDI and technology transfer         55         4.5           04 Business impact of tuberculosis         66         5.5         90.5 Fixed-broadband Internet subscriptions /100 pop.         54.1.1           05 HIV prevalence % adult pop.         1         0.0         9.06 Internet bandwidth Mobiluser         72         54.3           07 Infant mortality deather/1,000 live births         13         2.9         9.07 Mobile-broadband subscriptions /100 pop.         14         111.5           07 Infant mortality deather/1,000 live births         13         2.9         9.07 Mobile-broadband subscriptions /100 pop.         14         111.5           07 Infant mortality deather/1,000 live births         13         2.9         9.07 Mobile-broadband subscriptions /100 pop.         14         111.5           06 Life expectancy years         12         82.2         1         10.01 broadband internet subscriptions /100 pop.         14					8.08	3 Legal rights index 0-10 (best)	70	5	
101 Malaria incidence cases/100,000 pop. 20 2.8 9.02 Firm-level technology absorption 23 5.3 20 Business impact of malaria 9 5.7 9.03 FDI and technology transfer 55 4.5 0.3 TUberculosis incidence cases/100,000 pop. 87 80.0 9.04 Internet users % pop. 8 92.7 0.04 Business impact of tuberculosis 66 5.5 9.05 Fixed-broadband Internet subscriptions /100 pop. 5 41.1 0.0 HIV prevalence % adult pop. 1 0.0 9.06 Internet bandwidth kbl/s/user 72 54.3 0.05 HIV prevalence % adult pop. 1 1 0.0 9.06 Internet bandwidth kbl/s/user 72 54.3 0.05 HIV prevalence % adult pop. 1 1 0.0 9.06 Internet bandwidth kbl/s/user 72 54.3 0.05 HIV prevalence % adult pop. 1 1 11.5 5.0 1 11.0 to a pop. 1 1 11.5 5.0 1 11.0 to a pop. 1 1 1 11.0 to a pop. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3.05 Country credit rating 0-100 (best)	20	81.7		o8}3°	9th pillar: Technological readiness	29	5.6	-
9 Business impact of malaria 9 5.7	4th pillar: Health and primary education	28	6.3		9.0	Availability of latest technologies	23	5.8	-
03 Tuberculosis incidence cases/100,000 pop. 87 80.0    04 Business impact of tuberculosis 66 5.5    05 HIV prevalence % adult pop. 1 0.0    06 Business impact of HIV/AIDS 61 5.5    07 Infant mortality deaths/1,000 live births 13 2.9    08 Cuality of primary education 41 4.6    10 Primary education enrollment rate net % 30 98.2    05 Sthyllar: Higher education and training 25 5.3    05 Stoodary education enrollment rate gross % 3 99.9    05 Total young from the education system 81 3.5    06 Quality of management schools 69 4.2    11.01 Local supplier quantity 11 5.2    11.02 Local supplier quantity 11 5.2    11.03 State of cluster development 28 4.6    11.05 Value chain breadth 23 4.9    11.06 Control of international distribution 9 5.2    11.07 Value chain breadth 23 4.8    12.08 Extent of staff training 38 4.8    12.01 Capacity for innovation 18 4.8    12.01 Capacity for innovation 32 4.8    12.02 Quality of scientific research institutions 32 4.8    12.03 Company spending on R&D 28 4.4    12.04 Capacity for innovation 32 4.8    12.03 Company spending on R&D 28 4.4    12.04 Capacity for innovation 32 4.8    12.05 Company spending on R&D 28 4.4    12.06 Company spending on R&D 28 4.4    12.07 Capacity for innovation 32 4.8    12.08 Company spending on R&D 28 4.4    12.09 Company spending on R&D 28 4.4    12.00 Capacity for innovation 32 4.4    12.00 Capacity for innovation 32 4.4    12.00 Company spending on R&D 28 4.4    12.00 Company spending on R&D 28 4.4    12.00 Capacity for innovation 32 4.4    12.00 Company spending on R&D 28 4.4    12.00 Capacity for innovation 32 4.4    12.00 Capacity for innovation 32 4.4    12.00 Company spending on R&D 28 4.4    12.00 Capacity for innovation 32 4.4	1.01 Malaria incidence cases/100,000 pop.	20	2.8	~	9.02	Firm-level technology absorption	23	5.3	1
04 Business impact of tuberculosis 66 5.5	1.02 Business impact of malaria	9	5.7	$\overline{}$	9.03	FDI and technology transfer	55	4.5	_
04 Business impact of tuberculosis 66 5.5	1.03 Tuberculosis incidence cases/100,000 pop.	87	80.0	^	9.04	Internet users % pop.	8	92.7	_
1 0.0 9.06 Internet bandwidth kb/s/user 72 54.3 06 Business impact of HIV/AIDS 61 5.5 9.07 Mobile-broadband subscriptions /100 pop. 14 111.5 07 Infant mortality deaths/1,000 live births 13 2.9 9 100 Illegrange 12 82.2 100 Quality of primary education 9 12 82.2 100 Quality of primary education enrollment rate net % 30 98.2 100 Illegrange 25 5.3 100 Illegrange 25 Ill	1.04 Business impact of tuberculosis	66	5.5		9.05	Fixed-broadband Internet subscriptions /100 pop.	5	41.1	
66 Business impact of HIV/AIDS       61       5.5       9.07 Mobile-broadband subscriptions /100 pop.       14       111.5         07 Infant mortality deather/1,000 live births       13       2.9       10 bit per	·								
13 2.9									
12 82.2	•						- 17		
So Quality of primary education         41         4.6         10.01 Domestic market size index         14         5.4           5 Sth pillar: Higher education enrollment rate net %         30         98.2         10.02 Foreign market size index         12         6.0           5 Sth pillar: Higher education and training         25         5.3         10.02 Foreign market size index         12         6.0           01 Secondary education enrollment rate gross %         53         98.9         10.02 Foreign market size index         14         1,934.0         10.03 GDP (PPP) PPP \$billions         14         1,934.0         10.04 Exports % GDP         50         41.6         41.0	•				F 7 7	10th pillar: Market size	13	5.5	-
10 Primary education enrollment rate net % 30 98.2 10.02 Foreign market size index 12 6.0 10.03 GDP (PPP) shillions 14 1,934.0 10.04 Exports % GDP 50 41.6 10.04 Exports % GDP 60 41.04 Exports % GDP 60 41.04 Exports % GDP 60 41							1⊿	5.4	
10.03 GDP (PPP) PPP   billions   14   1,934.0				_					
Sth pillar: Higher education and training   25   5.3     01 Secondary education enrollment rate gross %   3   98.9     02 Tertiary education enrollment rate gross %   3   93.2     03 Quality of the education system   81   3.5     04 Quality of math and science education   36   4.6     05 Quality of management schools   69   4.2     06 Internet access in schools   15   5.8     07 Local availability of specialized training services   52   4.6     08 Extent of staff training   41   4.3     08 Extent of staff training   41   4.3     10.00 Exports % GDP   50   41.6     10.01 Exports % GDP   50   41.6     11.01 Local supplier quantity   11   5.2     11.02 Local supplier quantity   30   5.1     11.03 State of cluster development   28   4.6     11.04 Nature of competitive advantage   22   5.1     11.05 Value chain breadth   23   4.9     11.06 Control of international distribution   9   5.2     11.08 Extent of marketing   38   4.8     11.09 Willingness to delegate authority   78   4.2     11.00 Capacity for innovation   18   4.8     12.01 Capacity for innovation   35   4.7     12.02 Quality of scientific research institutions   32   4.8     12.03 Company spending on R&D   28   4.4	4.10 Primary education enrollment rate net %	30	98.2			-			_
101 Secondary education enrollment rate gross %   53   98.9   202 Tertiary education enrollment rate gross %   3   93.2   3   93.2   3   11th pillar: Business sophistication   26   4.9   203 Quality of the education system   81   3.5   3.5   2.	Sth pillar: Higher education and training	25	5.3						=
02 Tertiary education enrollment rate gross %       3       93.2       11th pillar: Business sophistication       26       4.9         03 Quality of the education system       81       3.5       11.01 Local supplier quantity       11       5.2         04 Quality of math and science education       36       4.6       11.02 Local supplier quantity       30       5.1         05 Quality of management schools       69       4.2       11.03 State of cluster development       28       4.6         06 Internet access in schools       15       5.8       11.04 Nature of competitive advantage       22       5.1         07 Local availability of specialized training services       52       4.6       11.05 Value chain breadth       23       4.9         08 Extent of staff training       41       4.3       11.06 Control of international distribution       9       5.2         11.08 Extent of marketing       38       4.8         11.09 Willingness to delegate authority       78       4.2         12.01 Capacity for innovation       35       4.7         12.02 Quality of scientific research institutions       32       4.8         12.03 Company spending on R&D       28       4.4				,	10.0	24 LAPUII 3 % GUF	50	41.0	
11.01   Local supplier quantity   11   5.2				=	og g	11th pillar: Business sophistication	26	4.9	
04 Quality of math and science education       36       4.6       11.02 Local supplier quality       30       5.1         05 Quality of management schools       69       4.2       11.03 State of cluster development       28       4.6         06 Internet access in schools       15       5.8       11.04 Nature of competitive advantage       22       5.1         07 Local availability of specialized training services       52       4.6       11.05 Value chain breadth       23       4.9         108 Extent of staff training       41       4.3       11.06 Control of international distribution       9       5.2         11.07 Production process sophistication       24       5.2         11.09 Willingness to delegate authority       78       4.2         12.01 Capacity for innovation       18       4.8         12.02 Quality of scientific research institutions       32       4.8         12.03 Company spending on R&D       28       4.4							11	5.2	-
11.03   State of cluster development   28   4.6   60   1.04   Nature of competitive advantage   22   5.1   1.04   Nature of competitive advantage   22   5.1   1.05   Value chain breadth   23   4.9   1.06   Control of international distribution   9   5.2   1.07   Local availability of specialized training services   41   4.3   4.3   4.3   1.06   Control of international distribution   9   5.2   1.07   Production process sophistication   24   5.2   1.08   Extent of marketing   38   4.8   4.8   1.09   Willingness to delegate authority   78   4.2   1.09   Willingness to delegate authority   78   4.2   1.00   Capacity for innovation   18   4.8   1.00   Capacity for innovation   35   4.7   1.00   Capacity for innovation   32   4.8   1.00   Capacity for innovation   33   4.9   1.00   Capacity for innovation   4.8   1.00   Capacity for				_					
11.04   Nature of competitive advantage   22   5.1				_					
07 Local availability of specialized training services       52       4.6       11.05 Value chain breadth       23       4.9         08 Extent of staff training       41       4.3       11.06 Control of international distribution       9       5.2         11.07 Production process sophistication       24       5.2         11.08 Extent of marketing       38       4.8         11.09 Willingness to delegate authority       78       4.2         12.01 Capacity for innovation       18       4.8         12.02 Quality of scientific research institutions       32       4.8         12.03 Company spending on R&D       28       4.4	5.05 Quality of management schools								
11.06 Control of international distribution   9   5.2	5.06 Internet access in schools			$\sim$					
11.07 Production process sophistication 24 5.2 11.08 Extent of marketing 38 4.8 11.09 Willingness to delegate authority 78 4.2 12th pillar: Innovation 18 4.8 12.01 Capacity for innovation 35 4.7 12.02 Quality of scientific research institutions 32 4.8 12.03 Company spending on R&D 28 4.4	5.07 Local availability of specialized training services	52		$\sim$					
11.08 Extent of marketing       38       4.8         11.09 Willingness to delegate authority       78       4.2         ** 12th pillar: Innovation       18       4.8         12.01 Capacity for innovation       35       4.7         12.02 Quality of scientific research institutions       32       4.8         12.03 Company spending on R&D       28       4.4	5.08 Extent of staff training	41	4.3	_					
11.09 Willingness to delegate authority       78       4.2         ** 12th pillar: Innovation       18       4.8         12.01 Capacity for innovation       35       4.7         12.02 Quality of scientific research institutions       32       4.8         12.03 Company spending on R&D       28       4.4						·			
12th pillar: Innovation       18       4.8         12.01 Capacity for innovation       35       4.7         12.02 Quality of scientific research institutions       32       4.8         12.03 Company spending on R&D       28       4.4							38	4.8	-
12.01 Capacity for innovation 35 4.7 12.02 Quality of scientific research institutions 32 4.8 12.03 Company spending on R&D 28 4.4					11.0	9 Willingness to delegate authority	78	4.2	
12.01 Capacity for innovation 35 4.7 12.02 Quality of scientific research institutions 32 4.8 12.03 Company spending on R&D 28 4.4					-346-	12th pillar: Innovation	18	4.8	-
12.02 Quality of scientific research institutions 32 4.8 12.03 Company spending on R&D 28 4.4									
12.03 Company spending on R&D 28 4.4									_
						•			
40 04 University industry collections in DOD					12.0		28	4.4	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

27 32

38

3.8

## Kuwait

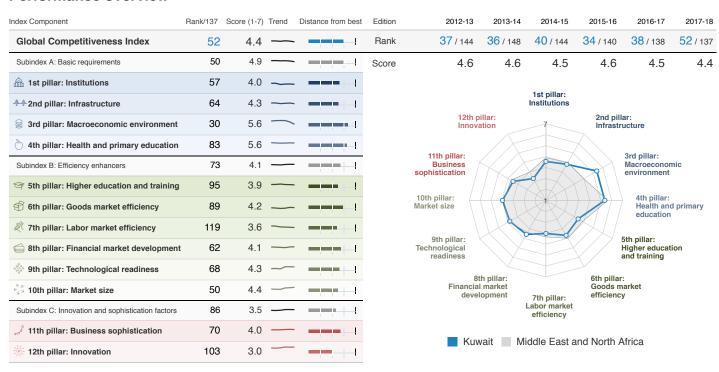


The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (Ap.				
Population millions	4.2	GDP per capita US\$	26,004.7			
GDP US\$ billions	109.9	GDP (PPP) % world GDP	0.25			

#### Performance overview

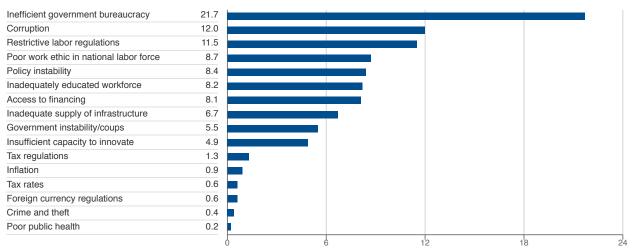


Kuwait drops to 52nd, mostly on the back of a deterioration in the macroeconomic environment and, following a revision of ICT indicators previously published by the International Telecommunications Union (ITU), in technological readiness. As oil and gas prices remain low, the fiscal balance went into deficit last year (from a surplus of 1.2 percent of GDP to a deficit of 3.6 percent of GDP) with an increase in debt. In

order to face the challenges posed by persistently-low oil prices, Kuwait will have to increase its innovation capacity through investments in higher education and training and a more inclusive and efficient labour market that allows to make the best use of its human capital.

#### Most problematic factors for doing business





# **Kuwait**

dex Component	Rank/13	7 Value	Trend	Index Component	Rank/137	Value
⋒ 1st pillar: Institutions	57	4.0	~		89	4.2
.01 Property rights	49	4.6	~	6.01 Intensity of local competition	89	4.8
.02 Intellectual property protection	80	3.9	_	6.02 Extent of market dominance	96	3.4
.03 Diversion of public funds	54	4.0		6.03 Effectiveness of anti-monopoly policy	108	3.2
•	68	3.0			10	5.2
04 Public trust in politicians				6.04 Effect of taxation on incentives to invest		
05 Irregular payments and bribes	70	3.9	_	6.05 Total tax rate % profits	3	13.0
.06 Judicial independence	44	4.6		6.06 No. of procedures to start a business	126	12
07 Favoritism in decisions of government officials	78	2.9		6.07 Time to start a business days	130	61.4
08 Efficiency of government spending	59	3.4	_	6.08 Agricultural policy costs	105	3.3
09 Burden of government regulation	90	3.2		6.09 Prevalence of non-tariff barriers	86	4.2
10 Efficiency of legal framework in settling disputes	47	4.1	_	6.10 Trade tariffs % duty	56	4.0
11 Efficiency of legal framework in challenging regulations	43	3.8		6.11 Prevalence of foreign ownership	136	2.7
12 Transparency of government policymaking	104	3.5	_	6.12 Business impact of rules on FDI	132	3.1
13 Business costs of terrorism	84	4.9	~	6.13 Burden of customs procedures	103	3.6
14 Business costs of crime and violence	46	5.0	~	6.14 Imports % GDP	50	51.8
15 Organized crime	52	5.1	~	6.15 Degree of customer orientation	94	4.3
16 Reliability of police services	46	5.0		6.16 Buyer sophistication	42	3.8
				6.10 Bayor coprilotication		0.0
17 Ethical behavior of firms	67	3.8		7th pillar: Labor market efficiency	119	3.6
18 Strength of auditing and reporting standards	80	4.4	_		54	4.5
19 Efficacy of corporate boards	128	4.0	~	7.01 Cooperation in labor-employer relations	54	4.5
20 Protection of minority shareholders' interests	76	3.9	_	7.02 Flexibility of wage determination	72	4.8
21 Strength of investor protection 0-10 (best)	74	5.5	~~	7.03 Hiring and firing practices	62	3.8
2				7.04 Redundancy costs weeks of salary	118	28.1
⁴ 2nd pillar: Infrastructure	64	4.3		7.05 Effect of taxation on incentives to work	40	4.3
01 Quality of overall infrastructure	69	4.1	~	7.06 Pay and productivity	113	3.3
•						
02 Quality of roads	63	4.1		7.07 Reliance on professional management	122	3.4
03 Quality of railroad infrastructure	n/a	not		7.08 Country capacity to retain talent	86	3.2
·		assessed		7.09 Country capacity to attract talent	89	3.0
04 Quality of port infrastructure	78	3.8	_	7.10 Female participation in the labor force ratio to men	116	0.58
05 Quality of air transport infrastructure	117	3.2	$\overline{}$	-		
06 Available airline seat kilometers millions/week	56	339.4		8th pillar: Financial market development	62	4.1
07 Quality of electricity supply	49	5.5	~	8.01 Availability of financial services	40	4.6
08 Mobile-cellular telephone subscriptions /100 pop.	24	146.6	$\sim$	·	40	
			( )	8.02 Affordability of financial services		4.3
09 Fixed-telephone lines /100 pop.	81	11.0		8.03 Financing through local equity market	49	4.0
3rd pillar: Macroeconomic environment	30	5.6		8.04 Ease of access to loans	38	4.4
· ·				8.05 Venture capital availability	30	3.6
01 Government budget balance % GDP	84	-3.6		8.06 Soundness of banks	36	5.5
02 Gross national savings % GDP	28	28.8		8.07 Regulation of securities exchanges	62	4.5
03 Inflation annual % change	52	3.2	<u></u>	8.08 Legal rights index 0-10 (best)	107	2
04 Government debt % GDP	7	18.6	_ /	6.06 Legal lights linex 0-10 (best)	107	
05 Country credit rating 0-100 (best)	27	74.0	$\sim$	⋄ 9th pillar: Technological readiness	68	4.3
03 Country Credit rating 0-100 (best)	21	74.0	_			
4th pillar: Health and primary education	83	5.6		9.01 Availability of latest technologies	55	4.9
				9.02 Firm-level technology absorption	70	4.4
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.03 FDI and technology transfer	121	3.5
02 Business impact of malaria	n/a	5.9		9.04 Internet users % pop.	34	78.4
03 Tuberculosis incidence cases/100,000 pop.	52	22.0	\	9.05 Fixed-broadband Internet subscriptions /100 pop.	101	2.8
04 Business impact of tuberculosis	49	6.0				
05 HIV prevalence % adult pop.	1	<0.1		9.06 Internet bandwidth kb/s/user	58	69.5
				9.07 Mobile-broadband subscriptions /100 pop.	58	66.8
06 Business impact of HIV/AIDS	43	5.9		10th pillar: Market size	50	4.4
07 Infant mortality deaths/1,000 live births	49	7.3		Valuation biliar: Market Size	30	4.4
08 Life expectancy years	71	74.7	~	10.01 Domestic market size index	49	4.2
09 Quality of primary education	104	3.1	~	10.02 Foreign market size index	43	5.1
10 Primary education enrollment rate net %	92	92.9		10.03 GDP (PPP) PPP \$ billions		303.7
				10.04 Exports % GDP	40	46.4
3 5th pillar: Higher education and training	95	3.9		10.04 Exports % GDP	40	40.4
01 Cocondary education enrollment rate	64	05.0	$\overline{}$	√ 11th pillar: Business sophistication	70	4.0
01 Secondary education enrollment rate gross %	64	95.0	^~			
02 Tertiary education enrollment rate gross %	88	27.0		11.01 Local supplier quantity	65	4.6
03 Quality of the education system	89	3.3	~	11.02 Local supplier quality	85	4.1
04 Quality of math and science education	106	3.2	~	11.03 State of cluster development	47	4.1
05 Quality of management schools	111	3.6	$\overline{}$	11.04 Nature of competitive advantage	52	3.9
06 Internet access in schools	88	3.8	_	11.05 Value chain breadth	66	3.8
			~			
07 Local availability of specialized training services	121	3.6	$\stackrel{\sim}{=}$	11.06 Control of international distribution	56	3.8
08 Extent of staff training	86	3.7		11.07 Production process sophistication	68	3.8
				11.08 Extent of marketing	88	4.2
				11.09 Willingness to delegate authority	107	3.8
				1/		
				12th pillar: Innovation	103	3.0
				12.01 Capacity for innovation	102	3.7
				12.02 Quality of scientific research institutions	97	3.3
				12.03 Company spending on R&D	116	2.8
				12.04 University-industry collaboration in R&D	108	2.9
				12.05 Gov't procurement of advanced technology products	84	3.1

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

84

98

3.1

# **Kyrgyz Republic**

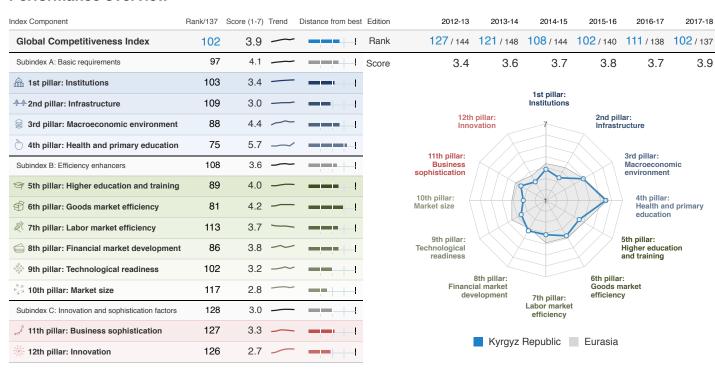
102nd/137

The Global Competitiveness Index 2017-2018 edition



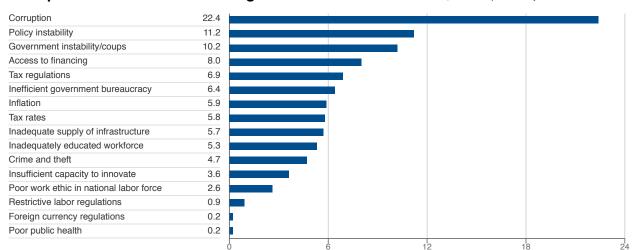
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20			
Population millions 6.1		GDP per capita US\$	1,072.7		
GDP US\$ billions	6.6	GDP (PPP) % world GDP	0.02		

#### Performance overview



#### Most problematic factors for doing business





# **Kyrgyz Republic**

ndex Component	Rank/137	Value	Trend	Index Componen	nt	Rank/137	Value	Э .
â 1st pillar: Institutions	103	3.4	_	<b>❸</b> 6th pillar:	: Goods market efficiency	81	4.2	-
1.01 Property rights	119	3.5	_	6.01 Intensity of	of local competition	124	4.3	_
.02 Intellectual property protection	118	3.3	_	6.02 Extent of	market dominance	92	3.4	_
03 Diversion of public funds	84	3.2	_		ess of anti-monopoly policy	109	3.2	
04 Public trust in politicians	78	2.8			axation on incentives to invest	78	3.5	
D5 Irregular payments and bribes	122	2.8				33	29.0	
•				6.05 Total tax r				
06 Judicial independence	102	3.1			ocedures to start a business	18	4	
07 Favoritism in decisions of government officials	86	2.8	_	6.07 Time to st	tart a business days	61	10.0	
08 Efficiency of government spending	77	3.1	_	6.08 Agricultur	al policy costs	114	3.2	
09 Burden of government regulation	77	3.3	_	6.09 Prevalence	ce of non-tariff barriers	104	4.0	
10 Efficiency of legal framework in settling disputes	96	3.0		6.10 Trade tari		69	4.9	
11 Efficiency of legal framework in challenging regulations	90	2.9			ce of foreign ownership	119	3.6	
12 Transparency of government policymaking	75	3.9	_		impact of rules on FDI	118	3.7	
13 Business costs of terrorism	103	4.5	$\overline{}$	6.13 Burden of	customs procedures	96	3.6	
14 Business costs of crime and violence	84	4.3	$\overline{}$	6.14 Imports %	6 GDP	20	74.5	
15 Organized crime	102	4.2	$\overline{}$	6.15 Degree of	f customer orientation	112	4.0	
-	107					53		
16 Reliability of police services				6.16 Buyer sop	onistication	53	3.6	
17 Ethical behavior of firms	95	3.5	_	₹ 7th pillar:	: Labor market efficiency	113	3.7	
18 Strength of auditing and reporting standards	117	3.7	$\sim$	« / III piliai .	. Labor market emclency	110	0.7	
19 Efficacy of corporate boards	127	4.0	_	7.01 Cooperati	ion in labor-employer relations	108	3.9	
20 Protection of minority shareholders' interests	121		~	7.02 Flexibility	of wage determination	117	4.2	
			<u> </u>		d firing practices	78	3.6	
21 Strength of investor protection 0-10 (best)	41	6.3	_		• .			
1 2nd nillar: Infractructure	109	3.0			ncy costs weeks of salary	74	17.3	
1 2nd pillar: Infrastructure		3.0		7.05 Effect of to	axation on incentives to work	90	3.6	
1 Quality of overall infrastructure	112	3.0	$\sim$	7.06 Pay and p	productivity	54	4.2	
2 Quality of roads	122	2.7	~	7.07 Reliance	on professional management	129	3.2	
03 Quality of railroad infrastructure	76	2.4	~		apacity to retain talent	122	2.5	
04 Quality of port infrastructure	137				apacity to attract talent	120	2.3	
05 Quality of air transport infrastructure	120	3.1		7.10 Female pa	articipation in the labor force ratio to men	99	0.66	
06 Available airline seat kilometers millions/week	93	71.8	_	C Oth miller	. Financial market development	86	3.8	
07 Quality of electricity supply	102	3.6	$\overline{}$	e our piliar:	: Financial market development	00	3.0	
08 Mobile-cellular telephone subscriptions /100 pop.	39	131.4	~~	8.01 Availability	y of financial services	97	3.8	
09 Fixed-telephone lines /100 pop.	95	6.6	_	8.02 Affordabili	ity of financial services	88	3.6	
09 Tixed telephone lines 7100 pop.	33	0.0			through local equity market	109	2.9	
3rd pillar: Macroeconomic environment	88	4.4	_			80		
'				8.04 Ease of a			3.7	
01 Government budget balance % GDP	100	-4.5	^		apital availability	93	2.6	
02 Gross national savings % GDP	70	20.7		8.06 Soundnes	ss of banks	107	4.1	
03 Inflation annual % change	45	0.4	\-	8.07 Regulation	n of securities exchanges	108	3.6	
04 Government debt % GDP	85	58.5	<b>→</b>		its index 0-10 (best)	23	8	
05 Country credit rating 0-100 (best)	97	29.8	_					
00 Country credit rating 0-100 (best)	37	25.0		9th pillar:	: Technological readiness	102	3.2	
4th pillar: Health and primary education	75	5.7		0.01 Availahilit	y of latest technologies	126	3.5	
		0.0						
01 Malaria incidence cases/100,000 pop.	1	0.0	_		I technology absorption	128	3.4	
02 Business impact of malaria	n/a	5.7	$\overline{}$	9.03 FDI and te	echnology transfer	130	3.1	
03 Tuberculosis incidence cases/100,000 pop.	102	144.0	<b>\</b>	9.04 Internet us	sers % pop.	97	34.5	
04 Business impact of tuberculosis	84	5.1	_	9.05 Fixed-broa	adband Internet subscriptions /100 pop.	91	4.1	
05 HIV prevalence % adult pop.	1				andwidth kb/s/user	65	65.4	
06 Business impact of HIV/AIDS	63	5.4	$\overline{}$	9.07 IVIODIIE-DI	oadband subscriptions /100 pop.	91	46.1	
07 Infant mortality deaths/1,000 live births	89	19.0		€ 10th nilla	r: Market size	117	2.8	
08 Life expectancy years	96	70.7						
09 Quality of primary education	98	3.3	_	10.01 Domestic	c market size index	118	2.6	
10 Primary education enrollment rate net %	37		_/	10.02 Foreign i	market size index	117	3.5	
				10.03 GDP (PF	PP) PPP \$ billions	121	21.5	
₹ 5th pillar: Higher education and training	89	4.0	_	10.04 Exports	•	64	36.7	
, ,	71	00.1		10.04 Exports	76 GDI	0-7	00.7	
01 Secondary education enrollment rate gross %	71	92.1		್ಯಾ 11th pilla	r: Business sophistication	127	3.3	
02 Tertiary education enrollment rate gross %	63		<b>√</b>	-	·			
03 Quality of the education system	104	3.1	_	11.01 Local sup		104	4.1	
04 Quality of math and science education	109	3.1	_	11.02 Local sup	pplier quality	98	3.9	
D5 Quality of management schools	134		_	11.03 State of	cluster development	131	2.8	
6 Internet access in schools	104		_	11.04 Nature o	f competitive advantage	112	2.7	
				11.05 Value ch		130	2.7	
7 Local availability of specialized training services	115							
08 Extent of staff training	127	3.2	$\overline{}$		of international distribution	131	2.7	
				11.07 Production	on process sophistication	119	3.0	
				11.08 Extent of	f marketing	117	3.8	
					ess to delegate authority	124	3.5	
							5.0	
				🔆 12th pilla	r: Innovation	126	2.7	
				12.01 Canacity	for innovation	122	3.4	
					of scientific research institutions		2.9	
						116		
					y spending on R&D	134	2.4	
				12.04 Universit	ty-industry collaboration in R&D	132	2.5	
				12.05 Gov't pro	ocurement of advanced technology products	103	2.9	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

103

112

2.9

## Lao PDR



The Global Competitiveness Index 2017-2018 edition



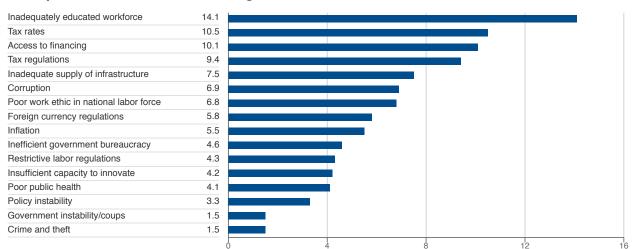
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20		
Population millions 7.2		GDP per capita US\$	1,925.2	
GDP US\$ billions	13.8	GDP (PPP) % world GDP	0.03	

#### **Performance overview**

ndex Component	Rank/137	Score (1-7) Tr	rend	Distance from best	Edition	2013-14	2014-15	2015-16	2016-17	2017-18		
Global Competitiveness Index	98	3.9 -			Rank	81 / 148	93 / 144	83 / 140	93 / 138	98 / 137		
Subindex A: Basic requirements	105	4.1 ~	~		Score	4.1	3.9	4.0	3.9	3.9		
☆ 1st pillar: Institutions	62	4.0 -						_				
	102	3.3					1st pil Institut					
	114	3.8	~			12th pillar: Innovation	7		pillar: astructure			
3 4th pillar: Health and primary education	103	5.2	_			440	1					
Subindex B: Efficiency enhancers	97	3.7 -				11th pillar: Business sophistication		3rd pillar: Macroeconomic environment				
⇒ 5th pillar: Higher education and training	105	3.5 -					Alb ciller					
	76	4.3 -	_			10th pillar: Market size		4th pillar: Health and primary education				
7th pillar: Labor market efficiency	36	4.6										
8th pillar: Financial market development	75	3.9				9th pillar: Technological readiness			5th pillar: Higher education and training			
9th pillar: Technological readiness	110	3.0	_					6th p	· ·			
10th pillar: Market size	101	3.1 -				8th pillar: Financial market development 7th pillar:			ls market ency			
Subindex C: Innovation and sophistication factors	85	3.5 -	_				Labor m efficie	arket				
ூ 11th pillar: Business sophistication	89	3.7	_			■ Loo D		at Asia and D	logific			
★ 12th pillar: Innovation	81	3.2			■ Lao PDR ■ East Asia and Pacific							

### Most problematic factors for doing business





# Lao PDR

ndex	Component	Rank/13	7 Value	e Trend	Inde	x Component	Rank/137	Value	Э.
	1st pillar: Institutions	62	4.0	_	\$	6th pillar: Goods market efficiency	76	4.3	-
1.01	Property rights	95	3.9	$\overline{}$	6.0	1 Intensity of local competition	129	4.2	-
	Intellectual property protection	85	3.8	~	6.02	Extent of market dominance	42	4.1	_
	Diversion of public funds	47	4.1			Effectiveness of anti-monopoly policy	61	3.8	-
	Public trust in politicians	37	3.9			4 Effect of taxation on incentives to invest	57	3.8	_
	Irregular payments and bribes	62	4.1	_		5 Total tax rate % profits	27	26.2	_
	Judicial independence	69	3.8			No. of procedures to start a business	92	8	
	·			_		•			-
	Favoritism in decisions of government officials	39	3.7			7 Time to start a business days	133	67.0	
	Efficiency of government spending	30	4.1	$\overline{}$		Agricultural policy costs	43	4.1	
1.09	Burden of government regulation	34	3.9		6.09	Prevalence of non-tariff barriers	77	4.3	
.10	Efficiency of legal framework in settling disputes	46	4.1	_	6.10	Trade tariffs % duty	83	6.6	
.11	Efficiency of legal framework in challenging regulations	59	3.4	_	6.1	Prevalence of foreign ownership	91	4.3	_
	Transparency of government policymaking	88	3.8	_		2 Business impact of rules on FDI	116	3.8	
	Business costs of terrorism	82	4.9	_		Burden of customs procedures	90	3.8	
	Business costs of crime and violence	59	4.8			4 Imports % GDP	73	42.2	
	Organized crime	65	5.0			5 Degree of customer orientation	80	4.5	
.16	Reliability of police services	78	4.3		6.16	Buyer sophistication	44	3.8	
.17	Ethical behavior of firms	55	4.0		50		00	4.0	
.18	Strength of auditing and reporting standards	112	3.8	$\sim$	E.	7th pillar: Labor market efficiency	36	4.6	
	Efficacy of corporate boards	93		~	7.0	1 Cooperation in labor-employer relations	51	4.5	
	Protection of minority shareholders' interests	87	3.8	_	7.02	2 Flexibility of wage determination	61	5.0	
	•					Hiring and firing practices	56	3.9	
.21	Strength of investor protection 0-10 (best)	127	3.5				127	34.2	
<u></u>	2nd pillar: Infrastructure	102	3.3			4 Redundancy costs weeks of salary			
	•					5 Effect of taxation on incentives to work	29	4.5	
.01	Quality of overall infrastructure	83	3.8	_	7.06	Pay and productivity	45	4.4	
.02	Quality of roads	94	3.3	_	7.0	Reliance on professional management	82	4.0	
00	Quality of railroad infrastructure	n/o	not		7.08	Country capacity to retain talent	42	3.9	
.03	Quality of railroad infrastructure	n/a	assessed			Country capacity to attract talent	56	3.5	
.04	Quality of port infrastructure	127	2.3	$\sim$		Female participation in the labor force ratio to men	4	1.02	
	Quality of air transport infrastructure	101	3.8	_	7.10	remaie participation in the labor force ratio to men	4	1.02	
	Available airline seat kilometers millions/week	114	34.9	_		8th pillar: Financial market development	75	3.9	
		75							
	Quality of electricity supply		4.8	$\overline{}$		1 Availability of financial services	67	4.2	
	Mobile-cellular telephone subscriptions /100 pop.	132	55.4		8.02	2 Affordability of financial services	47	4.1	
.09	Fixed-telephone lines /100 pop.	61	17.7		8.03	Financing through local equity market	80	3.3	
2	0 d - 111 - 14	114	2.0	~	8.0	4 Ease of access to loans	76	3.8	
	3rd pillar: Macroeconomic environment	114	3.8		8.05	Venture capital availability	51	3.2	
.01	Government budget balance % GDP	111	-5.9	~		Soundness of banks	87	4.4	
.02	Gross national savings % GDP	91	16.7	^		Regulation of securities exchanges	99	3.8	
0.3	Inflation annual % change	1	2.0	~~					
	Government debt % GDP	99		_	8.08	3 Legal rights index 0-10 (best)	50	6	
	Country credit rating 0-100 (best)	118	23.7		388	9th pillar: Technological readiness	110	3.0	
.05	Country credit rating 0-100 (best)	110	23.1						
Ĉ	4th pillar: Health and primary education	103	5.2			1 Availability of latest technologies	113	3.9	
	, ,			_	9.02	2 Firm-level technology absorption	102	4.1	
	Malaria incidence cases/100,000 pop.	49	1,250.9	/_	9.03	FDI and technology transfer	88	4.1	
02	Business impact of malaria	44	3.7		9.04	4 Internet users % pop.	117	21.9	
.03	Tuberculosis incidence cases/100,000 pop.	111	182.0	_		5 Fixed-broadband Internet subscriptions /100 pop.	115	0.3	
.04	Business impact of tuberculosis	124	3.8	_					
	HIV prevalence % adult pop.	63	0.3			Internet bandwidth kb/s/user	100	17.5	
		119	3.7		9.0	7 Mobile-broadband subscriptions /100 pop.	100	34.7	
	Business impact of HIV/AIDS				A 7	10th pillar: Market size	101	3.1	
	Infant mortality deaths/1,000 live births	123			.73	Totti piliai. Market Size		0.1	
.08	Life expectancy years	107	66.5	~	10.0	1 Domestic market size index	101	2.8	
.09	Quality of primary education	88	3.5	$\sim$	10.0	2 Foreign market size index	105	3.7	
.10	Primary education enrollment rate net %	93	92.7	~	10.0	03 GDP (PPP) PPP \$ billions	99	40.9	
_	•					04 Exports % GDP	82	30.4	
7	5th pillar: Higher education and training	105	3.5		10.0	54 Exporto 76 del	OL.	00.1	
01	Secondary education enrollment rate gross %	107	61.7	_	مرج المحرج	11th pillar: Business sophistication	89	3.7	
	Tertiary education enrollment rate gross %	102	16.9			1 Local supplier quantity	117	3.8	
	Quality of the education system	53	4.0	=		22 Local supplier quality	113	3.7	
	Quality of math and science education	88	3.7	~		3 State of cluster development	53	3.9	
05	Quality of management schools	80	4.0	_	11.0	Nature of competitive advantage	98	3.1	
06	Internet access in schools	96	3.6	$\sim$	11.0	5 Value chain breadth	97	3.5	
07	Local availability of specialized training services	95	4.0			06 Control of international distribution	72	3.6	
	Extent of staff training	74	3.8	~		77 Production process sophistication	97	3.4	
		, ,	0.0			·			
						08 Extent of marketing	91	4.2	
					11.0	9 Willingness to delegate authority	64	4.4	
					- 145	12th pillar: Innovation	81	3.2	
						·			
						1 Capacity for innovation	75	4.0	
					12.0	2 Quality of scientific research institutions	89	3.5	
					12.0	O3 Company spending on R&D	48	3.6	
						04 University-industry collaboration in R&D	55	3.6	
						6. Coult procurement of advanced technology products	59	3.4	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

58

117

3.4

## Latvia



The Global Competitiveness Index 2017-2018 edition

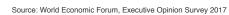


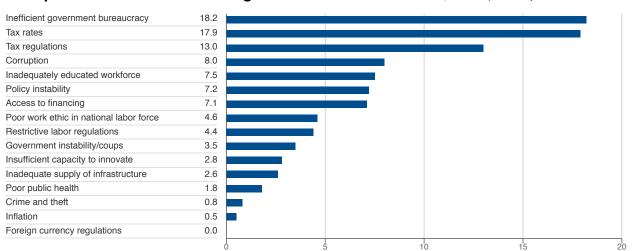
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201			
Population millions		GDP per capita ∪S\$	14,060.4		
GDP US\$ billions	27.7	GDP (PPP) % world GDP	0.04		

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18			
Global Competitiveness Index	54	4.4	_		Rank	<b>55</b> / 144	<b>52</b> / 148	<b>42</b> / 144	44 / 140	49 / 138	54 / 137			
Subindex A: Basic requirements	43	5.0			Score	4.3	4.4	4.5	4.5	4.4	4.4			
☆ 1st pillar: Institutions	82	3.8	_											
<b>1</b> 2nd pillar: Infrastructure	55	4.4	~					1st pillar: Institutions						
	23	5.8	~			12th p Innov		7	2nd pillar: Infrastructure					
3 4th pillar: Health and primary education	45	6.1	_											
Subindex B: Efficiency enhancers	49	4.4	~			Business	11th pillar: Business sophistication			3rd pillar: Macroeconomic environment				
⇒ 5th pillar: Higher education and training	42	5.0				10th pillar: Market size			4th pillar: Health and primar education					
	59	4.4	_											
🍂 7th pillar: Labor market efficiency	43	4.5	_			\								
8th pillar: Financial market development	64	4.1	~			9th pillar: Technological readiness			( / / ।	5th pillar: Higher education and training				
% 9th pillar: Technological readiness	37	5.3	_				th pillar:		6th pillar					
10th pillar: Market size	92	3.2	_			Financia		7th pillar:	Goods m	arket				
Subindex C: Innovation and sophistication factors	68	3.6	_			Labor market efficiency								
A 11th pillar: Business sophistication	62	4.1	_			<b>=</b> 1.	utuia 🔲 🗆	aa aad	Namba Amaa	wi.a.a.				
★ 12th pillar: Innovation	83	3.2	_			Latvia Europe and North America			rica					

### Most problematic factors for doing business





# Latvia

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Trend
â 1st pillar: Institutions	82	3.8	_		6th pillar: Goods market efficiency	59	4.4	
1.01 Property rights	87	4.0	$\overline{}$	6.0	Intensity of local competition	28	5.5	~
1.02 Intellectual property protection	68	4.1	_	6.02	Extent of market dominance	79	3.6	
1.03 Diversion of public funds	88	3.2		6.03	Effectiveness of anti-monopoly policy	78	3.6	$\overline{}$
1.04 Public trust in politicians	98	2.3	$\overline{}$	6.04	Effect of taxation on incentives to invest	118	2.9	
1.05 Irregular payments and bribes	54	4.3	$\overline{}$	6.05	5 Total tax rate % profits	65	35.9	<b>\</b>
1.06 Judicial independence	83	3.6	_	6.06	No. of procedures to start a business	18	4	
1.07 Favoritism in decisions of government officials	103	2.5		6.07	7 Time to start a business days	25	5.5	$\sim$
1.08 Efficiency of government spending	119	2.3	$\overline{}$	6.08	Agricultural policy costs	99	3.4	
1.09 Burden of government regulation	107	2.9		6.09	Prevalence of non-tariff barriers	22	5.0	_
1.10 Efficiency of legal framework in settling disputes	120	2.7	_	6.10	Trade tariffs % duty	6	1.1	_
1.11 Efficiency of legal framework in challenging regulations	123	2.5	$\overline{}$	6.1	Prevalence of foreign ownership	42	5.0	
1.12 Transparency of government policymaking	103	3.6			Business impact of rules on FDI	53	4.9	_
1.13 Business costs of terrorism	13	6.1	~~		Burden of customs procedures	60	4.3	_
1.14 Business costs of crime and violence	32	5.2	~		1 Imports % GDP	32	60.9	^
1.15 Organized crime	33	5.5			Degree of customer orientation	57	4.8	
1.16 Reliability of police services	79		$\sim$		Buyer sophistication	109	2.8	_
1.17 Ethical behavior of firms	73	3.7						
1.18 Strength of auditing and reporting standards	88		$\overline{}$	Æ?	7th pillar: Labor market efficiency	43	4.5	
1.19 Efficacy of corporate boards	59	4.9	_	7.0	Cooperation in labor-employer relations	47	4.6	
1.20 Protection of minority shareholders' interests	128	3.1	_	7.02	2 Flexibility of wage determination	4	6.1	
1.21 Strength of investor protection 0-10 (best)	41		$\overline{}$		B Hiring and firing practices	91	3.5	_
1.21 Offerigiti of investor protection 0-10 (best)	41	0.3			Redundancy costs weeks of salary	49	13.0	
♣♣ 2nd pillar: Infrastructure	55	4.4	~		5 Effect of taxation on incentives to work	117	3.1	_
2.01 Quality of overall infrastructure	59	4.3	$\overline{}$		Pay and productivity	49	4.3	
2.02 Quality of roads	107	3.0			Reliance on professional management	74	4.1	
2.03 Quality of railroad infrastructure	29	4.2			3 Country capacity to retain talent	118	2.5	
2.04 Quality of port infrastructure	29	5.1			Country capacity to retain talent	122	2.3	
2.05 Quality of air transport infrastructure	37		_		Female participation in the labor force ratio to men	22	0.92	
2.06 Available airline seat kilometers millions/week	89	85.8		7.10	Permate participation in the labor force ratio to men	22	0.92	
			~		8th pillar: Financial market development	64	4.1	~
2.07 Quality of electricity supply	55	5.2			Availability of financial services	70	4.2	
2.08 Mobile-cellular telephone subscriptions /100 pop.	40	131.2			2 Affordability of financial services	64	3.9	
2.09 Fixed-telephone lines /100 pop.	58	18.2	~		Financing through local equity market	87	3.2	
	23	5.8	~		Ease of access to loans	93	3.5	
3.01 Government budget balance % GDP	25	-0.4	~		5 Venture capital availability	101	2.5	=
	65	21.3	_		Soundness of banks	73	4.7	
3.02 Gross national savings % GDP 3.03 Inflation annual % change			$\widetilde{}$					
	56	0.1			7 Regulation of securities exchanges	96	3.8	$\overline{}$
3.04 Government debt % GDP	35	34.3	<b>~</b>	8.08	3 Legal rights index 0-10 (best)	13	9	
3.05 Country credit rating 0-100 (best)	38	68.0		o\${\$0	9th pillar: Technological readiness	37	5.3	_
3 4th pillar: Health and primary education	45	6.1		9.0	Availability of latest technologies	41	5.3	_
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02	Firm-level technology absorption	67	4.4	$\overline{}$
4.02 Business impact of malaria	n/a	6.8		9.03	FDI and technology transfer	80	4.2	
4.03 Tuberculosis incidence cases/100,000 pop.	64	41.0	~	9.04	1 Internet users % pop.	29	79.9	
4.04 Business impact of tuberculosis	41	6.2		9.05	Fixed-broadband Internet subscriptions /100 pop.	34	25.6	
4.05 HIV prevalence % adult pop.	97	0.7			Internet bandwidth kb/s/user	12	246.7	$\Lambda$
4.06 Business impact of HIV/AIDS	35				7 Mobile-broadband subscriptions /100 pop.	44	77.0	
4.07 Infant mortality deaths/1,000 live births	46		~					
4.08 Life expectancy years	81	74.1		£73	10th pillar: Market size	92	3.2	_
4.09 Quality of primary education	40	4.6	~	10.0	1 Domestic market size index	94	2.9	_
4.10 Primary education enrollment rate net %	64	96.1		10.0	2 Foreign market size index	81	4.2	
			_	10.0	03 GDP (PPP) PPP \$ billions	95	50.6	_
⇒ 5th pillar: Higher education and training	42	5.0		10.0	04 Exports % GDP	24	60.5	^
5.01 Secondary education enrollment rate gross %	12	119.5		٩	440 - 20 - B - 2 12 - 0 - 0	00		
5.02 Tertiary education enrollment rate gross %	35	67.0	~		11th pillar: Business sophistication	62	4.1	
5.03 Quality of the education system	68	3.7	_	11.0	1 Local supplier quantity	90	4.2	
5.04 Quality of math and science education	65	4.2	$\overline{}$	11.0	2 Local supplier quality	36	4.9	
5.05 Quality of management schools	51	4.4		11.0	3 State of cluster development	98	3.4	_
5.06 Internet access in schools	30	5.2	$\sim$	11.0	Nature of competitive advantage	71	3.4	_
5.07 Local availability of specialized training services	64	4.4		11.0	5 Value chain breadth	73	3.8	_
5.08 Extent of staff training	60	4.1		11.0	06 Control of international distribution	50	3.9	_
	00	7.1	_		7 Production process sophistication	54	4.1	_
					08 Extent of marketing	64	4.5	_
					9 Willingness to delegate authority	65	4.4	
						83	3.2	
					12th pillar: Innovation	83 57		
					11 Capacity for innovation		4.2	
					22 Quality of scientific research institutions	51	4.2	
					33 Company spending on R&D	73	3.2	_
					04 University-industry collaboration in R&D	100	3.1	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

119

109

2.7

## Lebanon



The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20		
Population millions 4		GDP per capita US\$	11,308.9	
GDP US\$ billions	52.0	GDP (PPP) % world GDP	0.07	

#### Performance overview

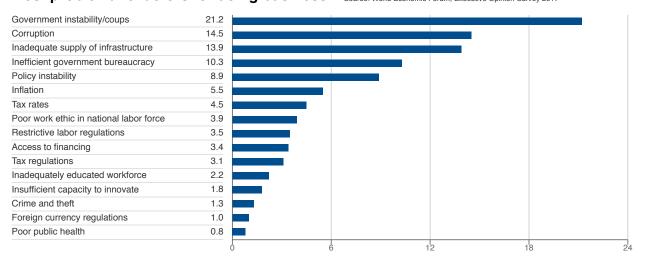
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	105	3.8			Rank	91 / 144	103 / 148	113 / 144	101 / 140	101 / 138	105 / 137
Subindex A: Basic requirements	119	3.5	~		Score	3.9	3.8	3.7	3.8	3.8	3.8
🖮 1st pillar: Institutions	124	3.2	~								
<b>1</b> 2nd pillar: Infrastructure	113	2.8	~					1st pillar: Institutions			
	133	2.5					th pillar: lovation	7	2nd pi Infras	illar: tructure	
4th pillar: Health and primary education	72	5.8	_			440	$\wedge$		$\nearrow$	0.4.30	
Subindex B: Efficiency enhancers	76	4.1	_			11th pillar: Business sophistication				3rd pillar: Macroecono environment	
⇒ 5th pillar: Higher education and training	74	4.3	~~							\	
	61	4.4				10th pillar: Market size	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			4th pillar Health an education	nd primary
7th pillar: Labor market efficiency	109	3.7	_								
8th pillar: Financial market development	76	3.9	_			9th pillar: Technological readiness				5th pillar: Higher educa and training	ition
% 9th pillar: Technological readiness	64	4.4					8th pillar:		6th pilla		
$\stackrel{\kappa_{\mathcal{I}}}{\downarrow}$ 10th pillar: Market size	75	3.6					cial market evelopment	7th pillar:	Goods efficien	market	
Subindex C: Innovation and sophistication factors	52	3.8						Labor marke efficiency	et		
ℳ 11th pillar: Business sophistication	52	4.2	_			<b>.</b> .	honon =	Middle Eas	ot and Newth	Africa	
※ 12th pillar: Innovation	58	3.4	_			L6	ebanon	iviidale Eas	si and North	I AIIICA	

Lebanon (105th) slips four places in this year's ranking. The country's performance is relatively stable, with the country punching above its weight in terms of business sophistication, technological readiness and innovation, but still burdened by a poor macroeconomic environment, inefficient institutions and labour market. The situation in neighbouring Syria and the large influx of refugees has further drained economic

resources and put the national health and education system under pressure, with an increase in number of transmittable diseases. ICT use improved thanks for increased international internet bandwidth and mobile broadband subscriptions. Deflation eased contributing to improve the country's macroeconomic context.

#### Most problematic factors for doing business





# Lebanon

Index Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	Tren
🗎 1st pillar: Institutions	124	3.2	~	6th pillar: Goods market efficiency	61	4.4	_
1.01 Property rights	77	4.2	~	6.01 Intensity of local competition	17	5.7	_
1.02 Intellectual property protection	120	3.2		6.02 Extent of market dominance	63	3.8	_
1.03 Diversion of public funds	98	2.9	~	6.03 Effectiveness of anti-monopoly policy	120	3.0	_
1.04 Public trust in politicians	128	1.7	~	6.04 Effect of taxation on incentives to invest	51	3.9	
1.05 Irregular payments and bribes	121	2.8	~	6.05 Total tax rate % profits	38	30.3	
1.06 Judicial independence	105	3.1		6.06 No. of procedures to start a business	92	8	
1.07 Favoritism in decisions of government officials	126	2.0	~	6.07 Time to start a business days	86	15.0	
1.08 Efficiency of government spending	130	1.8		6.08 Agricultural policy costs	129	2.9	=
1.09 Burden of government regulation	109	2.9	$\overline{}$	6.09 Prevalence of non-tariff barriers	96	4.1	
	105	3.0		6.10 Trade tariffs % duty	70	4.1	=
1.10 Efficiency of legal framework in settling disputes			~				`
1.11 Efficiency of legal framework in challenging regulations	120	2.5		6.11 Prevalence of foreign ownership	114	3.8	
1.12 Transparency of government policymaking	124	3.1	$\sim$	6.12 Business impact of rules on FDI	88	4.3	$\sim$
1.13 Business costs of terrorism	131	3.1	$\sim$	6.13 Burden of customs procedures	119	3.2	$\sim$
1.14 Business costs of crime and violence	109	3.7	~	6.14 Imports % GDP	27	63.6	_
1.15 Organized crime	109	4.0	_	6.15 Degree of customer orientation	54	4.9	$\sim$
1.16 Reliability of police services	109	3.5	$\sim$	6.16 Buyer sophistication	48	3.7	$\sim$
1.17 Ethical behavior of firms	104	3.4	~	7th pillar: Labor market efficiency	109	3.7	
1.18 Strength of auditing and reporting standards	79	4.4	$\overline{}$				
1.19 Efficacy of corporate boards	111	4.3	_	7.01 Cooperation in labor-employer relations	83	4.2	_
1.20 Protection of minority shareholders' interests	97	3.7	~	7.02 Flexibility of wage determination	65	5.0	_
1.21 Strength of investor protection 0-10 (best)	117	4.0	$\overline{}$	7.03 Hiring and firing practices	50	4.0	~
				7.04 Redundancy costs weeks of salary	63	15.1	_
2nd pillar: Infrastructure	113	2.8		7.05 Effect of taxation on incentives to work	44	4.3	_
2.01 Quality of overall infrastructure	130	2.3		7.06 Pay and productivity	59	4.1	_
2.02 Quality of roads	121	2.7	_	7.07 Reliance on professional management	96	3.8	<b>\</b>
O - I'll - of I'll - o - I - o - o - o - o - o - o - o - o	. , ,	not		7.08 Country capacity to retain talent	105	2.9	_
2.03 Quality of railroad infrastructure	n/a a	ssessed		7.09 Country capacity to attract talent	105	2.6	_
2.04 Quality of port infrastructure	91	3.5	$\overline{}$	7.10 Female participation in the labor force ratio to men	129	0.35	_
2.05 Quality of air transport infrastructure	100	3.8	_	7.10 Tollialo participation in the labor lorde ratio to mon	120	0.00	
2.06 Available airline seat kilometers millions/week	71	187.5	_	8th pillar: Financial market development	76	3.9	_
2.07 Quality of electricity supply	134	1.7		8.01 Availability of financial services	48	4.5	
2.08 Mobile-cellular telephone subscriptions /100 pop.	104	96.4	~~	8.02 Affordability of financial services	71	3.8	_
2.09 Fixed-telephone lines /100 pop.	47	21.0	-	8.03 Financing through local equity market	100	3.0	
2.09 Tixed telepriorie lines 7100 pop.		21.0			36	4.4	$\sim$
	133	2.5	$\overline{}$	8.04 Ease of access to loans	32		
3.01 Government budget balance % GDP	123	-8.1	~	8.05 Venture capital availability		3.5	
3.02 Gross national savings % GDP	129	6.3	<u></u>	8.06 Soundness of banks	45	5.4	
3.03 Inflation annual % change	84	-0.8	~	8.07 Regulation of securities exchanges	66	4.4	$\stackrel{\sim}{}$
3.04 Government debt % GDP	136	143.4	~	8.08 Legal rights index 0-10 (best)	107	2	
3.05 Country credit rating 0-100 (best)	99	29.4		♦ 9th pillar: Technological readiness	64	4.4	_
3.03 Oddritty Great rating 0-100 (best)	33	25.4			108	4.1	_
3 4th pillar: Health and primary education	72	5.8		9.01 Availability of latest technologies			
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	86	4.3	$\overline{}$
4.02 Business impact of malaria	n/a	5.6		9.03 FDI and technology transfer	122	3.4	~
4.03 Tuberculosis incidence cases/100,000 pop.	37	13.0	~	9.04 Internet users % pop.	41	76.1	
	65		$\overline{}$	9.05 Fixed-broadband Internet subscriptions /100 pop.	35	25.6	
4.04 Business impact of tuberculosis 4.05 HIV prevalence % adult pop.	1	5.5	•	9.06 Internet bandwidth kb/s/user	70	55.1	_^
		<0.1	_	9.07 Mobile-broadband subscriptions /100 pop.	57	67.2	/
4.06 Business impact of HIV/AIDS	60	5.5	,	10th pillar: Market size	75	3.6	_
4.07 Infant mortality deaths/1,000 live births	48	7.1	$\succeq$				
4.08 Life expectancy years	32	79.6		10.01 Domestic market size index	76	3.4	_
4.09 Quality of primary education	15	5.4	_	10.02 Foreign market size index	78	4.3	$\sim$
4.10 Primary education enrollment rate net %	123	81.8		10.03 GDP (PPP) PPP \$ billions	80	85.2	/
⇒ 5th pillar: Higher education and training	74	4.3	~~	10.04 Exports % GDP	60	38.4	$\overline{}$
			_	Add willow Designation	F0	4.0	
5.01 Secondary education enrollment rate gross %	108	61.2	~	A 11th pillar: Business sophistication	52	4.2	
5.02 Tertiary education enrollment rate gross %	74	38.5	~	11.01 Local supplier quantity	27	4.9	_
5.03 Quality of the education system	18	5.0	$\sim$	11.02 Local supplier quality	62	4.4	~
5.04 Quality of math and science education	4	5.8	$\sim$	11.03 State of cluster development	61	3.8	_
5.05 Quality of management schools	9	5.7	~	11.04 Nature of competitive advantage	42	4.1	_
5.06 Internet access in schools	78	4.0		11.05 Value chain breadth	43	4.2	~
5.07 Local availability of specialized training services	41	4.8	~	11.06 Control of international distribution	42	4.1	_
5.08 Extent of staff training	73	3.8		11.07 Production process sophistication	55	4.0	
·	-			11.08 Extent of marketing	31	4.9	~
				11.09 Willingness to delegate authority	99	3.9	
				11.00 Triming 1000 to delegate authority	99	0.9	
				* 12th pillar: Innovation	58	3.4	_
				12.01 Capacity for innovation	41	4.5	
				12.02 Quality of scientific research institutions	81	3.6	
				12.03 Company spending on R&D	75	3.2	
				12.04 University-industry collaboration in R&D	48	3.6	
				12.04 Onliversity-industry collaboration in H&D	11/	3.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

114

15

2.8

## Lesotho

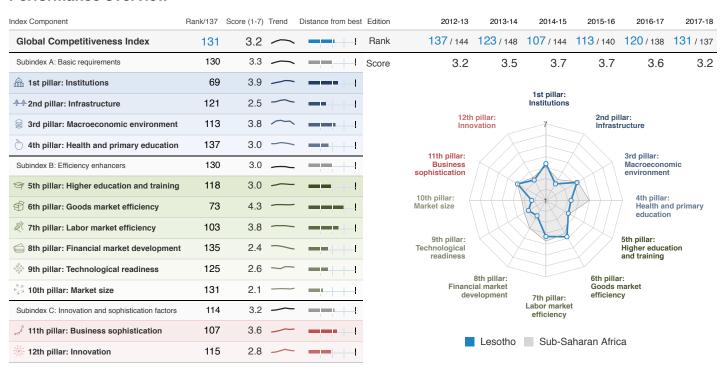
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The Global Competitiveness Index 2017-2018 edition



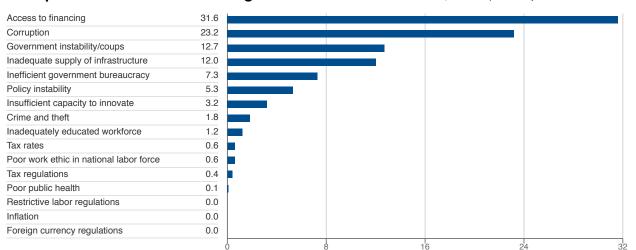
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2017				
Population millions	1.9	GDP per capita US\$	1,170.2			
GDP US\$ billions	2.3	GDP (PPP) % world GDP	0.01			

#### Performance overview



#### Most problematic factors for doing business

Source: World Economic Forum, Executive Opinion Survey 2017



## Lesotho

Index Component	Rank/137	7 Value	e Trend	Index Component	Rank/137	Value	Tren
â 1st pillar: Institutions	69	3.9	~		73	4.3	_
1.01 Property rights	111	3.7	^	6.01 Intensity of local competition	31	5.5	~~
1.02 Intellectual property protection	102	3.5	_	6.02 Extent of market dominance	72	3.6	
1.03 Diversion of public funds	72	3.5	_	6.03 Effectiveness of anti-monopoly policy	67	3.7	$\sim$
1.04 Public trust in politicians	58	3.2		6.04 Effect of taxation on incentives to invest	100	3.2	
1.05 Irregular payments and bribes	127	2.5	$\sim$	6.05 Total tax rate % profits	5	13.6	$\overline{}$
1.06 Judicial independence	74	3.8	_	6.06 No. of procedures to start a business	71	7	
1.07 Favoritism in decisions of government officials	61	3.2		6.07 Time to start a business days	118	29.0	\ <u></u>
1.08 Efficiency of government spending	21	4.4		6.08 Agricultural policy costs	52	4.0	
1.09 Burden of government regulation	47	3.7	~	6.09 Prevalence of non-tariff barriers	133	3.3	~
1.10 Efficiency of legal framework in settling disputes	71	3.5		6.10 Trade tariffs % duty	87	6.7	_
1.11 Efficiency of legal framework in challenging regulations	64	3.4		6.11 Prevalence of foreign ownership	118	3.6	$\sim$
1.12 Transparency of government policymaking	112	3.4	_	6.12 Business impact of rules on FDI	127	3.4	~
1.13 Business costs of terrorism	1	6.8		6.13 Burden of customs procedures	121	3.1	~
1.14 Business costs of crime and violence	2	6.4		6.14 Imports % GDP	9	91.9	~
1.15 Organized crime	14	6.0		6.15 Degree of customer orientation	133	3.4	~
1.16 Reliability of police services	35			6.16 Buyer sophistication	17	4.5	
1.17 Ethical behavior of firms	101	3.4		6.10 Bayer sopriistication	.,,	7.5	
	119	3.4		7th pillar: Labor market efficiency	103	3.8	
1.18 Strength of auditing and reporting standards	134			7.01 Cooperation in labor-employer relations	129	3.5	_
1.19 Efficacy of corporate boards		3.4		7.02 Flexibility of wage determination	130	3.5	
1.20 Protection of minority shareholders' interests	126		~~	7.03 Hiring and firing practices	92	3.5	_
1.21 Strength of investor protection 0-10 (best)	91	5.0		7.03 Redundancy costs weeks of salary	62	15.0	_
<b>↑</b> 2nd pillar: Infrastructure	121	2.5	~	7.04 Redundancy costs weeks of salary  7.05 Effect of taxation on incentives to work	97	3.5	_
•			_				
2.01 Quality of overall infrastructure	120 125	2.7	$\sim$	7.06 Pay and productivity	115 125	3.3	_
2.02 Quality of roads	125			7.07 Reliance on professional management			
2.03 Quality of railroad infrastructure	n/a	not assessed		7.08 Country capacity to retain talent	76	3.3	
2.04 Quality of port infrastructure	112	3.0		7.09 Country capacity to attract talent	85	3.1	
2.05 Quality of air transport infrastructure	137	1.1	_	7.10 Female participation in the labor force ratio to men	70	0.81	
2.06 Available airline seat kilometers millions/week	136	0.3	_	8th pillar: Financial market development	135	2.4	
	117	2.9					
2.07 Quality of electricity supply				8.01 Availability of financial services	137	1.9	
2.08 Mobile-cellular telephone subscriptions /100 pop.	91	106.6		8.02 Affordability of financial services	137	2.0	
2.09 Fixed-telephone lines /100 pop.	111	1.9	~	8.03 Financing through local equity market	126	2.5	
	113	3.8	~	8.04 Ease of access to loans	137	1.5	
3.01 Government budget balance % GDP	120	-7.7	~	8.05 Venture capital availability	137	1.6	
3.02 Gross national savings % GDP	81		$\sim$	8.06 Soundness of banks	137	2.0	
· · · · · · · · · · · · · · · · · · ·	111	7.0		8.07 Regulation of securities exchanges	128	3.2	_
3.03 Inflation annual % change				8.08 Legal rights index 0-10 (best)	70	5	
3.04 Government debt % GDP	67	47.8		9th pillar: Technological readiness	125	2.6	
3.05 Country credit rating 0-100 (best)	88	35.1					
3 4th pillar: Health and primary education	137	3.0	$\overline{}$	9.01 Availability of latest technologies	134	3.0	
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	133	3.2	
	n/a	6.8		9.03 FDI and technology transfer	132	2.9	
4.02 Business impact of malaria			^	9.04 Internet users % pop.	104	27.4	_
4.03 Tuberculosis incidence cases/100,000 pop.	137	788.0		9.05 Fixed-broadband Internet subscriptions /100 pop.	127	0.1	_
4.04 Business impact of tuberculosis	137	1.8		9.06 Internet bandwidth kb/s/user	122	4.5	$\sim$
4.05 HIV prevalence % adult pop.	136	25.0		9.07 Mobile-broadband subscriptions /100 pop.	99	36.9	
4.06 Business impact of HIV/AIDS	136	1.7		10th pillar: Market size	131	2.1	
4.07 Infant mortality deaths/1,000 live births	133	69.2	_				
4.08 Life expectancy years	137	50.0		10.01 Domestic market size index	132	1.8	
4.09 Quality of primary education	122	2.8		10.02 Foreign market size index	130	2.9	
4.10 Primary education enrollment rate net %	124	80.2	~	10.03 GDP (PPP) PPP \$ billions	133	7.0	_
⇒ 5th pillar: Higher education and training	118	3.0		10.04 Exports % GDP	49	41.7	^
, ,				å 44th million Business as 11 th the	107	2.6	
5.01 Secondary education enrollment rate gross %	114	53.8		್ಯಾನಿ 11th pillar: Business sophistication	107	3.6	
5.02 Tertiary education enrollment rate gross %	117	9.8		11.01 Local supplier quantity	26	4.9	_
5.03 Quality of the education system	70	3.6		11.02 Local supplier quality	60	4.4	_
5.04 Quality of math and science education	137	2.3		11.03 State of cluster development	87	3.5	
5.05 Quality of management schools	30	5.0		11.04 Nature of competitive advantage	76	3.3	_
5.06 Internet access in schools	110		_	11.05 Value chain breadth	116	3.2	_
5.07 Local availability of specialized training services	114	3.7		11.06 Control of international distribution	103	3.2	_
5.08 Extent of staff training	122	3.3	$\overline{}$	11.07 Production process sophistication	108	3.2	
-				11.08 Extent of marketing	136	3.1	_
				11.09 Willingness to delegate authority	131	3.3	
				W.			
				12th pillar: Innovation	115	2.8	_
				12.01 Capacity for innovation	130	3.2	_
				12.02 Quality of scientific research institutions	108	3.1	~
				12.03 Company spending on R&D	101	2.9	^
				12.04 University-industry collaboration in R&D	98		_
				12.05 Gov't procurement of advanced technology products	77	3.2	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

77

129

3.2

## Liberia



The Global Competitiveness Index 2017-2018 edition



2017-18

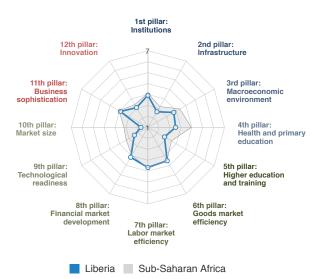
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Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Databa				
Population millions	4.4	GDP per capita US\$	479.8			
GDP US\$ billions	2.1	GDP (PPP) % world GDP	0.00			

#### Performance overview

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	
Global Competitiveness Index	134	3.1	_		Rank	
Subindex A: Basic requirements	133	3.1	/		Score	
☆ 1st pillar: Institutions	92	3.5	_			
1 2nd pillar: Infrastructure	126	2.4	~			
	126	3.3	~			
3 4th pillar: Health and primary education	134	3.2	_			
Subindex B: Efficiency enhancers	131	3.0	_			so
⇒ 5th pillar: Higher education and training	133	2.5	_			
	104	4.0	_			10 Ma
7th pillar: Labor market efficiency	77	4.1	_			
8th pillar: Financial market development	90	3.7	~			Te
9th pillar: Technological readiness	133	2.2	_			
10th pillar: Market size	135	1.5				
Subindex C: Innovation and sophistication factors	117	3.1	}			
	113	3.5	<u> </u>			
12th pillar: Innovation	119	2.8	_			



### Most problematic factors for doing business



2012-13

3.7

111 / 144

2013-14

3.5

128 / 148

2015-16

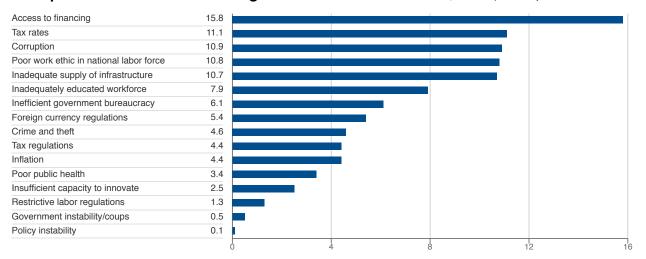
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129 / 140

2016-17

3.2

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## Liberia

ndex Component	Rank/137	7 Value	Trend	Index Component	Rank/137	Value	Э
â 1st pillar: Institutions	92	3.5	_		104	4.0	-
1.01 Property rights	106	3.8	~	6.01 Intensity of local competition	128	4.2	-
1.02 Intellectual property protection	104	3.5	_	6.02 Extent of market dominance	87	3.5	-
.03 Diversion of public funds	73	3.4	<u></u>	6.03 Effectiveness of anti-monopoly policy	79	3.5	-
.04 Public trust in politicians	76	2.9	~	6.04 Effect of taxation on incentives to invest	52	3.9	-
1.05 Irregular payments and bribes	85	3.5	<b>~</b>	6.05 Total tax rate % profits	99	45.9	_
.06 Judicial independence	97	3.3	~	6.06 No. of procedures to start a business	18	4	-
	67	3.0	_	•	19	4.5	-
.07 Favoritism in decisions of government officials				6.07 Time to start a business days			_
.08 Efficiency of government spending	83	3.0		6.08 Agricultural policy costs	127	2.9	_
.09 Burden of government regulation	42	3.7		6.09 Prevalence of non-tariff barriers	121	3.7	
10 Efficiency of legal framework in settling disputes	60	3.7	_	6.10 Trade tariffs % duty	118	11.6	_
11 Efficiency of legal framework in challenging regulations	85	3.0	$\sim$	6.11 Prevalence of foreign ownership	52	4.8	
.12 Transparency of government policymaking	111	3.4	_	6.12 Business impact of rules on FDI	101	4.1	•
.13 Business costs of terrorism	99	4.6	$\sim$	6.13 Burden of customs procedures	100	3.6	
14 Business costs of crime and violence	96	4.1		6.14 Imports % GDP	21	71.4	
15 Organized crime	77	4.7	$\sim$	6.15 Degree of customer orientation	110	4.1	
16 Reliability of police services	104	3.6	_	6.16 Buyer sophistication	114	2.8	
	110			0.10 Dayer sopriistication		2.0	
17 Ethical behavior of firms		3.3	_	7th pillar: Labor market efficiency	77	4.1	
18 Strength of auditing and reporting standards	124	3.6	_	7.01 Cooperation in labor-employer relations	120	3.7	
19 Efficacy of corporate boards	106	4.4	$\overline{}$				
20 Protection of minority shareholders' interests	94	3.8	$\overline{}$	7.02 Flexibility of wage determination	118	4.2	
21 Strength of investor protection 0-10 (best)	136	2.8	$\sim$	7.03 Hiring and firing practices	79	3.6	
A	100	0.7	_	7.04 Redundancy costs weeks of salary	106	25.7	
◆ 2nd pillar: Infrastructure	126	2.4		7.05 Effect of taxation on incentives to work	92	3.6	
01 Quality of overall infrastructure	123	2.6	_	7.06 Pay and productivity	87	3.7	
02 Quality of roads	111	3.0	$\sim$	7.07 Reliance on professional management	83	4.0	
·		not		7.08 Country capacity to retain talent	68	3.4	
03 Quality of railroad infrastructure	n/a	assessed	~	7.09 Country capacity to attract talent	47	3.7	
04 Quality of port infrastructure	104	3.2	_				
05 Quality of air transport infrastructure	126	2.8	_	7.10 Female participation in the labor force ratio to men	23	0.92	
06 Available airline seat kilometers millions/week	127	12.6	_	8th pillar: Financial market development	90	3.7	
07 Quality of electricity supply	124	2.4	~	8.01 Availability of financial services	117	3.5	
08 Mobile-cellular telephone subscriptions /100 pop.	117	83.1	/	8.02 Affordability of financial services	90	3.5	
09 Fixed-telephone lines /100 pop.	131	0.2		8.03 Financing through local equity market	104	3.0	
0-d-:!! M	126	3.3	~	8.04 Ease of access to loans	114	3.1	
3rd pillar: Macroeconomic environment	120	3.3	_	8.05 Venture capital availability	85	2.6	
01 Government budget balance % GDP	110	-5.9	$\sim$	8.06 Soundness of banks	113	3.9	
02 Gross national savings % GDP	n/a	n/a		8.07 Regulation of securities exchanges	115	3.4	
03 Inflation annual % change	120	8.8	~	8.08 Legal rights index 0-10 (best)	13	9	
04 Government debt % GDP	58	44.8	/	6.00 Legal rights index 6-10 (best)	10		
05 Country credit rating 0-100 (best)	129	18.7		% 9th pillar: Technological readiness	133	2.2	
, ,				9.01 Availability of latest technologies	135	2.8	
3 4th pillar: Health and primary education	134	3.2	_	· · · · · · · · · · · · · · · · · · ·			
01 Malaria incidence cases/100,000 pop.	65	25,805.6	_^	9.02 Firm-level technology absorption	131	3.3	
02 Business impact of malaria	58	2.7	=	9.03 FDI and technology transfer	123	3.4	
·				9.04 Internet users % pop.	135	7.3	
03 Tuberculosis incidence cases/100,000 pop.	125	308.0		9.05 Fixed-broadband Internet subscriptions /100 pop.	124	0.2	
04 Business impact of tuberculosis	126	3.7		9.06 Internet bandwidth kb/s/user	106	14.8	
05 HIV prevalence % adult pop.	116	1.6	_	9.07 Mobile-broadband subscriptions /100 pop.	135	6.6	
06 Business impact of HIV/AIDS	120	3.7					
07 Infant mortality deaths/1,000 live births	125	52.8		10th pillar: Market size	135	1.5	
08 Life expectancy years	121	61.2	_	10.01 Domestic market size index	135	1.5	
09 Quality of primary education	125	2.7	~	10.02 Foreign market size index	137	1.8	
10 Primary education enrollment rate net %	135	37.6	\	10.03 GDP (PPP) PPP \$ billions	135	3.8	
	100	57.0		, ,			
₹ 5th pillar: Higher education and training	133	2.5	_	10.04 Exports % GDP	131	10.3	
01 Secondary education enrollment rate gross %	127	37.3	^	الله 11th pillar: Business sophistication	113	3.5	
·			<u> </u>				
02 Tertiary education enrollment rate gross %	110	11.6	_	11.01 Local supplier quantity	124	3.7	
03 Quality of the education system	109	3.0		11.02 Local supplier quality	119	3.6	
04 Quality of math and science education	123	2.7	$\sim$	11.03 State of cluster development	85	3.6	
DE Quality of management schools	131	3.1	$\overline{}$	11.04 Nature of competitive advantage	81	3.3	
06 Internet access in schools	128	2.8	$\sim$	11.05 Value chain breadth	111	3.3	
77 Local availability of specialized training services	130	3.3		11.06 Control of international distribution	113	3.0	
28 Extent of staff training	87	3.7	$\sim$	11.07 Production process sophistication	128	2.7	
Extent of stall training	01	5.7		·			
				11.08 Extent of marketing	116	3.8	
				11.09 Willingness to delegate authority	82	4.1	
				※ 12th pillar: Innovation	119	2.8	
				12.01 Capacity for innovation	125	3.3	
				12.02 Quality of scientific research institutions	130	2.6	
				12.03 Company spending on R&D	79	3.2	
				12.04 University-industry collaboration in R&D	99	3.1	
				12.05 Gov't procurement of advanced technology products	76	3 2	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

76

132

3.2

## Lithuania



The Global Competitiveness Index 2017-2018 edition



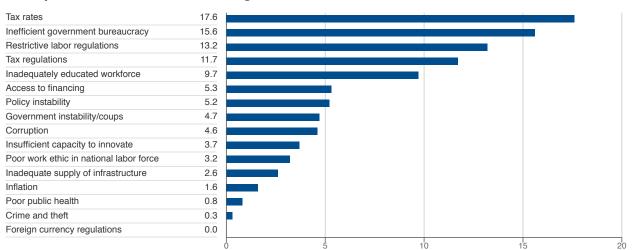
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April				
Population millions	2.9	GDP per capita US\$	14,890.1			
GDP US\$ billions	42.7	GDP (PPP) % world GDP	0.07			

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	41	4.6			Rank	45 / 144	48 / 148	41 / 144	36 / 140	<b>35</b> / 138	41 / 137
Subindex A: Basic requirements	34	5.1			Score	4.4	4.4	4.5	4.5	4.6	4.6
â 1st pillar: Institutions	53	4.1									
<b>↑</b> 2nd pillar: Infrastructure	47	4.7	_					1st pillar: Institutions			
	29	5.6	_			12th բ Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	42	6.2	_						$\langle \cdot \rangle$		
Subindex B: Efficiency enhancers	40	4.6	_			11th pillar: Business sophistication	$\langle \langle \rangle \rangle$			3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	29	5.2	_			/					
6th pillar: Goods market efficiency	44	4.6	_			10th pillar: Market size				4th pillar: Health and education	l primary
🍂 7th pillar: Labor market efficiency	61	4.3	_			\					
8th pillar: Financial market development	59	4.1				9th pillar: Technological readiness				5th pillar: Higher educat and training	ion
্ঠি 9th pillar: Technological readiness	30	5.6					th pillar:		6th pillar		
$\mathcal{L}^{\pi}_{\mathcal{L}^{3}}$ 10th pillar: Market size	78	3.6	_			Financia		7th pillar:	Goods m	arket	
Subindex C: Innovation and sophistication factors	44	4.0						Labor market efficiency			
"⅔ 11th pillar: Business sophistication	46	4.4				I ;#In	ania		مملك مالسمالا اد	- wi	
* 12th pillar: Innovation	41	3.7	_			Litn	uania	Europe and	INORTH AM	erica	

### Most problematic factors for doing business





# Lithuania

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
â 1st pillar: Institutions	53	4.1		1	6th pillar: Goods market efficiency	44	4.6	_
1.01 Property rights	68	4.3	_	6.0	1 Intensity of local competition	27	5.5	
1.02 Intellectual property protection	62	4.3	_		2 Extent of market dominance	77	3.6	_
1.03 Diversion of public funds	65		_		3 Effectiveness of anti-monopoly policy	68	3.7	_
1.04 Public trust in politicians	82	2.8			4 Effect of taxation on incentives to invest	99	3.2	
1.05 Irregular payments and bribes	37	4.9	-		5 Total tax rate % profits	90	42.7	_
1.06 Judicial independence	56				6 No. of procedures to start a business	18	4	~
1.07 Favoritism in decisions of government officials	76	2.9			7 Time to start a business days	25	5.5	_
1.08 Efficiency of government spending	95	2.7	_		B Agricultural policy costs	83	3.6	_
1.09 Burden of government regulation	97	3.1			9 Prevalence of non-tariff barriers	72	4.4	_
1.10 Efficiency of legal framework in settling disputes	62		_		Trade tariffs % duty	6	1.1	_
1.11 Efficiency of legal framework in settling disputes	101	2.7	_		Prevalence of foreign ownership	78	4.4	
			$\overline{}$					
1.12 Transparency of government policymaking	62	4.0	_		2 Business impact of rules on FDI	63	4.6	
1.13 Business costs of terrorism	37	5.6	_		Burden of customs procedures	43	4.6	
1.14 Business costs of crime and violence	45	5.1			4 Imports % GDP	17	75.3	_
1.15 Organized crime	34	5.5	$\sim$		5 Degree of customer orientation	31	5.2	^
1.16 Reliability of police services	53			6.16	Buyer sophistication	81	3.2	_
1.17 Ethical behavior of firms	48	4.2	$\overline{}$	250	7th pillar: Labor market efficiency	61	4.3	_
1.18 Strength of auditing and reporting standards	53	4.9	_	25,				
1.19 Efficacy of corporate boards	29	5.6	_		1 Cooperation in labor-employer relations	58	4.4	_
1.20 Protection of minority shareholders' interests	88	3.8			2 Flexibility of wage determination	13	5.9	
1.21 Strength of investor protection 0-10 (best)	49	6.2			3 Hiring and firing practices	111	3.2	_
			_	7.0	4 Redundancy costs weeks of salary	103	24.6	_
♣♣ 2nd pillar: Infrastructure	47	4.7		7.05	5 Effect of taxation on incentives to work	121	3.0	_
2.01 Quality of overall infrastructure	29	4.9		7.06	Pay and productivity	46	4.4	_
2.02 Quality of roads	37	4.7	_	7.0	7 Reliance on professional management	40	4.6	_
2.03 Quality of railroad infrastructure	27	4.4	_	7.08	Country capacity to retain talent	109	2.7	_
2.04 Quality of port infrastructure	39	4.8	_		9 Country capacity to attract talent	117	2.4	_
2.05 Quality of air transport infrastructure	68	4.4	~		Female participation in the labor force ratio to men	18	0.94	-
2.06 Available airline seat kilometers millions/week	94	71.3						
2.07 Quality of electricity supply	47	5.6			8th pillar: Financial market development	59	4.1	_
	30	140.7	$\overline{}$	8.0	1 Availability of financial services	38	4.6	-
2.08 Mobile-cellular telephone subscriptions /100 pop.	60	17.8			2 Affordability of financial services	36	4.4	
2.09 Fixed-telephone lines /100 pop.	60	17.0	_		Financing through local equity market	81	3.3	_
	29	5.6	_		4 Ease of access to loans	52	4.1	
3.01 Government budget balance % GDP	18	0.0			5 Venture capital availability	62	3.0	
-			~					=
3.02 Gross national savings % GDP	100	15.0			Soundness of banks	72	4.8	
3.03 Inflation annual % change	1 50	0.7	$\sim$		7 Regulation of securities exchanges	75		
3.04 Government debt % GDP	50	40.0	~~	8.08	B Legal rights index 0-10 (best)	50	6	_/
3.05 Country credit rating 0-100 (best)	39	67.8		e\$\$3	9th pillar: Technological readiness	30	5.6	_
4th pillar: Health and primary education	42	6.2		9.0	1 Availability of latest technologies	31	5.6	_
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02	2 Firm-level technology absorption	22	5.3	_
4.02 Business impact of malaria	n/a	6.5		9.03	FDI and technology transfer	32	4.9	_
4.03 Tuberculosis incidence cases/100,000 pop.	76	56.0	~	9.0	4 Internet users % pop.	45	74.4	_
4.04 Business impact of tuberculosis	56	5.7		9.05	5 Fixed-broadband Internet subscriptions /100 pop.	27	28.7	_
4.05 HIV prevalence % adult pop.	1	0.2	_		6 Internet bandwidth kb/s/user	18	198.6	
4.06 Business impact of HIV/AIDS	38	6.1			7 Mobile-broadband subscriptions /100 pop.	45	76.8	
4.07 Infant mortality deaths/1,000 live births	23	3.3			• • • • • • • • • • • • • • • • • • • •			_
4.08 Life expectancy years	61	75.1	_	+ x x	10th pillar: Market size	78	3.6	_
			_		1 Domestic market size index	83	3.3	
4.09 Quality of primary education	46	4.5 97.8	<u></u>		22 Foreign market size index	65	4.6	
4.10 Primary education enrollment rate net %	39	97.8	~		03 GDP (PPP) PPP \$ billions	78	86.1	
	29	5.2	_		04 Exports % GDP	16	75.6	7
5.01 Secondary education enrollment rate gross %	23	108.3						
5.02 Tertiary education enrollment rate gross %	31	68.5	$\sim$	ood	11th pillar: Business sophistication	46	4.4	-
5.03 Quality of the education system	73	3.6		11.0	1 Local supplier quantity	22	4.9	_
5.04 Quality of math and science education	45	4.6	_		2 Local supplier quality	33	5.0	_
5.05 Quality of management schools	81	4.0			03 State of cluster development	94	3.4	
5.06 Internet access in schools	16	5.8	$\overline{}$		04 Nature of competitive advantage	65	3.6	_
					05 Value chain breadth	49	4.1	
5.07 Local availability of specialized training services	42	4.8			06 Control of international distribution	40	4.1	
5.08 Extent of staff training	32	4.6						
					77 Production process sophistication	42	4.5	_
					08 Extent of marketing	40	4.7	
				11.0	09 Willingness to delegate authority	38	4.7	
				**	12th pillar: Innovation	41	3.7	_
				12.0	01 Capacity for innovation	33	4.8	
					22 Quality of scientific research institutions	39	4.5	_
					03 Company spending on R&D	37	3.9	
				16.0	of University industry collectors in DOD	07	4.4	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

37

101

57

2.9

# Luxembourg



The Global Competitiveness Index 2017-2018 edition

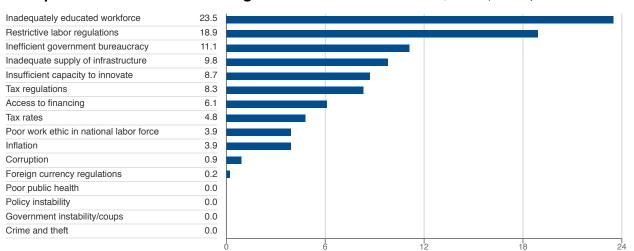
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April				
Population millions	0.6	GDP per capita ∪s\$	103,198.8			
GDP US\$ billions	59.5	GDP (PPP) % world GDP	0.05			

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	19	5.2			Rank	22 / 144	22 / 148	19 / 144	20 / 140	20 / 138	19 / 137
Subindex A: Basic requirements	10	6.0			Score	5.1	5.1	5.2	5.2	5.2	5.2
â 1st pillar: Institutions	8	5.7	_								
<b>↑</b> 2nd pillar: Infrastructure	17	5.7	_					1st pillar: Institutions			
	7	6.3	~			12th <sub> </sub> Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	41	6.2				4411				0.1.111	
Subindex B: Efficiency enhancers	23	5.0				11th pillar: Business sophistication		7	R	3rd pillar: Macroeconon environment	nic
⇒ 5th pillar: Higher education and training	50	4.7	_			/			$\wedge M$		
	4	5.5	_			10th pillar: Market size	1			4th pillar: Health and education	
7th pillar: Labor market efficiency	16	5.0	_			\					
8th pillar: Financial market development	15	5.0				9th pillar: Technological readiness			<b>3</b> / / I	5th pillar: Higher educati and training	ion
🕸 9th pillar: Technological readiness	1	6.5					th pillar:		6th pillar		
$\mathcal{L}^{\mathcal{T}}_{\mathcal{Q}}$ 10th pillar: Market size	88	3.3				Financia	al market elopment	7th pillar:	Goods m	arket	
Subindex C: Innovation and sophistication factors	16	5.1						Labor market efficiency			
ം 11th pillar: Business sophistication	17	5.2				Luna	mhoura	- Furancia	nd North A	mariaa	
** 12th pillar: Innovation	15	5.0	_		Luxembourg Europe and North America					menca	

### Most problematic factors for doing business

Source: World Economic Forum, Executive Opinion Survey 2017



# Luxembourg

dex Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	7 Value	е Т
â 1st pillar: Institutions	8	5.7	_	1	6th pillar: Goods market efficiency	4	5.5	-
1.01 Property rights	4	6.3		6.0	Intensity of local competition	51	5.3	_
1.02 Intellectual property protection	3	6.3	_		2 Extent of market dominance	19	4.6	
1.03 Diversion of public funds	7	6.0			B Effectiveness of anti-monopoly policy	13	5.1	
1.04 Public trust in politicians	8	5.6	_		4 Effect of taxation on incentives to invest	7	5.4	
1.05 Irregular payments and bribes	5				5 Total tax rate % profits	13	20.8	_
1.06 Judicial independence	10	6.2			No. of procedures to start a business	36	5	_
1.07 Favoritism in decisions of government officials	13	4.9			7 Time to start a business days	92	16.5	_
-								
.08 Efficiency of government spending	11	5.0			Agricultural policy costs	10	5.0	
1.09 Burden of government regulation	17	4.4			Prevalence of non-tariff barriers	18	5.0	
.10 Efficiency of legal framework in settling disputes	14	5.4			Trade tariffs % duty	6	1.1	
.11 Efficiency of legal framework in challenging regulations	4	5.3	~	6.1	Prevalence of foreign ownership	3	6.1	-
.12 Transparency of government policymaking	4	6.0		6.12	2 Business impact of rules on FDI	4	5.9	_
1.13 Business costs of terrorism	36	5.6	$\overline{}$	6.13	Burden of customs procedures	9	5.5	-
.14 Business costs of crime and violence	10	5.9	_	6.14	4 Imports % GDP	2	157.0	_
.15 Organized crime	9	6.2	/		Degree of customer orientation	22	5.5	
1.16 Reliability of police services	15		_		Buyer sophistication	5	4.9	1
.17 Ethical behavior of firms	10	5.8		0.11	2 Dayor Coprinction		1.0	
1.18 Strength of auditing and reporting standards	9	6.1	_		7th pillar: Labor market efficiency	16	5.0	-
	14	6.0		7.0	1 Cooperation in labor-employer relations	11	5.6	
.19 Efficacy of corporate boards					2 Flexibility of wage determination	54	5.1	_
20 Protection of minority shareholders' interests	12							_
21 Strength of investor protection 0-10 (best)	103	4.5	~		Hiring and firing practices	75	3.7	-
2nd pillar: Infrastructure	17	5.7			4 Redundancy costs weeks of salary	94	21.7	_
•					5 Effect of taxation on incentives to work	9	5.1	
01 Quality of overall infrastructure	16	5.6	_		Pay and productivity	25	4.7	
02 Quality of roads	20	5.5		7.0	7 Reliance on professional management	15	5.7	
03 Quality of railroad infrastructure	15	4.9		7.08	Country capacity to retain talent	8	5.2	
04 Quality of port infrastructure	50	4.6	_	7.09	Country capacity to attract talent	6	5.6	
05 Quality of air transport infrastructure	23	5.6	$\overline{}$		Female participation in the labor force ratio to men	58	0.84	
06 Available airline seat kilometers millions/week	106	44.2						
77 Quality of electricity supply	8	6.7			8th pillar: Financial market development	15	5.0	
				8.0	Availability of financial services	6	5.7	
08 Mobile-cellular telephone subscriptions /100 pop.	21	147.8	<b>~</b>		2 Affordability of financial services	5	5.4	
09 Fixed-telephone lines /100 pop.	8	50.9	$\sim$			24		
3rd pillar: Macroeconomic environment	7	6.3	~		Financing through local equity market		4.8	
· ·					4 Ease of access to loans	17	5.0	
01 Government budget balance % GDP	5	1.7			Venture capital availability	14	4.2	_
02 Gross national savings % GDP	45	24.6	~	8.00	Soundness of banks	9	6.1	_
03 Inflation annual % change	55	0.1	_	8.0	7 Regulation of securities exchanges	4	6.1	
04 Government debt % GDP	14	22.6	~	8.08	B Legal rights index 0-10 (best)	96	3	
05 Country credit rating 0-100 (best)	5	93.3		. ૧૧૧	9th pillar: Technological readiness	1	6.5	
4th pillar: Health and primary education	41	6.2			1 Availability of latest technologies	10	6.3	
	/	- 1						
01 Malaria incidence cases/100,000 pop.	n/a	s.l.			2 Firm-level technology absorption	11	5.7	
D2 Business impact of malaria	n/a	6.9			FDI and technology transfer	3	5.8	
03 Tuberculosis incidence cases/100,000 pop.	15	6.1	V	9.04	4 Internet users % pop.	3	97.5	
34 Business impact of tuberculosis	6	6.8		9.05	5 Fixed-broadband Internet subscriptions /100 pop.	13	36.7	
05 HIV prevalence % adult pop.	1	0.2	_	9.06	Internet bandwidth kb/s/user	1	8,397.9	
06 Business impact of HIV/AIDS	11	6.6		9.0	7 Mobile-broadband subscriptions /100 pop.	30	90.2	
07 Infant mortality deaths/1,000 live births	1	1.5	$\sim$		•			
08 Life expectancy years	11	82.2		+ 7 3	10th pillar: Market size	88	3.3	
De Quality of primary education	30	4.8	_	10.0	1 Domestic market size index	103	2.8	
10 Primary education enrollment rate net %	90	93.0	_		22 Foreign market size index	51	4.9	-
10 1 mmary education emoliment rate net %	90	93.0			03 GDP (PPP) PPP \$ billions	92	59.9	
₹ 5th pillar: Higher education and training	50	4.7			24 Exports % GDP	2	184.8	_
of Secondary education enrollment rate gross %	39	102.3	~~					
02 Tertiary education enrollment rate gross %	99	19.4	/	0-00	11th pillar: Business sophistication	17	5.2	
03 Quality of the education system	39		_	11.0	1 Local supplier quantity	95	4.2	
24 Quality of math and science education	43	4.6	~	11.0	2 Local supplier quality	19	5.3	٠.
Dis Quality of management schools	47		_		3 State of cluster development	14	5.0	
			_		04 Nature of competitive advantage	10	5.9	
6 Internet access in schools	25	5.3	_		55 Value chain breadth	22	5.0	
7 Local availability of specialized training services	32	5.1			06 Control of international distribution	17	4.9	
8 Extent of staff training	4	5.4						
					77 Production process sophistication	11	5.9	
					08 Extent of marketing	18	5.2	
				11.0	9 Willingness to delegate authority	16	5.5	
				386	12th pillar: Innovation	15	5.0	
					1 Capacity for innovation	8	5.6	
					22 Quality of scientific research institutions	25	5.1	
					•			_
					33 Company spending on R&D	11	5.2	
					04 University-industry collaboration in R&D	18	4.8	
				107	25 Gov't procurement of advanced technology products	0	17	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

9

62

4.7

# Madagascar

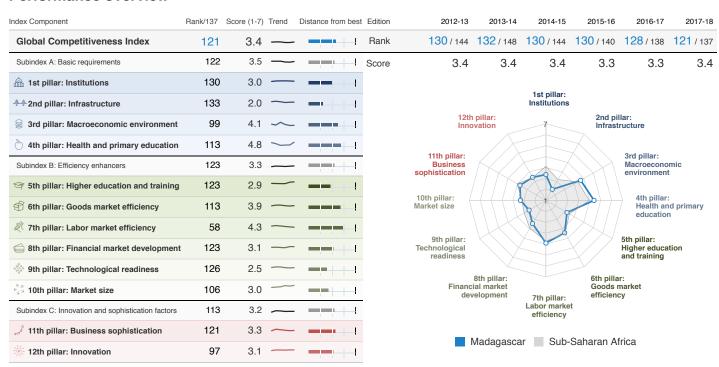
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The Global Competitiveness Index 2017-2018 edition



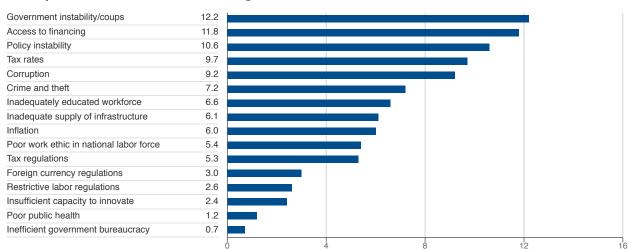
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April				
Population millions	24.9	GDP per capita US\$	World Economic Outlook Database (April 2017)  390.9  0.03			
GDP US\$ billions	9.7	GDP (PPP) % world GDP	0.03			

#### Performance overview



#### Most problematic factors for doing business





# Madagascar

Index Component	Rank/137	7 Value	e Trend	Inde	x Component	Rank/137	Value	Tre
€ 1st pillar: Institutions	130	3.0	_	1	6th pillar: Goods market efficiency	113	3.9	_
1.01 Property rights	130	3.1		6.0	Intensity of local competition	90	4.8	^
1.02 Intellectual property protection	115	3.4			2 Extent of market dominance	104	3.3	_
1.03 Diversion of public funds	126	2.2			3 Effectiveness of anti-monopoly policy	129	2.7	_
1.04 Public trust in politicians	94	2.4			4 Effect of taxation on incentives to invest	95	3.3	
1.05 Irregular payments and bribes	129	2.4			5 Total tax rate % profits	71	38.1	
1.06 Judicial independence	128	2.4	_		No. of procedures to start a business	71	7	
1.07 Favoritism in decisions of government officials	97	2.6			7 Time to start a business days	69	11.0	$\stackrel{\sim}{=}$
1.08 Efficiency of government spending	122	2.1			B Agricultural policy costs	103	3.4	$\overline{}$
1.09 Burden of government regulation	92	3.1			Prevalence of non-tariff barriers	128	3.5	
	115	2.8	_		Trade tariffs % duty	94	7.8	
1.10 Efficiency of legal framework in settling disputes					*			
1.11 Efficiency of legal framework in challenging regulations	116	2.6	$\sim$		Prevalence of foreign ownership	79	4.4	$\sim$
1.12 Transparency of government policymaking	134	2.6	_		2 Business impact of rules on FDI	106	4.0	
1.13 Business costs of terrorism	98	4.6			Burden of customs procedures	118	3.2	
1.14 Business costs of crime and violence	119	3.3			4 Imports % GDP	85	38.2	
1.15 Organized crime	117	3.8			Degree of customer orientation	73	4.6	_
1.16 Reliability of police services	125	2.9		6.16	Buyer sophistication	124	2.5	^
1.17 Ethical behavior of firms	114	3.2	~	28	7th miller, I abov movicet efficiency	58	4.3	_
1.18 Strength of auditing and reporting standards	122	3.6	$\sim$	821	7th pillar: Labor market efficiency			
1.19 Efficacy of corporate boards	110	4.3	_	7.01	1 Cooperation in labor-employer relations	93	4.1	~
1.20 Protection of minority shareholders' interests	125	3.2	$\sim$	7.02	2 Flexibility of wage determination	77	4.8	_
1.21 Strength of investor protection 0-10 (best)	96	4.8	_	7.03	Hiring and firing practices	69	3.7	
<u> </u>				7.04	4 Redundancy costs weeks of salary	59	14.7	_
44 2nd pillar: Infrastructure	133	2.0	_	7.05	Effect of taxation on incentives to work	63	4.0	_
2.01 Quality of overall infrastructure	119	2.7	~	7.06	Pay and productivity	118	3.3	_
2.02 Quality of roads	134	2.2	$\sim$		Reliance on professional management	109	3.6	_
2.03 Quality of railroad infrastructure	90	1.9			Country capacity to retain talent	107	2.8	
2.04 Quality of port infrastructure	86	3.6			Country capacity to attract talent	81	3.1	
2.05 Quality of air transport infrastructure	109	3.5	~		Female participation in the labor force ratio to men	12	0.95	=
2.06 Available airline seat kilometers millions/week	111	37.0		7.10	Terriale participation in the labor force Tallo to men	12	0.55	
			_~		8th pillar: Financial market development	123	3.1	_
2.07 Quality of electricity supply	132	1.9			1 Availability of financial services	104	3.7	_
2.08 Mobile-cellular telephone subscriptions /100 pop.	137	41.8	~		2 Affordability of financial services	113	3.1	
2.09 Fixed-telephone lines /100 pop.	124	0.6	_		•			_
	99	4.1	~		Financing through local equity market	123	2.5	
					4 Ease of access to loans	118	3.0	
3.01 Government budget balance % GDP	76	-3.2			5 Venture capital availability	114	2.3	_
3.02 Gross national savings % GDP	111	13.0	~~		Soundness of banks	101	4.2	
3.03 Inflation annual % change	110	6.7			Regulation of securities exchanges	130	3.1	_
3.04 Government debt % GDP	55	42.3	~	8.08	B Legal rights index 0-10 (best)	96	3	_
3.05 Country credit rating 0-100 (best)	121	22.5		«\$\$»	9th pillar: Technological readiness	126	2.5	_
<b>4th pillar: Health and primary education</b>	113	4.8	$\sim$		1 Availability of latest technologies	115	3.8	_
4.01 Malaria incidence cases/100,000 pop.	54	9,783.8	/	9.02	2 Firm-level technology absorption	89	4.3	_
4.02 Business impact of malaria	39	4.3			3 FDI and technology transfer	100	3.9	_
4.03 Tuberculosis incidence cases/100,000 pop.	120	236.0			4 Internet users % pop.	138	4.7	_
4.04 Business impact of tuberculosis	105	4.5			5 Fixed-broadband Internet subscriptions /100 pop.	130	0.1	
4.05 HIV prevalence % adult pop.	1		_		6 Internet bandwidth kb/s/user	108	14.3	
	82					129		_
4.06 Business impact of HIV/AIDS		5.1	_		7 Mobile-broadband subscriptions /100 pop.	129	10.5	_
4.07 Infant mortality deaths/1,000 live births	111	35.9	~	+ X X	10th pillar: Market size	106	3.0	_
4.08 Life expectancy years	110	65.5	~			104	2.8	
4.09 Quality of primary education	111	3.0			10 Domestic market size index	104	3.7	
4.10 Primary education enrollment rate net %	n/a	n/a	_		22 Foreign market size index			
⇒ 5th pillar: Higher education and training	123	2.9	_		O3 GDP (PPP) PPP \$ billions O4 Exports % GDP	103 75	37.5 31.2	_
5.01 Secondary education enrollment rate gross %	126	38.4			·			
5.02 Tertiary education enrollment rate gross %	128	4.8		200	11th pillar: Business sophistication	121	3.3	-
·	110	3.0		11.0	1 Local supplier quantity	86	4.3	^
5.03 Quality of the education system		3.9	$\overline{}$		22 Local supplier quality	105	3.9	_
5.04 Quality of math and science education	75 76				3 State of cluster development	116	3.0	_
5.05 Quality of management schools	76	4.1			24 Nature of competitive advantage	134	2.3	_
5.06 Internet access in schools	92	3.7						
5.07 Local availability of specialized training services	77		~		05 Value chain breadth	125	3.0	=
5.08 Extent of staff training	104	3.5	$\overline{}$		6 Control of international distribution	130	2.7	
					77 Production process sophistication	123	2.8	
					08 Extent of marketing	89	4.2	_
				11.0	9 Willingness to delegate authority	108	3.8	
				- N.	12th pillar: Innovation	97	3.1	_
					1 Capacity for innovation	91	3.8	_
					22 Quality of scientific research institutions	84	3.6	
					33 Company spending on R&D		3.2	
				12.0	33 Company Spending on Had	78	0.2	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

76

106

87

3.3

2.8

## Malawi

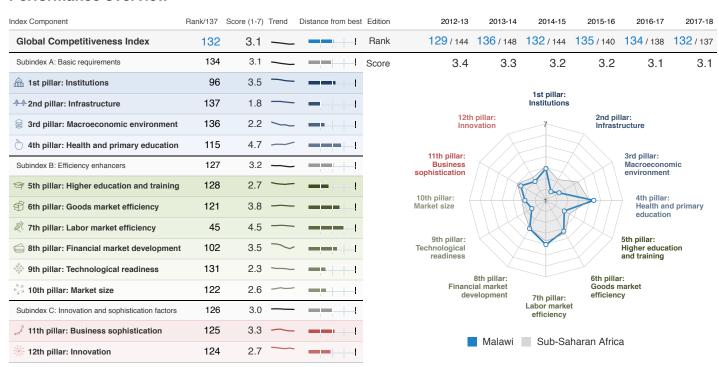


The Global Competitiveness Index 2017-2018 edition



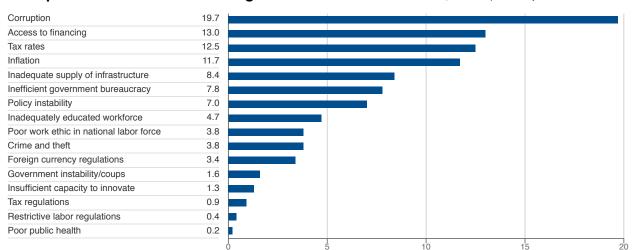
Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	18.6	GDP per capita US\$	294.8
GDP US\$ billions	5.5	GDP (PPP) % world GDP	0.02

#### Performance overview



#### Most problematic factors for doing business





# Malawi

ndex Component	Rank/137	7 Value	Trend	Index Component	Rank/137	Value	Т
â 1st pillar: Institutions	96	3.5	_		121	3.8	_
1.01 Property rights	96	3.9	_	6.01 Intensity of local competition	121	4.4	_
1.02 Intellectual property protection	117	3.3	~	6.02 Extent of market dominance	121	3.0	_
1.03 Diversion of public funds	111	2.5	~	6.03 Effectiveness of anti-monopoly policy	97	3.3	_
1.04 Public trust in politicians	120	1.9	_	6.04 Effect of taxation on incentives to invest	108	3.1	_
1.05 Irregular payments and bribes	108	3.1	~	6.05 Total tax rate % profits	58	34.5	_
1.06 Judicial independence	61	4.1	_	6.06 No. of procedures to start a business	71	7	-
1.07 Favoritism in decisions of government officials	115	2.3	$\sim$	6.07 Time to start a business days	123	37.0	_
1.08 Efficiency of government spending	106	2.5	~	6.08 Agricultural policy costs	116	3.1	_
1.09 Burden of government regulation	57		$\sim$	6.09 Prevalence of non-tariff barriers	61	4.5	
1.10 Efficiency of legal framework in settling disputes	88	3.3		6.10 Trade tariffs % duty	103	9.9	Ξ
1.11 Efficiency of legal framework in challenging regulations	82	3.1	$\sim$	6.11 Prevalence of foreign ownership	59	4.7	_
1.12 Transparency of government policymaking	101	3.6	~	6.12 Business impact of rules on FDI	67	4.5	
1.13 Business costs of terrorism	19	5.9	_		104	3.5	
				6.13 Burden of customs procedures			
1.14 Business costs of crime and violence	111		$\sim$	6.14 Imports % GDP	57	48.2	_
1.15 Organized crime	76	4.7	$\sim$	6.15 Degree of customer orientation	119	3.9	_
1.16 Reliability of police services	97	3.8		6.16 Buyer sophistication	126	2.5	
1.17 Ethical behavior of firms	107	3.3	_	7th pillar: Labor market efficiency	45	4.5	_
.18 Strength of auditing and reporting standards	94	4.2					
.19 Efficacy of corporate boards	67	4.9		7.01 Cooperation in labor-employer relations	101	4.0	_
.20 Protection of minority shareholders' interests	91	3.8	$\sim$	7.02 Flexibility of wage determination	57	5.0	~
.21 Strength of investor protection 0-10 (best)	107	4.3	~	7.03 Hiring and firing practices	82	3.6	-
				7.04 Redundancy costs weeks of salary	71	16.7	-
2nd pillar: Infrastructure	137	1.8		7.05 Effect of taxation on incentives to work	72	3.9	-
.01 Quality of overall infrastructure	127	2.5	_	7.06 Pay and productivity	108	3.4	_
.02 Quality of roads	117	2.8		7.07 Reliance on professional management	73	4.2	_
.03 Quality of railroad infrastructure	85	2.1	_	7.08 Country capacity to retain talent	82	3.2	_
2.04 Quality of port infrastructure	130	2.1	_	7.09 Country capacity to attract talent	84	3.1	_
2.05 Quality of air transport infrastructure	135	2.4	_	7.10 Female participation in the labor force ratio to men	5	1.01	
,	131	8.5	$\sim$	7.10 1 emale participation in the labor force Tallo to men	3	1.01	-
.06 Available airline seat kilometers millions/week			_	8th pillar: Financial market development	102	3.5	_
.07 Quality of electricity supply	133	1.9		8.01 Availability of financial services	127	3.2	_
.08 Mobile-cellular telephone subscriptions /100 pop.	138	40.3		•	133		
.09 Fixed-telephone lines /100 pop.	136	0.1	~	8.02 Affordability of financial services		2.4	=
3rd pillar: Macroeconomic environment	136	2.2	_	8.03 Financing through local equity market	96	3.1	
'				8.04 Ease of access to loans	129	2.6	
.01 Government budget balance % GDP	121		<u>~</u>	8.05 Venture capital availability	133	1.8	
.02 Gross national savings % GDP	135	-4.1		8.06 Soundness of banks	106	4.1	_
8.03 Inflation annual % change	135	21.7	/	8.07 Regulation of securities exchanges	94	3.9	_
8.04 Government debt % GDP	91	62.1	<i>~</i> ^	8.08 Legal rights index 0-10 (best)	13	9	-
.05 Country credit rating 0-100 (best)	124	21.0		% 9th pillar: Technological readiness	131	2.3	_
3 4th pillar: Health and primary education	115	4.7	_	9.01 Availability of latest technologies	125	3.5	-
.01 Malaria incidence cases/100,000 pop.	60	17,945.5	~	9.02 Firm-level technology absorption	129	3.4	-
.02 Business impact of malaria	48	3.4		9.03 FDI and technology transfer	129	3.2	_
.03 Tuberculosis incidence cases/100,000 pop.	113	193.0	<b>\</b>	9.04 Internet users % pop.	133	9.6	
.04 Business impact of tuberculosis	118	4.0	_	9.05 Fixed-broadband Internet subscriptions /100 pop.	131	0.0	_
	129		~	9.06 Internet bandwidth kb/s/user	124	4.2	-
.05 HIV prevalence % adult pop.							_
.06 Business impact of HIV/AIDS	127	3.3		9.07 Mobile-broadband subscriptions /100 pop.	121	18.5	-
07 Infant mortality deaths/1,000 live births	119	43.4		10th pillar: Market size	122	2.6	-
.08 Life expectancy years	116	63.8	_		101	2.5	
09 Quality of primary education	134	2.4	_	10.01 Domestic market size index	121	2.5	-
10 Primary education enrollment rate net %	44	97.5		10.02 Foreign market size index	126	3.1	_
₹ 5th pillar: Higher education and training	128	2.7	_	10.03 GDP (PPP) PPP \$ billions 10.04 Exports % GDP	122 105	21.1	_
01 Secondary education enrollment rate gross %	121	43.4	_	•			
.02 Tertiary education enrollment rate gross %	135	0.8	_	11th pillar: Business sophistication	125	3.3	-
.03 Quality of the education system	100	3.2		11.01 Local supplier quantity	111	4.0	-
.04 Quality of math and science education	124	2.7	_	11.02 Local supplier quality	130	3.3	_
•		3.1		11.03 State of cluster development	128	2.9	_
05 Quality of management schools	130		~	11.04 Nature of competitive advantage	122	2.6	-
06 Internet access in schools	129	2.7		11.05 Value chain breadth	126	3.0	_
07 Local availability of specialized training services	125	3.4			129	2.7	-
08 Extent of staff training	77	3.8		11.06 Control of international distribution			
				11.07 Production process sophistication	129	2.6	_
				11.08 Extent of marketing	114	3.9	-
				11.09 Willingness to delegate authority	87	4.0	
				** 12th pillar: Innovation	124	2.7	-
				12.01 Capacity for innovation	128	3.3	-
				12.02 Quality of scientific research institutions	119	2.8	-
				12.03 Company spending on R&D	117	2.7	-
				12.04 University-industry collaboration in R&D	119	2.7	
				12.05 Gov't procurement of advanced technology products	117	2.7	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

117

110

2.7

# Malaysia

2016-17

**25** / 138

5.2

The Global Competitiveness Index 2017-2018 edition



2017-18

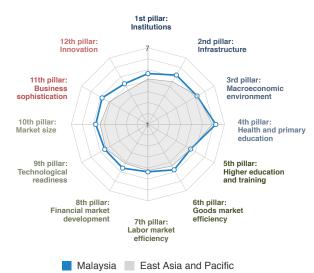
23 / 137

5.2

Key indicators, 2016	y indicators, 2016		Economic Outlook Database (April 2017)
Population millions	31.7	GDP per capita US\$	9,360.5
GDP US\$ billions	296.4	GDP (PPP) % world GDP	0.72

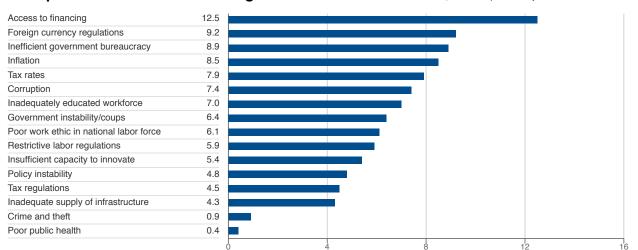
#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16
Global Competitiveness Index	23	5.2	_		Rank	25 / 144	24 / 148	20 / 144	18 / 140
Subindex A: Basic requirements	24	5.5			Score	5.1	5.0	5.2	5.2
â 1st pillar: Institutions	27	5.0	_						
	22	5.5	_					1st pillar: Institutions	
	34	5.4					pillar: vation	7	2nd pilla Infrastru
3 4th pillar: Health and primary education	30	6.3					$\Delta$		
Subindex B: Efficiency enhancers	24	4.9				11th pillar: Business sophistication			
⇒ 5th pillar: Higher education and training	45	4.9	~						
	20	5.1	_			10th pillar: Market size			
₹ 7th pillar: Labor market efficiency	26	4.7	_						
8th pillar: Financial market development	16	5.0	~			9th pillar: Technological readiness	1	•	5 F
% 9th pillar: Technological readiness	46	4.9	_				8th pillar:		6th pillar:
10th pillar: Market size	24	5.1	_			Financ	al market elopment	7th pillar:	Goods mare
Subindex C: Innovation and sophistication factors	21	4.9	_					Labor market efficiency	
್ಯ 11th pillar: Business sophistication	20	5.1	_			_	Malausia	Foot Asi	e and Desit
★ 12th pillar: Innovation	22	4.7	_				Malaysia	East Asi	a and Pacif



#### Most problematic factors for doing business





# Malaysia

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
☆ 1st pillar: Institutions	27	5.0	_	1	6th pillar: Goods market efficiency	20	5.1	_
1.01 Property rights	30	5.4		6.01	Intensity of local competition	35	5.4	_
1.02 Intellectual property protection	26	5.3	_		2 Extent of market dominance	15	4.8	_
1.03 Diversion of public funds	32		~		B Effectiveness of anti-monopoly policy	23	4.7	_
1.04 Public trust in politicians	29	4.3	$\sim$		Effect of taxation on incentives to invest	21	4.6	_
1.05 Irregular payments and bribes	39	4.8	_		5 Total tax rate % profits	81	40.0	~
1.06 Judicial independence	41	4.7	$\sim$		No. of procedures to start a business	105	9	Ť
1.07 Favoritism in decisions of government officials	22	4.4	~		7 Time to start a business days	95	18.5	Ξ
1.08 Efficiency of government spending	15	4.8	~		3 Agricultural policy costs	7	5.1	
1.09 Burden of government regulation	5	4.8	_		Prevalence of non-tariff barriers	34	4.8	
1.10 Efficiency of legal framework in settling disputes	18	5.1	~		Trade tariffs % duty	65	4.7	~
1.11 Efficiency of legal framework in settling disputes	18	4.6	$\overline{}$		Prevalence of foreign ownership	36	5.1	-
	23	5.1			2 Business impact of rules on FDI	50	4.9	=
1.12 Transparency of government policymaking 1.13 Business costs of terrorism	74	5.1			B Burden of customs procedures	25	5.1	
			~		I Imports % GDP			=
1.14 Business costs of crime and violence	60		~		•	23	70.0	
1.15 Organized crime	58	5.0	_		5 Degree of customer orientation	17	5.6	
1.16 Reliability of police services	36		_	6.16	Buyer sophistication	19	4.4	_
1.17 Ethical behavior of firms	26	5.0		J. Company	7th pillar: Labor market efficiency	26	4.7	_
1.18 Strength of auditing and reporting standards	28	5.5		7.0	Cooperation in labor-employer relations	20	5.3	_
1.19 Efficacy of corporate boards	30		~		2 Flexibility of wage determination	31	5.4	
1.20 Protection of minority shareholders' interests	18		~		B Hiring and firing practices	11	4.9	
1.21 Strength of investor protection 0-10 (best)	3	8.0	~			120		
↑↑ 2nd pillar: Infrastructure	22	5.5			Redundancy costs weeks of salary		29.4	=
•					5 Effect of taxation on incentives to work	12	5.0	
2.01 Quality of overall infrastructure	21	5.3			Pay and productivity	5	5.3	
2.02 Quality of roads	23		_		7 Reliance on professional management	21	5.5	
2.03 Quality of railroad infrastructure	14				3 Country capacity to retain talent	12	5.1	_
2.04 Quality of port infrastructure	20	5.4	$\overline{}$		Country capacity to attract talent	15	4.9	
2.05 Quality of air transport infrastructure	21	5.7	_	7.10	Female participation in the labor force ratio to men	102	0.65	
2.06 Available airline seat kilometers millions/week		2,030.7			8th pillar: Financial market development	16	5.0	_
2.07 Quality of electricity supply	36	5.9			· ·			
2.08 Mobile-cellular telephone subscriptions /100 pop.	28	141.2			A Affordability of financial services	14	5.3	
2.09 Fixed-telephone lines /100 pop.	72	14.5	$\sim$		2 Affordability of financial services	16		
	34	5.4			Financing through local equity market	23	4.8	
•					Ease of access to loans	21	4.7	_
3.01 Government budget balance % GDP	72	-3.0			5 Venture capital availability	9	4.4	_
3.02 Gross national savings % GDP	31	28.1	_		Soundness of banks	44	5.4	
3.03 Inflation annual % change	1	2.1			7 Regulation of securities exchanges	32	5.3	$\leq$
3.04 Government debt % GDP	82	56.3	_	8.08	3 Legal rights index 0-10 (best)	31	7	
3.05 Country credit rating 0-100 (best)	36	69.5	_	~\$\$%	9th pillar: Technological readiness	46	4.9	_
4th pillar: Health and primary education	30	6.3	~	9.0	Availability of latest technologies	35	5.5	_
4.01 Malaria incidence cases/100,000 pop.	25	6.6	~	9.02	2 Firm-level technology absorption	17	5.4	_
4.02 Business impact of malaria	24	5.2	$\overline{}$	9.03	FDI and technology transfer	13	5.4	_
4.03 Tuberculosis incidence cases/100,000 pop.	91	89.0		9.04	Internet users % pop.	33	78.8	_
4.04 Business impact of tuberculosis	88	5.0		9.05	Fixed-broadband Internet subscriptions /100 pop.	76	8.7	_
4.05 HIV prevalence % adult pop.	73	0.4	_	9.06	Internet bandwidth kb/s/user	80	42.6	_/
1.06 Business impact of HIV/AIDS	91	5.0	_	9.07	Mobile-broadband subscriptions /100 pop.	26	91.7	
4.07 Infant mortality deaths/1,000 live births	44	6.0	~	.47.		2.4	F 4	
4.08 Life expectancy years	67	74.9	_	£ 23	10th pillar: Market size	24	5.1	
4.09 Quality of primary education	23	5.1	_	10.0	1 Domestic market size index	28	4.8	_
4.10 Primary education enrollment rate net %	32	98.1	~~		2 Foreign market size index	17	5.9	_
				10.0	03 GDP (PPP) PPP \$ billions	28	863.3	_
⇒ 5th pillar: Higher education and training	45	4.9		10.0	04 Exports % GDP	17	75.3	/
5.01 Secondary education enrollment rate gross %	93	77.6	~	9	44th siller Dusiness and Control	20	E 4	
5.02 Tertiary education enrollment rate gross %	90	26.1	~		11th pillar: Business sophistication	20	5.1	
5.03 Quality of the education system	14	5.2	$\overline{}$	11.0	1 Local supplier quantity	15	5.1	_
5.04 Quality of math and science education	16	5.3		11.0	2 Local supplier quality	23	5.2	_
5.05 Quality of management schools	25			11.0	3 State of cluster development	13	5.1	_
5.06 Internet access in schools	27	5.3		11.0	Nature of competitive advantage	26	4.7	_
5.07 Local availability of specialized training services	18			11.0	5 Value chain breadth	15	5.2	_
5.08 Extent of staff training	9			11.0	06 Control of international distribution	18	4.9	_
5.00 Extern of stall training	J	5.5			7 Production process sophistication	28	5.1	_
					08 Extent of marketing	10	5.5	
					9 Willingness to delegate authority	18	5.4	
				785	12th pillar: Innovation	22	4.7	
				12.0	1 Capacity for innovation	14	5.4	_
				12.0	2 Quality of scientific research institutions	24	5.2	_
				12.0	3 Company spending on R&D	15	5.1	_
				40.0	A Hairmania indratar and baration in DOD	- 44		_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

5.2

5.0

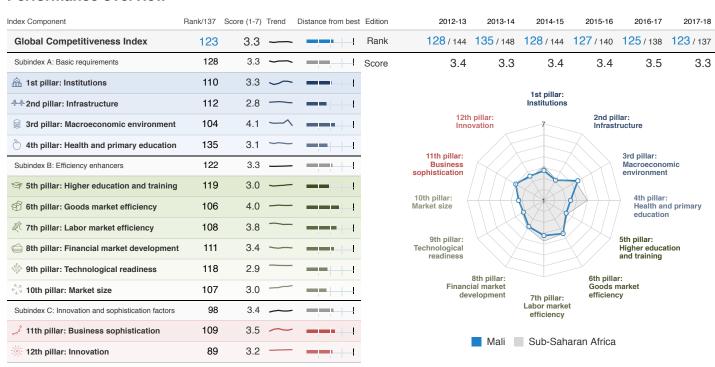
123rd<sub>/137</sub>

#### The Global Competitiveness Index 2017-2018 edition



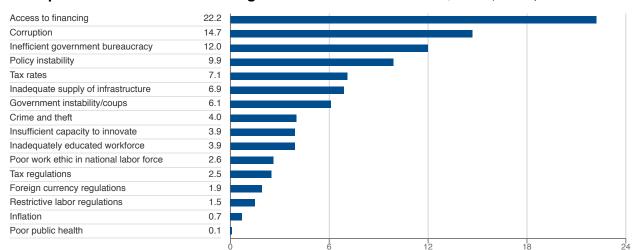
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20				
Population millions	16.8	GDP per capita US\$	830.1			
GDP US\$ billions	14.0	GDP (PPP) % world GDP	0.03			

#### Performance overview



#### Most problematic factors for doing business







Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
☆ 1st pillar: Institutions	110	3.3	~	1	6th pillar: Goods market efficiency	106	4.0	_
1.01 Property rights	114	3.6	~	6.0	Intensity of local competition	109	4.6	~
1.02 Intellectual property protection	91	3.7			2 Extent of market dominance	39	4.1	_
1.03 Diversion of public funds	85		<u></u>		3 Effectiveness of anti-monopoly policy	63	3.8	_
1.04 Public trust in politicians	63		_		4 Effect of taxation on incentives to invest	77	3.5	_
1.05 Irregular payments and bribes	131	2.4			5 Total tax rate % profits	103	48.3	_
1.06 Judicial independence	94	3.3			No. of procedures to start a business	36	5	
1.07 Favoritism in decisions of government officials	65	3.1			7 Time to start a business days	50	8.5	<u> </u>
1.08 Efficiency of government spending	78	3.0			B Agricultural policy costs	71	3.7	
, , ,	66	3.5			Prevalence of non-tariff barriers	126	3.6	~
1.09 Burden of government regulation								_
1.10 Efficiency of legal framework in settling disputes	80		~		Trade tariffs % duty	109	10.8	
1.11 Efficiency of legal framework in challenging regulations	66	3.4			Prevalence of foreign ownership	122	3.5	_
1.12 Transparency of government policymaking	96	3.6			2 Business impact of rules on FDI	117	3.8	_
1.13 Business costs of terrorism	129	3.1	$\sim$		Burden of customs procedures	112	3.4	~
1.14 Business costs of crime and violence	118	3.3	$\sim$		4 Imports % GDP	92	35.1	
1.15 Organized crime	124	3.4	$\sim$	6.15	Degree of customer orientation	99	4.2	_
1.16 Reliability of police services	115	3.3	$\sim$	6.16	Buyer sophistication	123	2.5	
1.17 Ethical behavior of firms	109	3.3	$\sim$	50	70	100	2.0	_
1.18 Strength of auditing and reporting standards	133	3.2	_	Elle (	7th pillar: Labor market efficiency	108	3.8	
1.19 Efficacy of corporate boards	117	4.2	_	7.0	Cooperation in labor-employer relations	96	4.0	
1.20 Protection of minority shareholders' interests	108	3.6		7.02	2 Flexibility of wage determination	119	4.1	$\overline{}$
1.21 Strength of investor protection 0-10 (best)	117	4.0		7.03	Hiring and firing practices	48	4.0	_
					4 Redundancy costs weeks of salary	54	13.7	_
<sup>↑</sup> 2nd pillar: Infrastructure	112	2.8		7.05	Effect of taxation on incentives to work	86	3.7	_
2.01 Quality of overall infrastructure	118	2.7	~		Pay and productivity	93	3.6	_
2.02 Quality of roads	87	3.6			7 Reliance on professional management	119	3.4	_
2.03 Quality of railroad infrastructure	84	2.1			B Country capacity to retain talent	94	3.1	_
2.04 Quality of port infrastructure	134	1.9	_		Country capacity to attract talent	86	3.1	
	96	3.9	$\sim$		Female participation in the labor force ratio to men	113	0.62	
2.05 Quality of air transport infrastructure				7.10	Female participation in the labor force ratio to men	113	0.02	
2.06 Available airline seat kilometers millions/week	113	35.0	_		8th pillar: Financial market development	111	3.4	_
2.07 Quality of electricity supply	116	2.9	~		1 Availability of financial services	120	3.4	
2.08 Mobile-cellular telephone subscriptions /100 pop.	63	120.3			·	123	2.9	
2.09 Fixed-telephone lines /100 pop.	118	1.2			2 Affordability of financial services			
	104	4.1	~		Financing through local equity market	95	3.1	_
					4 Ease of access to loans	100	3.4	
3.01 Government budget balance % GDP	90	-4.0	~		Venture capital availability	81	2.7	_
3.02 Gross national savings % GDP	118	11.0			Soundness of banks	124	3.5	_
3.03 Inflation annual % change	99	-1.8	~	8.0	Regulation of securities exchanges	118	3.4	_
3.04 Government debt % GDP	26	30.5	~^	8.08	B Legal rights index 0-10 (best)	50	6	
3.05 Country credit rating 0-100 (best)	122	22.4		989	9th pillar: Technological readiness	118	2.9	_
	135	3.1	~		1 Availability of latest technologies	102	4.1	_
4.01 Malaria incidence cases/100,000 pop.	73 46	5,030.7			2 Firm-level technology absorption	114	3.9	_
4.02 Business impact of malaria	54	3.1	$\overline{}$		3 FDI and technology transfer	108	3.7	_
4.03 Tuberculosis incidence cases/100,000 pop.	78	57.0			4 Internet users % pop.	131	11.1	
								_
4.04 Business impact of tuberculosis	130	3.6			5 Fixed-broadband Internet subscriptions /100 pop.	133	0.0	_
4.05 HIV prevalence % adult pop.	106	1.0			5 Internet bandwidth kb/s/user	136	0.6	_/
4.06 Business impact of HIV/AIDS	122	3.6	_	9.0	7 Mobile-broadband subscriptions /100 pop.	112	24.4	_
4.07 Infant mortality deaths/1,000 live births	135	74.5	_	* × ×	10th pillar: Market size	107	3.0	_
4.08 Life expectancy years	129	58.5						
4.09 Quality of primary education	94	3.4			Domestic market size index	102	2.8	_
4.10 Primary education enrollment rate net %	134	55.7	^		2 Foreign market size index	115	3.5	
⇒ 5th pillar: Higher education and training	119	3.0			O3 GDP (PPP) PPP \$ billions	102	38.1	=
5.01 Secondary education enrollment rate gross %	124		^	10.0	04 Exports % GDP	101	21.1	
•		41.3		and a	11th pillar: Business sophistication	109	3.5	-
5.02 Tertiary education enrollment rate gross %	122	6.9			1 Local supplier quantity	80	4.4	-
5.03 Quality of the education system	91		_			97	4.4	_
5.04 Quality of math and science education	91				22 Local supplier quality			
5.05 Quality of management schools	98				33 State of cluster development	81	3.6	1
5.06 Internet access in schools	82	3.9			24 Nature of competitive advantage	93	3.2	_
5.07 Local availability of specialized training services	70	4.3	_		05 Value chain breadth	119	3.2	
5.08 Extent of staff training	79	3.8			Control of international distribution	93	3.3	
-				11.0	7 Production process sophistication	116	3.1	_
				11.0	8 Extent of marketing	118	3.8	
				11.0	9 Willingness to delegate authority	127	3.5	
				- NE	12th pillar: Innovation	89	3.2	_
					1 Capacity for innovation	103	3.7	_
								-
					22 Quality of scientific research institutions	62	3.9	
				12.0	O3 Company spending on R&D	72	3.2	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

78

47

105

3.3

3.5

## Malta

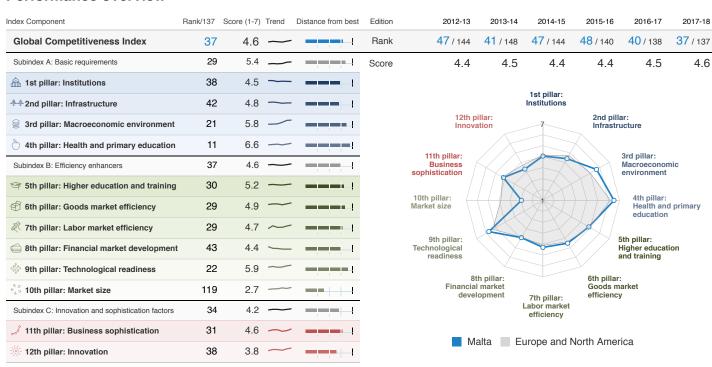


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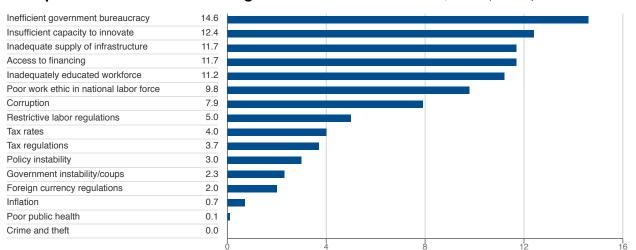
Key indicators, 2016		Source: International Monetary Fund; Work	d Economic Outlook Database (April 2017)
Population millions	0.4	GDP per capita US\$	25,214.3
GDP US\$ billions	11.0	GDP (PPP) % world GDP	0.01

#### Performance overview



### Most problematic factors for doing business





# Malta

ndex Component	Rank/137	7 Value	Trend	Index Component	Rank/137	Value
── 1st pillar: Institutions	38	4.5	_	6th pillar: Goods market efficiency	29	4.9
.01 Property rights	33	5.1	~	6.01 Intensity of local competition	2	6.2
.02 Intellectual property protection	30	5.0	~	6.02 Extent of market dominance	37	4.2
.03 Diversion of public funds	42	4.1	~	6.03 Effectiveness of anti-monopoly policy	42	4.1
·	74	2.9	=		16	4.9
.04 Public trust in politicians				6.04 Effect of taxation on incentives to invest		
.05 Irregular payments and bribes	43	4.7		6.05 Total tax rate % profits	93	43.8
06 Judicial independence	51	4.4	$\sim$	6.06 No. of procedures to start a business	105	9
07 Favoritism in decisions of government officials	89	2.8	_	6.07 Time to start a business days	111	26.0
08 Efficiency of government spending	31	4.0		6.08 Agricultural policy costs	26	4.4
09 Burden of government regulation	48	3.7		6.09 Prevalence of non-tariff barriers	12	5.2
10 Efficiency of legal framework in settling disputes	65	3.7	$\sim$	6.10 Trade tariffs % duty	6	1.1
	42	3.8		6.11 Prevalence of foreign ownership	35	5.1
11 Efficiency of legal framework in challenging regulations						
12 Transparency of government policymaking	25	4.9	~	6.12 Business impact of rules on FDI	20	5.4
13 Business costs of terrorism	39	5.5	~~	6.13 Burden of customs procedures	35	4.9
14 Business costs of crime and violence	18	5.5	$\sim$	6.14 Imports % GDP	4	136.5
15 Organized crime	20	5.7	$\overline{}$	6.15 Degree of customer orientation	61	4.7
16 Reliability of police services	51	4.8	$\overline{}$	6.16 Buyer sophistication	46	3.7
17 Ethical behavior of firms	47			one Bayor copriousation		0.7
		4.2	=	7th pillar: Labor market efficiency	29	4.7
18 Strength of auditing and reporting standards	15	5.8			04	F 0
19 Efficacy of corporate boards	39	5.2		7.01 Cooperation in labor-employer relations	24	5.2
20 Protection of minority shareholders' interests	29	4.9	$\overline{}$	7.02 Flexibility of wage determination	19	5.8
21 Strength of investor protection 0-10 (best)	31	6.5	_	7.03 Hiring and firing practices	53	4.0
				7.04 Redundancy costs weeks of salary	17	7.3
◆ 2nd pillar: Infrastructure	42	4.8	$\sim$	7.05 Effect of taxation on incentives to work	17	4.9
01 Quality of overall infrastructure	65	4.2	_	7.06 Pay and productivity	42	4.4
02 Quality of roads	98		$\sim$		33	4.8
02 Quality of Todas	90		_	7.07 Reliance on professional management		
03 Quality of railroad infrastructure	n/a	not		7.08 Country capacity to retain talent	30	4.5
	•	assessed	_	7.09 Country capacity to attract talent	21	4.6
04 Quality of port infrastructure	22	5.3	_	7.10 Female participation in the labor force ratio to men	108	0.64
05 Quality of air transport infrastructure	19	5.7	~	A		
06 Available airline seat kilometers millions/week	83	113.0	_	8th pillar: Financial market development	43	4.4
07 Quality of electricity supply	71	4.9	~	8.01 Availability of financial services	34	4.9
08 Mobile-cellular telephone subscriptions /100 pop.	53	124.8	~	8.02 Affordability of financial services	27	4.7
09 Fixed-telephone lines /100 pop.	5	54.2	- i	•		
09 Fixed-telepriorie lilies 7100 pop.	5	34.2	_	8.03 Financing through local equity market	29	4.6
3rd pillar: Macroeconomic environment	21	5.8		8.04 Ease of access to loans	39	4.4
· ·				8.05 Venture capital availability	52	3.2
01 Government budget balance % GDP	27	-0.6		8.06 Soundness of banks	17	5.9
02 Gross national savings % GDP	32	28.1		8.07 Regulation of securities exchanges	28	5.4
03 Inflation annual % change	1	0.9	~	8.08 Legal rights index 0-10 (best)	107	2
04 Government debt % GDP	86	59.4	_	0.00 Legal rights index 0-10 (best)	107	
05 Country credit rating 0-100 (best)	31	72.3	_	♦ 9th pillar: Technological readiness	22	5.9
oo oouning o roo (coot)		72.0			24	F 7
4th pillar: Health and primary education	11	6.6		9.01 Availability of latest technologies		5.7
	2/0			9.02 Firm-level technology absorption	31	5.1
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.03 FDI and technology transfer	17	5.2
02 Business impact of malaria	n/a	6.7		9.04 Internet users % pop.	36	77.3
03 Tuberculosis incidence cases/100,000 pop.	28	8.8	~	9.05 Fixed-broadband Internet subscriptions /100 pop.	7	39.6
04 Business impact of tuberculosis	27	6.5		9.06 Internet bandwidth kb/s/user		1,596.3
05 HIV prevalence % adult pop.	1	0.1				
06 Business impact of HIV/AIDS	19	6.5	=	9.07 Mobile-broadband subscriptions /100 pop.	49	71.4
•				10th pillar: Market size	119	2.7
07 Infant mortality deaths/1,000 live births	36	5.1				
08 Life expectancy years	16	81.9	~	10.01 Domestic market size index	126	2.2
09 Quality of primary education	13	5.5	$\sim$	10.02 Foreign market size index	86	4.0
10 Primary education enrollment rate net %	25	98.4		10.03 GDP (PPP) PPP \$ billions	125	17.3
•				10.04 Exports % GDP	4	130.8
₹ 5th pillar: Higher education and training	30	5.2			7	.55.0
01 Secondary education enrollment rate gross %	65	94.8	7/	→ 11th pillar: Business sophistication	31	4.6
		47.4	=			
02 Tertiary education enrollment rate gross %	62			11.01 Local supplier quantity	16	5.1
O3 Quality of the education system	19	5.0	$\sim$	11.02 Local supplier quality	46	4.6
04 Quality of math and science education	20	5.1	$\sim$	11.03 State of cluster development	34	4.3
D5 Quality of management schools	33	4.9	$\sim$	11.04 Nature of competitive advantage	29	4.4
06 Internet access in schools	21	5.5	_	11.05 Value chain breadth	32	4.4
77 Local availability of specialized training services	26			11.06 Control of international distribution	54	3.8
08 Extent of staff training	35	4.5	$\sim$	11.07 Production process sophistication	29	4.8
				11.08 Extent of marketing	46	4.7
				11.09 Willingness to delegate authority	32	4.8
				1/		
				12th pillar: Innovation	38	3.8
				12.01 Capacity for innovation	37	4.7
				12.02 Quality of scientific research institutions	53	4.1
				·		
				12.03 Company spending on R&D	40	3.8
				12.04 University-industry collaboration in R&D	38	4.0
				10.05 Coult progurament of advanced technology and usta	20	2.0

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

29

65

3.8

## Mauritania

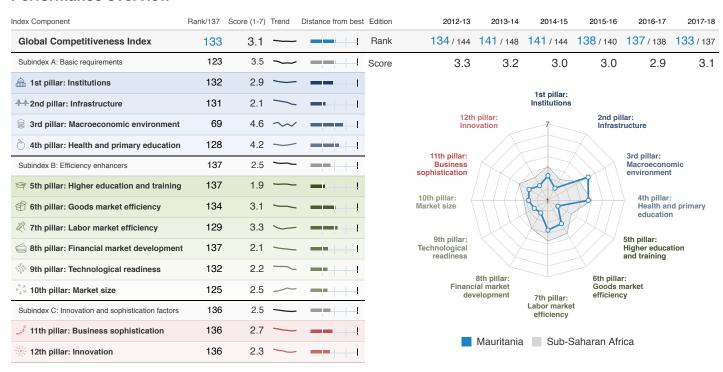
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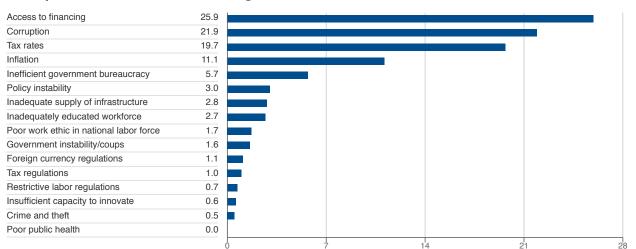
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2017				
Population millions	3.8	GDP per capita US\$	1,242.6			
GDP US\$ billions	4.7	GDP (PPP) % world GDP	0.01			

#### Performance overview



#### Most problematic factors for doing business





## Mauritania

Index Component	Rank/137	7 Value	Trend	Inde	x Component	Rank/137	Value	Trend
â 1st pillar: Institutions	132	2.9	_	1	6th pillar: Goods market efficiency	134	3.1	_
1.01 Property rights	135	2.6	_	6.0	1 Intensity of local competition	73	5.0	~
1.02 Intellectual property protection	131	3.0	_	6.0	2 Extent of market dominance	136	2.1	_
1.03 Diversion of public funds	94	3.0	~~	6.0	3 Effectiveness of anti-monopoly policy	134	2.4	_
1.04 Public trust in politicians	55	3.3			4 Effect of taxation on incentives to invest	132	2.3	_
1.05 Irregular payments and bribes	135	2.3	_		5 Total tax rate % profits	137	71.3	
1.06 Judicial independence	116	2.9	~		6 No. of procedures to start a business	71	7	=
1.07 Favoritism in decisions of government officials	69	3.0			7 Time to start a business days	46	8.0	$\overline{}$
1.08 Efficiency of government spending	111	2.5			B Agricultural policy costs	56	3.9	
1.09 Burden of government regulation	101	3.0			9 Prevalence of non-tariff barriers	137	2.2	
1.10 Efficiency of legal framework in settling disputes	130	2.2			Trade tariffs % duty	117	11.2	~
1.11 Efficiency of legal framework in challenging regulations	134	2.1	_		Prevalence of foreign ownership	135	2.9	Ž
	136	2.5	$\subseteq$			128	3.4	_
1.12 Transparency of government policymaking	111		$\overline{\sim}$		2 Business impact of rules on FDI	135	2.4	_
1.13 Business costs of terrorism		4.4			Burden of customs procedures			$\overline{}$
1.14 Business costs of crime and violence	78	4.4	~		4 Imports % GDP	49	52.0	
1.15 Organized crime	95	4.2	$\sim$		5 Degree of customer orientation	137	2.4	$\sim$
1.16 Reliability of police services	86		~	6.1	Buyer sophistication	136	2.0	_
1.17 Ethical behavior of firms	136	2.6		25%	7th pillar: Labor market efficiency	129	3.3	_
1.18 Strength of auditing and reporting standards	137	2.1						
1.19 Efficacy of corporate boards	137	2.3	_		1 Cooperation in labor-employer relations	44	4.7	
1.20 Protection of minority shareholders' interests	137	2.0	_		2 Flexibility of wage determination	82	4.7	_
1.21 Strength of investor protection 0-10 (best)	103	4.5	_		3 Hiring and firing practices	107	3.3	$\sim$
A A A	404	0.4	_	7.0	4 Redundancy costs weeks of salary	37	10.5	
◆◆ 2nd pillar: Infrastructure	131	2.1	_	7.0	5 Effect of taxation on incentives to work	51	4.2	_
2.01 Quality of overall infrastructure	137	1.5	$\overline{}$	7.0	6 Pay and productivity	137	2.4	$\sim$
2.02 Quality of roads	137	2.0	~	7.0	7 Reliance on professional management	137	2.1	_
2.03 Quality of railroad infrastructure	80	2.2	~	7.0	8 Country capacity to retain talent	113	2.6	_^
2.04 Quality of port infrastructure	123	2.6	<u></u>	7.0	Country capacity to attract talent	126	2.1	~
2.05 Quality of air transport infrastructure	134	2.5			Female participation in the labor force ratio to men	123	0.46	
2.06 Available airline seat kilometers millions/week	128	11.2			· · ·			
2.07 Quality of electricity supply	129	2.1	_		8th pillar: Financial market development	137	2.1	
2.08 Mobile-cellular telephone subscriptions /100 pop.	112	86.5	~	8.0	Availability of financial services	136	2.1	
2.09 Fixed-telephone lines /100 pop.	117	1.3		8.0	2 Affordability of financial services	136	2.0	
2.09 Fixed telephone lines 7100 pop.	117	1.0			Financing through local equity market	135	2.1	_
	69	4.6	~~		4 Ease of access to loans	134	2.1	
3.01 Government budget balance % GDP	19	-0.1	~		5 Venture capital availability	124	2.1	_
3.02 Gross national savings % GDP	51	23.5	~~		Soundness of banks	136	2.3	
3.03 Inflation annual % change	1	1.5	~		7 Regulation of securities exchanges	136	2.3	~
3.04 Government debt % GDP	124	99.6	~~		B Legal rights index 0-10 (best)	107	2.0	$\overline{}$
	128	18.8		0.0	s Legal rights index 8-10 (best)	107		
3.05 Country credit rating 0-100 (best)	120	10.0		383	9th pillar: Technological readiness	132	2.2	
4th pillar: Health and primary education	128	4.2	$\overline{}$	9.0	1 Availability of latest technologies	128	3.4	$\overline{}$
4.01 Malaria incidence cases/100,000 pop.	52	6,924.2	$\overline{}$	9.0	2 Firm-level technology absorption	137	2.6	
4.02 Business impact of malaria	47	3.5	_		3 FDI and technology transfer	137	2.1	~
4.03 Tuberculosis incidence cases/100,000 pop.	95	107.0	$\neg$		4 Internet users % pop.	123	18.0	
4.04 Business impact of tuberculosis	131	3.4	$\overline{}$		5 Fixed-broadband Internet subscriptions /100 pop.	119	0.3	
4.05 HIV prevalence % adult pop.	85	0.5	~		6 Internet bandwidth kb/s/user	123	4.5	_
4.06 Business impact of HIV/AIDS	129	3.2	_		7 Mobile-broadband subscriptions /100 pop.	105	30.2	
4.07 Infant mortality deaths/1,000 live births	131	65.1	_			103	00.2	
			<u></u>	£ 2	10th pillar: Market size	125	2.5	_
4.08 Life expectancy years	117	63.2			01 Domestic market size index	125	2.3	
4.09 Quality of primary education	126		~		22 Foreign market size index	120	3.2	_
4.10 Primary education enrollment rate net %	127	79.2	~		03 GDP (PPP) PPP \$ billions	127		
⇒ 5th pillar: Higher education and training	137	1.9			04 Exports % GDP	81	16.4 30.7	$\preceq$
5.01 Secondary education enrollment rate gross %				10.0	υ <del>ч ∟лроно</del> % αυг	01	30.7	_
	133	30.6		مر م	11th pillar: Business sophistication	136	2.7	~
5.02 Tertiary education enrollment rate gross %	125	5.3			1 Local supplier quantity	93	4.2	~
5.03 Quality of the education system	137	1.9	_		22 Local supplier quality	137	2.4	_
5.04 Quality of math and science education	127	2.7	$\sim$					
5.05 Quality of management schools	137		$\sim$		03 State of cluster development	126	3.8	$\sim$
5.06 Internet access in schools	134	2.4			04 Nature of competitive advantage	136	2.2	_
5.07 Local availability of specialized training services	137		_		05 Value chain breadth	137	2.1	
5.08 Extent of staff training	137	2.3	$\sim$		Control of international distribution	78	3.5	~~
					Production process sophistication	135	2.2	~
					08 Extent of marketing	137	2.1	$\sim$
				11.0	9 Willingness to delegate authority	137	2.2	
				-305	12th pillar: Innovation	136	2.3	_
					01 Capacity for innovation	137	2.2	-
					02 Quality of scientific research institutions	129	2.6	~~
				12.	O3 Company spending on R&D	136	1.9	$\sim$
				40.	o a li indica nativa tra di cata a na li albanativa tra DOD	400	0 7	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

122

69

137

2.7

3.3

## **Mauritius**



The Global Competitiveness Index 2017-2018 edition



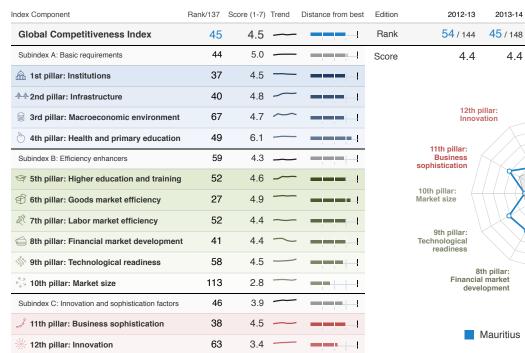
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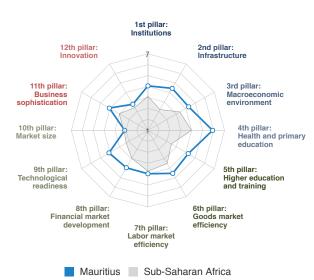
45 / 137

4.5

Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	1.3	GDP per capita US\$	9,424.5
GDP US\$ billions	12.0	GDP (PPP) % world GDP	0.02

#### Performance overview





2014-15

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4.5

4.4

2015-16

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4.4

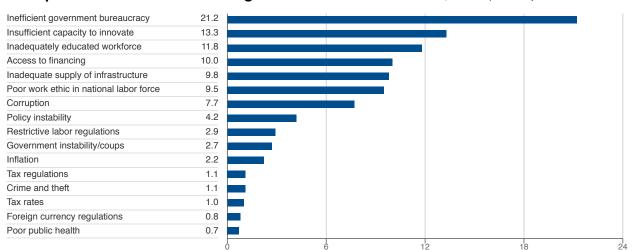
2016-17

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4.5

#### Most problematic factors for doing business





## **Mauritius**

ndex Component	Rank/137	7 Value	Trend	Index Component	Rank/137	Value	Э.
â 1st pillar: Institutions	37	4.5			27	4.9	-
1.01 Property rights	39	4.9		6.01 Intensity of local competition	46	5.3	-
1.02 Intellectual property protection	51	4.4		6.02 Extent of market dominance	70	3.7	_
.03 Diversion of public funds	50	4.0		6.03 Effectiveness of anti-monopoly policy	39	4.2	-
1.04 Public trust in politicians	65	3.1		6.04 Effect of taxation on incentives to invest	8	5.3	_
1.05 Irregular payments and bribes	48	4.6		6.05 Total tax rate % profits	17	21.8	-
1.06 Judicial independence	34	5.0		6.06 No. of procedures to start a business	53	6	
	63	3.2		·	36	6.5	-
.07 Favoritism in decisions of government officials				6.07 Time to start a business days			-
1.08 Efficiency of government spending	54	3.5	=	6.08 Agricultural policy costs	44	4.1	_
.09 Burden of government regulation	51	3.6		6.09 Prevalence of non-tariff barriers	37	4.8	
.10 Efficiency of legal framework in settling disputes	33	4.5		6.10 Trade tariffs % duty	3	8.0	_
.11 Efficiency of legal framework in challenging regulations	24	4.3	~	6.11 Prevalence of foreign ownership	56	4.8	•
.12 Transparency of government policymaking	39	4.6	$\sim$	6.12 Business impact of rules on FDI	40	5.1	•
.13 Business costs of terrorism	25	5.8	$\overline{}$	6.13 Burden of customs procedures	45	4.6	
.14 Business costs of crime and violence	44	5.1	_	6.14 Imports % GDP	40	56.0	-
.15 Organized crime	22	5.7	_	6.15 Degree of customer orientation	42	5.0	٠.
.16 Reliability of police services	61			6.16 Buyer sophistication	38	3.8	_
				6.16 Buyer sopriistication	30	5.0	
17 Ethical behavior of firms	40	4.3		7th pillar: Labor market efficiency	52	4.4	
18 Strength of auditing and reporting standards	43	5.1	$\sim$	, ,	07	4.0	٠.
19 Efficacy of corporate boards	33	5.4		7.01 Cooperation in labor-employer relations	37	4.8	_
20 Protection of minority shareholders' interests	32	4.8	$\overline{}$	7.02 Flexibility of wage determination	97	4.5	
21 Strength of investor protection 0-10 (best)	31	6.5	$\overline{}$	7.03 Hiring and firing practices	31	4.3	
				7.04 Redundancy costs weeks of salary	38	10.6	
⁴ 2nd pillar: Infrastructure	40	4.8		7.05 Effect of taxation on incentives to work	11	5.1	
01 Quality of overall infrastructure	50	4.5	_	7.06 Pay and productivity	56	4.2	
02 Quality of roads	48		$\overline{}$	7.07 Reliance on professional management	50	4.6	
02 Quality of roads	40		-				
03 Quality of railroad infrastructure	n/a ,	not assessed		7.08 Country capacity to retain talent	49	3.7	
04 Quality of part infrastructure				7.09 Country capacity to attract talent	34	4.0	
04 Quality of port infrastructure	65	4.2	_	7.10 Female participation in the labor force ratio to men	106	0.64	
05 Quality of air transport infrastructure	50	4.8			44	4.4	
06 Available airline seat kilometers millions/week	67	220.6	/	8th pillar: Financial market development	41	4.4	
07 Quality of electricity supply	52	5.5		8.01 Availability of financial services	46	4.5	
08 Mobile-cellular telephone subscriptions /100 pop.	26	144.2	_	8.02 Affordability of financial services	45	4.2	
.09 Fixed-telephone lines /100 pop.	35	30.7	<u></u>	8.03 Financing through local equity market	33	4.4	
oo i maa talapiiana iinaa yisa pap.		00.7		8.04 Ease of access to loans	44	4.2	
3rd pillar: Macroeconomic environment	67	4.7	~		53		
01 Government budget balance % GDP	78	-3.3	~_	8.05 Venture capital availability		3.1	
02 Gross national savings % GDP	94	16.3		8.06 Soundness of banks	43	5.4	
· · · · · · · · · · · · · · · · · · ·				8.07 Regulation of securities exchanges	56	4.6	
.03 Inflation annual % change	1	1.0	$\overline{}$	8.08 Legal rights index 0-10 (best)	50	6	
04 Government debt % GDP	95	62.7		۰۹۵ <u>_</u>	50	4.5	
05 Country credit rating 0-100 (best)	57	56.5		% 9th pillar: Technological readiness	58	4.5	
AAL SILES HEALTH AND SILES	49	6.1		9.01 Availability of latest technologies	60	4.9	
4th pillar: Health and primary education	49	0.1		9.02 Firm-level technology absorption	50	4.8	
01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.03 FDI and technology transfer	67	4.4	
02 Business impact of malaria	n/a	5.8		9.04 Internet users % pop.	80	53.2	
03 Tuberculosis incidence cases/100,000 pop.	52	22.0	\				
04 Business impact of tuberculosis	61	5.6	_	9.05 Fixed-broadband Internet subscriptions /100 pop.	53	16.9	
	103			9.06 Internet bandwidth kb/s/user	67	63.5	
05 HIV prevalence % adult pop.		0.9		9.07 Mobile-broadband subscriptions /100 pop.	80	51.7	
06 Business impact of HIV/AIDS	69	5.3	$\leq$	A A A A A A A A A A A A A A A A A A A	110	0.0	
07 Infant mortality deaths/1,000 live births	67	11.8	_	્રૈંગે 10th pillar: Market size	113	2.8	
08 Life expectancy years	77	74.4	_	10.01 Domestic market size index	119	2.5	
09 Quality of primary education	45	4.5		10.02 Foreign market size index	109	3.7	
10 Primary education enrollment rate net %	63	96.1	~	10.03 GDP (PPP) PPP \$ billions	116	25.9	
~				10.04 Exports % GDP	45	43.5	
₹ 5th pillar: Higher education and training	52	4.6	_	10.01 Exporto 70 del	73	10.5	
01 Secondary education enrollment rate gross %	62	95.7	~	√ 11th pillar: Business sophistication	38	4.5	
02 Tertiary education enrollment rate gross %	76	36.7	_				
				11.01 Local supplier quantity	30	4.9	
03 Quality of the education system	49	4.1	~~	11.02 Local supplier quality	55	4.5	
04 Quality of math and science education	35		~	11.03 State of cluster development	33	4.4	
05 Quality of management schools	43	4.6	~	11.04 Nature of competitive advantage	40	4.2	
06 Internet access in schools	66	4.2		11.05 Value chain breadth	27	4.6	
07 Local availability of specialized training services	56			11.06 Control of international distribution	36	4.2	
08 Extent of staff training	33		_	11.07 Production process sophistication	45	4.4	
	00	1.0		·			
				11.08 Extent of marketing	44	4.7	
				11.09 Willingness to delegate authority	43	4.6	
				<b>※ 12th pillar: Innovation</b>	63	3.4	
				12.01 Capacity for innovation	54	4.3	
				12.02 Quality of scientific research institutions	82	3.6	
				12.03 Company spending on R&D	49	3.6	
				12.04 University-industry collaboration in R&D	93	3.2	
				12.05 Gov't procurement of advanced technology products	50	3 /	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

59

3.4

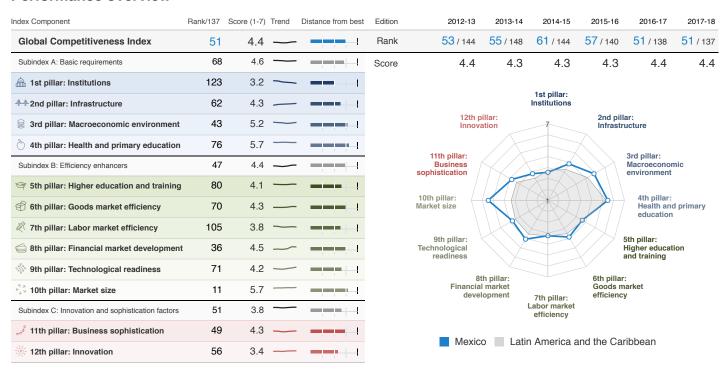
## **Mexico**

The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2017			
Population millions	122.3	GDP per capita US\$	8,554.6		
GDP US\$ billions	1,046.0	GDP (PPP) % world GDP	1.93		

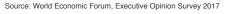
#### Performance overview

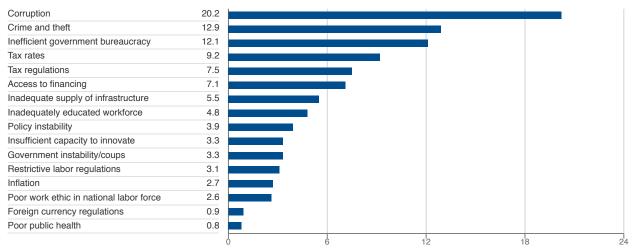


Mexico places 51st with an overall score that increases, indicating that the country has continued to make progress but at a relatively slower rate than other countries. The main reduction in score is in the institutions pillar, with efficiency in government spending falling in both score and rank. Private institutions also worsen, with deteriorations in

corporate ethics and responsibility. After significant efforts to implement efficiency-enhancing reforms, the slow progress this year signals the need to increase the speed and depth of reforms that will improve the allocation of factors of production and the competitive forces driving innovation and rivalry in product markets.

#### Most problematic factors for doing business





# **Mexico**

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	э Т
â 1st pillar: Institutions	123	3.2	_		70	4.3	-
1.01 Property rights	93	4.0	_	6.01 Intensity of local competition	63	5.2	_
1.02 Intellectual property protection	67	4.1	_	6.02 Extent of market dominance	90	3.5	_
1.03 Diversion of public funds	127	2.2	_	6.03 Effectiveness of anti-monopoly policy	64	3.7	_
.04 Public trust in politicians	127	1.7	_	6.04 Effect of taxation on incentives to invest	87	3.4	_
.05 Irregular payments and bribes	105	3.2	_	6.05 Total tax rate % profits	116	52.0	
1.06 Judicial independence	113	2.9	_	6.06 No. of procedures to start a business	92	8	
1.07 Favoritism in decisions of government officials	129	2.0	_	6.07 Time to start a business days	49	8.4	Ξ
	121					3.2	_
.08 Efficiency of government spending		2.2	_	6.08 Agricultural policy costs	112		
.09 Burden of government regulation	120	2.6	_	6.09 Prevalence of non-tariff barriers	57	4.5	_
.10 Efficiency of legal framework in settling disputes	118	2.7		6.10 Trade tariffs % duty	74	5.2	
.11 Efficiency of legal framework in challenging regulations	94	2.9		6.11 Prevalence of foreign ownership	25	5.3	_
1.12 Transparency of government policymaking	63	4.0	~	6.12 Business impact of rules on FDI	38	5.1	-
1.13 Business costs of terrorism	87	4.8		6.13 Burden of customs procedures	71	4.1	-
.14 Business costs of crime and violence	131	2.7		6.14 Imports % GDP	77	40.8	_
.15 Organized crime	134	2.6	$\sim$	6.15 Degree of customer orientation	56	4.8	-
.16 Reliability of police services	134	2.4	$\sim$	6.16 Buyer sophistication	62	3.5	-
.17 Ethical behavior of firms	117	3.2	_	-	02	0.0	
			_	7th pillar: Labor market efficiency	105	3.8	-
18 Strength of auditing and reporting standards	56	4.8		7.01 Cooperation in labor-employer relations	65	4.4	
19 Efficacy of corporate boards	57	5.0					
20 Protection of minority shareholders' interests	70	4.0	_	7.02 Flexibility of wage determination	48	5.2	_
21 Strength of investor protection 0-10 (best)	51	6.0	$\sim$	7.03 Hiring and firing practices	98	3.4	
A 0 - 1 - 21 1 - 1 - 1 - 1 - 1 - 1 - 1	00	4.0		7.04 Redundancy costs weeks of salary	96	22.0	_
↑ 2nd pillar: Infrastructure	62	4.3		7.05 Effect of taxation on incentives to work	94	3.5	
01 Quality of overall infrastructure	71	4.1	_	7.06 Pay and productivity	84	3.7	
02 Quality of roads	52	4.4	$\sim$	7.07 Reliance on professional management	75	4.1	
03 Quality of railroad infrastructure	65	2.8	_	7.08 Country capacity to retain talent	61	3.5	
04 Quality of port infrastructure	62		_	7.09 Country capacity to attract talent	54	3.5	
	67						-
05 Quality of air transport infrastructure		4.4		7.10 Female participation in the labor force ratio to men	115	0.59	
06 Available airline seat kilometers millions/week		2,645.0	_	8th pillar: Financial market development	36	4.5	١.
7 Quality of electricity supply	72	4.9					
08 Mobile-cellular telephone subscriptions /100 pop.	108	88.2	~	8.01 Availability of financial services	85	4.0	
09 Fixed-telephone lines /100 pop.	68	15.5	$\sim$	8.02 Affordability of financial services	75	3.7	
				8.03 Financing through local equity market	64	3.7	•
3rd pillar: Macroeconomic environment	43	5.2		8.04 Ease of access to loans	78	3.8	
01 Government budget balance % GDP	71	-2.9	~	8.05 Venture capital availability	56	3.1	
02 Gross national savings % GDP	72	20.6	$\sim$	8.06 Soundness of banks	47	5.4	
03 Inflation annual % change	1		$\sim$	8.07 Regulation of securities exchanges	48	4.7	٠.
04 Government debt % GDP	84	58.1	_	8.08 Legal rights index 0-10 (best)	8	10	
	34		_	6.00 Legal rights index 6-10 (best)		10	_
05 Country credit rating 0-100 (best)	34	71.0		\$ 9th pillar: Technological readiness	71	4.2	
4th pillar: Health and primary education	76	5.7		9.01 Availability of latest technologies	52	5.0	
01 Malaria incidence cases/100,000 pop.	19	0.5	~	9.02 Firm-level technology absorption	56	4.6	
	1	6.2	_	6,7	26		
02 Business impact of malaria			~	9.03 FDI and technology transfer			
03 Tuberculosis incidence cases/100,000 pop.	49		$\sim$	9.04 Internet users % pop.	69	59.5	
04 Business impact of tuberculosis	42	6.2		9.05 Fixed-broadband Internet subscriptions /100 pop.	63	12.7	
05 HIV prevalence % adult pop.	63	0.3		9.06 Internet bandwidth kb/s/user	83	37.6	
06 Business impact of HIV/AIDS	55	5.7		9.07 Mobile-broadband subscriptions /100 pop.	71	58.8	
07 Infant mortality deaths/1,000 live births	64	11.3	$\sim$	^7 T			
08 Life expectancy years	48	76.9	~	10th pillar: Market size	11	5.7	
09 Quality of primary education	114	3.0		10.01 Domestic market size index	11	5.5	
10 Primary education enrollment rate net %	71	95.1	~	10.02 Foreign market size index	6	6.1	
10 1 milary education emoliment rate het /8		33.1	_	10.03 GDP (PPP) PPP \$ billions		2,315.7	
₹ 5th pillar: Higher education and training	80	4.1		10.04 Exports % GDP	61	38.1	
01 Secondary education enrollment rate gross %	74	90.5	20	- 10.04 Exporte % dBi		00.1	
				3 11th pillar: Business sophistication	49	4.3	
02 Tertiary education enrollment rate gross %	82	29.9		11.01 Local supplier quantity	43	4.7	
03 Quality of the education system	108	3.0					
04 Quality of math and science education	117	2.9		11.02 Local supplier quality	47	4.6	
OS Quality of management schools	67	4.2	_	11.03 State of cluster development	38	4.2	
16 Internet access in schools	83	3.9		11.04 Nature of competitive advantage	82	3.3	
7 Local availability of specialized training services	66	4.4	_	11.05 Value chain breadth	34	4.4	
28 Extent of staff training	80	3.8		11.06 Control of international distribution	45	4.0	
	00	0.0		11.07 Production process sophistication	46	4.3	
				11.08 Extent of marketing	51	4.6	
				11.09 Willingness to delegate authority	68	4.3	
				11.00 Willinghess to delegate authority	UO	4.3	
				* 12th pillar: Innovation	56	3.4	
				12.01 Capacity for innovation	70	4.1	
				12.02 Quality of scientific research institutions	46	4.3	
				12.03 Company spending on R&D	77	3.2	
				12.04 University-industry collaboration in R&D	49	3.6	
				12.05 Gov't procurement of advanced technology products	an	2 1	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

90

53

3.1

## Moldova



The Global Competitiveness Index 2017-2018 edition



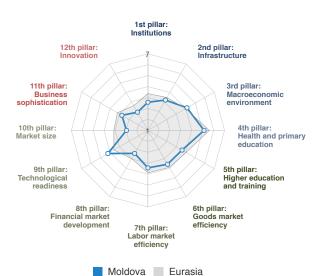
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4.0

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201				
Population millions	3.6	GDP per capita US\$	1,900.9			
GDP US\$ billions	6.8	GDP (PPP) % world GDP	0.02			

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15
Global Competitiveness Index	89	4.0			Rank	87 / 144	89 / 148	82 / 144
Subindex A: Basic requirements	95	4.2	~		Score	3.9	3.9	4.0
🖮 1st pillar: Institutions	119	3.2						
↑↑ 2nd pillar: Infrastructure	88	3.7						1st pillar: Institutions
	81	4.5	~			12th   Innov	oillar: ration	7
3 4th pillar: Health and primary education	97	5.4	_			4411	$\wedge$	
Subindex B: Efficiency enhancers	94	3.7	~			11th pillar: Business sophistication	$(\mathcal{A})$	00
⇒ 5th pillar: Higher education and training	83	4.1				. /	///	
6th pillar: Goods market efficiency	97	4.1				10th pillar: Market size		
7th pillar: Labor market efficiency	94	3.9	_			\ \		9
8th pillar: Financial market development	124	3.1	~			9th pillar: Technological readiness		
9th pillar: Technological readiness	53	4.6				9	th pillar:	
្សុំ 10th pillar: Market size	120	2.7				Financia	al market elopment	7th pillar:
Subindex C: Innovation and sophistication factors	124	3.0						Labor market efficiency
ு 11th pillar: Business sophistication	120	3.4					Mol	dova 🗆 E
** 12th pillar: Innovation	128	2.6					IVIOI	uova 🔲 E



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4.0

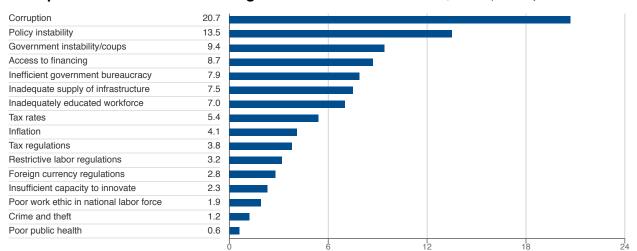
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#### Most problematic factors for doing business





# Moldova

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tren
🗎 1st pillar: Institutions	119	3.2	_		6th pillar: Goods market efficiency	97	4.1	_
1.01 Property rights	126	3.3		6.0	Intensity of local competition	95	4.8	_
1.02 Intellectual property protection	100	3.5			2 Extent of market dominance	122	3.0	
1.03 Diversion of public funds	120				3 Effectiveness of anti-monopoly policy	126	2.8	_
1.04 Public trust in politicians	112	2.0	_		4 Effect of taxation on incentives to invest	91	3.4	_
1.05 Irregular payments and bribes	111	3.1	_		5 Total tax rate % profits	84	40.4	~
1.06 Judicial independence	132	2.1			6 No. of procedures to start a business	36	5	=
1.07 Favoritism in decisions of government officials	123	2.1			7 Time to start a business days	30	6.0	_
	98	2.7	_			123	3.0	
1.08 Efficiency of government spending					Agricultural policy costs			
1.09 Burden of government regulation	110	2.8			Prevalence of non-tariff barriers	80	4.2	_
1.10 Efficiency of legal framework in settling disputes	126	2.5	$\sim$		Trade tariffs % duty	49	3.4	
1.11 Efficiency of legal framework in challenging regulations	126	2.4	$\sim$		Prevalence of foreign ownership	120	3.6	
1.12 Transparency of government policymaking	92	3.7	_		2 Business impact of rules on FDI	89	4.3	
1.13 Business costs of terrorism	46	5.5	$\sim$		Burden of customs procedures	86	3.9	
1.14 Business costs of crime and violence	66	4.7			4 Imports % GDP	22	71.4	
1.15 Organized crime	94	4.3	_		5 Degree of customer orientation	101	4.2	_
1.16 Reliability of police services	111	3.4	_	6.16	Buyer sophistication	104	2.9	
1.17 Ethical behavior of firms	112	3.3	$\sim$	58	74b willow I about and a fficiency	94	3.9	
1.18 Strength of auditing and reporting standards	114	3.7	$\overline{}$	ex.	7th pillar: Labor market efficiency		3.9	
1.19 Efficacy of corporate boards	98	4.5	_		1 Cooperation in labor-employer relations	82	4.2	_
1.20 Protection of minority shareholders' interests	127	3.1	~	7.02	2 Flexibility of wage determination	96	4.6	
1.21 Strength of investor protection 0-10 (best)	41	6.3		7.03	Hiring and firing practices	99	3.4	_
				7.0	4 Redundancy costs weeks of salary	98	22.6	_
2nd pillar: Infrastructure	88	3.7		7.05	Effect of taxation on incentives to work	105	3.4	_
2.01 Quality of overall infrastructure	102	3.3	~		Pay and productivity	69	3.9	
2.02 Quality of roads	128	2.5			Reliance on professional management	110	3.6	_
2.03 Quality of railroad infrastructure	71	2.7	_		Country capacity to retain talent	133	1.9	_
2.04 Quality of port infrastructure	126	2.4	_		Country capacity to attract talent	134	1.8	_
2.05 Quality of air transport infrastructure	86	4.1			Female participation in the labor force ratio to men	36	0.89	_
2.06 Available airline seat kilometers millions/week	105	44.6	~	7.10	Tomalo participation in the labor lorde ratio to men	00	0.00	
2.07 Quality of electricity supply	91	4.3			8th pillar: Financial market development	124	3.1	
3 113				8.0	1 Availability of financial services	114	3.6	
2.08 Mobile-cellular telephone subscriptions /100 pop.	83		~		2 Affordability of financial services	121	3.0	_
2.09 Fixed-telephone lines /100 pop.	28	34.3			3 Financing through local equity market	127	2.4	
	81	4.5	~		4 Ease of access to loans	108	3.2	
·	E-1	0.1	~					=
3.01 Government budget balance % GDP	51	-2.1			5 Venture capital availability	125	2.1	
3.02 Gross national savings % GDP	99	15.6			Soundness of banks	133	2.6	
3.03 Inflation annual % change	107	6.4			7 Regulation of securities exchanges	135	2.3	$\overline{}$
3.04 Government debt % GDP	44	38.1	_	8.08	B Legal rights index 0-10 (best)	23	8	_^
3.05 Country credit rating 0-100 (best)	114	25.8	_	2888	9th pillar: Technological readiness	53	4.6	_
3 4th pillar: Health and primary education	97	5.4	_		1 Availability of latest technologies	88	4.4	_
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02	2 Firm-level technology absorption	106	4.0	_
4.02 Business impact of malaria	n/a	5.6		9.03	FDI and technology transfer	98	4.0	_
4.03 Tuberculosis incidence cases/100,000 pop.	103	152.0	_		4 Internet users % pop.	50	71.0	
4.04 Business impact of tuberculosis	90	5.0			5 Fixed-broadband Internet subscriptions /100 pop.	55	16.3	
4.05 HIV prevalence % adult pop.	91	0.6	_		6 Internet bandwidth kb/s/user	34	144.1	_^
4.06 Business impact of HIV/AIDS	64	5.4	_		7 Mobile-broadband subscriptions /100 pop.	76	55.5	
4.07 Infant mortality deaths/1,000 live births	77	13.6				70	55.5	_
•	91	71.6		473	10th pillar: Market size	120	2.7	_
4.08 Life expectancy years			~		1 Domestic market size index	124	2.4	
4.09 Quality of primary education	69	4.0	=		22 Foreign market size index	112	3.5	
4.10 Primary education enrollment rate net %	115	86.9			03 GDP (PPP) PPP \$ billions	124	18.9	
⇒ 5th pillar: Higher education and training	83	4.1			04 Exports % GDP	43	45.3	
5.01 Secondary education enrollment rate gross %	83	86.1	~		•			
5.02 Tertiary education enrollment rate gross %	70	41.2		ood	11th pillar: Business sophistication	120	3.4	_
5.03 Quality of the education system	95	3.2		11.0	1 Local supplier quantity	121	3.8	_
5.04 Quality of math and science education	70	4.1			2 Local supplier quality	100	3.9	
					3 State of cluster development	134	2.6	
5.05 Quality of management schools	118		$\overline{\sim}$		24 Nature of competitive advantage	126	2.4	_
5.06 Internet access in schools	61	4.4			D5 Value chain breadth	110	3.3	_
5.07 Local availability of specialized training services	109				06 Control of international distribution			=
5.08 Extent of staff training	126	3.2	$\sim$			120	3.0	
					77 Production process sophistication	106	3.2	
					08 Extent of marketing	109	4.0	
				11.0	9 Willingness to delegate authority	105	3.9	
				燕	12th pillar: Innovation	128	2.6	_
				12 (	1 Capacity for innovation	119	3.4	_
					22 Quality of scientific research institutions	115	2.9	
					33 Company spending on R&D	135		
				16.0	13 Company Spending on Mad	100	0.7	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

121

130

120

# Mongolia

101st/137

The Global Competitiveness Index 2017-2018 edition



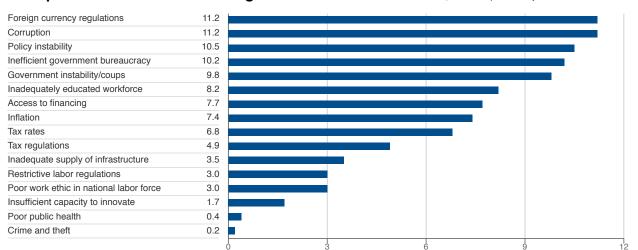
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201		
Population millions		GDP per capita US\$	3,659.8	
GDP US\$ billions	11.0	GDP (PPP) % world GDP	0.03	

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	101	3.9	_		Rank	93 / 144	<b>107</b> / 148	98 / 144	104 / 140	102 / 138	101 / 137
Subindex A: Basic requirements	100	4.1	_		Score	3.9	3.7	3.8	3.8	3.8	3.9
â 1st pillar: Institutions	108	3.4	_								
<b>↑</b> 2nd pillar: Infrastructure	108	3.1	_					1st pillar: Institution			
	89	4.4	~				h pillar: ovation	7	2nd p Infras	illar: tructure	
3 4th pillar: Health and primary education	85	5.6	_			4415 - 1115 -			$\nearrow \nearrow$	0.1.2	
Subindex B: Efficiency enhancers	91	3.8				11th pillar: Business sophistication				3rd pillar: Macroecond environmen	
⇒ 5th pillar: Higher education and training	65	4.5	_				/// <i>I</i>		79//	\	
6th pillar: Goods market efficiency	111	4.0	_			10th pillar: Market size				4th pillar Health ar educatio	nd primary
7th pillar: Labor market efficiency	68	4.2	_					7			
8th pillar: Financial market development	129	3.0	_			9th pillar: Technological readiness				5th pillar: Higher educa and training	ition
% 9th pillar: Technological readiness	74	4.2					8th pillar:		6th pill		
्रैं 10th pillar: Market size	104	3.0	_				cial market evelopment	7th pillar:	Goods	market	
Subindex C: Innovation and sophistication factors	116	3.1	_					Labor mark efficiency	et		
್ಯಿ 11th pillar: Business sophistication	123	3.3	~			_	Mongolio	Eact /	Asia and Da	oifio	
** 12th pillar: Innovation	101	3.0	_		■ Mongolia ■ East Asia and Pacific				CITIC		

### Most problematic factors for doing business





# Mongolia

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	e Tre
â 1st pillar: Institutions	108	3.4	_	\$	6th pillar: Goods market efficiency	111	4.0	_
1.01 Property rights	112	3.6	_	6.0	Intensity of local competition	116	4.5	
1.02 Intellectual property protection	122	3.2	_	6.0	2 Extent of market dominance	134	2.3	_
1.03 Diversion of public funds	107	2.7		6.0	3 Effectiveness of anti-monopoly policy	130	2.7	_
1.04 Public trust in politicians	125	1.7	_	6.0	4 Effect of taxation on incentives to invest	67	3.6	_
1.05 Irregular payments and bribes	81	3.6		6.0	5 Total tax rate % profits	22	24.7	_
1.06 Judicial independence	110	3.0	_	6.0	6 No. of procedures to start a business	36	5	~
1.07 Favoritism in decisions of government officials	132	1.9	_	6.0	7 Time to start a business days	30	6.0	/
1.08 Efficiency of government spending	124	2.1		6.0	8 Agricultural policy costs	106	3.3	_
1.09 Burden of government regulation	88	3.2	_		9 Prevalence of non-tariff barriers	100	4.0	_
1.10 Efficiency of legal framework in settling disputes	95	3.1	~		0 Trade tariffs % duty	63	4.2	_
1.11 Efficiency of legal framework in challenging regulations	58	3.5			Prevalence of foreign ownership	113	3.8	_
1.12 Transparency of government policymaking	93	3.7			2 Business impact of rules on FDI	120	3.7	_
1.13 Business costs of terrorism	26	5.8			3 Burden of customs procedures	108	3.5	
1.14 Business costs of terrorism	47	5.0	_		4 Imports % GDP	58	47.9	$\sim$
1.15 Organized crime	47		~		5 Degree of customer orientation	114	4.0	
1.16 Reliability of police services	82		_	6.1	6 Buyer sophistication	107	2.9	_
1.17 Ethical behavior of firms	123	3.1		P. Salan	7th pillar: Labor market efficiency	68	4.2	_
1.18 Strength of auditing and reporting standards	128	3.5	_	,	· ·			
1.19 Efficacy of corporate boards	132	3.6			1 Cooperation in labor-employer relations	81	4.2	
1.20 Protection of minority shareholders' interests	131	3.1	$\sim$		2 Flexibility of wage determination	12	5.9	
1.21 Strength of investor protection 0-10 (best)	25	6.8			3 Hiring and firing practices	68	3.7	_
AA 0 1 30 1 10 1 10 1 10 1	100	0.1		7.0	4 Redundancy costs weeks of salary	24	8.7	
♣♣ 2nd pillar: Infrastructure	108	3.1		7.0	5 Effect of taxation on incentives to work	114	3.1	
2.01 Quality of overall infrastructure	105	3.3	_	7.0	6 Pay and productivity	102	3.5	
2.02 Quality of roads	102	3.1		7.0	7 Reliance on professional management	100	3.7	_
2.03 Quality of railroad infrastructure	69	2.8	_	7.0	8 Country capacity to retain talent	127	2.4	_
2.04 Quality of port infrastructure	136	1.4	_	7.0	9 Country capacity to attract talent	110	2.6	
2.05 Quality of air transport infrastructure	116	3.2	_		O Female participation in the labor force ratio to men	57	0.84	_
2.06 Available airline seat kilometers millions/week	116	31.4	~					
2.07 Quality of electricity supply	95	4.0	<u> </u>		8th pillar: Financial market development	129	3.0	
2.08 Mobile-cellular telephone subscriptions /100 pop.	78		~	8.0	Availability of financial services	129	3.1	_
2.09 Fixed-telephone lines /100 pop.	90	7.6	$\stackrel{\cdot}{\sim}$		2 Affordability of financial services	112	3.1	
2.09 Tixed-telephone lines 7100 pop.	90	7.0			3 Financing through local equity market	103	3.0	_
	89	4.4	~		4 Ease of access to loans	121	2.9	
3.01 Government budget balance % GDP	135	-17.0	$\sim$		5 Venture capital availability	129	1.8	_
3.02 Gross national savings % GDP	41	26.5	$\overline{}$		6 Soundness of banks	126	3.4	_
3.03 Inflation annual % change	1	0.5	$\sim$		7 Regulation of securities exchanges	131	2.8	_
						70		_
3.04 Government debt % GDP	62	45.9		8.0	8 Legal rights index 0-10 (best)	70	5	
3.05 Country credit rating 0-100 (best)	94	31.6	_	388	9th pillar: Technological readiness	74	4.2	~
4th pillar: Health and primary education	85	5.6	$\overline{}$		Availability of latest technologies	96	4.3	
- ' '	2/2				2 Firm-level technology absorption			
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.			6, 1	85	4.3	_
4.02 Business impact of malaria	n/a	5.7			3 FDI and technology transfer	104	3.9	
4.03 Tuberculosis incidence cases/100,000 pop.	133	428.0			4 Internet users % pop.	115	22.3	
4.04 Business impact of tuberculosis	96	4.9			5 Fixed-broadband Internet subscriptions /100 pop.	80	7.6	
4.05 HIV prevalence % adult pop.	1	<0.1			6 Internet bandwidth kb/s/user	28	166.1	
4.06 Business impact of HIV/AIDS	81	5.1		9.0	7 Mobile-broadband subscriptions /100 pop.	37	82.0	_
4.07 Infant mortality deaths/1,000 live births	89	19.0	$\sim$	17	10th piller, Market size	104	3.0	
4.08 Life expectancy years	100	69.8	~		10th pillar: Market size			
4.09 Quality of primary education	81	3.8	_	10.	01 Domestic market size index	109	2.7	
4.10 Primary education enrollment rate net %	56	96.5	$\sim$	10.	02 Foreign market size index	92	4.0	_
				10.	03 GDP (PPP) PPP \$ billions	105	37.0	_
⇒ 5th pillar: Higher education and training	65	4.5		10.	04 Exports % GDP	32	51.8	/
		91.5	^					
5.01 Secondary education enrollment rate gross %	72	01.0		کار			ים כי	_
			_	9-0	11th pillar: Business sophistication	123	3.3	
5.02 Tertiary education enrollment rate gross %	30	68.6			11th pillar: Business sophistication 01 Local supplier quantity	123 131	3.5	_
5.02 Tertiary education enrollment rate gross % 5.03 Quality of the education system	30 116	68.6 2.8	_	11.				~ ~
5.02 Tertiary education enrollment rate gross % 5.03 Quality of the education system 5.04 Quality of math and science education	30 116 56	68.6 2.8 4.3	$\widehat{}$	11.	01 Local supplier quantity	131	3.5	_
5.02 Tertiary education enrollment rate gross % 5.03 Quality of the education system 5.04 Quality of math and science education 5.05 Quality of management schools	30 116 56 132	68.6 2.8 4.3 2.9		11. 11.	01 Local supplier quantity 02 Local supplier quality 03 State of cluster development	131 128 132	3.5 3.4 2.8	
5.02 Tertiary education enrollment rate gross % 5.03 Quality of the education system 5.04 Quality of math and science education 5.05 Quality of management schools 5.06 Internet access in schools	30 116 56 132 47	68.6 2.8 4.3 2.9 4.7	<u></u>	11. 11. 11.	01 Local supplier quantity 02 Local supplier quality 03 State of cluster development 04 Nature of competitive advantage	131 128 132 84	3.5 3.4 2.8 3.2	1
5.02 Tertiary education enrollment rate gross % 5.03 Quality of the education system 5.04 Quality of math and science education 5.05 Quality of management schools 5.06 Internet access in schools 5.07 Local availability of specialized training services	30 116 56 132 47 124	68.6 2.8 4.3 2.9 4.7 3.6	( \     \ )	11. 11. 11. 11.	101 Local supplier quantity 102 Local supplier quality 103 State of cluster development 104 Nature of competitive advantage 105 Value chain breadth	131 128 132 84 103	3.5 3.4 2.8 3.2 3.4	
5.02 Tertiary education enrollment rate gross % 5.03 Quality of the education system 5.04 Quality of math and science education 5.05 Quality of management schools 5.06 Internet access in schools 6.07 Local availability of specialized training services	30 116 56 132 47	68.6 2.8 4.3 2.9 4.7	<u></u>	11. 11. 11. 11. 11. 11.	101 Local supplier quantity 102 Local supplier quality 103 State of cluster development 104 Nature of competitive advantage 105 Value chain breadth 106 Control of international distribution	131 128 132 84 103 122	3.5 3.4 2.8 3.2 3.4 2.9	
5.02 Tertiary education enrollment rate gross % 5.03 Quality of the education system 5.04 Quality of math and science education 5.05 Quality of management schools 5.06 Internet access in schools 6.07 Local availability of specialized training services	30 116 56 132 47 124	68.6 2.8 4.3 2.9 4.7 3.6	( \     \ )	110 110 110 110 110 110 110	101 Local supplier quantity 102 Local supplier quality 103 State of cluster development 104 Nature of competitive advantage 105 Value chain breadth 106 Control of international distribution 107 Production process sophistication	131 128 132 84 103 122	3.5 3.4 2.8 3.2 3.4 2.9 3.1	
5.02 Tertiary education enrollment rate gross % 5.03 Quality of the education system 5.04 Quality of math and science education 5.05 Quality of management schools 5.06 Internet access in schools 5.07 Local availability of specialized training services	30 116 56 132 47 124	68.6 2.8 4.3 2.9 4.7 3.6	( \     \ )	112 112 112 113 114 114 115 117	101 Local supplier quantity 102 Local supplier quality 103 State of cluster development 104 Nature of competitive advantage 105 Value chain breadth 106 Control of international distribution 107 Production process sophistication 108 Extent of marketing	131 128 132 84 103 122 111	3.5 3.4 2.8 3.2 3.4 2.9 3.1 4.1	
5.02 Tertiary education enrollment rate gross % 5.03 Quality of the education system 5.04 Quality of math and science education 5.05 Quality of management schools 5.06 Internet access in schools 5.07 Local availability of specialized training services	30 116 56 132 47 124	68.6 2.8 4.3 2.9 4.7 3.6	( \     \ )	112 112 112 113 114 114 115 117	101 Local supplier quantity 102 Local supplier quality 103 State of cluster development 104 Nature of competitive advantage 105 Value chain breadth 106 Control of international distribution 107 Production process sophistication	131 128 132 84 103 122	3.5 3.4 2.8 3.2 3.4 2.9 3.1	
5.02 Tertiary education enrollment rate gross % 5.03 Quality of the education system 5.04 Quality of math and science education 5.05 Quality of management schools 5.06 Internet access in schools 5.07 Local availability of specialized training services	30 116 56 132 47 124	68.6 2.8 4.3 2.9 4.7 3.6	( \     \ )	11./ 11./ 11./ 11./ 11./ 11./ 11./ 11./	101 Local supplier quantity 102 Local supplier quality 103 State of cluster development 104 Nature of competitive advantage 105 Value chain breadth 106 Control of international distribution 107 Production process sophistication 108 Extent of marketing 109 Willingness to delegate authority	131 128 132 84 103 122 111 99 133	3.5 3.4 2.8 3.2 3.4 2.9 3.1 4.1 3.1	
5.02 Tertiary education enrollment rate gross % 5.03 Quality of the education system 5.04 Quality of math and science education 5.05 Quality of management schools 5.06 Internet access in schools 5.07 Local availability of specialized training services	30 116 56 132 47 124	68.6 2.8 4.3 2.9 4.7 3.6	( \     \ )	11./ 11./ 11./ 11./ 11./ 11./ 11./ 11./	101 Local supplier quantity 102 Local supplier quality 103 State of cluster development 104 Nature of competitive advantage 105 Value chain breadth 106 Control of international distribution 107 Production process sophistication 108 Extent of marketing 109 Willingness to delegate authority 118 Local supplier quantity 128 Value chain breadth 109 Willingness to delegate authority	131 128 132 84 103 122 111 99 133	3.5 3.4 2.8 3.2 3.4 2.9 3.1 4.1 3.0	
5.02 Tertiary education enrollment rate gross % 5.03 Quality of the education system 5.04 Quality of math and science education 5.05 Quality of management schools 5.06 Internet access in schools 5.07 Local availability of specialized training services	30 116 56 132 47 124	68.6 2.8 4.3 2.9 4.7 3.6	( \     \ )	11./ 11./ 11./ 11./ 11./ 11./ 11./ 11./	101 Local supplier quantity 102 Local supplier quality 103 State of cluster development 104 Nature of competitive advantage 105 Value chain breadth 106 Control of international distribution 107 Production process sophistication 108 Extent of marketing 109 Willingness to delegate authority 101 Capacity for innovation	131 128 132 84 103 122 111 99 133	3.5 3.4 2.8 3.2 3.4 2.9 3.1 4.1 3.0 4.2	
5.01 Secondary education enrollment rate gross % 5.02 Tertiary education enrollment rate gross % 5.03 Quality of the education system 5.04 Quality of math and science education 5.05 Quality of management schools 5.06 Internet access in schools 5.07 Local availability of specialized training services 5.08 Extent of staff training	30 116 56 132 47 124	68.6 2.8 4.3 2.9 4.7 3.6	( \     \ )	11 11 11 11 11 11 11 12 12 12	101 Local supplier quantity 102 Local supplier quality 103 State of cluster development 104 Nature of competitive advantage 105 Value chain breadth 106 Control of international distribution 107 Production process sophistication 108 Extent of marketing 109 Willingness to delegate authority 118 Local supplier quantity 128 Value chain breadth 109 Willingness to delegate authority	131 128 132 84 103 122 111 99 133	3.5 3.4 2.8 3.2 3.4 2.9 3.1 4.1 3.1 3.0 4.2	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

127

111

61

2.6

2.8

# Montenegro



The Global Competitiveness Index 2017-2018 edition

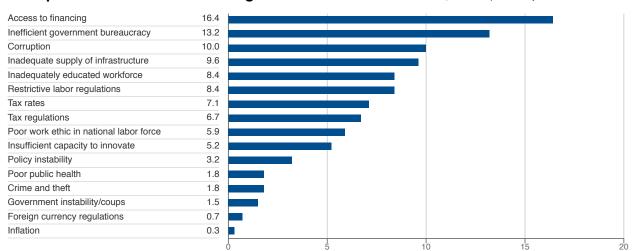
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201			
Population millions		GDP per capita US\$	6,628.6		
GDP US\$ billions	4.1	GDP (PPP) % world GDP	0.01		

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18			
Global Competitiveness Index	77	4.1		. ———	Rank	<b>72</b> / 144	<b>67</b> / 148	67 / 144	<b>70</b> / 140	82 / 138	<b>77</b> / 137			
Subindex A: Basic requirements	80	4.4	~		Score	4.1	4.2	4.2	4.2	4.1	4.1			
â 1st pillar: Institutions	66	3.9	_											
<b>1</b> 2nd pillar: Infrastructure	70	4.2						1st pillar: Institutions						
	116	3.7	~			12th pillar: Innovation		2nd pillar: Infrastructure  3rd pillar: Macroeconomic environment						
3 4th pillar: Health and primary education	62	5.9				4411								
Subindex B: Efficiency enhancers	72	4.1				11th pillar: Business sophistication 10th pillar: Market size								
⇒ 5th pillar: Higher education and training	61	4.5	~						4th pillar: Health and primary education					
6th pillar: Goods market efficiency	65	4.4												
7th pillar: Labor market efficiency	74	4.2	~			\ \								
8th pillar: Financial market development	47	4.2	_			9th pillar: Technological readiness				5th pillar: Higher educat and training	ion			
♦ 9th pillar: Technological readiness	48	4.9	_			8th pillar:			6th pillar					
್ಘೆತ 10th pillar: Market size	128	2.3	_			Financia	l market lopment	7th pillar:	Goods m	arket				
Subindex C: Innovation and sophistication factors	92	3.4	~					Labor market efficiency						
🎜 11th pillar: Business sophistication	101	3.6	_			Mont	onogro	Europo o	ad North A	morios				
12th pillar: Innovation	91	3.2	_		Montenegro Europe and North America				illelica					

### Most problematic factors for doing business Source: World Economic Forum, Executive Opinion Survey 2017





# Montenegro

dex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	э -
∴ 1st pillar: Institutions	66	3.9	_	€ 6th pillar: Goods market efficiency	65	4.4	-
1.01 Property rights	89	4.0	_	6.01 Intensity of local competition	122	4.4	-
1.02 Intellectual property protection	98	3.6		6.02 Extent of market dominance	84	3.5	-
1.03 Diversion of public funds	60	3.7	_	6.03 Effectiveness of anti-monopoly policy	75	3.6	-
.04 Public trust in politicians	59	3.2	~	6.04 Effect of taxation on incentives to invest	46	4.0	-
.05 Irregular payments and bribes	67	4.0	_	6.05 Total tax rate % profits	18	22.2	-
.06 Judicial independence	85	3.6	$\overline{}$	6.06 No. of procedures to start a business	53	6	-
.07 Favoritism in decisions of government officials	59	3.2		6.07 Time to start a business days	61	10.0	-
.08 Efficiency of government spending	39	3.8		6.08 Agricultural policy costs	54	4.0	-
.09 Burden of government regulation	52	3.6	_	6.09 Prevalence of non-tariff barriers	56	4.5	
· · ·	75	3.5		6.10 Trade tariffs % duty	47	3.2	_
.10 Efficiency of legal framework in settling disputes							_
.11 Efficiency of legal framework in challenging regulations	71	3.3	$\sim$	6.11 Prevalence of foreign ownership	88	4.3	_
.12 Transparency of government policymaking	58	4.2	$\sim$	6.12 Business impact of rules on FDI	78	4.4	_
.13 Business costs of terrorism	49	5.3		6.13 Burden of customs procedures	61	4.2	
.14 Business costs of crime and violence	70	4.5	_	6.14 Imports % GDP	25	67.9	-
.15 Organized crime	90	4.4	$\overline{}$	6.15 Degree of customer orientation	90	4.4	-
.16 Reliability of police services	93	3.9	$\sim$	6.16 Buyer sophistication	96	3.0	-
.17 Ethical behavior of firms	56	4.0	_	5 <sup>©</sup>	7.	4.0	
.18 Strength of auditing and reporting standards	98	4.1	_	7th pillar: Labor market efficiency	74	4.2	_
.19 Efficacy of corporate boards	105	4.4	~	7.01 Cooperation in labor-employer relations	100	4.0	_
.20 Protection of minority shareholders' interests	90		$\sim$	7.02 Flexibility of wage determination	55	5.1	-
21 Strength of investor protection 0-10 (best)	41			7.03 Hiring and firing practices	73	3.7	-
21 On ongail of invosion protoculoff 0-10 (best)	41	0.3		7.04 Redundancy costs weeks of salary	41	11.2	_
2nd pillar: Infrastructure	70	4.2		7.05 Effect of taxation on incentives to work	67	4.0	-
01 Quality of overall infrastructure	87	3.6	~	7.06 Pay and productivity	76	3.8	
•					99	3.7	
02 Quality of roads	88		$\sim$	7.07 Reliance on professional management			-
03 Quality of railroad infrastructure	63	2.9		7.08 Country capacity to retain talent	100	3.0	
04 Quality of port infrastructure	70	4.1		7.09 Country capacity to attract talent	107	2.6	_
05 Quality of air transport infrastructure	72	4.3		7.10 Female participation in the labor force rati	to men 76	0.79	_
06 Available airline seat kilometers millions/week	119	25.4	$\sim$	C 9th niller, Financial market developmen	ıt 47	4.2	
7 Quality of electricity supply	83	4.6	$\sim$	8th pillar: Financial market development			
08 Mobile-cellular telephone subscriptions /100 pop.	7	167.5	\_	8.01 Availability of financial services	113	3.6	
09 Fixed-telephone lines /100 pop.	40	23.8	~	8.02 Affordability of financial services	106	3.2	
			_	8.03 Financing through local equity market	73	3.5	
3rd pillar: Macroeconomic environment	116	3.7		8.04 Ease of access to loans	84	3.6	
01 Government budget balance % GDP	105	-5.3	~	8.05 Venture capital availability	69	2.9	
02 Gross national savings % GDP	130	4.5	_^	8.06 Soundness of banks	93	4.3	
03 Inflation annual % change	72	-0.4	~	8.07 Regulation of securities exchanges	84	4.0	
04 Government debt % GDP	103	71.3		8.08 Legal rights index 0-10 (best)	1	12	
05 Country credit rating 0-100 (best)	83	38.2					
03 Country Credit rating 0-100 (best)	00	30.2		9th pillar: Technological readiness	48	4.9	
4th pillar: Health and primary education	62	5.9	$\overline{}$	9.01 Availability of latest technologies	79	4.5	
01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02 Firm-level technology absorption	87	4.3	
02 Business impact of malaria	n/a	6.7	_	9.03 FDI and technology transfer	72	4.4	
•	49	21.0	5	•	53	69.9	
03 Tuberculosis incidence cases/100,000 pop.				9.04 Internet users % pop.			-
04 Business impact of tuberculosis	28	6.5		9.05 Fixed-broadband Internet subscriptions /1		18.5	
05 HIV prevalence % adult pop.	1	0.1	_	9.06 Internet bandwidth kb/s/user	17	202.9	
06 Business impact of HIV/AIDS	15	6.6		9.07 Mobile-broadband subscriptions /100 pop.	68	60.7	
07 Infant mortality deaths/1,000 live births	31	4.3		์ 10th pillar: Market size	128	2.3	
08 Life expectancy years	51	76.3					
09 Quality of primary education	61	4.1	$\sim$	10.01 Domestic market size index	130	2.0	_
10 Primary education enrollment rate net %	91	92.9	~	10.02 Foreign market size index	125	3.1	
S	0.1		_	10.03 GDP (PPP) PPP \$ billions	131	10.4	
₹ 5th pillar: Higher education and training	61	4.5		10.04 Exports % GDP	46	42.6	
01 Secondary education enrollment rate gross %	75	90.3		dath miller Dunings and the control	101	2.0	
02 Tertiary education enrollment rate gross %	52	55.3		11th pillar: Business sophistication	101	3.6	
3 Quality of the education system	58	3.8		11.01 Local supplier quantity	113	3.9	
24 Quality of math and science education	60		$\sim$	11.02 Local supplier quality	84	4.1	
55 Quality of management schools	75	4.1		11.03 State of cluster development	109	3.1	
of Internet access in schools	69	4.1		11.04 Nature of competitive advantage	69	3.5	
				11.05 Value chain breadth	88	3.6	
77 Local availability of specialized training services	89			11.06 Control of international distribution	94	3.3	
8 Extent of staff training	109	3.4	$\overline{}$				
				11.07 Production process sophistication	103	3.3	
				11.08 Extent of marketing	96	4.1	
				11.09 Willingness to delegate authority	110	3.8	
				★ 12th pillar: Innovation	91	3.2	
				12.01 Capacity for innovation	87	3.9	-
				12.02 Quality of scientific research institutions	76	3.7	
				12.03 Company spending on R&D	83	3.2	
				12.04 University-industry collaboration in R&D	91	3.2	
				12.04 University-industry collaboration in hab		3.2	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

74 85

3.3

## Morocco



The Global Competitiveness Index 2017-2018 edition



2017-18

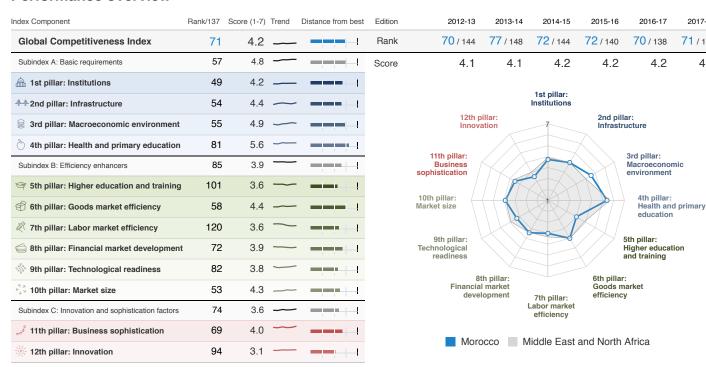
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4.2

4.2

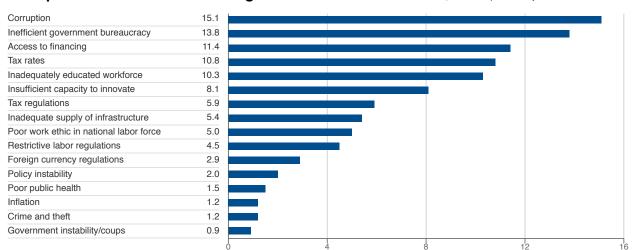
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201			
Population millions 33.8		GDP per capita US\$	3,063.1		
GDP US\$ billions	103.6	GDP (PPP) % world GDP	0.24		

#### Performance overview



#### Most problematic factors for doing business





# Morocco

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	e Tre
☆ 1st pillar: Institutions	49	4.2		1	6th pillar: Goods market efficiency	58	4.4	_
1.01 Property rights	44	4.7	$\sim$	6.0	Intensity of local competition	64	5.2	_
1.02 Intellectual property protection	53	4.4			2 Extent of market dominance	50	3.9	_
1.03 Diversion of public funds	49	4.0			Effectiveness of anti-monopoly policy	74	3.6	_
1.04 Public trust in politicians	53	3.4			Effect of taxation on incentives to invest	44	4.0	
1.05 Irregular payments and bribes	78	3.7			5 Total tax rate % profits	109	49.3	_
1.06 Judicial independence	75	3.8			No. of procedures to start a business	18	4	$\sim$
1.07 Favoritism in decisions of government officials	50	3.4			7 Time to start a business days	59	9.5	$\sim$
1.08 Efficiency of government spending	52		_		3 Agricultural policy costs	16	4.7	_
1.09 Burden of government regulation	39	3.8			Prevalence of non-tariff barriers	107	3.9	_
	67	3.6			Trade tariffs % duty	107	10.5	
1.10 Efficiency of legal framework in settling disputes					•			_
1.11 Efficiency of legal framework in challenging regulations	57	3.5	$\sim$		Prevalence of foreign ownership	44	4.9	
1.12 Transparency of government policymaking	49		_		Business impact of rules on FDI	35	5.1	
1.13 Business costs of terrorism	56	5.3	~		Burden of customs procedures	55	4.5	_
1.14 Business costs of crime and violence	36		$\overline{}$		Imports % GDP	60	47.2	^
1.15 Organized crime	37	5.4			Degree of customer orientation	78	4.5	~
1.16 Reliability of police services	34	5.6	_	6.16	Buyer sophistication	82	3.2	_
1.17 Ethical behavior of firms	71	3.8	~	250	7th pillar: Labor market efficiency	120	3.6	_
1.18 Strength of auditing and reporting standards	55	4.8	$\overline{}$					
1.19 Efficacy of corporate boards	58	5.0	$\sim$		Cooperation in labor-employer relations	115	3.8	
1.20 Protection of minority shareholders' interests	41	4.5			2 Flexibility of wage determination	36	5.4	_
1.21 Strength of investor protection 0-10 (best)	79	5.3	~	7.03	Hiring and firing practices	109	3.3	_
				7.04	Redundancy costs weeks of salary	88	20.7	_
◆ 2nd pillar: Infrastructure	54	4.4	_	7.05	5 Effect of taxation on incentives to work	52	4.2	_
2.01 Quality of overall infrastructure	42	4.7	$\sim$	7.06	Pay and productivity	96	3.6	_
2.02 Quality of roads	43	4.5	~	7.07	Reliance on professional management	79	4.0	_
2.03 Quality of railroad infrastructure	38	3.9			Country capacity to retain talent	90	3.2	_
2.04 Quality of port infrastructure	32	5.0	_		Country capacity to attract talent	69	3.3	
2.05 Quality of air transport infrastructure	54	4.8			Female participation in the labor force ratio to men	131	0.34	
2.06 Available airline seat kilometers millions/week	48	535.0		7.10	Tomale participation in the labor lorde ratio to men	101	0.01	
2.07 Quality of electricity supply	46		~		8th pillar: Financial market development	72	3.9	_
			$\overline{}$	8.0	Availability of financial services	87	4.0	_
2.08 Mobile-cellular telephone subscriptions /100 pop.	60	120.7	$\leq$		2 Affordability of financial services	76	3.7	
2.09 Fixed-telephone lines /100 pop.	96	6.0	_		Financing through local equity market	45	4.2	_
	55	4.9			Ease of access to loans	77	3.8	
•	00	4.0	_					_
3.01 Government budget balance % GDP	92	-4.2			5 Venture capital availability	90	2.6	_
3.02 Gross national savings % GDP	35	27.3			Soundness of banks	48	5.4	
3.03 Inflation annual % change	1	1.6	~		Regulation of securities exchanges	33	5.2	$\equiv$
3.04 Government debt % GDP	97	64.7		8.08	3 Legal rights index 0-10 (best)	107	2	
3.05 Country credit rating 0-100 (best)	69	51.7		3880	9th pillar: Technological readiness	82	3.8	_
3 4th pillar: Health and primary education	81	5.6			Availability of latest technologies	50	5.1	_
4.01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02	2 Firm-level technology absorption	62	4.5	~
4.02 Business impact of malaria	n/a	5.9		9.03	FDI and technology transfer	52	4.6	_
4.03 Tuberculosis incidence cases/100,000 pop.	95	107.0	/	9.04	1 Internet users % pop.	72	58.3	_
4.04 Business impact of tuberculosis	58	5.7			Fixed-broadband Internet subscriptions /100 pop.	94	3.7	_
4.05 HIV prevalence % adult pop.	1	0.1			6 Internet bandwidth kb/s/user	90	25.7	/
4.06 Business impact of HIV/AIDS	49	5.8	~		Mobile-broadband subscriptions /100 pop.	92	46.0	_
4.07 Infant mortality deaths/1,000 live births	96	23.7					10.0	
•	78			F 7 7	10th pillar: Market size	53	4.3	_
4.08 Life expectancy years		74.3	$\sim$		1 Domestic market size index	51	4.2	_
4.09 Quality of primary education	119	2.8			2 Foreign market size index	52	4.9	_
4.10 Primary education enrollment rate net %	26	98.4			-	56		
❤ 5th pillar: Higher education and training	101	3.6			O3 GDP (PPP) PPP \$ billions O4 Exports % GDP	65	281.8	=
5.01 Secondary education enrollment rate gross %	101	69.1	/		•			
5.02 Tertiary education enrollment rate gross %	86	28.1		000	11th pillar: Business sophistication	69	4.0	
5.03 Quality of the education system	120	2.7	=	11.0	1 Local supplier quantity	31	4.8	_
	80	3.8	_		2 Local supplier quality	68	4.3	_
5.04 Quality of math and science education					3 State of cluster development	60	3.8	
5.05 Quality of management schools	86	4.0			24 Nature of competitive advantage	87	3.2	_
5.06 Internet access in schools	111	3.4	$\sim$		55 Value chain breadth	58	3.9	_
5.07 Local availability of specialized training services	86	4.1						
5.08 Extent of staff training	117	3.4	$\sim$		26 Control of international distribution	71	3.6	-
					77 Production process sophistication	76	3.7	~
					08 Extent of marketing	66	4.5	_
				11.0	9 Willingness to delegate authority	98	3.9	
				辦	12th pillar: Innovation	94	3.1	_
					1 Capacity for innovation	83	3.9	_
					2 Quality of scientific research institutions	111	3.0	
					33 Company spending on R&D	93		
				12.0	33 Company Spending on had	405	0.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

105

75

60

3.0

# Mozambique

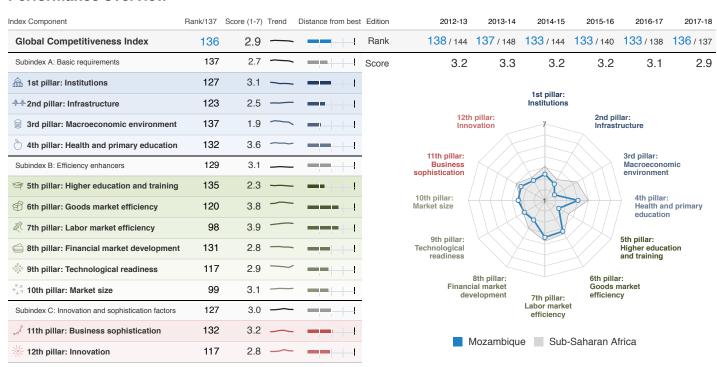
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The Global Competitiveness Index 2017-2018 edition



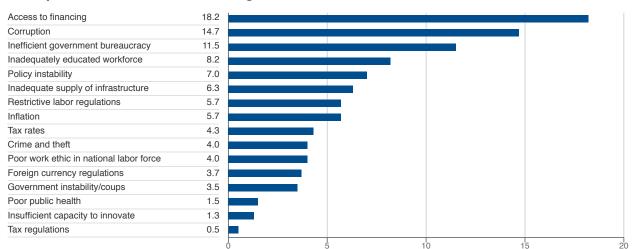
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201		
Population millions 28		GDP per capita US\$	392.4	
GDP US\$ billions	11.3	GDP (PPP) % world GDP	0.03	

#### Performance overview



#### Most problematic factors for doing business





# Mozambique

ndex Component	Rank/137	Value	e Trend	Inde	ex Component	Rank/137	Value	e Tr
â 1st pillar: Institutions	127	3.1	_	4	6th pillar: Goods market efficiency	120	3.8	_
1.01 Property rights	108	3.7		6.0	1 Intensity of local competition	118	4.5	_
1.02 Intellectual property protection	126	3.2		6.0	2 Extent of market dominance	128	2.8	_
1.03 Diversion of public funds	125	2.3		6.0	3 Effectiveness of anti-monopoly policy	132	2.6	_
1.04 Public trust in politicians	93	2.4	_	6.0	4 Effect of taxation on incentives to invest	81	3.5	_
1.05 Irregular payments and bribes	119	2.9	_		5 Total tax rate % profits	66	36.1	_
1.06 Judicial independence	115	2.9	~		6 No. of procedures to start a business	119	10	
1.07 Favoritism in decisions of government officials	110	2.4	_		7 Time to start a business days	96	19.0	
1.08 Efficiency of government spending	118	2.3	_		8 Agricultural policy costs	111	3.2	
1.09 Burden of government regulation	91	3.2	_		9 Prevalence of non-tariff barriers	124	3.7	_
	111	2.8	_		0 Trade tariffs % duty	93	7.6	
1.10 Efficiency of legal framework in settling disputes					*			_
1.11 Efficiency of legal framework in challenging regulations	124	2.5			1 Prevalence of foreign ownership	72	4.5	
1.12 Transparency of government policymaking	119	3.2			2 Business impact of rules on FDI	92	4.2	_
1.13 Business costs of terrorism	114	4.3	$\sim$		3 Burden of customs procedures	107	3.5	_
1.14 Business costs of crime and violence	117	3.4			4 Imports % GDP	18	75.1	_/
1.15 Organized crime	125	3.4	$\sim$	6.1	5 Degree of customer orientation	130	3.6	
1.16 Reliability of police services	126	2.8	_	6.1	6 Buyer sophistication	115	2.7	
1.17 Ethical behavior of firms	124	3.0		50	9	00	0.0	_
1.18 Strength of auditing and reporting standards	132	3.3	$\overline{}$	Æ,	7th pillar: Labor market efficiency	98	3.9	
.19 Efficacy of corporate boards	123	4.1	_	7.0	1 Cooperation in labor-employer relations	122	3.7	_
.20 Protection of minority shareholders' interests	130	3.1	_	7.0	2 Flexibility of wage determination	113	4.3	_
.20 Protection of minority shareholders interests .21 Strength of investor protection 0-10 (best)	107	4.3	~		3 Hiring and firing practices	102	3.4	_
.21 Ottorigiti of investor protection 0-10 (best)	107	4.3			4 Redundancy costs weeks of salary	130	37.5	_
1 2nd pillar: Infrastructure	123	2.5			5 Effect of taxation on incentives to work	71	3.9	
•								_
.01 Quality of overall infrastructure	126	2.5			6 Pay and productivity	130	2.8	_
2.02 Quality of roads	129		$\overline{}$		7 Reliance on professional management	127	3.3	_
2.03 Quality of railroad infrastructure	75	2.5			8 Country capacity to retain talent	92	3.1	_
.04 Quality of port infrastructure	88	3.6	_	7.0	9 Country capacity to attract talent	67	3.3	_
.05 Quality of air transport infrastructure	110	3.5		7.1	0 Female participation in the labor force ratio to men	1	1.10	_
06 Available airline seat kilometers millions/week	112	35.5	_		A 011 - 111 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	101	0.0	_
07 Quality of electricity supply	114	3.0	$\sim$		Sth pillar: Financial market development	131	2.8	
.08 Mobile-cellular telephone subscriptions /100 pop.	130	66.3	~	8.0	1 Availability of financial services	125	3.3	_
.09 Fixed-telephone lines /100 pop.	127	0.3		8.0	2 Affordability of financial services	126	2.7	_
				8.0	3 Financing through local equity market	122	2.5	_
3rd pillar: Macroeconomic environment	137	1.9			4 Ease of access to loans	122	2.9	_
.01 Government budget balance % GDP	112	-5.9	~~		5 Venture capital availability	121	2.2	_
.02 Gross national savings % GDP	132	-0.3	~		6 Soundness of banks	120	3.6	_
.03 Inflation annual % change	134	19.2			7 Regulation of securities exchanges	121	3.3	
•								=
.04 Government debt % GDP	131	115.2	_	8.0	8 Legal rights index 0-10 (best)	128	1	
.05 Country credit rating 0-100 (best)	111	27.5	_	888	9th pillar: Technological readiness	117	2.9	_
4th pillar: Health and primary education	132	3.6	~		1 Availability of latest technologies	121	3.7	-
01 Malaria incidence cases/100,000 pop.	68 2	9,772.0	~^	9.0	2 Firm-level technology absorption	119	3.8	_
02 Business impact of malaria	56	2.9			3 FDI and technology transfer	106	3.8	_
.03 Tuberculosis incidence cases/100,000 pop.	135	551.0	_		4 Internet users % pop.	124	17.5	
	133	3.1	_		5 Fixed-broadband Internet subscriptions /100 pop.	126	0.1	-
04 Business impact of tuberculosis								-
.05 HIV prevalence % adult pop.	130	12.3	$\overline{}$		6 Internet bandwidth kb/s/user	134	1.1	_
.06 Business impact of HIV/AIDS	131	3.1		9.0	7 Mobile-broadband subscriptions /100 pop.	83	49.5	_
.07 Infant mortality deaths/1,000 live births	127	56.7	_	4	10th pillar: Market size	99	3.1	_
.08 Life expectancy years	133	55.4	_					
.09 Quality of primary education	137	2.1			01 Domestic market size index	95	2.9	_
.10 Primary education enrollment rate net %	108	89.1	~	10.	02 Foreign market size index	107	3.7	_
~				10.	.03 GDP (PPP) PPP \$ billions	107	34.9	_
₹ 5th pillar: Higher education and training	135	2.3		10.	04 Exports % GDP	71	33.5	~
.01 Secondary education enrollment rate gross %	131	32.4	/		? <u>-</u>	400		
.02 Tertiary education enrollment rate gross %	124	6.4		00	11th pillar: Business sophistication	132	3.2	-
.03 Quality of the education system	119	2.7	_	11.	01 Local supplier quantity	130	3.5	_
.04 Quality of math and science education	130	2.6			02 Local supplier quality	131	3.2	
			_		03 State of cluster development	114	3.1	_
05 Quality of management schools	135	2.8			04 Nature of competitive advantage	109	2.9	_
06 Internet access in schools	126	3.0			.05 Value chain breadth	123	3.1	
07 Local availability of specialized training services	134	2.9	$\overline{}$					_
08 Extent of staff training	133	3.0	$\overline{}$		06 Control of international distribution	127	2.8	_
					07 Production process sophistication	130	2.6	-
				11.	08 Extent of marketing	119	3.8	-
				11.	09 Willingness to delegate authority	126	3.5	
				288	40th miller, Innevetion	117	0.0	
				7/1	12th pillar: Innovation	117	2.8	_
				12.	01 Capacity for innovation	114	3.6	_
				12.	02 Quality of scientific research institutions	124	2.7	_
					03 Company spending on R&D	109		
					04 University-industry collaboration in R&D	87	3.2	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

99

122

3.2

2.9

## Namibia



The Global Competitiveness Index 2017-2018 edition



2017-18

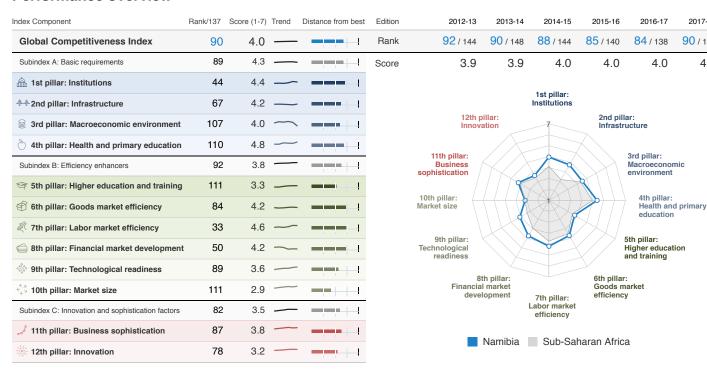
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4.0

4.0

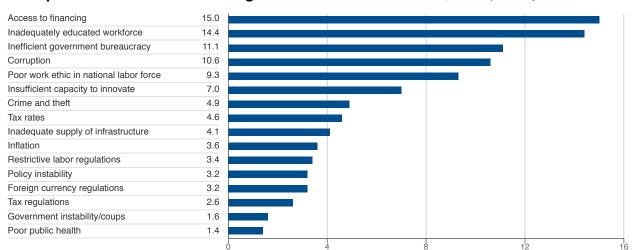
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2017)			
Population millions		GDP per capita US\$	4,629.5		
GDP US\$ billions	10.6	GDP (PPP) % world GDP	0.02		

#### Performance overview



### Most problematic factors for doing business





# **Namibia**

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	Э
â 1st pillar: Institutions	44	4.4	_		84	4.2	-
1.01 Property rights	32	5.2	_	6.01 Intensity of local competition	101	4.7	-
.02 Intellectual property protection	43	4.6	_	6.02 Extent of market dominance	93	3.4	-
.03 Diversion of public funds	59	3.7	_	6.03 Effectiveness of anti-monopoly policy	54	3.9	-
04 Public trust in politicians	47	3.5	~	6.04 Effect of taxation on incentives to invest	42	4.1	-
05 Irregular payments and bribes	60	4.2		6.05 Total tax rate % profits	12	20.7	
06 Judicial independence	29	5.3		6.06 No. of procedures to start a business	119	10	_
	74	2.9		·	132	66.0	
07 Favoritism in decisions of government officials				6.07 Time to start a business days			
.08 Efficiency of government spending	60	3.3	$\sim$	6.08 Agricultural policy costs	41	4.2	
09 Burden of government regulation	33	3.9		6.09 Prevalence of non-tariff barriers	53	4.5	
10 Efficiency of legal framework in settling disputes	29	4.6		6.10 Trade tariffs % duty	85	6.7	
11 Efficiency of legal framework in challenging regulations	21	4.4		6.11 Prevalence of foreign ownership	39	5.1	
12 Transparency of government policymaking	33	4.7		6.12 Business impact of rules on FDI	83	4.3	
13 Business costs of terrorism	27	5.8	$\overline{}$	6.13 Burden of customs procedures	67	4.2	
14 Business costs of crime and violence	103	3.9	_	6.14 Imports % GDP	24	67.9	
15 Organized crime	81	4.6	~	6.15 Degree of customer orientation	128	3.6	
16 Reliability of police services	76			6.16 Buyer sophistication	64	3.4	
	44			6.16 Bayor doprilotioation	01	0.1	
17 Ethical behavior of firms		4.3		7th pillar: Labor market efficiency	33	4.6	
18 Strength of auditing and reporting standards	38	5.2		7.01 Cooperation in labor-employer relations	61	4.4	
19 Efficacy of corporate boards	61	4.9	_				
20 Protection of minority shareholders' interests	34	4.8		7.02 Flexibility of wage determination	78	4.8	
21 Strength of investor protection 0-10 (best)	74	5.5		7.03 Hiring and firing practices	71	3.7	
A On divillant Information 1	67	4.0		7.04 Redundancy costs weeks of salary	30	9.7	
⁴ 2nd pillar: Infrastructure	67	4.2		7.05 Effect of taxation on incentives to work	43	4.3	
01 Quality of overall infrastructure	45	4.6	_	7.06 Pay and productivity	81	3.8	
02 Quality of roads	31	5.0	_	7.07 Reliance on professional management	54	4.5	
03 Quality of railroad infrastructure	51	3.3	~	7.08 Country capacity to retain talent	53	3.7	
04 Quality of port infrastructure	26			7.09 Country capacity to attract talent	46	3.7	
05 Quality of air transport infrastructure	58	4.7	$\overline{}$	7.10 Female participation in the labor force ratio to men	37	0.89	
, ,				7.10 Female participation in the labor force ratio to men	31	0.09	
06 Available airline seat kilometers millions/week	103	48.1		8th pillar: Financial market development	50	4.2	
Of Quality of electricity supply	51	5.5	~				
08 Mobile-cellular telephone subscriptions /100 pop.	87	109.2	~	8.01 Availability of financial services	49	4.5	
09 Fixed-telephone lines /100 pop.	88	7.7		8.02 Affordability of financial services	65	3.9	
	407	4.0	_	8.03 Financing through local equity market	56	3.8	
3rd pillar: Macroeconomic environment	107	4.0		8.04 Ease of access to loans	68	3.9	
01 Government budget balance % GDP	122	-7.8		8.05 Venture capital availability	71	2.8	
02 Gross national savings % GDP	92	16.6	~	8.06 Soundness of banks	38	5.5	
03 Inflation annual % change	109	6.7	~	8.07 Regulation of securities exchanges	42	4.9	
04 Government debt % GDP	53	42.1	_	8.08 Legal rights index 0-10 (best)	70	5	
05 Country credit rating 0-100 (best)	64	53.9					
00 Country Credit rating 0-100 (best)	04	30.3		9th pillar: Technological readiness	89	3.6	
4th pillar: Health and primary education	110	4.8		9.01 Availability of latest technologies	58	4.9	
01 Malaria incidence cases/100,000 pop.	46	945.0	_/	9.02 Firm-level technology absorption	69	4.4	
02 Business impact of malaria	33	4.6		9.03 FDI and technology transfer	76	4.3	
03 Tuberculosis incidence cases/100,000 pop.	134	489.0	~	9.04 Internet users % pop.	99	31.0	
						2.2	
04 Business impact of tuberculosis	116	4.1		9.05 Fixed-broadband Internet subscriptions /100 pop.	103		
05 HIV prevalence % adult pop.	133			9.06 Internet bandwidth kb/s/user	104	15.9	
06 Business impact of HIV/AIDS	116	4.0	_	9.07 Mobile-broadband subscriptions /100 pop.	62	66.1	
07 Infant mortality deaths/1,000 live births	105		~~	্টুর 10th pillar: Market size	111	2.9	
08 Life expectancy years	111	64.9					
09 Quality of primary education	86	3.6		10.01 Domestic market size index	113	2.6	
10 Primary education enrollment rate net %	105		~~	10.02 Foreign market size index	106	3.7	
				10.03 GDP (PPP) PPP \$ billions	115	26.0	
5th pillar: Higher education and training	111	3.3		10.04 Exports % GDP	39	47.4	
01 Secondary education enrollment rate gross %	104	64.8		مرگ 11th pillar: Business sophistication	87	3.8	
02 Tertiary education enrollment rate gross %	118	9.3		·			
03 Quality of the education system	92	3.3		11.01 Local supplier quantity	133	3.5	
04 Quality of math and science education	105			11.02 Local supplier quality	94	4.0	
D5 Quality of management schools	115		_	11.03 State of cluster development	91	3.5	
6 Internet access in schools	112		_	11.04 Nature of competitive advantage	61	3.7	
			$\overline{}$	11.05 Value chain breadth	105	3.3	
7 Local availability of specialized training services	111			11.06 Control of international distribution	90	3.3	
08 Extent of staff training	45	4.2	_				
				11.07 Production process sophistication	89	3.5	
				11.08 Extent of marketing	95	4.1	
				11.09 Willingness to delegate authority	40	4.7	
				* 12th pillar: Innovation	78	3.2	
				12.01 Capacity for innovation	77	4.0	
				12.02 Quality of scientific research institutions	87	3.5	
				12.03 Company spending on R&D	63	3.4	
				12.04 University-industry collaboration in R&D	83	3.3	
				12.05 Gov't procurement of advanced technology products	65	33	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

65

103

3.3

# Nepal



The Global Competitiveness Index 2017-2018 edition

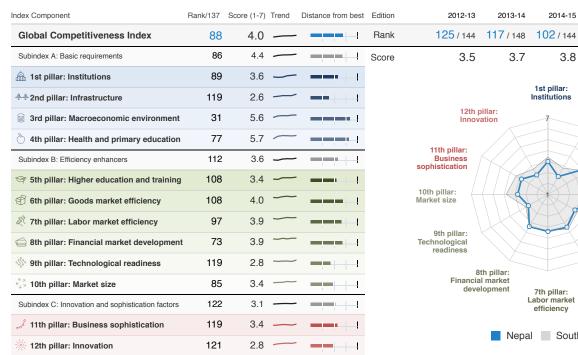


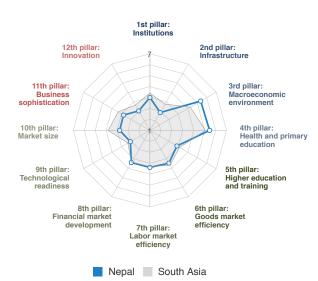
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4.0

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201			
Population millions	28.9	GDP per capita US\$	733.2		
GDP US\$ billions	21.2	GDP (PPP) % world GDP	0.06		

#### Performance overview





2014-15

3.8

2015-16

3.9

100 / 140

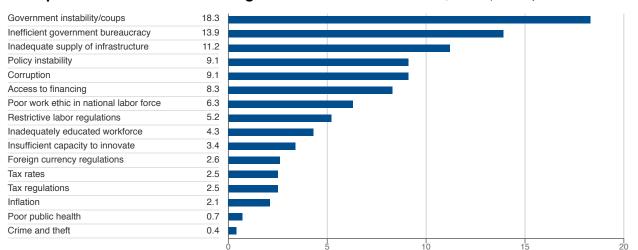
2016-17

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3.9

#### Most problematic factors for doing business





# Nepal

ndex Component	Rank/137	Value	Trend	Index	x Component	Rank/137	Value	Э .
â 1st pillar: Institutions	89	3.6	_	8	6th pillar: Goods market efficiency	108	4.0	-
1.01 Property rights	74	4.2		6.01	Intensity of local competition	92	4.8	_
1.02 Intellectual property protection	101	3.5		6.02	Extent of market dominance	127	2.8	-
1.03 Diversion of public funds	70	3.5	_	6.03	Effectiveness of anti-monopoly policy	118	3.0	-
1.04 Public trust in politicians	121	1.9		6.04	Effect of taxation on incentives to invest	53	3.8	_
1.05 Irregular payments and bribes	117	2.9	_		5 Total tax rate % profits	35	29.5	-
1.06 Judicial independence	64	4.0	_		6 No. of procedures to start a business	71	7	-
·					•			٠.
.07 Favoritism in decisions of government officials	102	2.6	_		Time to start a business days	93	17.0	
.08 Efficiency of government spending	90	2.8	)	6.08	Agricultural policy costs	84	3.6	_
.09 Burden of government regulation	82	3.3	_	6.09	Prevalence of non-tariff barriers	71	4.4	
.10 Efficiency of legal framework in settling disputes	87	3.3	_	6.10	Trade tariffs % duty	135	16.7	
.11 Efficiency of legal framework in challenging regulations	80	3.1			Prevalence of foreign ownership	134	2.9	
, ,	99	3.6	~		2 Business impact of rules on FDI	113	3.8	
.12 Transparency of government policymaking					·			
.13 Business costs of terrorism	109	4.5			Burden of customs procedures	109	3.4	
.14 Business costs of crime and violence	91	4.2	$\overline{}$	6.14	Imports % GDP	51	51.5	
.15 Organized crime	99	4.2	$\overline{}$	6.15	Degree of customer orientation	105	4.1	
.16 Reliability of police services	85	4.2		6.16	Buyer sophistication	89	3.1	
.17 Ethical behavior of firms	98	3.4						
				Æ.	7th pillar: Labor market efficiency	97	3.9	
18 Strength of auditing and reporting standards	103	4.0			Cooperation in labor-employer relations	132	3.5	
19 Efficacy of corporate boards	102	4.4						
20 Protection of minority shareholders' interests	106	3.6	$\overline{}$		Programme Progra	111	4.3	
21 Strength of investor protection 0-10 (best)	61	5.8	_	7.03	Hiring and firing practices	120	3.1	
				7.04	Redundancy costs weeks of salary	110	27.2	
2nd pillar: Infrastructure	119	2.6	_	7.05	Effect of taxation on incentives to work	68	4.0	
.01 Quality of overall infrastructure	117	2.9	~~		Pay and productivity	110	3.4	
•			_					
.02 Quality of roads	118	2.8	_		Reliance on professional management	121	3.4	
.03 Quality of railroad infrastructure	n/a	not			Country capacity to retain talent	112	2.7	
•		ssessed	_	7.09	Country capacity to attract talent	115	2.4	
04 Quality of port infrastructure	135	1.6	$\sim$	7.10	Female participation in the labor force ratio to men	17	0.94	
05 Quality of air transport infrastructure	133	2.5		_				
06 Available airline seat kilometers millions/week	79	134.7	~		8th pillar: Financial market development	73	3.9	
07 Quality of electricity supply	118	2.8	_	8.01	Availability of financial services	82	4.0	
08 Mobile-cellular telephone subscriptions /100 pop.	81	111.7	_		2 Affordability of financial services	80	3.7	
					•			
.09 Fixed-telephone lines /100 pop.	108	3.0			Financing through local equity market	42	4.2	
3rd pillar: Macroeconomic environment	31	5.6	_	8.04	Ease of access to loans	72	3.9	
'				8.05	Venture capital availability	75	2.8	
.01 Government budget balance % GDP	7	1.4	~	8.06	Soundness of banks	97	4.3	
.02 Gross national savings % GDP	6	40.3	$\sim$		Regulation of securities exchanges	86	4.0	
.03 Inflation annual % change	123	9.9	~~		•	50	6	
.04 Government debt % GDP	18	27.3	1	0.00	B Legal rights index 0-10 (best)	50	- 0	
	120	23.5	_	28%	9th pillar: Technological readiness	119	2.8	
.05 Country credit rating 0-100 (best)	120	23.3			-			
4th pillar: Health and primary education	77	5.7			Availability of latest technologies	120	3.8	
. ,				9.02	Firm-level technology absorption	123	3.7	
01 Malaria incidence cases/100,000 pop.	36	85.4	/	9.03	FDI and technology transfer	126	3.3	
02 Business impact of malaria	25	5.1	_		Internet users % pop.	120	19.7	
03 Tuberculosis incidence cases/100,000 pop.	106	156.0	$\neg$					
04 Business impact of tuberculosis	93	4.9			Fixed-broadband Internet subscriptions /100 pop.	110	0.8	
					Internet bandwidth kb/s/user	126	3.9	
.05 HIV prevalence % adult pop.	1	0.2		9.07	Mobile-broadband subscriptions /100 pop.	104	30.8	
06 Business impact of HIV/AIDS	89	5.0		42				
.07 Infant mortality deaths/1,000 live births	102	29.4	_	£ 7 7	10th pillar: Market size	85	3.4	
.08 Life expectancy years	98	70.0	~	10.0	1 Domestic market size index	78	3.4	
09 Quality of primary education	80	3.8			2 Foreign market size index	119	3.3	
10 Primary education enrollment rate net %	53	97.0			33 GDP (PPP) PPP \$ billions	85	71.5	
10 I filliary education enrollment rate fiet 78	33	37.0			,			
₹ 5th pillar: Higher education and training	108	3.4		10.0	04 Exports % GDP	136	8.2	
			_	8	11th pillar: Business sophistication	119	3.4	
.01 Secondary education enrollment rate gross %	100	69.6					0.4	
.02 Tertiary education enrollment rate gross %	105	14.9	_	11.0	1 Local supplier quantity	102	4.1	
03 Quality of the education system	69	3.7		11.0	2 Local supplier quality	129	3.4	
04 Quality of math and science education	71				3 State of cluster development	101	3.4	
05 Quality of management schools	82	4.0			Nature of competitive advantage	104	2.9	
06 Internet access in schools	103		_		5 Value chain breadth	112	3.3	
07 Local availability of specialized training services	116	3.7	_	11.0	6 Control of international distribution	114	3.0	
08 Extent of staff training	120	3.3		11.0	7 Production process sophistication	122	2.8	
- -					8 Extent of marketing	121	3.8	
					-			
				11.0	9 Willingness to delegate authority	111	3.8	
				辦	12th pillar: Innovation	121	2.8	
					1 Capacity for innovation	121	3.4	
					2 Quality of scientific research institutions	125	2.7	
				12.0	3 Company spending on R&D	125	2.6	
				12.0	4 University-industry collaboration in R&D	115	2.8	
					5 Gov't procurement of advanced technology products	108	2.8	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

108

94

2.8

## **Netherlands**



The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2				
Population millions	17.0	GDP per capita US\$	45,282.6			
GDP US\$ billions	771.2	GDP (PPP) % world GDP	0.73			

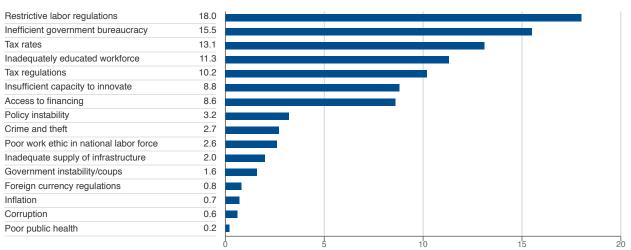
#### Performance overview

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18				
Global Competitiveness Index	4	5.7	_		Rank	5 / 144	8 / 148	8 / 144	5 / 140	4 / 138	4 / 137				
Subindex A: Basic requirements	4	6.2			Score	5.5	5.4	5.5	5.5	5.6	5.7				
🚊 1st pillar: Institutions	7	5.8	_												
<b>1</b> 2nd pillar: Infrastructure	3	6.4						1st pillar: Institutions							
	14	6.1				12th p Innova		7	2nd pilla Infrastru						
3 4th pillar: Health and primary education	4	6.7				4415 - 2115 -			•						
Subindex B: Efficiency enhancers	8	5.5	_			11th pillar: Business sophistication			3rd pillar: Macroeconomic environment						
⇒ 5th pillar: Higher education and training	4	6.1								Add willow					
	5	5.5				10th pillar: Market size			4th pillar: Health and primary education						
7th pillar: Labor market efficiency	13	5.1				\ \									
8th pillar: Financial market development	28	4.6	$\overline{}$			9th pillar: Technological readiness	/ / a		// / H	ith pillar: ligher education and training	on				
9th pillar: Technological readiness	3	6.3	_			01	h nilları		6th pillar:						
$\stackrel{\kappa_{\pi}}{\downarrow_{\varphi}}$ 10th pillar: Market size	23	5.1				Financia	8th pillar: Financial market development 7th pillar:			arket					
Subindex C: Innovation and sophistication factors	4	5.6			development 7th pillar: efficiency Labor market efficiency										
→ 11th pillar: Business sophistication	4	5.7	_						Louble America						
* 12th pillar: Innovation	6	5.6	_	1	Netherlands Europe and North America					nenca					

The Netherlands (4th) maintains its position with the support of a strong education system and high levels of tech readiness among businesses and individuals. Its thriving innovation ecosystem, ranked 6th globally, puts the country in an excellent position to shape the unfolding Fourth Industrial Revolution.

### Most problematic factors for doing business





# **Netherlands**

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	•
â 1st pillar: Institutions	7	5.8	_		5	5.5	-
1.01 Property rights	7	6.2	_	6.01 Intensity of local competition	7	5.9	-
.02 Intellectual property protection	6	6.2	_	6.02 Extent of market dominance	6	5.2	-
03 Diversion of public funds	6	6.0	$\overline{}$	6.03 Effectiveness of anti-monopoly policy	2	5.6	-
04 Public trust in politicians	7	5.6	_	6.04 Effect of taxation on incentives to invest	11	5.1	
.05 Irregular payments and bribes	13	6.2	_	6.05 Total tax rate % profits	84	40.4	
.06 Judicial independence	5	6.4	_	6.06 No. of procedures to start a business	18	4	
.07 Favoritism in decisions of government officials	6	5.5		6.07 Time to start a business days	12	4.0	-
.08 Efficiency of government spending	13	4.9		6.08 Agricultural policy costs	4	5.2	
	19		_	6.09 Prevalence of non-tariff barriers	11	5.2	
.09 Burden of government regulation							
.10 Efficiency of legal framework in settling disputes	9	5.5		6.10 Trade tariffs % duty	6	1.1	
.11 Efficiency of legal framework in challenging regulations	7		~	6.11 Prevalence of foreign ownership	26	5.3	
.12 Transparency of government policymaking	5	5.9		6.12 Business impact of rules on FDI	11	5.6	
13 Business costs of terrorism	64	5.2	_	6.13 Burden of customs procedures	6	5.8	
14 Business costs of crime and violence	42	5.1	_	6.14 Imports % GDP	12	87.2	
15 Organized crime	23	5.7		6.15 Degree of customer orientation	14	5.7	
.16 Reliability of police services	17	6.1		6.16 Buyer sophistication	20	4.4	
17 Ethical behavior of firms	8	6.0		60			
18 Strength of auditing and reporting standards	8	6.3	_	7th pillar: Labor market efficiency	13	5.1	
19 Efficacy of corporate boards	6	6.1		7.01 Cooperation in labor-employer relations	5	5.9	
20 Protection of minority shareholders' interests	15			7.02 Flexibility of wage determination	123	4.0	
21 Strength of investor protection 0-10 (best)	66		$\overline{}$	7.03 Hiring and firing practices	34	4.2	
2. On ongail of invocator protection of to (best)	00	5.7		7.04 Redundancy costs weeks of salary	68	15.8	
2nd pillar: Infrastructure	3	6.4		7.05 Effect of taxation on incentives to work	65	4.0	
.01 Quality of overall infrastructure	5	6.2		7.06 Pay and productivity	20	4.8	
.02 Quality of roads	5	6.1			1		
·				7.07 Reliance on professional management		6.3	
.03 Quality of railroad infrastructure	6	5.8	=	7.08 Country capacity to retain talent	7	5.3	
.04 Quality of port infrastructure	1	6.8		7.09 Country capacity to attract talent	11	5.1	
.05 Quality of air transport infrastructure	4	6.6		7.10 Female participation in the labor force ratio to men	46	0.88	
.06 Available airline seat kilometers millions/week	22	2,118.1	_	Oth piller, Financial market development	28	4.6	
07 Quality of electricity supply	6	6.8		8th pillar: Financial market development		4.0	
08 Mobile-cellular telephone subscriptions /100 pop.	41	130.0	~	8.01 Availability of financial services	25	5.1	
.09 Fixed-telephone lines /100 pop.	18	40.3	)	8.02 Affordability of financial services	19	4.9	
· · · · · · · · · · · · · · · · · · ·				8.03 Financing through local equity market	13	5.2	
3rd pillar: Macroeconomic environment	14	6.1		8.04 Ease of access to loans	42	4.3	
.01 Government budget balance % GDP	26	-0.5	_	8.05 Venture capital availability	21	3.9	
.02 Gross national savings % GDP	27	29.3	~	8.06 Soundness of banks	41	5.4	
.03 Inflation annual % change	54	0.1	_	8.07 Regulation of securities exchanges	11	5.8	
.04 Government debt % GDP	94		$\overline{}$	8.08 Legal rights index 0-10 (best)	96	3	
.05 Country credit rating 0-100 (best)	9	90.8		6.66 Logar righto madx 6 to (best)		Ü	
-				⋄ 9th pillar: Technological readiness	3	6.3	
4th pillar: Health and primary education	4	6.7		9.01 Availability of latest technologies	7	6.4	
01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02 Firm-level technology absorption	3	5.9	
02 Business impact of malaria	n/a	6.9		9.03 FDI and technology transfer	9	5.5	
03 Tuberculosis incidence cases/100,000 pop.	11	5.8		9.04 Internet users % pop.	12	90.4	
04 Business impact of tuberculosis	3	6.9		9.05 Fixed-broadband Internet subscriptions /100 pop.	4	42.2	
.05 HIV prevalence % adult pop.	1			9.06 Internet bandwidth kb/s/user		196.1	
.06 Business impact of HIV/AIDS	12	0.0		9.07 Mobile-broadband subscriptions /100 pop.	34	87.8	
.07 Infant mortality deaths/1,000 live births	21		_	10th pillar: Market size	23	5.1	
.08 Life expectancy years	19	81.7					
09 Quality of primary education	4	5.9		10.01 Domestic market size index	29	4.8	
10 Primary education enrollment rate net %	29	98.3	~	10.02 Foreign market size index	8	6.1	
₹ 5th pillar: Higher education and training	4	6.1		10.03 GDP (PPP) PPP \$ billions		869.4	
	5	135.5		10.04 Exports % GDP	7	96.9	
.01 Secondary education enrollment rate gross %				→ 11th pillar: Business sophistication	4	5.7	
.02 Tertiary education enrollment rate gross %	21	78.5		11.01 Local supplier quantity	10	5.2	
03 Quality of the education system	6	5.4			4	5.8	
04 Quality of math and science education	5			11.02 Local supplier quality			
05 Quality of management schools	3		_	11.03 State of cluster development	5	5.4	
06 Internet access in schools	6	6.0	$\overline{}$	11.04 Nature of competitive advantage	6	6.0	
07 Local availability of specialized training services	2	6.2		11.05 Value chain breadth	8	5.5	
08 Extent of staff training	7	5.4		11.06 Control of international distribution	4	5.4	
ŭ				11.07 Production process sophistication	4	6.2	
				11.08 Extent of marketing	4	5.6	
				11.09 Willingness to delegate authority	6	5.8	
				3V.			
				12th pillar: Innovation	6	5.6	
				12.01 Capacity for innovation	6	5.7	
				12.02 Quality of scientific research institutions	4	6.1	
				12.03 Company spending on R&D	8	5.2	
				12.04 University-industry collaboration in R&D	5	5.6	
				13.05 Gov't procurement of advanced technology products	10	11	-

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

19

19

4.1

## **New Zealand**



2015-16

16/140

5.3

2nd pillar: Infrastructure

2016-17

13/138

5.3

3rd pillar: Macroeconomic environment

5th pillar: Higher education and training

6th pillar: Goods market efficiency

Asia and Pacific

4th pillar: Health and primary education

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5.4

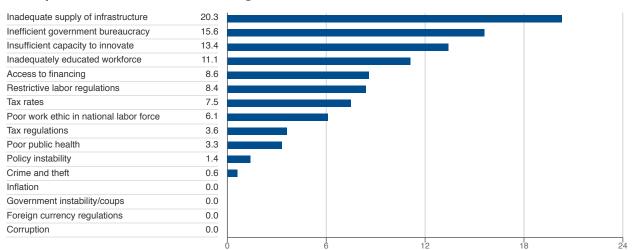
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2					
Population millions	4.7	GDP per capita US\$	38,345.4				
GDP US\$ billions	182.0	GDP (PPP) % world GDP	0.15				

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15
Global Competitiveness Index	13	5.4			Rank	23 / 144	<b>18</b> / 148	<b>17</b> / 144
Subindex A: Basic requirements	5	6.0			Score	5.1	5.1	5.2
â 1st pillar: Institutions	3	6.1	_					
<b>↑</b> 2nd pillar: Infrastructure	23	5.5						1st pillar: Institutions
	16	6.1	_			12th   Innov	pillar: vation	
3 4th pillar: Health and primary education	6	6.6	_			11th pillar:	$\wedge$	
Subindex B: Efficiency enhancers	9	5.4				Business sophistication		
⇒ 5th pillar: Higher education and training	7	6.0				4011		
	9	5.3				10th pillar: Market size		
7th pillar: Labor market efficiency	5	5.5	_			\ \		XX
8th pillar: Financial market development	: 1	5.8				9th pillar: Technological readiness		
💖 9th pillar: Technological readiness	13	6.1	_			ş	3th pillar:	
੍ਰੀ 10th pillar: Market size	64	3.9				Financia	al market elopment	7th pillar:
Subindex C: Innovation and sophistication factors	25	4.8	_					Labor marke efficiency
	24	4.9	_			■ No	ew Zealand	d East
12th pillar: Innovation	20	4.7	_			INE	vv Ztaidill	u <u> </u>

#### Most problematic factors for doing business





# **New Zealand**

Index Component	Rank/137	7 Value	e Trend	Inde	x Component	Rank/137	Value	e Tren
	3	6.1	_	1	6th pillar: Goods market efficiency	9	5.3	~
1.01 Property rights	5	6.3		6.0	1 Intensity of local competition	45	5.4	_
1.02 Intellectual property protection	5	6.2			2 Extent of market dominance	27	4.3	_
1.03 Diversion of public funds	1	6.5			3 Effectiveness of anti-monopoly policy	6	5.3	_
1.04 Public trust in politicians	3	6.1			4 Effect of taxation on incentives to invest	17	4.8	
1.05 Irregular payments and bribes	2	6.7			5 Total tax rate % profits	54	34.3	~
1.06 Judicial independence	2	6.7			6 No. of procedures to start a business	1	1	_
1.07 Favoritism in decisions of government officials	3				7 Time to start a business days	1	0.5	$\overline{}$
1.08 Efficiency of government spending	8				B Agricultural policy costs	1	5.7	
1.09 Burden of government regulation	21	4.3			9 Prevalence of non-tariff barriers	4	5.6	_
	7	5.6			Trade tariffs % duty	33	1.6	
1.10 Efficiency of legal framework in settling disputes	3							$\sim$
1.11 Efficiency of legal framework in challenging regulations		5.4			1 Prevalence of foreign ownership	21	5.4	
1.12 Transparency of government policymaking	1	6.3			2 Business impact of rules on FDI	55	4.9	
1.13 Business costs of terrorism	24	5.8	_		Burden of customs procedures	5	5.8	_
1.14 Business costs of crime and violence	25	5.3	_		4 Imports % GDP	114	26.3	
1.15 Organized crime	8	6.3	$\sim$		5 Degree of customer orientation	11	5.7	
1.16 Reliability of police services	6	6.4	_	6.16	Buyer sophistication	28	4.0	~
1.17 Ethical behavior of firms	1	6.3	$\sim$	25	7th pillar: Labor market efficiency	5	5.5	
1.18 Strength of auditing and reporting standards	4	6.3	_					
1.19 Efficacy of corporate boards	1	6.2	_	7.0	1 Cooperation in labor-employer relations	6	5.8	
1.20 Protection of minority shareholders' interests	9	5.5	_	7.02	2 Flexibility of wage determination	16	5.8	
1.21 Strength of investor protection 0-10 (best)	1	8.3	_	7.03	3 Hiring and firing practices	15	4.6	_
				7.0	4 Redundancy costs weeks of salary	1	0.0	
2nd pillar: Infrastructure	23	5.5		7.05	5 Effect of taxation on incentives to work	19	4.7	_
2.01 Quality of overall infrastructure	34	4.8		7.06	Pay and productivity	10	5.0	_
2.02 Quality of roads	40	4.7	$\sim$	7.0	7 Reliance on professional management	2	6.2	_
2.03 Quality of railroad infrastructure	46	3.5	~	7.08	B Country capacity to retain talent	22	4.6	_
2.04 Quality of port infrastructure	17	5.5			9 Country capacity to attract talent	8	5.2	_
2.05 Quality of air transport infrastructure	22	5.6			Female participation in the labor force ratio to men	40	0.89	_
2.06 Available airline seat kilometers millions/week	32	1,005.6		7.10	or critato participation in the labor lorde ratio to men	-10	0.00	
2.07 Quality of electricity supply	17	6.5			8th pillar: Financial market development	1	5.8	
3 113				8.0	1 Availability of financial services	8	5.5	
2.08 Mobile-cellular telephone subscriptions /100 pop.	51	125.0	~		2 Affordability of financial services	14	5.1	
2.09 Fixed-telephone lines /100 pop.	20	39.2	_		3 Financing through local equity market	10	5.3	
	16	6.1			4 Ease of access to loans	10	5.7	
	9	0.6						_
3.01 Government budget balance % GDP					5 Venture capital availability	16	4.1	
3.02 Gross national savings % GDP	71	20.6			6 Soundness of banks	3	6.5	
3.03 Inflation annual % change	1		_		7 Regulation of securities exchanges	8	5.9	
3.04 Government debt % GDP	25	29.5	_	8.08	B Legal rights index 0-10 (best)	1	12	_/
3.05 Country credit rating 0-100 (best)	15	86.3		3888	9th pillar: Technological readiness	13	6.1	_
3 4th pillar: Health and primary education	6	6.6	_		1 Availability of latest technologies	17	6.0	_
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02	2 Firm-level technology absorption	16	5.5	_
4.02 Business impact of malaria	n/a	n/a			3 FDI and technology transfer	22	5.2	
4.03 Tuberculosis incidence cases/100,000 pop.	22	7.4			4 Internet users % pop.	16	88.5	~
4.04 Business impact of tuberculosis	14	6.7			5 Fixed-broadband Internet subscriptions /100 pop.	18	32.4	
4.05 HIV prevalence % adult pop.	1	0.1			6 Internet bandwidth kb/s/user	42	109.6	
	7	6.7			7 Mobile-broadband subscriptions /100 pop.	21	101.3	
4.06 Business impact of HIV/AIDS 4.07 Infant mortality deaths/1,000 live births	35	4.7				۷۱	101.0	
				+ x x	10th pillar: Market size	64	3.9	
4.08 Life expectancy years	24	81.5			01 Domestic market size index	64	3.8	_
4.09 Quality of primary education	7	5.7	_		22 Foreign market size index	72	4.5	
4.10 Primary education enrollment rate net %	16	99.1	$\sim$		-	64		
⇒ 5th pillar: Higher education and training	7	6.0			03 GDP (PPP) PPP \$ billions		177.0	=
			_	10.0	04 Exports % GDP	94	26.6	
5.01 Secondary education enrollment rate gross %	15	116.6	_ `	208	11th pillar: Business sophistication	24	4.9	_
5.02 Tertiary education enrollment rate gross %	11	83.9			D1 Local supplier quantity	61	4.6	
5.03 Quality of the education system	10	5.4				17	5.3	_
5.04 Quality of math and science education	17	5.3			02 Local supplier quality			
5.05 Quality of management schools	24		_		33 State of cluster development	44	4.1	
5.06 Internet access in schools	2	6.2			04 Nature of competitive advantage	31	4.4	
5.07 Local availability of specialized training services	9	5.9			05 Value chain breadth	36	4.4	_
5.08 Extent of staff training	20	5.0			06 Control of international distribution	20	4.8	_
					77 Production process sophistication	27	5.1	_
					08 Extent of marketing	14	5.2	_
				11.0	09 Willingness to delegate authority	5	5.8	
				-384	12th pillar: Innovation	20	4.7	_
					01 Capacity for innovation	17	5.3	
					22 Quality of scientific research institutions	15	5.6	_
				12.0	O3 Company spending on R&D	26	4.4	_
					or Hairmain indicator callabaration in DOD	47	4.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

17

31

26

4.8

3.8

# Nicaragua



2016-17

3.8

4th pillar: Health and primary

education

The Global Competitiveness Index 2017-2018 edition



2017-18

93 / 137

3.9

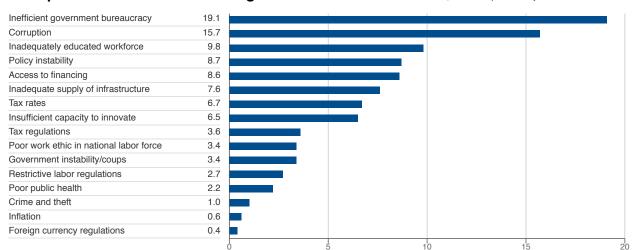
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20:				
Population millions	6.2	GDP per capita US\$	2,120.3			
GDP US\$ billions	13.0	GDP (PPP) % world GDP	0.03			

#### Performance overview



### Most problematic factors for doing business





# Nicaragua

ndex Component	Rank/137	7 Value	Trend	Index	x Component	Rank/137	Value	<b>)</b> ]
â 1st pillar: Institutions	115	3.2	~	8	6th pillar: Goods market efficiency	117	3.9	-
1.01 Property rights	122	3.5		6.01	Intensity of local competition	112	4.6	_
1.02 Intellectual property protection	121	3.2	$\sim$		Extent of market dominance	129	2.8	_
1.03 Diversion of public funds	103	2.8	$\sim$		Effectiveness of anti-monopoly policy	127	2.8	_
1.04 Public trust in politicians	129	1.7	$\sim$		Effect of taxation on incentives to invest	89	3.4	_
	114	3.0	$\sim$			125	60.8	_
1.05 Irregular payments and bribes					5 Total tax rate % profits			_
1.06 Judicial independence	136	1.6	$\sim$		No. of procedures to start a business	53	6	_
.07 Favoritism in decisions of government officials	128	2.0	$\sim$		Time to start a business days	78	13.0	_
1.08 Efficiency of government spending	86	2.9	$\sim$	6.08	Agricultural policy costs	63	3.8	_
1.09 Burden of government regulation	105	2.9	$\sim$	6.09	Prevalence of non-tariff barriers	110	3.9	-
1.10 Efficiency of legal framework in settling disputes	136	2.0	$\sim$	6.10	Trade tariffs % duty	53	3.9	_
1.11 Efficiency of legal framework in challenging regulations	133	2.2	$\sim$		Prevalence of foreign ownership	83	4.4	_
	100	3.6	$\sim$		• •	34	5.2	
1.12 Transparency of government policymaking					Business impact of rules on FDI			-
.13 Business costs of terrorism	6	6.3	_		Burden of customs procedures	137	2.2	
.14 Business costs of crime and violence	57	4.9	_	6.14	Imports % GDP	28	62.8	
.15 Organized crime	31	5.5	$\overline{}$	6.15	Degree of customer orientation	117	3.9	-
.16 Reliability of police services	84	4.2	_	6.16	Buyer sophistication	113	2.8	-
.17 Ethical behavior of firms	111	3.3	~		,,			
	72	4.5		Æ.	7th pillar: Labor market efficiency	101	3.9	
.18 Strength of auditing and reporting standards			_	7.01	Cooperation in labor-employer relations	35	4.8	
19 Efficacy of corporate boards	94	4.5						-
20 Protection of minority shareholders' interests	119	3.4	$\sim$		2 Flexibility of wage determination	95	4.6	_
21 Strength of investor protection 0-10 (best)	117	4.0	$\sim$		Hiring and firing practices	39	4.2	_
				7.04	Redundancy costs weeks of salary	61	14.9	
2nd pillar: Infrastructure	92	3.6		7.05	Effect of taxation on incentives to work	101	3.4	
01 Quality of overall infrastructure	95	3.5	~		Pay and productivity	103	3.5	
02 Quality of roads	54		_		Reliance on professional management	107	3.6	
02 Quality of roads	54							
03 Quality of railroad infrastructure	n/a	not			Country capacity to retain talent	96	3.0	
		assessed	_	7.09	Country capacity to attract talent	95	2.9	
04 Quality of port infrastructure	110	3.1	$\sim$	7.10	Female participation in the labor force ratio to men	111	0.63	
05 Quality of air transport infrastructure	102	3.8	$\overline{}$					
06 Available airline seat kilometers millions/week	122	23.7	~		8th pillar: Financial market development	100	3.6	
07 Quality of electricity supply	87	4.4	_	8.01	Availability of financial services	64	4.2	
08 Mobile-cellular telephone subscriptions /100 pop.	58	122.1	_		Affordability of financial services	92	3.5	-
09 Fixed-telephone lines /100 pop.	98	5.8	_		•			
09 Fixed-teleprione lines 7100 pop.	90	5.0			Financing through local equity market	111	2.8	_
3rd pillar: Macroeconomic environment	51	5.1			Ease of access to loans	73	3.9	
•				8.05	Venture capital availability	123	2.1	•
01 Government budget balance % GDP	42	-1.7	_	8.06	Soundness of banks	54	5.3	
02 Gross national savings % GDP	58	22.5	_	8.07	Regulation of securities exchanges	52	4.7	
03 Inflation annual % change	50	3.1			Legal rights index 0-10 (best)	128	1	_
04 Government debt % GDP	27	31.1			gaing			
05 Country credit rating 0-100 (best)	116	24.8	_	૰ૢૺૺઽ૾ૺ૰	9th pillar: Technological readiness	108	3.1	
					Availability of latest technologies	122	3.7	-
4th pillar: Health and primary education	86	5.5	$\sim$					_
01 Malaria incidence cases/100,000 pop.	34	75.6			2 Firm-level technology absorption	116	3.9	
				9.03	FDI and technology transfer	71	4.4	_ '
02 Business impact of malaria	19			9.04	Internet users % pop.	113	24.6	
03 Tuberculosis incidence cases/100,000 pop.	74	51.0	~	9.05	Fixed-broadband Internet subscriptions /100 pop.	100	2.8	
04 Business impact of tuberculosis	70	5.4			Internet bandwidth kb/s/user	88	29.2	
.05 HIV prevalence % adult pop.	1	0.2			Mobile-broadband subscriptions /100 pop.	114	22.8	_
06 Business impact of HIV/AIDS	62	5.5		9.07	Wobile-broaubarid Subscriptions 7100 pop.	114	22.0	
07 Infant mortality deaths/1,000 live births	88	18.8	_	£ 7	10th pillar: Market size	103	3.0	
			$\overline{}$					
08 Life expectancy years	62	75.1			1 Domestic market size index	106	2.7	
09 Quality of primary education	132		$\sim$	10.0	2 Foreign market size index	97	3.9	
10 Primary education enrollment rate net %	54	97.0		10.0	3 GDP (PPP) PPP \$ billions	109	33.5	
S					04 Exports % GDP	37	48.0	
3 5th pillar: Higher education and training	110	3.4	$\sim$		· · · · · · · · · · · · · · · · · · ·			
01 Secondary education enrollment rate gross %	97	74.2		200	11th pillar: Business sophistication	129	3.2	
02 Tertiary education enrollment rate gross %	n/a	n/a		11.0	1 Local supplier quantity	118	3.8	
03 Quality of the education system	134	2.3			2 Local supplier quality	123	3.5	
04 Quality of math and science education	134		$\sim$		3 State of cluster development	125	3.0	
05 Quality of management schools	62	4.3	_	11.0	Nature of competitive advantage	127	2.4	
06 Internet access in schools	123	3.1	$\sim$		5 Value chain breadth	128	2.8	
07 Local availability of specialized training services	120		$\sim$		6 Control of international distribution	123	2.9	
08 Extent of staff training	111	3.4	~		7 Production process sophistication			
oo Extent of stall training	111	0.4	_			125	2.8	
					8 Extent of marketing	115	3.9	
				11.0	9 Willingness to delegate authority	113	3.8	
				- 365-	12th pillar: Innovation	133	2.5	
						129		
					1 Capacity for innovation		3.2	
					2 Quality of scientific research institutions	135	2.1	_
				12.0	3 Company spending on R&D	133	2.4	_ '
				12.0	4 University-industry collaboration in R&D	123	2.7	
				10.0	E Gov't procurement of advanced technology products	120	2.5	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

129

130

2.5

# Nigeria

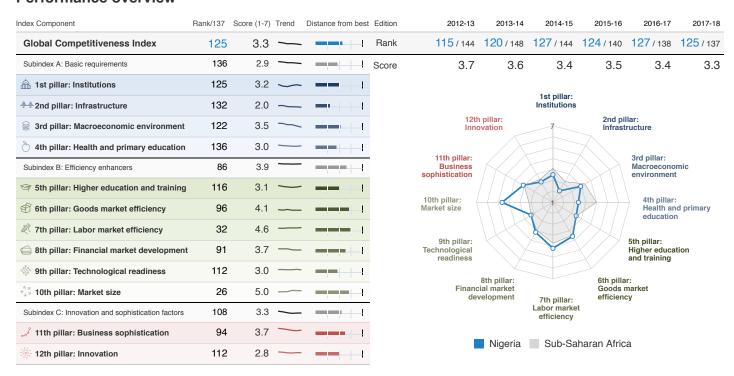


The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (Ap				
Population millions	183.6	GDP per capita US\$	2,210.6			
GDP US\$ billions	406.0	GDP (PPP) % world GDP	0.91			

#### Performance overview

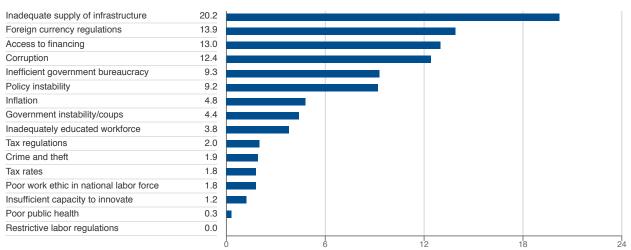


Nigeria (125th) moves up two places in the rankings despite its score having fallen every year since 2012. Its macroeconomic conditions are worsening (122nd, down 14), inflation (131st) is high at 15.7 percent, and its budget deficit (99th) has reached 4.4 percent. Institutions appear more fragile (125th, down seven), adding uncertainty to the business environment. Nigeria is struggling to adapt to lower commodity prices, with the potential for structural change impeded by

low scores on infrastructure (132nd), technological readiness (112th, down seven), higher education (116th), and innovation capacity (112th). However, new prudential requirements have strengthened the banking sector's soundness, and the Economic Recovery and Growth Plan (ERGP) for 2017-2020 contains much-needed reforms on transport and power infrastructure, the business environment, and education investment.

#### Most problematic factors for doing business





# Nigeria

Index Component	Rank/137	' Value	Trend	Inde	x Component	Rank/137	7 Value	e Tren
â 1st pillar: Institutions	125	3.2	<u>~</u>	1	6th pillar: Goods market efficiency	96	4.1	_
1.01 Property rights	104	3.8	~	6.0	Intensity of local competition	70	5.1	_
1.02 Intellectual property protection	127	3.2			2 Extent of market dominance	69	3.7	_
1.03 Diversion of public funds	132	2.1			3 Effectiveness of anti-monopoly policy	128	2.8	
1.04 Public trust in politicians	130	1.6			4 Effect of taxation on incentives to invest	43	4.1	
1.05 Irregular payments and bribes	124	2.8	_		5 Total tax rate % profits	54	34.3	$\sim$
1.06 Judicial independence	82	3.6	<b>∽</b>		No. of procedures to start a business	105	9	
1.07 Favoritism in decisions of government officials	125	2.1			7 Time to start a business days	109	25.2	₹
1.08 Efficiency of government spending	120	2.2			Agricultural policy costs	72	3.7	
1.09 Burden of government regulation	114	2.8	=		Prevalence of non-tariff barriers	36	4.8	
1.10 Efficiency of legal framework in settling disputes	99	3.0			Trade tariffs % duty	116	11.2	
		2.6	$\sim$		1 Prevalence of foreign ownership	57	4.7	_
1.11 Efficiency of legal framework in challenging regulations	104							
1.12 Transparency of government policymaking	106	3.5	$\sim$		2 Business impact of rules on FDI	37	5.1	=
1.13 Business costs of terrorism	133	3.0	_		Burden of customs procedures	128	2.9	_
1.14 Business costs of crime and violence	124	3.1			4 Imports % GDP	136	12.5	
1.15 Organized crime	110	4.0			5 Degree of customer orientation	115	3.9	
1.16 Reliability of police services	123	3.0		6.1	Buyer sophistication	79	3.3	
1.17 Ethical behavior of firms	119	3.1		25%	7th pillar: Labor market efficiency	32	4.6	_
1.18 Strength of auditing and reporting standards	66	4.6	_	od,				
1.19 Efficacy of corporate boards	55	5.0	_		1 Cooperation in labor-employer relations	94	4.1	
1.20 Protection of minority shareholders' interests	61	4.1	_		2 Flexibility of wage determination	30	5.4	_
1.21 Strength of investor protection 0-10 (best)	31	6.5	_~		Hiring and firing practices	12	4.8	_
AA On durillary Information	100	0.0	_		4 Redundancy costs weeks of salary	7	3.2	
2nd pillar: Infrastructure	132	2.0			5 Effect of taxation on incentives to work	8	5.1	_
2.01 Quality of overall infrastructure	131	2.3	_	7.0	Pay and productivity	74	3.8	_
2.02 Quality of roads	127	2.5		7.0	Reliance on professional management	47	4.6	_
2.03 Quality of railroad infrastructure	97	1.5	_	7.0	Country capacity to retain talent	70	3.4	_
2.04 Quality of port infrastructure	116	2.8		7.0	Country capacity to attract talent	52	3.6	
2.05 Quality of air transport infrastructure	125	2.9	_	7.10	Female participation in the labor force ratio to men	83	0.76	_
2.06 Available airline seat kilometers millions/week	66	227.7	$\sim$					
2.07 Quality of electricity supply	136	1.4	~		8th pillar: Financial market development	91	3.7	
2.08 Mobile-cellular telephone subscriptions /100 pop.	118	81.8		8.0	Availability of financial services	102	3.7	
2.09 Fixed-telephone lines /100 pop.	135	0.1		8.0	2 Affordability of financial services	129	2.6	_
2.09 Tixed telephone lines 7100 pop.	100	0.1			Financing through local equity market	48	4.0	
3rd pillar: Macroeconomic environment	122	3.5			4 Ease of access to loans	130	2.6	_
3.01 Government budget balance % GDP	99	-4.4	~		5 Venture capital availability	131	1.8	_
3.02 Gross national savings % GDP	107	13.1	_		Soundness of banks	99	4.3	
3.03 Inflation annual % change	131	15.7	~		Regulation of securities exchanges	57	4.6	. /
3.04 Government debt % GDP	8	18.6	~		B Legal rights index 0-10 (best)	31	7.0	$\overline{}$
3.05 Country credit rating 0-100 (best)	85	36.9	~	0.0	a Legal rights index 6-10 (best)	01		
3.03 Country Credit Fating 0-100 (best)	03	30.9		8/3	9th pillar: Technological readiness	112	3.0	_
4th pillar: Health and primary education	136	3.0		9.0	Availability of latest technologies	98	4.3	_
4.01 Malaria incidence cases/100,000 pop.	71 3	34,233.2	~	9.0	2 Firm-level technology absorption	80	4.3	_
4.02 Business impact of malaria	38	4.3	_	9.0	FDI and technology transfer	82	4.2	_
4.03 Tuberculosis incidence cases/100,000 pop.	126	322.0	_/_	9.0	4 Internet users % pop.	106	25.7	
4.04 Business impact of tuberculosis	74	5.3	_	9.0	Fixed-broadband Internet subscriptions /100 pop.	134	0.0	
4.05 HIV prevalence % adult pop.	123	2.9	~	9.0	5 Internet bandwidth kb/s/user	110	11.3	_^
4.06 Business impact of HIV/AIDS	79	5.1			7 Mobile-broadband subscriptions /100 pop.	118	21.8	
4.07 Infant mortality deaths/1,000 live births	134	69.4	_					
4.08 Life expectancy years	134	53.0		+13	10th pillar: Market size	26	5.0	
4.09 Quality of primary education	120	2.8	_	10.0	1 Domestic market size index	21	5.0	
4.10 Primary education enrollment rate net %	133	63.8	_		2 Foreign market size index	54	4.9	
	100	30.0	_		03 GDP (PPP) PPP \$ billions	23	1,091.2	_/
⇒ 5th pillar: Higher education and training	116	3.1			04 Exports % GDP	134	8.9	
5.01 Secondary education enrollment rate gross %	113	55.7			•			
5.02 Tertiary education enrollment rate gross %	114	10.1	_	ood	11th pillar: Business sophistication	94	3.7	
5.03 Quality of the education system	117	2.8		11.0	1 Local supplier quantity	64	4.6	_
5.04 Quality of math and science education	118	2.9	_	11.0	2 Local supplier quality	110	3.7	_
5.05 Quality of management schools	94	3.8	_		3 State of cluster development	97	3.4	
5.06 Internet access in schools	120	3.2	~		04 Nature of competitive advantage	125	2.5	/
5.06 Internet access in scriools 5.07 Local availability of specialized training services	73		_		55 Value chain breadth	107	3.3	_
					66 Control of international distribution	126	2.9	_
5.08 Extent of staff training	75	3.8			77 Production process sophistication	118	3.0	_
					28 Extent of marketing	45	4.7	=
					-			
				11.0	9 Willingness to delegate authority	41	4.6	
				386	12th pillar: Innovation	112	2.8	_
					1 Capacity for innovation	82	3.9	
					22 Quality of scientific research institutions	122	2.8	
					33 Company spending on R&D	108		
				12.1	33 Company Spending on had	100	2.3	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

133

100

79

2.5

2.9

# Norway



The Global Competitiveness Index 2017-2018 edition

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20				
Population millions	5.3	GDP per capita US\$	70,391.6			
GDP US\$ billions	370.4	GDP (PPP) % world GDP	0.30			

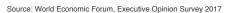
#### Performance overview

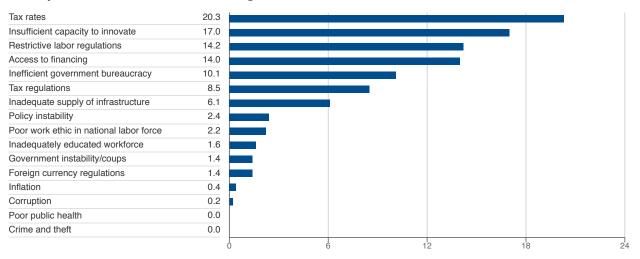
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18		
Global Competitiveness Index	11	5.4	_		Rank	<b>15</b> / 144	<b>11</b> / 148	<b>11</b> / 144	11 / 140	11 / 138	11 / 137		
Subindex A: Basic requirements	6	6.0			Score	5.3	5.3	5.4	5.4	5.4	5.4		
â 1st pillar: Institutions	6	5.8	_										
<b>↑</b> 2nd pillar: Infrastructure	34	5.0	_			1st pillar: Institutions							
	1	6.6				12th pillar: Innovation		7	2nd pill Infrastr				
3 4th pillar: Health and primary education	9	6.6					$\Lambda$						
Subindex B: Efficiency enhancers	14	5.3	_			11th pillar: Business sophistication			M	3rd pillar: Macroeconomic environment			
⇒ 5th pillar: Higher education and training	8	5.9	_			. /	I Silvation						
	22	5.0	_			10th pillar: Market size			)	4th pillar: Health and primary education			
7th pillar: Labor market efficiency	12	5.1	_							education			
8th pillar: Financial market development	t 9	5.2	_			9th pillar: Technological readiness				5th pillar: Higher educati and training	ion		
🖇 9th pillar: Technological readiness	11	6.1	_				h pillar:						
र््रेंड 10th pillar: Market size	49	4.4	_			Financial		7th nillar	6th pillar Goods m efficience	arket			
Subindex C: Innovation and sophistication factors	13	5.2				development 7th pillar: efficiency Labor market efficiency							
್ಲಾರೆ 11th pillar: Business sophistication	12	5.4	_		Norway Europe and North America								
* 12th pillar: Innovation	14	5.0											

Norway (11th) tops the macroeconomic environment pillar, a factor that has been a consistent weakness for most of its high-income peers in recent years. The country can further rely on strong institutions and a high-performing education system, both ranking among the top 10 in

the world. With high levels of information and communication technology use and a very dynamic business sector, it is well placed to capitalize on the opportunities of the digital transformation.

### Most problematic factors for doing business





# **Norway**

dex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	е -
â 1st pillar: Institutions	6	5.8	_		22	5.0	-
1.01 Property rights	9	6.2		6.01 Intensity of local competition	57	5.3	-
1.02 Intellectual property protection	19	5.8		6.02 Extent of market dominance	18	4.7	
1.03 Diversion of public funds	9	5.9	_	6.03 Effectiveness of anti-monopoly policy	9	5.3	_
1.04 Public trust in politicians	6	5.7	$\overline{}$	6.04 Effect of taxation on incentives to invest	75	3.5	
.05 Irregular payments and bribes	10	6.3	_	6.05 Total tax rate % profits	77	39.5	-
.06 Judicial independence	3	6.6		6.06 No. of procedures to start a business	18	4	-
.07 Favoritism in decisions of government officials	11	4.9	_	6.07 Time to start a business days	12	4.0	-
.08 Efficiency of government spending	18	4.6	_	6.08 Agricultural policy costs	76	3.7	_
.09 Burden of government regulation	28	4.1		6.09 Prevalence of non-tariff barriers	66	4.4	_
							-(
.10 Efficiency of legal framework in settling disputes	11	5.5		6.10 Trade tariffs % duty	43	2.7	
.11 Efficiency of legal framework in challenging regulations	14	4.8		6.11 Prevalence of foreign ownership	43	4.9	_
.12 Transparency of government policymaking	7	5.8		6.12 Business impact of rules on FDI	43	5.0	
.13 Business costs of terrorism	17	5.9	~	6.13 Burden of customs procedures	20	5.2	
14 Business costs of crime and violence	9	5.9	_	6.14 Imports % GDP	97	32.2	-
15 Organized crime	2	6.6	~	6.15 Degree of customer orientation	10	5.7	_
16 Reliability of police services	4	6.5	_	6.16 Buyer sophistication	22	4.3	-
17 Ethical behavior of firms	9	5.8		60			
18 Strength of auditing and reporting standards	2	6.4		7th pillar: Labor market efficiency	12	5.1	-
19 Efficacy of corporate boards	3	6.2		7.01 Cooperation in labor-employer relations	3	6.1	-
20 Protection of minority shareholders' interests	2	5.9	_	7.02 Flexibility of wage determination	127	3.7	
•				7.03 Hiring and firing practices	101	3.4	
21 Strength of investor protection 0-10 (best)	9	7.5		7.04 Redundancy costs weeks of salary	22	8.7	
↑ 2nd pillar: Infrastructure	34	5.0		7.05 Effect of taxation on incentives to work	78	3.8	
21 Quality of overall infrastructure				7.06 Pay and productivity			
•	24	5.2			28	4.6	
2 Quality of roads	58			7.07 Reliance on professional management	8	6.0	
3 Quality of railroad infrastructure	36		~	7.08 Country capacity to retain talent	4	5.5	
04 Quality of port infrastructure	13	5.5	~	7.09 Country capacity to attract talent	20	4.6	
5 Quality of air transport infrastructure	10	6.0	_	7.10 Female participation in the labor force ratio to men	15	0.95	
06 Available airline seat kilometers millions/week	43	626.7	/	A 4111 F1	9	F 0	
7 Quality of electricity supply	1	6.9		8th pillar: Financial market development	9	5.2	
08 Mobile-cellular telephone subscriptions /100 pop.	84	110.1	~	8.01 Availability of financial services	5	5.7	
09 Fixed-telephone lines /100 pop.	64	16.6	_	8.02 Affordability of financial services	11	5.2	Ξ.
				8.03 Financing through local equity market	9	5.4	-
3rd pillar: Macroeconomic environment	1	6.6		8.04 Ease of access to loans	11	5.1	
01 Government budget balance % GDP	4	2.9	^	8.05 Venture capital availability	17	4.1	
02 Gross national savings % GDP	13	33.7	~	8.06 Soundness of banks	8	6.3	
3 Inflation annual % change	65	3.5		8.07 Regulation of securities exchanges	6	6.0	
04 Government debt % GDP	31		~		70		
		33.2	$\simeq$	8.08 Legal rights index 0-10 (best)	70	5	
05 Country credit rating 0-100 (best)	2	94.8		9th pillar: Technological readiness	11	6.1	
4th pillar: Health and primary education	9	6.6		9.01 Availability of latest technologies	2	6.6	
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	7	5.8	
2 Business impact of malaria	n/a	7.0		9.03 FDI and technology transfer	23	5.1	_
03 Tuberculosis incidence cases/100,000 pop.	17	6.3		9.04 Internet users % pop.	4	97.3	
04 Business impact of tuberculosis	1	7.0	_	9.05 Fixed-broadband Internet subscriptions /100 pop.	6	40.4	
	1	0.2		9.06 Internet bandwidth kb/s/user	10	269.0	
05 HIV prevalence % adult pop.	2	6.8	=				
06 Business impact of HIV/AIDS				9.07 Mobile-broadband subscriptions /100 pop.	20	101.8	_
77 Infant mortality deaths/1,000 live births	5	2.0	~	€3 10th pillar: Market size	49	4.4	
08 Life expectancy years	14	82.1					
9 Quality of primary education	12	5.5		10.01 Domestic market size index	47	4.2	
10 Primary education enrollment rate net %	6	99.8		10.02 Foreign market size index	49	5.0	
₹ 5th pillar: Higher education and training	8	5.9		10.03 GDP (PPP) PPP \$ billions	47	364.4	
				10.04 Exports % GDP	68	33.8	
D1 Secondary education enrollment rate gross % D2 Tertiary education enrollment rate gross %	17	113.0		→ 11th pillar: Business sophistication	12	5.4	
,	23	76.7	=	11.01 Local supplier quantity	69	4.6	
33 Quality of the education system	11	5.3		11.02 Local supplier quality	12	5.5	
04 Quality of math and science education	24						
5 Quality of management schools	19			11.03 State of cluster development	15	5.0	
6 Internet access in schools	8	6.0	$\sim$	11.04 Nature of competitive advantage	18	5.7	
7 Local availability of specialized training services	13	5.7	_	11.05 Value chain breadth	24	4.8	
8 Extent of staff training	3	5.4		11.06 Control of international distribution	16	5.0	
-				11.07 Production process sophistication	3	6.2	
				11.08 Extent of marketing	16	5.2	
				11.09 Willingness to delegate authority	3	6.1	
				.1/	14		
				** 12th pillar: Innovation		5.0	
				12.01 Capacity for innovation	18	5.3	
				12.02 Quality of scientific research institutions	18	5.4	
				12.03 Company spending on R&D	18	4.9	
				12.04 University-industry collaboration in R&D	20	4.8	
				12.05 Gov't procurement of advanced technology products	18	11	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

18

14

4.1

## **J**man

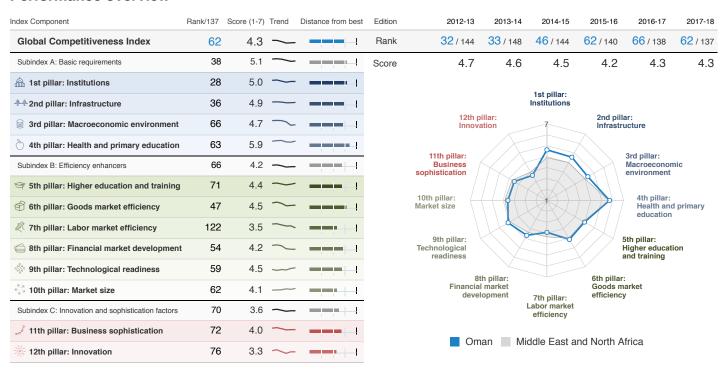


The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World	d Economic Outlook Database (April 2017)
Population millions 4.0		GDP per capita US\$	15,964.0
GDP US\$ billions	63.2	GDP (PPP) % world GDP	0.15

#### Performance overview

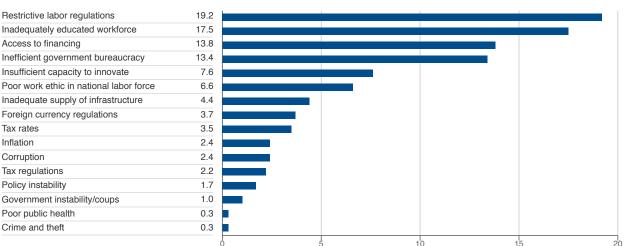


Oman (62nd) moves up by four places. Oman improves in terms of its macroeconomic environment and higher education and training. The government is passing substantial fiscal reforms to help the economy adjust to the new situation of low oil prices and preserve the sustainability of public finances. These reforms include a cut in fuels

subsidies and other distortive fiscal measures, an increase in corporate tax and the introduction of GCC-wide VAT system in 2018. Overall, the country can rely on strong institutions and infrastructure, however, it needs to continue efforts to upgrade education and training systems and fundamentally reform the labour markets.

#### Most problematic factors for doing business







Index	Component	Rank/13	7 Value	Trend	Index Component	Rank/13	37 Valu	e Tre
	1st pillar: Institutions	28	5.0	~		47	4.5	~
1.01	Property rights	27	5.4	~~	6.01 Intensity of local competition	113	4.6	_
1.02	Intellectual property protection	35	4.8	~	6.02 Extent of market dominance	111	3.2	^
	Diversion of public funds	30	4.8	$\sim$	6.03 Effectiveness of anti-monopoly policy	66	3.7	^
1.04	Public trust in politicians	19	4.7	~	6.04 Effect of taxation on incentives to inves	9	5.2	^
1.05	Irregular payments and bribes	33	5.2	~	6.05 Total tax rate % profits	21	23.9	_
1.06	Judicial independence	42	4.7	$\sim$	6.06 No. of procedures to start a business	18	4	
1.07	Favoritism in decisions of government officials	35	3.9	$\sim$	6.07 Time to start a business days	35	6.3	
	Efficiency of government spending	10	5.1	_	6.08 Agricultural policy costs	24	4.4	~
	Burden of government regulation	46	3.7	$\sim$	6.09 Prevalence of non-tariff barriers	40	4.6	_
1.10	Efficiency of legal framework in settling disputes	27	4.6	~	6.10 Trade tariffs % duty	62	4.2	~
	Efficiency of legal framework in challenging regulations	32	4.1	$\sim$	6.11 Prevalence of foreign ownership	98		_
	Transparency of government policymaking	37	4.6	~	6.12 Business impact of rules on FDI	100		_
	Business costs of terrorism	11	6.1	~	6.13 Burden of customs procedures	50		_
	Business costs of crime and violence	5	6.3	_	6.14 Imports % GDP	61	47.0	_
	Organized crime	3	6.6	~	6.15 Degree of customer orientation	88		_
	Reliability of police services	11	6.3	~	6.16 Buyer sophistication	74		~
	Ethical behavior of firms	31	4.7	~	a.		0.0	
	Strength of auditing and reporting standards	40	5.2	_	7th pillar: Labor market efficiency	122	3.5	
				$\overline{}$	7.01 Cooperation in labor-employer relations	52	4.5	_
	Efficacy of corporate boards  Protection of minority chareholders' interests	41	5.1		7.02 Flexibility of wage determination	56		_
	Protection of minority shareholders' interests	26		$\overline{}$	7.03 Hiring and firing practices	121	3.1	_
1.21	Strength of investor protection 0-10 (best)	100	4.7	~			not	
11	2nd pillar: Infrastructure	36	4.9		7.04 Redundancy costs weeks of salary	136	possible	_
2.01	Quality of overall infrastructure	32	4.9	_	7.05 Effect of taxation on incentives to work	6		_
	Quality of roads	14	5.5	_	7.06 Pay and productivity	73		^
0.00	Quality of valleage infrastructure	2/2	not		7.07 Reliance on professional management	60	4.5	_
2.03	Quality of railroad infrastructure	n/a	assessed		7.08 Country capacity to retain talent	36	4.2	_
2.04	Quality of port infrastructure	48	4.6	$\sim$	7.09 Country capacity to attract talent	29	4.3	/
2.05	Quality of air transport infrastructure	56	4.7	$\sim$	7.10 Female participation in the labor force	ratio to men 127	0.36	_
2.06	Available airline seat kilometers millions/week	54	397.0	_		. 54	4.0	
2.07	Quality of electricity supply	28	6.2	~	8th pillar: Financial market development	ent 54	4.2	
2.08	Mobile-cellular telephone subscriptions /100 pop.	13	159.2	1	8.01 Availability of financial services	41	4.6	
	Fixed-telephone lines /100 pop.	83	9.8	~~	8.02 Affordability of financial services	32	4.5	_
_					8.03 Financing through local equity market	35	4.4	_
	3rd pillar: Macroeconomic environment	66	4.7	_	8.04 Ease of access to loans	24	4.7	$\sim$
3.01	Government budget balance % GDP	137	-20.6	$\overline{}$	8.05 Venture capital availability	34	3.5	\
3.02	Gross national savings % GDP	57	22.5	~	8.06 Soundness of banks	51	5.3	_
3.03	Inflation annual % change	1	1.1	~	8.07 Regulation of securities exchanges	35	5.2	
3.04	Government debt % GDP	34	34.3	_/	8.08 Legal rights index 0-10 (best)	128	1	$\neg$
3.05	Country credit rating 0-100 (best)	41	67.0	_	9th pillar: Technological readiness	59	4.5	_
ð	4th pillar: Health and primary education	63	5.9	$\sim$	9.01 Availability of latest technologies	61		_
4 01	Malaria incidence cases/100,000 pop.	1	0.0		9.02 Firm-level technology absorption	52		
	Business impact of malaria	n/a	6.0		9.03 FDI and technology transfer	87		_
	Tuberculosis incidence cases/100,000 pop.	27	8.4	$\overline{}$	9.04 Internet users % pop.	54		
	Business impact of tuberculosis	54	5.8	_	9.05 Fixed-broadband Internet subscriptions			~
	HIV prevalence % adult pop.	1	0.1		9.06 Internet bandwidth kb/s/user	7100 pop. <b>64</b>		
	• • • • • • • • • • • • • • • • • • • •	54	5.7	$\overline{}$				
	Business impact of HIV/AIDS	60	9.9	<u></u>	9.07 Mobile-broadband subscriptions /100 po	,. 28	91.3	
	Infant mortality deaths/1,000 live births			~_	5 10th pillar: Market size	62	4.1	_
	Life expectancy years  Ouglity of primary education	43	77.3		10.01 Domestic market size index	62	3.8	
	Quality of primary education	78	3.9	$\sim$	10.02 Foreign market size index	63		
4.10	Primary education enrollment rate net %	77	94.5	. ~	10.03 GDP (PPP) PPP \$ billions	61	184.8	
9	5th pillar: Higher education and training	71	4.4	~	10.03 GDP (PPP) PPP \$ billions 10.04 Exports % GDP	54		=
5.01	Secondary education enrollment rate gross %	32	104.2	~	•	70		_
5.02	Tertiary education enrollment rate gross %	58	50.5		11th pillar: Business sophistication	72		
5.03	Quality of the education system	75	3.6	~~	11.01 Local supplier quantity	116		
5.04	Quality of math and science education	84	3.7	$\sim$	11.02 Local supplier quality	87		_
5.05	Quality of management schools	116	3.5	~~	11.03 State of cluster development	72	3.7	_
	Internet access in schools	79	4.0		11.04 Nature of competitive advantage	66	3.6	$\hat{}$
	Local availability of specialized training services	113	3.7		11.05 Value chain breadth	69	3.8	
	Extent of staff training	48	4.2		11.06 Control of international distribution	51	3.9	_
	· · · · <b>y</b>	.5			11.07 Production process sophistication	57	4.0	_
					11.08 Extent of marketing	102	4.1	~
					11.09 Willingness to delegate authority	76		
						76		~
					12.01 Capacity for innovation	92		
					12.02 Quality of scientific research institution			
					12.03 Company spending on R&D	106		
					12.04 University-industry collaboration in R&		3.6	
					12.05 Gov't procurement of advanced technol			_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers 12.07 PCT patents applications/million pop.

38

## **Pakistan**

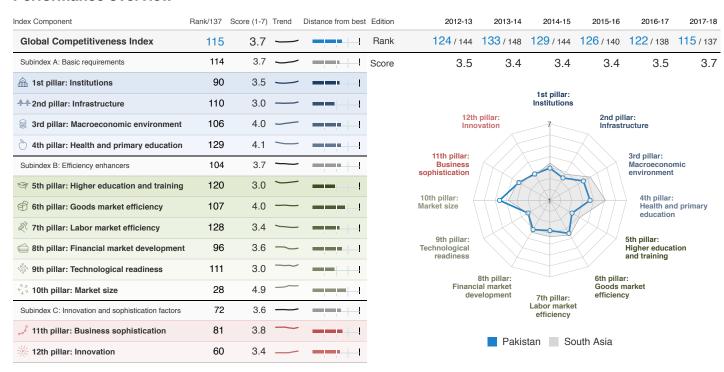


The Global Competitiveness Index 2017-2018 edition



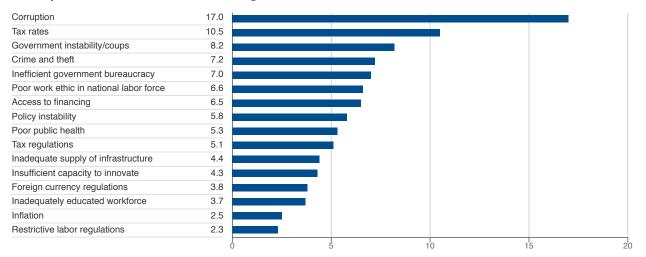
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2017)				
Population millions 193.6		GDP per capita US\$	1,468.2			
GDP US\$ billions	284.2	GDP (PPP) % world GDP	0.82			

#### Performance overview



#### Most problematic factors for doing business





# **Pakistan**

ndex Component	Rank/137	Value	Trend	Index Cor	mponent	Rank/137	Value	Э
â 1st pillar: Institutions	90	3.5	_	<b>❸</b> 6th	pillar: Goods market efficiency	107	4.0	-
1.01 Property rights	115	3.6		6.01 Inte	ensity of local competition	120	4.4	-
.02 Intellectual property protection	97	3.6		6.02 Ext	tent of market dominance	71	3.7	~
.03 Diversion of public funds	66	3.5		6.03 Effe	ectiveness of anti-monopoly policy	70	3.7	-
.04 Public trust in politicians	62	3.2			ect of taxation on incentives to invest	85	3.4	-
.05 Irregular payments and bribes	102	3.2			tal tax rate % profits	52	33.3	-
.06 Judicial independence	80	3.6	_		of procedures to start a business	126	12	
	62	3.2			•	94	18.0	
.07 Favoritism in decisions of government officials					ne to start a business days			
.08 Efficiency of government spending	58	3.4			ricultural policy costs	92	3.5	
.09 Burden of government regulation	64		~		evalence of non-tariff barriers	106	3.9	
.10 Efficiency of legal framework in settling disputes	83	3.4			ade tariffs % duty	136	17.2	
.11 Efficiency of legal framework in challenging regulations	69	3.3	_	6.11 Pre	evalence of foreign ownership	112	3.8	
.12 Transparency of government policymaking	97	3.6	$\sim$	6.12 <b>Bus</b>	siness impact of rules on FDI	102	4.1	
.13 Business costs of terrorism	130	3.1	$\overline{}$	6.13 Bur	rden of customs procedures	93	3.7	
.14 Business costs of crime and violence	121	3.1	_	6.14 lmp	ports % GDP	127	19.2	
.15 Organized crime	127	3.3	_	6.15 <b>De</b>	gree of customer orientation	116	3.9	
.16 Reliability of police services	116	3.3			yer sophistication	56	3.6	
				0.10 Du	yer sopriistication	30	0.0	
17 Ethical behavior of firms	79	3.7		💐 7th	pillar: Labor market efficiency	128	3.4	
18 Strength of auditing and reporting standards	110	3.8	~		·	105	2.6	
19 Efficacy of corporate boards	121	4.1			operation in labor-employer relations	125	3.6	
20 Protection of minority shareholders' interests	109		_		exibility of wage determination	122	4.1	
21 Strength of investor protection 0-10 (best)	26	6.7			ing and firing practices	63	3.8	
On double laterates	110	0.0			dundancy costs weeks of salary	110	27.2	
2nd pillar: Infrastructure	110	3.0		7.05 Effe	ect of taxation on incentives to work	89	3.6	
01 Quality of overall infrastructure	82	3.8		7.06 Pay	y and productivity	82	3.8	
02 Quality of roads	76	3.9	_	7.07 Rel	liance on professional management	106	3.6	
03 Quality of railroad infrastructure	52	3.3	_	7.08 Cou	untry capacity to retain talent	58	3.6	
04 Quality of port infrastructure	73	4.0			untry capacity to attract talent	65	3.3	
05 Quality of air transport infrastructure	91	4.0			male participation in the labor force ratio to men	133	0.30	
06 Available airline seat kilometers millions/week	46	551.3		7.10 1 61	male participation in the labor force ratio to men	100	0.00	
			—,	€ 8th	pillar: Financial market development	96	3.6	
07 Quality of electricity supply	115	2.9	$\sim$		ailability of financial services	89	3.9	
08 Mobile-cellular telephone subscriptions /100 pop.	126	71.4			•	73	3.8	
09 Fixed-telephone lines /100 pop.	115	1.6	$\sim$		ordability of financial services			
3rd pillar: Macroeconomic environment	106	4.0			nancing through local equity market	58	3.8	
'					se of access to loans	88	3.6	
01 Government budget balance % GDP	95	-4.3			nture capital availability	39	3.4	
.02 Gross national savings % GDP	105	14.1	~~	8.06 <b>So</b> t	undness of banks	89	4.3	
03 Inflation annual % change	1	2.9	~	8.07 <b>Re</b> (	gulation of securities exchanges	91	3.9	
04 Government debt % GDP	98	66.9		8.08 Leg	gal rights index 0-10 (best)	96	3	
05 Country credit rating 0-100 (best)	109	27.9		ળીય 🛶		444	0.0	
4th pillar: Health and primary education	129	4.1			pillar: Technological readiness	111	3.0	
· · · · · ·		4.1			ailability of latest technologies	70	4.7	
01 Malaria incidence cases/100,000 pop.	42	542.1	~	9.02 Firr	m-level technology absorption	88	4.3	
02 Business impact of malaria	43	3.8	$\overline{}$	9.03 FD	I and technology transfer	69	4.4	
03 Tuberculosis incidence cases/100,000 pop.	122	270.0	_/_	9.04 Inte	ernet users % pop.	125	15.5	
04 Business impact of tuberculosis	123	3.9	$\overline{}$	9.05 Fix	ed-broadband Internet subscriptions /100 pop.	108	0.9	
05 HIV prevalence % adult pop.	1	0.1			ernet bandwidth kb/s/user	102	16.6	
06 Business impact of HIV/AIDS	121	3.6	$\overline{}$		bile-broadband subscriptions /100 pop.	120	20.1	
07 Infant mortality deaths/1,000 live births	132		<b>~</b>					
	108		<u>~</u>	€3 10t	th pillar: Market size	28	4.9	
08 Life expectancy years					omestic market size index	22	5.0	
09 Quality of primary education	100				oriegn market size index	59	4.8	
10 Primary education enrollment rate net %	131	73.8	~		DP (PPP) PPP \$ billions			
₹ 5th pillar: Higher education and training	120	3.0	_		xports % GDP	25 135	988.2	
01 Secondary education enrollment rate gross %	119	44.5		10.04 EX	APUITO 70 GUP	133	8.4	
02 Tertiary education enrollment rate gross %	116		-	್ಯಾ <sup>8</sup> 11tl	th pillar: Business sophistication	81	3.8	
,			_	11.01 L o	ocal supplier quantity	107	4.1	
03 Quality of the education system	61				ocal supplier quality	108	3.8	
04 Quality of math and science education	96				tate of cluster development	55	3.9	
05 Quality of management schools	102	3.8			·			
106 Internet access in schools	98	3.6	~		ature of competitive advantage	68	3.5	
77 Local availability of specialized training services	99	4.0			alue chain breadth	74	3.8	
8 Extent of staff training	93	3.6		11.06 Co	ontrol of international distribution	67	3.7	
-				11.07 Pr	roduction process sophistication	75	3.7	
				11.08 Ex	xtent of marketing	103	4.1	
					/illingness to delegate authority	101	3.9	
					th pillar: Innovation	60	3.4	
					apacity for innovation	80		
					uality of scientific research institutions	67	3.8	
				12.03 <b>C</b> C	ompany spending on R&D	52	3.5	
				12.04 Ur	niversity-industry collaboration in R&D	63	3.5	
				12.05 (2)	ov't procurement of advanced technology products	33	3 8	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

33

63

3.8

# **Panama**



The Global Competitiveness Index 2017-2018 edition



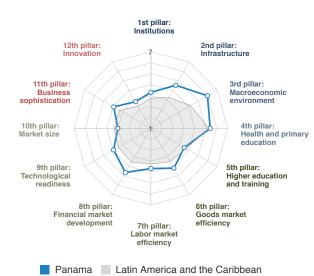
2017-18 50 / 137

4.4

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20			
Population millions 4.0		GDP per capita ∪s\$	13,654.1		
GDP US\$ billions	55.1	GDP (PPP) % world GDP	0.08		

#### Performance overview

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13
Global Competitiveness Index	50	4.4			Rank	40 / 144
Subindex A: Basic requirements	37	5.1			Score	4.5
1st pillar: Institutions	74	3.8	~			
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	37	4.9	~			
3rd pillar: Macroeconomic environment	11	6.1				12th pi Innova
4th pillar: Health and primary education	79	5.6	~~			
Subindex B: Efficiency enhancers	57	4.3	_			11th pillar: Business sophistication
⇒ 5th pillar: Higher education and training	88	4.0	~			
fth pillar: Goods market efficiency	41	4.6	_			10th pillar: Market size
7th pillar: Labor market efficiency	76	4.1	~~			
ath pillar: Financial market development	14	5.0	_			9th pillar: Technological readiness
🖖 9th pillar: Technological readiness	63	4.4	<u></u>			811
្ទី 10th pillar: Market size	79	3.6	_			Financial develo
Subindex C: Innovation and sophistication factors	48	3.9				
المرح 11th pillar: Business sophistication	44	4.4				Panam
12th pillar: Innovation	55	3.4	_			- ranam



2014-15

4.4

48 / 144

2015-16

50 / 140

4.4

2016-17

42 / 138

4.5

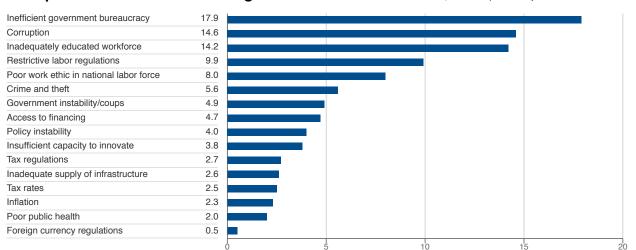
2013-14

4.5

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### Most problematic factors for doing business





# **Panama**

Index Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	Trend
â 1st pillar: Institutions	74	3.8	~	<b>❸</b> 6th pillar: Goods market efficiency	41	4.6	_
1.01 Property rights	41	4.8	~	6.01 Intensity of local competition	48	5.3	_
1.02 Intellectual property protection	38	4.7	~	6.02 Extent of market dominance	43	4.1	_
1.03 Diversion of public funds	104	2.8		6.03 Effectiveness of anti-monopoly policy	52	3.9	_
1.04 Public trust in politicians	108	2.1	_	6.04 Effect of taxation on incentives to invest	15	4.9	
1.05 Irregular payments and bribes	74	3.8	$\sim$	6.05 Total tax rate % profits	69	37.2	\
1.06 Judicial independence	120	2.8	_	6.06 No. of procedures to start a business	36	5	_
1.07 Favoritism in decisions of government officials	101	2.6	$\overline{}$	6.07 Time to start a business days	30	6.0	
1.08 Efficiency of government spending	93	2.7	_	6.08 Agricultural policy costs	118	3.1	$\overline{}$
1.09 Burden of government regulation	50	3.7		6.09 Prevalence of non-tariff barriers	31	4.9	
	101	3.0		6.10 Trade tariffs % duty	66	4.7	_
1.10 Efficiency of legal framework in settling disputes     1.11 Efficiency of legal framework in challenging regulations			_		11	5.6	$\sim$
, , ,	92	2.9		6.11 Prevalence of foreign ownership			
1.12 Transparency of government policymaking	60	4.1		6.12 Business impact of rules on FDI	13	5.6	
1.13 Business costs of terrorism	22	5.8	~	6.13 Burden of customs procedures	52	4.5	~
1.14 Business costs of crime and violence	90		_	6.14 Imports % GDP	74	41.8	_
1.15 Organized crime	68	4.9		6.15 Degree of customer orientation	83	4.5	~
1.16 Reliability of police services	66	4.4	~	6.16 Buyer sophistication	55	3.6	$\sim$
1.17 Ethical behavior of firms	87	3.6	_	8 74 -: II I -b	76	4.1	
1.18 Strength of auditing and reporting standards	39	5.2	~	7th pillar: Labor market efficiency	76	4.1	~
1.19 Efficacy of corporate boards	45	5.1	_	7.01 Cooperation in labor-employer relations	55	4.5	_
1.20 Protection of minority shareholders' interests	45	4.4	~	7.02 Flexibility of wage determination	92	4.6	_
1.21 Strength of investor protection 0-10 (best)	66		_	7.03 Hiring and firing practices	100	3.4	$\overline{}$
2		5.7		7.04 Redundancy costs weeks of salary	78	18.1	
◆ 2nd pillar: Infrastructure	37	4.9		7.05 Effect of taxation on incentives to work	38	4.3	_
2.01 Quality of overall infrastructure	38	4.7	~	7.06 Pay and productivity	83	3.7	_
2.02 Quality of roads	49	4.4		7.00 Reliance on professional management	63	4.4	
2.03 Quality of railroad infrastructure	24			7.08 Country capacity to retain talent	28	4.5	
•	6				16	4.8	
2.04 Quality of port infrastructure			_	7.09 Country capacity to attract talent			
2.05 Quality of air transport infrastructure	11	6.0		7.10 Female participation in the labor force ratio to men	101	0.65	
2.06 Available airline seat kilometers millions/week	50	462.2		8th pillar: Financial market development	14	5.0	
2.07 Quality of electricity supply	56	5.2	$\sim$				_
2.08 Mobile-cellular telephone subscriptions /100 pop.	6	172.3	~	8.01 Availability of financial services	11	5.4	
2.09 Fixed-telephone lines /100 pop.	66	15.8	~	8.02 Affordability of financial services	9	5.2	
8 0-d-:		6.1		8.03 Financing through local equity market	40	4.3	~
	11	6.1	_	8.04 Ease of access to loans	14	5.1	~
3.01 Government budget balance % GDP	52	-2.2	~	8.05 Venture capital availability	26	3.7	~
3.02 Gross national savings % GDP	5	41.8		8.06 Soundness of banks	14	5.9	
3.03 Inflation annual % change	1	0.7	~	8.07 Regulation of securities exchanges	29	5.3	
3.04 Government debt % GDP	47	39.2	^	8.08 Legal rights index 0-10 (best)	31	7	
3.05 Country credit rating 0-100 (best)	52	58.0	_	¢.			
				💖 9th pillar: Technological readiness	63	4.4	
4th pillar: Health and primary education	79	5.6	~	9.01 Availability of latest technologies	37	5.4	_
4.01 Malaria incidence cases/100,000 pop.	29	16.6	_	9.02 Firm-level technology absorption	35	5.1	_
4.02 Business impact of malaria	10	5.6	_	9.03 FDI and technology transfer	8	5.5	_
4.03 Tuberculosis incidence cases/100,000 pop.	73	50.0		9.04 Internet users % pop.	77	54.0	~
4.04 Business impact of tuberculosis	68	5.4	$\overline{}$	9.05 Fixed-broadband Internet subscriptions /100 pop.	75	9.5	$\sim$
			_				^
4.05 HIV prevalence % adult pop.	100	0.8		9.06 Internet bandwidth kb/s/user	71	55.1	
4.06 Business impact of HIV/AIDS	98	4.8		9.07 Mobile-broadband subscriptions /100 pop.	106	29.7	
4.07 Infant mortality deaths/1,000 live births	80	14.6	_	10th pillar: Market size	79	3.6	_
4.08 Life expectancy years	41	77.8					
4.09 Quality of primary education	102	3.2		10.01 Domestic market size index	80	3.3	_
4.10 Primary education enrollment rate net %	86	93.4	~	10.02 Foreign market size index	76	4.3	
S Pak -: Illand History advisor'	00	4.0	_	10.03 GDP (PPP) PPP \$ billions	77	92.9	_
5th pillar: Higher education and training	88	4.0	~	10.04 Exports % GDP	56	40.4	
5.01 Secondary education enrollment rate gross %	96	75.6	~	114h miller, Business og - bi-titi	11	1 1	
5.02 Tertiary education enrollment rate gross %	73	38.7	~~	and 11th pillar: Business sophistication	44	4.4	
5.03 Quality of the education system	96	3.2	~	11.01 Local supplier quantity	68	4.6	_
5.04 Quality of math and science education	112	3.1	_	11.02 Local supplier quality	44	4.7	_
5.05 Quality of management schools	89	4.0	~	11.03 State of cluster development	46	4.1	_
5.06 Internet access in schools	60	4.4	~	11.04 Nature of competitive advantage	34	4.3	
5.07 Local availability of specialized training services	85	4.1		11.05 Value chain breadth	44	4.2	
			$\stackrel{\sim}{-}$	11.06 Control of international distribution	43	4.1	
5.08 Extent of staff training	68	4.0	_	11.07 Production process sophistication	56	4.0	$\tilde{}$
				11.07 Froduction process sophistication	37		_
						4.8	
				11.09 Willingness to delegate authority	46	4.5	
				12th pillar: Innovation	55	3.4	_
				12.01 Capacity for innovation	53	4.3	
				12.02 Quality of scientific research institutions	72	3.7	_
				12.03 Company spending on R&D	59	3.4	~
				12.04 University-industry collaboration in R&D	79		~
				12.04 Onliversity-industry collaboration in FAD	51		_
				iz.ua czov i procurement di advanced technology products	51	ა.ე	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

51

64 67

3.5

# **Paraguay**



The Global Competitiveness Index 2017-2018 edition



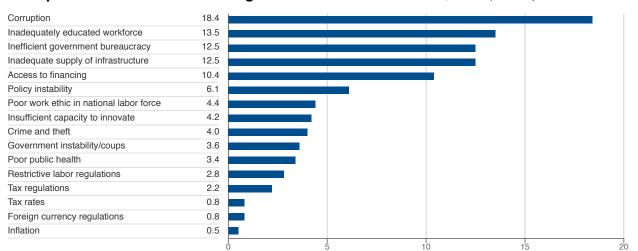
Key indicators, 2016		Source: International Monetary Fund; World	ernational Monetary Fund; World Economic Outlook Database (April 2017			
Population millions 6.9		GDP per capita US\$	4,003.3			
GDP US\$ billions	27.4	GDP (PPP) % world GDP	0.02			

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	112	3.7			Rank	116 / 144	119 / 148	120 / 144	118 / 140	117 / 138	112 / 137
Subindex A: Basic requirements	108	4.0			Score	3.7	3.6	3.6	3.6	3.7	3.7
â 1st pillar: Institutions	131	3.0	_								
<b>↑</b> 2nd pillar: Infrastructure	118	2.6	_					1st pillar: Institutions			
	42	5.2					pillar: ovation	7	2nd pil Infrast	lar: ructure	
3 4th pillar: Health and primary education	104	5.1	_				$\wedge$		X		
Subindex B: Efficiency enhancers	106	3.6				11th pillar: Business sophistication				3rd pillar: Macroecono environment	
⇒ 5th pillar: Higher education and training	107	3.4					/// <b>/</b> //				
	86	4.2	_			10th pillar: Market size	1 13			4th pillar: Health an education	d primary
7th pillar: Labor market efficiency	106	3.8	_				1				
8th pillar: Financial market development	82	3.8				9th pillar: Technological readiness				5th pillar: Higher educa and training	tion
% 9th pillar: Technological readiness	103	3.2	_				8th pillar:		6th pilla		
$c_{\psi}^{\gamma \gamma}$ 10th pillar: Market size	87	3.3	_			Financ	ial market /elopment	7th pillar:	Goods r efficient	narket	
Subindex C: Innovation and sophistication factors	121	3.1						Labor marke efficiency	t		
್ಯ 11th pillar: Business sophistication	114	3.5	_			Davas		ation Amaguia.	a and tha C	مر م ما ما نبر د	
** 12th pillar: Innovation	127	2.7				Parag	juay 📉 La	atin America	a and the C	andbean	

### Most problematic factors for doing business





# **Paraguay**

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
	131	3.0	_	\$	6th pillar: Goods market efficiency	86	4.2	_
1.01 Property rights	110	3.7	_	6.0	1 Intensity of local competition	74	5.0	_
1.02 Intellectual property protection	109	3.4	_		2 Extent of market dominance	114	3.1	~
1.03 Diversion of public funds	133	2.0			3 Effectiveness of anti-monopoly policy	122	2.9	_
1.04 Public trust in politicians	134	1.5	_		4 Effect of taxation on incentives to invest	12	5.0	_
1.05 Irregular payments and bribes	123	2.8	_		5 Total tax rate % profits	60	35.0	_
1.06 Judicial independence	133	2.1	_		6 No. of procedures to start a business	71	7	_
1.07 Favoritism in decisions of government officials	121	2.2			7 Time to start a business days	121	35.0	_
								_
1.08 Efficiency of government spending	109	2.5			8 Agricultural policy costs	89	3.5	
1.09 Burden of government regulation	74	3.3	_		9 Prevalence of non-tariff barriers	76	4.3	_
1.10 Efficiency of legal framework in settling disputes	132	2.2			0 Trade tariffs % duty	88	7.0	_
1.11 Efficiency of legal framework in challenging regulations	110	2.6	$\sim$		Prevalence of foreign ownership	74	4.4	
1.12 Transparency of government policymaking	90	3.7	_		2 Business impact of rules on FDI	42	5.1	_
1.13 Business costs of terrorism	89	4.8	_	6.1	Burden of customs procedures	102	3.6	_
1.14 Business costs of crime and violence	105	3.8		6.1	4 Imports % GDP	79	39.4	
1.15 Organized crime	100	4.2	_	6.1	5 Degree of customer orientation	85	4.5	~
1.16 Reliability of police services	129	2.7	_	6.1	6 Buyer sophistication	97	3.0	_
1.17 Ethical behavior of firms	134	2.7	_	-C				_
1.18 Strength of auditing and reporting standards	95	4.2	_	West .	7th pillar: Labor market efficiency	106	3.8	
1.19 Efficacy of corporate boards	114	4.2		7.0	Cooperation in labor-employer relations	88	4.1	_
1.20 Protection of minority shareholders' interests	114	3.5	_	7.0	2 Flexibility of wage determination	42	5.3	_
1.21 Strength of investor protection 0-10 (best)	112	4.2	~		3 Hiring and firing practices	103	3.3	_
Sasangar of arroador protoation of to (best)	112	7.4			4 Redundancy costs weeks of salary	119	29.4	_
1 2nd pillar: Infrastructure	118	2.6	$\overline{}$		5 Effect of taxation on incentives to work	41	4.3	
2.01 Quality of overall infrastructure	124	2.6	~		6 Pay and productivity	119	3.3	_
2.02 Quality of roads	131		~		7 Reliance on professional management	118	3.4	
2.02 Quality of roads	101	not			8 Country capacity to retain talent	65	3.4	_
2.03 Quality of railroad infrastructure	n/a	sessed						
2.04 Quality of port infrastructure	100	3.3			9 Country capacity to attract talent	80	3.1	
2.05 Quality of air transport infrastructure	132	2.6	_	7.10	Female participation in the labor force ratio to men	93	0.70	
2.06 Available airline seat kilometers millions/week	110	37.6	~/		8th pillar: Financial market development	82	3.8	_
	119		$\tilde{}$					
2.07 Quality of electricity supply		2.6			1 Availability of financial services	65	4.2	
2.08 Mobile-cellular telephone subscriptions /100 pop.	95	104.8			2 Affordability of financial services	57	3.9	
2.09 Fixed-telephone lines /100 pop.	101	5.1	~		Financing through local equity market	61	3.7	_
<b>3rd pillar: Macroeconomic environment</b>	42	5.2		8.0	4 Ease of access to loans	45	4.2	_
- · · · · · · · · · · · · · · · · · · ·				8.0	5 Venture capital availability	86	2.6	$\sim$
3.01 Government budget balance % GDP	31		~	8.0	6 Soundness of banks	61	5.1	_
3.02 Gross national savings % GDP	84	18.6	~	8.0	7 Regulation of securities exchanges	61	4.5	_
3.03 Inflation annual % change	79	4.1	~	8.0	8 Legal rights index 0-10 (best)	107	2	$\overline{}$
3.04 Government debt % GDP	15	24.7		oŶo.				
3.05 Country credit rating 0-100 (best)	75	41.9		8/2	9th pillar: Technological readiness	103	3.2	
A 445 -: 11-145	104	5.1		9.0	Availability of latest technologies	118	3.8	_
4th pillar: Health and primary education	104	5.1		9.0	2 Firm-level technology absorption	110	4.0	_
4.01 Malaria incidence cases/100,000 pop.	1	0.0	$\overline{}$	9.0	3 FDI and technology transfer	102	3.9	_
4.02 Business impact of malaria	n/a	5.8	$\overline{}$		4 Internet users % pop.	83	51.3	
4.03 Tuberculosis incidence cases/100,000 pop.	64	41.0			5 Fixed-broadband Internet subscriptions /100 pop.	95	3.4	
4.04 Business impact of tuberculosis	64	5.6			6 Internet bandwidth kb/s/user	97	21.0	-
4.05 HIV prevalence % adult pop.	85	0.5			7 Mobile-broadband subscriptions /100 pop.	96		_
4.06 Business impact of HIV/AIDS	76	5.2		9.0	r wiodiie-dioaudanu sudscriptions /100 pop.	90	41.7	_
4.07 Infant mortality deaths/1,000 live births	85	17.5	_	£ 12	10th pillar: Market size	87	3.3	_
4.08 Life expectancy years	86	73.0	~		·	88	3.1	
4.09 Quality of primary education	136	2.2	_		01 Domestic market size index	87	4.0	
4.10 Primary education enrollment rate net %	109	88.5			02 Foreign market size index			
4.10 1 minary education emoniment rate net %	109	00.5	~		03 GDP (PPP) PPP \$ billions	91	64.4	_
	107	3.4		10.0	04 Exports % GDP	69	33.8	$\wedge$
5.01 Secondary education enrollment rate gross %	95	76.6		مرمح	11th pillar: Business sophistication	114	3.5	_
•			$\overline{}$					
5.02 Tertiary education enrollment rate gross %	79	35.1	_		01 Local supplier quantity	84	4.4	
5.03 Quality of the education system	135		$\sim$		02 Local supplier quality	86	4.1	
5.04 Quality of math and science education	136	2.4			03 State of cluster development	112	3.1	
5.05 Quality of management schools	126		$\sim$		Nature of competitive advantage	128	2.4	_
5.06 Internet access in schools	117			11.0	05 Value chain breadth	117	3.2	_
5.07 Local availability of specialized training services	128	3.3	$\overline{}$	11.0	06 Control of international distribution	96	3.3	
5.08 Extent of staff training	115	3.4	$\sim$	11.0	07 Production process sophistication	109	3.1	_
				11.0	08 Extent of marketing	80	4.3	_
					09 Willingness to delegate authority	125	3.5	
				388	12th pillar: Innovation	127	2.7	
				12.0	01 Capacity for innovation	94	3.8	_
					02 Quality of scientific research institutions	132	2.5	_
					03 Company spending on R&D	120	2.7	-
				14.5	of Hair-raits industry callabaration in DOD	100		

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

126

98

131

2.6

2.9

## Peru

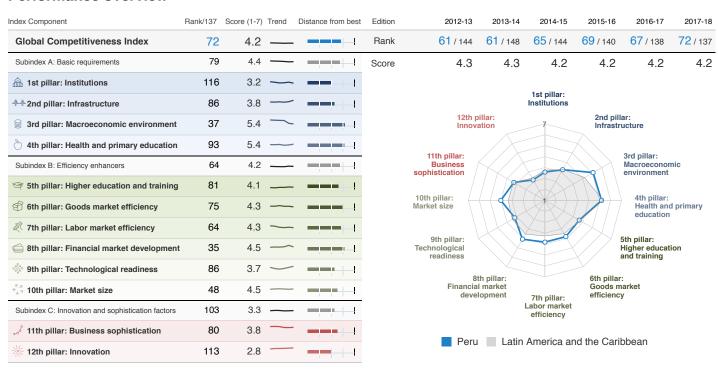


The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (Ap			
Population millions	31.5	GDP per capita US\$	6,198.6		
GDP US\$ billions	195.1	GDP (PPP) % world GDP	0.34		

#### Performance overview

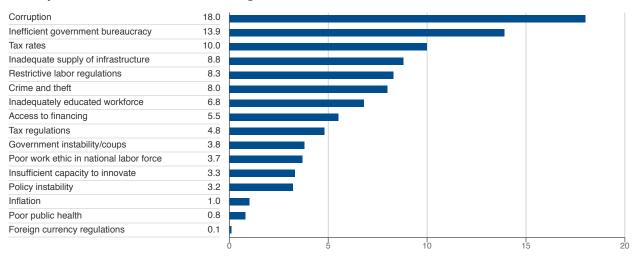


Peru (72nd) falls five positions this year. The less favourable assessment in terms of ethics and corruption reflects the impact of the corruption scandals seen in the region during the past year and the impact it has had on the trust in both public and private institutions.

During the last year, the efficiency of financial markets and their ability to meet the needs of the business sector also negatively impacted the country's competitiveness. At the same time, the country's infrastructure and technological readiness are progressing.

### Most problematic factors for doing business





# Peru

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
â 1st pillar: Institutions	116	3.2		1	6th pillar: Goods market efficiency	75	4.3	_
1.01 Property rights	109	3.7		6.0	Intensity of local competition	67	5.1	
1.02 Intellectual property protection	105	3.5	_		2 Extent of market dominance	98	3.4	_
1.03 Diversion of public funds	118	2.5	-		Effectiveness of anti-monopoly policy	92	3.4	_
1.04 Public trust in politicians	126	1.7	_		Effect of taxation on incentives to invest	65	3.6	_
1.05 Irregular payments and bribes	89	3.4	$\sim$		5 Total tax rate % profits	64	35.6	$\overline{}$
1.06 Judicial independence	106	3.0	_		No. of procedures to start a business	53	6	
1.07 Favoritism in decisions of government officials	114	2.3	~		7 Time to start a business days	111	26.0	$\overline{}$
1.08 Efficiency of government spending	104	2.5			3 Agricultural policy costs	80	3.6	
1.09 Burden of government regulation	131	2.3	$\overline{}$		Prevalence of non-tariff barriers	68	4.4	
1.10 Efficiency of legal framework in settling disputes	129	2.2			Trade tariffs % duty	38	1.9	_
1.11 Efficiency of legal framework in settling disputes	95	2.8			Prevalence of foreign ownership	55	4.8	
1.12 Transparency of government policymaking	59	4.1				36	5.1	_
1.13 Business costs of terrorism	97				2 Business impact of rules on FDI 3 Burden of customs procedures	75		_
		4.6	_		•		4.0	_
1.14 Business costs of crime and violence	122	3.1			I Imports % GDP	118	22.6	_
1.15 Organized crime	129	3.2	$\overline{}$		5 Degree of customer orientation	59	4.7	
1.16 Reliability of police services	130	2.6	_	6.16	Buyer sophistication	78	3.3	
1.17 Ethical behavior of firms	121	3.1		,5°C	7th pillar: Labor market efficiency	64	4.3	_
1.18 Strength of auditing and reporting standards	46	5.0	_	and .				
1.19 Efficacy of corporate boards	71	4.8			Cooperation in labor-employer relations	89	4.1	_
1.20 Protection of minority shareholders' interests	59	4.1	_		2 Flexibility of wage determination	20	5.7	
1.21 Strength of investor protection 0-10 (best)	51	6.0	$\sim$		Hiring and firing practices	129	2.7	
AA	00	0.0		7.0	Redundancy costs weeks of salary	42	11.4	_
◆ 2nd pillar: Infrastructure	86	3.8		7.0	Effect of taxation on incentives to work	108	3.3	_
2.01 Quality of overall infrastructure	111	3.1	$\sim$	7.06	Pay and productivity	90	3.7	
2.02 Quality of roads	108	3.0	$\sim$	7.07	Reliance on professional management	62	4.4	
2.03 Quality of railroad infrastructure	87	2.0		7.08	Country capacity to retain talent	52	3.7	
2.04 Quality of port infrastructure	83	3.7	$\sim$	7.09	Country capacity to attract talent	51	3.6	_
2.05 Quality of air transport infrastructure	85	4.1	_	7.10	Female participation in the labor force ratio to men	68	0.81	_
2.06 Available airline seat kilometers millions/week	42	632.7	~					
2.07 Quality of electricity supply	62	5.1			8th pillar: Financial market development	35	4.5	
2.08 Mobile-cellular telephone subscriptions /100 pop.	69	117.1		8.0	Availability of financial services	57	4.4	_
2.09 Fixed-telephone lines /100 pop.	84	9.7	$\sim$	8.02	Affordability of financial services	54	4.0	_
2.09 Tixed telephone lines 7100 pap.	0-7	5.7			Financing through local equity market	69	3.6	_
	37	5.4			Ease of access to loans	48	4.2	
3.01 Government budget balance % GDP	56	-2.3	~		5 Venture capital availability	61	3.0	_
3.02 Gross national savings % GDP	74	20.0	_		Soundness of banks	32	5.6	
3.03 Inflation annual % change	66	3.6	~		Regulation of securities exchanges	37	5.1	
3.04 Government debt % GDP	16	24.8				23	8	
			$\sim$	0.00	3 Legal rights index 0-10 (best)	23	0	_
3.05 Country credit rating 0-100 (best)	42	66.9		e8/3;	9th pillar: Technological readiness	86	3.7	-
4th pillar: Health and primary education	93	5.4		9.0	Availability of latest technologies	94	4.3	_
4.01 Malaria incidence cases/100,000 pop.	40	472.9	~	9.02	Firm-level technology absorption	105	4.1	_
4.02 Business impact of malaria	15	5.4	$\overline{}$	9.03	FDI and technology transfer	62	4.5	_
4.03 Tuberculosis incidence cases/100,000 pop.	97	119.0	~	9.04	1 Internet users % pop.	89	45.5	_
4.04 Business impact of tuberculosis	94	4.9		9.05	Fixed-broadband Internet subscriptions /100 pop.	82	6.7	_
4.05 HIV prevalence % adult pop.	63	0.3	_		Internet bandwidth kb/s/user	86	33.3	
4.06 Business impact of HIV/AIDS	90	5.0			Mobile-broadband subscriptions /100 pop.	66	62.0	_
4.07 Infant mortality deaths/1,000 live births	74	13.1	~					_
4.08 Life expectancy years	70	74.8		+ 1 ×	10th pillar: Market size	48	4.5	_
					1 Domestic market size index	46	4.3	
4.09 Quality of primary education	129	2.6			22 Foreign market size index	58	4.8	_
4.10 Primary education enrollment rate net %	83	94.1	~		03 GDP (PPP) PPP \$ billions	46	406.2	-
⇒ 5th pillar: Higher education and training	81	4.1			04 Exports % GDP	99	22.0	$\leq$
5.01 Secondary education enrollment rate gross %	61	95.7		10.0		33	٠.٠	_
	71	40.5	$\stackrel{\sim}{\sim}$	~08	11th pillar: Business sophistication	80	3.8	
5.02 Tertiary education enrollment rate gross %				11 (	1 Local supplier quantity	48	4.7	_
5.03 Quality of the education system	124	2.6			2 Local supplier quality	88	4.1	_
5.04 Quality of math and science education	125	2.7			3 State of cluster development	105	3.2	_
5.05 Quality of management schools	90	4.0			·	105	2.9	_
5.06 Internet access in schools	86	3.8			04 Nature of competitive advantage			
5.07 Local availability of specialized training services	76	4.2	_		05 Value chain breadth	101	3.4	
5.08 Extent of staff training	105	3.5			Control of international distribution	84	3.4	
					7 Production process sophistication	86	3.5	_
					8 Extent of marketing	65	4.5	_
				11.0	9 Willingness to delegate authority	74	4.3	
				-386	12th pillar: Innovation	113	2.8	_
					1 Capacity for innovation	113	3.6	
					22 Quality of scientific research institutions	105	3.2	_
				12.0	3 Company spending on R&D	123	2.7	_
				40.	A University industry collaboration in DOD	407	0.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

107

116

102

2.9

2.7

# **Philippines**

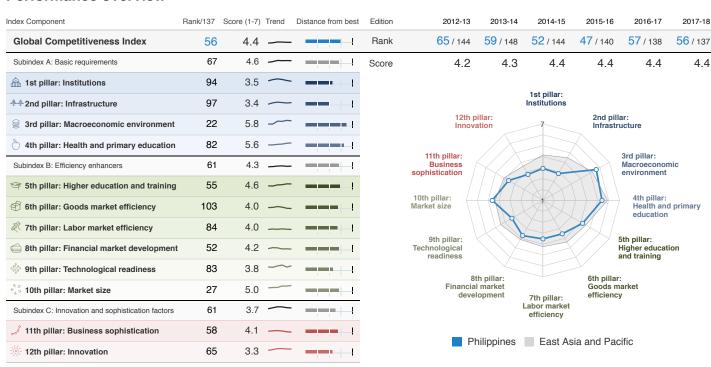


The Global Competitiveness Index 2017-2018 edition



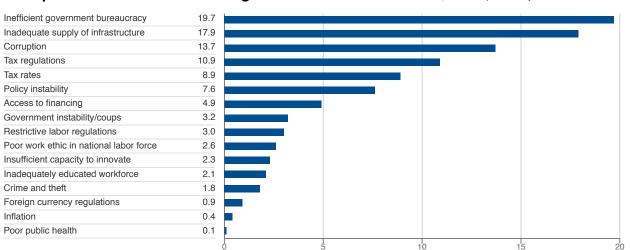
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201			
Population millions	104.2	GDP per capita US\$	2,924.3		
GDP US\$ billions	304.7	GDP (PPP) % world GDP	0.67		

#### Performance overview



#### Most problematic factors for doing business





# **Philippines**

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value
â 1st pillar: Institutions	94	3.5	<u> </u>		103	4.0
1.01 Property rights	73	4.3	~	6.01 Intensity of local competition	54	5.3
.02 Intellectual property protection	71	4.1		6.02 Extent of market dominance	119	3.0
.03 Diversion of public funds	106	2.7	_	6.03 Effectiveness of anti-monopoly policy	106	3.2
04 Public trust in politicians	107	2.2	$\overline{}$	6.04 Effect of taxation on incentives to invest	83	3.5
05 Irregular payments and bribes	118	2.9	_	6.05 Total tax rate % profits	91	42.9
06 Judicial independence	88	3.6		6.06 No. of procedures to start a business	137	16
	105	2.5		·	116	28.0
07 Favoritism in decisions of government officials				6.07 Time to start a business days		
.08 Efficiency of government spending	88	2.9		6.08 Agricultural policy costs	119	3.1
.09 Burden of government regulation	111	2.8	$\sim$	6.09 Prevalence of non-tariff barriers	64	4.4
10 Efficiency of legal framework in settling disputes	113	2.8	$\overline{}$	6.10 Trade tariffs % duty	59	4.0
11 Efficiency of legal framework in challenging regulations	83	3.1	$\overline{}$	6.11 Prevalence of foreign ownership	90	4.3
12 Transparency of government policymaking	81	3.9		6.12 Business impact of rules on FDI	97	4.2
.13 Business costs of terrorism	125	3.8	_	6.13 Burden of customs procedures	125	3.0
14 Business costs of crime and violence	113	3.6	$\overline{}$	6.14 Imports % GDP	89	36.2
15 Organized crime	104	4.1	_	6.15 Degree of customer orientation	50	4.9
16 Reliability of police services	112	3.4	~	6.16 Buyer sophistication	76	3.3
				6.16 Bayor dopriloadation	7.0	0.0
17 Ethical behavior of firms	84	3.6		7th pillar: Labor market efficiency	84	4.0
18 Strength of auditing and reporting standards	48	5.0		7.01 Cooperation in labor-employer relations	33	4.8
19 Efficacy of corporate boards	54	5.0				
20 Protection of minority shareholders' interests	51		$\sim$	7.02 Flexibility of wage determination	86	4.6
21 Strength of investor protection 0-10 (best)	112	4.2	$\overline{}$	7.03 Hiring and firing practices	77	3.6
A On divillant Information 1	07	0.4		7.04 Redundancy costs weeks of salary	116	27.4
◆ 2nd pillar: Infrastructure	97	3.4		7.05 Effect of taxation on incentives to work	35	4.4
01 Quality of overall infrastructure	113	3.0	_	7.06 Pay and productivity	43	4.4
02 Quality of roads	104	3.1	$\sim$	7.07 Reliance on professional management	44	4.6
03 Quality of railroad infrastructure	91	1.9	$\overline{}$	7.08 Country capacity to retain talent	57	3.6
04 Quality of port infrastructure	114	2.9	$\overline{}$	7.09 Country capacity to attract talent	71	3.3
05 Quality of air transport infrastructure	124	2.9	_	7.10 Female participation in the labor force ratio to men	103	0.65
06 Available airline seat kilometers millions/week		1,424.7		7.10 Terriale participation in the labor force ratio to men	100	0.00
				8th pillar: Financial market development	52	4.2
77 Quality of electricity supply	92	4.2		8.01 Availability of financial services	42	4.6
08 Mobile-cellular telephone subscriptions /100 pop.	88		~	·	43	
09 Fixed-telephone lines /100 pop.	106	3.7		8.02 Affordability of financial services		
3rd pillar: Macroeconomic environment	22	5.8		8.03 Financing through local equity market	38	4.3
'				8.04 Ease of access to loans	54	4.1
01 Government budget balance % GDP	24	-0.4	^	8.05 Venture capital availability	70	2.8
02 Gross national savings % GDP	49	23.8		8.06 Soundness of banks	35	5.5
03 Inflation annual % change	1	1.8	$\sim$	8.07 Regulation of securities exchanges	36	5.1
04 Government debt % GDP	33	33.7	~	8.08 Legal rights index 0-10 (best)	96	3
05 Country credit rating 0-100 (best)	48	61.4		080		
-	00		_	9th pillar: Technological readiness	83	3.8
4th pillar: Health and primary education	82	5.6		9.01 Availability of latest technologies	73	4.6
01 Malaria incidence cases/100,000 pop.	27	12.5	~	9.02 Firm-level technology absorption	51	4.7
02 Business impact of malaria	26	5.0	_	9.03 FDI and technology transfer	63	4.5
03 Tuberculosis incidence cases/100,000 pop.	126	322.0	~	9.04 Internet users % pop.	75	55.5
04 Business impact of tuberculosis	112	4.3		9.05 Fixed-broadband Internet subscriptions /100 pop.	88	5.5
05 HIV prevalence % adult pop.	1	0.1		9.06 Internet bandwidth kb/s/user	79	43.4
	105	4.5			90	
06 Business impact of HIV/AIDS	94		·~	9.07 Mobile-broadband subscriptions /100 pop.	90	46.3
07 Infant mortality deaths/1,000 live births			~	10th pillar: Market size	27	5.0
08 Life expectancy years	104		~~	10.01 Domestic market size index	27	Λ 0
09 Quality of primary education	66	4.1				4.8
10 Primary education enrollment rate net %	66	96.0		10.02 Foreign market size index	33	5.4
₹ 5th pillar: Higher education and training	55	4.6		10.03 GDP (PPP) PPP \$ billions	29	805.2
			_	10.04 Exports % GDP	90	28.8
01 Secondary education enrollment rate gross %	80	88.4		→ 11th pillar: Business sophistication	58	4.1
02 Tertiary education enrollment rate gross %	78	35.8				
03 Quality of the education system	46		$\sim$	11.01 Local supplier quantity	49	4.7
Quality of math and science education	76	3.9	_	11.02 Local supplier quality	73	4.3
5 Quality of management schools	38	4.8	_	11.03 State of cluster development	62	3.8
06 Internet access in schools	62	4.4	_	11.04 Nature of competitive advantage	94	3.1
77 Local availability of specialized training services	43			11.05 Value chain breadth	53	4.0
8 Extent of staff training	38	4.4	_	11.06 Control of international distribution	60	3.8
Extent of Staff training	30	4.4	•	11.07 Production process sophistication	80	3.6
				11.08 Extent of marketing	36	4.8
				11.09 Willingness to delegate authority	44	4.6
					65	3.3
				12.01 Capacity for innovation	45	4.5
				12.02 Quality of scientific research institutions	75	3.7
					51	3.5
				12.03 Company spending on R&D		
				12.04 University-industry collaboration in R&D	59	3.5
				12 US 130VT procurement of advanced technology products		

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

91

74

3.0

# **Poland**



The Global Competitiveness Index 2017-2018 edition



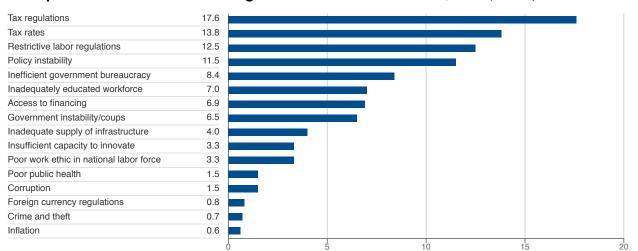
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database				
Population millions	38.0	GDP per capita ∪S\$	12,315.6			
GDP US\$ billions	467.6	GDP (PPP) % world GDP	0.88			

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	39	4.6			Rank	41 / 144	<b>42</b> / 148	43 / 144	<b>41</b> / 140	<b>36</b> / 138	39 / 137
Subindex A: Basic requirements	45	5.0	_		Score	4.5	4.5	4.5	4.5	4.6	4.6
â 1st pillar: Institutions	72	3.8	_								
<b>1</b> 2nd pillar: Infrastructure	44	4.7						1st pillar: Institutions			
	41	5.2				12th բ Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	38	6.2					$\Lambda$		$\langle \cdot \rangle$		
Subindex B: Efficiency enhancers	34	4.7	_			11th pillar: Business sophistication	$\langle \langle \rangle \rangle$			3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	40	5.0	_			/					
6th pillar: Goods market efficiency	45	4.6				10th pillar: Market size				4th pillar: Health and education	d primary
7th pillar: Labor market efficiency	78	4.1	_			\					
8th pillar: Financial market development	53	4.2	~			9th pillar: Technological readiness				5th pillar: Higher educat and training	ion
্ঠি 9th pillar: Technological readiness	47	4.9					th pillar:		6th pillar		
ึ่ง 10th pillar: Market size	21	5.2	_			Financia		7th pillar:	Goods n	narket	
Subindex C: Innovation and sophistication factors	59	3.8						Labor market efficiency			
ூ 11th pillar: Business sophistication	57	4.1				■ Do	lond I	Europo ond	North Ame	rico	
* 12th pillar: Innovation	59	3.4				<b>P</b> 0	land	Europe and	NOITH AITH	enca	

### Most problematic factors for doing business





# **Poland**

Index Component	Rank/137	Value	e Trend	Index	k Component	Rank/137	Value	е
â 1st pillar: Institutions	72	3.8	_	8	6th pillar: Goods market efficiency	45	4.6	-
1.01 Property rights	83	4.1	_	6.01	Intensity of local competition	55	5.3	-
1.02 Intellectual property protection	72	4.0		6.02	Extent of market dominance	16	4.7	-
1.03 Diversion of public funds	57	3.8	<u> </u>	6.03	Effectiveness of anti-monopoly policy	49	4.0	-
1.04 Public trust in politicians	101	2.3		6.04	Effect of taxation on incentives to invest	97	3.3	_
.05 Irregular payments and bribes	40	4.8	$\overline{}$	6.05	Total tax rate % profits	84	40.4	-
.06 Judicial independence	99	3.2			No. of procedures to start a business	18	4	-
1.07 Favoritism in decisions of government officials	85	2.8	_		7 Time to start a business days	123	37.0	
1.08 Efficiency of government spending	73	3.2			B Agricultural policy costs	77	3.6	_
					Prevalence of non-tariff barriers			
.09 Burden of government regulation	112	2.8				50	4.6	
.10 Efficiency of legal framework in settling disputes	106	2.9			Trade tariffs % duty	6	1.1	
.11 Efficiency of legal framework in challenging regulations	118	2.6	$\sim$		Prevalence of foreign ownership	46	4.9	
.12 Transparency of government policymaking	116	3.3	_	6.12	Business impact of rules on FDI	65	4.6	
.13 Business costs of terrorism	52	5.3	_	6.13	Burden of customs procedures	46	4.6	
.14 Business costs of crime and violence	58	4.9	_	6.14	Imports % GDP	55	49.4	
.15 Organized crime	54	5.1	_		Degree of customer orientation	36	5.1	
.16 Reliability of police services	89	4.1			Buyer sophistication	70	3.4	
			=	0.10	buyer sopriistication	70	0.4	
17 Ethical behavior of firms	62	3.9		J.	7th pillar: Labor market efficiency	78	4.1	
18 Strength of auditing and reporting standards	54	4.8				70	4.0	
19 Efficacy of corporate boards	52	5.0	_		Cooperation in labor-employer relations	79	4.3	
20 Protection of minority shareholders' interests	73	4.0	_		Plexibility of wage determination	24	5.5	
21 Strength of investor protection 0-10 (best)	41	6.3	_~~	7.03	Hiring and firing practices	97	3.4	
				7.04	Redundancy costs weeks of salary	80	18.8	
2nd pillar: Infrastructure	44	4.7		7.05	Effect of taxation on incentives to work	128	2.8	
01 Quality of overall infrastructure	61	4.2			Pay and productivity	58	4.2	
.02 Quality of roads	65	4.1			Reliance on professional management	72	4.2	
.03 Quality of railroad infrastructure	45	3.6			Country capacity to retain talent	89	3.2	
•								
.04 Quality of port infrastructure	64				Country capacity to attract talent	113	2.5	
05 Quality of air transport infrastructure	66	4.5	_	7.10	Female participation in the labor force ratio to men	63	0.82	
06 Available airline seat kilometers millions/week	45	558.1	_		Oth nillaw Financial market devalanment	53	4.2	
07 Quality of electricity supply	48	5.5			8th pillar: Financial market development			
08 Mobile-cellular telephone subscriptions /100 pop.	25	146.2	/	8.01	Availability of financial services	45	4.5	
09 Fixed-telephone lines /100 pop.	38	24.5	_	8.02	Affordability of financial services	59	3.9	
				8.03	Financing through local equity market	71	3.6	
3rd pillar: Macroeconomic environment	41	5.2			Ease of access to loans	43	4.3	
.01 Government budget balance % GDP	63	-2.4	~~		Venture capital availability	72	2.8	
•						50		
02 Gross national savings % GDP	82	19.3	~		Soundness of banks		5.3	
.03 Inflation annual % change	78	-0.6			Regulation of securities exchanges	104	3.7	
04 Government debt % GDP	78	54.2	~	8.08	B Legal rights index 0-10 (best)	31	7	
.05 Country credit rating 0-100 (best)	28	73.8		28%	9th pillar: Technological readiness	47	4.9	
4th pillar: Health and primary education	38	6.2			Availability of latest technologies	64	4.8	
.01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02	Firm-level technology absorption	55	4.6	
02 Business impact of malaria	n/a	6.6			B FDI and technology transfer	37	4.9	
	47	19.0	~~		••	47	73.3	
03 Tuberculosis incidence cases/100,000 pop.			- '		Internet users % pop.			
04 Business impact of tuberculosis	43	6.2			Fixed-broadband Internet subscriptions /100 pop.	45	19.2	
.05 HIV prevalence % adult pop.	1	0.1			Internet bandwidth kb/s/user	52	83.3	
.06 Business impact of HIV/AIDS	33	6.2		9.07	Mobile-broadband subscriptions /100 pop.	70	58.9	
.07 Infant mortality deaths/1,000 live births	34	4.5	$\sim$	, 4 7	AND THE RELEASE	01	F 0	
.08 Life expectancy years	39	78.2	_	13	10th pillar: Market size	21	5.2	
.09 Quality of primary education	43			10.0	1 Domestic market size index	25	4.9	
10 Primary education enrollment rate net %	59	96.4	~	10.0	2 Foreign market size index	19	5.9	
To Timely oddodion officialion rate flet %		00.1		10.0	3 GDP (PPP) PPP \$ billions	24	1,054.1	
→ 5th pillar: Higher education and training  → 1  → 1  → 2  → 2  → 3  → 3  → 3  → 4  → 4  → 4  → 4  → 4	40	5.0	_		04 Exports % GDP	29	53.8	
01 Secondary education enrollment rate gross %	24	108.1		2	Add the Book of the Control of the C	57	4.1	
.02 Tertiary education enrollment rate gross %	34	68.1		ood		57	4.1	
03 Quality of the education system	72	3.6		11.0	1 Local supplier quantity	45	4.7	
04 Quality of math and science education	49			11.0	2 Local supplier quality	34	4.9	
05 Quality of management schools	71	4.2			3 State of cluster development	64	3.8	
			$\overline{}$		Nature of competitive advantage	100	3.0	
06 Internet access in schools	49	4.6			74 Nature of competitive advantage 75 Value chain breadth	64	3.8	
7 Local availability of specialized training services	40	4.9						
08 Extent of staff training	69	4.0			66 Control of international distribution	61	3.7	
					7 Production process sophistication	49	4.2	
				11.0	8 Extent of marketing	47	4.7	
				11.0	9 Willingness to delegate authority	84	4.1	
				燕	12th pillar: Innovation	59	3.4	
					1 Capacity for innovation	72	4.1	
					22 Quality of scientific research institutions	49	4.2	
					3 Company spending on R&D	60	3.4	
					4 University-industry collaboration in R&D	89	3.2	
				100	Gov't progurement of advanced technology products	90	2.1	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

89

52

3.1

# **Portugal**



The Global Competitiveness Index 2017-2018 edition

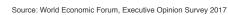


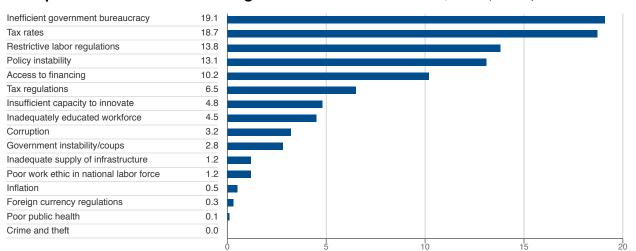
Key indicators, 2016		Source: International Monetary Fund; World	d Economic Outlook Database (April 2017)
Population millions	10.3	GDP per capita US\$	19,831.6
GDP US\$ billions	204.8	GDP (PPP) % world GDP	0.25

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	42	4.6			Rank	49 / 144	<b>51</b> / 148	36 / 144	38 / 140	46 / 138	42 / 137
Subindex A: Basic requirements	39	5.1			Score	4.4	4.4	4.5	4.5	4.5	4.6
â 1st pillar: Institutions	43	4.4									
<b>↑</b> 2nd pillar: Infrastructure	18	5.6						1st pillar: Institutions			
	105	4.0	_			12th p Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	18	6.4				4411			3	0.4.30	
Subindex B: Efficiency enhancers	39	4.6	_			11th pillar: Business sophistication				3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	34	5.1	_			/					
6th pillar: Goods market efficiency	34	4.7				10th pillar: Market size			1	4th pillar: Health and education	
7th pillar: Labor market efficiency	55	4.4				\					
8th pillar: Financial market development	116	3.3	~			9th pillar: Technological readiness				5th pillar: Higher educat and training	ion
% 9th pillar: Technological readiness	26	5.7					th pillar:		6th pillar		
$\mathcal{L}_{\mathcal{S}}^{\mathcal{T}_{\mathcal{S}}}$ 10th pillar: Market size	54	4.3				Financia		7th pillar:	Goods m	arket	
Subindex C: Innovation and sophistication factors	36	4.2						Labor market efficiency			
್ಯ 11th pillar: Business sophistication	43	4.4				■ Dov	du and	F.,,,,,,,,	مسم طاحت		
* 12th pillar: Innovation	32	4.0	_			Por	tugal	Europe and	I NOTIN AM	erica	

### Most problematic factors for doing business





# **Portugal**

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value
∴ 1st pillar: Institutions	43	4.4			34	4.7
1 Property rights	45	4.7	$\sim$	6.01 Intensity of local competition	59	5.3
2 Intellectual property protection	32	5.0		6.02 Extent of market dominance	41	4.1
3 Diversion of public funds	46	4.1	_	6.03 Effectiveness of anti-monopoly policy	45	4.0
04 Public trust in politicians	60			6.04 Effect of taxation on incentives to invest	109	3.1
05 Irregular payments and bribes	35	5.1		6.05 Total tax rate % profits	79	39.8
	35	4.9	=	6.06 No. of procedures to start a business	36	5
.06 Judicial independence				•		
.07 Favoritism in decisions of government officials	47	3.6		6.07 Time to start a business days	19	4.5
.08 Efficiency of government spending	72	3.2		6.08 Agricultural policy costs	46	4.1
.09 Burden of government regulation	104	3.0	_	6.09 Prevalence of non-tariff barriers	6	5.5
.10 Efficiency of legal framework in settling disputes	121	2.7	_	6.10 Trade tariffs % duty	6	1.1
.11 Efficiency of legal framework in challenging regulations	89	2.9	$\overline{}$	6.11 Prevalence of foreign ownership	51	4.8
12 Transparency of government policymaking	77	3.9	_	6.12 Business impact of rules on FDI	7	5.7
.13 Business costs of terrorism	16	6.0	_	6.13 Burden of customs procedures	27	5.1
				· · · · · · · · · · · · · · · · · · ·		
14 Business costs of crime and violence	11	5.8		6.14 Imports % GDP	78	40.1
.15 Organized crime	15	6.0		6.15 Degree of customer orientation	34	5.1
.16 Reliability of police services	28	5.7	_	6.16 Buyer sophistication	47	3.7
17 Ethical behavior of firms	41	4.3		EØ.		
18 Strength of auditing and reporting standards	101	4.0	$\sim$	7th pillar: Labor market efficiency	55	4.4
	76	4.8		7.01 Cooperation in labor-employer relations	46	4.6
19 Efficacy of corporate boards				7.02 Flexibility of wage determination	70	4.9
20 Protection of minority shareholders' interests	82	3.9				
21 Strength of investor protection 0-10 (best)	66	5.7	_	7.03 Hiring and firing practices	117	3.1
A 0-d	10	F. C	_	7.04 Redundancy costs weeks of salary	73	17.0
2nd pillar: Infrastructure	18	5.6		7.05 Effect of taxation on incentives to work	120	3.0
01 Quality of overall infrastructure	13	5.7	$\overline{}$	7.06 Pay and productivity	65	4.0
02 Quality of roads	8	6.0	_	7.07 Reliance on professional management	66	4.3
03 Quality of railroad infrastructure	31	4.2	_	7.08 Country capacity to retain talent	62	3.5
04 Quality of port infrastructure	25			7.09 Country capacity to attract talent	64	3.4
• •			$\sim$			
05 Quality of air transport infrastructure	29	5.5		7.10 Female participation in the labor force ratio to men	26	0.91
06 Available airline seat kilometers millions/week		1,081.6		8th pillar: Financial market development	116	3.3
07 Quality of electricity supply	27	6.2	$\sim$			
08 Mobile-cellular telephone subscriptions /100 pop.	89	109.1	_	8.01 Availability of financial services	47	4.5
09 Fixed-telephone lines /100 pop.	13	45.1		8.02 Affordability of financial services	52	4.0
_				8.03 Financing through local equity market	94	3.1
3rd pillar: Macroeconomic environment	105	4.0	$\overline{}$	8.04 Ease of access to loans	82	3.7
01 Government budget balance % GDP	55	-2.3	. /	8.05 Venture capital availability	55	3.1
•			$\sim$			
02 Gross national savings % GDP	98	15.7		8.06 Soundness of banks	129	3.1
.03 Inflation annual % change	1	0.6	$\sim$	8.07 Regulation of securities exchanges	113	3.4
.04 Government debt % GDP	133	130.3		8.08 Legal rights index 0-10 (best)	107	2
05 Country credit rating 0-100 (best)	55	57.1		% 9th pillar: Technological readiness	26	5.7
4th pillar: Health and primary education	18	6.4		9.01 Availability of latest technologies	20	6.0
01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02 Firm-level technology absorption	28	5.2
02 Business impact of malaria	n/a	6.6		9.03 FDI and technology transfer	15	5.3
03 Tuberculosis incidence cases/100,000 pop.	54	23.0	<u> </u>	9.04 Internet users % pop.	51	70.4
.04 Business impact of tuberculosis	34	6.3		9.05 Fixed-broadband Internet subscriptions /100 pop.	20	31.8
05 HIV prevalence % adult pop.	97	0.7		9.06 Internet bandwidth kb/s/user	25	177.8
.06 Business impact of HIV/AIDS	40	6.1	_	9.07 Mobile-broadband subscriptions /100 pop.	67	61.1
.07 Infant mortality deaths/1,000 live births	17					
				10th pillar: Market size	54	4.3
08 Life expectancy years	22	81.5			ΕA	4 4
09 Quality of primary education	26			10.01 Domestic market size index	54	4.1
10 Primary education enrollment rate net %	38	97.8	~	10.02 Foreign market size index	46	5.0
The niller. Higher education and training	34	5.1	_	10.03 GDP (PPP) PPP \$ billions	54	298.7
5th pillar: Higher education and training				10.04 Exports % GDP	52	41.4
.01 Secondary education enrollment rate gross %	13	119.1		→ 11th pillar: Business sophistication	43	4.4
.02 Tertiary education enrollment rate gross %	44	61.9			74	4.5
.03 Quality of the education system	32			11.01 Local supplier quantity	74	
04 Quality of math and science education	28	4.8	_	11.02 Local supplier quality	35	4.9
05 Quality of management schools	31	5.0	$\sim$	11.03 State of cluster development	39	4.2
06 Internet access in schools	32	5.1	$\overline{}$	11.04 Nature of competitive advantage	44	4.1
77 Local availability of specialized training services	46	4.7	$\sim$	11.05 Value chain breadth	33	4.4
				11.06 Control of international distribution	57	3.8
08 Extent of staff training	56	4.1			36	
				11.07 Production process sophistication		4.6
				11.08 Extent of marketing	53	4.6
				11.09 Willingness to delegate authority	75	4.2
				* 12th pillar: Innovation	32	4.0
				12.01 Capacity for innovation	39	4.6
				12.02 Quality of scientific research institutions	22	5.2
				12.03 Company spending on R&D	39	3.8
				12.04 University-industry collaboration in R&D	36	4.2
				12.05 Gov't procurement of advanced technology products	46	3.5

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

 $12.07 \ \ \textbf{PCT patents} \ \ \text{applications/million pop}.$ 

46

28

3.5

## Qatar



The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World	d Economic Outlook Database (April 2017)
Population millions	2.6	GDP per capita ∪S\$	60,786.7
GDP US\$ billions	156.7	GDP (PPP) % world GDP	0.28

#### Performance overview

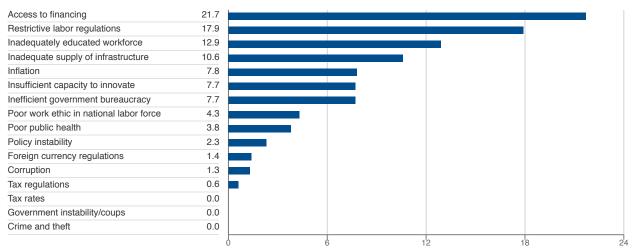
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	25	5.1			Rank	<b>11</b> / 144	13 / 148	<b>16</b> / 144	14/140	18 / 138	<b>25</b> / 137
Subindex A: Basic requirements	12	5.9			Score	5.4	5.2	5.2	5.3	5.2	5.1
â 1st pillar: Institutions	10	5.6									
<b>1</b> 2nd pillar: Infrastructure	13	5.8						1st pillar: Institutions			
	20	5.9	_			12th բ Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	34	6.2				4411				0.4.30	
Subindex B: Efficiency enhancers	25	4.9	_			11th pillar: Business sophistication				3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	37	5.0				/			M		
	15	5.2				10th pillar: Market size	\			4th pillar: Health and education	
7th pillar: Labor market efficiency	19	4.9	~			\					
8th pillar: Financial market development	25	4.7	_			9th pillar: Technological readiness			///	5th pillar: Higher educat and training	ion
্বী 9th pillar: Technological readiness	34	5.4					th pillar:		6th pillar		
10th pillar: Market size	51	4.4				Financia	al market elopment	7th pillar:	Goods m	arket	
Subindex C: Innovation and sophistication factors	22	4.9						Labor market efficiency			
္တီ 11th pillar: Business sophistication	22	5.0	_				stor NA	ddla East a	nd North A	frica	
★ 12th pillar: Innovation	21	4.7				<b>Q</b> a	itar   Mi	ddle East a	πα ινόπη Α	irica	

Qatar remains the second most competitive economy in the Arab World. In the global ranking it moves to 25th place from 18th. The change is mainly due to the drop in oil and gas prices which had a significant effect on the country's fiscal situation. Qatar moved from a fiscal surplus of 10.3 percent (in 2015) to a deficit of 4.07 percent of GDP (2016) and public debt increased from 35.8 to 47.6 percent of

GDP in the same years. Qatar's strengths remain its good infrastructure facilities and the country's efficient goods markets. Going forward, the country will have to ensure better access to digital technologies for individuals and businesses, and further strengthen educational institutions. It is important to note that both survey as well as statistical data reflect the situation prior to the embargo.

### Most problematic factors for doing business





ndex Component	Rank/137	7 Value	Trend	Inde	x Component	Rank/137	Value	э Т
∴ 1st pillar: Institutions	10	5.6		\$	6th pillar: Goods market efficiency	15	5.2	_
1.01 Property rights	21	5.6	$\overline{}$	6.0	1 Intensity of local competition	21	5.6	-
1.02 Intellectual property protection	22	5.7	$\overline{}$		2 Extent of market dominance	14	4.8	_
1.03 Diversion of public funds	5	6.1	_		3 Effectiveness of anti-monopoly policy	24	4.7	_
1.04 Public trust in politicians	4	5.9			4 Effect of taxation on incentives to invest	4	5.9	_
1.05 Irregular payments and bribes	11	6.3	~		5 Total tax rate % profits	2	11.3	
•	27	5.3	$\sim$			92	8	=
.06 Judicial independence					6 No. of procedures to start a business			
.07 Favoritism in decisions of government officials	5	5.5	~		7 Time to start a business days	53	8.7	_
.08 Efficiency of government spending	4	5.8			8 Agricultural policy costs	25	4.4	_
.09 Burden of government regulation	11	4.7			Prevalence of non-tariff barriers	8	5.3	
.10 Efficiency of legal framework in settling disputes	10	5.5	$\sim$	6.1	Trade tariffs % duty	57	4.0	_
.11 Efficiency of legal framework in challenging regulations	5	5.2	$\overline{}$	6.1	Prevalence of foreign ownership	86	4.3	_
.12 Transparency of government policymaking	15	5.5	$\sim$	6.1	2 Business impact of rules on FDI	61	4.7	_
.13 Business costs of terrorism	12	6.1	$\sim$	6.1	Burden of customs procedures	26	5.1	_
.14 Business costs of crime and violence	1	6.4	$\sim$	6.1	4 Imports % GDP	83	39.3	
.15 Organized crime	6	6.4	$\sim$		5 Degree of customer orientation	26	5.5	_
.16 Reliability of police services	9	6.3			Buyer sophistication	11	4.7	
				0.1	buyer sophistication		4.7	_
.17 Ethical behavior of firms	17	5.4		£56	7th pillar: Labor market efficiency	19	4.9	_
.18 Strength of auditing and reporting standards	22	5.7	$\overline{}$	7.0		16	E 4	
.19 Efficacy of corporate boards	26	5.6			1 Cooperation in labor-employer relations	16	5.4	
20 Protection of minority shareholders' interests	6	5.6	$\overline{}$		2 Flexibility of wage determination	11	5.9	_
21 Strength of investor protection 0-10 (best)	137	2.7	$\sim$		3 Hiring and firing practices	9	5.1	-
				7.0	4 Redundancy costs weeks of salary	101	23.2	_
2nd pillar: Infrastructure	13	5.8		7.0	5 Effect of taxation on incentives to work	2	6.2	-
01 Quality of overall infrastructure	22	5.2	~		6 Pay and productivity	8	5.2	
02 Quality of roads	17				7 Reliance on professional management	23	5.4	_
·		not			B Country capacity to retain talent	9	5.2	-
03 Quality of railroad infrastructure	n/a	assessed			9 Country capacity to attract talent	7	5.5	-
04 Quality of port infrastructure	12	5.6						
05 Quality of air transport infrastructure	6	6.3	_	7.10	Female participation in the labor force ratio to men	117	0.57	_
					8th pillar: Financial market development	25	4.7	-
06 Available airline seat kilometers millions/week		1,868.0						
07 Quality of electricity supply	20	6.5	_	8.0	1 Availability of financial services	29	5.0	-
08 Mobile-cellular telephone subscriptions /100 pop.	22	147.1	<i></i>	8.0	2 Affordability of financial services	18	5.0	-
09 Fixed-telephone lines /100 pop.	55	19.3	~	8.0	Financing through local equity market	12	5.2	
	20		_	8.0	4 Ease of access to loans	7	5.3	-
3rd pillar: Macroeconomic environment	20	5.9		8.0	5 Venture capital availability	5	4.7	_
01 Government budget balance % GDP	91	-4.1			6 Soundness of banks	23	5.7	_
02 Gross national savings % GDP	4	44.0			7 Regulation of securities exchanges	9	5.9	-
03 Inflation annual % change	1	2.7	~		B Legal rights index 0-10 (best)	128	1	-
04 Government debt % GDP	66	47.6	~/	0.0	b Legal rights index 0-10 (best)	120		
.05 Country credit rating 0-100 (best)	25	76.7		388	9th pillar: Technological readiness	34	5.4	-
oo oodhay oroda raang o 100 (best)		70.7				22	5.9	
4th pillar: Health and primary education	34	6.2	_		1 Availability of latest technologies			
01 Malaria incidence cases/100,000 pop.	n/a	s.l.			2 Firm-level technology absorption	18	5.4	
				9.0	FDI and technology transfer	24	5.1	-
02 Business impact of malaria	n/a	6.4		9.0	4 Internet users % pop.	7	94.3	-
03 Tuberculosis incidence cases/100,000 pop.	61	34.0		9.0	5 Fixed-broadband Internet subscriptions /100 pop.	69	10.8	-
04 Business impact of tuberculosis	39	6.2		9.0	6 Internet bandwidth kb/s/user	51	86.9	
05 HIV prevalence % adult pop.	1	<0.1			7 Mobile-broadband subscriptions /100 pop.	7	129.2	-
06 Business impact of HIV/AIDS	28	6.3						-
07 Infant mortality deaths/1,000 live births	45	6.8	<b>\</b>	4	10th pillar: Market size	51	4.4	-
08 Life expectancy years	37	78.8			01 Domestic market size index	52	4.1	
09 Quality of primary education	10	5.6	_		D2 Foreign market size index	41	5.1	-
		92.1	~		•			-
10 Primary education enrollment rate net %	96	92.1			03 GDP (PPP) PPP \$ billions	50	329.2	-
₹ 5th pillar: Higher education and training	37	5.0		10.0	04 Exports % GDP	42	46.0	-
				8	11th nillar: Business conhistination	22	5.0	
01 Secondary education enrollment rate gross %	73	91.2			11th pillar: Business sophistication			
02 Tertiary education enrollment rate gross %	106	14.5			1 Local supplier quantity	57	4.6	_
03 Quality of the education system	5	5.6	~	11.0	D2 Local supplier quality	39	4.9	-
04 Quality of math and science education	6	5.6	~	11.0	3 State of cluster development	9	5.2	
5 Quality of management schools	7	5.8			04 Nature of competitive advantage	27	4.6	
06 Internet access in schools	19	5.6	_		05 Value chain breadth	18	5.2	
7 Local availability of specialized training services	22	5.4			06 Control of international distribution	19	4.9	
8 Extent of staff training	14	5.2	$\overline{}$		77 Production process sophistication	22	5.3	
				11.0	08 Extent of marketing	24	5.1	_
				11.0	09 Willingness to delegate authority	21	5.3	
				-305	12th pillar: Innovation	21	4.7	
						34		
					01 Capacity for innovation		4.8	-
					02 Quality of scientific research institutions	20	5.3	
					O3 Company spending on R&D	13	5.1	-
				12.0	04 University-industry collaboration in R&D	12	5.1	-
				101	Gov't procurement of advanced technology products	2	5.1	-

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products 12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

3

# Romania



The Global Competitiveness Index 2017-2018 edition



2017-18 **68** / 137

4.3

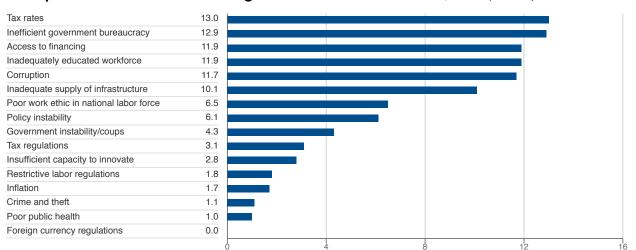
Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	19.8	GDP per capita US\$	9,465.4
GDP US\$ billions	187.0	GDP (PPP) % world GDP	0.37

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-1
Global Competitiveness Index	68	4.3		-	Rank	78 / 144	<b>76</b> / 148	59 / 144	53 / 140	<b>62</b> / 138	68 / 13
Subindex A: Basic requirements	72	4.6	_		Score	4.1	4.1	4.3	4.3	4.3	4.3
â 1st pillar: Institutions	86	3.7									
<b>1</b> ♣ 2nd pillar: Infrastructure	83	3.8						1st pillar: Institutions			
	38	5.2	_			12th p Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	92	5.5	_				1		$\langle \cdot \rangle$		
Subindex B: Efficiency enhancers	58	4.3	_			11th pillar: Business sophistication	$\langle \langle \rangle$			3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	70	4.4	~			/					
<b> </b>	92	4.1	_			10th pillar: Market size				4th pillar: Health and education	d primary
7th pillar: Labor market efficiency	89	4.0	_								
8th pillar: Financial market development	t 88	3.7	_			9th pillar: Technological readiness				5th pillar: Higher educat and training	ion
% 9th pillar: Technological readiness	51	4.8	_				th pillar:		6th pillar		
ึ้ง 10th pillar: Market size	41	4.6	_			Financia		7th pillar:	Goods n	narket	
Subindex C: Innovation and sophistication factors	107	3.3	~					Labor market efficiency			
ூசி 11th pillar: Business sophistication	116	3.5	_			<b>.</b> D		F	l Ni - util- Au-		
★ 12th pillar: Innovation	96	3.1	_			■ Hor	nania	Europe and	North Am	ierica	

### Most problematic factors for doing business





# Romania

Index Component	Rank/137	Value	e Trend	Inde	x Component	Rank/137	Value	e Trer
☆ 1st pillar: Institutions	86	3.7		\$	6th pillar: Goods market efficiency	92	4.1	_
1.01 Property rights	63	4.4		6.0	1 Intensity of local competition	86	4.9	
1.02 Intellectual property protection	44	4.6			2 Extent of market dominance	76	3.6	~
1.03 Diversion of public funds	91	3.1			3 Effectiveness of anti-monopoly policy	95	3.4	^
1.04 Public trust in politicians	113	2.0	~		4 Effect of taxation on incentives to invest	121	2.9	
1.05 Irregular payments and bribes	66	4.0	$\sim$		5 Total tax rate % profits	73	38.4	~
1.06 Judicial independence	67	3.9	_		6 No. of procedures to start a business	53	6	~
1.07 Favoritism in decisions of government officials	116		~		7 Time to start a business days	75	12.0	$\overline{}$
1.08 Efficiency of government spending	115	2.4			8 Agricultural policy costs	65	3.8	
1.09 Burden of government regulation	124		~		9 Prevalence of non-tariff barriers	42	4.6	
	81	3.4			0 Trade tariffs % duty	6		
1.10 Efficiency of legal framework in settling disputes							1.1	
1.11 Efficiency of legal framework in challenging regulations	131		$\widehat{}$		1 Prevalence of foreign ownership	93	4.2	_
1.12 Transparency of government policymaking	113	3.4	$\widehat{}$		2 Business impact of rules on FDI	25	5.3	_
1.13 Business costs of terrorism	57	5.3			3 Burden of customs procedures	68	4.2	_
1.14 Business costs of crime and violence	41	5.1			4 Imports % GDP	64	45.9	~
1.15 Organized crime	71	4.8	~		5 Degree of customer orientation	91	4.3	
1.16 Reliability of police services	69	4.4	_	6.1	6 Buyer sophistication	121	2.6	_
1.17 Ethical behavior of firms	100	3.4	~	58	7.745 -: !!! ! -	89	4.0	
1.18 Strength of auditing and reporting standards	65	4.7		W.	7th pillar: Labor market efficiency	69	4.0	
1.19 Efficacy of corporate boards	119	4.2	_	7.0	Cooperation in labor-employer relations	99	4.0	_
1.20 Protection of minority shareholders' interests	93	3.8	~~	7.0	2 Flexibility of wage determination	33	5.4	
1.21 Strength of investor protection 0-10 (best)	51	6.0	_~	7.0	3 Hiring and firing practices	51	4.0	_
					4 Redundancy costs weeks of salary	8	4.0	_
<sup>♣</sup> 2nd pillar: Infrastructure	83	3.8	_		5 Effect of taxation on incentives to work	126	2.9	
2.01 Quality of overall infrastructure	103	3.3	~		6 Pay and productivity	111	3.4	_
2.02 Quality of roads	120	2.7			7 Reliance on professional management	102	3.7	_
2.03 Quality of railroad infrastructure	73	2.6	~		8 Country capacity to retain talent	132	2.0	_
•	92						2.0	
2.04 Quality of port infrastructure					9 Country capacity to attract talent	131		_
2.05 Quality of air transport infrastructure	89			7.10	Female participation in the labor force ratio to men	81	0.77	
2.06 Available airline seat kilometers millions/week	58	321.6	/		8th pillar: Financial market development	88	3.7	_
2.07 Quality of electricity supply	58	5.2				404	0.4	
2.08 Mobile-cellular telephone subscriptions /100 pop.	92	106.4	$\sim$		1 Availability of financial services	121	3.4	_
2.09 Fixed-telephone lines /100 pop.	57	19.1			2 Affordability of financial services	119	3.0	
9 0-d -:!! Mii-	38	5.2	_		3 Financing through local equity market	119	2.6	~
					4 Ease of access to loans	119	3.0	
3.01 Government budget balance % GDP	60	-2.4		8.0	5 Venture capital availability	126	2.1	~
3.02 Gross national savings % GDP	54	23.0	<b>✓</b>	8.0	6 Soundness of banks	79	4.6	_
3.03 Inflation annual % change	95	-1.6	~	8.0	7 Regulation of securities exchanges	114	3.4	_
3.04 Government debt % GDP	48	39.2		8.0	8 Legal rights index 0-10 (best)	8	10	_/
3.05 Country credit rating 0-100 (best)	54	57.2		2999	9th pillar: Technological readiness	51	4.8	
→ 4th pillar: Health and primary education	92	5.5			Availability of latest technologies	71	4.7	
4.01 Malaria incidence cases/100,000 pop.	n/a	m.f.			2 Firm-level technology absorption	95	4.2	
4.02 Business impact of malaria	n/a	4.6			3 FDI and technology transfer	86	4.1	
4.03 Tuberculosis incidence cases/100,000 pop.	89	84.0	_		4 Internet users % pop.	70	59.5	_
			$\sim$					
4.04 Business impact of tuberculosis	104	4.5			5 Fixed-broadband Internet subscriptions /100 pop.	43	20.7	
4.05 HIV prevalence % adult pop.	1	0.1	_		6 Internet bandwidth kb/s/user	30	155.5	_^
4.06 Business impact of HIV/AIDS	84	5.1	_	9.0	7 Mobile-broadband subscriptions /100 pop.	48	73.7	
4.07 Infant mortality deaths/1,000 live births	59	9.7		47	10th pillar: Market size	41	4.6	_
4.08 Life expectancy years	65	75.0						
4.09 Quality of primary education	75	3.9	_		01 Domestic market size index	39	4.4	_
4.10 Primary education enrollment rate net %	114	86.9	$\sim$		02 Foreign market size index	38	5.3	_
S 80 - 20 - 10 1 1 0	70		_		03 GDP (PPP) PPP \$ billions	41	441.6	_
Sth pillar: Higher education and training	70	4.4		10.	04 Exports % GDP	44	44.5	/
5.01 Secondary education enrollment rate gross %	70	92.3		B	11th pillar: Business sophistication	116	3.5	_
5.02 Tertiary education enrollment rate gross %	54	53.2			· ·			
5.03 Quality of the education system	115	2.8	$\sim$		01 Local supplier quantity	122	3.8	
5.04 Quality of math and science education	23	5.0		11.0	02 Local supplier quality	63	4.4	_
5.05 Quality of management schools	121		^	11.0	03 State of cluster development	119	3.0	
5.06 Internet access in schools	76		$\overline{}$	11.0	04 Nature of competitive advantage	113	2.7	_
5.07 Local availability of specialized training services	75				05 Value chain breadth	87	3.6	_
5.08 Extent of staff training	123		~		06 Control of international distribution	128	2.7	
5.00 Extent of stair training	123	0.0	•		07 Production process sophistication	94	3.4	
					08 Extent of marketing	100	4.1	
					09 Willingness to delegate authority	129	3.4	
					12th pillar: Innovation	96	3.1	
				12.	01 Capacity for innovation	109	3.7	
				12.	02 Quality of scientific research institutions	57	4.0	
					03 Company spending on R&D	110	2.8	_
					04 University-industry collaboration in R&D	97		
					05 Gov't procurement of advanced technology products	133		_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

133

80

2.3

## **Russian Federation**



The Global Competitiveness Index 2017-2018 edition

Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	143.4	GDP per capita US\$	8,928.7
GDP US\$ billions	1,280.7	GDP (PPP) % world GDP	3.17

#### Performance overview

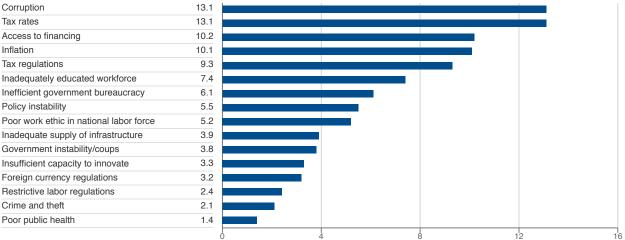
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	38	4.6			Rank	<b>67</b> / 144	<b>64</b> / 148	53 / 144	45 / 140	43 / 138	38 / 137
Subindex A: Basic requirements	48	4.9	~		Score	4.2	4.2	4.4	4.4	4.5	4.6
â 1st pillar: Institutions	83	3.7									
<b>↑</b> 2nd pillar: Infrastructure	35	4.9						1st pillar: Institutions			
	53	5.0	~	1		12th բ Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	54	6.0				4411	$\Lambda$			0.4.30	
Subindex B: Efficiency enhancers	38	4.6	_			11th pillar: Business sophistication	$\langle \langle \rangle \rangle$			3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	32	5.1				/					
	80	4.2				10th pillar: Market size				4th pillar: Health and education	
7th pillar: Labor market efficiency	60	4.3	_			\	186				
8th pillar: Financial market development	107	3.4	_			9th pillar: Technological readiness			( / / ।	5th pillar: Higher educat and training	ion
9th pillar: Technological readiness	57	4.5				0	th pillar:		6th pillar		
🖓 10th pillar: Market size	6	5.9				Financia		7th pillar:	Goods m	arket	
Subindex C: Innovation and sophistication factors	57	3.8						Labor market efficiency			
ூ 11th pillar: Business sophistication	71	4.0				_	Duccion [	ederation	Eurasia		
** 12th pillar: Innovation	49	3.5				_	nussiani	eueralion	curasia	1	

The Russian Federation (38th) improves five positions, mostly driven by the macroeconomic environment (up 38 positions to 53rd), rebounding strongly from the 2015-16 recession. However, its economy remains highly dependent on mineral exports and prospects remain uncertain. Weak links continue to include the financial market (107th), in particular the banking sector, along with aspects of institutional quality such as property rights (106th), judicial

independence (90th), and corruption, which remains one of the most problematic factors for doing business. Russia has passed new laws to increase the minimum wage (2015) and protect temporary employment (2016), which have lowered labor market flexibility (75th, down 18 places); however, this may have a beneficial overall effect by restoring domestic purchasing power, which had been hit by inflation and the weak ruble.

### Most problematic factors for doing business





# **Russian Federation**

Index Component	Rank/137	7 Value	e Trend	Inde	x Component	Rank/137	7 Value	e Tren
€ 1st pillar: Institutions	83	3.7		1	6th pillar: Goods market efficiency	80	4.2	_
1.01 Property rights	116	3.6		6.0	1 Intensity of local competition	72	5.0	_
1.02 Intellectual property protection	93	3.7			2 Extent of market dominance	64	3.7	_
1.03 Diversion of public funds	82				3 Effectiveness of anti-monopoly policy	83	3.5	_
1.04 Public trust in politicians	51	3.4			4 Effect of taxation on incentives to invest	104	3.2	_
1.05 Irregular payments and bribes	76	3.8			5 Total tax rate % profits	101	47.4	^
1.06 Judicial independence	90	3.5			6 No. of procedures to start a business	18	4	_
1.07 Favoritism in decisions of government officials	66	3.1			7 Time to start a business days	60	9.8	_
	57	3.4				95		
1.08 Efficiency of government spending					8 Agricultural policy costs		3.5	_
1.09 Burden of government regulation	79	3.3			Prevalence of non-tariff barriers	112	3.9	=
1.10 Efficiency of legal framework in settling disputes	70				Trade tariffs % duty	73	5.1	$\overline{}$
1.11 Efficiency of legal framework in challenging regulations	77	3.1			Prevalence of foreign ownership	124	3.4	
1.12 Transparency of government policymaking	70	4.0			2 Business impact of rules on FDI	123	3.6	
1.13 Business costs of terrorism	94	4.7	_		Burden of customs procedures	76	4.0	
1.14 Business costs of crime and violence	69	4.5			4 Imports % GDP	123	20.6	
1.15 Organized crime	86	4.5	_	6.15	5 Degree of customer orientation	81	4.5	
1.16 Reliability of police services	98	3.8		6.16	Buyer sophistication	58	3.5	
1.17 Ethical behavior of firms	70	3.8		50	70	60	4.3	
1.18 Strength of auditing and reporting standards	100	4.0		ex.	7th pillar: Labor market efficiency	00	4.3	
1.19 Efficacy of corporate boards	51	5.0		7.0	1 Cooperation in labor-employer relations	90	4.1	
1.20 Protection of minority shareholders' interests	111	3.6	_	7.02	2 Flexibility of wage determination	88	4.6	
1.21 Strength of investor protection 0-10 (best)	51	6.0		7.03	3 Hiring and firing practices	46	4.0	_
				7.0	4 Redundancy costs weeks of salary	76	17.3	_
1 2nd pillar: Infrastructure	35	4.9		7.05	5 Effect of taxation on incentives to work	81	3.7	_
2.01 Quality of overall infrastructure	74	4.0			Pay and productivity	57	4.2	
2.02 Quality of roads	114	2.9			7 Reliance on professional management	93	3.8	
2.03 Quality of railroad infrastructure	23				B Country capacity to retain talent	59	3.5	_
2.04 Quality of port infrastructure	66	4.2			9 Country capacity to attract talent	77	3.2	
2.05 Quality of air transport infrastructure	59	4.6			Female participation in the labor force ratio to men	51	0.87	
2.06 Available airline seat kilometers millions/week	12	3,770.3	~	7.10	or emale participation in the labor lorce ratio to men	31	0.07	
					8th pillar: Financial market development	107	3.4	_
2.07 Quality of electricity supply	59	5.1	~	8.0	1 Availability of financial services	101	3.7	
2.08 Mobile-cellular telephone subscriptions /100 pop.	9	163.3			2 Affordability of financial services	94	3.4	
2.09 Fixed-telephone lines /100 pop.	44	22.8			3 Financing through local equity market	90	3.1	
	53	5.0	~					
			_		4 Ease of access to loans	110	3.2	
3.01 Government budget balance % GDP	85	-3.7			5 Venture capital availability	89	2.6	
3.02 Gross national savings % GDP	34	27.4	$\sim$		6 Soundness of banks	121	3.6	
3.03 Inflation annual % change	112	7.0			7 Regulation of securities exchanges	112	3.5	
3.04 Government debt % GDP	6	17.0		8.08	B Legal rights index 0-10 (best)	50	6	_
3.05 Country credit rating 0-100 (best)	61	54.2		3898	9th pillar: Technological readiness	57	4.5	_
3 4th pillar: Health and primary education	54	6.0			1 Availability of latest technologies	84	4.4	
4.01 Malaria incidence cases/100,000 pop.	1	0.0			2 Firm-level technology absorption	72	4.4	
4.02 Business impact of malaria	n/a	5.6			3 FDI and technology transfer	109	3.7	
4.03 Tuberculosis incidence cases/100,000 pop.	87	80.0	_		4 Internet users % pop.	39	76.4	
	79	5.2	_		5 Fixed-broadband Internet subscriptions /100 pop.	44	19.5	
4.04 Business impact of tuberculosis								_
4.05 HIV prevalence % adult pop.	105	1.0			6 Internet bandwidth kb/s/user	75	51.9	
4.06 Business impact of HIV/AIDS	71	5.3		9.0	7 Mobile-broadband subscriptions /100 pop.	47	75.0	
4.07 Infant mortality deaths/1,000 live births	52	8.2	~	47	10th pillar: Market size	6	5.9	_
4.08 Life expectancy years	94	70.9	_					
4.09 Quality of primary education	50	4.4			D1 Domestic market size index	6	5.8	
4.10 Primary education enrollment rate net %	55	96.5	_~		02 Foreign market size index	5	6.2	_
⇒ 5th pillar: Higher education and training	32	5.1			03 GDP (PPP) PPP \$ billions	6	3,799.7	-
			_	10.0	04 Exports % GDP	95	25.9	~
5.01 Secondary education enrollment rate gross %	31	104.5		~08	11th pillar: Business sophistication	71	4.0	
5.02 Tertiary education enrollment rate gross %	20	80.4						
5.03 Quality of the education system	64	3.7			01 Local supplier quantity	83	4.4	
5.04 Quality of math and science education	51	4.4			D2 Local supplier quality	66	4.4	
5.05 Quality of management schools	65				03 State of cluster development	88	3.5	_
5.06 Internet access in schools	34	5.0			04 Nature of competitive advantage	72	3.4	
5.07 Local availability of specialized training services	53	4.6			05 Value chain breadth	71	3.8	
5.08 Extent of staff training	78	3.8			Control of international distribution	68	3.7	
-				11.0	7 Production process sophistication	64	3.9	
				11.0	08 Extent of marketing	59	4.5	
				11.0	9 Willingness to delegate authority	80	4.2	
				-305	12th pillar: Innovation	49	3.5	
					01 Capacity for innovation	65	4.2	_
					O2 Quality of scientific research institutions	41	4.4	
				12.0	O3 Company spending on R&D	54	3.5	_
					or Hairmain industry and the profile in DOD	40	0.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

42

63

50

3.9

# Rwanda



The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April		
Population millions	11.5	GDP per capita ∪s\$	729.1	
GDP US\$ billions	8.4	GDP (PPP) % world GDP	0.02	

#### Performance overview

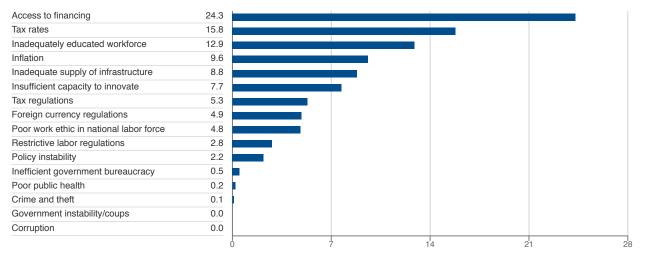
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18		
Global Competitiveness Index	58	4.3	_		Rank	63 / 144	<b>66</b> / 148	62 / 144	58 / 140	<b>52</b> / 138	58 / 137		
Subindex A: Basic requirements	65	4.6			Score	4.2	4.2	4.3	4.3	4.4	4.3		
1st pillar: Institutions	16	5.4											
↑↑ 2nd pillar: Infrastructure	98	3.4						1st pillar: Institutions					
	92	4.3	~~			12th p Innov		7	2nd pil Infrasti				
3 4th pillar: Health and primary education	98	5.3				11th pillar: Business sophistication			$\bigwedge$	0.1.1			
Subindex B: Efficiency enhancers	84	3.9	_						3rd pillar: Macroeconomic environment				
⇒ 5th pillar: Higher education and training	113	3.2	_						79	\			
	37	4.7				10th pillar: Market size				4th pillar: Health and primary education			
7th pillar: Labor market efficiency	8	5.4	_			\		XX	M				
8th pillar: Financial market development	t 34	4.5	_			9th pillar: Technological readiness				5th pillar: Higher educat and training	tion		
্ঠি 9th pillar: Technological readiness	101	3.2	_			8th pillar: 6th ; Financial market Goo			6th pilla				
$\stackrel{\kappa_{\pi}}{\downarrow_{\varphi}}$ 10th pillar: Market size	123	2.6	_						Goods n	narket			
Subindex C: Innovation and sophistication factors	49	3.9			Tri piliar: Labor market efficiency								
္တီ 11th pillar: Business sophistication	61	4.1	_			_	Duranda	Cub Cal	havan Afria				
** 12th pillar: Innovation	44	3.6	_		Rwanda Sub-Saharan Africa			ä					

Rwanda ranks 58th losing 6 places since the last edition. Rwanda remains among the most competitive African countries thanks to efficient goods and labour markets and a stable political situation that supports robust GDP growth (above 6% for the next few years). Lower health and primary education, and macroeconomic environment's scores drive most of Rwanda's decline. In terms of health and primary education, malaria cases passed from about 11 thousands per 100,000

people in 2013 to almost 31 in 2015 while primary enrolment rate reduced from 96.1% to 95.1%. In terms of macroeconomic environment Rwanda suffered especially from doubling inflation which passed from 2.5% in 2015 to 5.7% in 2016. In addition, despite large investments in telecommunication and transport infrastructure, a gap remains in these factors for now.

### Most problematic factors for doing business





# Rwanda

dex Component	Rank/137	7 Value	Trend	Inde	ex Component	Rank/137	Value	э Т
â 1st pillar: Institutions	16	5.4		1	6th pillar: Goods market efficiency	37	4.7	-
.01 Property rights	25	5.5		6.0	1 Intensity of local competition	84	4.9	_
.02 Intellectual property protection	28	5.2	_		2 Extent of market dominance	32	4.3	_
1.03 Diversion of public funds	16	5.5			3 Effectiveness of anti-monopoly policy	27	4.5	_
			_					
.04 Public trust in politicians	10	5.4			4 Effect of taxation on incentives to invest	34	4.3	_
.05 Irregular payments and bribes	21	5.7	$\sim$		5 Total tax rate % profits	49	33.0	_
.06 Judicial independence	23	5.6	_		6 No. of procedures to start a business	36	5	_
.07 Favoritism in decisions of government officials	9	5.0	$\sim$	6.0	7 Time to start a business days	12	4.0	_
.08 Efficiency of government spending	5	5.6		6.0	8 Agricultural policy costs	5	5.1	_
.09 Burden of government regulation	3	5.3	$\sim$	6.0	9 Prevalence of non-tariff barriers	62	4.4	_
.10 Efficiency of legal framework in settling disputes	13	5.4			0 Trade tariffs % duty	100	9.7	_
.11 Efficiency of legal framework in challenging regulations	11	5.0	_		Prevalence of foreign ownership	69	4.5	_
, ,								
12 Transparency of government policymaking	9	5.8			2 Business impact of rules on FDI	19	5.4	_
.13 Business costs of terrorism	20	5.9	_		3 Burden of customs procedures	18	5.3	_
.14 Business costs of crime and violence	7	6.0		6.1	4 Imports % GDP	84	38.7	-
15 Organized crime	11	6.1		6.1	5 Degree of customer orientation	41	5.0	_
16 Reliability of police services	13	6.2			6 Buyer sophistication	95	3.0	
17 Ethical behavior of firms	23	5.2		0.1	- Bayer coprime academ		0.0	_
				P.	7th pillar: Labor market efficiency	8	5.4	_
18 Strength of auditing and reporting standards	45	5.0		7.0		10	F 0	
19 Efficacy of corporate boards	31	5.5			1 Cooperation in labor-employer relations	18	5.3	_
20 Protection of minority shareholders' interests	25	5.0			2 Flexibility of wage determination	34	5.4	_
21 Strength of investor protection 0-10 (best)	88	5.2	~	7.0	3 Hiring and firing practices	16	4.6	
<u> </u>				7.0	4 Redundancy costs weeks of salary	48	13.0	
↑ 2nd pillar: Infrastructure	98	3.4			5 Effect of taxation on incentives to work	13	5.0	٠.
1 Quality of overall infrastructure	40	4.7	_		6 Pay and productivity	37	4.5	
•								
2 Quality of roads	32	5.0			7 Reliance on professional management	29	5.1	_
3 Quality of railroad infrastructure	n/a	not			8 Country capacity to retain talent	18	4.9	
·	Ċ	assessed		7.0	9 Country capacity to attract talent	14	5.0	
4 Quality of port infrastructure	115	2.9		7.1	Female participation in the labor force ratio to men	2	1.05	
5 Quality of air transport infrastructure	55	4.7						
6 Available airline seat kilometers millions/week	107	44.0			∃ 8th pillar: Financial market development	34	4.5	
7 Quality of electricity supply	89	4.4	_	8.0	1 Availability of financial services	72	4.2	-
08 Mobile-cellular telephone subscriptions /100 pop.	127	69.9			2 Affordability of financial services	84	3.6	-
	133	0.1	_		•			_
99 Fixed-telephone lines /100 pop.	133	0.1	$\overline{}$		3 Financing through local equity market	70	3.6	
3rd pillar: Macroeconomic environment	92	4.3	~~		4 Ease of access to loans	55	4.1	_
<b>-</b>		0.4	_	8.0	5 Venture capital availability	44	3.2	-
O1 Government budget balance % GDP	57	-2.4	~	8.0	6 Soundness of banks	84	4.5	
02 Gross national savings % GDP	125	7.5	~	8.0	7 Regulation of securities exchanges	43	4.9	Ξ.
33 Inflation annual % change	102	5.7	$\sim$	8.0	8 Legal rights index 0-10 (best)	4	11	_
04 Government debt % GDP	41	37.6	/		gg			ď
05 Country credit rating 0-100 (best)	105	28.9		28/3	9th pillar: Technological readiness	101	3.2	
• • • • • • • • • • • • • • • • • • • •				9.0	1 Availability of latest technologies	49	5.1	٠,
4th pillar: Health and primary education	98	5.3			, ,	49	4.8	_
of Malaria incidence cases/100,000 pop.	70 :	30,951.0			2 Firm-level technology absorption			
			_		3 FDI and technology transfer	45	4.7	
2 Business impact of malaria	27	5.0	_	9.0	4 Internet users % pop.	119	20.0	
3 Tuberculosis incidence cases/100,000 pop.	76	56.0		9.0	5 Fixed-broadband Internet subscriptions /100 pop.	125	0.2	
4 Business impact of tuberculosis	87	5.0		9.0	6 Internet bandwidth kb/s/user	116	7.5	
05 HIV prevalence % adult pop.	124	3.1			7 Mobile-broadband subscriptions /100 pop.	108	27.0	
06 Business impact of HIV/AIDS	99	4.8	_			100	27.0	_
7 Infant mortality deaths/1,000 live births	104	31.1	_	£1.3	10th pillar: Market size	123	2.6	
						100	0.5	
08 Life expectancy years	113	64.5			01 Domestic market size index	120	2.5	
9 Quality of primary education	53	4.3			02 Foreign market size index	129	3.0	
0 Primary education enrollment rate net %	70	95.1	~	10.	03 GDP (PPP) PPP \$ billions	120	22.8	
₹ en	110	3.2		10.	04 Exports % GDP	122	16.0	
5th pillar: Higher education and training	113	3.2			8			
1 Secondary education enrollment rate gross %	129	36.7	~	-od	11th pillar: Business sophistication	61	4.1	
2 Tertiary education enrollment rate gross %	121	8.0	/	11	01 Local supplier quantity	88	4.3	
3 Quality of the education system	38	4.4	_		02 Local supplier quality	91	4.1	
4 Quality of math and science education								
*	55	4.4			03 State of cluster development	42	4.1	
5 Quality of management schools	56				04 Nature of competitive advantage	50	3.9	_
6 Internet access in schools	54	4.5		11.	05 Value chain breadth	80	3.7	
7 Local availability of specialized training services	71	4.3		11.	06 Control of international distribution	77	3.5	
8 Extent of staff training	46	4.2			07 Production process sophistication	92	3.4	
						77	4.4	-
					08 Extent of marketing			
				11.	09 Willingness to delegate authority	33	4.8	
				388	€ 12th pillar: Innovation	44	3.6	
					01 Capacity for innovation	50	4.3	_
					02 Quality of scientific research institutions	68	3.8	_ '
				12.	03 Company spending on R&D	67	3.3	
				12.	04 University-industry collaboration in R&D	57	3.5	•
					05 Gov't procurement of advanced technology products	7	47	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

4.7

4.1

58

## Saudi Arabia

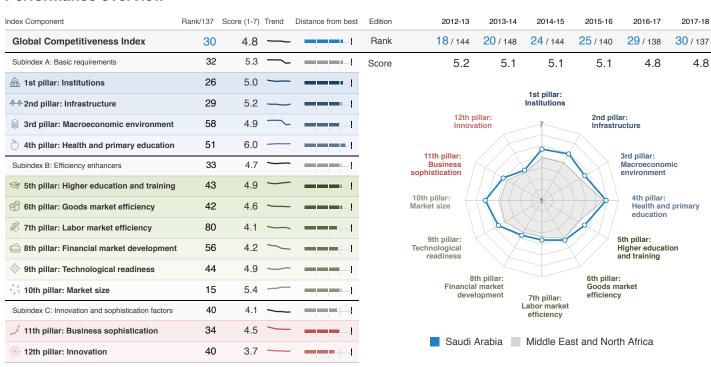


The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2		
Population millions	31.7	GDP per capita US\$	20,150.1	
GDP US\$ billions	639.6	GDP (PPP) % world GDP	1.46	

#### Performance overview

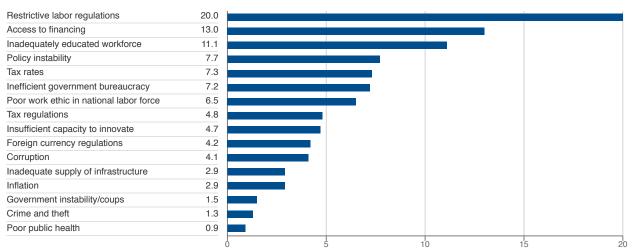


Saudi Arabia (30th) slips one position, with a relatively stable overall performance. The macroeconomic environment has improved slightly after the 2015 oil price shock, but financial market efficiency (down 10, at 57th) has deteriorated as interest rates increased in 2016 and credit growth slowed. The country has stable institutions (27th), good-quality infrastructure (29th), and the largest market in the Arab world (15th). Saudi executives see restrictive labor regulations as their most

problematic factor for doing business: the labor market is segmented among different population groups, and women remain largely excluded. Another concern is the lack of adequately educated workers: although tertiary enrollment is strong at 63 percent, more efforts are needed to advance the quality of education and align it with economic needs.

#### Most problematic factors for doing business





# Saudi Arabia

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	Э
⚠ 1st pillar: Institutions	26	5.0	_	<b>❸</b> 6th pillar: Goods market efficiency	42	4.6	-
1.01 Property rights	35	5.1	~	6.01 Intensity of local competition	41	5.4	-
1.02 Intellectual property protection	34	4.8	_	6.02 Extent of market dominance	29	4.3	_
.03 Diversion of public funds	20	5.3		6.03 Effectiveness of anti-monopoly policy	37	4.3	-
.04 Public trust in politicians	12	5.2		6.04 Effect of taxation on incentives to invest	32	4.3	-
1.05 Irregular payments and bribes	31	5.3	_	6.05 Total tax rate % profits	6	15.7	
.06 Judicial independence	30	5.2		6.06 No. of procedures to start a business	132	13	
	19	4.5		·	91	16.2	_
.07 Favoritism in decisions of government officials			$\sim$	6.07 Time to start a business days			
.08 Efficiency of government spending	7	5.3		6.08 Agricultural policy costs	32	4.3	
.09 Burden of government regulation	24	4.1		6.09 Prevalence of non-tariff barriers	55	4.5	_
.10 Efficiency of legal framework in settling disputes	22	4.8	_	6.10 Trade tariffs % duty	61	4.1	_
.11 Efficiency of legal framework in challenging regulations	33	4.0	$\sim$	6.11 Prevalence of foreign ownership	109	3.9	
12 Transparency of government policymaking	48	4.4	$\sim$	6.12 Business impact of rules on FDI	119	3.7	•
.13 Business costs of terrorism	58	5.3	_	6.13 Burden of customs procedures	37	4.8	
.14 Business costs of crime and violence	21	5.4	_	6.14 Imports % GDP	105	29.8	
15 Organized crime	21	5.7		6.15 Degree of customer orientation	66	4.6	
-	23		<b>\</b>	6.16 Buyer sophistication	30	4.0	
16 Reliability of police services				6.16 Buyer Sopriistication	30	4.0	
17 Ethical behavior of firms	25	5.0		7th pillar: Labor market efficiency	80	4.1	
18 Strength of auditing and reporting standards	41	5.1					
19 Efficacy of corporate boards	62	4.9		7.01 Cooperation in labor-employer relations	45	4.7	
20 Protection of minority shareholders' interests	33	4.8	_	7.02 Flexibility of wage determination	29	5.4	
21 Strength of investor protection 0-10 (best)	61	5.8	$\sim$	7.03 Hiring and firing practices	37	4.2	
				7.04 Redundancy costs weeks of salary	102	23.7	
⁴ 2nd pillar: Infrastructure	29	5.2		7.05 Effect of taxation on incentives to work	30	4.5	
01 Quality of overall infrastructure	30	4.9	_	7.06 Pay and productivity	35	4.5	
02 Quality of roads	34	4.8	_	7.07 Reliance on professional management	52	4.5	
•			_	-			
03 Quality of railroad infrastructure	53	3.3		7.08 Country capacity to retain talent	27	4.5	
04 Quality of port infrastructure	42	4.7	_	7.09 Country capacity to attract talent	24	4.5	
05 Quality of air transport infrastructure	46	4.9		7.10 Female participation in the labor force ratio to men	134	0.26	
06 Available airline seat kilometers millions/week	24	1,983.9		Oth nilley Financial maybet development	56	4.2	
07 Quality of electricity supply	30	6.2	_	8th pillar: Financial market development	50	4.2	
08 Mobile-cellular telephone subscriptions /100 pop.	15	157.6	~	8.01 Availability of financial services	52	4.4	
09 Fixed-telephone lines /100 pop.	77	12.0	~	8.02 Affordability of financial services	42	4.2	
				8.03 Financing through local equity market	37	4.3	
3rd pillar: Macroeconomic environment	58	4.9		8.04 Ease of access to loans	64	3.9	
01 Government budget balance % GDP	134	-16.9	$\overline{}$	8.05 Venture capital availability	31	3.5	
.02 Gross national savings % GDP	42	26.4	$\sim$	8.06 Soundness of banks	39	5.5	
•					34		
.03 Inflation annual % change	62	3.5		8.07 Regulation of securities exchanges		5.2	
04 Government debt % GDP	4	12.4		8.08 Legal rights index 0-10 (best)	107	2	
05 Country credit rating 0-100 (best)	33	71.5		💖 9th pillar: Technological readiness	44	4.9	
4th pillar: Health and primary education	51	6.0		9.01 Availability of latest technologies	40	5.4	
01 Malaria incidence cases/100,000 pop.	18	0.3		9.02 Firm-level technology absorption	32	5.1	
	6			6, 1		4.8	
D2 Business impact of malaria		5.8	$\overline{}$	9.03 FDI and technology transfer	39		
03 Tuberculosis incidence cases/100,000 pop.	35	12.0	_	9.04 Internet users % pop.	46	73.8	
04 Business impact of tuberculosis	57	5.7		9.05 Fixed-broadband Internet subscriptions /100 pop.	68	10.8	
05 HIV prevalence % adult pop.	1	<0.1		9.06 Internet bandwidth kb/s/user	56	78.2	
.06 Business impact of HIV/AIDS	56	5.6	_	9.07 Mobile-broadband subscriptions /100 pop.	43	78.5	
07 Infant mortality deaths/1,000 live births	69	12.5	<b>~</b>	^7			
08 Life expectancy years	74		~	્રૈં <sup>રૂ</sup> 10th pillar: Market size	15	5.4	
09 Quality of primary education	63	4.1		10.01 Domestic market size index	15	5.3	
10 Primary education enrollment rate net %	42	97.6		10.02 Foreign market size index	24	5.8	
10 1 minary education emoliment rate liet %	44	37.0		10.03 GDP (PPP) PPP \$ billions		1,750.9	
₹ 5th pillar: Higher education and training	43	4.9	_	10.04 Exports % GDP	86	29.7	
01 Secondary education enrollment rate gross %	22	108.3	~				
02 Tertiary education enrollment rate gross %	41	63.1	_	√ 11th pillar: Business sophistication	34	4.5	
03 Quality of the education system	41	4.3		11.01 Local supplier quantity	29	4.9	
	63		$\subseteq$	11.02 Local supplier quality	64	4.4	
04 Quality of math and science education				11.03 State of cluster development	22	4.7	
05 Quality of management schools	52		$\sim$	·	39		
106 Internet access in schools	57	4.4	$\sim$	11.04 Nature of competitive advantage		4.2	
07 Local availability of specialized training services	67	4.3	$\overline{}$	11.05 Value chain breadth	37	4.3	
08 Extent of staff training	63	4.0	_	11.06 Control of international distribution	32	4.3	
-				11.07 Production process sophistication	34	4.6	
				11.08 Extent of marketing	55	4.6	
				11.09 Willingness to delegate authority	48	4.5	
				. \/			
				12th pillar: Innovation	40	3.7	
				12.01 Capacity for innovation	64	4.2	
				12.02 Quality of scientific research institutions	54	4.0	
				12.03 Company spending on R&D	45	3.6	
				12.04 University-industry collaboration in R&D	46	3.7	
				12.05 Gov't procurement of advanced technology products	15	12	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

15

34

4.2

# Senegal

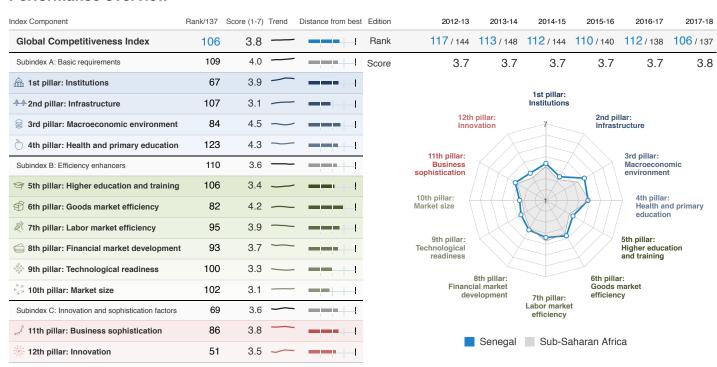
106th<sub>/137</sub>

The Global Competitiveness Index 2017-2018 edition



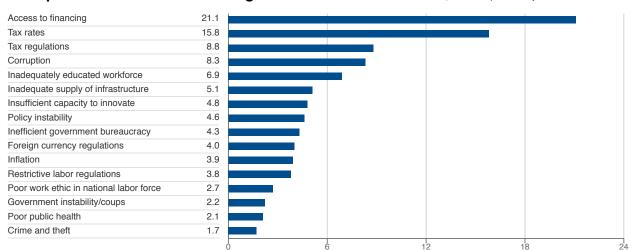
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April			
Population millions	15.4	GDP per capita US\$	959.7		
GDP US\$ billions	14.8	GDP (PPP) % world GDP	0.03		

#### Performance overview



### Most problematic factors for doing business





# Senegal

Index Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	Trend
â 1st pillar: Institutions	67	3.9	_		82	4.2	_
1.01 Property rights	71	4.3	_	6.01 Intensity of local competition	69	5.1	~
1.02 Intellectual property protection	59	4.3	_	6.02 Extent of market dominance	53	3.9	_
1.03 Diversion of public funds	74	3.4	_	6.03 Effectiveness of anti-monopoly policy	77	3.6	$\sim$
1.04 Public trust in politicians	64	3.1		6.04 Effect of taxation on incentives to invest	92	3.4	_
1.05 Irregular payments and bribes	82	3.6		6.05 Total tax rate % profits	98	45.1	~~
1.06 Judicial independence	77	3.7		6.06 No. of procedures to start a business	18	4	
1.07 Favoritism in decisions of government officials	60	3.2		6.07 Time to start a business days	30	6.0	
1.08 Efficiency of government spending	43	3.7	_	6.08 Agricultural policy costs	73	3.7	~
1.09 Burden of government regulation	53	3.6	~	6.09 Prevalence of non-tariff barriers	113	3.9	$\sim$
1.10 Efficiency of legal framework in settling disputes	40	4.3		6.10 Trade tariffs % duty	109	10.8	$\sim$
1.11 Efficiency of legal framework in challenging regulations	41	3.8	_	6.11 Prevalence of foreign ownership	63	4.5	~
1.12 Transparency of government policymaking	69	4.0	~	6.12 Business impact of rules on FDI	76	4.5	~
1.13 Business costs of terrorism	113	4.3		6.13 Burden of customs procedures	49	4.6	~
1.14 Business costs of crime and violence	87	4.2		6.14 Imports % GDP	62	46.1	$\overline{}$
1.15 Organized crime	85		<u></u>	6.15 Degree of customer orientation	77	4.5	_
1.16 Reliability of police services	45			6.16 Buyer sophistication	117	2.7	_
1.17 Ethical behavior of firms	75					2.7	_
1.18 Strength of auditing and reporting standards	104	4.0		7th pillar: Labor market efficiency	95	3.9	
	89		_	7.01 Cooperation in labor-employer relations	70	4.3	_
1.19 Efficacy of corporate boards		4.6		7.02 Flexibility of wage determination	90	4.6	_
1.20 Protection of minority shareholders' interests	56		~	7.03 Hiring and firing practices	89	3.5	_
1.21 Strength of investor protection 0-10 (best)	112	4.2	_~	7.04 Redundancy costs weeks of salary	60	14.8	
◆◆ 2nd pillar: Infrastructure	107	3.1		7.04 Redundancy Costs weeks of salary  7.05 Effect of taxation on incentives to work	53	4.2	
·	114	2.0	$\sim$				_
2.01 Quality of overall infrastructure	114	2.9		7.06 Pay and productivity	109 91	3.4	
2.02 Quality of roads	83		_	7.07 Reliance on professional management			
2.03 Quality of railroad infrastructure	82		_	7.08 Country capacity to retain talent	88	3.2	_
2.04 Quality of port infrastructure	59		~	7.09 Country capacity to attract talent	50	3.6	=
2.05 Quality of air transport infrastructure	79	4.2		7.10 Female participation in the labor force ratio to men	104	0.65	
2.06 Available airline seat kilometers millions/week	86		$\sim$	8th pillar: Financial market development	93	3.7	_
2.07 Quality of electricity supply	103	3.6					
2.08 Mobile-cellular telephone subscriptions /100 pop.	100			8.01 Availability of financial services	100	3.8	
2.09 Fixed-telephone lines /100 pop.	114	1.9		8.02 Affordability of financial services	107	3.2	_
	84	4.5	_	8.03 Financing through local equity market	75	3.4	
·			_	8.04 Ease of access to loans	107	3.3	
3.01 Government budget balance % GDP	93	-4.2		8.05 Venture capital availability	94	2.6	
3.02 Gross national savings % GDP	76	19.8		8.06 Soundness of banks	83	4.5	_
3.03 Inflation annual % change	1	0.9		8.07 Regulation of securities exchanges	97	3.8	$\leq$
3.04 Government debt % GDP	83	57.4		8.08 Legal rights index 0-10 (best)	50	6	
3.05 Country credit rating 0-100 (best)	87	35.2		9th pillar: Technological readiness	100	3.3	
3 4th pillar: Health and primary education	123	4.3	_	9.01 Availability of latest technologies	59	4.9	_
4.01 Malaria incidence cases/100,000 pop.	53	9,671.4	$\overline{}$	9.02 Firm-level technology absorption	48	4.8	_
4.02 Business impact of malaria	30	4.8	_	9.03 FDI and technology transfer	81	4.2	$\overline{}$
4.03 Tuberculosis incidence cases/100,000 pop.	100	139.0		9.04 Internet users % pop.	107	25.7	~
4.04 Business impact of tuberculosis	85	5.1		9.05 Fixed-broadband Internet subscriptions /100 pop.	111	0.6	_
4.05 HIV prevalence % adult pop.	73	0.4	_	9.06 Internet bandwidth kb/s/user	121	5.0	$\Delta$
	67	5.4		9.07 Mobile-broadband subscriptions /100 pop.	110	26.1	->=
4.06 Business impact of HIV/AIDS 4.07 Infant mortality deaths/1,000 live births	116	41.7			110	۷. ۱	_
				10th pillar: Market size	102	3.1	_
4.08 Life expectancy years	106	66.8		10.01 Domestic market size index	98	2.9	_
4.09 Quality of primary education	82		_	10.02 Foreign market size index	110	3.6	_
4.10 Primary education enrollment rate net %	132	71.4	~	10.03 GDP (PPP) PPP \$ billions	100	39.7	
⇒ 5th pillar: Higher education and training	106	3.4	—	10.04 Exports % GDP	96	25.1	~~
5.01 Secondary education enrollment rate gross %	115	49.6	~	·	0.0		_
5.02 Tertiary education enrollment rate gross %	113	10.4		and 11th pillar: Business sophistication	86	3.8	
5.03 Quality of the education system	78		$\sim$	11.01 Local supplier quantity	72	4.5	_
5.04 Quality of math and science education	79	3.9		11.02 Local supplier quality	89	4.1	~
5.05 Quality of management schools	40	4.8		11.03 State of cluster development	93	3.5	
5.06 Internet access in schools	64	4.3	_	11.04 Nature of competitive advantage	79	3.3	_
5.07 Local availability of specialized training services	27		~	11.05 Value chain breadth	79	3.7	_
5.08 Extent of staff training	95		~	11.06 Control of international distribution	85	3.4	$\sim$
	00	0.0	-	11.07 Production process sophistication	95	3.4	^
				11.08 Extent of marketing	72	4.4	_
				11.09 Willingness to delegate authority	121	3.6	
				M.	51	3.5	
				# 12th pillar: Innovation 12.01 Capacity for innovation	55		
				12.02 Quality of scientific research institutions	44		
				12.03 Company spending on R&D	55		
				12.04 University-industry collaboration in R&D	56 48	3.6	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

48

86

3.5

# Serbia



The Global Competitiveness Index 2017-2018 edition



2017-18 78 / 137

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (Ap		
Population millions	7.0	GDP per capita US\$	5,376.3	
GDP US\$ billions	37.7	GDP (PPP) % world GDP	0.09	

Edition

Rank

2012-13

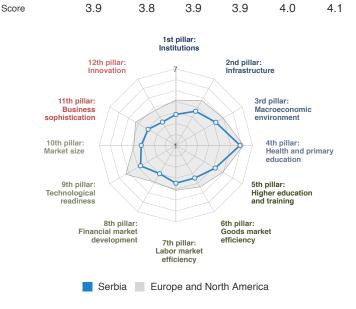
95 / 144

2013-14

101 / 148

#### Performance overview

Index Component	Rank/137	Score (1-7)	Trend	Distance from best
Global Competitiveness Index	78	4.1		
Subindex A: Basic requirements	74	4.5	_	
â 1st pillar: Institutions	104	3.4		
<b>1</b> 2nd pillar: Infrastructure	75	4.1		
	72	4.6	_	
3 4th pillar: Health and primary education	52	6.0		
Subindex B: Efficiency enhancers	82	4.0		
⇒ 5th pillar: Higher education and training	59	4.6		
	110	4.0		
7th pillar: Labor market efficiency	92	4.0	_	
8th pillar: Financial market development	101	3.6	~	
% 9th pillar: Technological readiness	72	4.2	~	
$\mathcal{C}_{\varphi}^{\uparrow,\gamma}$ 10th pillar: Market size	74	3.7	_	
Subindex C: Innovation and sophistication factors	104	3.3	_	
္တီ 11th pillar: Business sophistication	110	3.5	_	
※ 12th pillar: Innovation	95	3.1		



2014-15

94 / 144

2015-16

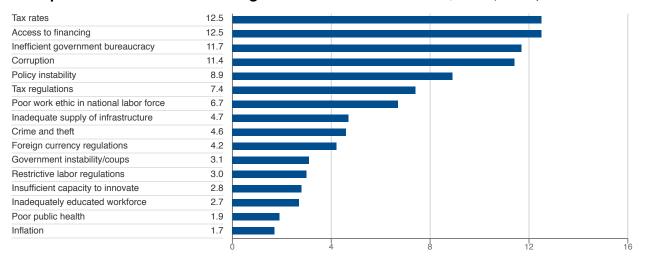
94/140

2016-17

90 / 138

### Most problematic factors for doing business





# Serbia

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
☆ 1st pillar: Institutions	104	3.4			6th pillar: Goods market efficiency	110	4.0	_
1.01 Property rights	124	3.4		6.0	Intensity of local competition	115	4.5	_
1.02 Intellectual property protection	116	3.3			Extent of market dominance	112	3.2	_
1.03 Diversion of public funds	89	3.1			Effectiveness of anti-monopoly policy	114	3.1	_
1.04 Public trust in politicians	87	2.6			Effect of taxation on incentives to invest	98	3.3	_
1.05 Irregular payments and bribes	71	3.9			5 Total tax rate % profits	78	39.7	
1.06 Judicial independence	118	2.8			6 No. of procedures to start a business	36	5	-
1.07 Favoritism in decisions of government officials	104	2.5			7 Time to start a business days	41	7.0	_
1.08 Efficiency of government spending	44	3.7			Agricultural policy costs	130	2.9	_
1.09 Burden of government regulation	122	2.6			Prevalence of non-tariff barriers	101	4.0	_
1.10 Efficiency of legal framework in settling disputes	117	2.7			Trade tariffs % duty	75	5.2	_
	119	2.6			Prevalence of foreign ownership	77	4.4	_
1.11 Efficiency of legal framework in challenging regulations			_		- ·			
1.12 Transparency of government policymaking	78	3.9			Business impact of rules on FDI	80	4.3	_
1.13 Business costs of terrorism	77	5.0	_		B Burden of customs procedures	87	3.9	~
1.14 Business costs of crime and violence	81	4.4			Imports % GDP	30	61.6	^
1.15 Organized crime	107	4.1			Degree of customer orientation	100	4.2	_
1.16 Reliability of police services	95	3.9		6.16	Buyer sophistication	128	2.4	_
1.17 Ethical behavior of firms	99	3.4	_	£6	7th pillar: Labor market efficiency	92	4.0	_
1.18 Strength of auditing and reporting standards	106	3.9		25,				
1.19 Efficacy of corporate boards	85	4.6			Cooperation in labor-employer relations	105	4.0	_
1.20 Protection of minority shareholders' interests	132	3.0			Programme Flexibility of wage determination	40	5.3	-
.21 Strength of investor protection 0-10 (best)	66	5.7	_~		Hiring and firing practices	80	3.6	_
	7.5			7.04	Redundancy costs weeks of salary	18	7.7	_
1 2nd pillar: Infrastructure	75	4.1		7.05	Effect of taxation on incentives to work	125	2.9	_
2.01 Quality of overall infrastructure	96	3.5	$\sim$	7.06	Pay and productivity	68	3.9	_
2.02 Quality of roads	100	3.2	_	7.07	Reliance on professional management	128	3.3	_
2.03 Quality of railroad infrastructure	79	2.2	_	7.08	Country capacity to retain talent	134	1.8	_
2.04 Quality of port infrastructure	113	3.0	_		Country capacity to attract talent	132	2.0	_
2.05 Quality of air transport infrastructure	76	4.2			Female participation in the labor force ratio to men	79	0.77	-
2.06 Available airline seat kilometers millions/week	87	95.4			, , , , , , , , , , , , , , , , , , ,			
2.07 Quality of electricity supply	69	5.0	_		8th pillar: Financial market development	101	3.6	_
2.08 Mobile-cellular telephone subscriptions /100 pop.	62	120.6	V	8.0	Availability of financial services	107	3.6	-
2.09 Fixed-telephone lines /100 pop.	25	36.0			Affordability of financial services	116	3.0	_
2.09 Fixed-telepriorie lines 7100 pop.	23	30.0	~		Financing through local equity market	110	2.9	_
	72	4.6	_		Ease of access to loans	86	3.6	
3.01 Government budget balance % GDP	35	-1.3	~~		5 Venture capital availability	95	2.6	=
-	106	14.0				88		
3.02 Gross national savings % GDP			<u></u>		Soundness of banks		4.4	_
3.03 Inflation annual % change	1	1.1			Regulation of securities exchanges	109	3.6	=
3.04 Government debt % GDP	106	74.1		8.08	B Legal rights index 0-10 (best)	50	6	
3.05 Country credit rating 0-100 (best)	77	39.8		e\$\$\$0	9th pillar: Technological readiness	72	4.2	_
4th pillar: Health and primary education	52	6.0		9.0	Availability of latest technologies	87	4.4	_
4.01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02	Firm-level technology absorption	117	3.9	_
4.02 Business impact of malaria	n/a	6.7		9.03	FDI and technology transfer	101	3.9	_
4.03 Tuberculosis incidence cases/100,000 pop.	49	21.0	~~	9.04	Internet users % pop.	57	67.1	_
4.04 Business impact of tuberculosis	53	5.9		9.05	Fixed-broadband Internet subscriptions /100 pop.	46	18.9	_
4.05 HIV prevalence % adult pop.	1	<0.1			Internet bandwidth kb/s/user	89	26.3	
4.06 Business impact of HIV/AIDS	48	5.8			Mobile-broadband subscriptions /100 pop.	55	67.4	
4.07 Infant mortality deaths/1,000 live births	42	5.9	_					
4.08 Life expectancy years	59	75.5		£ 7 3	10th pillar: Market size	74	3.7	_
					1 Domestic market size index	74	3.4	_
4.09 Quality of primary education	64	4.1	_		2 Foreign market size index	68	4.5	
4.10 Primary education enrollment rate net %	60	96.3	~		33 GDP (PPP) PPP \$ billions	75	101.8	
	59	4.6			4 Exports % GDP	30	52.7	_
5.01 Secondary education enrollment rate gross %	58	96.7			·			_
5.02 Tertiary education enrollment rate gross %	46	58.3	_	000	11th pillar: Business sophistication	110	3.5	-
5.03 Quality of the education system	93		_	11.0	1 Local supplier quantity	106	4.1	-
5.04 Quality of math and science education	29		=		2 Local supplier quality	79	4.2	_
					3 State of cluster development	100	3.4	_
5.05 Quality of management schools	85		~		4 Nature of competitive advantage	133	2.3	_
5.06 Internet access in schools	85		~		5 Value chain breadth	109	3.3	
5.07 Local availability of specialized training services	87							
5.08 Extent of staff training	113	3.4			26 Control of international distribution	91	3.3	
					77 Production process sophistication	107	3.2	_
					8 Extent of marketing	108	4.0	-
				11.0	9 Willingness to delegate authority	90	4.0	
				辦	12th pillar: Innovation	95	3.1	-
				12 (	1 Capacity for innovation	117	3.5	_
					2 Quality of scientific research institutions	47	4.2	
					3 Company spending on R&D	107	2.9	
				16.0	of University is divising on the DOD	05	2.5	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

95

105

68

3.2

2.8

# Seychelles

The Global Competitiveness Index 2017-2018 edition

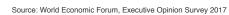


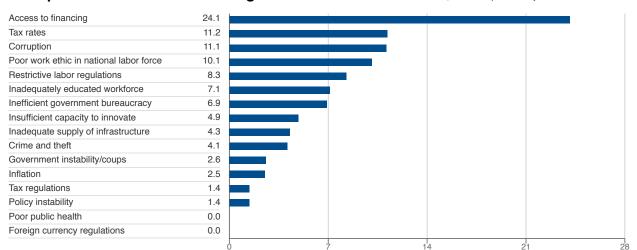
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (Apr		
Population millions 0.1		GDP per capita US\$	14,938.1	
GDP US\$ billions	1.4	GDP (PPP) % world GDP	0.00	

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2017-18			
Global Competitiveness Index	107	3.8			Rank	<b>76</b> / 144	80 / 148	92 / 144	97 / 140	<b>107</b> / 137			
Subindex A: Basic requirements	62	4.7			Score	4.1	4.1	3.9	3.9	3.8			
☆ 1st pillar: Institutions	81	3.8	_										
<b>1</b> 2nd pillar: Infrastructure	50	4.6	_				1st p Institu						
	73	4.6	~			12th pillar: Innovation			d pillar: rastructure				
3 4th pillar: Health and primary education	57	6.0							0.1.71				
Subindex B: Efficiency enhancers	115	3.5				11th pillar: Business sophistication			3rd pillar: Macroecoi environme				
⇒ 5th pillar: Higher education and training	94	3.9	_						<b>/</b>				
	74	4.3	~			10th pillar: Market size			4th pillar: Health and primary education				
7th pillar: Labor market efficiency	81	4.1	~				0						
8th pillar: Financial market development	115	3.3	_			9th pillar: Technological readiness			5th pillar: Higher edu and training				
9th pillar: Technological readiness	75	4.2	_			8th pil	lor	6th	pillar:	5			
10th pillar: Market size	137	1.4	_			Financial mai developm	ket	Goo	ds market ciency				
Subindex C: Innovation and sophistication factors	93	3.4						market					
္တီ 11th pillar: Business sophistication	76	3.9	_			Sove	hallaa 🔲 G	Sub Cabaran	Africa				
★ 12th pillar: Innovation	105	2.9	_		Seychelles Sub-Saharan Africa								

### Most problematic factors for doing business





# Seychelles

ndex Component	Rank/137	Value	e Trend	Index Component	Rank/137	Value	, -
1st pillar: Institutions	81	3.8	_		74	4.3	-
1 Property rights	60	4.4	$\sim$	6.01 Intensity of local competition	80	5.0	_
2 Intellectual property protection	103	3.5		6.02 Extent of market dominance	126	2.8	_
3 Diversion of public funds	90	3.1	$\sim$	6.03 Effectiveness of anti-monopoly policy	90	3.4	-
4 Public trust in politicians	83	2.8		6.04 Effect of taxation on incentives to invest	79	3.5	_
5 Irregular payments and bribes	84	3.6	_	6.05 Total tax rate % profits	36	30.1	
6 Judicial independence	63	4.0	_	6.06 No. of procedures to start a business	105	9	
7 Favoritism in decisions of government officials	96	2.6	_	6.07 Time to start a business days	120	32.0	
8 Efficiency of government spending	50	3.6	~	6.08 Agricultural policy costs	68	3.8	
9 Burden of government regulation	29	4.0		6.09 Prevalence of non-tariff barriers	43	4.6	_
Efficiency of legal framework in settling disputes	59	3.7	_	6.10 Trade tariffs % duty	41	2.5	
1 Efficiency of legal framework in challenging regulations	50	3.6	$\sim$	6.11 Prevalence of foreign ownership	60	4.7	•
12 Transparency of government policymaking	54	4.3	$\overline{}$	6.12 Business impact of rules on FDI	71	4.5	
13 Business costs of terrorism	102	4.5	$\sim$	6.13 Burden of customs procedures	82	3.9	
14 Business costs of crime and violence	82	4.3	$\sim$	6.14 Imports % GDP	5	110.1	
15 Organized crime	80	4.6	/	6.15 Degree of customer orientation	125	3.7	
16 Reliability of police services	63	4.5		6.16 Buyer sophistication	49	3.7	Ξ.
17 Ethical behavior of firms	89	3.6	$\overline{}$	- Ca			
8 Strength of auditing and reporting standards	126	3.6	~	7th pillar: Labor market efficiency	81	4.1	
9 Efficacy of corporate boards	124	4.1		7.01 Cooperation in labor-employer relations	74	4.3	
Protection of minority shareholders' interests	74	4.0	_	7.02 Flexibility of wage determination	116	4.2	
21 Strength of investor protection 0-10 (best)	91	5.0	$\overline{}$	7.03 Hiring and firing practices	81	3.6	
er energin er invester protestion e to (seet)		0.0	•	7.04 Redundancy costs weeks of salary	45	12.0	
◆ 2nd pillar: Infrastructure	50	4.6		7.05 Effect of taxation on incentives to work	80	3.7	
1 Quality of overall infrastructure	41	4.7		7.06 Pay and productivity	39	4.4	
2 Quality of roads	53	4.4	_	7.07 Reliance on professional management	130	3.2	
•		not		7.08 Country capacity to retain talent	81	3.2	
3 Quality of railroad infrastructure	n/a as	sessed		7.09 Country capacity to attract talent	27	4.3	
04 Quality of port infrastructure	53	4.5		7.10 Female participation in the labor force ratio to men	n/a	n/a	
5 Quality of air transport infrastructure	57	4.7			11/4	1170	
06 Available airline seat kilometers millions/week	95	63.8	_	8th pillar: Financial market development	115	3.3	
7 Quality of electricity supply	66	5.0	_	8.01 Availability of financial services	118	3.4	
08 Mobile-cellular telephone subscriptions /100 pop.	10	161.2	~~	8.02 Affordability of financial services	100	3.4	
09 Fixed-telephone lines /100 pop.	45	22.1	~	8.03 Financing through local equity market	98	3.0	
and the priority in the paper.				8.04 Ease of access to loans	112	3.1	
3rd pillar: Macroeconomic environment	73	4.6	~	8.05 Venture capital availability	115	2.3	
O1 Government budget balance % GDP	16	0.0	~	8.06 Soundness of banks	77	4.6	
2 Gross national savings % GDP	110	13.1	^		95		
03 Inflation annual % change	85	-1.0	^	8.07 Regulation of securities exchanges		3.8	
04 Government debt % GDP	101	68.6	~	8.08 Legal rights index 0-10 (best)	107	2	
05 Country credit rating 0-100 (best)	112	27.3	_	9th pillar: Technological readiness	75	4.2	
				9.01 Availability of latest technologies	54	5.0	
4th pillar: Health and primary education	57	6.0		9.02 Firm-level technology absorption	54	4.6	
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.03 FDI and technology transfer	66	4.4	
2 Business impact of malaria	n/a	5.2			74	56.5	
33 Tuberculosis incidence cases/100,000 pop.	32	9.5	$\overline{}$	9.04 Internet users % pop.			_
24 Business impact of tuberculosis	92	5.0	~	9.05 Fixed-broadband Internet subscriptions /100 pop.	58	14.9	
D5 HIV prevalence % adult pop.	102	0.8	~	9.06 Internet bandwidth kb/s/user	73	52.4	
D6 Business impact of HIV/AIDS	103		_	9.07 Mobile-broadband subscriptions /100 pop.	115	22.6	
77 Infant mortality deaths/1,000 live births	66	11.7	~~	10th pillar: Market size	137	1.4	
08 Life expectancy years							
	85 51		~	10.01 Domestic market size index	138	1.0	
09 Quality of primary education	74	4.4	-	10.02 Foreign market size index	132	2.8	
10 Primary education enrollment rate net %	/4	94.9	~	10.03 GDP (PPP) PPP \$ billions	138	2.6	
5th pillar: Higher education and training	94	3.9	)	10.04 Exports % GDP	10	94.4	
1 Secondary education enrollment rate gross %	89	81.6	$\overline{}$	√ 11th pillar: Business sophistication	76	3.9	
22 Tertiary education enrollment rate gross %	107	14.3		11.01 Local supplier quantity	108	4.0	
3 Quality of the education system	63			11.02 Local supplier quality	92	4.1	
24 Quality of math and science education	67	4.1		11.03 State of cluster development	71	3.7	
5 Quality of management schools	55			,	32		
				11.04 Nature of competitive advantage		4.4	
6 Internet access in schools	89	3.7	~	11.05 Value chain breadth	60	3.9	
7 Local availability of specialized training services	102		~	11.06 Control of international distribution	102	3.2	
8 Extent of staff training	42	4.3	$\sim$	11.07 Production process sophistication	67	3.8	
				11.08 Extent of marketing	81	4.2	
				11.09 Willingness to delegate authority	119	3.7	
				* 12th pillar: Innovation	105	2.9	
				12.01 Capacity for innovation	106	3.7	
				12.02 Quality of scientific research institutions	110		
						3.1	
				12.03 Company spending on R&D	111	2.8	
				12.04 University-industry collaboration in R&D	124	2.7	
				12 Up 1-0VT procurement of advanced technology producte	36	27	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

36

126

3.7

## Sierra Leone



The Global Competitiveness Index 2017-2018 edition



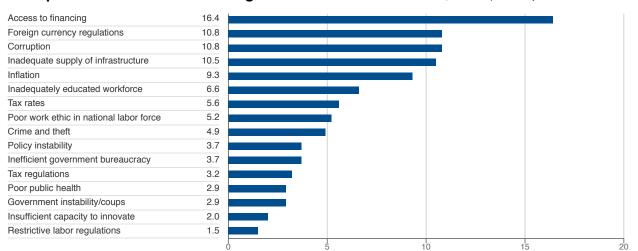
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20		
Population millions	6.4	GDP per capita US\$	618.2	
GDP US\$ billions	4.0	GDP (PPP) % world GDP	0.01	

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from besi	t Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	
Global Competitiveness Index	130	3.2			Rank	143 / 144	144 / 148	138 / 144	137 / 140	132 / 138	130 / 137	
Subindex A: Basic requirements	127	3.4			Score	2.8	3.0	3.1	3.1	3.2	3.2	
☆ 1st pillar: Institutions	112	3.3	~									
<b>1</b> 2nd pillar: Infrastructure	120	2.6	_					1st pillar: Institutions				
	128	3.2	~				pillar: ovation	7	2nd pi Infrast	llar: ructure		
3 4th pillar: Health and primary education	124	4.3					$\wedge$		A			
Subindex B: Efficiency enhancers	132	3.0	_			11th pillar: Business sophistication				3rd pillar: Macroecono environment		
⇒ 5th pillar: Higher education and training	132	2.5	_				////>			4th pillar: Health and prima education		
	125	3.7	~			10th pillar: Market size		0 0				
7th pillar: Labor market efficiency	111	3.7	_						$\gg 1$			
8th pillar: Financial market development	118	3.2	~			9th pillar: Technological readiness				5th pillar: Higher educa and training	ition	
💖 9th pillar: Technological readiness	128	2.5	~				Oth niller		6th pilla			
10th pillar: Market size	129	2.2	_			Financ	8th pillar: Financial market development 7th pillar:			narket		
Subindex C: Innovation and sophistication factors	129	3.0	~			development 7th pillar: efficiency Labor market efficiency						
→ 11th pillar: Business sophistication	128	3.2					Diagna I aan	o Cub	Cabaran A	fui a a		
★ 12th pillar: Innovation	125	2.7				Sierra Leone Sub-Saharan Africa				IIICa		

### Most problematic factors for doing business Source: World Economic Forum, Executive Opinion Survey 2017





# Sierra Leone

ndex Component	Rank/137	7 Value	Trend	Index Component	Rank/137	Value
â 1st pillar: Institutions	112	3.3	~	6th pillar: Goods market efficiency	125	3.7
1.01 Property rights	117	3.6	~	6.01 Intensity of local competition	133	3.9
1.02 Intellectual property protection	114	3.4	~	6.02 Extent of market dominance	125	2.9
1.03 Diversion of public funds	100	2.9	$\overline{}$	6.03 Effectiveness of anti-monopoly policy	125	2.8
.04 Public trust in politicians	77	2.9	~	6.04 Effect of taxation on incentives to invest	93	3.4
.05 Irregular payments and bribes	125	2.7		6.05 Total tax rate % profits	42	31.0
	112	2.9			53	6
.06 Judicial independence				6.06 No. of procedures to start a business		
.07 Favoritism in decisions of government officials	99	2.6	$\sim$	6.07 Time to start a business days	61	10.0
.08 Efficiency of government spending	84	3.0		6.08 Agricultural policy costs	120	3.0
.09 Burden of government regulation	85	3.2	_	6.09 Prevalence of non-tariff barriers	123	3.7
.10 Efficiency of legal framework in settling disputes	84	3.4	$\sim$	6.10 Trade tariffs % duty	130	14.6
11 Efficiency of legal framework in challenging regulations	117	2.6	~	6.11 Prevalence of foreign ownership	99	4.1
12 Transparency of government policymaking	94	3.7		6.12 Business impact of rules on FDI	94	4.2
			_			
13 Business costs of terrorism	110	4.4	_	6.13 Burden of customs procedures	117	3.3
.14 Business costs of crime and violence	108	3.7	_	6.14 Imports % GDP	42	55.1
.15 Organized crime	108	4.1	~	6.15 Degree of customer orientation	127	3.7
.16 Reliability of police services	110	3.4	~	6.16 Buyer sophistication	122	2.6
17 Ethical behavior of firms	116	3.2	$\sim$	-74		
18 Strength of auditing and reporting standards	127	3.5		7th pillar: Labor market efficiency	111	3.7
				7.01 Cooperation in labor-employer relations	112	3.9
19 Efficacy of corporate boards	120	4.2	$\sim$			
20 Protection of minority shareholders' interests	118	3.4	$\sim$	7.02 Flexibility of wage determination	112	4.3
21 Strength of investor protection 0-10 (best)	79	5.3	$\sim$	7.03 Hiring and firing practices	96	3.4
				7.04 Redundancy costs weeks of salary	135	75.5
2nd pillar: Infrastructure	120	2.6	_	7.05 Effect of taxation on incentives to work	95	3.5
01 Quality of overall infrastructure	121	2.6	~	7.06 Pay and productivity	117	3.3
02 Quality of roads	101			7.07 Reliance on professional management	103	3.7
oz quality of rodus	101					
03 Quality of railroad infrastructure	n/a	not assessed		7.08 Country capacity to retain talent	102	3.0
04 Quality of part infrastructure			~ -	7.09 Country capacity to attract talent	82	3.1
04 Quality of port infrastructure	102	3.3	_	7.10 Female participation in the labor force ratio to men	9	0.96
05 Quality of air transport infrastructure	127	2.8	~			
06 Available airline seat kilometers millions/week	133	6.3	<b>^</b>	8th pillar: Financial market development	118	3.2
07 Quality of electricity supply	120	2.6	$\sim$	8.01 Availability of financial services	123	3.3
08 Mobile-cellular telephone subscriptions /100 pop.	101	97.6	_	8.02 Affordability of financial services	118	3.0
09 Fixed-telephone lines /100 pop.	128	0.3		•	107	2.9
09 Fixed-teleprione lines 7100 pop.	120	0.0		8.03 Financing through local equity market		
3rd pillar: Macroeconomic environment	128	3.2		8.04 Ease of access to loans	128	2.7
•				8.05 Venture capital availability	111	2.4
01 Government budget balance % GDP	103	-4.8		8.06 Soundness of banks	119	3.6
02 Gross national savings % GDP	133	-1.1	~	8.07 Regulation of securities exchanges	124	3.3
.03 Inflation annual % change	126	11.3		8.08 Legal rights index 0-10 (best)	70	5
04 Government debt % GDP	77	53.4	<u> </u>	c.co Logar righte mack on to (cook)	, ,	Ŭ
05 Country credit rating 0-100 (best)	131	17.2		% 9th pillar: Technological readiness	128	2.5
				9.01 Availability of latest technologies	133	3.0
4th pillar: Health and primary education	124	4.3				
01 Malaria incidence cases/100,000 pop.	60 (	30,928.0	- ^	9.02 Firm-level technology absorption	126	3.5
			$\sim$	9.03 FDI and technology transfer	127	3.3
02 Business impact of malaria	57	2.9		9.04 Internet users % pop.	130	11.8
03 Tuberculosis incidence cases/100,000 pop.	124	307.0	~	9.05 Fixed-broadband Internet subscriptions /100 pop.	138	0.0
04 Business impact of tuberculosis	129	3.6		9.06 Internet bandwidth kb/s/user	135	1.0
.05 HIV prevalence % adult pop.	118	1.7				
.06 Business impact of HIV/AIDS	123	3.6	_	9.07 Mobile-broadband subscriptions /100 pop.	113	23.4
•				10th pillar: Market size	129	2.2
.07 Infant mortality deaths/1,000 live births	138	87.1				
08 Life expectancy years	136		~	10.01 Domestic market size index	129	2.1
09 Quality of primary education	118	2.9		10.02 Foreign market size index	134	2.6
10 Primary education enrollment rate net %	15	99.1		10.03 GDP (PPP) PPP \$ billions	130	10.8
·				10.04 Exports % GDP	116	16.7
₹ 5th pillar: Higher education and training	132	2.5	_	10.04 Exporte % dB1	110	10.7
01 Secondary education enrollment rate gross %	122	43.3	~~	√ 11th pillar: Business sophistication	128	3.2
02 Tertiary education enrollment rate gross %	n/a		^_	11.01 Local supplier quantity	112	4.0
03 Quality of the education system	99	3.2	_	11.02 Local supplier quality	126	3.4
04 Quality of math and science education	121	2.8		11.03 State of cluster development	122	3.0
05 Quality of management schools	127	3.1		11.04 Nature of competitive advantage	124	2.5
06 Internet access in schools	131		_	11.05 Value chain breadth	127	2.9
07 Local availability of specialized training services	132		_			
				11.06 Control of international distribution	117	3.0
08 Extent of staff training	121	3.3		11.07 Production process sophistication	127	2.7
				11.08 Extent of marketing	133	3.4
				11.09 Willingness to delegate authority	83	4.1
				1/		
				12th pillar: Innovation	125	2.7
				12.01 Capacity for innovation	126	3.3
				12.02 Quality of scientific research institutions	131	
				12.03 Company spending on R&D	114	2.8
				12.04 University-industry collaboration in R&D	112	2.8
				12.05 Gov't procurement of advanced technology products	87	3.1

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

87

127

3.1

# **Singapore**



The Global Competitiveness Index 2017-2018 edition



#### Key indicators, 2016 Source: International Monetary Fund; World Economic Outlook Database (April 2017) **Population** millions 5.6 GDP per capita US\$ 52,960.7 GDP US\$ billions 297.0 GDP (PPP) % world GDP 0.41

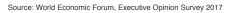
#### Performance overview

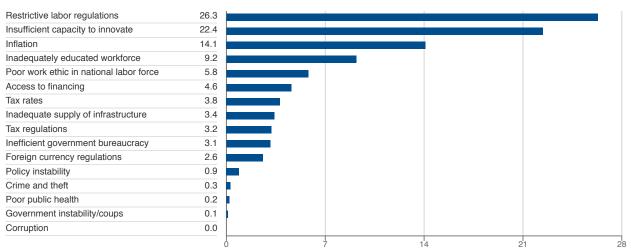
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-1			
Global Competitiveness Index	3	5.7	_		Rank	2/144	2 / 148	2 / 144	2 / 140	2 / 138	3 / 13			
Subindex A: Basic requirements	2	6.3	_		Score	5.7	5.6	5.6	5.7	5.7	5.			
â 1st pillar: Institutions	2	6.1	_											
<b>1</b> 2nd pillar: Infrastructure	2	6.5						1st pillar: Institutions						
	18	6.0	_			12th pill Innovat		7	2nd pilla Infrastru					
3 4th pillar: Health and primary education	3	6.8							1					
Subindex B: Efficiency enhancers	2	5.7	_			11th pillar: Business sophistication				3rd pillar: Macroeconom environment	ic			
⇒ 5th pillar: Higher education and training	1	6.3	_			10th pillar: Market size			Att village					
fth pillar: Goods market efficiency	1	5.8	_						4th pillar: Health and primare					
7th pillar: Labor market efficiency	2	5.8	_											
8th pillar: Financial market development	t 3	5.7	~			9th pillar: Technological readiness			// / H	th pillar: ligher education and training	on			
% 9th pillar: Technological readiness	14	6.1	_				pillar:		6th pillar:					
∿ุ้ง 10th pillar: Market size	35	4.8	_			Financial r develo	narket	7th pillar:	Goods ma efficiency	arket				
Subindex C: Innovation and sophistication factors	12	5.2	_		Lahor market									
ംഗ് 11th pillar: Business sophistication	18	5.2			<u> </u>				fic					
* 12th pillar: Innovation	9	5.3	_		Singapore East Asia and Pacific					IIC				

Singapore (3rd) posts a strong performance across the board, with many of its pillars scoring among the top three. The country possesses superior transport infrastructure (2nd), its product and labor markets are extremely efficient, and its financial sector is stable and trustworthy (3rd). Since the last edition of the GCI, Singapore's macroeconomic environment has slightly deteriorated as a result of rising government debt-which is already among the highest in the world when measured

as a share of GDP—and a persisting deflationary spell. The country is also falling marginally behind in terms of technological readiness compared with other advanced economies. There is also room for improvement among innovation and sophistication factors, where it ranks 12th, especially given that one of the most problematic factors for doing business perceived by firms is their insufficient capacity to innovate.

### Most problematic factors for doing business





# Singapore

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	Э
â 1st pillar: Institutions	2	6.1			1	5.8	-
1.01 Property rights	3	6.4	_	6.01 Intensity of local competition	16	5.7	-
.02 Intellectual property protection	4	6.2		6.02 Extent of market dominance	11	5.0	-
03 Diversion of public funds	4	6.2	_	6.03 Effectiveness of anti-monopoly policy	7	5.3	-
04 Public trust in politicians	1	6.4	_	6.04 Effect of taxation on incentives to invest	5	5.9	
05 Irregular payments and bribes	3	6.7		6.05 Total tax rate % profits	11	19.1	-
06 Judicial independence	19	5.7		6.06 No. of procedures to start a business	7	3	
07 Favoritism in decisions of government officials	1	5.9		6.07 Time to start a business days	4	2.5	
	2				2		
08 Efficiency of government spending		6.1		6.08 Agricultural policy costs		5.4	
09 Burden of government regulation	1		~	6.09 Prevalence of non-tariff barriers	1	5.9	
10 Efficiency of legal framework in settling disputes	1	6.2	_	6.10 Trade tariffs % duty	2	0.0	
11 Efficiency of legal framework in challenging regulations	16	4.7	~	6.11 Prevalence of foreign ownership	2	6.1	
12 Transparency of government policymaking	2	6.3		6.12 Business impact of rules on FDI	1	6.1	
13 Business costs of terrorism	48	5.4	$\overline{}$	6.13 Burden of customs procedures	1	6.3	
14 Business costs of crime and violence	6	6.0	_	6.14 Imports % GDP	3	147.6	
15 Organized crime	5	6.4	_	6.15 Degree of customer orientation	12	5.7	
16 Reliability of police services	3		_	6.16 Buyer sophistication	14	4.6	
17 Ethical behavior of firms	3		_	-			
				7th pillar: Labor market efficiency	2	5.8	
18 Strength of auditing and reporting standards	3	6.4		7.01 Cooperation in labor-employer relations	2	6.2	
19 Efficacy of corporate boards	10	6.1					
20 Protection of minority shareholders' interests	4			7.02 Flexibility of wage determination	5	6.0	
21 Strength of investor protection 0-10 (best)	1	8.3	$\overline{}$	7.03 Hiring and firing practices	3	5.6	
A On durilland Information of	0	6.5		7.04 Redundancy costs weeks of salary	5	3.0	
◆ 2nd pillar: Infrastructure	2	6.5		7.05 Effect of taxation on incentives to work	1	6.2	
01 Quality of overall infrastructure	2	6.4		7.06 Pay and productivity	2	5.5	
02 Quality of roads	2	6.3	_	7.07 Reliance on professional management	4	6.2	
3 Quality of railroad infrastructure	4	5.9	_	7.08 Country capacity to retain talent	5	5.5	
04 Quality of port infrastructure	2	6.7	_	7.09 Country capacity to attract talent	4	5.9	
05 Quality of air transport infrastructure	1	6.9		7.10 Female participation in the labor force ratio to men	73	0.80	
, ,				7.10 Female participation in the labor force ratio to men	73	0.60	
06 Available airline seat kilometers millions/week		2,633.0	~_	8th pillar: Financial market development	3	5.7	
Of Quality of electricity supply	3	6.9		·		F 0	
08 Mobile-cellular telephone subscriptions /100 pop.	23	146.9	~	8.01 Availability of financial services	4	5.8	
09 Fixed-telephone lines /100 pop.	27	35.0	~	8.02 Affordability of financial services	2	5.5	
2	18	6.0		8.03 Financing through local equity market	6	5.5	
3rd pillar: Macroeconomic environment		6.0		8.04 Ease of access to loans	3	5.5	
01 Government budget balance % GDP	3	3.3	~	8.05 Venture capital availability	4	4.8	
02 Gross national savings % GDP	3	44.4	~~	8.06 Soundness of banks	6	6.4	
03 Inflation annual % change	76	-0.5	/	8.07 Regulation of securities exchanges	1	6.4	
04 Government debt % GDP	129	112.0	~	8.08 Legal rights index 0-10 (best)	23	8	
05 Country credit rating 0-100 (best)	6	93.2	_	^			
		00.2		9th pillar: Technological readiness	14	6.1	
4th pillar: Health and primary education	3	6.8		9.01 Availability of latest technologies	15	6.1	
01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02 Firm-level technology absorption	14	5.6	
					2	5.9	
D2 Business impact of malaria	n/a	6.2	~	9.03 FDI and technology transfer			
03 Tuberculosis incidence cases/100,000 pop.	70	44.0	~	9.04 Internet users % pop.	25	81.0	
04 Business impact of tuberculosis	40	6.2		9.05 Fixed-broadband Internet subscriptions /100 pop.	36	25.4	
05 HIV prevalence % adult pop.	1	0.0	_	9.06 Internet bandwidth kb/s/user	5	982.9	
06 Business impact of HIV/AIDS	24	6.4		9.07 Mobile-broadband subscriptions /100 pop.	4	144.6	
07 Infant mortality deaths/1,000 live births	7	2.1	~	Λπ			
08 Life expectancy years	8	82.6		10th pillar: Market size	35	4.8	
09 Quality of primary education	3	6.2		10.01 Domestic market size index	44	4.4	
10 Primary education enrollment rate net %	1	100.0		10.02 Foreign market size index	13	6.0	
To Filmary Education Officialistic flet 76	'	100.0		10.03 GDP (PPP) PPP \$ billions		492.6	
₹ 5th pillar: Higher education and training	1	6.3		10.04 Exports % GDP	3	161.3	
11 Secondary education enrollment rate gross %	25	108.1	_	10.04 EAPORTO /6 CIDI	3	101.0	
•				√ 11th pillar: Business sophistication	18	5.2	
D2 Tertiary education enrollment rate gross %	4	92.2	$\leq$	11.01 Local supplier quantity	73	4.5	
O3 Quality of the education system	2	5.8					
04 Quality of math and science education	1	6.5		11.02 Local supplier quality	29	5.1	
D5 Quality of management schools	4	6.0		11.03 State of cluster development	10	5.2	
06 Internet access in schools	1	6.2	_	11.04 Nature of competitive advantage	17	5.7	
77 Local availability of specialized training services	4	6.0	_	11.05 Value chain breadth	14	5.2	
28 Extent of staff training	5	5.4	_	11.06 Control of international distribution	25	4.6	
2. 2. 2. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3. 3.	3	5.4		11.07 Production process sophistication	16	5.6	
				11.08 Extent of marketing	17	5.2	
				·			
				11.09 Willingness to delegate authority	17	5.5	
				★ 12th pillar: Innovation	9	5.3	
				12.01 Capacity for innovation	20	5.1	
				12.02 Quality of scientific research institutions	12	5.7	
				12.03 Company spending on R&D	17	5.0	
				12.04 University-industry collaboration in R&D	8	5.3	
				12.05 Gov't procurement of advanced technology products	5	4 Q	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

5

4.9

# **Slovak Republic**



The Global Competitiveness Index 2017-2018 edition

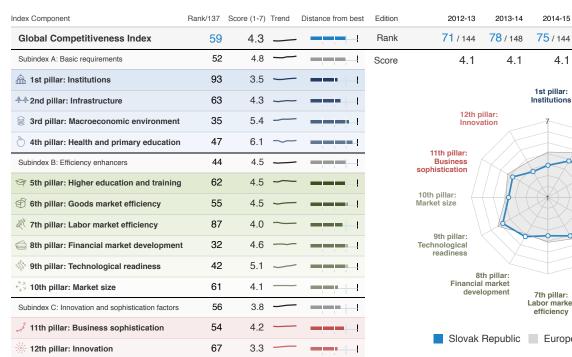


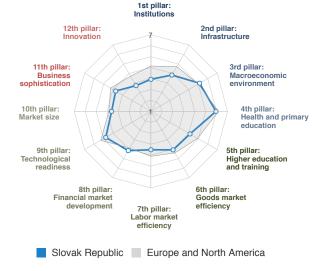
59 / 137

4.3

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20		
Population millions 5.4		GDP per capita US\$	16,498.5	
GDP US\$ billions	89.5	GDP (PPP) % world GDP	0.14	

#### Performance overview





2014-15

4.1

2015-16

67 / 140

4.2

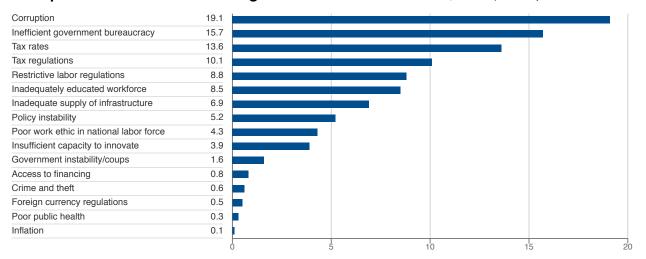
2016-17

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4.3

## Most problematic factors for doing business





# **Slovak Republic**

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Trend
â 1st pillar: Institutions	93	3.5	_	•	6th pillar: Goods market efficiency	55	4.5	
1.01 Property rights	79	4.1	_	6.0	1 Intensity of local competition	36	5.4	_
1.02 Intellectual property protection	60	4.3		6.0	2 Extent of market dominance	88	3.5	~
1.03 Diversion of public funds	117	2.5	_	6.0	3 Effectiveness of anti-monopoly policy	76	3.6	
1.04 Public trust in politicians	109	2.1	_	6.0	4 Effect of taxation on incentives to invest	70	3.6	
1.05 Irregular payments and bribes	79	3.7	_	6.0	5 Total tax rate % profits	113	51.6	$\checkmark$
1.06 Judicial independence	119	2.8	<u></u>	6.0	No. of procedures to start a business	53	6	$\sim$
1.07 Favoritism in decisions of government officials	130	1.9	_	6.0	7 Time to start a business days	73	11.5	~
1.08 Efficiency of government spending	94	2.7			8 Agricultural policy costs	107	3.3	
1.09 Burden of government regulation	129	2.4			Prevalence of non-tariff barriers	60	4.5	_
1.10 Efficiency of legal framework in settling disputes	131		$\sim$		Trade tariffs % duty	6	1.1	_
1.11 Efficiency of legal framework in challenging regulations	129	2.2			Prevalence of foreign ownership	6	5.9	_
1.12 Transparency of government policymaking	87	3.8			2 Business impact of rules on FDI	15	5.5	~
1.13 Business costs of terrorism	28	5.8			Burden of customs procedures	53	4.5	
1.14 Business costs of crime and violence	62	4.8	$\sim$		4 Imports % GDP	8	93.2	~~
1.15 Organized crime	64	5.0			5 Degree of customer orientation	58	4.7	
1.16 Reliability of police services	106	3.5		6.1	Buyer sophistication	101	2.9	
1.17 Ethical behavior of firms	105	3.4		7	7th pillar: Labor market efficiency	87	4.0	_
1.18 Strength of auditing and reporting standards	27 43	5.5 5.1			1 Cooperation in labor-employer relations	75	4.3	
1.19 Efficacy of corporate boards     1.20 Protection of minority shareholders' interests	81	3.9			2 Flexibility of wage determination	60	5.0	~
1.21 Strength of investor protection 0-10 (best)	79	5.3			3 Hiring and firing practices	118	3.1	_
1.21 Strength of investor protection 6-10 (best)	19	5.5			4 Redundancy costs weeks of salary	80	18.8	
◆◆ 2nd pillar: Infrastructure	63	4.3			5 Effect of taxation on incentives to work	131	2.7	$\sim$
2.01 Quality of overall infrastructure	62	4.2	~		6 Pay and productivity	44	4.4	
2.02 Quality of roads	73	4.0			7 Reliance on professional management	55	4.5	_
2.03 Quality of railroad infrastructure	25	4.4		7.0	B Country capacity to retain talent	125	2.5	_
2.04 Quality of port infrastructure	111	3.0	/	7.0	9 Country capacity to attract talent	130	2.0	~
2.05 Quality of air transport infrastructure	108	3.5		7.1	Female participation in the labor force ratio to men	67	0.82	
2.06 Available airline seat kilometers millions/week	109	39.3	~	0	0.00	32	4.6	
2.07 Quality of electricity supply	34	6.0			8th pillar: Financial market development		4.6	
2.08 Mobile-cellular telephone subscriptions /100 pop.	45	128.0	_		1 Availability of financial services	35	4.7	
2.09 Fixed-telephone lines /100 pop.	69	15.1	_		2 Affordability of financial services	37	4.4	_
	35	5.4			Financing through local equity market	74	3.5	=
3.01 Government budget balance % GDP	49	-2.0			4 Ease of access to loans 5 Venture capital availability	23 49	4.7 3.2	
3.02 Gross national savings % GDP	61	21.9	<b>-</b>		6 Soundness of banks	15	5.9	
3.03 Inflation annual % change	75	-0.5	_		7 Regulation of securities exchanges	53	4.7	_
3.04 Government debt % GDP	74	52.3	$\overline{}$		B Legal rights index 0-10 (best)	31	7	_
3.05 Country credit rating 0-100 (best)	30	73.6	_	0				
4th pillar: Health and primary education	47	6.1	~		9th pillar: Technological readiness	42	5.1	
- ' '					1 Availability of latest technologies	39	5.4	
4.01 Malaria incidence cases/100,000 pop.  4.02 Business impact of malaria	n/a n/a	s.l. 6.8			2 Firm-level technology absorption	47 16	4.8 5.2	
4.03 Tuberculosis incidence cases/100,000 pop.	18	6.5	~		3 FDI and technology transfer 4 Internet users % pop.	27	80.5	$\sim$
4.04 Business impact of tuberculosis	35	6.3			5 Fixed-broadband Internet subscriptions /100 pop.	39	24.5	-
4.04 Business impact of tuberculosis  4.05 HIV prevalence % adult pop.	1	<0.1			6 Internet bandwidth kb/s/user	74	52.4	_
4.06 Business impact of HIV/AIDS	32		=		7 Mobile-broadband subscriptions /100 pop.	42	78.7	
4.07 Infant mortality deaths/1,000 live births	41	5.8	_					_
4.08 Life expectancy years	45	77.2		+	10th pillar: Market size	61	4.1	
4.09 Quality of primary education	74	4.0		10.0	1 Domestic market size index	68	3.7	
4.10 Primary education enrollment rate net %	n/a	n/a	$\overline{}$	10.	02 Foreign market size index	40	5.2	_
				10.	03 GDP (PPP) PPP \$ billions	65	170.1	_
5th pillar: Higher education and training	62	4.5		10.0	04 Exports % GDP	9	96.0	_
5.01 Secondary education enrollment rate gross %	69	92.5	$\sim$	~8	11th pillar: Business sophistication	54	4.2	
5.02 Tertiary education enrollment rate gross %	55	52.9	$\sim$		11 Local supplier quantity	99	4.1	_
5.03 Quality of the education system	118	2.8			22 Local supplier quality	32	5.0	=
5.04 Quality of math and science education	82	3.8			33 State of cluster development	57	3.8	
5.05 Quality of management schools	105	3.7	=		Nature of competitive advantage	75	3.4	_
5.06 Internet access in schools	38	4.9			D5 Value chain breadth	52	4.0	
5.07 Local availability of specialized training services	74		~		06 Control of international distribution	75	3.6	
5.08 Extent of staff training	66	4.0			77 Production process sophistication	30	4.8	
					28 Extent of marketing	76	4.4	_
					09 Willingness to delegate authority	59	4.5	
					12th pillar: Innovation	67	3.3	
					01 Capacity for innovation	48	4.3	
					02 Quality of scientific research institutions	71	3.8	
				12.0	03 Company spending on R&D	65	3.4	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

 $12.07 \ \ \textbf{PCT patents} \ \ \text{applications/million pop}.$ 

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

77

79

104

3.3

3.2

# **Slovenia**

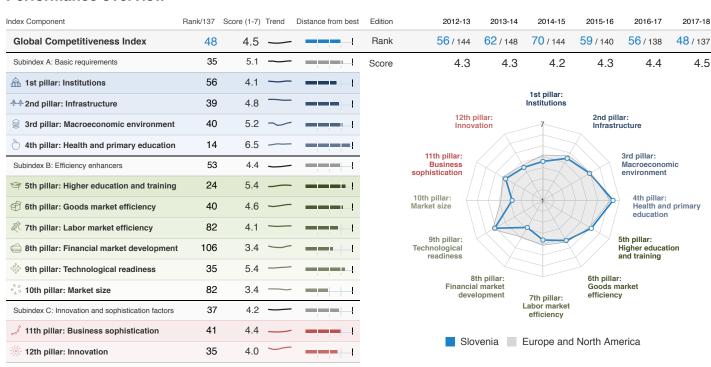


The Global Competitiveness Index 2017-2018 edition



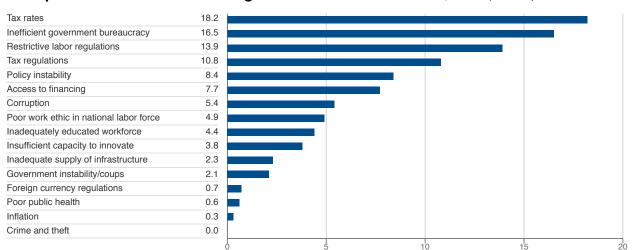
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20				
Population millions	2.1	GDP per capita ∪S\$	21,320.2			
GDP US\$ billions	44.0	GDP (PPP) % world GDP	0.06			

#### Performance overview



### Most problematic factors for doing business





# **Slovenia**

dex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	э -
â 1st pillar: Institutions	56	4.1	_		40	4.6	-
.01 Property rights	64	4.4		6.01 Intensity of local competition	38	5.4	-
1.02 Intellectual property protection	39	4.7		6.02 Extent of market dominance	26	4.3	_
1.03 Diversion of public funds	69		~	6.03 Effectiveness of anti-monopoly policy	60	3.8	_
1.04 Public trust in politicians	92	2.5		6.04 Effect of taxation on incentives to invest	113	3.0	_
1.05 Irregular payments and bribes	36		_	6.05 Total tax rate % profits	42	31.0	_
	76	3.7	_		18	4	
.06 Judicial independence				6.06 No. of procedures to start a business			_
.07 Favoritism in decisions of government officials	88	2.8		6.07 Time to start a business days	41	7.0	_
.08 Efficiency of government spending	97	2.7	)	6.08 Agricultural policy costs	86	3.6	_
.09 Burden of government regulation	118	2.7	$\sim$	6.09 Prevalence of non-tariff barriers	44	4.6	_
.10 Efficiency of legal framework in settling disputes	90	3.2	_	6.10 Trade tariffs % duty	6	1.1	-
.11 Efficiency of legal framework in challenging regulations	107	2.6	~	6.11 Prevalence of foreign ownership	104	3.9	_
.12 Transparency of government policymaking	67	4.0		6.12 Business impact of rules on FDI	104	4.1	_
.13 Business costs of terrorism	38	5.6	_	6.13 Burden of customs procedures	28	5.0	
14 Business costs of crime and violence	15	5.6	~	6.14 Imports % GDP	16	79.6	_
				·			
15 Organized crime	36	5.4	~	6.15 Degree of customer orientation	35	5.1	-
16 Reliability of police services	41	5.3	_	6.16 Buyer sophistication	75	3.3	-
17 Ethical behavior of firms	57	4.0	$\overline{}$	50	00	4.4	
18 Strength of auditing and reporting standards	73	4.5	_	7th pillar: Labor market efficiency	82	4.1	
19 Efficacy of corporate boards	83	4.6	_	7.01 Cooperation in labor-employer relations	62	4.4	-
	107	3.6		7.02 Flexibility of wage determination	107	4.4	
20 Protection of minority shareholders' interests				7.03 Hiring and firing practices	132	2.4	_
21 Strength of investor protection 0-10 (best)	9	7.5	~~	0 0,			_
↑ 2nd pillar: Infrastructure	39	4.8		7.04 Redundancy costs weeks of salary	39	10.7	_
•				7.05 Effect of taxation on incentives to work	135	2.3	
1 Quality of overall infrastructure	44	4.6		7.06 Pay and productivity	77	3.8	
2 Quality of roads	51	4.4	~	7.07 Reliance on professional management	69	4.2	
3 Quality of railroad infrastructure	62	2.9	_	7.08 Country capacity to retain talent	93	3.1	
04 Quality of port infrastructure	31	5.0		7.09 Country capacity to attract talent	114	2.5	
	71				27	0.91	
5 Quality of air transport infrastructure		4.3		7.10 Female participation in the labor force ratio to men	21	0.91	
66 Available airline seat kilometers millions/week	124	19.1		8th pillar: Financial market development	106	3.4	
7 Quality of electricity supply	22	6.4	$\sim$				
8 Mobile-cellular telephone subscriptions /100 pop.	75	114.6		8.01 Availability of financial services	91	3.9	
9 Fixed-telephone lines /100 pop.	26	35.1	/	8.02 Affordability of financial services	62	3.9	
				8.03 Financing through local equity market	93	3.1	
3rd pillar: Macroeconomic environment	40	5.2	~	8.04 Ease of access to loans	106	3.3	
of Government budget balance % GDP	44	-1.8	~	8.05 Venture capital availability	63	2.9	
•							
D2 Gross national savings % GDP	40	26.5	_	8.06 Soundness of banks	104	4.1	
03 Inflation annual % change	61	-0.1	$\sim$	8.07 Regulation of securities exchanges	98	3.8	
04 Government debt % GDP	112	78.9		8.08 Legal rights index 0-10 (best)	96	3	
05 Country credit rating 0-100 (best)	44	64.9	_	🕸 9th pillar: Technological readiness	35	5.4	
4th pillar: Health and primary education	14	6.5	_	9.01 Availability of latest technologies	26	5.7	
01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02 Firm-level technology absorption	45	4.9	
22 Business impact of malaria	n/a	6.6		9.03 FDI and technology transfer	83	4.2	
•							
3 Tuberculosis incidence cases/100,000 pop.	20	7.2	_	9.04 Internet users % pop.	43	75.5	
94 Business impact of tuberculosis	19	6.6		9.05 Fixed-broadband Internet subscriptions /100 pop.	30	28.3	
D5 HIV prevalence % adult pop.	1	<0.1		9.06 Internet bandwidth kb/s/user	14	239.2	
06 Business impact of HIV/AIDS	25	6.4	$\overline{}$	9.07 Mobile-broadband subscriptions /100 pop.	65	62.3	
77 Infant mortality deaths/1,000 live births	7	2.1	~	^7	6.5	٠.	
08 Life expectancy years	29	81.1		્રૈંગે 10th pillar: Market size	82	3.4	
9 Quality of primary education	22	5.2		10.01 Domestic market size index	92	3.0	
10 Primary education enrollment rate net %	40	97.7	~~	10.02 Foreign market size index	66	4.6	
io i innary education enrollment fate net %	40	31.1	-	10.03 GDP (PPP) PPP \$ billions	88	66.2	
5th pillar: Higher education and training	24	5.4	_	10.04 Exports % GDP	13	91.0	
1 Secondary education enrollment rate gross %	19	110.7		•			
2 Tertiary education enrollment rate gross %	14	82.9		11th pillar: Business sophistication	41	4.4	
3 Quality of the education system	52	4.0	_	11.01 Local supplier quantity	41	4.8	
24 Quality of math and science education	11	5.4		11.02 Local supplier quality	18	5.3	
				11.03 State of cluster development	77	3.7	
5 Quality of management schools	53		_	·	36		
6 Internet access in schools	23	5.4	$\overline{}$	11.04 Nature of competitive advantage		4.3	
7 Local availability of specialized training services	51	4.7	_	11.05 Value chain breadth	62	3.9	
8 Extent of staff training	52	4.1		11.06 Control of international distribution	41	4.1	
-				11.07 Production process sophistication	33	4.7	
				11.08 Extent of marketing	79	4.3	
				11.09 Willingness to delegate authority	60	4.4	
				. \/			
				12th pillar: Innovation	35	4.0	
				12.01 Capacity for innovation	32	4.8	
				12.02 Quality of scientific research institutions	29	4.9	
				12.03 Company spending on R&D	33	4.2	7
				12.04 University-industry collaboration in R&D	44	3.8	
				12.05 Gov't procurement of advanced technology products	101	2.6	-

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

121

69

2.6

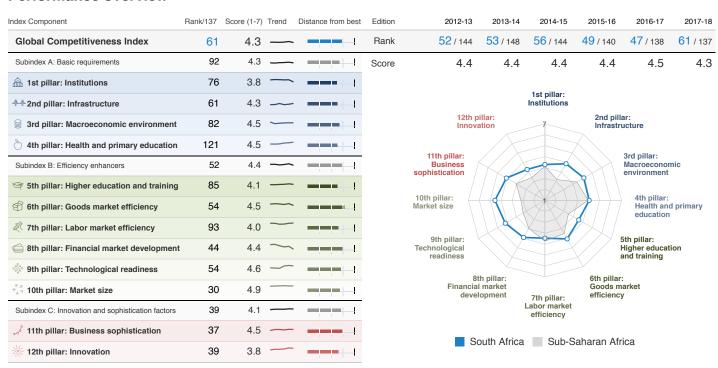
## **South Africa**

The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (A			
Population millions	55.9	GDP per capita US\$	5,260.9		
GDP US\$ billions	294.1	GDP (PPP) % world GDP	0.62		

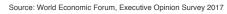
#### Performance overview

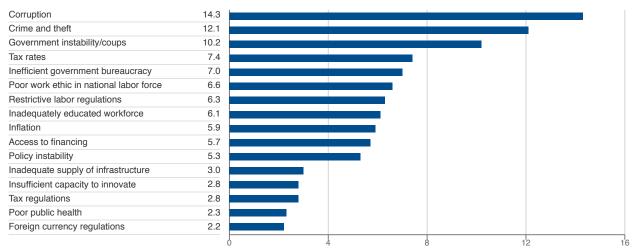


South Africa (61st) remains one of the most competitive countries in sub-Saharan Africa, and among the region's most innovative (39th)but it drops 14 positions in the overall rankings this year. South Africa's economy is nearly at a standstill, with GDP growth forecast at just 1.0 percent in 2017 and 1.2 percent in 2018—hit by persistently low international demand for its commodities, while its unemployment rate

is currently estimated above 25 percent and rising. Political uncertainty in 2017 has decreased the confidence of South African business leaders: although still relatively good in the African context, the country's institutional environment (76th), financial markets (44th), and goods market efficiency (54th) are all rated as weaker than last year, also partially due to a structural break in the Executive Opinion Survey sample.

### Most problematic factors for doing business





# **South Africa**

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	e Tr
☆ 1st pillar: Institutions	76	3.8	_		6th pillar: Goods market efficiency	54	4.5	_
1.01 Property rights	56	4.5	$\overline{}$	6.0	Intensity of local competition	44	5.4	_
1.02 Intellectual property protection	36	4.8	$\overline{}$		2 Extent of market dominance	52	3.9	_
1.03 Diversion of public funds	109	2.6	_		Effectiveness of anti-monopoly policy	28	4.5	_
1.04 Public trust in politicians	114	2.0	~		Effect of taxation on incentives to invest	59	3.7	_
1.05 Irregular payments and bribes	91	3.4	$\overline{}$		5 Total tax rate % profits	31	28.8	_
1.06 Judicial independence	36	4.9	_		No. of procedures to start a business	71	7	
1.07 Favoritism in decisions of government officials	127	2.0	~		7 Time to start a business days	126	43.0	_
1.08 Efficiency of government spending	103	2.6			3 Agricultural policy costs	78	3.6	Ξ
1.09 Burden of government regulation	89	3.2			Prevalence of non-tariff barriers	69	4.4	_
1.10 Efficiency of legal framework in settling disputes	31	4.6			Trade tariffs % duty	79	6.3	
			_		•	47		_
1.11 Efficiency of legal framework in challenging regulations	36	4.0			Prevalence of foreign ownership		4.9	_
1.12 Transparency of government policymaking	74	3.9	_ `		Business impact of rules on FDI	85	4.3	_
1.13 Business costs of terrorism	92	4.7	_		Burden of customs procedures	66	4.2	
1.14 Business costs of crime and violence	133	2.6	~		Imports % GDP	90	36.1	_
1.15 Organized crime	122	3.6			Degree of customer orientation	67	4.6	_
1.16 Reliability of police services	118	3.2		6.16	Buyer sophistication	35	3.9	_
1.17 Ethical behavior of firms	72	3.8	$\sim$	£6	7th pillar: Labor market efficiency	93	4.0	_
1.18 Strength of auditing and reporting standards	30	5.4		at,				
.19 Efficacy of corporate boards	34	5.3	$\overline{}$		Cooperation in labor-employer relations	137	3.1	-
.20 Protection of minority shareholders' interests	30	4.9	$\overline{}$		2 Flexibility of wage determination	132	3.4	-
.21 Strength of investor protection 0-10 (best)	21	7.0	$\sim$		Hiring and firing practices	125	2.9	-
A A A	0.1			7.04	Redundancy costs weeks of salary	27	9.3	-
↑↑ 2nd pillar: Infrastructure	61	4.3		7.05	Effect of taxation on incentives to work	83	3.7	_
2.01 Quality of overall infrastructure	72	4.1	_	7.06	Pay and productivity	99	3.5	_
2.02 Quality of roads	50	4.4		7.07	Reliance on professional management	43	4.6	_
2.03 Quality of railroad infrastructure	47	3.5	_	7.08	Country capacity to retain talent	78	3.3	-
2.04 Quality of port infrastructure	37	4.8	_		Country capacity to attract talent	66	3.3	_
2.05 Quality of air transport infrastructure	25	5.6	_		Female participation in the labor force ratio to men	72	0.80	-
2.06 Available airline seat kilometers millions/week		1,273.6	_		,			
2.07 Quality of electricity supply	97	3.9	$\sim$		8th pillar: Financial market development	44	4.4	
2.08 Mobile-cellular telephone subscriptions /100 pop.	27	142.4	_	8.0	Availability of financial services	32	5.0	-
2.09 Fixed-telephone lines /100 pop.	94	6.6	_		2 Affordability of financial services	48	4.1	_
2.09 Fixed-telepriorie lines 7100 pop.	94	0.0	_		Financing through local equity market	25	4.6	_
	82	4.5	$\overline{}$		Ease of access to loans	62	3.9	_
3.01 Government budget balance % GDP	82	-3.5			5 Venture capital availability	66	2.9	_
3.02 Gross national savings % GDP	95	16.2			Soundness of banks	37	5.5	_
3.03 Inflation annual % change	105	6.3			Regulation of securities exchanges	46	4.8	_
								_
3.04 Government debt % GDP	69	50.5		8.08	3 Legal rights index 0-10 (best)	70	5	
3.05 Country credit rating 0-100 (best)	63	54.0	_	e\$\$30	9th pillar: Technological readiness	54	4.6	-
4th pillar: Health and primary education	121	4.5		9.0	Availability of latest technologies	45	5.2	-
.01 Malaria incidence cases/100,000 pop.	30	21.2	$\overline{}$	9.02	2 Firm-level technology absorption	38	5.0	_
1.02 Business impact of malaria	31	4.7		9.03	FDI and technology transfer	60	4.5	_
1.03 Tuberculosis incidence cases/100,000 pop.	138	834.0	~	9.04	Internet users % pop.	77	54.0	
1.04 Business impact of tuberculosis	132	3.3	~	9.05	Fixed-broadband Internet subscriptions /100 pop.	99	2.8	_
1.05 HIV prevalence % adult pop.	134	18.9	_		5 Internet bandwidth kb/s/user		263.0	
1.06 Business impact of HIV/AIDS	128	3.2	_		7 Mobile-broadband subscriptions /100 pop.	72	58.6	
1.07 Infant mortality deaths/1,000 live births	106	33.6	_		•			_
1.08 Life expectancy years	130	57.4	=	£ 3	10th pillar: Market size	30	4.9	
					1 Domestic market size index	30	4.8	-
1.09 Quality of primary education	116	3.0	_		22 Foreign market size index	36	5.3	
1.10 Primary education enrollment rate net %	50	97.1	_		03 GDP (PPP) PPP \$ billions		739.4	_
	85	4.1	_		04 Exports % GDP	84	30.3	
5.01 Secondary education enrollment rate gross %	54	98.8	~		<u> </u>			
5.02 Tertiary education enrollment rate gross %	100	19.4	_	000	11th pillar: Business sophistication	37	4.5	-
5.03 Quality of the education system	114		_	11.0	1 Local supplier quantity	46	4.7	-
5.04 Quality of math and science education	128	2.6			2 Local supplier quality	42	4.7	-
5.05 Quality of management schools	45	4.5			3 State of cluster development	29	4.5	_
5.06 Internet access in schools	95	3.6			04 Nature of competitive advantage	58	3.7	_
					55 Value chain breadth	46	4.2	
5.07 Local availability of specialized training services	54	4.6			66 Control of international distribution	38	4.1	_
5.08 Extent of staff training	39	4.3	$\overline{}$					
					77 Production process sophistication	40	4.5	_
					08 Extent of marketing	30	4.9	-
				11.0	9 Willingness to delegate authority	24	5.0	
				絲	12th pillar: Innovation	39	3.8	-
				12 (	1 Capacity for innovation	30	4.9	_
					2 Quality of scientific research institutions	42		_
					3 Company spending on R&D	32	4.3	
				12.0	of University is diverse collaboration in DOD	02	4.4	-

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

29 57

100

3.4

# **Spain**



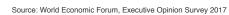
The Global Competitiveness Index 2017-2018 edition

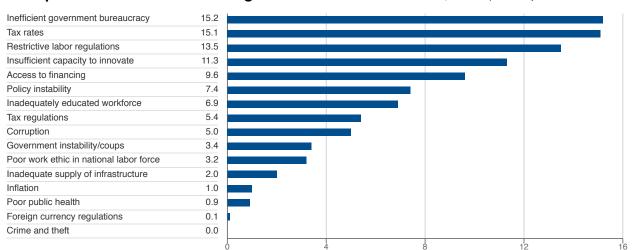
Key indicators, 2016		Source: International Monetary Fund; World	d Economic Outlook Database (April 2017)
Population millions	46.3	GDP per capita US\$	26,608.9
GDP US\$ billions	1,232.6	GDP (PPP) % world GDP	1.41

#### **Performance overview**

Global Competitiveness Index         34         4.7         Image: Rank square squar	1st pilla Institutio	4.5 4.6  ar: ons	4.7	34 / 13
1st pillar: Institutions  54  4.1  → 2nd pillar: Infrastructure  12  5.9  12th pillar	1st pilla Institutio	ar: ons 2nd pi		4.7
↑ 2nd pillar: Infrastructure 12 5.9 12th pillar:	Institutio r:	ons 2nd pi	llar•	
12th pillar	Institutio r:	ons 2nd pi	llar•	
			lları	
initivation		IIIIIasi	ructure	
♦ 4th pillar: Health and primary education 32 6.3 —		28	0.4.311	
Subindex B: Efficiency enhancers 30 4.8 Business sophistication			3rd pillar: Macroeconor environment	nic
Sth pillar: Higher education and training     28     5.2     ■■■■     !			\	
6th pillar: Goods market efficiency 49 4.5 — 10th pillar: Market size			4th pillar: Health and education	
7th pillar: Labor market efficiency 70 4.2				
9th pillar: Financial market development 68 4.0 — 9th pillar: Technological readiness			5th pillar: Higher educat and training	ion
	ilları	6th pilla		
10th pillar: Market size 17 5.4 Financial ma developm	arket	Goods	narket	
Subindex C: Innovation and sophistication factors 38 4.2	Labor ma efficiend	arket		
11th pillar: Business sophistication 29 4.6	. Europo o	and North Ame	vrice	
* 12th pillar: Innovation 42 3.7 Spain	i <u> </u>	and North Ame	HICA	

## Most problematic factors for doing business





# **Spain**

ndex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	е
	54	4.1	_		49	4.5	
1.01 Property rights	47	4.7	~	6.01 Intensity of local competition	23	5.5	
1.02 Intellectual property protection	45	4.5	~	6.02 Extent of market dominance	30	4.3	
1.03 Diversion of public funds	96	3.0	_	6.03 Effectiveness of anti-monopoly policy	41	4.1	
1.04 Public trust in politicians	104	2.2		6.04 Effect of taxation on incentives to invest	88	3.4	
1.05 Irregular payments and bribes	41	4.7	~	6.05 Total tax rate % profits	107	49.0	
.06 Judicial independence	58	4.2		6.06 No. of procedures to start a business	71	7	
	83	2.9	$\sim$	·	78	13.0	
.07 Favoritism in decisions of government officials				6.07 Time to start a business days			
.08 Efficiency of government spending	74	3.1		6.08 Agricultural policy costs	81	3.6	
.09 Burden of government regulation	113	2.8		6.09 Prevalence of non-tariff barriers	38	4.7	
.10 Efficiency of legal framework in settling disputes	73	3.5	$\sim$	6.10 Trade tariffs % duty	6	1.1	
.11 Efficiency of legal framework in challenging regulations	76	3.2	$\sim$	6.11 Prevalence of foreign ownership	30	5.2	
.12 Transparency of government policymaking	57	4.2	~	6.12 Business impact of rules on FDI	49	4.9	
1.13 Business costs of terrorism	53	5.3	_	6.13 Burden of customs procedures	40	4.7	
.14 Business costs of crime and violence	26	5.3	~	6.14 Imports % GDP	100	30.8	
.15 Organized crime	32	5.5		6.15 Degree of customer orientation	39	5.1	
-							
.16 Reliability of police services	12			6.16 Buyer sophistication	67	3.4	
.17 Ethical behavior of firms	85	3.6	_	7th pillar: Labor market efficiency	70	4.2	
18 Strength of auditing and reporting standards	60	4.8	$\overline{}$				
19 Efficacy of corporate boards	40	5.1	_	7.01 Cooperation in labor-employer relations	78	4.3	
20 Protection of minority shareholders' interests	67	4.0	_	7.02 Flexibility of wage determination	73	4.8	
21 Strength of investor protection 0-10 (best)	31	6.5		7.03 Hiring and firing practices	115	3.2	
J				7.04 Redundancy costs weeks of salary	77	17.4	
2nd pillar: Infrastructure	12	5.9		7.05 Effect of taxation on incentives to work	99	3.4	
.01 Quality of overall infrastructure	18	5.5		7.06 Pay and productivity	97	3.5	
•	16		_		38		
02 Quality of roads		5.5		7.07 Reliance on professional management		4.6	
.03 Quality of railroad infrastructure	11	5.5	_	7.08 Country capacity to retain talent	77	3.3	
.04 Quality of port infrastructure	14	5.5	~	7.09 Country capacity to attract talent	76	3.2	
.05 Quality of air transport infrastructure	14	5.8		7.10 Female participation in the labor force ratio to men	53	0.86	
06 Available airline seat kilometers millions/week	9 4	4,755.6	_	A	20	4.0	
07 Quality of electricity supply	25	6.2	~	8th pillar: Financial market development	68	4.0	
08 Mobile-cellular telephone subscriptions /100 pop.	85	109.7	\ -	8.01 Availability of financial services	63	4.2	
.09 Fixed-telephone lines /100 pop.	17	41.3		8.02 Affordability of financial services	46	4.2	
1.09 Fixed-telephone lines 7100 pop.	17	41.3		8.03 Financing through local equity market	65	3.7	
3rd pillar: Macroeconomic environment	90	4.4	$\overline{}$	8.04 Ease of access to loans	79	3.7	
•	404						
.01 Government budget balance % GDP	101	-4.6		8.05 Venture capital availability	37	3.4	
.02 Gross national savings % GDP	59	22.4		8.06 Soundness of banks	80	4.6	
.03 Inflation annual % change	67	-0.2	_	8.07 Regulation of securities exchanges	63	4.5	
.04 Government debt % GDP	123	99.3		8.08 Legal rights index 0-10 (best)	70	5	
05 Country credit rating 0-100 (best)	40	67.5		%	00	<b>-</b>	
\$ ALL	00	0.0		9th pillar: Technological readiness	28	5.7	
4th pillar: Health and primary education	32	6.3		9.01 Availability of latest technologies	36	5.4	
01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02 Firm-level technology absorption	53	4.6	
02 Business impact of malaria	n/a	6.8		9.03 FDI and technology transfer	31	4.9	
.03 Tuberculosis incidence cases/100,000 pop.	35	12.0	\	9.04 Internet users % pop.	26	80.6	
	23	6.6	$\sim$	9.05 Fixed-broadband Internet subscriptions /100 pop.	25	29.5	
04 Business impact of tuberculosis							
.05 HIV prevalence % adult pop.	73			9.06 Internet bandwidth kb/s/user	39	113.0	
.06 Business impact of HIV/AIDS	31	6.2		9.07 Mobile-broadband subscriptions /100 pop.	35	87.3	
.07 Infant mortality deaths/1,000 live births	26	3.5	~	્રૈંગે 10th pillar: Market size	17	5.4	
.08 Life expectancy years	4	83.4					
09 Quality of primary education	55	4.2		10.01 Domestic market size index	17	5.3	
10 Primary education enrollment rate net %	11	99.4	~	10.02 Foreign market size index	20	5.9	
				10.03 GDP (PPP) PPP \$ billions	16	1,686.9	
→ 5th pillar: Higher education and training  → − − − − − − − − − − − − − − − − − −	28	5.2	_	10.04 Exports % GDP	70	33.6	
01 Secondary education enrollment rate gross %	7	129.8					
02 Tertiary education enrollment rate gross %	6	89.7		411th pillar: Business sophistication	29	4.6	
		3.7		11.01 Local supplier quantity	21	4.9	
03 Quality of the education system	67			11.02 Local supplier quality	28	5.1	
04 Quality of math and science education	72	4.1					
05 Quality of management schools	13	5.6	~	11.03 State of cluster development	36	4.3	
06 Internet access in schools	46	4.7	$\sim$	11.04 Nature of competitive advantage	37	4.3	
7 Local availability of specialized training services	60	4.4	~	11.05 Value chain breadth	25	4.8	
08 Extent of staff training	85	3.7		11.06 Control of international distribution	31	4.3	
				11.07 Production process sophistication	32	4.8	
				11.08 Extent of marketing	49	4.6	
				11.09 Willingness to delegate authority	61	4.4	
				11.00 Fininghoss to delegate authority	01	4.4	
				<b>12th pillar: Innovation</b>	42	3.7	
				12.01 Capacity for innovation	49	4.3	
				12.02 Quality of scientific research institutions	38	4.6	
				12.03 Company spending on R&D	53		
				12.04 University-industry collaboration in R&D	67	3.5	
				12.05 Gov't procurement of advanced technology products	96	2.1	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

86

40

3.1

# Sri Lanka

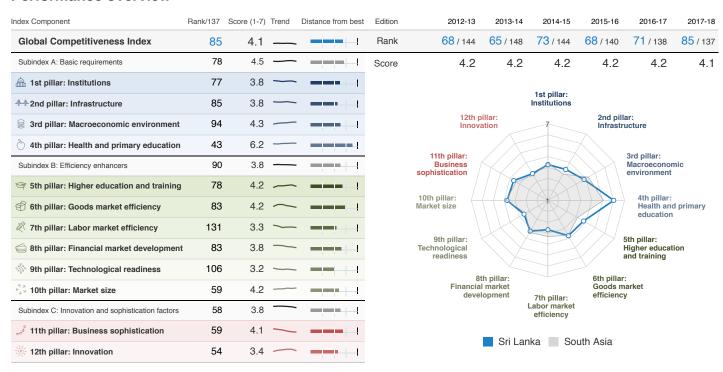


The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	21.3	GDP per capita US\$	3,887.5
GDP US\$ billions	82.6	GDP (PPP) % world GDP	0.22

#### Performance overview

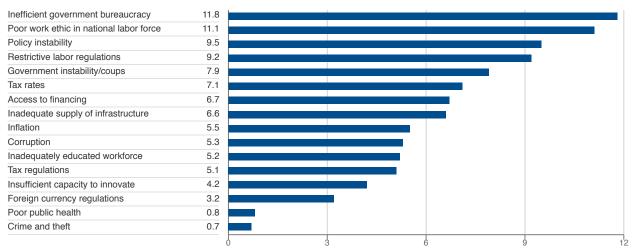


Sri Lanka slips in the ranking to 85th, mainly due to a deteriorating institutional environment, lower goods markets efficiency and infrastructure that is assessed as less well developed. Macroeconomic stability needs to remain a priority for the government, as the country continues to cope with high levels of debt and tries to restore a sound macroeconomic environment. The government managed to decrease

the deficit and stabilize debt after the country entered assistance programme by the IMF in 2016. Yet, the burden of interest on debt remains high and currently amounts to most of the revenue collected by government. Inflation also increased and forced the authorities to tighten monetary policy, with negative effects on credit. Business confidence has been declining over the past two years.

### Most problematic factors for doing business





# Sri Lanka

Index Component	Rank/137	Value	e Trend	Inde	x Component	Rank/137	Value	e Tre
☆ 1st pillar: Institutions	77	3.8	_	1	6th pillar: Goods market efficiency	83	4.2	
1.01 Property rights	78	4.1		6.0	1 Intensity of local competition	87	4.8	_
1.02 Intellectual property protection	66	4.2			2 Extent of market dominance	74	3.6	_
1.03 Diversion of public funds	67	3.5			3 Effectiveness of anti-monopoly policy	82	3.5	_
1.04 Public trust in politicians	96	2.4	~		4 Effect of taxation on incentives to invest	55	3.8	
1.05 Irregular payments and bribes	86	3.5	_		5 Total tax rate % profits	118	55.2	\
1.06 Judicial independence	66	3.9	~		6 No. of procedures to start a business	71	7	
1.07 Favoritism in decisions of government officials	94	2.6			7 Time to start a business days	54	9.0	1
1.08 Efficiency of government spending	99	2.7	_		B Agricultural policy costs	91	3.5	_
1.09 Burden of government regulation	75	3.3			9 Prevalence of non-tariff barriers	78	4.3	
1.10 Efficiency of legal framework in settling disputes	68	3.6			Trade tariffs % duty	124	12.3	
1.11 Efficiency of legal framework in settling disputes	86	3.0	~		Prevalence of foreign ownership	97	4.2	=
	109	3.5				84	4.2	_
1.12 Transparency of government policymaking 1.13 Business costs of terrorism	83	4.9	$\overline{}$		2 Business impact of rules on FDI 3 Burden of customs procedures	84	3.9	_
			~		•			~
1.14 Business costs of crime and violence	71	4.5			4 Imports % GDP	101	30.6	
1.15 Organized crime	75	4.7	~		5 Degree of customer orientation	62	4.7	
1.16 Reliability of police services	88	4.1	$\sim$	6.16	Buyer sophistication	57	3.6	
1.17 Ethical behavior of firms	68	3.8		150	7th pillar: Labor market efficiency	131	3.3	_
1.18 Strength of auditing and reporting standards	64	4.7		7.				
1.19 Efficacy of corporate boards	66	4.9			1 Cooperation in labor-employer relations	71	4.3	
1.20 Protection of minority shareholders' interests	54	4.2	_		2 Flexibility of wage determination	69	4.9	
1.21 Strength of investor protection 0-10 (best)	41	6.3			Hiring and firing practices	94	3.5	
AA	05	2.0	_		4 Redundancy costs weeks of salary	134	58.5	_
◆ 2nd pillar: Infrastructure	85	3.8		7.0	5 Effect of taxation on incentives to work	48	4.2	_
2.01 Quality of overall infrastructure	79	3.9		7.0	Pay and productivity	60	4.1	_
2.02 Quality of roads	61	4.2	$\overline{}$	7.0	7 Reliance on professional management	57	4.5	
2.03 Quality of railroad infrastructure	55	3.2	$\sim$	7.08	8 Country capacity to retain talent	66	3.4	_
2.04 Quality of port infrastructure	57	4.5	_	7.09	Country capacity to attract talent	90	3.0	_
2.05 Quality of air transport infrastructure	75	4.2	$\sim$		Female participation in the labor force ratio to men	125	0.42	_
2.06 Available airline seat kilometers millions/week	55	349.9	_		<u> </u>			
2.07 Quality of electricity supply	96	4.0	_		8th pillar: Financial market development	83	3.8	
2.08 Mobile-cellular telephone subscriptions /100 pop.	66	118.5		8.0	Availability of financial services	62	4.2	_
2.09 Fixed-telephone lines /100 pop.	79	11.4	$\leq$	8.02	2 Affordability of financial services	67	3.8	_
2.09 Tixed telephone lines 7100 pap.	73	11.4	_		Financing through local equity market	44	4.2	_
	94	4.3			4 Ease of access to loans	56	4.0	
3.01 Government budget balance % GDP	107	-5.7			5 Venture capital availability	57	3.0	
3.02 Gross national savings % GDP	38	27.1			6 Soundness of banks	70	4.9	_
3.03 Inflation annual % change	70	3.7			7 Regulation of securities exchanges	72	4.2	_
3.04 Government debt % GDP	110	77.3	$\sim$			107	2	_
			$\stackrel{\sim}{-}$	0.00	B Legal rights index 0-10 (best)	107		
3.05 Country credit rating 0-100 (best)	79	38.6		e\${\$?	9th pillar: Technological readiness	106	3.2	_
4th pillar: Health and primary education	43	6.2		9.0	1 Availability of latest technologies	90	4.3	_
4.01 Malaria incidence cases/100,000 pop.	1	0.0	_	9.02	2 Firm-level technology absorption	79	4.3	_
4.02 Business impact of malaria	n/a	5.0	$\overline{}$	9.03	FDI and technology transfer	99	4.0	
4.03 Tuberculosis incidence cases/100,000 pop.	82	65.0		9.04	4 Internet users % pop.	98	32.1	_
4.04 Business impact of tuberculosis	82	5.2	_	9.05	5 Fixed-broadband Internet subscriptions /100 pop.	90	4.1	
4.05 HIV prevalence % adult pop.	1	<0.1			6 Internet bandwidth kb/s/user	96	22.0	
4.06 Business impact of HIV/AIDS	78	5.2	_		7 Mobile-broadband subscriptions /100 pop.	122	18.3	_
4.07 Infant mortality deaths/1,000 live births	53	8.4	<u> </u>		•			
4.08 Life expectancy years	66	75.0	$\sim$	+ x x	10th pillar: Market size	59	4.2	_
			$\sim$		1 Domestic market size index	57	4.1	_
4.09 Quality of primary education	48	4.5 98.9			22 Foreign market size index	67	4.5	
4.10 Primary education enrollment rate net %	20	98.9	_		03 GDP (PPP) PPP \$ billions	59	260.6	
	78	4.2	_		04 Exports % GDP	100	21.1	=
5.01 Secondary education enrollment rate gross %	49	99.7	/					
5.02 Tertiary education enrollment rate gross %	98	19.8	~~	ood	11th pillar: Business sophistication	59	4.1	
5.03 Quality of the education system	60	3.8		11.0	1 Local supplier quantity	77	4.5	-
5.04 Quality of math and science education	39	4.6			2 Local supplier quality	72	4.3	_
5.05 Quality of management schools	49	4.5	_		3 State of cluster development	54	3.9	_
5.06 Internet access in schools					04 Nature of competitive advantage	63	3.6	_
	94	3.7			05 Value chain breadth	51	4.0	_
5.07 Local availability of specialized training services	63	4.4			06 Control of international distribution	74	3.6	_
5.08 Extent of staff training	58	4.1						_
					77 Production process sophistication	63	3.9	-
					08 Extent of marketing	70	4.4	
				11.0	09 Willingness to delegate authority	56	4.5	
				燕	12th pillar: Innovation	54	3.4	_
					1 Capacity for innovation	66	4.1	_
					22 Quality of scientific research institutions	79	3.6	
					03 Company spending on R&D	41	3.7	_
				12.0	of University industry colleberation in DCD		0.7	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.06 Availability of scientists and engineers

12.05 Gov't procurement of advanced technology products

3.6

3.3

4.2

70 54 76

# **Swaziland**



The Global Competitiveness Index 2017-2018 edition



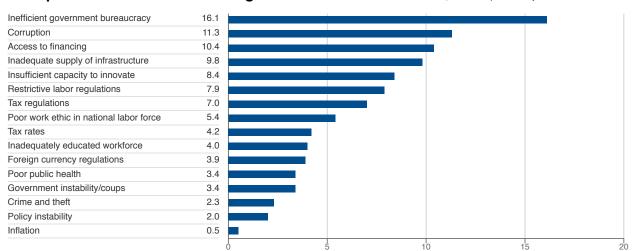
Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	1.1	GDP per capita US\$	3,329.8
GDP US\$ billions	3.8	GDP (PPP) % world GDP	0.01

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2017-18
Global Competitiveness Index	122	3.4	_		Rank	135 / 144	124 / 148	123 / 144	128 / 140	122 / 137
Subindex A: Basic requirements	120	3.5	$\overline{}$		Score	3.3	3.5	3.6	3.4	3.4
â 1st pillar: Institutions	61	4.0	_							
<b>1</b> 2nd pillar: Infrastructure	105	3.2	~					oillar: utions		
	127	3.3				12th pillar: Innovation			nd pillar: frastructure	
3 4th pillar: Health and primary education	130	3.6	_~			4411			0.1.71	
Subindex B: Efficiency enhancers	124	3.3	_			11th pillar: Business sophistication			3rd pillar: Macroecon environme	
⇒ 5th pillar: Higher education and training	112	3.2	_			//		7	\\	
	119	3.9	_			10th pillar: Market size			4th pilla Health a education	ind primary
7th pillar: Labor market efficiency	83	4.1							// <b></b>	
8th pillar: Financial market development	t 85	3.8	_			9th pillar: Technological readiness			5th pillar: Higher educ and training	
9th pillar: Technological readiness	124	2.6				8th pil	lar	6th	pillar:	
$\epsilon_{\psi^s}^{\gamma_{\gamma}}$ 10th pillar: Market size	130	2.2	_			Financial mai developm	ket	God	ods market ciency	
Subindex C: Innovation and sophistication factors	130	2.9	_				Labor	market iency		
္တိ 11th pillar: Business sophistication	117	3.4	~			Swo	ziland 🗏 S	Sub-Saharan	Africa	
** 12th pillar: Innovation	135	2.4				■ Swa	ziiaiiu 🔝 3	ouv-oalialali	I AIIICa	

## Most problematic factors for doing business





# **Swaziland**

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	e Tre
â 1st pillar: Institutions	61	4.0	_	\$	6th pillar: Goods market efficiency	119	3.9	_
1.01 Property rights	103	3.8	_	6.0	1 Intensity of local competition	126	4.3	_
1.02 Intellectual property protection	129	3.1	$\overline{}$		Extent of market dominance	135	2.2	_
1.03 Diversion of public funds	63	3.6			3 Effectiveness of anti-monopoly policy	111	3.2	_
1.04 Public trust in politicians	69	3.0	_		4 Effect of taxation on incentives to invest	28	4.4	_
1.05 Irregular payments and bribes	44	4.7			5 Total tax rate % profits	61	35.1	_
1.06 Judicial independence	86	3.6	~		No. of procedures to start a business	126	12	_
1.07 Favoritism in decisions of government officials	54	3.3			7 Time to start a business days	119	30.0	$\overline{}$
1.08 Efficiency of government spending	110				B Agricultural policy costs	35	4.3	_
1.09 Burden of government regulation	37	3.8			Prevalence of non-tariff barriers	51	4.6	
· · ·	89	3.3	$\sim$		Trade tariffs % duty	86	6.7	$\leq$
1.10 Efficiency of legal framework in settling disputes					•			_
1.11 Efficiency of legal framework in challenging regulations	75	3.2	$\widehat{}$		1 Prevalence of foreign ownership	49	4.8	_
1.12 Transparency of government policymaking	110	3.4			2 Business impact of rules on FDI	69	4.5	
1.13 Business costs of terrorism	9	6.2	_		Burden of customs procedures	72	4.1	=
1.14 Business costs of crime and violence	29		_		4 Imports % GDP	70	43.6	
1.15 Organized crime	24	5.7	_		Degree of customer orientation	126	3.7	
1.16 Reliability of police services	37	5.5	_	6.16	Buyer sophistication	119	2.7	
1.17 Ethical behavior of firms	51	4.1		28	7th pillar: Labor market efficiency	83	4.1	_
1.18 Strength of auditing and reporting standards	33	5.4	$\overline{}$	85,0				
1.19 Efficacy of corporate boards	60	4.9	_	7.0	1 Cooperation in labor-employer relations	128	3.6	_
1.20 Protection of minority shareholders' interests	105	3.6		7.02	2 Flexibility of wage determination	125	4.0	
1.21 Strength of investor protection 0-10 (best)	107	4.3	_^	7.03	Hiring and firing practices	21	4.5	_
· · · · · · · · · · · · · · · · · · ·				7.04	4 Redundancy costs weeks of salary	58	14.6	_
1 2nd pillar: Infrastructure	105	3.2	$\sim$	7.05	Effect of taxation on incentives to work	10	5.1	_
2.01 Quality of overall infrastructure	81	3.8	$\overline{}$	7.06	Pay and productivity	52	4.2	_
2.02 Quality of roads	39	4.7	$\sim$		Reliance on professional management	65	4.3	_
2.03 Quality of railroad infrastructure	48		$\sim$		Country capacity to retain talent	87	3.2	_
2.04 Quality of port infrastructure	87	3.6	_		Country capacity to attract talent	70	3.3	
2.05 Quality of air transport infrastructure	80	4.1			Female participation in the labor force ratio to men	109	0.64	=
2.06 Available airline seat kilometers millions/week	137	0.3		7.10	Tomalo participation in the labor lorde ratio to men	100	0.01	
2.07 Quality of electricity supply	98				8th pillar: Financial market development	85	3.8	_
, , , , , ,				8.0	1 Availability of financial services	88	3.9	
2.08 Mobile-cellular telephone subscriptions /100 pop.	123	76.4	_		2 Affordability of financial services	66	3.9	
2.09 Fixed-telephone lines /100 pop.	107	3.2			Financing through local equity market	101	3.0	
	127	3.3			4 Ease of access to loans	91	3.5	-
	100	10.4	~					_
3.01 Government budget balance % GDP	130	-12.4			5 Venture capital availability	87	2.6	_
3.02 Gross national savings % GDP	126	7.1	$\langle \cdot \rangle$		Soundness of banks	52	5.3	
3.03 Inflation annual % change	117	8.0	$\sim$		7 Regulation of securities exchanges	80	4.1	=
3.04 Government debt % GDP	19	27.5	_/	8.08	B Legal rights index 0-10 (best)	86	4	
3.05 Country credit rating 0-100 (best)	125	20.0		o8}80	9th pillar: Technological readiness	124	2.6	_
3 4th pillar: Health and primary education	130	3.6	~		1 Availability of latest technologies	127	3.4	_
4.01 Malaria incidence cases/100,000 pop.	31	23.2	$\overline{}$	9.02	2 Firm-level technology absorption	124	3.6	_
4.02 Business impact of malaria	11	5.6			FDI and technology transfer	105	3.8	_
4.03 Tuberculosis incidence cases/100,000 pop.	136	565.0	_		4 Internet users % pop.	103	28.6	
1.04 Business impact of tuberculosis	134	2.8			5 Fixed-broadband Internet subscriptions /100 pop.	114	0.5	
4.05 HIV prevalence % adult pop.	137	27.2			6 Internet bandwidth kb/s/user	118	5.8	
	133	2.6				128	13.0	
4.06 Business impact of HIV/AIDS			$\overline{}$		7 Mobile-broadband subscriptions /100 pop.	120	13.0	
4.07 Infant mortality deaths/1,000 live births	120	44.5		+ X X	10th pillar: Market size	130	2.2	_
4.08 Life expectancy years	138	48.9				121	1.9	_
4.09 Quality of primary education	73	4.0			10 Domestic market size index	131		
4.10 Primary education enrollment rate net %	126	79.6			22 Foreign market size index	124	3.2	
	112	3.2			O3 GDP (PPP) PPP \$ billions O4 Exports % GDP	129 51	11.1 41.5	=
5.01 Secondary education enrollment rate gross %	102	66.0	_	10.0	DA ENDOING TO GUE	31	41.0	
	126	5.3	$\overline{}$	~0°	11th pillar: Business sophistication	117	3.4	-
5.02 Tertiary education enrollment rate gross %				11.0	1 Local supplier quantity	101	4.1	_
5.03 Quality of the education system	76		$\stackrel{\frown}{\sim}$		22 Local supplier quality	107	3.8	_
5.04 Quality of math and science education	95				33 State of cluster development	123	3.0	_
5.05 Quality of management schools	133				·	99		
5.06 Internet access in schools	133	2.4			04 Nature of competitive advantage		3.1	_
5.07 Local availability of specialized training services	107		~		05 Value chain breadth	136	2.4	
5.08 Extent of staff training	65	4.0			Control of international distribution	124	2.9	
					7 Production process sophistication	113	3.1	
					08 Extent of marketing	125	3.7	
				11.0	9 Willingness to delegate authority	49	4.5	
				1	12th pillar: Innovation	135	2.4	-
					1 Capacity for innovation	134		
							3.1	
					22 Quality of scientific research institutions	137	2.0	
				12.0	O3 Company spending on R&D	132	2.4	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

136

72

135

2.1

3.3

# Sweden



### The Global Competitiveness Index 2017-2018 edition

Key indicators, 2016		Source: International Monetary Fund; World	d Economic Outlook Database (April 2017)
Population millions	10.0	GDP per capita US\$	51,164.5
GDP US\$ billions	511.4	GDP (PPP) % world GDP	0.42

#### Performance overview

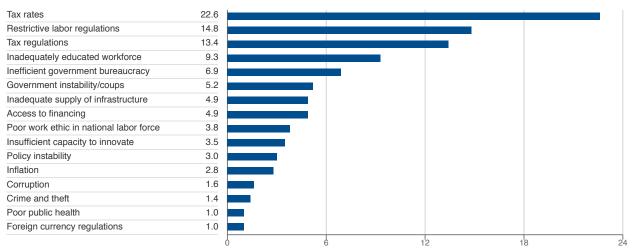
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	7	5.5	_		Rank	4 / 144	6 / 148	10 / 144	9 / 140	6 / 138	7 / 137
Subindex A: Basic requirements	8	6.0			Score	5.5	5.5	5.4	5.4	5.5	5.5
â 1st pillar: Institutions	11	5.6	~~								
<b>1</b> 2nd pillar: Infrastructure	19	5.6	_					1st pillar: Institutions			
	4	6.4	_			12th pi Innova		7	2nd pilla Infrastru		
3 4th pillar: Health and primary education	20	6.4	_			4411		a		S. J. 201	
Subindex B: Efficiency enhancers	12	5.3				11th pillar: Business sophistication			1 0	3rd pillar: Macroeconom environment	ic
⇒ 5th pillar: Higher education and training	18	5.6	_								
	14	5.2				10th pillar: Market size	1			4th pillar: Health and education	primary
7th pillar: Labor market efficiency	20	4.9	_								
8th pillar: Financial market development	10	5.1				9th pillar: Technological readiness	1		/ / H	th pillar: igher education nd training	on
9th pillar: Technological readiness	5	6.3				0+1	n pillar:		6th pillar:		
$\stackrel{\nwarrow}{\leftarrow}_{\!$	40	4.7				Financial		7th pillar:	Goods ma efficiency		
Subindex C: Innovation and sophistication factors	5	5.6	_					Labor market efficiency			
္တီ 11th pillar: Business sophistication	6	5.6	_			- Cure	odon =	Europo and N	lorth Ama	rioo	
** 12th pillar: Innovation	7	5.5	_			■ SWE	eden	Europe and N	NOITH AITH	IIId	

Sweden (7th) is overtaken by Hong Kong SAR this year, dropping one spot while retaining its absolute score. The Swedish economy performs best in absolute terms on the set of basic requirements, although the data show a deterioration in the perception of the institutional environment. This is true for both public and private institutions, with the economy dropping seven spots on this set of

indicators. Sweden's macroeconomic environment (4th) continues to improve as both the government's budget deficit and debt fell in 2016. Furthermore, the country is well positioned to contribute to and benefit from technological advances, with top 10 ranks for technological readiness, business sophistication, and innovation capacity.

### Most problematic factors for doing business





# **Sweden**

Index Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	Tre
â 1st pillar: Institutions	11	5.6	~~		14	5.2	_
1.01 Property rights	13	6.0	~	6.01 Intensity of local competition	25	5.5	~
1.02 Intellectual property protection	13	5.8	_	6.02 Extent of market dominance	20	4.6	$\sim$
1.03 Diversion of public funds	13	5.7	~	6.03 Effectiveness of anti-monopoly policy	4	5.5	~
1.04 Public trust in politicians	11	5.2	~~	6.04 Effect of taxation on incentives to invest	66	3.6	_
1.05 Irregular payments and bribes	18	6.0	~	6.05 Total tax rate % profits	108	49.1	1
1.06 Judicial independence	12	6.1	$\sim$	6.06 No. of procedures to start a business	7	3	
1.07 Favoritism in decisions of government officials	7	5.4	$\sim$	6.07 Time to start a business days	41	7.0	
1.08 Efficiency of government spending	26	4.2	$\overline{}$	6.08 Agricultural policy costs	11	4.9	~
1.09 Burden of government regulation	23	4.1		6.09 Prevalence of non-tariff barriers	15	5.1	)
1.10 Efficiency of legal framework in settling disputes	12	5.5	~~	6.10 Trade tariffs % duty	6	1.1	_
1.11 Efficiency of legal framework in challenging regulations	19	4.6	~	6.11 Prevalence of foreign ownership	16	5.5	_
1.12 Transparency of government policymaking	16	5.5	~	6.12 Business impact of rules on FDI	10	5.7	_
1.13 Business costs of terrorism	42	5.5	~	6.13 Burden of customs procedures	7	5.6	~
1.14 Business costs of crime and violence	34	5.2	~	6.14 Imports % GDP	82	39.3	~
1.15 Organized crime	25	5.6	~~	6.15 Degree of customer orientation	8	5.8	_
1.16 Reliability of police services	39	5.3	_	6.16 Buyer sophistication	13	4.7	_
1.17 Ethical behavior of firms	7	6.0	~	50			_
1.18 Strength of auditing and reporting standards	14	5.9	_	₹ 7th pillar: Labor market efficiency	20	4.9	
1.19 Efficacy of corporate boards	9	6.1		7.01 Cooperation in labor-employer relations	8	5.7	~
1.20 Protection of minority shareholders' interests	10		~~	7.02 Flexibility of wage determination	129	3.6	_
1.21 Strength of investor protection 0-10 (best)	18	7.2		7.03 Hiring and firing practices	90	3.5	_
				7.04 Redundancy costs weeks of salary	57	14.4	_
1 2nd pillar: Infrastructure	19	5.6		7.05 Effect of taxation on incentives to work	103	3.4	_
2.01 Quality of overall infrastructure	15	5.6		7.06 Pay and productivity	34	4.5	~
2.02 Quality of roads	18	5.5		7.07 Reliance on professional management	7	6.1	_
2.03 Quality of railroad infrastructure	21	4.6		7.08 Country capacity to retain talent	17	4.9	_
2.04 Quality of port infrastructure	15	5.5	_	7.09 Country capacity to attract talent	26	4.3	_
2.05 Quality of air transport infrastructure	15	5.8	$\overline{}$	7.10 Female participation in the labor force ratio to me	14	0.95	_
2.06 Available airline seat kilometers millions/week	36	741.3					
2.07 Quality of electricity supply	15	6.6	~	8th pillar: Financial market development	10	5.1	
2.08 Mobile-cellular telephone subscriptions /100 pop.	49	126.7	_	8.01 Availability of financial services	10	5.5	_
2.09 Fixed-telephone lines /100 pop.	29	34.1	_	8.02 Affordability of financial services	17	5.0	_
_		0		8.03 Financing through local equity market	7	5.4	_
	4	6.4	_	8.04 Ease of access to loans	12	5.1	
3.01 Government budget balance % GDP	21	-0.2	~	8.05 Venture capital availability	8	4.5	_
3.02 Gross national savings % GDP	24	29.5	~	8.06 Soundness of banks	19	5.8	_
3.03 Inflation annual % change	1	1.1	~	8.07 Regulation of securities exchanges	15	5.7	_
3.04 Government debt % GDP	52	41.7	_~	8.08 Legal rights index 0-10 (best)	50	6	$\overline{}$
3.05 Country credit rating 0-100 (best)	7	92.9		0			
				া 9th pillar: Technological readiness	5	6.3	
4th pillar: Health and primary education	20	6.4		9.01 Availability of latest technologies	5	6.5	$\sim$
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	1	6.0	_
4.02 Business impact of malaria	n/a	6.7		9.03 FDI and technology transfer	14	5.3	_
4.03 Tuberculosis incidence cases/100,000 pop.	29	9.2	_	9.04 Internet users % pop.	10	91.5	
4.04 Business impact of tuberculosis	20	6.6		9.05 Fixed-broadband Internet subscriptions /100 pop	14	36.3	_
4.05 HIV prevalence % adult pop.	1	0.2		9.06 Internet bandwidth kb/s/user	7	505.6	_^
4.06 Business impact of HIV/AIDS	22	6.5		9.07 Mobile-broadband subscriptions /100 pop.	8	125.2	_
4.07 Infant mortality deaths/1,000 live births	10	2.4					
4.08 Life expectancy years	9	82.6	_	્રૈંગે 10th pillar: Market size	40	4.7	
4.09 Quality of primary education	35	4.7	_	10.01 Domestic market size index	36	4.5	_
4.10 Primary education enrollment rate net %	12	99.4	~	10.02 Foreign market size index	37	5.3	_
·				10.03 GDP (PPP) PPP \$ billions	37	498.1	_
⇒ 5th pillar: Higher education and training	18	5.6		10.04 Exports % GDP	53	41.2	1
5.01 Secondary education enrollment rate gross %	3	140.5		11th millow Desires and the control of the control	6	E 0	_
5.02 Tertiary education enrollment rate gross %	43	62.3	$\overline{}$	11th pillar: Business sophistication	6	5.6	
5.03 Quality of the education system	20	4.8	_	11.01 Local supplier quantity	36	4.8	_
5.04 Quality of math and science education	46	4.6		11.02 Local supplier quality	7	5.7	_
5.05 Quality of management schools	22	5.3	~	11.03 State of cluster development	16	5.0	_
5.06 Internet access in schools	3	6.2	_	11.04 Nature of competitive advantage	7	6.0	_
5.07 Local availability of specialized training services	16	5.6	$\sim$	11.05 Value chain breadth	5	5.7	_
5.08 Extent of staff training	8	5.4	~	11.06 Control of international distribution	3	5.5	_
-				11.07 Production process sophistication	5	6.1	_
				11.08 Extent of marketing	8	5.5	_
				11.09 Willingness to delegate authority	2	6.2	
				* 10th nilley Innoveti	7	FF	_
				12th pillar: Innovation		5.5	
				12.01 Capacity for innovation	4	5.8	_
				12.02 Quality of scientific research institutions	13	5.7	_
				12.03 Company spending on R&D	6	5.6	_
				12.04 University-industry collaboration in R&D	10	5.2	_
				12.05 Gov't procurement of advanced technology pro	ducts 17	4.2	_
				12.06 Availability of scientists and engineers	20	4.8	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

4.8

20

## **Switzerland**



The Global Competitiveness Index 2017-2018 edition

Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	8.3	GDP per capita US\$	79,242.3
GDP US\$ billions	659.9	GDP (PPP) % world GDP	0.41

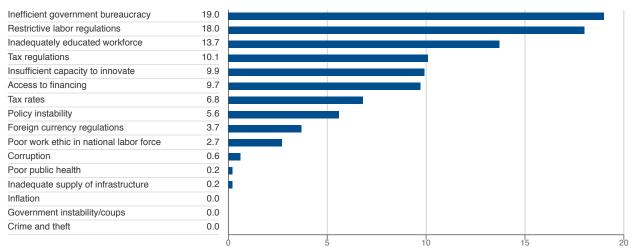
#### Performance overview

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	1	5.9			Rank	1 / 144	1 / 148	1 / 144	<b>1</b> / 140	1 / 138	1 / 137
Subindex A: Basic requirements	1	6.4	_		Score	5.7	5.7	5.7	5.8	5.8	5.9
☆ 1st pillar: Institutions	4	5.9	_								
<b>1</b> 2nd pillar: Infrastructure	6	6.3					1	1st pillar: Institutions			
	3	6.6				12th pill Innovat		7	2nd pilla Infrastru		
3 4th pillar: Health and primary education	2	6.8	_			440				S. J. 201	
Subindex B: Efficiency enhancers	3	5.6				11th pillar: Business sophistication			/ / D/ I	3rd pillar: Macroeconom environment	ic
⇒ 5th pillar: Higher education and training	5	6.1				400 - 70 -				411	
	6	5.5				10th pillar: Market size	<b>7</b>			4th pillar: Health and education	primary
7th pillar: Labor market efficiency	1	5.9	_								
8th pillar: Financial market development	8	5.3				9th pillar: Technological readiness	M.		// H	th pillar: igher education nd training	on
💖 9th pillar: Technological readiness	2	6.4	_			Qth.	pillar:		6th pillar:		
$\zeta_{\psi}^{\pi_{\mathcal{A}}}$ 10th pillar: Market size	39	4.7	_			Financial r develo	narket	7th pillar:	Goods ma efficiency		
Subindex C: Innovation and sophistication factors	1	5.9					L	abor market efficiency			
್ಯೂ 11th pillar: Business sophistication	1	5.9				Switze	rland	Europe and	d North Am	orioo	
12th pillar: Innovation	1	5.8	_			SWILZE	IIaiiu 📗	Europe and	a NOITH AII	ienca	

Switzerland (1st) continues to top the overall rankings, with strong results evenly balanced across the different components of competitiveness. Economic performance benefits from extremely strong fundamentals including public health, primary education, and a comparatively solid macroeconomic environment. Its economy has a high level of flexibility, with its labor markets being ranked as the bestfunctioning globally. Absorptive capacity for new technologies is high, with an overall 2nd place ranking in the tech readiness of citizens and businesses. Switzerland further improves its scores for business sector sophistication and its innovation environment, thereby defending its top global ranking on those two important pillars.

#### Most problematic factors for doing business





## **Switzerland**

Index Component	Rank/137	7 Value	e Trend	Index Component	Rank/137	Value	e Tre
☆ 1st pillar: Institutions	4	5.9	_		ncy 6	5.5	_
1.01 Property rights	2	6.5	_	6.01 Intensity of local competition	29	5.5	_
1.02 Intellectual property protection	1	6.6		6.02 Extent of market dominance	1	5.9	_
1.03 Diversion of public funds	8	6.0	_	6.03 Effectiveness of anti-monopoly po		5.2	_
1.04 Public trust in politicians	9	5.5		6.04 Effect of taxation on incentives to	•	5.4	
1.05 Irregular payments and bribes	8	6.4		6.05 Total tax rate % profits	31	28.8	~
1.06 Judicial independence	4	6.5		6.06 No. of procedures to start a busin		6	_
1.07 Favoritism in decisions of government officials	8	5.3	_	6.07 Time to start a business days	61	10.0	$\neg$
1.08 Efficiency of government spending	9		_	6.08 Agricultural policy costs	85	3.6	
1.09 Burden of government regulation	6	4.8		6.09 Prevalence of non-tariff barriers	32	4.8	_
1.10 Efficiency of legal framework in settling disputes	3	5.9		6.10 Trade tariffs % duty	50	3.5	~
1.11 Efficiency of legal framework in challenging regulations	2	5.4		6.11 Prevalence of foreign ownership	10	5.6	
1.12 Transparency of government policymaking	3			6.12 Business impact of rules on FDI	8	5.7	
1.13 Business costs of terrorism	30	5.7		6.13 Burden of customs procedures	13	5.4	
1.14 Business costs of crime and violence	13			6.14 Imports % GDP	43	55.1	
1.15 Organized crime	12	6.1		6.15 Degree of customer orientation	2	6.1	$\equiv$
1.16 Reliability of police services	2		_	6.16 Buyer sophistication	3	5.1	_
1.17 Ethical behavior of firms	4	6.1	=	6.16 Duyer sopriistication	3	5.1	
1.18 Strength of auditing and reporting standards	7		_	7th pillar: Labor market efficien	icy 1	5.9	_
	7	6.1		7.01 Cooperation in labor-employer re	lations 1	6.2	
1.19 Efficacy of corporate boards				7.02 Flexibility of wage determination	6	6.0	
1.20 Protection of minority shareholders' interests	13		~	7.03 Hiring and firing practices	2	5.6	_
1.21 Strength of investor protection 0-10 (best)	91	5.0	_~	7.04 Redundancy costs weeks of salary	33	10.1	
↑↑ 2nd pillar: Infrastructure	6	6.3		7.05 Effect of taxation on incentives to		5.7	=
2.01 Quality of overall infrastructure	1	6.6		7.06 Pay and productivity	1	5.6	
2.02 Quality of roads	3	6.3		7.07 Reliance on professional manage		6.1	_
2.03 Quality of railroad infrastructure	1	6.6		7.08 Country capacity to retain talent	1	6.0	
•	56	4.5			1	6.2	
2.04 Quality of port infrastructure	7	6.2		7.09 Country capacity to attract talent		0.89	=
2.05 Quality of air transport infrastructure			_	7.10 Female participation in the labor f	orce ratio to men 33	0.69	
2.06 Available airline seat kilometers millions/week	30	1,121.5	=	8th pillar: Financial market dev	elopment 8	5.3	_
2.07 Quality of electricity supply	2	6.9	_	8.01 Availability of financial services	1	6.0	_
2.08 Mobile-cellular telephone subscriptions /100 pop.	34	135.6	~	8.02 Affordability of financial services	1	5.8	_
2.09 Fixed-telephone lines /100 pop.	10	48.4	_	8.03 Financing through local equity ma		5.5	_
	3	6.6		8.04 Ease of access to loans	18	4.9	
3.01 Government budget balance % GDP	20	-0.1	~~	8.05 Venture capital availability	15	4.2	
3.02 Gross national savings % GDP	12	34.4	~	8.06 Soundness of banks	13	6.0	
3.03 Inflation annual % change	74	-0.4		8.07 Regulation of securities exchange		5.9	_
3.04 Government debt % GDP	60	45.4	~	8.08 Legal rights index 0-10 (best)	50	6	_
	1	95.2	_	8.08 Legal rights index 0-10 (best)	30	- 0	
3.05 Country credit rating 0-100 (best)				🖇 9th pillar: Technological readin	ess 2	6.4	_
4th pillar: Health and primary education	2	6.8		9.01 Availability of latest technologies	3	6.5	_
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	4	5.9	_
4.02 Business impact of malaria	n/a	7.0		9.03 FDI and technology transfer	12	5.4	_
4.03 Tuberculosis incidence cases/100,000 pop.	22	7.4	_	9.04 Internet users % pop.	15	89.4	_
4.04 Business impact of tuberculosis	7	6.8		9.05 Fixed-broadband Internet subscri	ptions /100 pop. 1	46.3	
4.05 HIV prevalence % adult pop.	73	0.4		9.06 Internet bandwidth kb/s/user	9	269.2	_/
1.06 Business impact of HIV/AIDS	14	6.6	_	9.07 Mobile-broadband subscriptions	/100 pop. 18	103.7	
4.07 Infant mortality deaths/1,000 live births	25	3.4	_	57			_
4.08 Life expectancy years	5	83.2		10th pillar: Market size	39	4.7	
4.09 Quality of primary education	2	6.2		10.01 Domestic market size index	38	4.4	_
4.10 Primary education enrollment rate net %	7	99.6		10.02 Foreign market size index	29	5.5	_
•				10.03 GDP (PPP) PPP \$ billions	38	496.0	_
	5	6.1		10.04 Exports % GDP	21	63.0	_
5.01 Secondary education enrollment rate gross %	42	101.2	_	Add willow B	dia	F.0	_
5.02 Tertiary education enrollment rate gross %	48	57.7	~	√ 11th pillar: Business sophistica		5.9	
5.03 Quality of the education system	1	6.2		11.01 Local supplier quantity	2	5.7	_
5.04 Quality of math and science education	3	6.1		11.02 Local supplier quality	1	6.3	_
5.05 Quality of management schools	1	6.4		11.03 State of cluster development	12	5.1	_
5.06 Internet access in schools	11	5.9		11.04 Nature of competitive advantage	1	6.5	-
5.07 Local availability of specialized training services	1	6.7		11.05 Value chain breadth	3	5.8	_
5.08 Extent of staff training	1	5.7		11.06 Control of international distribution	on 6	5.4	_
	•	0.7		11.07 Production process sophistication	on 1	6.5	
				11.08 Extent of marketing	3	5.8	
				11.09 Willingness to delegate authority		5.8	
				. \			_
				12th pillar: Innovation	1	5.8	
				12.01 Capacity for innovation	1	6.2	_
				12.02 Quality of scientific research inst	titutions 1	6.6	_
				12.03 Company spending on R&D	1	6.1	_
				an natibute and the land code and the control of	:- D0D		

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

5.8

3.7

5.1

37

12

# Taiwan, China



The Global Competitiveness Index 2017-2018 edition



2017-18

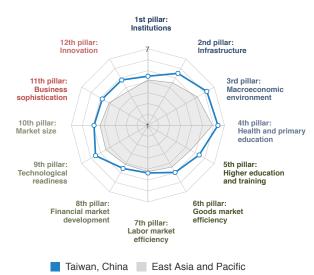
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Key indicators, 2016		Source: International Monetary Fund; Work	d Economic Outlook Database (April 2017)
Population millions	23.5	GDP per capita US\$	22,453.4
GDP US\$ billions	528.6	GDP (PPP) % world GDP	0.94

#### Performance overview

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition
Global Competitiveness Index	15	5.3	_		Rank
Subindex A: Basic requirements	15	5.8			Score
1st pillar: Institutions	30	4.9	_		
<b>↑</b> 2nd pillar: Infrastructure	15	5.7	_		
3rd pillar: Macroeconomic environment	5	6.3			
3 4th pillar: Health and primary education	15	6.5			
Subindex B: Efficiency enhancers	16	5.2			
⇒ 5th pillar: Higher education and training	17	5.6			
6th pillar: Goods market efficiency	12	5.3	_		
7th pillar: Labor market efficiency	25	4.7	<u></u>		
8th pillar: Financial market development	19	4.9			
9th pillar: Technological readiness	25	5.7			
្លឹ <sup>ក្</sup> ្ន 10th pillar: Market size	20	5.2	_		
Subindex C: Innovation and sophistication factors	15	5.1	~		
3 11th pillar: Business sophistication	21	5.1	_		
* 12th pillar: Innovation	11	5.1	_		



2014-15

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2015-16

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2016-17

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#### Most problematic factors for doing business



2012-13

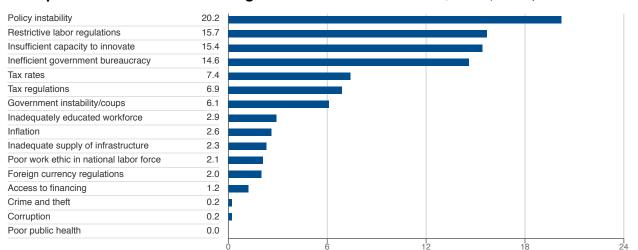
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2013-14

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# Taiwan, China

dex Component	Rank/137	Value	Trend	Index	Component	Rank/137	Value	Э.
â 1st pillar: Institutions	30	4.9		8	6th pillar: Goods market efficiency	12	5.3	-
.01 Property rights	22	5.6	_	6.01	Intensity of local competition	5	6.0	-
.02 Intellectual property protection	27	5.2	_	6.02	Extent of market dominance	5	5.3	_
.03 Diversion of public funds	34	4.6		6.03	Effectiveness of anti-monopoly policy	22	4.7	-
04 Public trust in politicians	35	4.1	_	6.04	Effect of taxation on incentives to invest	37	4.2	_
05 Irregular payments and bribes	24	5.6	_		Total tax rate % profits	58	34.5	-
06 Judicial independence	48	4.5	_		No. of procedures to start a business	7	3	-
7 Favoritism in decisions of government officials	29	4.2	_		Time to start a business days	61	10.0	-
	35	3.9				40		
8 Efficiency of government spending					Agricultural policy costs		4.2	-
9 Burden of government regulation	30	4.0			Prevalence of non-tariff barriers	30	4.9	
Efficiency of legal framework in settling disputes	56	3.8	_		Trade tariffs % duty	72	5.0	
Efficiency of legal framework in challenging regulations	49	3.6			Prevalence of foreign ownership	48	4.9	
2 Transparency of government policymaking	22	5.1	_	6.12	Business impact of rules on FDI	79	4.4	
13 Business costs of terrorism	55	5.3	$\overline{}$	6.13	Burden of customs procedures	15	5.3	
4 Business costs of crime and violence	31	5.2	$\overline{}$	6.14	Imports % GDP	44	53.4	
5 Organized crime	49	5.1		6.15	Degree of customer orientation	4	5.9	
6 Reliability of police services	33	5.6	_		Buyer sophistication	10	4.7	
7 Ethical behavior of firms	34	4.7	$\sim$					
		5.7		J.	7th pillar: Labor market efficiency	25	4.7	
8 Strength of auditing and reporting standards	23		_	7.01	Cooperation in labor-employer relations	17	5.4	
9 Efficacy of corporate boards	32	5.5				9	6.0	
Protection of minority shareholders' interests	19		_		P. Flexibility of wage determination			
1 Strength of investor protection 0-10 (best)	21	7.0			Hiring and firing practices	13	4.8	
A Cond willow Information	15	E 7	_		Redundancy costs weeks of salary	97	22.6	
2nd pillar: Infrastructure	15	5.7		7.05	Effect of taxation on incentives to work	24	4.6	
1 Quality of overall infrastructure	19	5.4		7.06	Pay and productivity	14	4.8	
2 Quality of roads	11	5.6	$\overline{}$	7.07	Reliance on professional management	27	5.4	
3 Quality of railroad infrastructure	12	5.3	$\overline{}$	7.08	Country capacity to retain talent	41	4.0	
4 Quality of port infrastructure	24		_		Country capacity to attract talent	63	3.4	
5 Quality of air transport infrastructure	43	5.1			Female participation in the labor force ratio to men	86	0.75	
06 Available airline seat kilometers millions/week		1,528.4	->	7.10	Terrale participation in the labor force Tallo to men		0.73	
					8th pillar: Financial market development	19	4.9	
7 Quality of electricity supply	41	5.8			Availability of financial services	13	5.4	
8 Mobile-cellular telephone subscriptions /100 pop.	54	124.6			•			
9 Fixed-telephone lines /100 pop.	3	58.7	~		Affordability of financial services	26	4.7	
3rd pillar: Macroeconomic environment	5	6.2			Financing through local equity market	5	5.5	
3rd pillar: Macroeconomic environment	5	6.3		8.04	Ease of access to loans	6	5.4	
1 Government budget balance % GDP	41	-1.6		8.05	Venture capital availability	18	4.0	
2 Gross national savings % GDP	10	35.6	$\sim$	8.06	Soundness of banks	16	5.9	
3 Inflation annual % change	1	1.4	~~	8.07	Regulation of securities exchanges	19	5.6	
4 Government debt % GDP	39	35.4	~		Legal rights index 0-10 (best)	86	4	
5 Country credit rating 0-100 (best)	18	82.0						
o obtainly broak raking a roo (best)	10	02.0		3/20	9th pillar: Technological readiness	25	5.7	
4th pillar: Health and primary education	15	6.5		9.01	Availability of latest technologies	30	5.6	
11 Malaria incidence cases/100,000 pop.	n/a	m.f.			Firm-level technology absorption	29	5.2	
2 Business impact of malaria	n/a	2.2	_		FDI and technology transfer	35	4.9	
•	71		_		••	31	79.7	
33 Tuberculosis incidence cases/100,000 pop.		45.7	_		Internet users % pop.			
4 Business impact of tuberculosis	135	2.5	_ \		Fixed-broadband Internet subscriptions /100 pop.	40	24.2	
5 HIV prevalence % adult pop.	1	0.2			Internet bandwidth kb/s/user	6	717.6	
6 Business impact of HIV/AIDS	135	2.4		9.07	Mobile-broadband subscriptions /100 pop.	29	90.8	
7 Infant mortality deaths/1,000 live births	33	4.4	$\sim$	,57	40th siller Market size	20	E 0	
8 Life expectancy years	31	80.1		£73	10th pillar: Market size	20	5.2	
9 Quality of primary education	19		_	10.0	1 Domestic market size index	23	5.0	
0 Primary education enrollment rate net %	9		~~	10.0	2 Foreign market size index	15	6.0	
		55.0	_		3 GDP (PPP) PPP \$ billions		1,132.1	
7 5th pillar: Higher education and training	17	5.6			4 Exports % GDP	23	60.8	
1 Secondary education enrollment rate gross %	43	101.2		0	·		20.0	
2 Tertiary education enrollment rate gross %	13	83.7	~	~~	11th pillar: Business sophistication	21	5.1	
,				11.0	1 Local supplier quantity	6	5.5	
3 Quality of the education system	31	4.5			2 Local supplier quality	21	5.3	
4 Quality of math and science education	18		_			2		
5 Quality of management schools	28		_		3 State of cluster development		5.5	
Internet access in schools	26	5.3	$\sim$		4 Nature of competitive advantage	20	5.3	
7 Local availability of specialized training services	33	5.1	$\sim$		5 Value chain breadth	21	5.0	
Extent of staff training	25	4.8	~	11.0	6 Control of international distribution	39	4.1	
·				11.0	7 Production process sophistication	21	5.3	
				11.0	8 Extent of marketing	15	5.2	
					9 Willingness to delegate authority	30	4.9	
				17		30	7.5	
				洲	12th pillar: Innovation	11	5.1	
				12.0	1 Capacity for innovation	22	5.1	
					2 Quality of scientific research institutions	26	5.1	
					3 Company spending on R&D	10	5.2	
					4 University-industry collaboration in R&D	16		
					5 Gov't procurement of advanced technology products	34	3.8	
				120	is carry cornelitement of anyanced technology products	:32	33.8	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

3.8

4.7

34

30

# Tajikistan



The Global Competitiveness Index 2017-2018 edition



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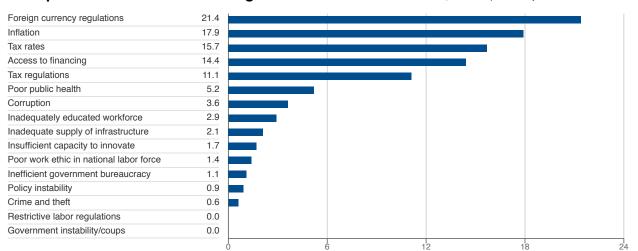
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (A)		
Population millions	8.7	GDP per capita ∪s\$	799.8	
GDP US\$ billions	6.9	GDP (PPP) % world GDP	0.02	

#### **Performance overview**

ndex Component	Rank/137	Score (1-7) Trend	Distance from best	Edition	2012-13	2014-15	2015-16	2016-17	2017-1
Global Competitiveness Index	79	4.1 —		Rank	100 / 144	91 / 144	80 / 140	77 / 138	79 / 13
Subindex A: Basic requirements	81	4.4		Score	3.8	3.9	4.0	4.1	4.1
🖮 1st pillar: Institutions	42	4.4							
<b>1</b> 2nd pillar: Infrastructure	99	3.3				1st pilli Institutio			
	103	4.1			12th pillar: Innovation	7		pillar: structure	
3 4th pillar: Health and primary education	73	5.7			4411	1		0.1.20	
Subindex B: Efficiency enhancers	95	3.7			11th pillar: Business sophistication			3rd pillar: Macroecond environmen	
⇒ 5th pillar: Higher education and training	76	4.3			///			\	
	68	4.3			10th pillar: Market size			4th pillar Health ar education	nd primary
🍂 7th pillar: Labor market efficiency	34	4.6						/	
8th pillar: Financial market development	105	3.5			9th pillar: Technological readiness			5th pillar: Higher educa and training	ntion
🖐 9th pillar: Technological readiness	114	3.0			8th pillar		6th pi		
10th pillar: Market size	118	2.8			Financial marke developmen	et	Good	s market	
Subindex C: Innovation and sophistication factors	62	3.7				Labor ma efficien	arket		
→ 11th pillar: Business sophistication	75	3.9			_	Taiikistan	Eurasia		
★ 12th pillar: Innovation	47	3.6				Tajikistan	Eurasia		

### Most problematic factors for doing business





# **Tajikistan**

Index Component	Rank/137	Value	e Trend	Index Component	Rank/137	Value	Trend
â 1st pillar: Institutions	42	4.4	_		68	4.3	
1.01 Property rights	59	4.5	_	6.01 Intensity of local competition	99	4.7	
1.02 Intellectual property protection	64	4.2		6.02 Extent of market dominance	49	3.9	$\overline{}$
1.03 Diversion of public funds	36	4.5		6.03 Effectiveness of anti-monopoly policy	72	3.7	
1.04 Public trust in politicians	30	4.2		6.04 Effect of taxation on incentives to invest	84	3.5	
1.05 Irregular payments and bribes	58	4.2		6.05 Total tax rate % profits	131	65.2	~
1.06 Judicial independence	49	4.4		6.06 No. of procedures to start a business	36	5	
1.07 Favoritism in decisions of government officials	37	3.8	_	6.07 Time to start a business days	101	22.0	~
1.08 Efficiency of government spending	34	3.9		6.08 Agricultural policy costs	27	4.4	
1.09 Burden of government regulation	16	4.5	_	6.09 Prevalence of non-tariff barriers	92	4.1	
1.10 Efficiency of legal framework in settling disputes	34	4.5		6.10 Trade tariffs % duty	77	5.9	
1.11 Efficiency of legal framework in challenging regulations	35	4.0	_	6.11 Prevalence of foreign ownership	121	3.5	
1.12 Transparency of government policymaking	36	4.6	_	6.12 Business impact of rules on FDI	111	3.9	
1.13 Business costs of terrorism	76	5.0	_	6.13 Burden of customs procedures	65	4.2	
1.14 Business costs of crime and violence	56		$\overline{}$	6.14 Imports % GDP	54	50.0	^
1.15 Organized crime	61	5.0		6.15 Degree of customer orientation	68	4.6	_
1.16 Reliability of police services	49		_	6.16 Buyer sophistication	29	4.0	
1.17 Ethical behavior of firms	38			g.			
1.18 Strength of auditing and reporting standards	96	4.1		7th pillar: Labor market efficiency	34	4.6	
1.19 Efficacy of corporate boards	88	4.6	_	7.01 Cooperation in labor-employer relations	42	4.7	_
	77	3.9	_	7.02 Flexibility of wage determination	32	5.4	
1.20 Protection of minority shareholders' interests			~	7.03 Hiring and firing practices	23	4.5	
1.21 Strength of investor protection 0-10 (best)	26	6.7		7.04 Redundancy costs weeks of salary	66	15.5	_
♦ 2nd pillar: Infrastructure	99	3.3		7.05 Effect of taxation on incentives to work	36	4.3	
2.01 Quality of overall infrastructure	64	4.2		7.06 Pay and productivity	27		
·	70				77	4.6	
2.02 Quality of roads		4.1		7.07 Reliance on professional management		4.1	
2.03 Quality of railroad infrastructure	41	3.7		7.08 Country capacity to retain talent	46	3.9	_
2.04 Quality of port infrastructure	132	2.0		7.09 Country capacity to attract talent	44	3.8	
2.05 Quality of air transport infrastructure	70	4.3	_	7.10 Female participation in the labor force ratio to men	80	0.77	
2.06 Available airline seat kilometers millions/week	96	61.7	~	8th pillar: Financial market development	105	3.5	
2.07 Quality of electricity supply	100	3.7		8.01 Availability of financial services	71	4.2	
2.08 Mobile-cellular telephone subscriptions /100 pop.	90	106.7		•	51		
2.09 Fixed-telephone lines /100 pop.	99	5.3	_	8.02 Affordability of financial services		4.0	
	103	4.1	~	8.03 Financing through local equity market	102	3.0	_
•			_	8.04 Ease of access to loans	50	4.1	
3.01 Government budget balance % GDP	98	-4.4		8.05 Venture capital availability	42	3.3	
3.02 Gross national savings % GDP	103	14.6		8.06 Soundness of banks	94	4.3	
3.03 Inflation annual % change	103	5.9	\	8.07 Regulation of securities exchanges	90	3.9	_
3.04 Government debt % GDP	38	35.3	$\sim$	8.08 Legal rights index 0-10 (best)	128	1	
3.05 Country credit rating 0-100 (best)	117	23.8		% 9th pillar: Technological readiness	114	3.0	_
	73	5.7					
				9.01 Availability of latest technologies	92	4.3	$\sim$
4.01 Malaria incidence cases/100,000 pop.	1	0.0	$\overline{}$	9.02 Firm-level technology absorption	104	4.1	
4.02 Business impact of malaria	n/a	4.9		9.03 FDI and technology transfer	97	4.0	
4.03 Tuberculosis incidence cases/100,000 pop.	90	87.0	_	9.04 Internet users % pop.	118	20.5	
4.04 Business impact of tuberculosis	103	4.6		9.05 Fixed-broadband Internet subscriptions /100 pop.	129	0.1	_
4.05 HIV prevalence % adult pop.	63	0.3	_	9.06 Internet bandwidth kb/s/user	129	2.4	$\sim$
4.06 Business impact of HIV/AIDS	94	5.0		9.07 Mobile-broadband subscriptions /100 pop.	123	18.1	
4.07 Infant mortality deaths/1,000 live births	114	38.5	~	10th pillar: Market size	118	2.8	_
4.08 Life expectancy years	101	69.8					
4.09 Quality of primary education	67	4.1		10.01 Domestic market size index	110	2.7	
4.10 Primary education enrollment rate net %	41	97.7	~	10.02 Foreign market size index	127	3.1	
⇒ 5th pillar: Higher education and training	76	4.3		10.03 GDP (PPP) PPP \$ billions	114	26.0	
			_	10.04 Exports % GDP	119	16.4	_
5.01 Secondary education enrollment rate gross %	82	87.9		3 11th pillar: Business sophistication	75	3.9	
5.02 Tertiary education enrollment rate gross %	84	28.9					
5.03 Quality of the education system	50	4.1		11.01 Local supplier quantity	34	4.8	
5.04 Quality of math and science education	74	4.0		11.02 Local supplier quality	76	4.2	$\widehat{}$
5.05 Quality of management schools	84	4.0	_	11.03 State of cluster development	120	3.0	
5.06 Internet access in schools	52	4.5		11.04 Nature of competitive advantage	67	3.6	
5.07 Local availability of specialized training services	65	4.4		11.05 Value chain breadth	86	3.6	
5.08 Extent of staff training	64	4.0		11.06 Control of international distribution	46	4.0	_
				11.07 Production process sophistication	81	3.6	
				11.08 Extent of marketing	126	3.7	
				11.09 Willingness to delegate authority	79	4.2	
				* 12th pillar: Innovation	47	3.6	_
				12.01 Capacity for innovation	68		
				12.02 Quality of scientific research institutions	63		
				12.03 Company spending on R&D	74	3.2	
				12.04 University-industry collaboration in R&D	31		
				13.05 Gov't procurement of advanced technology products	26	30	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

26

51

3.9

## Tanzania

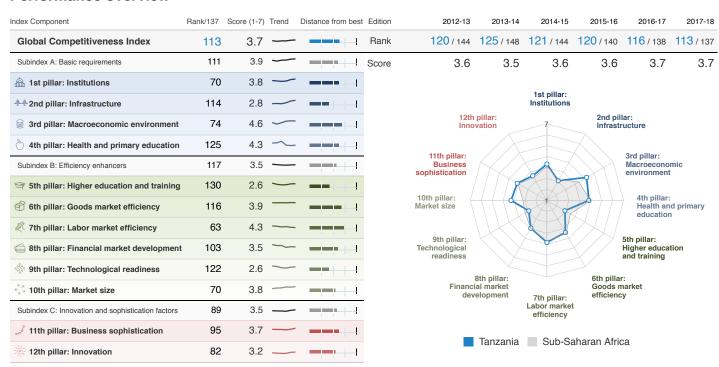
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The Global Competitiveness Index 2017-2018 edition



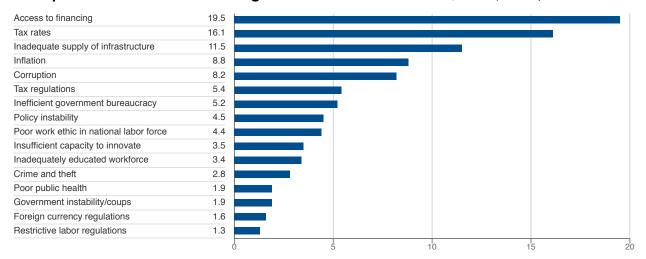
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (Ap		
Population millions	48.6	GDP per capita US\$	970.2	
GDP US\$ billions	47.2	GDP (PPP) % world GDP	0.13	

#### Performance overview



#### Most problematic factors for doing business





## **Tanzania**

Index Component	Rank/13	7 Value	e Trend	Index Component	Rank/137	Value	Trend
â 1st pillar: Institutions	70	3.8	_	<b>❸</b> 6th pillar: Goods market efficiency	116	3.9	
1.01 Property rights	82	4.1	~	6.01 Intensity of local competition	110	4.6	_
1.02 Intellectual property protection	90	3.7		6.02 Extent of market dominance	89	3.5	_
1.03 Diversion of public funds	76	3.4		6.03 Effectiveness of anti-monopoly policy	56	3.9	_
1.04 Public trust in politicians	48	3.5		6.04 Effect of taxation on incentives to invest	115	3.0	
1.05 Irregular payments and bribes	100			6.05 Total tax rate % profits	94	43.9	
1.06 Judicial independence	68	3.8		6.06 No. of procedures to start a business	105	9	
1.07 Favoritism in decisions of government officials	49	3.4		6.07 Time to start a business days	111	26.0	
1.08 Efficiency of government spending	28			6.08 Agricultural policy costs	66	3.8	$\sim$
1.09 Burden of government regulation	60	3.5		6.09 Prevalence of non-tariff barriers	111	3.9	
	43	4.1		6.10 Trade tariffs % duty	104	10.2	
1.10 Efficiency of legal framework in settling disputes							
1.11 Efficiency of legal framework in challenging regulations	53	3.5		6.11 Prevalence of foreign ownership	102	4.0	_
1.12 Transparency of government policymaking	85		~	6.12 Business impact of rules on FDI	109	4.0	
1.13 Business costs of terrorism	91	4.7	~	6.13 Burden of customs procedures	88	3.8	
1.14 Business costs of crime and violence	97	4.1	~	6.14 Imports % GDP	116	24.7	_
1.15 Organized crime	73	4.8	~	6.15 Degree of customer orientation	104	4.1	_
1.16 Reliability of police services	70	4.4	_	6.16 Buyer sophistication	110	2.8	
1.17 Ethical behavior of firms	82	3.7	$\overline{}$	\$ 744 -: II I -h	63	4.3	
1.18 Strength of auditing and reporting standards	108	3.9	$\overline{}$	7th pillar: Labor market efficiency			
1.19 Efficacy of corporate boards	103	4.4		7.01 Cooperation in labor-employer relations	113	3.8	
1.20 Protection of minority shareholders' interests	60	4.1		7.02 Flexibility of wage determination	93	4.6	~
1.21 Strength of investor protection 0-10 (best)	117	4.0		7.03 Hiring and firing practices	85	3.6	
2gar or arrostor protestion o to (boot)		1.0		7.04 Redundancy costs weeks of salary	27	9.3	
◆◆ 2nd pillar: Infrastructure	114	2.8	_	7.05 Effect of taxation on incentives to work	106	3.4	_
2.01 Quality of overall infrastructure	92	3.6		7.06 Pay and productivity	105	3.5	
2.02 Quality of roads	90	3.5		7.07 Reliance on professional management	89	3.9	_
	68		$\sim$	7.08 Country capacity to retain talent	74	3.3	
2.03 Quality of railroad infrastructure	95						
2.04 Quality of port infrastructure		3.4		7.09 Country capacity to attract talent	62	3.4	
2.05 Quality of air transport infrastructure	114		$\overline{}$	7.10 Female participation in the labor force ratio to men	31	0.90	
2.06 Available airline seat kilometers millions/week	84	106.8	~	8th pillar: Financial market development	103	3.5	~
2.07 Quality of electricity supply	110	3.1					
2.08 Mobile-cellular telephone subscriptions /100 pop.	125	74.4	~	8.01 Availability of financial services	99	3.8	
2.09 Fixed-telephone lines /100 pop.	129	0.2		8.02 Affordability of financial services	108	3.2	
9 0-d-:	74	16		8.03 Financing through local equity market	66	3.6	~
	74	4.6	_	8.04 Ease of access to loans	105	3.3	
3.01 Government budget balance % GDP	87	-3.8	~	8.05 Venture capital availability	84	2.7	~
3.02 Gross national savings % GDP	66	21.3	~	8.06 Soundness of banks	110	4.0	_
3.03 Inflation annual % change	98	5.2	^	8.07 Regulation of securities exchanges	105	3.7	_
3.04 Government debt % GDP	46	39.0	~	8.08 Legal rights index 0-10 (best)	70	5	$\overline{}$
3.05 Country credit rating 0-100 (best)	104	28.9	_	^			
			_	9th pillar: Technological readiness	122	2.6	
4th pillar: Health and primary education	125	4.3	~	9.01 Availability of latest technologies	116	3.8	_
4.01 Malaria incidence cases/100,000 pop.	55	11,045.4	$\sim$	9.02 Firm-level technology absorption	103	4.1	_
4.02 Business impact of malaria	52	3.3		9.03 FDI and technology transfer	92	4.0	_
4.03 Tuberculosis incidence cases/100,000 pop.	123	306.0	_	9.04 Internet users % pop.	127	13.0	~
4.04 Business impact of tuberculosis	118	4.0		9.05 Fixed-broadband Internet subscriptions /100 pop.	120	0.3	
·							_
4.05 HIV prevalence % adult pop.	126	4.7		9.06 Internet bandwidth kb/s/user	132	1.7	
4.06 Business impact of HIV/AIDS	124	3.5		9.07 Mobile-broadband subscriptions /100 pop.	133	9.2	
4.07 Infant mortality deaths/1,000 live births	109	35.2	_	10th pillar: Market size	70	3.8	_
4.08 Life expectancy years	109	65.5					
4.09 Quality of primary education	117	3.0		10.01 Domestic market size index	69	3.7	
4.10 Primary education enrollment rate net %	125	80.1		10.02 Foreign market size index	83	4.2	
S Pak - illan Hinkan adarah	100	0.0		10.03 GDP (PPP) PPP \$ billions		149.8	_
5th pillar: Higher education and training	130	2.6		10.04 Exports % GDP	113	18.6	~
5.01 Secondary education enrollment rate gross %	132	32.3	$\sim$	data millow Business combination	95	2.7	
5.02 Tertiary education enrollment rate gross %	132	3.6		3 11th pillar: Business sophistication		3.7	
5.03 Quality of the education system	90	3.3	~	11.01 Local supplier quantity	87	4.3	_
5.04 Quality of math and science education	119	2.8		11.02 Local supplier quality	114	3.7	_
5.05 Quality of management schools	119		_	11.03 State of cluster development	58	3.8	_
5.06 Internet access in schools	122	3.1		11.04 Nature of competitive advantage	83	3.3	
5.07 Local availability of specialized training services	96	4.0		11.05 Value chain breadth	91	3.5	~
		3.5		11.06 Control of international distribution	101	3.2	_
5.08 Extent of staff training	108	3.5		11.07 Production process sophistication	99	3.3	
				11.08 Extent of marketing	111	3.9	
				11.09 Willingness to delegate authority	95	4.0	
				<b>※ 12th pillar: Innovation</b>	82	3.2	_
				12.01 Capacity for innovation	112	3.6	
				12.02 Quality of scientific research institutions	69	3.8	
				12.03 Company spending on R&D	84	3.2	_
				12.04 University-industry collaboration in R&D	61		_
				12.05 Gov't procurement of advanced technology products	52	3.5	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

52

84

3.5

## Thailand



The Global Competitiveness Index 2017-2018 edition



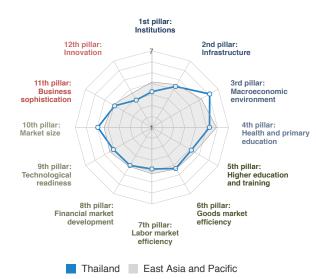
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4.7

Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	69.0	GDP per capita US\$	5,899.4
GDP US\$ billions	406.9	GDP (PPP) % world GDP	0.97

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14
Global Competitiveness Index	32	4.7			Rank	38 / 144	<b>37</b> / 148
Subindex A: Basic requirements	41	5.1	_		Score	4.5	4.5
☆ 1st pillar: Institutions	78	3.8	_				
1 2nd pillar: Infrastructure	43	4.7	-~				
3rd pillar: Macroeconomic environment	9	6.2				12th p Innov	
4th pillar: Health and primary education	90	5.5	~			ddile eillen	$\wedge$
Subindex B: Efficiency enhancers	35	4.6				11th pillar: Business sophistication	4//
⇒ 5th pillar: Higher education and training	57	4.6					1
fth pillar: Goods market efficiency	33	4.7				10th pillar: Market size	1
7th pillar: Labor market efficiency	65	4.3	_			\ \	
ath pillar: Financial market development	40	4.4	~			9th pillar: Technological readiness	
9th pillar: Technological readiness	61	4.5				8	th pillar:
ใง 10th pillar: Market size	18	5.2				Financia	l market lopment
Subindex C: Innovation and sophistication factors	47	3.9	_				
္တβ 11th pillar: Business sophistication	42	4.4	_			_	Thailand
12th pillar: Innovation	50	3.5					TTIAIIATIU



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4.6

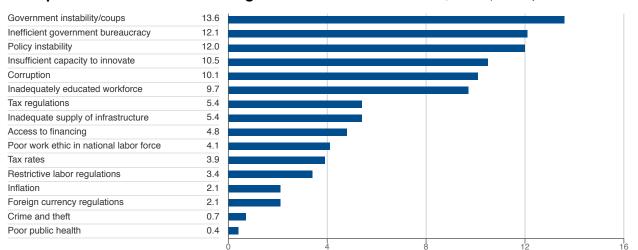
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4.6

#### Most problematic factors for doing business





# Thailand

Index Component	Rank/137	' Value	Trend	Inde	x Component	Rank/137	7 Value	e Tre
€ 1st pillar: Institutions	78	3.8	_	1	6th pillar: Goods market efficiency	33	4.7	_
1.01 Property rights	80	4.1		6.0	Intensity of local competition	43	5.4	_
1.02 Intellectual property protection	106	3.5			2 Extent of market dominance	95	3.4	_
1.03 Diversion of public funds	80	3.3			Effectiveness of anti-monopoly policy	57	3.9	_
1.04 Public trust in politicians	102	2.3	_		Effect of taxation on incentives to invest	40	4.1	_
1.05 Irregular payments and bribes	72	3.8			5 Total tax rate % profits	46	32.6	~
1.06 Judicial independence	62	4.1			No. of procedures to start a business	36	5	
1.07 Favoritism in decisions of government officials	71	3.0			7 Time to start a business days	110	25.5	=
1.08 Efficiency of government spending	51	3.6			3 Agricultural policy costs	69	3.8	~
1.09 Burden of government regulation	58	3.6			Prevalence of non-tariff barriers	67	4.4	_
1.10 Efficiency of legal framework in settling disputes	49	4.0			Trade tariffs % duty	90	7.3	
					·			=
1.11 Efficiency of legal framework in challenging regulations	72	3.3	~~		Prevalence of foreign ownership	54	4.8	
1.12 Transparency of government policymaking	83	3.8	_		Business impact of rules on FDI	47	5.0	_
1.13 Business costs of terrorism	121	4.1	_		Burden of customs procedures	78	4.0	
1.14 Business costs of crime and violence	94	4.1	~		Imports % GDP	36	58.1	
1.15 Organized crime	96	4.2	_		Degree of customer orientation	25	5.5	_
1.16 Reliability of police services	91	4.1	~	6.16	Buyer sophistication	25	4.1	
1.17 Ethical behavior of firms	86	3.6	_	25	7th pillar: Labor market efficiency	65	4.3	
1.18 Strength of auditing and reporting standards	49	5.0						
1.19 Efficacy of corporate boards	79	4.7		7.0	Cooperation in labor-employer relations	36	4.8	
1.20 Protection of minority shareholders' interests	37	4.5	$\sim$	7.02	2 Flexibility of wage determination	103	4.5	/
1.21 Strength of investor protection 0-10 (best)	26	6.7	$\overline{}$	7.03	Hiring and firing practices	30	4.4	_
				7.0	Redundancy costs weeks of salary	128	36.0	
44 2nd pillar: Infrastructure	43	4.7	~	7.05	Effect of taxation on incentives to work	56	4.1	_
2.01 Quality of overall infrastructure	67	4.1	<u></u>	7.06	Pay and productivity	47	4.3	~
2.02 Quality of roads	59	4.3	_		Reliance on professional management	51	4.5	_
2.03 Quality of railroad infrastructure	72	2.6			Country capacity to retain talent	40	4.0	_
2.04 Quality of port infrastructure	63	4.3	_		Country capacity to attract talent	43	3.8	_
2.05 Quality of air transport infrastructure	39	5.2	_		Female participation in the labor force ratio to men	65	0.82	_
2.06 Available airline seat kilometers millions/week	15	3,298.1	_	7.10	Terriale participation in the labor lorce ratio to men	03	0.02	
2.07 Quality of electricity supply					8th pillar: Financial market development	40	4.4	_
3 113	57		~	8.0	Availability of financial services	23	5.1	
2.08 Mobile-cellular telephone subscriptions /100 pop.	5	172.6	_~		2 Affordability of financial services	35	4.4	
2.09 Fixed-telephone lines /100 pop.	92	7.0			•			~
	9	6.2			Financing through local equity market	20	5.0	
			_		Ease of access to loans	31	4.5	_
3.01 Government budget balance % GDP	10	0.5			5 Venture capital availability	27	3.6	
3.02 Gross national savings % GDP	16	33.4	~		Soundness of banks	27	5.7	
3.03 Inflation annual % change	53	0.2			Regulation of securities exchanges	45	4.9	=
3.04 Government debt % GDP	54	42.2	~	8.08	B Legal rights index 0-10 (best)	96	3	
3.05 Country credit rating 0-100 (best)	46	61.5	_	38838	9th pillar: Technological readiness	61	4.5	_
3 4th pillar: Health and primary education	90	5.5	~		Availability of latest technologies	56	4.9	_
4.01 Malaria incidence cases/100,000 pop.	35	76.0			Firm-level technology absorption	42	4.9	_
4.02 Business impact of malaria	20	5.2	_		3 FDI and technology transfer	40	4.8	
4.03 Tuberculosis incidence cases/100,000 pop.	108	172.0	_		Internet users % pop.	87	47.5	
4.04 Business impact of tuberculosis	89	5.0			5 Fixed-broadband Internet subscriptions /100 pop.	70	10.7	_
	109	1.1			6 Internet bandwidth kb/s/user	76	49.2	
4.05 HIV prevalence % adult pop.			$\overline{}$			24		
4.06 Business impact of HIV/AIDS	92	5.0			Mobile-broadband subscriptions /100 pop.	24	94.7	_
4.07 Infant mortality deaths/1,000 live births	61	10.5		£ 7.3	10th pillar: Market size	18	5.2	_
4.08 Life expectancy years	73	74.6						_
4.09 Quality of primary education	89	3.5	_		1 Domestic market size index	24	5.0	
4.10 Primary education enrollment rate net %	100	90.8			22 Foreign market size index	11	6.1	
⇒ 5th pillar: Higher education and training	57	4.6			O3 GDP (PPP) PPP \$ billions O4 Exports % GDP	20 19	1,164.9	=
5.01 Secondary education enrollment rate gross %	8	129.0			·			
	60	48.9	$\overline{}$	~os	11th pillar: Business sophistication	42	4.4	_
5.02 Tertiary education enrollment rate gross %					1 Local supplier quantity	59	4.6	_
5.03 Quality of the education system	65	3.7			2 Local supplier quality	74	4.3	_
5.04 Quality of math and science education	83	3.8			3 State of cluster development	67	3.8	
5.05 Quality of management schools	78		$\sim$		·			
5.06 Internet access in schools	48	4.6			04 Nature of competitive advantage	33	4.4	
5.07 Local availability of specialized training services	90		~		5 Value chain breadth	38	4.3	_
5.08 Extent of staff training	47	4.2	$\sim$		Control of international distribution	44	4.0	
					7 Production process sophistication	47	4.3	
					8 Extent of marketing	21	5.1	_
				11.0	99 Willingness to delegate authority	53	4.5	
				淋	12th pillar: Innovation	50	3.5	_
				12 (	1 Capacity for innovation	69	4.1	_
					22 Quality of scientific research institutions	56	4.0	_
					3 Company spending on R&D	43		_
				12.0	of University industry collection in DOD		0.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

39

56 56

3.9

3.4

# **Trinidad and Tobago**

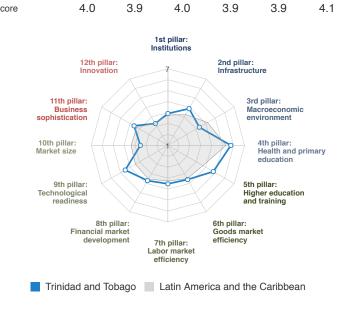
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Key indicators, 2016		Source: International Monetary Fund; World	d Economic Outlook Database (April 2017)
Population millions	1.4	GDP per capita US\$	15,342.2
GDP US\$ billions	21.0	GDP (PPP) % world GDP	0.04

#### Performance overview

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition
Global Competitiveness Index	83	4.1			Rank
Subindex A: Basic requirements	83	4.4	~		Score
â 1st pillar: Institutions	97	3.5	~		
<b>1</b> 2nd pillar: Infrastructure	59	4.3	~		
	112	3.8	~		
3 4th pillar: Health and primary education	60	5.9			
Subindex B: Efficiency enhancers	63	4.2			
⇒ 5th pillar: Higher education and training	33	5.1	_		
6th pillar: Goods market efficiency	95	4.1			
7th pillar: Labor market efficiency	85	4.0	~		
8th pillar: Financial market development	51	4.2	~		
∜ 9th pillar: Technological readiness	49	4.9	_		
ึ่ง 10th pillar: Market size	94	3.2			
Subindex C: Innovation and sophistication factors	80	3.5			
ூ8 11th pillar: Business sophistication	65	4.1			
** 12th pillar: Innovation	102	3.0			



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#### Most problematic factors for doing business

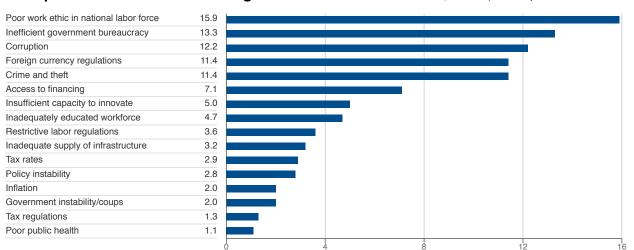
Source: World Economic Forum, Executive Opinion Survey 2017

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# **Trinidad and Tobago**

dex Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	т
â 1st pillar: Institutions	97	3.5	_	1	6th pillar: Goods market efficiency	95	4.1	-
.01 Property rights	72	4.3	~	6.0	1 Intensity of local competition	65	5.2	_
.02 Intellectual property protection	88	3.7	_		2 Extent of market dominance	105	3.2	_
.03 Diversion of public funds	102	2.8	$\sim$		3 Effectiveness of anti-monopoly policy	117	3.0	_
.04 Public trust in politicians	111	2.1			4 Effect of taxation on incentives to invest	33	4.3	_
·	95	3.3	_		5 Total tax rate % profits	44	32.2	
.05 Irregular payments and bribes							7	=
.06 Judicial independence	47	4.5	$\sim$		6 No. of procedures to start a business	71		_
.07 Favoritism in decisions of government officials	120	2.2	$\sim$		7 Time to start a business days	67	10.5	
08 Efficiency of government spending	91	2.7	_		Agricultural policy costs	117	3.1	
.09 Burden of government regulation	73	3.3	$\sim$	6.09	Prevalence of non-tariff barriers	20	5.0	_
10 Efficiency of legal framework in settling disputes	104	3.0	_	6.10	Trade tariffs % duty	108	10.8	_
11 Efficiency of legal framework in challenging regulations	93	2.9		6.1	1 Prevalence of foreign ownership	75	4.4	_
12 Transparency of government policymaking	72	4.0	~		2 Business impact of rules on FDI	56	4.8	-
13 Business costs of terrorism	78	5.0	~					
					Burden of customs procedures	114	3.3	-
14 Business costs of crime and violence	129	2.7			4 Imports % GDP	41	55.2	-
15 Organized crime	114	3.9	_	6.15	5 Degree of customer orientation	134	3.3	-
16 Reliability of police services	124	2.9		6.16	Buyer sophistication	60	3.5	-
17 Ethical behavior of firms	118	3.2		-30				
8 Strength of auditing and reporting standards	70	4.6			7th pillar: Labor market efficiency	85	4.0	-
				7.0	1 Cooperation in labor-employer relations	136	3.3	
9 Efficacy of corporate boards	84	4.6	_		2 Flexibility of wage determination	87	4.6	_
Protection of minority shareholders' interests	95	3.8			, «			-
1 Strength of investor protection 0-10 (best)	51	6.0	~~		3 Hiring and firing practices	84	3.6	
A	50		_	7.0	4 Redundancy costs weeks of salary	87	20.5	
↑ 2nd pillar: Infrastructure	59	4.3		7.0	5 Effect of taxation on incentives to work	66	4.0	
1 Quality of overall infrastructure	55	4.3	$\sim$	7.06	Pay and productivity	70	3.9	
2 Quality of roads	66	4.1			7 Reliance on professional management	42	4.6	
·					B Country capacity to retain talent	63	3.5	
3 Quality of railroad infrastructure	n/a	not ssessed						
04 Quality of port infrastructure	79	3.8			Ountry capacity to attract talent	55	3.5	_
			_	7.10	Female participation in the labor force ratio to men	88	0.74	
5 Quality of air transport infrastructure	87	4.1			Oth willow Financial mandrat development	51	4.2	
6 Available airline seat kilometers millions/week	97	55.5	_	<b>=</b>	8th pillar: Financial market development	51	4.2	•
7 Quality of electricity supply	64	5.0		8.0	Availability of financial services	76	4.1	
No Mobile-cellular telephone subscriptions /100 pop.	11	160.6		8.02	2 Affordability of financial services	56	3.9	
9 Fixed-telephone lines /100 pop.	51	20.2	$\sim$		3 Financing through local equity market	62	3.7	
	* .				4 Ease of access to loans	67	3.9	
3rd pillar: Macroeconomic environment	112	3.8	$\sim$					_
1 Government budget balance % GDP	132	-14.0			5 Venture capital availability	113	2.3	_
•			_ `	8.06	Soundness of banks	34	5.6	_
22 Gross national savings % GDP	123	8.8	$\overline{}$	8.0	7 Regulation of securities exchanges	70	4.3	
03 Inflation annual % change	59	3.4	^~	8.08	B Legal rights index 0-10 (best)	31	7	
04 Government debt % GDP	90	61.0	~	. 0 .				
05 Country credit rating 0-100 (best)	49	61.0		32/2	9th pillar: Technological readiness	49	4.9	
				9.0	Availability of latest technologies	53	5.0	
4th pillar: Health and primary education	60	5.9			2 Firm-level technology absorption	76	4.3	-
on Malaria incidence cases/100,000 pop.	n/a	m.f.			0, 1			-
22 Business impact of malaria	n/a	6.3			FDI and technology transfer	68	4.4	_
			_		4 Internet users % pop.	48	73.3	
3 Tuberculosis incidence cases/100,000 pop.	42		<u></u>	9.05	5 Fixed-broadband Internet subscriptions /100 pop.	47	18.9	
4 Business impact of tuberculosis	46	6.0	_	9.06	6 Internet bandwidth kb/s/user	23	182.8	
05 HIV prevalence % adult pop.	112	1.2	$\overline{}$		7 Mobile-broadband subscriptions /100 pop.	86	47.3	
06 Business impact of HIV/AIDS	72	5.2					.,	-
77 Infant mortality deaths/1,000 live births	86	18.2	1	£ 7 X	10th pillar: Market size	94	3.2	
08 Life expectancy years	97		_		01 Domestic market size index	96	2.9	
9 Quality of primary education	44	4.6			02 Foreign market size index	93	3.9	
10 Primary education enrollment rate net %	69	95.2		10.0	03 GDP (PPP) PPP \$ billions	96	43.6	
7 FAb =: 11 == 11: =b == = d == ab: == a = d d == i = i = =	33	5.1		10.0	04 Exports % GDP	48	41.9	
5th pillar: Higher education and training	33	5.1		9				
of Secondary education enrollment rate gross %	n/a	n/a	_	್ಯಾರ	11th pillar: Business sophistication	65	4.1	
22 Tertiary education enrollment rate gross %	36	65.2		11 (	1 Local supplier quantity	54	4.6	
3 Quality of the education system	45	4.2			D2 Local supplier quality	77	4.2	
•								
4 Quality of math and science education	32	4.8			3 State of cluster development	83	3.6	
5 Quality of management schools	36	4.8			Nature of competitive advantage	74	3.4	
6 Internet access in schools	74	4.1	$\overline{}$	11.0	05 Value chain breadth	65	3.8	
7 Local availability of specialized training services	35	5.0		11.0	06 Control of international distribution	49	3.9	7
8 Extent of staff training	43	4.3	_		77 Production process sophistication	50	4.2	
						106		
					08 Extent of marketing		4.0	
				11.0	9 Willingness to delegate authority	54	4.5	
				- 165	12th pillar: Innovation	102	3.0	
					1 Capacity for innovation			
						115	3.6	_
					02 Quality of scientific research institutions	83	3.6	_
				12.0	O3 Company spending on R&D	124	2.6	
				12.0	04 University-industry collaboration in R&D	113	2.8	•
				101	05 Gov't procurement of advanced technology products	127	2.5	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

127

47

2.5

## Tunisia



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3.9

3rd pillar: Macroeconomic environment

5th pillar: Higher education and training

4th pillar: Health and primary education

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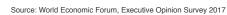
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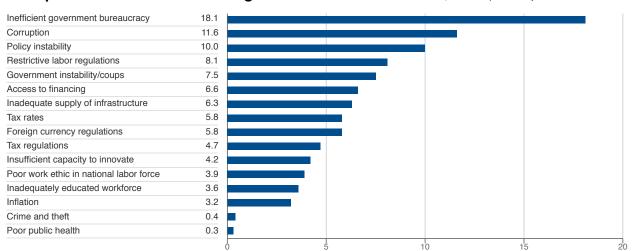
Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	11.2	GDP per capita US\$	3,730.4
GDP US\$ billions	41.9	GDP (PPP) % world GDP	0.11

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2013-14	2014-15	2015-16	2016-
Global Competitiveness Index	95	3.9			Rank	83 / 148	87 / 144	92 / 140	95 / 13
Subindex A: Basic requirements	84	4.4	_		Score	4.1	4.0	3.9	3.
â 1st pillar: Institutions	80	3.8	_						
<b>↑</b> 2nd pillar: Infrastructure	82	3.8	_				1st pil Institut		
	109	3.9	_			12th pillar: Innovation	7		l pillar: astructure
े 4th pillar: Health and primary education	58	6.0					1	$\overline{A}$	
Subindex B: Efficiency enhancers	99	3.7	_			11th pillar: Business sophistication			3rd pill Macroe enviror
⇒ 5th pillar: Higher education and training	82	4.1	~			///	19		
	112	4.0	_			10th pillar: Market size	4		Hea edu
₹ 7th pillar: Labor market efficiency	135	3.1	_						
8th pillar: Financial market development	110	3.4	~			9th pillar: Technological readiness			5th pilla Higher e and trair
% 9th pillar: Technological readiness	85	3.7	_					Cab =	
10th pillar: Market size	69	3.9	_			8th pil Financial mar developm	ket	-441-1	ds market
Subindex C: Innovation and sophistication factors	97	3.4	\				Labor m efficie	arket	
ூ 11th pillar: Business sophistication	98	3.7	_			Tunicio.	Middle F	ant and Nor	tla Africa
** 12th pillar: Innovation	99	3.1				Tunisia	ivildale E	ast and Nor	III AIIICA

#### Most problematic factors for doing business





## **Tunisia**

Property rights	dex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	•
20 Interfection   76   3.9	â 1st pillar: Institutions	80	3.8	_		112	4.0	-
Some production of public funds	1.01 Property rights	58	4.5		6.01 Intensity of local competition	79	5.0	-
Public hastin politicians   75   2.9	1.02 Intellectual property protection	78	3.9	_	6.02 Extent of market dominance	97	3.4	-
10   Strength payments and bribes   88   3.5	.03 Diversion of public funds	44	4.1	_	6.03 Effectiveness of anti-monopoly policy	93	3.4	-
10   Strength payments and bribes   88   3.5	.04 Public trust in politicians	75	2.9	_	6.04 Effect of taxation on incentives to invest	61	3.7	-
20. Judicial independence   70   3.8   20. No. of procedures to start a businese   0.9   10.	.05 Irregular payments and bribes	88	3.5	_		123	60.2	-
77 Powerform of decisions of government officials         55         3.3         — On Time to start a business easy         0.9         11.0           20 Burden of government regulation         103         3.0         — Co.P. Prevalence of non-called burners         119         3.8           11 Efficiency of legal framework is neitling disputes         60         3.0         — Co.P. Prevalence of non-called burners         114         11.1         1.1	•	70	3.8			105		-
Emblescy of government especiation   3.2   Emblescy of government especiation   3.3   Emblescy of legal framework in setting disputes   69   3.6   Emblescy of legal framework in setting disputes   69   3.6   Emblescy of legal framework in setting disputes   69   3.6   Emblescent of legal framework in setting disputes   69   3.6   Emblescent injurat of turbes on FDI   73   4.5   7   Transpapency of government policymistry   79   3.3   Emblescent injurat of turbes on FDI   73   4.5   7   1   1   1   1   1   1   1   1   1				_	·			-
20 Burden of government regulation   103   3.0								_
10   Efficiency of logal framework in settling disputes   69   3.6   6.10 Trade tariffs subs.   114   11.4   11.4   12 Transparency of povernment policyrealing of 29   3.9   6.10 Trade tariffs subs.   1.4   1				=				_
Efficiency of legal framework in challenging regulations   65   3.4				_				-
17 Transpersery of povernment policymaking   79   3.9   4.0								_
13 Business coals of internation   128   3.2	, ,				· ·			_
16 Business coals of crime and violence   89   4.2     6.14 Imports some   46   6.29   7.05 Organized commence   83   4.3     6.15 Begree of customer contentation   9.3   4.3   4.3   6.15 Boyers of customer contentation   9.2   2.9								_
15 Organized crime	.13 Business costs of terrorism	128	3.2	<u> </u>	6.13 Burden of customs procedures	122	3.1	•
Reliably of police services   73   4.3	.14 Business costs of crime and violence	89	4.2		6.14 Imports % GDP	46	52.9	
75 Ehrical behavior of firms	15 Organized crime	93	4.3	_	6.15 Degree of customer orientation	93	4.3	
75 Ehrical behavior of firms	-	73	4.3			102	2.9	
18   Brangh of auditing and reporting standards   88   4.5   20   Protection of minority shareholders' interests   50   4.5   7.00   Protection of minority shareholders' interests   50   4.3   7.00   Protection of minority shareholders   7.00   Protection of minority sh					a.			
19   Efficacy of corporate bearries   100   4.5   701 Cooperation in labor-employer relations   128   3.7					7th pillar: Labor market efficiency	135	3.1	
20 Protection of minority shareholdors' interests   50				$\equiv$	7.01 Cooperation in labor-employer relations	123	3.7	
28 Strength of investor protection 6 to (pass)								-
7.04   Foldundarry costs waves or slawy   92   2.16				$\sim$				
2	21 Strength of investor protection 0-10 (best)	100	4.7	_				
20   Caulally of roads   88   3.7   7.06   Pay and productivity   128   3.9   3.0	↑ 0 - d -:!! !f	92	20	_				
22 Quality of roads   84   3.7   7.6 Peliance on professional management   88   3.9   3.0 Quality of reliroad infrastructure   67   2.8   7.68 Country capacity to relate latent   111   2.7   2.8   2.8	· ·							
130 Quality of part infrastructure 101	01 Quality of overall infrastructure	86	3.7	_	7.06 Pay and productivity	126	3.1	
10   10   10   10   10   10   10   10	02 Quality of roads	84	3.7	$\sim$	7.07 Reliance on professional management	88	3.9	
10   10   10   10   10   10   10   10	03 Quality of railroad infrastructure	67	2.8	_	7.08 Country capacity to retain talent	111	2.7	
25 Guality of air transport infrastructure	•	101		/		119	2.3	
10 Available aritine seat kilometers milliometers milliometers milliometers will be provided by the collision of the collis								
27	, ,			$\sim$	7.10 Tomalo participation in the labor force talle to men	120	0.00	
Modelia-cellular telephone subscriptions /noopop.   50   125.8   8.61   Availability of financial services   106   3.7					8th pillar: Financial market development	110	3.4	
Secondary education enrollment rate gross % 86   8.6				$\overline{}$		106	2.7	
Strip				V -	·			
3	09 Fixed-telephone lines /100 pop.	85	8.6	$\overline{}$				
10 Government budget balance % GDP 108 5.7	3 O.d.: III M	100	2.0	_				
102 Gross national savings % dOP	•							
23 Inflation annual % change   69   3.7   24 Government debt % GDP   88   60.6   25 Country credit rating 0-100 (best)   74   42.2   25   44 th pillar: Health and primary education   74   42.2   26 While pillar: Health and primary education   74   42.2   27   44 th pillar: Health and primary education   78   6.0   28 Business impact of malaria   78   6.4   23 Tuberculosis incidence cases/100,000 pop.   78   78   78   79   25 Business impact of malaria   78   6.4   26 Business impact of mularia   78   78   78   78   78   26 Business impact of mularia   78   78   78   27   48   50.9   28 Business impact of mularia   78   78   78   28   48   50.9   29   50   50   50   50   50   29   50   50   50   50   29   50   50   50   50   29   50   50   50   50   29   50   50   50   29   50   50   50   29   50   50   50   29   50   50   50   29   50   50   50   29   50   50   50   29   50   50   50   29   50   50   50   29   50   50   50   29   50   50   50   29   50   50   50   29   50   50   50   29   50   50   50   29   50   50   50   20   50   50   50   20   50   50   50   20   50   50   20   50   50   50   20   50   50	01 Government budget balance % GDP	108	-5.7	<b>~</b>	8.05 Venture capital availability	100	2.5	
24 Government debt % GDP	02 Gross national savings % GDP	109	13.1	<u> </u>	8.06 Soundness of banks	117	3.7	
26 Government debt % GDP   88   60.6   74   42.2   74   42.2   74   42.2   75   74   42.2   75   74   42.2   75   74   42.2   75   75   75   75   75   75   75   7	03 Inflation annual % change	69	3.7	$\sim$	8.07 Regulation of securities exchanges	76	4.2	
Secondary credit rating 0-100 (best)   74   42.2	04 Government debt % GDP	88	60.6			96		
Sth pillar: Health and primary education   58   6.0					^			
Malaria incidence cases/100,000 pop.   n/a   s.l.   3.02 Firm-level technology absorption   111   4.0	-				9th pillar: Technological readiness	85	3.7	
10.2 Business impact of malaria 10.2 Business impact of malaria 10.3 Tuberculosis incidence cases 100.000 pp. 10.3 Tuberculosis incidence cases 100.000 pp. 11	4th pillar: Health and primary education	58	6.0		9.01 Availability of latest technologies	76	4.6	
103 Tuberculosis incidence cases/100,000 pop. 62 37.0   48 Usiness impact of tuberculosis 36 6.2   49.05 Fixed-broadband Internet subscriptions //100 pop. 87 5.6   50 Business impact of tuberculosis 36 6.2   50 Business impact of tuberculosis 37 1.2   50 Business impact of HIV/AIDS 30 6.2   50 Business impact of HIV/AIDS 30 6.2   50 Gusiness impact of HIV/AIDS 30 7   50 Gu	01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	111	4.0	
64 Business impact of tuberculosis         36         6.2         9.05 Fixed-broadband Internet subscriptions /100 pop.         87         5.6           55 HIV prevalence % adult pop.         1         <0.1	22 Business impact of malaria	n/a	6.4		9.03 FDI and technology transfer	85	4.2	
64 Business impact of tuberculosis         36         6.2         9.05 Fixed-broadband Internet subscriptions /100 pop.         87         5.6           55 HIV prevalence % adult pop.         1         <0.1	03 Tuberculosis incidence cases/100,000 pop.	62	37.0	_	9.04 Internet users % pop.	84	50.9	
1								
10   10   10   10   10   10   10   10	•							
107 Infant mortality deaths/1,000 live births 68 12.1   108 Life expectancy years 64 75.0   109 Quality of primary education 83 3.7   1001 Domestic market size index 70 3.6   1002 Foreign market size index 69 4.5   1002 Foreign market size index 69 4.5   1003 GDP (PPP) PPP s billions 73 130.6   1004 Exports % GDP 58 39.5   1004 Exports % GDP 69 1  1005 GDP (PPP) PPP s billions 73 130.6   1006 Exports % GDP 69 1  1007 Exports % GDP 69 1  1008 Exports % GDP 69 1  1009 Expo								
10th pillar: Market size   69   3.9				_	9.07 WODITE-DIOAUDATIO SUDSCRIPTIONS /100 pop.	04	03.0	
10   10   10   10   10   10   10   10				_	10th pillar: Market size	69	3.9	
10   Primary education enrollment rate net %   24   98.6     5   5   5   5   5   5   5   5     5   5	08 Life expectancy years			~				
10.03 GDP (PPP) PPP \$ billions   73   130.6	09 Quality of primary education	83	3.7	_				
Sth pillar: Higher education and training   82   4.1     10.04 Exports % GDP   58   39.5     10.05 Secondary education enrollment rate gross %   81   88.2     10.06 Exports % GDP   58   39.5     10.07 Exports % GDP   58   39.5     10.08 Extent of staff training   98   3.7     10.08 Extent of international distribution   79   3.5     10.08 Extent of marketing   84   4.2     10.08 Extent of marketing   89   3.7     10.08 Extent of marketing   81   3.7     10.08 Extent of marketing   82   3.7     10.08 Extent of marketing   83   4.1     10.08 Extent of marketing   84   3.7     10.08 Extent of marketing   83   4.1     10.08 Extent of marketing   83   3.7     10.08 Extent of custer development   11.07     10.08 Extent of custer development   11.08     10.08 Extent of custer development   11.09     10.08 Extent of	10 Primary education enrollment rate net %	24	98.6					
100   Secondary education enrollment rate gross %   81   88.2     3.7	> FIL. 11. 11. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	00	4.1			73	130.6	
Tertiary education enrollment rate gross % 80 34.6   34.				$\sim$	10.04 Exports % GDP	58	39.5	
102   Internet reducation enrollment rate gross %   80   34.6     34.6   34.6     35   Quality of math and science education   44   4.6     4.6   11.02   Local supplier quantity   83   4.1     4.6   11.02   Local supplier quantity   83   4.1     50   Quality of management schools   83   4.0     50   Quality of management schools   106   3.5     50   Internet access in schools   106   3.5     50   Internet access in schools   110   3.8     51   Internet access in schools   110   3.8     52   Internet access in schools   110   3.8     53   Internet access in schools   110   3.8     54   Internet access in schools   110   3.0     52   Internet access in schools   110   3.8     53   Internet access in schools   110   3.0     52   Internet access in schools   110   3.8     53   Internet access in schools   110   3.0     54   Internet access in schools   110   3.0     55   Internet access in schools   110   3.0     56   Internet access in schools   110   3.0     57   Internet access in schools   110   3.0     58   Internet access in schools   110   3.0     59   Internet access in schools   110   3.0     50   Internet acc				_	A 11th pillar: Business sophistication	98	3.7	
Quality of math and science education   44   4.6   11.02 Local supplier quality   83   4.1	, .			_				
11.03 State of cluster development   117   3.0	03 Quality of the education system	103	3.1	$\sim$				
11.04   Nature of competitive advantage   120   2.6	04 Quality of math and science education	44	4.6	$\sim$				
3.5       11.04       Nature of competitive advantage       120       2.6         3.7       Local availability of specialized training services       110       3.8       11.05       Value chain breadth       78       3.7         3.8       11.06       Control of international distribution       79       3.5         11.07       Production process sophistication       91       3.4         11.08       Extent of marketing       84       4.2         11.09       Willingness to delegate authority       122       3.6         12.01       Capacity for innovation       99       3.1         12.02       Quality of scientific research institutions       96       3.3         12.03       Company spending on R&D       100       2.9         12.04       University-industry collaboration in R&D       106       3.0	D5 Quality of management schools	83	4.0	_	11.03 State of cluster development	117	3.0	
57 Local availability of specialized training services       110       3.8       11.05 Value chain breadth       78       3.7         58 Extent of staff training       106       3.5       11.06 Control of international distribution       79       3.5         11.07 Production process sophistication       91       3.4         11.09 Willingness to delegate authority       122       3.6         12.01 Capacity for innovation       93       3.8         12.02 Quality of scientific research institutions       96       3.3         12.03 Company spending on R&D       100       2.9         12.04 University-industry collaboration in R&D       106       3.0				_	11.04 Nature of competitive advantage	120	2.6	
Extent of staff training 106 3.5 11.06 Control of international distribution 79 3.5 11.07 Production process sophistication 91 3.4 11.08 Extent of marketing 84 4.2 11.09 Willingness to delegate authority 122 3.6 12.01 Capacity for innovation 99 3.1 12.02 Quality of scientific research institutions 96 3.3 12.03 Company spending on R&D 100 2.9 12.04 University-industry collaboration in R&D 106 3.0				$\sim$	11.05 Value chain breadth	78	3.7	
11.07 Production process sophistication       91       3.4         11.08 Extent of marketing       84       4.2         11.09 Willingness to delegate authority       122       3.6         ** 12th pillar: Innovation       99       3.1         12.01 Capacity for innovation       93       3.8         12.02 Quality of scientific research institutions       96       3.3         12.03 Company spending on R&D       100       2.9         12.04 University-industry collaboration in R&D       106       3.0								
11.08 Extent of marketing       84       4.2         11.09 Willingness to delegate authority       122       3.6         ** 12th pillar: Innovation       99       3.1         12.01 Capacity for innovation       93       3.8         12.02 Quality of scientific research institutions       96       3.3         12.03 Company spending on R&D       100       2.9         12.04 University-industry collaboration in R&D       106       3.0	OO LAGIR OF STATE FRANCISCO	100	3.5					
11.09 Willingness to delegate authority       122       3.6         ** 12th pillar: Innovation       99       3.1         12.01 Capacity for innovation       93       3.8         12.02 Quality of scientific research institutions       96       3.3         12.03 Company spending on R&D       100       2.9         12.04 University-industry collaboration in R&D       106       3.0					·			
12th pillar: Innovation       99       3.1         12.01 Capacity for innovation       93       3.8         12.02 Quality of scientific research institutions       96       3.3         12.03 Company spending on R&D       100       2.9         12.04 University-industry collaboration in R&D       106       3.0								
12.01 Capacity for innovation       93       3.8         12.02 Quality of scientific research institutions       96       3.3         12.03 Company spending on R&D       100       2.9         12.04 University-industry collaboration in R&D       106       3.0					11.09 willingness to delegate authority	122	3.6	
12.01 Capacity for innovation       93       3.8         12.02 Quality of scientific research institutions       96       3.3         12.03 Company spending on R&D       100       2.9         12.04 University-industry collaboration in R&D       106       3.0					<b>12th pillar: Innovation</b>	99	3.1	
12.02 Quality of scientific research institutions963.312.03 Company spending on R&D1002.912.04 University-industry collaboration in R&D1063.0						93	3.8	
12.03 Company spending on R&D         100         2.9           12.04 University-industry collaboration in R&D         106         3.0								
12.04 University-industry collaboration in R&D 106 3.0								-
					·			_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

122

43

2.6

# Turkey

The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Databa				
Population millions	79.8	GDP per capita ∪S\$	10,742.7			
GDP US\$ billions	857.4	GDP (PPP) % world GDP	1.66			

#### Performance overview

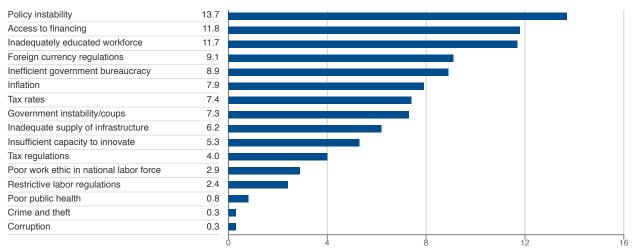
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	53	4.4			Rank	43 / 144	44 / 148	45 / 144	<b>51</b> / 140	<b>55</b> / 138	<b>53</b> / 137
Subindex A: Basic requirements	60	4.8			Score	4.5	4.5	4.5	4.4	4.4	4.4
🖮 1st pillar: Institutions	71	3.8	_								
<b>↑</b> 2nd pillar: Infrastructure	53	4.5	_					1st pillar: Institutions			
	50	5.1				12th p Innov		7	2nd pill Infrastr		
4th pillar: Health and primary education	84	5.6	_			4411				01	
Subindex B: Efficiency enhancers	51	4.4				11th pillar: Business sophistication	4/)			3rd pillar: Macroeconor environment	mic
⇒ 5th pillar: Higher education and training	48	4.8				/					
	53	4.5	_			10th pillar: Market size			1	4th pillar: Health and education	d primary
7th pillar: Labor market efficiency	127	3.4	_			\					
8th pillar: Financial market development	80	3.8	_			9th pillar: Technological readiness				5th pillar: Higher educat and training	ion
% 9th pillar: Technological readiness	62	4.4	~				th pillar:		6th pillar		
$\mathcal{L}_{\varphi}^{\tilde{\gamma}_{\beta}}$ 10th pillar: Market size	14	5.5				Financia		7th pillar:	Goods n	narket	
Subindex C: Innovation and sophistication factors	66	3.7	~					Labor market efficiency			
ூ 11th pillar: Business sophistication	67	4.0	_			■ Tu	rkov 🔲 l	Europe and	North Amo	vrico	
★ 12th pillar: Innovation	69	3.3	_			I I U	rkey	Europe and	NOTHI ATTE	nica	

Turkey (53rd) rises by two places but remains below historical highs (the country ranked 43rd in 2012). This year, it sees the strongest improvements in the take up of the latest technologies as well as in mobile broadband subscriptions—from 51 percent in 2015 to 67 percent of the population in 2016. Going forward, Turkey must improve its institutional framework, continue to remove the significant rigidities

that exist in its labor markets, and strengthen the efficiency and stability of financial markets. In 2017, the Turkish economy is expected to grow by 2.9 percent. In the first half of the year, the depreciation of the lira has helped Turkish exports and the government boosted domestic demand through monetary and fiscal policies.

#### Most problematic factors for doing business





# Turkey

Index Component	Rank/137	7 Value	Trend	Inde	x Component	Rank/137	7 Value	e Trei
☆ 1st pillar: Institutions	71	3.8	~	1	6th pillar: Goods market efficiency	53	4.5	_
1.01 Property rights	67	4.4	~	6.0	Intensity of local competition	9	5.9	_
1.02 Intellectual property protection	94	3.7			2 Extent of market dominance	59	3.8	
1.03 Diversion of public funds	38	4.3			Effectiveness of anti-monopoly policy	43	4.1	_
1.04 Public trust in politicians	70	2.9	$\sim$		Effect of taxation on incentives to invest	72	3.6	_
1.05 Irregular payments and bribes	53	4.3	~		5 Total tax rate % profits	87	41.1	~
1.06 Judicial independence	103	3.1	_		No. of procedures to start a business	71	7	
1.07 Favoritism in decisions of government officials	82	2.9	~		7 Time to start a business days	36	6.5	
1.08 Efficiency of government spending	n/a	n/a			3 Agricultural policy costs	90	3.5	
1.09 Burden of government regulation	67	3.4			Prevalence of non-tariff barriers	45	4.6	
1.10 Efficiency of legal framework in settling disputes	91	3.1	$\overline{}$		Trade tariffs % duty	76	5.9	
1.11 Efficiency of legal framework in challenging regulations	103	2.7	$\overline{}$		Prevalence of foreign ownership	100	4.1	
1.12 Transparency of government policymaking	42	4.5	_		2 Business impact of rules on FDI	52	4.9	$\overline{}$
1.13 Business costs of terrorism	120	4.1	~~		B Burden of customs procedures	80	3.9	_
1.14 Business costs of crime and violence	72	4.5	~~		I Imports % GDP	115	25.5	~
1.15 Organized crime	72	4.8	~~		5 Degree of customer orientation	37	5.1	_
1.16 Reliability of police services	72		~~		Buyer sophistication	66	3.4	
1.17 Ethical behavior of firms	88	3.6	~	0.10	Buyer sopriistication	00	5.4	_
	83	4.3		Æ.	7th pillar: Labor market efficiency	127	3.4	~
1.18 Strength of auditing and reporting standards	48	5.0		7.0	Cooperation in labor-employer relations	118	3.8	_
1.19 Efficacy of corporate boards					2 Flexibility of wage determination	51	5.1	_
1.20 Protection of minority shareholders' interests	80	3.9			B Hiring and firing practices	87	3.5	_
1.21 Strength of investor protection 0-10 (best)	21	7.0	_		Redundancy costs weeks of salary	122	29.8	_
1 2nd pillar: Infrastructure	53	4.5			5 Effect of taxation on incentives to work	70	3.9	
2.01 Quality of overall infrastructure	28	5.0	_		Pay and productivity	91	3.7	Ξ
2.02 Quality of roads	30	5.0			7 Reliance on professional management	80	4.0	
2.03 Quality of railroad infrastructure	57	3.0				83		
•	54	4.5			3 Country capacity to retain talent	103	3.2 2.6	
2.04 Quality of port infrastructure	31	5.4			Country capacity to attract talent	124	0.44	
2.05 Quality of air transport infrastructure 2.06 Available airline seat kilometers millions/week				7.10	Female participation in the labor force ratio to men	124	0.44	_
	17	2,834.6	$\sim$		8th pillar: Financial market development	80	3.8	_
2.07 Quality of electricity supply	88	4.4		8.0-	Availability of financial services	51	4.4	_
2.08 Mobile-cellular telephone subscriptions /100 pop.	103	96.9			2 Affordability of financial services	97	3.4	
2.09 Fixed-telephone lines /100 pop.	74	14.3	_		Financing through local equity market	55	3.8	
	50	5.1			Ease of access to loans	51	4.1	
3.01 Government budget balance % GDP	54	-2.3	_		5 Venture capital availability	82	2.7	
3.02 Gross national savings % GDP	44	24.9			S Soundness of banks	58	5.2	_
3.03 Inflation annual % change	116	7.8	~~		Regulation of securities exchanges	78	4.1	_
3.04 Government debt % GDP	23	29.1			B Legal rights index 0-10 (best)	96	3	$\overline{}$
	68	52.6	_	0.00	s Legal rights index 6-10 (best)	30	3	
3.05 Country credit rating 0-100 (best)			_	e\$\f\$5	9th pillar: Technological readiness	62	4.4	~
4th pillar: Health and primary education	84	5.6			Availability of latest technologies	57	4.9	_
4.01 Malaria incidence cases/100,000 pop.	1	0.0			2 Firm-level technology absorption	46	4.8	
4.02 Business impact of malaria	n/a	n/a	$\sim$	9.03	FDI and technology transfer	61	4.5	_
4.03 Tuberculosis incidence cases/100,000 pop.	44	18.0	_	9.04	Internet users % pop.	71	58.3	_
4.04 Business impact of tuberculosis	125	3.7		9.05	Fixed-broadband Internet subscriptions /100 pop.	60	13.6	_
4.05 HIV prevalence % adult pop.	1	0.0		9.06	Internet bandwidth kb/s/user	62	68.1	_/
4.06 Business impact of HIV/AIDS	n/a	n/a	$\sim$	9.07	Mobile-broadband subscriptions /100 pop.	60	66.8	_
4.07 Infant mortality deaths/1,000 live births	65	11.6	$\sim$	_ ^ 7 N	10th willow Maykot aims	14	5.5	
4.08 Life expectancy years	60	75.4	_		10th pillar: Market size			
4.09 Quality of primary education	105	3.1	~		1 Domestic market size index	13	5.4	
4.10 Primary education enrollment rate net %	82	94.1	~	10.0	2 Foreign market size index	26	5.7	_
S F0 20 19.1 1 1 1 1 1 1	40	4.0	~		03 GDP (PPP) PPP \$ billions	13	1,988.3	_
Sth pillar: Higher education and training	48	4.8		10.0	04 Exports % GDP	102	20.9	~
5.01 Secondary education enrollment rate gross %	37	102.5		200	11th pillar: Business sophistication	67	4.0	_
5.02 Tertiary education enrollment rate gross %	2	94.7						
5.03 Quality of the education system	101		_		1 Local supplier quantity	44	4.7	
5.04 Quality of math and science education	104	3.3			22 Local supplier quality	52	4.6	
5.05 Quality of management schools	108	3.6	_		3 State of cluster development	59	3.8	
5.06 Internet access in schools	72	4.1	$\sim$		4 Nature of competitive advantage	106	2.9	
5.07 Local availability of specialized training services	93	4.0	$\sim$		05 Value chain breadth	67	3.8	
5.08 Extent of staff training	102	3.5	_		06 Control of international distribution	55	3.8	
					7 Production process sophistication	51	4.2	
					8 Extent of marketing	92	4.1	_
				11.0	9 Willingness to delegate authority	97	3.9	
				洲	12th pillar: Innovation	69	3.3	_
					11 Capacity for innovation	74	4.1	
					2 Quality of scientific research institutions	100		$\overline{}$
					33 Company spending on R&D	69		_
				12.0	33 Company Spending on hαD	09	0.0	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

66

64 49

3.5

3.4

# Uganda

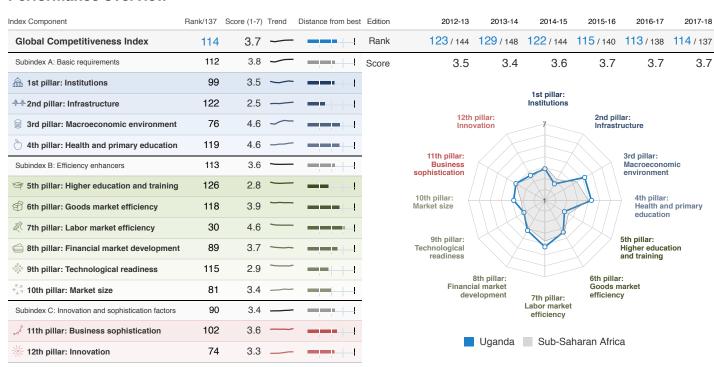


The Global Competitiveness Index 2017-2018 edition



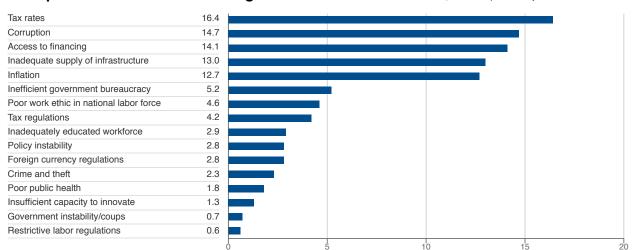
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 20			
Population millions	41.1	GDP per capita ∪s\$	637.6		
GDP US\$ billions	26.2	GDP (PPP) % world GDP	0.07		

#### Performance overview



#### Most problematic factors for doing business





# Uganda

dex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value
∴ 1st pillar: Institutions	99	3.5	_	6th pillar: Goods market efficiency	118	3.9
1.01 Property rights	86	4.0		6.01 Intensity of local competition	56	5.3
.02 Intellectual property protection	112	3.4	$\overline{}$	6.02 Extent of market dominance	124	2.9
.03 Diversion of public funds	116	2.5	_	6.03 Effectiveness of anti-monopoly policy	107	3.2
04 Public trust in politicians	99	2.3		6.04 Effect of taxation on incentives to invest	122	2.8
5 Irregular payments and bribes	115	3.0	$\overline{}$	6.05 Total tax rate % profits	53	33.5
06 Judicial independence	92	3.4	_	6.06 No. of procedures to start a business	132	13
	100	2.6		·	111	26.0
7 Favoritism in decisions of government officials				6.07 Time to start a business days		
08 Efficiency of government spending	100	2.7		6.08 Agricultural policy costs	94	3.5
09 Burden of government regulation	55	3.6		6.09 Prevalence of non-tariff barriers	41	4.6
10 Efficiency of legal framework in settling disputes	53	3.8	_	6.10 Trade tariffs % duty	101	9.9
11 Efficiency of legal framework in challenging regulations	78	3.1	~	6.11 Prevalence of foreign ownership	38	5.1
12 Transparency of government policymaking	68	4.0		6.12 Business impact of rules on FDI	44	5.0
13 Business costs of terrorism	123	4.0		6.13 Burden of customs procedures	62	4.2
14 Business costs of crime and violence	115	3.4		6.14 Imports % GDP	110	28.0
15 Organized crime	112	3.9		6.15 Degree of customer orientation	82	4.5
16 Reliability of police services	96	3.8	$\overline{}$	6.16 Buyer sophistication	127	2.5
17 Ethical behavior of firms	83	3.6	$\overline{}$	7/4		
18 Strength of auditing and reporting standards	97	4.1	_	7th pillar: Labor market efficiency	30	4.6
	53	5.0	_	7.01 Cooperation in labor-employer relations	57	4.4
19 Efficacy of corporate boards				7.02 Flexibility of wage determination	7	6.0
20 Protection of minority shareholders' interests	96	3.7		, ,		
21 Strength of investor protection 0-10 (best)	91	5.0	_	7.03 Hiring and firing practices	36	4.2
A	100	0.5		7.04 Redundancy costs weeks of salary	22	8.7
◆ 2nd pillar: Infrastructure	122	2.5		7.05 Effect of taxation on incentives to work	91	3.6
1 Quality of overall infrastructure	101	3.3	_	7.06 Pay and productivity	104	3.5
2 Quality of roads	91	3.4	_	7.07 Reliance on professional management	76	4.1
03 Quality of railroad infrastructure	95			7.08 Country capacity to retain talent	101	3.0
		1.6	_			
04 Quality of port infrastructure	122	2.6	_	7.09 Country capacity to attract talent	87	3.1
05 Quality of air transport infrastructure	119	3.1	$\sim$	7.10 Female participation in the labor force ratio to men	16	0.95
06 Available airline seat kilometers millions/week	104	47.7	~	A	00	0.7
O7 Quality of electricity supply	108	3.4	_	8th pillar: Financial market development	89	3.7
08 Mobile-cellular telephone subscriptions /100 pop.	133	55.1	~	8.01 Availability of financial services	93	3.9
	122		_	8.02 Affordability of financial services	125	2.8
09 Fixed-telephone lines /100 pop.	122	0.9		8.03 Financing through local equity market	82	3.3
3rd pillar: Macroeconomic environment	76	4.6	_			
'				8.04 Ease of access to loans	71	3.9
01 Government budget balance % GDP	83		_	8.05 Venture capital availability	106	2.5
02 Gross national savings % GDP	75	19.8	~	8.06 Soundness of banks	95	4.3
03 Inflation annual % change	100	5.5	^	8.07 Regulation of securities exchanges	73	4.2
04 Government debt % GDP	40	36.9	~	8.08 Legal rights index 0-10 (best)	50	6
05 Country credit rating 0-100 (best)	90	33.3				
55 Country credit rating 6-100 (best)	30	00.0		9th pillar: Technological readiness	115	2.9
4th pillar: Health and primary education	119	4.6		9.01 Availability of latest technologies	109	4.1
' '	00.0		_	·		
01 Malaria incidence cases/100,000 pop.		21,356.4	~	9.02 Firm-level technology absorption	107	4.0
2 Business impact of malaria	45	3.6		9.03 FDI and technology transfer	84	4.2
03 Tuberculosis incidence cases/100,000 pop.	115	202.0	/	9.04 Internet users % pop.	116	21.9
04 Business impact of tuberculosis	118	4.0		9.05 Fixed-broadband Internet subscriptions /100 pop.	118	0.3
05 HIV prevalence % adult pop.	128	6.5	_	9.06 Internet bandwidth kb/s/user	119	5.5
06 Business impact of HIV/AIDS	125	3.5		9.07 Mobile-broadband subscriptions /100 pop.	102	33.7
•			$\overline{}$		102	55.7
07 Infant mortality deaths/1,000 live births	112	37.7		10th pillar: Market size	81	3.4
08 Life expectancy years	126	59.2	_			
09 Quality of primary education	121	2.8	_	10.01 Domestic market size index	79	3.4
10 Primary education enrollment rate net %	85	93.7	~	10.02 Foreign market size index	104	3.7
			_	10.03 GDP (PPP) PPP \$ billions	81	85.0
₹ 5th pillar: Higher education and training	126	2.8		10.04 Exports % GDP	123	14.8
1 Secondary education enrollment rate gross %	134	23.2	~	•	.20	
			~ `	→ 11th pillar: Business sophistication	102	3.6
D2 Tertiary education enrollment rate gross %	129		$\sim$	11.01 Local supplier quantity	71	4 5
03 Quality of the education system	85	3.4	~			4.5
04 Quality of math and science education	110	3.1		11.02 Local supplier quality	121	3.6
5 Quality of management schools	103	3.7		11.03 State of cluster development	84	3.6
06 Internet access in schools	124	3.1		11.04 Nature of competitive advantage	118	2.6
	72			11.05 Value chain breadth	99	3.5
7 Local availability of specialized training services				11.06 Control of international distribution	119	3.0
8 Extent of staff training	94	3.6				
				11.07 Production process sophistication	121	2.9
				11.08 Extent of marketing	71	4.4
				11.09 Willingness to delegate authority	70	4.3
				.1/	74	0.0
				<b>12th pillar: Innovation</b>	74	3.3
				12.01 Capacity for innovation	81	3.9
				12.02 Quality of scientific research institutions	91	3.5
				12.03 Company spending on R&D	80	3.2
				12.04 University-industry collaboration in R&D	52	3.6
				12.04 Onliversity-industry collaboration in hab	10	3.0
				12 US 130VT procurement of advanced technology producte	40	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

49

59

3.5

## **Ukraine**

The Global Competitiveness Index 2017-2018 edition



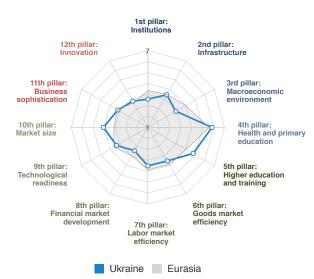
2017-18 81 / 137

4.1

Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions 42.5		GDP per capita US\$	2,194.4
GDP US\$ billions	93.3	GDP (PPP) % world GDP	0.29

#### **Performance overview**

ndex Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15
Global Competitiveness Index	81	4.1			Rank	<b>73</b> / 144	84 / 148	<mark>76</mark> / 144
Subindex A: Basic requirements	96	4.2	~		Score	4.1	4.1	4.1
	118	3.2						
↑↑ 2nd pillar: Infrastructure	78	3.9	_					1st pillar: Institutions
	121	3.5	~			12th բ Innov		7
3 4th pillar: Health and primary education	53	6.0	_				$\wedge$	
Subindex B: Efficiency enhancers	70	4.1				11th pillar: Business sophistication	$\langle \langle \rangle \rangle$	009
⇒ 5th pillar: Higher education and training	35	5.1				/		
	101	4.0	_			10th pillar: Market size		
7th pillar: Labor market efficiency	86	4.0	~			\		9
8th pillar: Financial market development	120	3.1	~			9th pillar: Technological readiness	$\langle \rangle \rangle$	
♦ 9th pillar: Technological readiness	81	3.8	~				th pillar:	
្សុំ 10th pillar: Market size	47	4.5	_			Financia		7th pillar:
Subindex C: Innovation and sophistication factors	77	3.5	_					Labor market efficiency
ூ 11th pillar: Business sophistication	90	3.7					■ I Hou	oine 🔲 🗆
★ 12th pillar: Innovation	61	3.4	_				UKI	aine E



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4.0

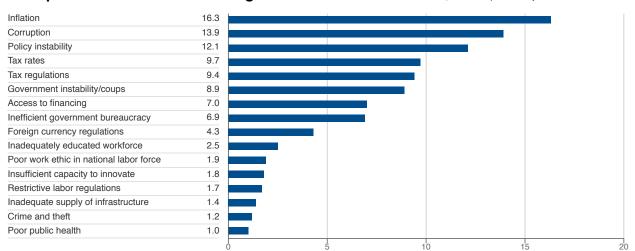
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85 / 138

4.0

#### Most problematic factors for doing business





# **Ukraine**

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
â 1st pillar: Institutions	118	3.2	_	1	6th pillar: Goods market efficiency	101	4.0	_
1.01 Property rights	128	3.3		6.0	Intensity of local competition	78	5.0	_
1.02 Intellectual property protection	119	3.3	_		2 Extent of market dominance	106	3.2	_
1.03 Diversion of public funds	119		~		Effectiveness of anti-monopoly policy	124	2.8	_
1.04 Public trust in politicians	91	2.5	~		Effect of taxation on incentives to invest	129	2.6	
1.05 Irregular payments and bribes	106	3.2			5 Total tax rate % profits	115	51.9	
1.06 Judicial independence	129	2.3			No. of procedures to start a business	18	4	
1.07 Favoritism in decisions of government officials	111	2.4			7 Time to start a business days	22	5.0	_
1.08 Efficiency of government spending	113	2.4			3 Agricultural policy costs	75	3.7	_
1.09 Burden of government regulation	81	3.3			Prevalence of non-tariff barriers	120	3.8	
1.10 Efficiency of legal framework in settling disputes	116				Trade tariffs % duty	45	2.9	
	122				*	127		_
1.11 Efficiency of legal framework in challenging regulations		2.5			Prevalence of foreign ownership		3.3	
1.12 Transparency of government policymaking	65	4.0			2 Business impact of rules on FDI	130	3.3	
1.13 Business costs of terrorism	122	4.1	$\sim$		Burden of customs procedures	126	3.0	_
1.14 Business costs of crime and violence	92	4.1	$\sim$		Imports % GDP	47	52.8	_
1.15 Organized crime	113	3.9	$\sim$		Degree of customer orientation	74	4.6	
1.16 Reliability of police services	101	3.7	_	6.16	Buyer sophistication	93	3.1	_
1.17 Ethical behavior of firms	102	3.4	$\sim$	250	7th pillar: Labor market efficiency	86	4.0	_
1.18 Strength of auditing and reporting standards	123	3.6	$\overline{}$	ox,				_
1.19 Efficacy of corporate boards	90	4.6	~		Cooperation in labor-employer relations	92	4.1	
1.20 Protection of minority shareholders' interests	129	3.1			2 Flexibility of wage determination	126	3.8	_
1.21 Strength of investor protection 0-10 (best)	66	5.7	~		Hiring and firing practices	52	4.0	_
	70	2.0		7.04	Redundancy costs weeks of salary	49	13.0	
2nd pillar: Infrastructure	78	3.9		7.05	Effect of taxation on incentives to work	124	2.9	_
2.01 Quality of overall infrastructure	88	3.6	_	7.06	Pay and productivity	55	4.2	_
2.02 Quality of roads	130	2.4		7.07	Reliance on professional management	123	3.4	_
2.03 Quality of railroad infrastructure	37	3.9		7.08	Country capacity to retain talent	129	2.2	
2.04 Quality of port infrastructure	93	3.5	_		Country capacity to attract talent	106	2.6	_
2.05 Quality of air transport infrastructure	92	4.0			Female participation in the labor force ratio to men	60	0.83	_
2.06 Available airline seat kilometers millions/week	59	313.5	_	_				
2.07 Quality of electricity supply	85	4.5	$\overline{}$		8th pillar: Financial market development	120	3.1	
2.08 Mobile-cellular telephone subscriptions /100 pop.	37	132.6		8.0	Availability of financial services	112	3.6	_
2.09 Fixed-telephone lines /100 pop.	52	19.8	_		2 Affordability of financial services	120	3.0	_
2.03 Fixed telephone lines 7100 pop.	32	10.0	_		Financing through local equity market	114	2.7	_
	121	3.5	~		Ease of access to loans	103	3.4	_
3.01 Government budget balance % GDP	53	-2.2	<b>√</b>		5 Venture capital availability	118	2.3	_
3.02 Gross national savings % GDP	88	17.9	$\overline{}$		Soundness of banks	135	2.3	_
3.03 Inflation annual % change	129	13.9			Regulation of securities exchanges	134	2.4	_
3.04 Government debt % GDP	113	81.2			B Legal rights index 0-10 (best)	23	8	$\neg$
	123	21.3	=	0.00	s Legal rights index 6-10 (best)	2.5	- 0	
3.05 Country credit rating 0-100 (best)		21.3	_	e\${\$?	9th pillar: Technological readiness	81	3.8	~
4th pillar: Health and primary education	53	6.0		9.0	Availability of latest technologies	107	4.1	\
4.01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02	2 Firm-level technology absorption	84	4.3	_
4.02 Business impact of malaria	n/a	5.7		9.03	FDI and technology transfer	118	3.5	_
4.03 Tuberculosis incidence cases/100,000 pop.	93	91.0	\ <u></u>	9.04	Internet users % pop.	82	52.5	
4.04 Business impact of tuberculosis	95	4.9	_	9.05	Fixed-broadband Internet subscriptions /100 pop.	64	12.0	_
4.05 HIV prevalence % adult pop.	104	0.9		9.06	Internet bandwidth kb/s/user	55	79.9	_^
4.06 Business impact of HIV/AIDS	74	5.2	_		Mobile-broadband subscriptions /100 pop.	116	22.6	_
4.07 Infant mortality deaths/1,000 live births	51	7.7	~					
4.08 Life expectancy years	93	71.2	_	43	10th pillar: Market size	47	4.5	
4.09 Quality of primary education	42	4.6	~	10.0	1 Domestic market size index	48	4.2	_
4.10 Primary education enrollment rate net %	62	96.2			2 Foreign market size index	39	5.2	
4.10 Filmary education emoliment rate het %	02	30.2	_		03 GDP (PPP) PPP \$ billions	48	353.0	
⇒ 5th pillar: Higher education and training	35	5.1			04 Exports % GDP	31	51.9	
5.01 Secondary education enrollment rate gross %	51	99.2	_	0	•			_
5.02 Tertiary education enrollment rate gross %	17		~~	ood	11th pillar: Business sophistication	90	3.7	
5.03 Quality of the education system	56		_	11.0	1 Local supplier quantity	63	4.6	_
5.04 Quality of math and science education	27	4.8			2 Local supplier quality	67	4.4	~
5.05 Quality of management schools	88	4.0	_		3 State of cluster development	108	3.1	_
5.06 Internet access in schools	44	4.8	_		04 Nature of competitive advantage	111	2.8	_
5.06 Internet access in scriools 5.07 Local availability of specialized training services	68		=		5 Value chain breadth	94	3.5	_
					66 Control of international distribution	95	3.3	_
5.08 Extent of staff training	88	3.7			77 Production process sophistication	72	3.7	
						74		
					08 Extent of marketing	94	4.4	
				11.0	9 Willingness to delegate authority	94	4.0	
				洲	12th pillar: Innovation	61	3.4	_
				12.0	1 Capacity for innovation	51	4.3	_
					2 Quality of scientific research institutions	60		_
					33 Company spending on R&D	76		_
				40.0	st University industry colleboration in DOD	70	0.4	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

73

96 25

3.4

3.0 4.7

## **United Arab Emirates**



The Global Competitiveness Index 2017-2018 edition

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2			
Population millions	9.9	GDP per capita US\$	37,677.9		
GDP US\$ billions	371.4	GDP (PPP) % world GDP	0.56		

#### Performance overview

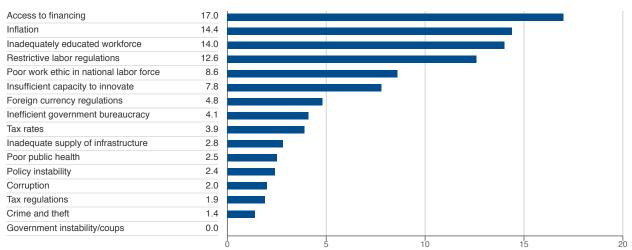
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	17	5.3			Rank	24 / 144	<b>19</b> / 148	12 / 144	<b>17</b> / 140	<b>16</b> / 138	<b>17</b> / 137
Subindex A: Basic requirements	7	6.0	~		Score	5.1	5.1	5.3	5.2	5.3	5.3
â 1st pillar: Institutions	5	5.9									
<b>1</b> 2nd pillar: Infrastructure	5	6.3	_					1st pillar: Institutions			
	28	5.6	$\overline{}$			12th բ Innov		7	2nd pil Infrastr		
3 4th pillar: Health and primary education	33	6.3					$\wedge$	1	9		
Subindex B: Efficiency enhancers	17	5.2	_			11th pillar: Business sophistication				3rd pillar: Macroeconor environment	
⇒ 5th pillar: Higher education and training	36	5.0	~			. /					
fth pillar: Goods market efficiency	3	5.6				10th pillar: Market size	1			4th pillar: Health and education	d primary
7th pillar: Labor market efficiency	11	5.2	_			\					
8th pillar: Financial market development	24	4.8	~			9th pillar: Technological readiness			(///	5th pillar: Higher educat and training	ion
ু 9th pillar: Technological readiness	24	5.8					th pillar:		6th pilla		
ੀ 10th pillar: Market size	29	4.9				Financia		7th pillar:	Goods n	narket	
Subindex C: Innovation and sophistication factors	20	4.9				Labor market efficiency					
√ 11th pillar: Business sophistication	13	5.3		1		I Inited Ave	h Funivataa	Middle		Nowth Africa	
* 12th pillar: Innovation	25	4.6			United Arab Emirates Middle East and North A					NOTH ATTIC	а

The United Arab Emirates (UAE) (17th) improves its absolute assessment and continues to lead the Arab World in terms of competitiveness, but it loses one place as other countries post even larger gains. This improvement shows the resilience of the UAE economy, in part due to increased diversification, which is reflected in its stable macroeconomic environment and its ability to weather the double shock of lower oil and gas prices and reduced global trade.

Although the IMF predicts GDP growth to drop to 1.3 percent this year, non-oil growth is expected to pick up, suggesting that the country's diversification strategy is bearing fruit.10 To further increase its competitiveness, the UAE will have to speed up progress in terms of spreading the latest digital technologies (36th) and upgrading education (36th).

#### Most problematic factors for doing business





## **United Arab Emirates**

Index Component	Rank/13	7 Value	Trend	Index Component	Rank/137	Value	Trend
â 1st pillar: Institutions	5	5.9			3	5.6	_
1.01 Property rights	14	5.9		6.01 Intensity of local competition	19	5.6	_
1.02 Intellectual property protection	21	5.7		6.02 Extent of market dominance	10	5.0	_
1.03 Diversion of public funds	3			6.03 Effectiveness of anti-monopoly policy	20	4.8	_
1.04 Public trust in politicians	2	6.3		6.04 Effect of taxation on incentives to invest	1	6.1	
1.05 Irregular payments and bribes	6	6.4		6.05 Total tax rate % profits	7	15.9	=
	16				18		$\subseteq$
1.06 Judicial independence		5.8		6.06 No. of procedures to start a business		4	, `
1.07 Favoritism in decisions of government officials	2			6.07 Time to start a business days	48	8.2	_
1.08 Efficiency of government spending	1		_	6.08 Agricultural policy costs	3	5.2	
1.09 Burden of government regulation	2	5.4		6.09 Prevalence of non-tariff barriers	5	5.6	
1.10 Efficiency of legal framework in settling disputes	5	5.7		6.10 Trade tariffs % duty	58	4.0	_
1.11 Efficiency of legal framework in challenging regulations	13	4.9	$\overline{}$	6.11 Prevalence of foreign ownership	12	5.6	
1.12 Transparency of government policymaking	10	5.7		6.12 Business impact of rules on FDI	17	5.5	$\overline{}$
1.13 Business costs of terrorism	7	6.2		6.13 Burden of customs procedures	4	6.0	_
1.14 Business costs of crime and violence	4	6.3		6.14 Imports % GDP	14	82.7	
1.15 Organized crime	7	6.4		6.15 Degree of customer orientation	6	5.8	_
	5				6		
1.16 Reliability of police services		6.5		6.16 Buyer sophistication	0	4.9	~
1.17 Ethical behavior of firms	6	6.0		₹ 7th pillar: Labor market efficiency	11	5.2	
1.18 Strength of auditing and reporting standards	21	5.7		•			
1.19 Efficacy of corporate boards	22	5.7		7.01 Cooperation in labor-employer relations	9	5.6	
1.20 Protection of minority shareholders' interests	3	5.7		7.02 Flexibility of wage determination	8	6.0	
1.21 Strength of investor protection 0-10 (best)	9	7.5		7.03 Hiring and firing practices	4	5.5	
				7.04 Redundancy costs weeks of salary	9	4.3	
◆◆ 2nd pillar: Infrastructure	5	6.3		7.05 Effect of taxation on incentives to work	3	6.1	
2.01 Quality of overall infrastructure	4	6.2		7.06 Pay and productivity	4	5.3	_
2.02 Quality of roads	1		_	7.07 Reliance on professional management	18	5.6	
2.02 Quality of roads				7.08 Country capacity to retain talent	2		
2.03 Quality of railroad infrastructure	n/a	not assessed				5.8	
2.04 Quality of port infrastructure	4	6.2		7.09 Country capacity to attract talent	2	6.1	
	3		_	7.10 Female participation in the labor force ratio to men	122	0.46	
2.05 Quality of air transport infrastructure		6.6	_	C 9th niller, Financial market development	24	4.8	~
2.06 Available airline seat kilometers millions/week	4	6,054.1		8th pillar: Financial market development		4.0	
2.07 Quality of electricity supply	16	6.5	_	8.01 Availability of financial services	12	5.4	
2.08 Mobile-cellular telephone subscriptions /100 pop.	3	204.0	_	8.02 Affordability of financial services	20	4.9	
2.09 Fixed-telephone lines /100 pop.	41	23.4	~	8.03 Financing through local equity market	18	5.0	
0			_	8.04 Ease of access to loans	9	5.2	
	28	5.6		8.05 Venture capital availability	7	4.6	
3.01 Government budget balance % GDP	88	-3.9	$\sim$	8.06 Soundness of banks	20	5.8	_
3.02 Gross national savings % GDP	22	30.5	~				
3.03 Inflation annual % change	1	1.8		8.07 Regulation of securities exchanges	13	5.8	$\overline{}$
3.04 Government debt % GDP	9	19.3	- C	8.08 Legal rights index 0-10 (best)	107	2	
				% 9th pillar: Technological readiness	24	5.8	
3.05 Country credit rating 0-100 (best)	29	73.8					_
	33	6.3		9.01 Availability of latest technologies	13	6.1	
				9.02 Firm-level technology absorption	10	5.7	
4.01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.03 FDI and technology transfer	4	5.6	
4.02 Business impact of malaria	n/a	6.4		9.04 Internet users % pop.	11	90.6	
4.03 Tuberculosis incidence cases/100,000 pop.	1	1.6	~	9.05 Fixed-broadband Internet subscriptions /100 pop.	61	13.3	~
4.04 Business impact of tuberculosis	30	6.4		9.06 Internet bandwidth kb/s/user		133.7	$\Delta$
4.05 HIV prevalence % adult pop.	n/a	n/a		9.07 Mobile-broadband subscriptions /100 pop.		156.7	
4.06 Business impact of HIV/AIDS	27	6.3	_			100.7	_
4.07 Infant mortality deaths/1,000 live births	42	5.9	~	្ទឹ 10th pillar: Market size	29	4.9	
4.08 Life expectancy years	42		_		24	16	
				10.01 Domestic market size index	34	4.6	
4.09 Quality of primary education	16	5.4		10.02 Foreign market size index	18	5.9	
4.10 Primary education enrollment rate net %	87	93.4		10.03 GDP (PPP) PPP \$ billions	32	668.9	_
⇒ 5th pillar: Higher education and training	36	5.0	~	10.04 Exports % GDP	14	88.4	$\sim$
, ,				Additional Designation of the Control of the Contro	10	FO	
5.01 Secondary education enrollment rate gross %	n/a	n/a	_	11th pillar: Business sophistication	13	5.3	
5.02 Tertiary education enrollment rate gross %	95	22.0	~	11.01 Local supplier quantity	13	5.1	_
5.03 Quality of the education system	12	5.3		11.02 Local supplier quality	24	5.2	_
5.04 Quality of math and science education	13	5.3		11.03 State of cluster development	3	5.4	
5.05 Quality of management schools	15			11.04 Nature of competitive advantage	21	5.1	
5.06 Internet access in schools	13		_	11.05 Value chain breadth	12		
						5.3	
5.07 Local availability of specialized training services	24		_	11.06 Control of international distribution	12	5.1	$\overline{}$
5.08 Extent of staff training	15	5.2		11.07 Production process sophistication	23	5.2	
				11.08 Extent of marketing	5	5.6	
				11.09 Willingness to delegate authority	20	5.3	
				12th pillar: Innovation	25	4.6	
				12.01 Capacity for innovation	15	5.4	
				12.02 Quality of scientific research institutions	30	4.9	
				12.03 Company spending on R&D	22	4.5	
				12.04 University-industry collaboration in R&D	25	4.5	_
				12.05 Gov't procurement of advanced technology products	1	5.5	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

5.5

5.4

3

# **United Kingdom**



The Global Competitiveness Index 2017-2018 edition

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2			
Population millions	65.6	GDP per capita US\$	40,095.9		
GDP US\$ billions	2,629.2	GDP (PPP) % world GDP	2.32		

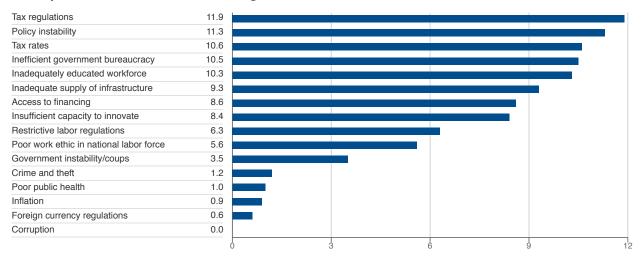
#### Performance overview

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	8	5.5			Rank	8 / 144	10 / 148	9 / 144	10 / 140	7 / 138	8 / 137
Subindex A: Basic requirements	23	5.6			Score	5.4	5.4	5.4	5.4	5.5	5.5
â 1st pillar: Institutions	12	5.5	_								
<b>1</b> 2nd pillar: Infrastructure	11	6.0	_					1st pillar: Institutions			
	68	4.6	_			12th p Innov		7	2nd pillar Infrastru		
3 4th pillar: Health and primary education	17	6.5				440		7			
Subindex B: Efficiency enhancers	5	5.6				11th pillar: Business sophistication			N /	Brd pillar: Macroeconom environment	ic
⇒ 5th pillar: Higher education and training	20	5.5	_			/					
	10	5.3	_			10th pillar: Market size				4th pillar: Health and education	primary
7th pillar: Labor market efficiency	6	5.4	_			\					
8th pillar: Financial market development	13	5.0	_			9th pillar: Technological readiness			/ / H	th pillar: igher education nd training	on
% 9th pillar: Technological readiness	4	6.3	_			9	th pillar:		6th pillar:		
$\stackrel{\nwarrow}{\leftarrow}_{\!$	7	5.8				Financia		7th pillar:	Goods ma efficiency	rket	
Subindex C: Innovation and sophistication factors	9	5.3	_		Ath pillar: Labor market efficiency						
္တီ 11th pillar: Business sophistication	7	5.6	_			Linitad	Kinadom	Europa a	nd North A	morios	
★ 12th pillar: Innovation	12	5.1	_		United Kingdom Europe and North Am				amenca		

The United Kingdom (UK) (8th) falls one spot. This drop does not yet reflect the outcome of the Brexit negotiations, which is likely to further undermine the country's competitiveness. Currently the country performs very well on technological readiness and the sophistication of its business sector (4th and 7th overall). Its macroeconomic environment remains challenging (68th) and could become an important constraint in the future as the timeline for a reduction of the fiscal deficit is repeatedly pushed back.

#### Most problematic factors for doing business





# **United Kingdom**

dex Component	Rank/137	Value	Trend	Index Component	Rank/137	Value	е
â 1st pillar: Institutions	12	5.5	_		10	5.3	
01 Property rights	6	6.3		6.01 Intensity of local competition	15	5.7	
2 Intellectual property protection	7	6.2		6.02 Extent of market dominance	13	5.0	
3 Diversion of public funds	10	5.8	$\sim$	6.03 Effectiveness of anti-monopoly policy	12	5.1	
04 Public trust in politicians	17	4.8		6.04 Effect of taxation on incentives to invest	19	4.6	
D5 Irregular payments and bribes	17	6.1		6.05 Total tax rate % profits	41	30.9	
06 Judicial independence	6	6.3		6.06 No. of procedures to start a business	18	4	
07 Favoritism in decisions of government officials	18	4.5	_	6.07 Time to start a business days	19	4.5	
	27						
08 Efficiency of government spending		4.2		6.08 Agricultural policy costs	39	4.2	
09 Burden of government regulation	32		_	6.09 Prevalence of non-tariff barriers	10	5.2	
10 Efficiency of legal framework in settling disputes	6	5.6		6.10 Trade tariffs % duty	6	1.1	
11 Efficiency of legal framework in challenging regulations	10	5.0		6.11 Prevalence of foreign ownership	1	6.1	
12 Transparency of government policymaking	14	5.5	~	6.12 Business impact of rules on FDI	5	5.8	
13 Business costs of terrorism	93	4.7		6.13 Burden of customs procedures	11	5.5	
14 Business costs of crime and violence	50	5.0	~	6.14 Imports % GDP	98	31.6	
15 Organized crime	28	5.5		6.15 Degree of customer orientation	28	5.4	
16 Reliability of police services	19	6.0	_	6.16 Buyer sophistication	9	4.8	
17 Ethical behavior of firms	16	5.5	~~	7.			
18 Strength of auditing and reporting standards	12	6.0		7th pillar: Labor market efficiency	6	5.4	
				7.01 Cooperation in labor-employer relations	19	5.3	
19 Efficacy of corporate boards	17	5.8		7.02 Flexibility of wage determination	14	5.8	
20 Protection of minority shareholders' interests	11		=		8	5.1	
21 Strength of investor protection 0-10 (best)	6	7.8		7.03 Hiring and firing practices			
↑ 2nd pillar: Infrastructure	11	6.0		7.04 Redundancy costs weeks of salary	27	9.3	
•				7.05 Effect of taxation on incentives to work	42	4.3	
O1 Quality of overall infrastructure	27	5.0		7.06 Pay and productivity	18	4.8	
02 Quality of roads	27	5.1	$\overline{}$	7.07 Reliance on professional management	9	6.0	
03 Quality of railroad infrastructure	19	4.7		7.08 Country capacity to retain talent	6	5.3	
04 Quality of port infrastructure	16	5.5	_	7.09 Country capacity to attract talent	3	6.0	
05 Quality of air transport infrastructure	28	5.5	$\sim$	7.10 Female participation in the labor force ratio to men	49	0.87	
06 Available airline seat kilometers millions/week		7,815.0	_				
07 Quality of electricity supply	12	6.7		8th pillar: Financial market development	13	5.0	
	57	122.3	$\sim$	8.01 Availability of financial services	15	5.3	
08 Mobile-cellular telephone subscriptions /100 pop.				8.02 Affordability of financial services	12	5.1	
09 Fixed-telephone lines /100 pop.	7	52.2	~~		3	5.7	
3rd pillar: Macroeconomic environment	68	4.6		8.03 Financing through local equity market			
'			_	8.04 Ease of access to loans	37	4.4	
01 Government budget balance % GDP	73	-3.1		8.05 Venture capital availability	12	4.3	
02 Gross national savings % GDP	114	12.6		8.06 Soundness of banks	59	5.2	
03 Inflation annual % change	1	0.6	$\sim$	8.07 Regulation of securities exchanges	20	5.6	
04 Government debt % GDP	118	89.2		8.08 Legal rights index 0-10 (best)	31	7	
05 Country credit rating 0-100 (best)	13	88.9		000		0.0	
-		0.5		9th pillar: Technological readiness	4	6.3	
4th pillar: Health and primary education	17	6.5		9.01 Availability of latest technologies	9	6.3	
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02 Firm-level technology absorption	13	5.6	
02 Business impact of malaria	n/a	6.9		9.03 FDI and technology transfer	7	5.5	
03 Tuberculosis incidence cases/100,000 pop.	33	10.0	^	9.04 Internet users % pop.	6	94.8	
04 Business impact of tuberculosis	18	6.7		9.05 Fixed-broadband Internet subscriptions /100 pop.	8	39.2	
·	1		_	9.06 Internet bandwidth kb/s/user	8	449.1	
05 HIV prevalence % adult pop.							
06 Business impact of HIV/AIDS	20	6.5		9.07 Mobile-broadband subscriptions /100 pop.	27	91.4	
07 Infant mortality deaths/1,000 live births	26	3.5		្ទុំ 10th pillar: Market size	7	5.8	
08 Life expectancy years	20		~				
09 Quality of primary education	25	5.0		10.01 Domestic market size index	9	5.7	
10 Primary education enrollment rate net %	5	99.9	_	10.02 Foreign market size index	14	6.0	
> FIL. 10. LD. L	00		_	10.03 GDP (PPP) PPP \$ billions	9 2	2,785.6	
3 5th pillar: Higher education and training	20	5.5		10.04 Exports % GDP	93	27.9	
01 Secondary education enrollment rate gross %	9	127.8	~~	11th niller, Pusiness conhistingtion	7	5.6	
02 Tertiary education enrollment rate gross %	49	56.5	$\overline{}$	11th pillar: Business sophistication			
03 Quality of the education system	22	4.7		11.01 Local supplier quantity	9	5.3	
24 Quality of math and science education	41			11.02 Local supplier quality	16	5.4	
25 Quality of management schools	2		_	11.03 State of cluster development	6	5.4	
of Internet access in schools	17	5.7	_	11.04 Nature of competitive advantage	9	5.9	
			$\overline{}$	11.05 Value chain breadth	6	5.6	
7 Local availability of specialized training services	5	6.0		11.06 Control of international distribution	8	5.3	
8 Extent of staff training	27	4.8					
				11.07 Production process sophistication	12	5.9	
				11.08 Extent of marketing	2	5.8	
				11.09 Willingness to delegate authority	15	5.5	
				* 12th pillar: Innovation	12	5.1	
				12.01 Capacity for innovation	11	5.5	
				12.02 Quality of scientific research institutions	2	6.3	
				12.03 Company spending on R&D	14	5.1	
				12.04 University-industry collaboration in R&D	6	5.4	
				10.05 Coult progurement of advanced technology products	0.4	2.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

3.9

4.9

17

## **United States**



The Global Competitiveness Index 2017-2018 edition

Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 201			
Population millions	323.3	GDP per capita US\$	57,436.4		
GDP US\$ billions	18,569.1	GDP (PPP) % world GDP	15.49		

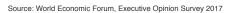
#### Performance overview

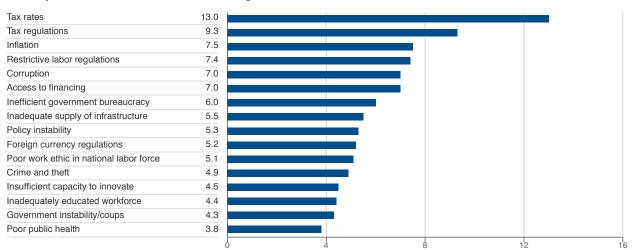
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	2	5.9	_		Rank	7 / 144	5 / 148	3 / 144	3 / 140	3 / 138	2 / 137
Subindex A: Basic requirements	25	5.5	_		Score	5.5	5.5	5.5	5.6	5.7	5.9
â 1st pillar: Institutions	20	5.3									
<b>1</b> 2nd pillar: Infrastructure	9	6.0						1st pillar: Institutions			
	83	4.5	_			12th pill Innovati		7	2nd pilla Infrastru		
3 4th pillar: Health and primary education	29	6.3	_				/ <u>&gt;</u>				
Subindex B: Efficiency enhancers	1	6.0				11th pillar: Business sophistication				3rd pillar: Macroeconom environment	iic
⇒ 5th pillar: Higher education and training	3	6.1				//					
<b> </b>	7	5.5				10th pillar: Market size				4th pillar: Health and education	primary
7th pillar: Labor market efficiency	3	5.6									
8th pillar: Financial market development	2	5.7	_			9th pillar: Technological readiness			// / H	th pillar: ligher education and training	on
ু 9th pillar: Technological readiness	6	6.2	_				pillar:		6th pillar:		
ੀ 10th pillar: Market size	2	6.9				Financial n develo	narket	7th pillar:	Goods ma	arket	
Subindex C: Innovation and sophistication factors	2	5.8						Labor market efficiency			
√ 11th pillar: Business sophistication	2	5.8				Linited (	Otataa -		ما المسام الم		
* 12th pillar: Innovation	2	5.8			United States Europe and North Americ			merica			

The United States ranks 2nd overall this year, displaying a constant improvement in score since 2010. Although ranking high overall, the country ranks 25th in basic requirements, with institutions, coming in below the top 10 and the macroeconomic environment placing 83rd. The macroeconomic environment pillar, out of all the components of the basic requirements subindex, has advanced the least and is one of the country's worst-ranked areas. Compared with other top-ranked countries, the United States performs poorly in health and primary education, coming in 29th despite an improvement of 0.15 in score over the last year. The strength of the United States comes from its performance in efficiency enhancers and innovation and sophistication

factors, where it comes in at 1st and 2nd respectively. These two subindexes reflect sound and well-functioning factors of production and product markets and a vibrant innovation ecosystem. The United States faces numerous policy uncertainties moving forward, many of which are in the areas where it is relatively weakest. Successfully meeting institutional challenges relating to both public and private institutions, improving the macroeconomic environment, and investing in human capital—particularly in the areas of health and primary education—will be crucial for the United States to maintain its position near the top of the competitiveness rankings.

### Most problematic factors for doing business





## **United States**

dex Component	Rank/137	7 Value	Trend	Index Component	Rank/137	Value	э Т
☆ 1st pillar: Institutions	20	5.3		<b>❸</b> 6th pillar: Goods market efficiency	7	5.5	-
1.01 Property rights	20	5.7		6.01 Intensity of local competition	6	6.0	_
1.02 Intellectual property protection	14	5.8	_	6.02 Extent of market dominance	3	5.5	_
1.03 Diversion of public funds	23	5.2		6.03 Effectiveness of anti-monopoly policy	3	5.6	_
1.04 Public trust in politicians	16	4.8	_	6.04 Effect of taxation on incentives to invest	18	4.7	_
1.05 Irregular payments and bribes	34	5.2		6.05 Total tax rate % profits	95	44.0	_
1.06 Judicial independence	25	5.5		6.06 No. of procedures to start a business	53	6	-
1.07 Favoritism in decisions of government officials	17	4.6		6.07 Time to start a business days	29	5.6	$\neg$
1.08 Efficiency of government spending	3	5.9		6.08 Agricultural policy costs	6	5.1	
	12			6.09 Prevalence of non-tariff barriers	13	5.2	
.09 Burden of government regulation	8						
.10 Efficiency of legal framework in settling disputes		5.6		6.10 Trade tariffs % duty	34	1.6	
11 Efficiency of legal framework in challenging regulations	6			6.11 Prevalence of foreign ownership	22	5.4	_
.12 Transparency of government policymaking	12		_	6.12 Business impact of rules on FDI	32	5.2	-
.13 Business costs of terrorism	86	4.9		6.13 Burden of customs procedures	8	5.6	_
.14 Business costs of crime and violence	61	4.8	$\overline{}$	6.14 Imports % GDP	133	14.7	
.15 Organized crime	57	5.0		6.15 Degree of customer orientation	7	5.8	_
.16 Reliability of police services	22	5.9	_	6.16 Buyer sophistication	1	5.3	_
.17 Ethical behavior of firms	19	5.4	_		_		
.18 Strength of auditing and reporting standards	16	5.8		7th pillar: Labor market efficiency	3	5.6	_
19 Efficacy of corporate boards	15	5.9	_	7.01 Cooperation in labor-employer relations	14	5.4	_
.20 Protection of minority shareholders' interests	8		_	7.02 Flexibility of wage determination	18	5.8	_
			_	7.03 Hiring and firing practices	5	5.4	_
21 Strength of investor protection 0-10 (best)	31	6.5		7.04 Redundancy costs weeks of salary	1	0.0	
1 2nd pillar: Infrastructure	9	6.0		7.05 Effect of taxation on incentives to work	15	4.9	
•							-
.01 Quality of overall infrastructure	10	5.9		7.06 Pay and productivity	3	5.5	-
02 Quality of roads	10	5.7		7.07 Reliance on professional management	13	5.9	-
03 Quality of railroad infrastructure	10	5.5	_	7.08 Country capacity to retain talent	3	5.7	_
04 Quality of port infrastructure	9	5.8		7.09 Country capacity to attract talent	5	5.8	-
05 Quality of air transport infrastructure	9	6.0	_	7.10 Female participation in the labor force ratio to men	56	0.86	-
06 Available airline seat kilometers millions/week	1.3	39,222.0	_	A	•		
7 Quality of electricity supply	26	6.2	_	8th pillar: Financial market development	2	5.7	-
08 Mobile-cellular telephone subscriptions /100 pop.	47	127.2		8.01 Availability of financial services	2	5.9	-
09 Fixed-telephone lines /100 pop.	24	37.1		8.02 Affordability of financial services	10	5.2	-
09 Fixed-telephone lines 7100 pop.	24	37.1	_	8.03 Financing through local equity market	1	5.7	
3rd pillar: Macroeconomic environment	83	4.5		8.04 Ease of access to loans	2	5.5	
	96	4.4	_				-
01 Government budget balance % GDP		-4.4		8.05 Venture capital availability	1	5.2	-
02 Gross national savings % GDP	83	18.6		8.06 Soundness of banks	24	5.7	_
03 Inflation annual % change	1	1.3	$\sim$	8.07 Regulation of securities exchanges	18	5.6	-
04 Government debt % GDP	126	107.4	~	8.08 Legal rights index 0-10 (best)	4	11	-
05 Country credit rating 0-100 (best)	4	93.4		3 9th pillar: Technological readiness	6	6.2	_
4th pillar: Health and primary education	29	6.3		9.01 Availability of latest technologies	6	6.5	
01 Malaria incidence cases/100,000 pop.	n/a	m.f.		9.02 Firm-level technology absorption	2	6.0	
02 Business impact of malaria	n/a	5.3	_	9.03 FDI and technology transfer	5	5.6	
•							
03 Tuberculosis incidence cases/100,000 pop.	4	3.2		9.04 Internet users % pop.	40		
04 Business impact of tuberculosis	80	5.2		9.05 Fixed-broadband Internet subscriptions /100 pop.	19	32.4	-
D5 HIV prevalence % adult pop.	85	0.5		9.06 Internet bandwidth kb/s/user	37	126.5	
06 Business impact of HIV/AIDS	85	5.1		9.07 Mobile-broadband subscriptions /100 pop.	11	120.0	
77 Infant mortality deaths/1,000 live births	40	5.6	_	<sup>A</sup> 7 400	0	6.0	
08 Life expectancy years	38	78.7		્રૈંગે 10th pillar: Market size	2	6.9	
9 Quality of primary education	11	5.5		10.01 Domestic market size index	2	6.9	
10 Primary education enrollment rate net %	84	93.8		10.02 Foreign market size index	2	6.6	
·				10.03 GDP (PPP) PPP \$ billions	2 18	8,569.1	
₹ 5th pillar: Higher education and training	3	6.1		10.04 Exports % GDP	130	11.8	-
01 Secondary education enrollment rate gross %	57	97.6	~	مرم 11th pillar: Business sophistication	2	5.8	
02 Tertiary education enrollment rate gross %	9	85.8	~				
O3 Quality of the education system	4	5.6	_	11.01 Local supplier quantity	3	5.7	
Quality of math and science education	10	5.4	_	11.02 Local supplier quality	6	5.8	
5 Quality of management schools	6	5.9		11.03 State of cluster development	1	5.7	
6 Internet access in schools	10	5.9	_	11.04 Nature of competitive advantage	15	5.7	
7 Local availability of specialized training services	10	5.8		11.05 Value chain breadth	4	5.7	
	2	5.5		11.06 Control of international distribution	1	5.7	
8 Extent of staff training	۷	5.5	•	11.07 Production process sophistication	9	5.9	
				11.08 Extent of marketing	1	6.0	
				11.09 Willingness to delegate authority	8	5.7	
				12th pillar: Innovation	2	5.8	•
				12.01 Capacity for innovation	2	6.0	
				12.02 Quality of scientific research institutions	5	6.0	
				12.03 Company spending on R&D	2	5.9	_
				12.04 University-industry collaboration in R&D	2	5.7	
				12.05 Gov't procurement of advanced technology products	2	5.7	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

2

5.1

# **Uruguay**



The Global Competitiveness Index 2017-2018 edition



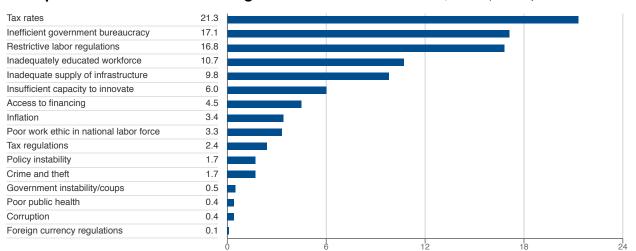
Key indicators, 2016		Source: International Monetary Fund; World	d Economic Outlook Database (April 2017)
Population millions	3.5	GDP per capita US\$	15,679.2
GDP US\$ billions	54.6	GDP (PPP) % world GDP	0.06

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	76	4.1	_		Rank	<b>74</b> / 144	<b>85</b> / 148	80 / 144	<b>73</b> / 140	<b>73</b> / 138	<b>76</b> / 137
Subindex A: Basic requirements	56	4.8	_		Score	4.1	4.1	4.0	4.1	4.2	4.1
â 1st pillar: Institutions	34	4.6	_								
<b>↑</b> 2nd pillar: Infrastructure	45	4.7						1st pillar: Institutions			
	95	4.3	_			12th p Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	70	5.8	_								
Subindex B: Efficiency enhancers	65	4.2				11th pillar: Business sophistication	$\langle \langle \rangle \rangle$			3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	53	4.6	_			/					
	77	4.3				10th pillar: Market size	1			4th pillar: Health and education	
7th pillar: Labor market efficiency	121	3.5	_								
8th pillar: Financial market development	60	4.1	_			9th pillar: Technological readiness				5th pillar: Higher educat and training	ion
⋄ 9th pillar: Technological readiness	36	5.3	_				th pillar:		6th pillar		
્રૈંટ 10th pillar: Market size	89	3.3	_			Financia		7th pillar:	Goods m	arket	
Subindex C: Innovation and sophistication factors	87	3.5						Labor market efficiency			
₯ 11th pillar: Business sophistication	83	3.8	_			- Herror	nu 🔳 l =	lin Amaani	and tha O-	مره و ما ما نس	
* 12th pillar: Innovation	93	3.1	_		Uruguay Latin America and the Caribbean						

## Most problematic factors for doing business





# **Uruguay**

dex Component	Rank/137	Value	Trend	Index	Component	Rank/137	Value	• 7
🗎 1st pillar: Institutions	34	4.6	_	8	6th pillar: Goods market efficiency	77	4.3	-
1.01 Property rights	40	4.9	_	6.01	Intensity of local competition	111	4.6	_
1.02 Intellectual property protection	41	4.7	_	6.02	Extent of market dominance	82	3.6	-
1.03 Diversion of public funds	40	4.3	_	6.03	Effectiveness of anti-monopoly policy	100	3.3	_
1.04 Public trust in politicians	28	4.4	$\overline{}$	6.04	Effect of taxation on incentives to invest	103	3.2	-
1.05 Irregular payments and bribes	28	5.5			Total tax rate % profits	88	41.8	-
1.06 Judicial independence	22	5.6	_		No. of procedures to start a business	36	5	-
1.07 Favoritism in decisions of government officials	31	4.0			Time to start a business days	36	6.5	-
1.08 Efficiency of government spending	117	2.3			Agricultural policy costs	17	4.7	
	108	2.9			Prevalence of non-tariff barriers	63	4.4	
.09 Burden of government regulation					Trade tariffs % duty			_
.10 Efficiency of legal framework in settling disputes	61	3.7	_			96	8.5	_
.11 Efficiency of legal framework in challenging regulations	55	3.5			Prevalence of foreign ownership	40	5.0	_
.12 Transparency of government policymaking	30	4.8	_		Business impact of rules on FDI	22	5.4	_
.13 Business costs of terrorism	5	6.3		6.13	Burden of customs procedures	51	4.5	_
.14 Business costs of crime and violence	110	3.7		6.14	Imports % GDP	128	19.0	_
.15 Organized crime	27	5.5	_	6.15	Degree of customer orientation	95	4.3	-
.16 Reliability of police services	83	4.2		6.16	Buyer sophistication	59	3.5	_
.17 Ethical behavior of firms	35	4.6	$\sim$	-3				
.18 Strength of auditing and reporting standards	35	5.3	_	Æ?	7th pillar: Labor market efficiency	121	3.5	_
.19 Efficacy of corporate boards	63	4.9	_	7.01	Cooperation in labor-employer relations	131	3.5	_
	46	4.4	_	7.02	Flexibility of wage determination	135	2.6	_
20 Protection of minority shareholders' interests			_		Hiring and firing practices	126	2.8	_
21 Strength of investor protection 0-10 (best)	103	4.5			Redundancy costs weeks of salary	89	20.8	-
► 2nd pillar: Infrastructure	45	4.7						_
•			~		Effect of taxation on incentives to work	132	2.6	-
.01 Quality of overall infrastructure	91	3.6	_		Pay and productivity	120	3.3	-
02 Quality of roads	95		$\sim$		Reliance on professional management	64	4.4	_
03 Quality of railroad infrastructure	100	1.2			Country capacity to retain talent	84	3.2	-
04 Quality of port infrastructure	34	4.9		7.09	Country capacity to attract talent	100	2.7	-
05 Quality of air transport infrastructure	34	5.3	$\overline{}$	7.10	Female participation in the labor force ratio to men	74	0.80	-
06 Available airline seat kilometers millions/week	90	74.1	<u></u>			20		
7 Quality of electricity supply	33	6.0			8th pillar: Financial market development	60	4.1	-
08 Mobile-cellular telephone subscriptions /100 pop.	19	148.7		8.01	Availability of financial services	74	4.1	-
99 Fixed-telephone lines /100 pop.	33	32.4			Affordability of financial services	50	4.0	
09 Fixed-telephone lines 7100 pop.	33	32.4			Financing through local equity market	118	2.7	
3rd pillar: Macroeconomic environment	95	4.3	$\overline{}$		Ease of access to loans	49	4.1	-
01 Government budget balance % GDP	89	-3.9	~		Venture capital availability	77	2.8	-
-					, ,			-
02 Gross national savings % GDP	86		~~		Soundness of banks	29	5.6	_
03 Inflation annual % change	122				Regulation of securities exchanges	31	5.3	-
04 Government debt % GDP	89	60.9	/	8.08	Legal rights index 0-10 (best)	86	4	
05 Country credit rating 0-100 (best)	50	60.7		25%	9th pillar: Technological readiness	36	5.3	-
4th pillar: Health and primary education	70	5.8			Availability of latest technologies	63	4.9	
01 Malaria incidence cases/100,000 pop.	n/a	s.l.		9.02	Firm-level technology absorption	68	4.4	-
02 Business impact of malaria	n/a	6.8			FDI and technology transfer	38	4.8	-
•	59	30.0			Internet users % pop.	58	66.4	
03 Tuberculosis incidence cases/100,000 pop.			_					-
04 Business impact of tuberculosis	22	6.6			Fixed-broadband Internet subscriptions /100 pop.	33	26.8	٠
D5 HIV prevalence % adult pop.	91	0.6			Internet bandwidth kb/s/user	46	96.7	
06 Business impact of HIV/AIDS	34	6.2	_	9.07	Mobile-broadband subscriptions /100 pop.	19	102.0	
77 Infant mortality deaths/1,000 live births	56	8.7	~	47	10th pillar: Market size	89	3.3	Ī
08 Life expectancy years	46	77.1	_					
9 Quality of primary education	92	3.4	_	10.01	Domestic market size index	86	3.2	
10 Primary education enrollment rate net %	79	94.2	$\overline{}$	10.02	2 Foreign market size index	101	3.8	
•				10.03	GDP (PPP) PPP \$ billions	84	74.9	,
₹ 5th pillar: Higher education and training	53	4.6	_	10.04	Exports % GDP	114	18.3	
01 Secondary education enrollment rate gross %	63	95.1		8	11th pillar: Business sophistication	83	3.8	
2 Tertiary education enrollment rate gross %	51	55.6						
O3 Quality of the education system	121	2.7			Local supplier quantity	110	4.0	
04 Quality of math and science education	116	3.0			2 Local supplier quality	96	4.0	
5 Quality of management schools	57	4.3	_	11.03	State of cluster development	104	3.3	
06 Internet access in schools	20	5.6		11.04	Nature of competitive advantage	55	3.8	
7 Local availability of specialized training services	48	4.7			Value chain breadth	89	3.6	
		3.7	~		Control of international distribution	109	3.1	
8 Extent of staff training	91	3.7			Production process sophistication	85	3.5	
						73		
					8 Extent of marketing		4.4	
				11.09	Willingness to delegate authority	77	4.2	
				辦	12th pillar: Innovation	93	3.1	
				12.01	Capacity for innovation	101	3.7	
				12.02	Quality of scientific research institutions	61	3.9	
					Company spending on R&D	105	2.9	
					University-industry collaboration in R&D	80	3.3	
					Gov't procurement of advanced technology products	107	2.8	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

107

101

2.8

## Venezuela



The Global Competitiveness Index 2017-2018 edition



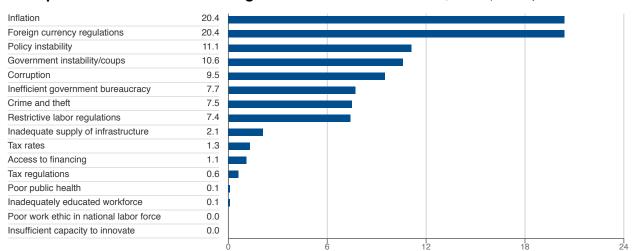
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Databas				
Population millions	31.0	GDP per capita US\$	9,258.3			
GDP US\$ billions	287.3	GDP (PPP) % world GDP	0.36			

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from bes	t Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	127	3.2	_		Rank	126 / 144	134 / 148	131 / 144	132 / 140	130 / 138	127 / 137
Subindex A: Basic requirements	131	3.1	_		Score	3.5	3.4	3.3	3.3	3.3	3.2
â 1st pillar: Institutions	137	2.2	_								
<b>↑</b> 2nd pillar: Infrastructure	117	2.6						1st pillar: Institutions			
	134	2.4	_				n pillar: ovation	7	2nd pi Infrast	llar: ructure	
3 4th pillar: Health and primary education	99	5.3					$\wedge$		$\Delta$		
Subindex B: Efficiency enhancers	119	3.4	_			11th pillar: Business sophistication				3rd pillar: Macroecono environment	
⇒ 5th pillar: Higher education and training	58	4.6	_			•		000		\	
	137	2.8	_			10th pillar: Market size	1 8			4th pillar Health an education	nd primary
7th pillar: Labor market efficiency	137	2.7	~					000	76		
8th pillar: Financial market development	122	3.1	_			9th pillar: Technological readiness				5th pillar: Higher educa and training	ition
⋄ 9th pillar: Technological readiness	109	3.0	_			. oaaoo	8th pillar:		6th pilla		
$\sqrt[6]{3}$ 10th pillar: Market size	52	4.4	_				cial market velopment	7th pillar:	Goods r	market	
Subindex C: Innovation and sophistication factors	133	2.8	~~					Labor marke efficiency	t		
مر 11th pillar: Business sophistication	133	3.0	_			Vanas	ala 🔲 l	atia Amazia	- and the C	Davilala a a a	
** 12th pillar: Innovation	131	2.6				Venez	tuela 🔲 L	atin Americ	a and the C	Jailbbean	

### Most problematic factors for doing business





# Venezuela

Index	Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	7 Value	Trer
	1st pillar: Institutions	137	2.2	_	1	6th pillar: Goods market efficiency	137	2.8	_
1.01	Property rights	137	1.7	_	6.0	Intensity of local competition	137	2.8	_
	Intellectual property protection	137	2.0	_		Extent of market dominance	130	2.6	
	Diversion of public funds	137	1.3	_		Effectiveness of anti-monopoly policy	135	2.2	_
	Public trust in politicians	133	1.6	~		4 Effect of taxation on incentives to invest	86	3.4	_
	Irregular payments and bribes	132	2.3			5 Total tax rate % profits	130	64.7	~
	Judicial independence	137	1.1			No. of procedures to start a business	138	20	
	Favoritism in decisions of government officials	137	1.5	_		7 Time to start a business days	138	230.0	
	Efficiency of government spending	136	1.1	_		B Agricultural policy costs	137	1.7	$\overline{}$
	Burden of government regulation	137	1.7			Prevalence of non-tariff barriers	131	3.4	
	Efficiency of legal framework in settling disputes	137	1.6	$\sim$		Trade tariffs % duty	123	12.2	=
	Efficiency of legal framework in challenging regulations	137	1.2	_		1 Prevalence of foreign ownership	129	3.2	
	Transparency of government policymaking	137	2.3	$\sim$		2 Business impact of rules on FDI	136	2.6	
	Business costs of terrorism	79	5.0	_		Burden of customs procedures	136	2.2	$\tilde{}$
	Business costs of crime and violence			_		·	138		_
		136	2.0	$\overline{}$		4 Imports % GDP		10.5	_
	Organized crime	135	2.5	_		5 Degree of customer orientation	129	3.6	$\sim$
	Reliability of police services	137	1.8	_	6.16	Buyer sophistication	130	2.4	
	Ethical behavior of firms	137	2.6		7	7th pillar: Labor market efficiency	137	2.7	~
	Strength of auditing and reporting standards	85	4.3						
	Efficacy of corporate boards	74	4.8			1 Cooperation in labor-employer relations	126	3.6	
	Protection of minority shareholders' interests	123	3.2	_		2 Flexibility of wage determination	106	4.4	
1.21	Strength of investor protection 0-10 (best)	134	3.2	_	7.03	Hiring and firing practices	137	1.5	_
11	2nd pillar: Infrastructure	117	2.6		7.0	4 Redundancy costs weeks of salary	136	not possible	
	Quality of overall infrastructure	125	2.5		7.05	5 Effect of taxation on incentives to work	84	3.7	_
	Quality of roads	119	2.8		7.06	Pay and productivity	136	2.4	~
	Quality of railroad infrastructure	98	1.5		7.0	Reliance on professional management	68	4.3	_
	•	118	2.7			Country capacity to retain talent	137	1.6	_
	Quality of port infrastructure					Country capacity to attract talent	137	1.2	_
	Quality of air transport infrastructure	131	2.7	$\overline{}$		Female participation in the labor force ratio to men	97	0.68	_
	Available airline seat kilometers millions/week	82	119.3	_		Tomalo participation in the labor love ratio to mon	<u> </u>	0.00	
	Quality of electricity supply	128	2.1	=		8th pillar: Financial market development	122	3.1	
	Mobile-cellular telephone subscriptions /100 pop.	110	87.0		8.0	Availability of financial services	109	3.6	_
2.09	Fixed-telephone lines /100 pop.	39	24.4			2 Affordability of financial services	58	3.9	_
9	3rd pillar: Macroeconomic environment	134	2.4	_		Financing through local equity market	121	2.5	
	•					4 Ease of access to loans	70	3.9	_
	Government budget balance % GDP	133	-14.6	$\sim$		5 Venture capital availability	108	2.4	
	Gross national savings % GDP	128	6.6	$\rightarrow$		Soundness of banks	103	4.2	=
	Inflation annual % change	137	254.9	$\overline{}$		Regulation of securities exchanges	127	3.2	
	Government debt % GDP	22	28.2	$\sim$		B Legal rights index 0-10 (best)	128	1	$\overline{}$
3.05	Country credit rating 0-100 (best)	126	19.6	_	. 0 .				
Ò	4th pillar: Health and primary education	99	5.3		8/24		109	3.0	_
4.01	Malaria incidence cases/100,000 pop.	44	744.0	_		1 Availability of latest technologies	132	3.1	_
4.02	Business impact of malaria	17	5.4	_	9.02	2 Firm-level technology absorption	122	3.7	
	Tuberculosis incidence cases/100,000 pop.	58	29.0	$\overline{}$	9.03	FDI and technology transfer	135	2.4	_
	Business impact of tuberculosis	75	5.2	_	9.04	1 Internet users % pop.	66	60.0	/
	HIV prevalence % adult pop.	91	0.6	_	9.05	Fixed-broadband Internet subscriptions /100 pop.	78	8.2	_
	Business impact of HIV/AIDS	87	5.0		9.06	6 Internet bandwidth kb/s/user	98	18.9	_^
	Infant mortality deaths/1,000 live births	73	12.9	_	9.0	7 Mobile-broadband subscriptions /100 pop.	94	44.6	_/
	Life expectancy years	76	74.4		.47	AON - West Market of			
	Quality of primary education	123	2.8	_	£ 7 3	10th pillar: Market size	52	4.4	
	Primary education enrollment rate net %	104	89.9	_	10.0	1 Domestic market size index	42	4.4	_
4.10	i imaly education emolinent rate net %	104	09.9	_	10.0	2 Foreign market size index	73	4.4	_
9	5th pillar: Higher education and training	58	4.6	_		03 GDP (PPP) PPP \$ billions	44	427.0	_/
5.01	Secondary education enrollment rate gross %	76	89.7	~	10.0	04 Exports % GDP	133	10.0	/
	Tertiary education enrollment rate gross %	22	77.0	_	9	11th willow Dusiness	100	0.0	
	Quality of the education system	127	2.6	~~	200	11th pillar: Business sophistication	133	3.0	
	Quality of math and science education	120	2.8	_		1 Local supplier quantity	137	2.4	_
	Quality of management schools	68	4.2	~		2 Local supplier quality	132	3.1	_
	Internet access in schools	113		=	11.0	3 State of cluster development	136	2.6	_
		92	4.1		11.0	Nature of competitive advantage	135	2.2	~
	Local availability of specialized training services			_	11.0	05 Value chain breadth	134	2.6	_
J.U8	Extent of staff training	101	3.5	~~	11.0	06 Control of international distribution	133	2.6	_
						7 Production process sophistication	120	3.0	_
						08 Extent of marketing	120	3.8	$\sim$
						9 Willingness to delegate authority	67	4.3	
						12th pillar: Innovation	131	2.6	
						1 Capacity for innovation	116	3.6	_
						2 Quality of scientific research institutions	95	3.4	_
						O3 Company spending on R&D	130	2.5	
					12 (	M University-industry collaboration in B&D	104	3.0	~

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D 12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers 12.07 PCT patents applications/million pop.

137

## Vietnam



The Global Competitiveness Index 2017-2018 edition



Key indicators, 2016		Source: International Monetary Fund; World	Economic Outlook Database (April 2017)
Population millions	92.6	GDP per capita US\$	2,173.3
GDP US\$ billions	201.3	GDP (PPP) % world GDP	0.50

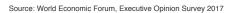
#### Performance overview

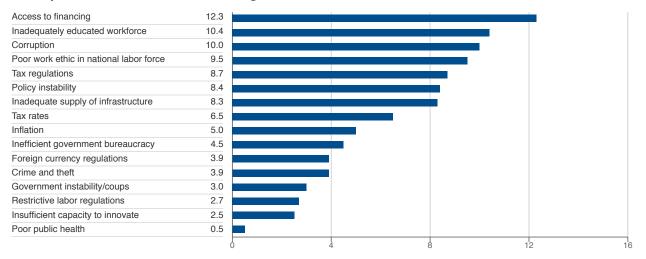
Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Global Competitiveness Index	55	4.4			Rank	<b>75</b> / 144	70 / 148	68 / 144	<b>56</b> / 140	60 / 138	<b>55</b> / 137
Subindex A: Basic requirements	75	4.5	_		Score	4.1	4.2	4.2	4.3	4.3	4.4
â 1st pillar: Institutions	79	3.8	_								
<b>↑</b> 2nd pillar: Infrastructure	79	3.9	_					1st pillar: Institutions			
	77	4.6	~			12th p Innov		7	2nd pill Infrastr		
3 4th pillar: Health and primary education	67	5.8	_				$\Lambda$		$\langle \cdot \rangle$		
Subindex B: Efficiency enhancers	62	4.2				11th pillar: Business sophistication	$\langle \langle \rangle \rangle$	00		3rd pillar: Macroeconor environment	nic
⇒ 5th pillar: Higher education and training	84	4.1	_								
	91	4.1	_			10th pillar: Market size	1			4th pillar: Health and education	
7th pillar: Labor market efficiency	57	4.3	_			\					
8th pillar: Financial market development	71	4.0				9th pillar: Technological readiness				5th pillar: Higher educat and training	ion
9th pillar: Technological readiness	79	4.0					th pillar:		6th pillar		
੍ਰਿੰਤ 10th pillar: Market size	31	4.9				Financia		7th pillar:	Goods m	narket	
Subindex C: Innovation and sophistication factors	84	3.5						Labor market efficiency			
₀ 11th pillar: Business sophistication	100	3.7	~				/ietnam	Foot Asia	and Dasi	Fi a	
* 12th pillar: Innovation	71	3.3			■ Vietnam ■ East Asia and Pacific			IIC			

With a relatively modest increase in its overall score, Vietnam (55th) moves up five places to narrowly surpass the Philippines (56th). Vietnam's competitiveness is significantly driven by its market size (31st). Although the withdrawal of the United States from the Trans-Pacific Partnership (TPP) earlier in 2017 eliminated significant trade opportunities, the country's growth is nonetheless projected to remain robust from strong exports.8 Significant improvements are necessary across all pillars, notably among the basic requirement factors (75th)

and higher education (84th), as firms perceive that the lack of an educated workforce constitute a significant hurdle for doing business. Vietnam could also boost its competitiveness by closing gaps in innovation and sophistication factors with countries at a similar stage of development, such as the Philippines (see Box 2 for a description of how the latter is working with the GCI to advance its competitiveness agenda).

#### Most problematic factors for doing business





# **Vietnam**

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
â 1st pillar: Institutions	79	3.8	_	8	6th pillar: Goods market efficiency	91	4.1	_
1.01 Property rights	90	4.0	_	6.01	Intensity of local competition	108	4.7	_
1.02 Intellectual property protection	99	3.6	_		2 Extent of market dominance	78	3.6	_
1.03 Diversion of public funds	61	3.7	_		Effectiveness of anti-monopoly policy	94	3.4	$\overline{}$
1.04 Public trust in politicians	46	3.6	_		Effect of taxation on incentives to invest	64	3.7	_
1.05 Irregular payments and bribes	109	3.1	_		5 Total tax rate % profits	76	39.4	
1.06 Judicial independence	84	3.6			No. of procedures to start a business	105	9	7
1.07 Favoritism in decisions of government officials	56	3.3			7 Time to start a business days	105	24.0	Ĺ
1.08 Efficiency of government spending	69				3 Agricultural policy costs	62	3.8	_
1.09 Burden of government regulation	76	3.3			Prevalence of non-tariff barriers	109	3.9	
1.10 Efficiency of legal framework in settling disputes	82	3.4			Trade tariffs % duty	92	7.5	_
, ,					*			
1.11 Efficiency of legal framework in challenging regulations	54	3.5	$\sim$		Prevalence of foreign ownership	96	4.2	<u></u>
1.12 Transparency of government policymaking	82	3.8	_		Business impact of rules on FDI	105	4.0	
1.13 Business costs of terrorism	60	5.3			Burden of customs procedures	95	3.7	$\overline{}$
1.14 Business costs of crime and violence	68	4.7	$\sim$		I Imports % GDP	7	95.6	_
1.15 Organized crime	69	4.9			Degree of customer orientation	113	4.0	
1.16 Reliability of police services	74		<u> </u>	6.16	Buyer sophistication	72	3.3	^
1.17 Ethical behavior of firms	81	3.7	~	250	7th pillar: Labor market efficiency	57	4.3	_
1.18 Strength of auditing and reporting standards	115	3.7						
1.19 Efficacy of corporate boards	130	3.9	$\sim$		Cooperation in labor-employer relations	85	4.2	
1.20 Protection of minority shareholders' interests	98	3.7	$\overline{}$		2 Flexibility of wage determination	81	4.7	
1.21 Strength of investor protection 0-10 (best)	79	5.3	_~		Hiring and firing practices	49	4.0	_
а а				7.04	Redundancy costs weeks of salary	103	24.6	_
1 2nd pillar: Infrastructure	79	3.9		7.05	Effect of taxation on incentives to work	61	4.0	_
2.01 Quality of overall infrastructure	89	3.6		7.06	Pay and productivity	66	4.0	_
2.02 Quality of roads	92	3.4	_	7.07	Reliance on professional management	108	3.6	_
2.03 Quality of railroad infrastructure	59	3.0		7.08	Country capacity to retain talent	60	3.5	_
2.04 Quality of port infrastructure	82	3.7	_		Country capacity to attract talent	60	3.4	_
2.05 Quality of air transport infrastructure	103	3.8	_		Female participation in the labor force ratio to men	24	0.92	-
2.06 Available airline seat kilometers millions/week		1,355.2	_					
2.07 Quality of electricity supply	90	4.3	_		8th pillar: Financial market development	71	4.0	
2.08 Mobile-cellular telephone subscriptions /100 pop.	44	128.0	~	8.01	Availability of financial services	78	4.1	
2.09 Fixed-telephone lines /100 pop.	97	5.9	~~		Affordability of financial services	60	3.9	-
2.09 Fixeu-telepriorie lines 7100 pop.	97	5.9			Financing through local equity market	53	3.9	_
	77	4.6	~		Ease of access to loans	69	3.9	
3.01 Government budget balance % GDP	118	-6.6			5 Venture capital availability	38	3.4	
3.02 Gross national savings % GDP	21	31.3	$\overline{\sim}$		Soundness of banks	112	3.9	
3.03 Inflation annual % change	1	2.7				89	4.0	-
•			$\geq$		7 Regulation of securities exchanges			=
3.04 Government debt % GDP	93	62.4		8.08	3 Legal rights index 0-10 (best)	31	7	
3.05 Country credit rating 0-100 (best)	71	44.8		e2/20	9th pillar: Technological readiness	79	4.0	_
4th pillar: Health and primary education	67	5.8		9.01	Availability of latest technologies	112	4.0	_
4.01 Malaria incidence cases/100,000 pop.	28	13.7		9.02	Firm-level technology absorption	93	4.2	_
4.02 Business impact of malaria	29	4.9	$\overline{}$	9.03	FDI and technology transfer	89	4.1	_
4.03 Tuberculosis incidence cases/100,000 pop.	99	137.0	~	9.04	1 Internet users % pop.	88	46.5	
4.04 Business impact of tuberculosis	100	4.6		9.05	5 Fixed-broadband Internet subscriptions /100 pop.	73	9.9	
4.05 HIV prevalence % adult pop.	73	0.4			6 Internet bandwidth kb/s/user	48	91.3	
4.06 Business impact of HIV/AIDS	101	4.6			Mobile-broadband subscriptions /100 pop.	89	46.6	_
4.07 Infant mortality deaths/1,000 live births	83		~					_
•	57			F 7 7	10th pillar: Market size	31	4.9	_
4.08 Life expectancy years		75.8			1 Domestic market size index	35	4.6	_
4.09 Quality of primary education	93	3.4			2 Foreign market size index	21	5.8	
4.10 Primary education enrollment rate net %	36	98.0	~		-	35		
⇒ 5th pillar: Higher education and training	84	4.1			O3 GDP (PPP) PPP \$ billions O4 Exports % GDP	11	595.5 93.9	_
5.01 Secondary education enrollment rate gross %	68	92.5		0	•			
5.02 Tertiary education enrollment rate gross %	85	28.8		ood	11th pillar: Business sophistication	100	3.7	
5.03 Quality of the education system	71			11.0	1 Local supplier quantity	105	4.1	_
5.04 Quality of math and science education	85	3.7			2 Local supplier quality	116	3.6	_
					3 State of cluster development	68	3.8	_
5.05 Quality of management schools	120				24 Nature of competitive advantage	102	3.0	_
5.06 Internet access in schools	77	4.1			25 Value chain breadth	106	3.3	
5.07 Local availability of specialized training services	108							_
5.08 Extent of staff training	71	3.9			26 Control of international distribution	64	3.7	_
					77 Production process sophistication	87	3.5	
					08 Extent of marketing	105	4.0	-
				11.0	9 Willingness to delegate authority	96	4.0	
				紫	12th pillar: Innovation	71	3.3	_
					1 Capacity for innovation	79	4.0	_
					2 Quality of scientific research institutions	90	3.5	
					•			_
				12.0	33 Company spending on R&D	46	3.6	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

62

40

78

3.5

3.6

## Yemen



#### The Global Competitiveness Index 2017-2018 edition



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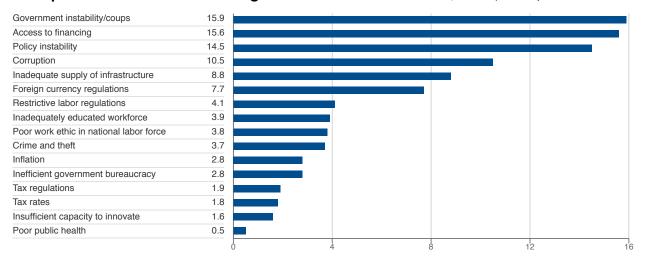
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2				
Population millions	29.1	GDP per capita ∪s\$	937.7			
GDP US\$ billions	27.3	GDP (PPP) % world GDP	0.06			

#### **Performance overview**

Index Component	Rank/137	Score (1-7) Tr	rend	Distance from best	Edition	2012-13	2013-14	2014-15	2016-17	2017-1			
Global Competitiveness Index	137				Rank	140 / 144	145 / 148	142 / 144	138 / 138	137 / 13			
Subindex A: Basic requirements	135	3.0 -			Score	3.0	3.0	3.0	2.7	2.9			
â 1st pillar: Institutions	134	2.7	_										
<b>↑</b> 2nd pillar: Infrastructure	135	1.8 -				1st pillar: Institutions							
	130	2.8	~~			12th pillar Innovation	d pillar: rastructure						
3 4th pillar: Health and primary education	118	4.7 -											
Subindex B: Efficiency enhancers	136	2.7	_			11th pillar: Business sophistication	Macroecon	3rd pillar: Macroeconomic environment					
⇒ 5th pillar: Higher education and training	136	2.2 -					Pos						
	132	3.4	_			10th pillar: Market size		th pillar: ealth and primary ducation					
7th pillar: Labor market efficiency	136	3.0	_	<del></del>									
8th pillar: Financial market development	136	2.2 -	_			9th pillar: Technological readiness		5th pillar: Higher educ and training					
∜ 9th pillar: Technological readiness	136	2.0 -	_	<del></del>		8th pi	ilları	6th					
್ಘೆ 10th pillar: Market size	96	3.1 -	_			Financial ma developr	Goo	6th pillar: Goods market efficiency					
Subindex C: Innovation and sophistication factors	135	2.7	_										
→ 11th pillar: Business sophistication	134	2.9	_			Vomon	Middlo	East and No	rth Africa				
** 12th pillar: Innovation	134	2.4 -			Yemen Middle East and North Africa								

### Most problematic factors for doing business





# Yemen

ndex Component	Rank/13	7 Value	Trend	Index Component	Rank/137	Value
â 1st pillar: Institutions	134	2.7	~	6th pillar: Goods market efficiency	132	3.4
.01 Property rights	132	3.0		6.01 Intensity of local competition	130	4.1
1.02 Intellectual property protection	135	2.5		6.02 Extent of market dominance	132	2.5
.03 Diversion of public funds	112	2.5	_	6.03 Effectiveness of anti-monopoly policy	136	2.2
.04 Public trust in politicians	115	2.0				3.0
			_	6.04 Effect of taxation on incentives to invest	111	
.05 Irregular payments and bribes	134	2.3	_	6.05 Total tax rate % profits	50	33.1
.06 Judicial independence	124	2.5		6.06 No. of procedures to start a business	53	6
07 Favoritism in decisions of government officials	117	2.2		6.07 Time to start a business days	125	40.5
08 Efficiency of government spending	116	2.4	_	6.08 Agricultural policy costs	121	3.0
.09 Burden of government regulation	94	3.1		6.09 Prevalence of non-tariff barriers	132	3.3
10 Efficiency of legal framework in settling disputes	123	2.6	_	6.10 Trade tariffs % duty	81	6.5
			=			
11 Efficiency of legal framework in challenging regulations	100	2.7	_	6.11 Prevalence of foreign ownership	137	2.2
.12 Transparency of government policymaking	135	2.5		6.12 Business impact of rules on FDI	134	2.9
.13 Business costs of terrorism	137	2.4	$\overline{}$	6.13 Burden of customs procedures	132	2.7
14 Business costs of crime and violence	127	2.9	$\overline{}$	6.14 Imports % GDP	122	21.2
15 Organized crime	128	3.3	_	6.15 Degree of customer orientation	131	3.5
16 Reliability of police services	133	2.4		6.16 Buyer sophistication	125	2.5
			=	0.10 Buyer sopriistication	123	2.5
17 Ethical behavior of firms	131	2.8		7th pillar: Labor market efficiency	136	3.0
18 Strength of auditing and reporting standards	136	2.6	_			
19 Efficacy of corporate boards	136	3.3	~	7.01 Cooperation in labor-employer relations	116	3.8
20 Protection of minority shareholders' interests	133	2.8	_	7.02 Flexibility of wage determination	76	4.8
21 Strength of investor protection 0-10 (best)	107	4.3	_~	7.03 Hiring and firing practices	122	3.0
	101	1.0		7.04 Redundancy costs weeks of salary	115	27.4
⁴ 2nd pillar: Infrastructure	135	1.8		7.05 Effect of taxation on incentives to work	98	3.5
•			_			
01 Quality of overall infrastructure	133	2.2	_	7.06 Pay and productivity	124	3.2
02 Quality of roads	132	2.3	_	7.07 Reliance on professional management	134	2.4
03 Quality of railroad infrastructure	n/a	not		7.08 Country capacity to retain talent	130	2.1
oo daaniy or ramoda iimadaadaa	11/4	assessed		7.09 Country capacity to attract talent	129	2.0
04 Quality of port infrastructure	121	2.6	$\overline{}$	7.10 Female participation in the labor force ratio to men	128	0.36
05 Quality of air transport infrastructure	136	2.1				
06 Available airline seat kilometers millions/week	138	0.1	1	8th pillar: Financial market development	136	2.2
07 Quality of electricity supply	137	1.2			134	0.6
			~	8.01 Availability of financial services		2.6
08 Mobile-cellular telephone subscriptions /100 pop.	129	67.2		8.02 Affordability of financial services	128	2.7
09 Fixed-telephone lines /100 pop.	102	4.6		8.03 Financing through local equity market	133	2.3
3rd pillar: Macroeconomic environment	130	2.8	~	8.04 Ease of access to loans	132	2.4
3rd pillar: Macroeconomic environment	130	2.0		8.05 Venture capital availability	132	1.8
01 Government budget balance % GDP	131	-13.5		8.06 Soundness of banks	131	2.9
02 Gross national savings % GDP	134	-4.1	$\sim$	8.07 Regulation of securities exchanges	137	2.2
03 Inflation annual % change	97	5.0				
04 Government debt % GDP	117	85.4		8.08 Legal rights index 0-10 (best)	137	0
			=	Oth piller, Technological readings	136	2.0
05 Country credit rating 0-100 (best)	135	11.7	_	9th pillar: Technological readiness		2.0
Ath piller, Heelth and primary education	118	4.7		9.01 Availability of latest technologies	137	2.7
4th pillar: Health and primary education	110			9.02 Firm-level technology absorption	135	2.9
01 Malaria incidence cases/100,000 pop.	48	1,081.8		9.03 FDI and technology transfer	136	2.2
02 Business impact of malaria	46	3.5		9.04 Internet users % pop.	112	24.6
03 Tuberculosis incidence cases/100,000 pop.	72	48.0	<b>~</b>			
	128	3.7	<u> </u>	9.05 Fixed-broadband Internet subscriptions /100 pop.	105	1.6
04 Business impact of tuberculosis				9.06 Internet bandwidth kb/s/user	120	5.5
05 HIV prevalence % adult pop.	1	<0.1	_	9.07 Mobile-broadband subscriptions /100 pop.	136	6.0
06 Business impact of HIV/AIDS	130	3.2		Λ <sub>λ</sub>		
07 Infant mortality deaths/1,000 live births	107	33.8	$\overline{}$	10th pillar: Market size	96	3.1
08 Life expectancy years	115	64.0	~	10.01 Domestic market size index	85	3.2
09 Quality of primary education	135	2.4		10.02 Foreign market size index	131	2.9
10 Primary education enrollment rate net %	121	84.8	~	· · ·		
10 1 mmary education efficient rate net %	121	04.0	~	10.03 GDP (PPP) PPP \$ billions	86	69.2
₹ 5th pillar: Higher education and training	136	2.2		10.04 Exports % GDP	138	4.1
				11th villey Business our bi-titi	124	2.9
01 Secondary education enrollment rate gross %	116	48.6		→ 11th pillar: Business sophistication	134	2.9
02 Tertiary education enrollment rate gross %	115	10.0	_	11.01 Local supplier quantity	75	4.5
03 Quality of the education system	133	2.3		11.02 Local supplier quality	136	2.7
24 Quality of math and science education	135		_	11.03 State of cluster development	129	2.9
·	136		~	·		
05 Quality of management schools			_	11.04 Nature of competitive advantage	119	2.6
06 Internet access in schools	137	1.6		11.05 Value chain breadth	131	2.7
D7 Local availability of specialized training services	136	2.7		11.06 Control of international distribution	132	2.6
08 Extent of staff training	135	2.8		11.07 Production process sophistication	133	2.4
Ţ.				11.08 Extent of marketing	131	3.6
				-		
				11.09 Willingness to delegate authority	136	2.7
				★ 12th pillar: Innovation	134	2.4
				12.01 Capacity for innovation	133	
						3.1
				12.02 Quality of scientific research institutions	136	2.1
				12.03 Company spending on R&D	127	2.6
				12.04 University-industry collaboration in R&D	134	2.3
				12.05 Gov't procurement of advanced technology products	125	2.6

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

125

119

2.6

## Zambia



The Global Competitiveness Index 2017-2018 edition



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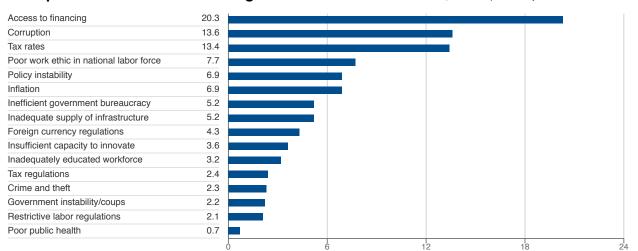
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2017)			
Population millions	16.7	GDP per capita US\$	1,274.8		
GDP US\$ billions	21.3	GDP (PPP) % world GDP	0.05		

#### **Performance overview**

Index Component	Rank/137	Score (1-7)	Trend	Distance from best	Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-1		
Global Competitiveness Index	118	3.5	_		Rank	102 / 144	93 / 148	96 / 144	96 / 140	118 / 138	118 / 13		
Subindex A: Basic requirements	118	3.6	~		Score	3.8	3.9	3.9	3.9	3.6	3.5		
🖮 1st pillar: Institutions	84	3.7	_										
↑↑ 2nd pillar: Infrastructure	124	2.4	_				1st pillar: Institutions						
	118	3.7	~~			12th pillar: Innovation  11th pillar: Business sophistication  10th pillar: Market size				nd pillar: frastructure			
3 4th pillar: Health and primary education	122	4.4	~						X	0.1.3			
Subindex B: Efficiency enhancers	116	3.5	~							3rd pillar: Macroeconomic environment			
⇒ 5th pillar: Higher education and training	121	2.9	~							445 = 111==			
	87	4.2	~							4th pillar: Health and preducation			
7th pillar: Labor market efficiency	100	3.9	_						$\mathcal{M}$				
8th pillar: Financial market development	94	3.7	_			9th pillar: Technological readiness			5th pillar: Higher educa and training	ation			
🕸 9th pillar: Technological readiness	116	2.9	_						Cth nill	· ·			
$\overset{\kappa_{\pi}}{\downarrow}$ 10th pillar: Market size	86	3.3				8th pillar: Financial market development 7th		7th pillar:	Goods	6th pillar: Goods market efficiency			
Subindex C: Innovation and sophistication factors	94	3.4	^				Labor marke efficiency	t					
ூ 11th pillar: Business sophistication	103	3.6	~			_	Zambia	Cub Ca	hovon Afri				
** 12th pillar: Innovation	92	3.2	_			•	Zambia	Sub-Sa	haran Afri	ua .			

### Most problematic factors for doing business





# The Global Competitiveness Index in detail

# Zambia

Index Component	Rank/137	Value	Trend	Inde	x Component	Rank/137	Value	Tre
â 1st pillar: Institutions	84	3.7		\$	6th pillar: Goods market efficiency	87	4.2	_
1.01 Property rights	66	4.4		6.0	1 Intensity of local competition	83	4.9	_
1.02 Intellectual property protection	76	4.0	_		2 Extent of market dominance	81	3.6	_
1.03 Diversion of public funds	92	3.1	_		3 Effectiveness of anti-monopoly policy	103	3.3	
1.04 Public trust in politicians	79	2.8	_		4 Effect of taxation on incentives to invest	73	3.5	_
1.05 Irregular payments and bribes	110	3.1	~		5 Total tax rate % profits	10	18.6	
1.06 Judicial independence	93	3.4			6 No. of procedures to start a business	71	7	_
1.07 Favoritism in decisions of government officials	91	2.7			7 Time to start a business days	50	8.5	$\neg$
1.08 Efficiency of government spending	68	3.3			8 Agricultural policy costs	70	3.7	_
1.09 Burden of government regulation	45	3.7			9 Prevalence of non-tariff barriers	89	4.2	_
· · ·	52	3.9	_		0 Trade tariffs % duty	112	10.8	_
1.10 Efficiency of legal framework in settling disputes			~		·			
1.11 Efficiency of legal framework in challenging regulations	102	2.7			1 Prevalence of foreign ownership	24	5.3	
1.12 Transparency of government policymaking	64	4.0	~		2 Business impact of rules on FDI	51	4.9	_
1.13 Business costs of terrorism	50	5.3	$\overline{}$		3 Burden of customs procedures	92	3.7	
1.14 Business costs of crime and violence	77	4.4			4 Imports % GDP	81	39.3	
1.15 Organized crime	78	4.7	_		5 Degree of customer orientation	97	4.2	
1.16 Reliability of police services	100	3.7	$\sim$	6.1	6 Buyer sophistication	111	2.8	
1.17 Ethical behavior of firms	80	3.7	$\overline{}$	25%	7th millery I abov market efficiency	100	3.9	_
1.18 Strength of auditing and reporting standards	121	3.7	_	ex.	7th pillar: Labor market efficiency			
1.19 Efficacy of corporate boards	87	4.6	$\overline{}$	7.0	Cooperation in labor-employer relations	98	4.0	_
1.20 Protection of minority shareholders' interests	72	4.0	_	7.0	2 Flexibility of wage determination	46	5.2	_
1.21 Strength of investor protection 0-10 (best)	79	5.3		7.0	3 Hiring and firing practices	55	3.9	
<u> </u>			_	7.0	4 Redundancy costs weeks of salary	132	50.6	_
4 2nd pillar: Infrastructure	124	2.4		7.0	5 Effect of taxation on incentives to work	82	3.7	_
2.01 Quality of overall infrastructure	107	3.2	_	7.0	6 Pay and productivity	92	3.6	_
2.02 Quality of roads	86	3.6	_		7 Reliance on professional management	78	4.0	_
2.03 Quality of railroad infrastructure	77	2.4			8 Country capacity to retain talent	79	3.3	_
2.04 Quality of port infrastructure	128	2.3	_		9 Country capacity to attract talent	58	3.5	_
2.05 Quality of air transport infrastructure	118	3.2	$\overline{}$		Female participation in the labor force ratio to men	47	0.87	_
2.06 Available airline seat kilometers millions/week	108		~	7.1	or emale participation in the labor force ratio to men	7,	0.07	
			~		8th pillar: Financial market development	94	3.7	
2.07 Quality of electricity supply	121	2.5	_		Availability of financial services	108	3.6	_
2.08 Mobile-cellular telephone subscriptions /100 pop.	124	74.9	~		2 Affordability of financial services	109	3.2	
2.09 Fixed-telephone lines /100 pop.	123	0.6			•			=
	118	3.7	~		Financing through local equity market	76	3.4	
•			_		4 Ease of access to loans	115	3.1	~
3.01 Government budget balance % GDP	114	-6.1	~~		5 Venture capital availability	122	2.2	
3.02 Gross national savings % GDP	17	32.9			6 Soundness of banks	105	4.1	
3.03 Inflation annual % change	133	17.9			7 Regulation of securities exchanges	81	4.1	=
3.04 Government debt % GDP	75	53.1	~~	8.0	8 Legal rights index 0-10 (best)	31	7	
3.05 Country credit rating 0-100 (best)	86	35.3		388	9th pillar: Technological readiness	116	2.9	_
	122	4.4	~		Availability of latest technologies	110	4.0	_
4.01 Malaria incidence cases/100,000 pop.	59 1	7,367.2	~		2 Firm-level technology absorption	113	3.9	_
4.02 Business impact of malaria	40	4.2			3 FDI and technology transfer	96	4.0	_
4.03 Tuberculosis incidence cases/100,000 pop.	131	391.0	_		4 Internet users % pop.	109	25.5	
4.04 Business impact of tuberculosis	122	3.9	$\overline{}$		5 Fixed-broadband Internet subscriptions /100 pop.	121	0.2	
								_
4.05 HIV prevalence % adult pop.	131	12.4	_		6 Internet bandwidth kb/s/user	125	3.9	_
4.06 Business impact of HIV/AIDS	118	3.8	_	9.0	7 Mobile-broadband subscriptions /100 pop.	103	32.2	-
4.07 Infant mortality deaths/1,000 live births	118	43.3	<u>~</u>	47	10th pillar: Market size	86	3.3	_
4.08 Life expectancy years	122	60.8						
4.09 Quality of primary education	97	3.4	$\sim$		01 Domestic market size index	87	3.1	_
4.10 Primary education enrollment rate net %	111	87.4	$\sim$		02 Foreign market size index	90	4.0	
⇒ 5th pillar: Higher education and training	121	2.9	$\sim$		03 GDP (PPP) PPP \$ billions	90	64.9	=
			_	10.0	04 Exports % GDP	74	31.4	
5.01 Secondary education enrollment rate gross %	128	37.0		8	11th pillar: Business sophistication	103	3.6	_
5.02 Tertiary education enrollment rate gross %	131	4.0						
5.03 Quality of the education system	62	3.8	$\overline{}$		01 Local supplier quantity	98	4.2	
5.04 Quality of math and science education	89	3.7	$\sim$		02 Local supplier quality	118	3.6	
5.05 Quality of management schools	96	3.8	$\sim$		03 State of cluster development	89	3.5	_
5.06 Internet access in schools	118	3.2	$\overline{}$	11.0	Nature of competitive advantage	103	3.0	
5.07 Local availability of specialized training services	61	4.4	_	11.0	05 Value chain breadth	113	3.3	
5.08 Extent of staff training	90		_	11.0	06 Control of international distribution	110	3.1	_
		0.7		11.0	07 Production process sophistication	112	3.1	_
					08 Extent of marketing	98	4.1	_
					09 Willingness to delegate authority	57	4.5	
					12th pillar: Innovation	92	3.2	
				12.	01 Capacity for innovation	90	3.8	
				12.	02 Quality of scientific research institutions	102	3.3	_
				12.0	03 Company spending on R&D	86	3.1	_
				4.0	or Hairmanita industria collaboration in DOD	0.4	0.0	_

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.04 University-industry collaboration in R&D

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

12.05 Gov't procurement of advanced technology products

3.3

3.5

3.8

55 77

# **Zimbabwe**

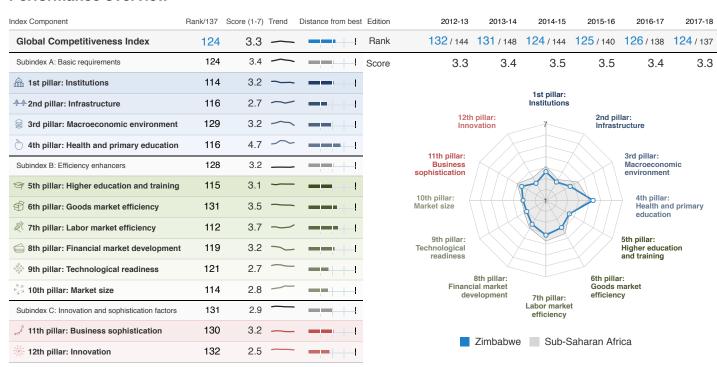


# The Global Competitiveness Index 2017-2018 edition



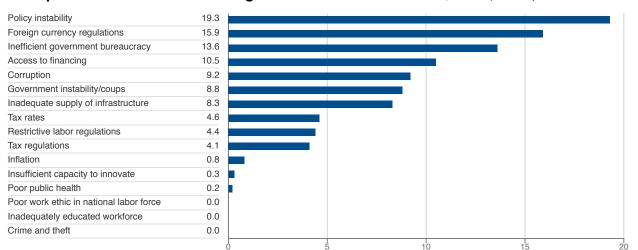
Key indicators, 2016		Source: International Monetary Fund; World Economic Outlook Database (April 2			
Population millions 14.5		GDP per capita US\$	977.4		
GDP US\$ billions	14.2	GDP (PPP) % world GDP	0.02		

#### Performance overview



# Most problematic factors for doing business





Note: From the list of factors, respondents to the World Economic Forum's Executive Opinion Survey were asked to select the five most problematic factors for doing business in their country and to rank them between 1 (most problematic) and 5. The score corresponds to the responses weighted according to their rankings.

# The Global Competitiveness Index in detail

# **Zimbabwe**

Index Component	Rank/137	' Value	e Trend	Index Component	Rank/137	Value	Trend
â 1st pillar: Institutions	114	3.2	~	<b>❸</b> 6th pillar: Goods market efficiency	131	3.5	_
1.01 Property rights	136	2.5	~~	6.01 Intensity of local competition	103	4.7	~
1.02 Intellectual property protection	110	3.4	~	6.02 Extent of market dominance	116	3.1	
1.03 Diversion of public funds	114	2.5	~	6.03 Effectiveness of anti-monopoly policy	87	3.4	$\sim$
1.04 Public trust in politicians	131	1.6	~	6.04 Effect of taxation on incentives to invest	119	2.9	_
1.05 Irregular payments and bribes	99	3.3	_	6.05 Total tax rate % profits	48	32.8	~
1.06 Judicial independence	109	3.0		6.06 No. of procedures to start a business	119	10	
1.07 Favoritism in decisions of government officials	133	1.9	~	6.07 Time to start a business days	135	91.0	
1.08 Efficiency of government spending	134	1.7	_	6.08 Agricultural policy costs	135	2.6	
1.09 Burden of government regulation	133	2.1	_	6.09 Prevalence of non-tariff barriers	102	4.0	$\overline{}$
1.10 Efficiency of legal framework in settling disputes	78	3.5		6.10 Trade tariffs % duty	131	14.7	~
1.11 Efficiency of legal framework in challenging regulations	121	2.5		6.11 Prevalence of foreign ownership	108	3.9	_
1.12 Transparency of government policymaking	118	3.2		6.12 Business impact of rules on FDI	137	2.3	_
1.13 Business costs of terrorism	3	6.3		6.13 Burden of customs procedures	129	2.9	_
1.14 Business costs of crime and violence	75	4.4	_	6.14 Imports % GDP	88	36.5	^
1.15 Organized crime	40	5.4		6.15 Degree of customer orientation	122	3.8	
	108		_	6.16 Buyer sophistication	120	2.6	
1.16 Reliability of police services				6.16 Buyer sopriistication	120	2.0	
1.17 Ethical behavior of firms	115	3.2		7th pillar: Labor market efficiency	112	3.7	_
1.18 Strength of auditing and reporting standards	51	4.9		7.01 Cooperation in labor-employer relations	110	3.9	_
1.19 Efficacy of corporate boards	70	4.8		7.02 Flexibility of wage determination	134	2.7	
1.20 Protection of minority shareholders' interests	65		_	7.02 Flexibility of wage determination 7.03 Hiring and firing practices	128	2.7	_
1.21 Strength of investor protection 0-10 (best)	88	5.2					_
◆◆ 2nd pillar: Infrastructure	116	2.7	~	7.04 Redundancy costs weeks of salary	105	25.3	
•				7.05 Effect of taxation on incentives to work	74	3.9	
2.01 Quality of overall infrastructure	115	2.9		7.06 Pay and productivity	122	3.2	~
2.02 Quality of roads	116	2.8		7.07 Reliance on professional management	41	4.6	_
2.03 Quality of railroad infrastructure	86	2.1		7.08 Country capacity to retain talent	124	2.5	_
2.04 Quality of port infrastructure	108	3.1		7.09 Country capacity to attract talent	125	2.2	_
2.05 Quality of air transport infrastructure	104	3.7	_	7.10 Female participation in the labor force ratio to men	35	0.89	
2.06 Available airline seat kilometers millions/week	121	24.0	/	8th pillar: Financial market development	119	3.2	
2.07 Quality of electricity supply	112	3.1	_				_
2.08 Mobile-cellular telephone subscriptions /100 pop.	116	83.2	~	8.01 Availability of financial services	116	3.5	
2.09 Fixed-telephone lines /100 pop.	110	2.0	_	8.02 Affordability of financial services	131	2.5	
8	100	2.0	_	8.03 Financing through local equity market	91	3.1	~
	129	3.2		8.04 Ease of access to loans	127	2.8	~
3.01 Government budget balance % GDP	127	-10.2		8.05 Venture capital availability	130	1.8	
3.02 Gross national savings % GDP	90	17.0	$\sim$	8.06 Soundness of banks	125	3.4	$\sim$
3.03 Inflation annual % change	96	-1.6	~	8.07 Regulation of securities exchanges	100	3.8	$\overline{}$
3.04 Government debt % GDP	108	75.3	$\setminus$	8.08 Legal rights index 0-10 (best)	70	5	
3.05 Country credit rating 0-100 (best)	136	6.8		% 9th pillar: Technological readiness	121	2.7	$\sim$
4th pillar: Health and primary education	116	4.7	~	9.01 Availability of latest technologies	114	3.9	_
4.01 Malaria incidence cases/100,000 pop.	51	6,766.2	~	9.02 Firm-level technology absorption	120	3.8	_
4.02 Business impact of malaria	23	5.2		9.03 FDI and technology transfer	133	2.9	$\sim$
4.03 Tuberculosis incidence cases/100,000 pop.	121	242.0		9.04 Internet users % pop.	114	23.1	~
4.04 Business impact of tuberculosis	97	4.9		9.05 Fixed-broadband Internet subscriptions /100 pop.	107	1.1	
	132				113	9.1	_
4.05 HIV prevalence % adult pop.	108			9.06 Internet bandwidth kb/s/user	97		
4.06 Business impact of HIV/AIDS				9.07 Mobile-broadband subscriptions /100 pop.	97	38.1	
4.07 Infant mortality deaths/1,000 live births	121		<u>~</u>	្មែរ 10th pillar: Market size	114	2.8	_
4.08 Life expectancy years	127	59.2	_	10.01 Domestic market size index	111	2.6	_
4.09 Quality of primary education	59	4.2	_	10.02 Foreign market size index	118	3.3	_
4.10 Primary education enrollment rate net %	116	85.9	~ <	10.03 GDP (PPP) PPP \$ billions		28.6	
⇒ 5th pillar: Higher education and training	115	3.1		10.03 GDP (PPP) PPP \$ billions 10.04 Exports % GDP	113 98	22.4	~
5.01 Secondary education enrollment rate gross %	117	47.6	_				
5.02 Tertiary education enrollment rate gross %	119	8.4		್ಯಾನಿ 11th pillar: Business sophistication	130	3.2	_
5.03 Quality of the education system	51	4.0		11.01 Local supplier quantity	132	3.5	~
5.04 Quality of math and science education	68	4.1		11.02 Local supplier quality	127	3.4	~
5.05 Quality of management schools	99	3.8		11.03 State of cluster development	135	2.6	$\sim$
5.05 Quality of management schools 5.06 Internet access in schools	121	3.2		11.04 Nature of competitive advantage	129	2.4	_
5.07 Local availability of specialized training services				11.05 Value chain breadth	129	2.7	_
	91		=	11.06 Control of international distribution	135	2.4	~
5.08 Extent of staff training	89	3.7	_	11.07 Production process sophistication	126	2.7	_
				11.08 Extent of marketing	120	3.8	
				-			
				11.09 Willingness to delegate authority	62	4.4	
				** 12th pillar: Innovation	132	2.5	
				12.01 Capacity for innovation	131	3.2	_
				12.02 Quality of scientific research institutions	109	3.1	_
				12.03 Company spending on R&D	131	2.5	_
				12.04 University-industry collaboration in R&D	131	2.5	_
				12.05 Gov't procurement of advanced technology products	136	2.0	

Note: Values are on a 1-to-7 scale unless indicated otherwise. Trend lines depict evolution in values since the 2012-2013 edition (or earliest edition available). For detailed definitions, sources, and periods, consult the interactive Economy Profiles and Rankings at http://gcr.weforum.org/

12.05 Gov't procurement of advanced technology products

12.06 Availability of scientists and engineers

12.07 PCT patents applications/million pop.

136

121

2.0

3.1

#### **APPENDIX A**

# Methodology and Computation of the **Global Competitiveness** Index 2017-2018

This appendix presents a short description of each pillar of the Global Competitiveness Index 2017–2018 (GCI) and of the application of the concept of stages of development to weight the Index. The appendix also presents the detailed structure of the GCI and explains how the Index is computed.

#### THE TWELVE PILLARS OF COMPETITIVENESS

We define competitiveness as the set of institutions. policies, and factors that determine the level of productivity of a country. The level of productivity, in turn, sets the level of prosperity that can be reached by an economy. The productivity level also determines the rates of return obtained by investments in an economy, which in turn are the fundamental drivers of its growth rates. In other words, a more competitive economy is one that is likely to grow faster over time.

This open-endedness is captured within the GCI by including a weighted average of many different components, each measuring a different aspect of competitiveness. The components are grouped into 12 categories, the pillars of competitiveness:

#### 1st pillar: Institutions

The institutional environment of a country depends on the efficiency and the behavior of both public and private stakeholders. The legal and administrative framework within which individuals, firms, and governments interact determines the quality of the public institutions of a country and has a strong bearing on competitiveness and growth. It influences investment decisions and the organization of production and plays a key role in the ways in which societies distribute the benefits and bear the costs of development strategies and policies. Good private institutions are also important for the sound and sustainable development of an economy. The 2007-08 global financial crisis, along with numerous corporate scandals, has highlighted the relevance of accounting and reporting standards and transparency for preventing fraud and mismanagement, ensuring good governance, and maintaining investor and consumer confidence.

# 2nd pillar: Infrastructure

Extensive and efficient infrastructure is critical for ensuring the effective functioning of the economy. Effective modes of transport—including high-quality roads, railroads, ports, and air transport—enable entrepreneurs to get their goods and services to market in a secure and timely manner and facilitate the movement of workers to the most suitable jobs. Economies also depend on electricity supplies that are free from interruptions and shortages so that businesses and factories can work unimpeded. Finally, a solid and extensive telecommunications network allows for a rapid and free flow of information, which increases overall economic efficiency by helping to ensure that

businesses can communicate and decisions are made by economic actors taking into account all available relevant information.

#### 3rd pillar: Macroeconomic environment

The stability of the macroeconomic environment is important for business and, therefore, is significant for the overall competitiveness of a country. Although it is certainly true that macroeconomic stability alone cannot increase the productivity of a nation, it is also recognized that macroeconomic disarray harms the economy, as we have seen in recent years, conspicuously in the European context. The government cannot provide services efficiently if it has to make high-interest payments on its past debts. Running fiscal deficits limits the government's future ability to react to business cycles. Firms cannot operate efficiently when inflation rates are out of hand. In sum, the economy cannot grow in a sustainable manner unless the macro environment is stable.

### 4th pillar: Health and primary education

A healthy workforce is vital to a country's competitiveness and productivity. Workers who are ill cannot function to their potential and will be less productive. Poor health leads to significant costs to business, as sick workers are often absent or operate at lower levels of efficiency. Investment in the provision of health services is thus critical for clear economic, as well as moral, considerations. In addition to health, this pillar takes into account the quantity and quality of the basic education received by the population, which is fundamental in today's economy. Basic education increases the efficiency of each individual worker.

### 5th pillar: Higher education and training

Quality higher education and training is crucial for economies that want to move up the value chain beyond simple production processes and products. In particular, today's globalizing economy requires countries to nurture pools of well-educated workers who are able to perform complex tasks and adapt rapidly to their changing environment and the evolving needs of the production system. This pillar measures secondary and tertiary enrollment rates as well as the quality of education as evaluated by business leaders. The extent of staff training is also taken into consideration because of the importance of vocational and continuous on-the-job training—which is neglected in many economies—for ensuring a constant upgrading of workers' skills.

### 6th pillar: Goods market efficiency

Countries with efficient goods markets are well positioned to produce the right mix of products and services given their particular supply-and-demand conditions, as well as to ensure that these goods can be most effectively traded in the economy. Healthy market competition, both domestic and foreign, is important in driving market efficiency, and thus business productivity, by ensuring that the most efficient firms, producing goods demanded by the market, are those that thrive. Market efficiency also depends on demand conditions such as customer orientation and buyer sophistication. For cultural or historical reasons, customers may be more demanding in some countries than in others. This can create an important competitive advantage, as it forces companies to be more innovative and customeroriented and thus imposes the discipline necessary for efficiency to be achieved in the market.

#### 7th pillar: Labor market efficiency

The efficiency and flexibility of the labor market are critical for ensuring that workers are allocated to their most effective use in the economy and provided with incentives to give their best effort in their jobs. Labor markets must therefore have the flexibility to shift workers from one economic activity to another rapidly and at low cost, and to allow for wage fluctuations without much social disruption. Efficient labor markets must also ensure clear strong incentives for employees and promote meritocracy at the workplace, and they must provide equity in the business environment between women and men. Taken together these factors have a positive effect on worker performance and the attractiveness of the country for talent, two aspects of the labor market that are growing more important as talent shortages loom on the horizon.

#### 8th pillar: Financial market development

An efficient financial sector allocates the resources saved by a nation's population, as well as those entering the economy from abroad, to the entrepreneurial or investment projects with the highest expected rates of return rather than to the politically connected. Business investment is critical to productivity. Therefore economies require sophisticated financial markets that can make capital available for private-sector investment from such sources as loans from a sound banking sector, well-regulated securities exchanges, venture capital, and other financial products. In order to fulfill all those functions, the banking sector needs to be trustworthy and transparent, and—as has been made so clear recently—financial markets need appropriate regulation to protect investors and other actors in the economy at large.

#### 9th pillar: Technological readiness

The technological readiness pillar measures the agility with which an economy adopts existing technologies to enhance the productivity of its industries, with specific emphasis on its capacity to fully leverage information and communication technologies (ICTs) in daily activities and production processes for increased efficiency and enabling innovation for competitiveness. Whether the technology used has or has not been developed within national borders is irrelevant for its ability to enhance productivity. The central point is that the firms operating in the country need to have access to advanced products and blueprints and the ability to absorb and use them. Among the main sources of foreign technology, foreign direct investment (FDI) often plays a key role, especially for countries at a less advanced stage of technological development.

#### 10th pillar: Market size

The size of the market affects productivity since large markets allow firms to exploit economies of scale. Traditionally, the markets available to firms have been constrained by national borders. In the era of globalization, international markets have become a substitute for domestic markets, especially for small countries. Thus exports can be thought of as a substitute for domestic demand in determining the size of the market for the firms of a country. By including both domestic and foreign markets in our measure of market size, we give credit to export-driven economies and geographic areas (such as the European Union) that are divided into many countries but have a single common market.

# 11th pillar: Business sophistication

Business sophistication concerns two elements that are intricately linked: the quality of a country's overall business networks and the quality of individual firms' operations and strategies. These factors are especially important for countries at an advanced stage of development when, to a large extent, the more basic sources of productivity improvements have been exhausted. The quality of a country's business networks and supporting industries, as measured by the quantity and quality of local suppliers and the extent of their interaction, is important for a variety of reasons. When companies and suppliers from a particular sector are interconnected in geographically proximate groups, called *clusters*, efficiency is heightened, greater opportunities for innovation in processes and products are created, and barriers to entry for new firms are reduced.

# 12th pillar: Innovation

The last pillar focuses on innovation. Innovation is particularly important for economies as they approach the frontiers of knowledge, and the possibility of generating more value by merely integrating and adapting exogenous technologies tends to disappear. In these economies, firms must design and develop cutting-edge products and processes to maintain a competitive edge and move toward even higher value-added activities. This progression requires an

environment that is conducive to innovative activity and supported by both the public and the private sectors. In particular, it means sufficient investment in research and development (R&D), especially by the private sector; the presence of high-quality scientific research institutions that can generate the basic knowledge needed to build the new technologies; extensive collaboration in research and technological developments between universities and industry; and the protection of intellectual property.

#### The interrelation of the 12 pillars

Although we report the results of the 12 pillars of competitiveness separately, it is important to keep in mind that they are not independent: they tend to reinforce each other, and a weakness in one area often has a negative impact in others. The detailed structure and methodology used to compute the GCI are presented at the end of this appendix.

# STAGES OF DEVELOPMENT AND THE WEIGHTED INDEX

Although all of the pillars described above will matter to a certain extent for all economies, it is clear that they affect different economies in different ways.

In line with well-known economic theory of stages of development, the GCI assumes that, in the first stage, the economy is factor-driven and countries compete based on their factor endowments—primarily unskilled labor and natural resources.<sup>a</sup> Maintaining competitiveness at this stage of development hinges primarily on well-functioning public and private institutions (1st pillar), a well-developed infrastructure (2nd pillar), a stable macroeconomic environment (3rd pillar), and a healthy workforce that has received at least a basic education (4th pillar).

As a country becomes more competitive, productivity will increase and wages will rise with advancing development. Countries will then move into the efficiency-driven stage of development, when they must begin to develop more-efficient production processes and increase product quality because wages have risen and they cannot increase prices. At this point, competitiveness is increasingly driven by higher education and training (5th pillar), efficient goods markets (6th pillar), well-functioning labor markets (7th pillar), developed financial markets (8th pillar), the ability to harness the benefits of existing technologies (9th pillar), and a large domestic or foreign market (10th pillar).

Finally, as countries move into the innovation-driven stage, wages will have risen by so much that they are able to sustain those higher wages and the associated standard of living only if their businesses are able to compete using the most sophisticated production processes (11th pillar) and by innovating new ones (12th pillar).

Table 1: Subindex weights and income thresholds for stages of development

		STAGE OF DEVELOPMENT							
	Stage 1: Factor-driven	Transition from stage 1 to stage 2	Stage 2: Efficiency-driven	Transition from stage 2 to stage 3	Stage 3: Innovation-driven				
GDP per capita (US\$) thresholds*	<2,000	2,000-2,999	3,000-8,999	9,000-17,000	>17,000				
Weight for basic requirements	60%	40-60%	40%	20-40%	20%				
Weight for efficiency enhancers	35%	35-50%	50%	50%	50%				
Weight for innovation and sophistication factors	5%	5-10%	10%	10-30%	30%				

Note: See individual economy profiles for exact applied weights.

Table 2: Classification by each stage of development

Stage 1: Factor-driven (35 economies)	Transition from stage 1 to stage 2* (15 economies)	Stage 2: Efficiency-driven (31 economies)	Transition from stage 2 to stage 3* (20 economies)	Stage 3: Innovation-driven (36 economies)
Bangladesh	Algeria (58.2, 36.4, 5.5)	Albania	Argentina (31.2, 50, 18.8)	Australia
Benin	Azerbaijan (54.5, 39.1, 6.4)	Armenia	Chile (28.6, 50, 21.4)	Austria
Burundi	Bhutan (46.5, 45.1, 8.4)	Bosnia and Herzegovina	Costa Rica (32.9, 50, 17.1)	Bahrain
Cambodia	Botswana (53.8, 39.7, 6.6)	Brazil	Croatia (32.3, 50, 17.7)	Belgium
Cameroon	Brunei Darussalam (50.2, 42.3, 7.4)	Bulgaria	Hungary (30.6, 50, 19.4)	Canada
Chad	Honduras (47.8, 44.1, 8)	Cape Verde	Latvia (27.3, 50, 22.7)	Cyprus
Congo, Democratic Rep.	Kazakhstan (43.4, 47.4, 9.1)	China	Lebanon (34.2, 50, 15.8)	Czech Republic
Ethiopia	Kuwait (49.9, 42.6, 7.5)	Colombia	Lithuania (25.3, 50, 24.7)	Denmark
Gambia, The	Mongolia (47.3, 44.5, 8.2)	Dominican Republic	Malaysia (39.1, 50, 10.9)	Estonia
Ghana	Nicaragua (57.6, 36.8, 5.6)	Ecuador	Mauritius (38.9, 50, 11.1)	Finland
Guinea	Nigeria (58.5, 36.1, 5.4)	Egypt	Oman (27.2, 50, 22.8)	France
Haiti	Philippines (41.5, 48.9, 9.6)	El Salvador	Panama (28.4, 50, 21.6)	Germany
India	Ukraine (56.1, 37.9, 6)	Georgia	Poland (31.7, 50, 18.3)	Greece
Kenya	Venezuela (55.5, 38.4, 6.1)	Guatemala	Romania (38.8, 50, 11.2)	Hong Kong SAR
Kyrgyz Republic	Vietnam (56.5, 37.6, 5.9)	Indonesia	Saudi Arabia (36.7, 50, 13.3)	Iceland
Lao PDR		Iran, Islamic Rep.	Seychelles (25.2, 50, 24.8)	Ireland
Lesotho		Jamaica	Slovak Republic (21.3, 50, 28.7)	Israel
Liberia		Jordan	Trinidad and Tobago (24.1, 50, 25.9)	Italy
Madagascar		Mexico	Turkey (35.6, 50, 14.4)	Japan
Malawi		Montenegro	Uruguay (23.3, 50, 26.7)	Korea, Rep.
Mali		Morocco		Luxembourg
Mauritania		Namibia		Malta
Moldova		Paraguay		Netherlands
Mozambique		Peru		New Zealand
Nepal		Russian Federation		Norway
Pakistan		Serbia		Portugal
Rwanda		South Africa		Qatar
Senegal		Sri Lanka		Singapore
Sierra Leone		Swaziland		Slovenia
Tajikistan		Thailand		Spain
Tanzania		Tunisia		Sweden
Uganda				Switzerland
Yemen				Taiwan, China
Zambia				United Arab Emirates
Zimbabwe				United Kingdom
				United States

<sup>\*</sup> For economies in transition, the weights (%) applied to the Basic requirements subindex, Efficiency enhancers subindex, and the Innovation and sophistication factors subindex are reported in parentheses.

<sup>\*</sup> For economies with a high dependency on mineral resources, GDP per capita is not the sole criterion for the determination of the stage of development. See text for details.

The GCI takes the stages of development into account by attributing higher relative weights to those pillars that are more relevant for an economy given its particular stage of development. To implement this concept, the pillars are organized into three subindexes, each critical to a particular stage of development.

The basic requirements subindex groups those pillars most critical for countries in the factor-driven stage. The efficiency enhancers subindex includes those pillars critical for countries in the efficiency-driven stage. And the innovation and sophistication factors subindex includes the pillars critical to countries in the innovationdriven stage.

The weights attributed to each subindex in every stage of development are shown in Table 1.

Two criteria are used to allocate countries into stages of development. The first is the level of GDP per capita at market exchange rates. The thresholds used are also reported in Table 1. A second criterion is used to adjust for countries that, based on income, would have moved beyond stage 1, but where prosperity is based on the extraction of resources. This is measured by the share of exports of mineral goods in total exports (goods and services), and assumes that countries with more than 70 percent of their exports made up of mineral products (measured using a five-year average) are to a large extent factor driven.b Countries that are resource driven and significantly wealthier than economies at the technological frontier are classified in the innovationdriven stage.<sup>c</sup> Any countries falling between two of the three stages are considered to be "in transition." For these countries, the weights change smoothly as a country develops, reflecting the smooth transition from one stage of development to another. The classification of countries into stages of development is shown in Table 2.

# STRUCTURE AND COMPUTATION OF THE INDEX

The computation of the GCI is based on successive aggregations of scores from the indicator level (i.e., the most disaggregated level) all the way up to the overall GCI score. Unless noted otherwise, we use an arithmetic mean to aggregate individual indicators within a category.d For the higher aggregation levels, we use the percentage shown next to each category. This percentage represents the category's weight within its immediate parent category. Reported percentages are rounded to the nearest integer, but exact figures are used in the calculation of the GCI. For example, the score a country achieves in the 11th pillar accounts for 50 percent of this country's score in the innovation and sophistication factors subindex, irrespective of the country's stage of development. Similarly, the score achieved on the subpillar transport infrastructure accounts for 50 percent of the score of the infrastructure pillar.

Unlike the case for the lower levels of aggregation, the weight put on each of the three subindexes (basic requirements, efficiency enhancers, and innovation and sophistication factors) is not fixed. Instead, it depends on each country's stage of development, as discussed in the chapter.e For instance, in the case of Burundi-a country in the first stage of development—the score in the basic requirements subindex accounts for 60 percent of its overall GCI score, while it represents just 20 percent of the overall GCI score of Sweden, a country in the third stage of development. For countries in transition between stages, the weighting applied to each subindex is reported in Table 2 above. For instance, in the case of Turkey, currently in transition from stage 2 to stage 3, the weight on each subindex is 35.6 percent, 50 percent, and 14.4 percent, respectively.

Indicators that are not derived from the Executive Opinion Survey are identified by an asterisk (\*) in the following list. Appendix D, Technical Notes and Sources, provides detailed information about each of these indicators. To make the aggregation possible, the indicators are converted to a 1-to-7 scale in order to align them with the Survey results. We apply a min-max transformation, which preserves the order of, and the relative distance between, country scores.f

Indicators that are followed by the designation "1/2" enter the GCI in two different pillars. In order to avoid double counting, we assign a half-weight to each instance.g

Weight (%) within immediate parent category

4.06 HIV prevalence\* j

Immediate parent category	4.07 Infant mortality*
BASIC REQUIREMENTS20-60%	4.08 Life expectancy*
	B. Primary education50%
1st pillar: Institutions25%	4.09 Quality of primary education
A. Public institutions75%	4.10 Primary education enrollment rate*
1. Property rights20%	
<ul> <li>1.01 Property rights</li> <li>1.02 Intellectual property protection ½</li> </ul>	EFFICIENCY ENHANCERS35–50%
2. Ethics and corruption	Eth niller: Higher education and training 170/
1.03 Diversion of public funds	5th pillar: Higher education and training17%
1.04 Public trust in politicians	A. Quantity of education
1.05 Irregular payments and bribes	5.01 Secondary education enrollment rate*
3. Undue influence20%	5.02 Tertiary education enrollment rate*
1.06 Judicial independence	B. Quality of education
1.07 Favoritism in decisions of government officials	<ul><li>5.03 Quality of the educational system</li><li>5.04 Quality of math and science education</li></ul>
4. Public-sector performance20%	5.05 Quality of management schools
1.08 Wastefulness of government spending	5.06 Internet access in schools
1.09 Burden of government regulation	C. On-the-job training33%
1.10 Efficiency of legal framework in settling disputes	5.07 Local availability of specialized research and training
1.11 Efficiency of legal framework in challenging regulations	services
1.12 Transparency of government policymaking	5.08 Extent of staff training
5. Security20%	
1.13 Business costs of terrorism	6th pillar: Goods market efficiency17%
1.14 Business costs of crime and violence	A. Competition67%
1.15 Organized crime	1. Domestic competitionvariable <sup>k</sup>
1.16 Reliability of police services	6.01 Intensity of local competition
B. Private institutions25%	6.02 Extent of market dominance
1. Corporate ethics50%	6.03 Effectiveness of anti-monopoly policy
1.17 Ethical behavior of firms	6.04 Effect of taxation on incentives to invest
2. Accountability50%	6.05 Total tax rate*
1.18 Strength of auditing and reporting standards	6.06 Number of procedures required to start a business*
1.19 Efficacy of corporate boards	6.07 Time required to start a business*1
<ul><li>1.20 Protection of minority shareholders' interests</li><li>1.21 Strength of investor protection*</li></ul>	6.08 Agricultural policy costs
1.21 Strength of investor protection*	2. Foreign competition
2nd pillar: Infrastructure25%	6.09 Prevalence of trade barriers 6.10 Trade tariffs*
A. Transport infrastructure50%	6.11 Prevalence of foreign ownership
2.01 Quality of overall infrastructure	6.12 Business impact of rules on FDI
2.02 Quality of roads	6.13 Burden of customs procedures
2.03 Quality of railroad infrastructure <sup>h</sup>	6.14 Imports as a percentage of GDP* m
2.04 Quality of port infrastructure	B. Quality of demand conditions33%
2.05 Quality of air transport infrastructure	6.15 Degree of customer orientation
2.06 Available airline seat kilometers*	6.16 Buyer sophistication
B. Electricity and telephony infrastructure50%	
2.07 Quality of electricity supply	7th pillar: Labor market efficiency17%
2.08 Mobile telephone subscriptions* ½	A. Flexibility50%
2.09 Fixed telephone lines* 1/2	7.01 Cooperation in labor-employer relations
3rd pillar: Macroeconomic environment25%	7.02 Flexibility of wage determination
3.01 Government budget balance*	7.03 Hiring and firing practices
3.02 Gross national savings*	7.04 Redundancy costs*
3.03 Inflation*i	7.05 Effect of taxation on incentives to work
3.04 Government debt*	B. Efficient use of talent50%
3.05 Country credit rating*	7.06 Pay and productivity
40. 90. 11. 00. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	7.07 Reliance on professional management <sup>½</sup> 7.08 Country capacity to retain talent
4th pillar: Health and primary education25%	7.09 Country capacity to retain talent 7.09 Country capacity to attract talent
A. Health	7.10 Female participation in labor force*
4.01 Business impact of malaria	
4.02 Malaria incidence* <sup>†</sup>	
4.03 Business impact of tuberculosis	
4.04 Tuberculosis incidence* J	
4.05 Business impact of HIV/AIDS <sup>I</sup>	

8th pillar: F	Financial market development	17%
A. Efficiency		.50%
8.01	Financial services meeting business needs	
	Affordability of financial services	
	Financing through local equity market	
	Ease of access to loans	
8.05	Venture capital availability	
	iness and confidence	.50%
	Soundness of banks	
	Regulation of securities exchanges	
8.08	Legal rights index*	
9th pillar: T	echnological readiness	17%
A. Technologic	cal adoption	.50%
_	Availability of latest technologies	
9.02	Firm-level technology absorption	
9.03	FDI and technology transfer	
B. ICT use		.50%
9.04	Internet users*	
9.05	Broadband Internet subscriptions*	
9.06	Internet bandwidth*	
9.07	Mobile broadband subscriptions*	
2.08	Mobile telephone subscriptions <sup>⋆½</sup>	
2.09	Fixed telephone lines* 1/2	
10th pillar:	Market size	17%
A. Domestic n	narket size	.75%
	Domestic market size index* n	
B. Foreign ma	arket size	.25%
	Foreign market size index*0	
INNOVATIO	N AND SOPHISTICATION FACTORS5-	30% <sup>e</sup>
•	Business sophistication	50%
	Local supplier quantity	
	Local supplier quality	
	State of cluster development	
	Nature of competitive advantage	
11.05 11.06	Value chain breadth Control of international distribution	
11.00		
	Extent of marketing	
11.09	Willingness to delegate authority	
7.07	Reliance on professional management <sup>1/2</sup>	
1046: !!!	DOD Innovetion	<b>50</b> 0/
-	R&D Innovation	50%
12.01		
12.02 12.03	Quality of scientific research institutions Company spending on R&D	
12.03	University-industry collaboration in R&D	
12.04	Government procurement of advanced technology produced technology	urte
12.05	Availability of scientists and engineers	uoto
12.07		
1.02	Intellectual property protection ½	
	• • •	

#### **NOTES**

a See Chapter 1.1 of The Global Competitiveness Report 2007-2008 for a complete description of how we have adapted Michael Porter's theory for the present application.

b In order to capture the resource intensity of the economy, we use as a proxy the exports of mineral products as a share of overall exports according to the sector classification developed by the International Trade Centre in their Trade Performance Index. In addition to crude oil and gas, this category also contains all metal ores and other minerals as well as petroleum products, liquefied gas, coal, and precious stones. The data used cover the years 2012 through 2016. Further information on these data can be found at http://www.intracen.org/itc/market-info-tools/tradestatistics/

All countries with more than 70 percent of their exports made up of mineral products are considered to be to some extent factor driven. The stage of development for these countries is adjusted downward smoothly depending on the exact primary export share. The higher the minerals export share, the stronger the adjustment and the closer the country will move to stage 1. For example, a country that exports 95 percent of mineral exports and that, based on the income criteria, would be in stage 3 will be in transition between stages 1 and 2. The income and primary exports criteria are weighted identically. Stages of development are dictated solely by income for countries that export less than 70 percent minerals. Countries that export only primary products would automatically fall into the factor-driven stage (stage 1).

- c In practice, this applies to countries where the GDP per capita at current market prices has, for the past five years, been above an average of that of economies at the technology frontier. Countries at the technology frontier are the 10 countries with the highest number of Patent Cooperation Treaty patent applications per
- d Formally, for a category *i* composed of *K* indicators, we have:

$$category_i = \frac{\sum_{k=1}^{K} indicator_k}{K}$$

- e As described above, the weights are as specified in Table 1 of this appendix. Refer to individual country/economy profiles at the end of this Report for the exact weights used in the computation of each economy's GCI score.
- f Formally, we have:

6 x 
$$\left(\frac{\text{country score - sample minimum}}{\text{sample maximum - sample minimum}}\right)$$
 + 1

The sample minimum and sample maximum are, respectively, the lowest and highest country scores in the sample of economies covered by the GCI. In some instances, adjustments were made to account for extreme outliers. For those indicators for which a higher value indicates a worse outcome (e.g., disease incidence, government debt), the transformation formula takes the following form, thus ensuring that 1 and 7 still correspond to the worst and best possible outcomes, respectively:

$$-6 \times \left(\frac{\text{country score - sample minimum}}{\text{sample maximum - sample minimum}}\right) + 7$$

g For those categories that contain one or several half-weight indicators, country scores are computed as follows:

(sum of scores on full-weight variables) +  $\frac{1}{2}$  × (sum of scores on half-weight variables) (count of full-weight variables) +  $\frac{1}{2}$  × (count of half-weight variables)

- h "N/Appl." is used for economies where there is no regular train service or where the network covers only a negligible portion of the territory. Assessment of the existence of a network was conducted by the World Economic Forum based on various
- i In order to capture the idea that both high inflation and deflation are detrimental, inflation enters the model in a U-shaped manner as follows: for values of inflation between 0.5 and 2.9 percent. a country receives the highest possible score of 7. Outside this range, scores decrease linearly as they move away from these

- j The impact of malaria, tuberculosis, and HIV/AIDS on competitiveness depends not only on their respective incidence rates but also on how costly they are for business. Therefore, in order to estimate the impact of each of the three diseases, we combine its incidence rate with the Survey question on its perceived cost to businesses. To combine these data we first take the ratio of each country's disease incidence rate relative to the highest incidence rate in the whole sample. The inverse of this ratio is then multiplied by each country's score on the related Survey question. This product is then normalized to a 1-to-7 scale. Note that countries with zero reported incidence receive a 7, regardless of their scores on the related Survey question. In the case of malaria, countries receive a 7 if the World Health Organization (WHO) has classified them as malaria-free countries or included them in the supplementary list of areas where malaria has never existed or has disappeared without specific measures.
- k The competition subpillar is the weighted average of two components: domestic competition and foreign competition. In both components, the included indicators provide an indication of the extent to which competition is distorted. The relative importance of these distortions depends on the relative size of domestic versus foreign competition. This interaction between the domestic market and the foreign market is captured by the way we determine the weights of the two components. Domestic competition is the sum of consumption (C), investment (I), government spending (G), and exports (X), while foreign competition is equal to imports (M). Thus we assign a weight of (C + I + G + X)/(C + I + G + X + M) to domestic competition and a weight of M/(C + I + G + X + M) to foreign competition.
- I Indicators 6.06 and 6.07 combine to form one single indicator.
- m For indicator 6.14, imports as a percentage of GDP, we first apply a log-transformation and then a min-max transformation.
- n The size of the domestic market is constructed by taking the natural log of the sum of the gross domestic product valued at purchased power parity (PPP) (indicator 10.03) plus the total value (PPP estimates) of imports of goods and services (indicator 6.14), minus the total value (PPP estimates) of exports of goods and services (indicator 10.04). Data are then normalized on a 1-to-7 scale. PPP estimates of imports and exports are obtained by taking the product of exports as a percentage of GDP and GDP valued at PPP.
- The size of the foreign market is estimated as the natural log of the total value (PPP estimates) of exports of goods and services, normalized on a 1-to-7 scale. PPP estimates of exports are obtained by taking the product of exports as a percentage of GDP (indicator 10.04) and GDP valued at PPP (10.03).

# **APPENDIX B**

# Global Competitiveness Index 2017-2018 Rankings

The following pages report the GCI 2017–2018 rankings for the three subindexes (Table 1) and their corresponding pillars (Tables 2-4). Detailed scorecards for all the economies are available at the end of the Report. Enhanced scorecards and sortable rankings for every component of the GCI are available at http:// gcr.weforum.org/.

Table 1: The Global Competitiveness Index 2017–2018

					SUBIN	DEXES			
	OVERALI	_ INDEX	Basic requ	uirements	Efficiency	enhancers	Innovation and so	phistication factors	
Economy	Rank	Score	Rank	Score	Rank	Score	Rank	Score	
Switzerland	1	5.86	1	6.39	3	5.65	1	5.86	
United States	2	5.85	25	5.54	1	6.01	2	5.80	
Singapore	3	5.71	2	6.34	2	5.72	12	5.25	
Netherlands	4	5.66	4	6.24	8	5.46	4	5.62	
Germany	5	5.65	11	5.97	6	5.53	3	5.65	
Hong Kong SAR	6	5.53	3	6.26	4	5.58	18	4.96	
Sweden	7	5.52	8	6.00	12	5.30	5	5.57	
United Kingdom	8	5.51	23	5.65	5	5.55	9	5.34	
Japan	9	5.49	21	5.66	10	5.39	6	5.55	
Finland	10	5.49	9	5.98	11	5.30	8	5.48	
Norway	11	5.40	6	6.02	14	5.29	13	5.19	
Denmark	12	5.39	13	5.90	15	5.26	11	5.28	
New Zealand	13	5.37	5	6.05	9	5.43	25	4.81	
Canada	14	5.35	17	5.72	7	5.52	24	4.82	
Taiwan, China	15	5.33	15	5.84	16	5.25	15	5.12	
Israel	16	5.31	28	5.48	19	5.12	7	5.53	
United Arab Emirates	17	5.30	7	6.02	17	5.23	20	4.93	
Austria	18	5.25	19	5.70	22	5.03	10	5.30	
Luxembourg	19	5.23	10	5.98	23	5.01	16	5.11	
Belgium	20	5.23	27	5.48	18	5.15	14	5.18	
Australia	21	5.19	18	5.70	13	5.29	27	4.68	
France	22	5.18	26	5.54	20	5.10	17	5.07	
Malaysia	23	5.17	24	5.55	24	4.94	21	4.91	
Ireland	24	5.16	20	5.68	21	5.09	19	4.93	
Qatar	25	5.11	12	5.91	25	4.94	22	4.85	
Korea, Rep.	26	5.07	16	5.77	26	4.93	23	4.85	
China	27	5.00	31	5.32	28	4.88	29	4.33	
Iceland	28	4.99	14	5.88	32	4.77	26	4.77	
Estonia	29	4.85	22	5.66	27	4.92	35	4.20	
Saudi Arabia	30	4.83	32	5.28	33	4.69	40	4.12	
Czech Republic	31	4.77	30	5.35	29	4.86	32	4.24	
Thailand	32	4.72	41	5.06	35	4.62	47	3.92	
Chile	33	4.71	36	5.13	31	4.83	50	3.86	
Spain	34	4.70	33	5.15	30	4.84	38	4.17	
Azerbaijan	35	4.69	47	4.93	46	4.44	33	4.22	
Indonesia	36	4.68	46	4.98	41	4.52	31	4.29	
Malta	37	4.65	29	5.41	37	4.61	34	4.20	
Russian Federation	38	4.64	48	4.92	38	4.59	57	3.76	
Poland	39	4.59	45	4.99	34	4.65	59	3.75	
India	40	4.59	63	4.68	42	4.47	30	4.29	
Lithuania	41	4.58	34	5.15	40	4.57	44	4.23	
Portugal	42	4.57	39	5.12	39	4.57	36	4.18	
Italy	43	4.54	51	4.88	43	4.46	28	4.16	
Bahrain	43	4.54	40	5.08	36	4.40	43	4.45	
Mauritius	45	4.52	44	5.00	59	4.02	46	3.93	
Brunei Darussalam	45	4.52	42	5.05	74	4.20	88		
								3.46	
Costa Rica Slovenia	47 48	4.50 4.48	53	4.82 5.14	48 53	4.43 4.39	42 37	4.08	
	48 49	4.48	35 59	5.14 4.77	53	4.39	73	4.18 3.57	
Bulgaria	49 50	4.46		4.77 5.12	57	4.40	48		
Panama Maxico			37					3.89	
Mexico	51 52	4.44 4.43	68 50	4.59 4.88	47	4.43 4.07	51	3.84	
Kuwait					73 51		86	3.47	
Turkey	53	4.42	60	4.75	51	4.40	66	3.65	
Latvia	54	4.40	43	5.01	49	4.40	68	3.65	
Vietnam	55	4.36	75	4.52	62	4.24	84	3.49	
Philippines	56	4.35	67	4.60	61	4.27	61	3.72	
Kazakhstan	57	4.35	69	4.59	56	4.32	95	3.39	
Rwanda	58	4.35	65	4.62	84	3.95	49	3.87	
Slovak Republic	59	4.33	52	4.83	44	4.46	56	3.76	
Hungary	60	4.33	64	4.65	45	4.44	79	3.52	
South Africa	61	4.32	92	4.28	52	4.39	39	4.14	
Oman	62	4.31	38	5.12	66	4.19	70	3.61	
Botswana	63	4.30	61	4.73	89	3.87	91	3.44	
Cyprus	64	4.30	49	4.92	55	4.36	55	3.79	
Jordan	65	4.30	73	4.56	67	4.15	45	3.96	
Colombia	66	4.29	90	4.33	54	4.38	64	3.67	
Georgia	67	4.28	54	4.82	75	4.06	112	3.23	
Romania	68	4.28	72	4.57	58	4.28	107	3.28	
Iran, Islamic Rep.	69	4.27	55	4.82	83	3.99	81	3.51	

(Cont'd.)

Table 1: The Global Competitiveness Index 2017–2018 (cont'd.)

					SUBIN	DEXES				
	OVERALL	INDEX	Basic requ	iirements	Efficiency	enhancers	Innovation and so	phistication factors		
Economy	Rank	Score	Rank	Score	Rank	Score	Rank	Score		
Jamaica	70	4.25	76	4.52	68	4.12	54	3.81		
Morocco	71	4.24	57	4.79	85	3.94	74	3.56		
Peru	72	4.22	79	4.45	64	4.22	103	3.33		
Armenia Croatia	73 74	4.19 4.19	77 58	4.51 4.77	78 69	4.05 4.11	67 99	3.65 3.37		
Albania	75	4.18	71	4.57	80	4.11	76	3.55		
Uruquay	76	4.15	56	4.81	65	4.20	87	3.47		
Montenegro	77	4.15	80	4.42	72	4.08	92	3.40		
Serbia	78	4.14	74	4.54	82	3.99	104	3.31		
Tajikistan	79	4.14	81	4.40	95	3.74	62	3.72		
Brazil	80	4.14	104	4.08	60	4.27	65	3.66		
Ukraine Bhutan	81 82	4.11 4.10	96 66	4.18 4.61	70 101	4.09 3.68	77 78	3.55 3.53		
Trinidad and Tobago	83	4.09	83	4.40	63	4.24	80	3.52		
Guatemala	84	4.08	93	4.26	79	4.02	63	3.70		
Sri Lanka	85	4.08	78	4.51	90	3.81	58	3.76		
Algeria	86	4.07	82	4.40	102	3.68	118	3.13		
Greece	87	4.02	70	4.58	77	4.05	71	3.60		
Nepal	88	4.02	86	4.36	112	3.56	122	3.07		
Moldova	89	3.99	95	4.22	94	3.75	124	3.00		
Namibia Kenya	90 91	3.99 3.98	89 110	4.35 3.90	92 71	3.80 4.09	82 41	3.51 4.10		
Argentina	92	3.98	103	4.10	81	4.09	75	3.56		
Nicaragua	93	3.95	85	4.37	118	3.46	132	2.85		
Cambodia	94	3.93	102	4.11	96	3.73	111	3.24		
Tunisia	95	3.93	84	4.37	99	3.69	97	3.37		
Honduras	96	3.92	94	4.25	103	3.66	102	3.34		
Ecuador	97	3.91	87	4.36	98	3.69	110	3.25		
Lao PDR	98	3.91	105	4.07	97	3.71	85	3.49		
Bangladesh	99	3.91	101	4.11	105 87	3.65	106	3.28		
Egypt Mongolia	100 101	3.90 3.90	106 100	4.05 4.11	91	3.90 3.81	101 116	3.35 3.15		
Kyrgyz Republic	102	3.90	97	4.14	108	3.61	128	2.97		
Bosnia and Herzegovina	103	3.87	91	4.30	100	3.68	119	3.09		
Dominican Republic	104	3.87	98	4.13	93	3.77	105	3.28		
Lebanon	105	3.84	119	3.55	76	4.05	52	3.82		
Senegal	106	3.81	109	3.95	110	3.59	69	3.62		
Seychelles	107	3.80	62	4.72	115	3.53	93	3.40		
Ethiopia El Salvador	108 109	3.78 3.77	107 99	4.05 4.12	120 107	3.39 3.62	100 120	3.36 3.08		
Cape Verde	110	3.76	88	4.36	121	3.38	109	3.26		
Ghana	111	3.72	116	3.62	88	3.90	60	3.75		
Paraguay	112	3.71	108	3.97	106	3.63	121	3.08		
Tanzania	113	3.71	111	3.88	117	3.46	89	3.45		
Uganda	114	3.70	112	3.80	113	3.56	90	3.45		
Pakistan	115	3.67	114	3.68	104	3.65	72	3.59		
Cameroon Cambia Tha	116	3.65	113	3.74	114	3.54	96	3.38		
Gambia, The Zambia	117 118	3.61 3.52	115 118	3.64 3.55	111 116	3.56 3.48	83 94	3.50 3.39		
Guinea	119	3.47	126	3.38	109	3.59	53	3.82		
Benin	120	3.47	117	3.62	125	3.27	115	3.16		
Madagascar	121	3.40	122	3.48	123	3.30	113	3.21		
Swaziland	122	3.35	120	3.54	124	3.29	130	2.92		
Mali	123	3.33	128	3.33	122	3.33	98	3.37		
Zimbabwe	124	3.32	124	3.45	128	3.17	131	2.87		
Nigeria	125	3.30	136	2.93	86	3.91	108	3.27		
Congo, Democratic Rep. Venezuela	126 127	3.27 3.23	129 131	3.31 3.14	126 119	3.24 3.42	125 133	2.99 2.79		
Haiti	127	3.23	121	3.14	134	2.81	137	2.79		
Burundi	129	3.21	125	3.42	133	2.89	123	3.01		
Sierra Leone	130	3.20	127	3.35	132	2.97	129	2.96		
Lesotho	131	3.20	130	3.29	130	3.04	114	3.20		
Malawi	132	3.11	134	3.06	127	3.23	126	2.99		
Mauritania	133	3.09	123	3.46	137	2.54	136	2.52		
Liberia	134	3.08	133	3.11	131	3.02	117	3.14		
	4.0-		4							
Chad Mozambique	135 136	2.99 2.89	132 137	3.14 2.75	135 129	2.77 3.11	134 127	2.71 2.98		

Note: Ranks out of 137 economies and scores measured on a 1-to-7 scale.

Table 2: The Global Competitiveness Index 2017–2018: Basic requirements

						DII	LLARS							
	BASIC REQ	UIREMENTS	1. Inst	itutions	2. Infra	structure		mic environment	4. Health and p	orimary education				
Economy	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score				
Albania	71	4.57	68	3.88	94	3.56	75	4.60	36	6.24				
Algeria	82	4.40	88	3.63	93	3.56	71	4.63	71	5.77				
Argentina	103	4.10	113	3.28	81	3.85	125	3.38	64	5.89				
Armenia	77	4.51	55	4.06	80	3.85	101	4.13	55	5.99				
Australia Austria	18 19	5.70 5.70	18 22	5.35 5.15	28 14	5.27 5.73	27 32	5.67 5.52	12 22	6.52 6.40				
Azerbaijan	47	4.93	33	4.65	51	4.54	65	4.80	74	5.72				
Bahrain	40	5.08	23	5.04	33	5.07	108	3.98	37	6.22				
Bangladesh	101	4.11	107	3.39	111	2.92	56	4.90	102	5.22				
Belgium	27	5.48	25	5.02	24	5.42	59	4.87	5	6.63				
Benin	117	3.62	91	3.53	128	2.31	110	3.94	117	4.69				
Bhutan	66 91	4.61	32	4.80	89	3.64	78	4.58	95 56	5.42 5.97				
Bosnia and Herzegovina Botswana	61	4.30 4.73	126 45	3.09 4.36	100 90	3.30 3.64	64 13	4.82 6.09	107	4.83				
Brazil	104	4.73	109	3.35	73	4.11	124	3.44	96	5.41				
Brunei Darussalam	42	5.05	40	4.43	60	4.31	45	5.15	31	6.32				
Bulgaria	59	4.77	98	3.48	76	4.06	25	5.72	68	5.80				
Burundi	125	3.42	122	3.20	130	2.12	119	3.59	109	4.79				
Cambodia	102	4.11	106	3.39	106	3.14	70	4.64	101	5.26				
Cameroon	113	3.74	100	3.48	129	2.25	86	4.45	112	4.77				
Canada Cana Varda	17 88	5.72 4.36	15 65	5.43 3.94	16 95	5.70 3.50	47 100	5.13 4.14	8 <b>6</b> 5	6.60 5.85				
Cape Verde Chad	132	3.14	136	2.64	134	1.90	87	4.14	131	3.62				
Chile	36	5.14	35	4.53	41	4.78	36	5.38	66	5.82				
China	31	5.32	41	4.42	46	4.66	17	6.00	40	6.21				
Colombia	90	4.33	117	3.21	87	3.77	62	4.83	88	5.53				
Congo, Democratic Rep.	129	3.31	121	3.20	127	2.33	123	3.45	126	4.25				
Costa Rica	53	4.82	48	4.25	65	4.25	79	4.55	35	6.24				
Croatia	58	4.77	102	3.45	48	4.65	60	4.85	44	6.13				
Cyprus	49	4.92	51	4.18	30	5.11	97	4.19	39	6.21				
Czech Republic Denmark	30 13	5.35 5.90	52 13	4.16 5.46	49 21	4.61 5.51	8 10	6.23	23 21	6.40 6.41				
Dominican Republic	98	4.13	129	3.05	101	3.30	49	5.10	105	5.07				
Ecuador	87	4.36	128	3.05	72	4.12	91	4.34	61	5.91				
Egypt	106	4.05	64	3.94	71	4.13	132	2.59	87	5.54				
El Salvador	99	4.12	133	2.75	77	3.97	85	4.47	100	5.31				
Estonia	22	5.66	24	5.04	32	5.09	15	6.07	19	6.43				
Ethiopia	107	4.05	73	3.83	115	2.71	57	4.87	111	4.77				
Finland	9 26	5.98 5.54	31	6.16 4.84	26 7	5.39	33 63	5.49 4.82	1 24	6.90 6.39				
France Gambia, The	115	3.64	46	4.84	91	6.10 3.64	135	2.42	127	4.19				
Georgia	54	4.82	50	4.20	69	4.19	48	5.10	69	5.79				
Germany	11	5.97	21	5.30	10	5.96	12	6.10	13	6.52				
Ghana	116	3.62	59	4.03	103	3.25	131	2.64	120	4.55				
Greece	70	4.58	87	3.65	38	4.89	117	3.70	48	6.10				
Guatemala	93	4.26	111	3.33	84	3.82	54	4.94	106	4.97				
Guinea	126	3.38	105	3.42	125	2.43	102	4.12	133	3.54				
Haiti Honduras	121 94	3.53 4.25	135 120	2.66 3.20	136 104	1.79 3.24	61 52	4.85 5.04	108 89	4.81 5.51				
Hong Kong SAR	3	6.26	9	5.69	1	6.70	6	6.28	26	6.38				
Hungary	64	4.65	101	3.46	56	4.36	46	5.13	78	5.65				
Iceland	14	5.88	14	5.45	20	5.56	19	5.94	10	6.58				
India	63	4.68	39	4.44	66	4.22	80	4.54	91	5.50				
Indonesia	46	4.98	47	4.27	52	4.52	26	5.72	94	5.43				
Iran, Islamic Rep.	55	4.82	85	3.72	57	4.35	44	5.15	50	6.04				
Ireland	20	5.68	19	5.35	31	5.11	24	5.77	16	6.48				
Israel Italy	28 51	5.48 4.88	29 95	4.94 3.50	25 27	5.40 5.37	39 96	5.24 4.24	27 25	6.34 6.39				
Jamaica	76	4.00	63	3.94	74	4.09	111	3.94	46	6.11				
Japan	21	5.66	17	5.41	4	6.34	93	4.30	7	6.60				
Jordan	73	4.56	36	4.50	58	4.34	115	3.78	80	5.64				
Kazakhstan	69	4.59	60	4.03	68	4.20	98	4.17	59	5.95				
Kenya	110	3.90	75	3.82	96	3.46	120	3.57	114	4.76				
Korea, Rep.	16	5.77	58	4.04	8	6.08	2	6.63	28	6.34				
Kuwait	50	4.88	57	4.05	64	4.26	30	5.60	83	5.61				
Kyrgyz Republic	97	4.14	103	3.44	109	3.05	88	4.38	75	5.70				
Lao PDR	105	4.07	62	4.02	102	3.27	114	3.81	103	5.19				
Latvia	43	5.01	82	3.76	55	4.40	23	5.77	45	6.11				

(Cont'd.)

Table 2: The Global Competitiveness Index 2017–2018: Basic requirements (cont'd.)

	BASIC REQ	UIREMENTS	1. Inst	itutions	2. Infra	PIL structure	.LARS 3. Macroecono	mic environment	4. Health and p	rimary education			
Economy	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score			
Lesotho	130	3.29	69	3.87	121	2.49	113	3.81	137	2.97			
Liberia	133	3.11	92	3.52	126	2.41	126	3.34	134	3.17			
Lithuania	34	5.15	53	4.13	47	4.65	29	5.61	42	6.20			
Luxembourg	10	5.98	8	5.74	17	5.68	7	6.27	41	6.21			
Madagascar Malawi	122 134	3.48	130 96	3.02 3.50	133 137	1.99 1.79	99 136	4.14 2.19	113 115	4.77 4.75			
Malaysia	24	5.55	27	4.98	22	5.46	34	5.44	30	6.32			
Mali	128	3.33	110	3.33	112	2.83	104	4.07	135	3.09			
Malta	29	5.41	38	4.47	42	4.77	21	5.85	11	6.57			
Mauritania	123	3.46	132	2.93	131	2.10	69	4.64	128	4.16			
Mauritius	44	5.01	37	4.49	40	4.80	67	4.69	49	6.07			
Mexico Moldova	68 95	4.59 4.22	123 119	3.20 3.20	62 88	4.30 3.74	43 81	5.17 4.53	76 97	5.69 5.40			
Mongolia	100	4.22	108	3.37	108	3.11	89	4.37	85	5.59			
Montenegro	80	4.42	66	3.90	70	4.16	116	3.71	62	5.91			
Morocco	57	4.79	49	4.20	54	4.42	55	4.91	81	5.63			
Mozambique	137	2.75	127	3.05	123	2.47	137	1.86	132	3.59			
Namibia	89	4.35	44	4.39	67	4.21	107	4.02	110	4.77			
Nepal	86	4.36	89	3.58	119	2.61	31	5.59	77	5.68			
Netherlands New Zealand	4 5	6.24 6.05	7	5.76 6.07	3 23	6.44 5.45	14 16	6.08	4	6.69 6.62			
Nicaragua	85	4.37	115	3.24	92	3.58	51	5.09	86	5.55			
Nigeria	136	2.93	125	3.17	132	2.04	122	3.51	136	3.00			
Norway	6	6.02	6	5.82	34	5.04	1	6.64	9	6.59			
Oman	38	5.12	28	4.96	36	4.90	66	4.70	63	5.90			
Pakistan	114	3.68	90	3.53	110	3.03	106	4.03	129	4.14			
Panama	37	5.12	74	3.82	37	4.90	11	6.11	79	5.64			
Paraguay Peru	108 79	3.97 4.45	131 116	3.00	118 86	2.63 3.77	42 37	5.19 5.35	104 93	5.08 5.44			
Philippines	67	4.60	94	3.51	97	3.43	22	5.82	82	5.63			
Poland	45	4.99	72	3.84	44	4.70	41	5.20	38	6.22			
Portugal	39	5.12	43	4.40	18	5.59	105	4.04	18	6.44			
Qatar	12	5.91	10	5.60	13	5.83	20	5.93	34	6.25			
Romania	72	4.57	86	3.70	83	3.82	38	5.25	92	5.49			
Russian Federation Rwanda	48 65	4.92 4.62	83 16	3.75 5.42	35 98	4.93 3.39	53 92	5.03 4.34	54 98	6.00 5.34			
Saudi Arabia	32	5.28	26	5.01	29	5.20	58	4.87	51	6.03			
Senegal	109	3.95	67	3.90	107	3.14	84	4.48	123	4.30			
Serbia	74	4.54	104	3.42	75	4.09	72	4.61	52	6.02			
Seychelles	62	4.72	81	3.77	50	4.55	73	4.60	57	5.97			
Sierra Leone	127	3.35	112	3.30	120	2.58	128	3.24	124	4.29			
Singapore	2	6.34	2	6.08	2	6.54	18	5.98	3	6.76			
Slovak Republic Slovenia	52 35	4.83 5.14	93 56	3.51 4.05	63 39	4.29 4.80	35 40	5.40 5.23	47 14	6.10 6.49			
South Africa	92	4.28	76	3.81	61	4.31	82	4.52	121	4.47			
Spain	33	5.15	54	4.10	12	5.88	90	4.35	32	6.29			
Sri Lanka	78	4.51	77	3.80	85	3.80	94	4.27	43	6.15			
Swaziland	120	3.54	61	4.02	105	3.22	127	3.28	130	3.63			
Sweden	8	6.00	11	5.59	19	5.56	4	6.44	20	6.41			
Switzerland Taiwan China	1	6.39	4	5.93	6	6.26	3	6.57	2	6.78			
Taiwan, China Tajikistan	15 81	5.84 4.40	30 42	4.85 4.41	15 99	5.71 3.34	5 103	6.33 4.10	15 73	6.48 5.75			
Tanzania	111	3.88	70	3.85	114	2.77	74	4.60	125	4.28			
Thailand	41	5.06	78	3.80	43	4.70	9	6.23	90	5.51			
Trinidad and Tobago	83	4.40	97	3.49	59	4.32	112	3.84	60	5.93			
Tunisia	84	4.37	80	3.78	82	3.83	109	3.94	58	5.95			
Turkey	60	4.75	71	3.85	53	4.47	50	5.10	84	5.60			
Uganda Ukraine	112	3.80	99	3.48	122	2.49	76	4.59	119	4.64			
United Arab Emirates	96 7	4.18 6.02	118 5	3.21 5.93	<b>78</b> 5	3.95 6.26	121 28	3.52 5.63	53 33	6.02 6.26			
United Kingdom	23	5.65	12	5.52	11	5.96	68	4.65	17	6.47			
United States	25	5.54	20	5.33	9	6.01	83	4.51	29	6.33			
Uruguay	56	4.81	34	4.55	45	4.66	95	4.26	70	5.77			
Venezuela	131	3.14	137	2.18	117	2.63	134	2.43	99	5.32			
Vietnam	75	4.52	79	3.79	79	3.90	77	4.59	67	5.81			
Yemen	135 118	3.01 3.55	134 84	2.67 3.72	135	1.83 2.44	130 118	2.85 3.68	118	4.68 4.36			
Zambia					124				122				

Note: Ranks out of 137 economies and scores measured on a 1-to-7 scale.

Table 3: The Global Competitiveness Index 2017–2018: Efficiency enhancers

								PILL	.ARS					
		CIENCY NCERS		education raining		s market iency		r market iency	8. Financ	ial market opment		nological liness	10. Ma	ırket size
Economy	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Albania	80	4.01	49	4.77	57	4.43	91	3.96	81	3.81	78	4.07	105	2.99
Algeria	102	3.68	92	3.95	129	3.64	133	3.27	125	3.06	98	3.36	36	4.78
Argentina	81 78	4.00 4.05	38 69	5.00 4.42	133 35	3.44 4.70	132 51	3.29 4.40	121 78	3.10 3.88	66	4.32 4.09	32 115	4.88 2.79
Armenia Australia	13	5.29	9	5.88	28	4.70	28	4.40	6	5.45	77 27	5.72	22	5.13
Austria	22	5.03	16	5.68	26	4.89	42	4.49	30	4.58	17	5.97	42	4.59
Azerbaijan	46	4.44	68	4.46	31	4.80	17	5.01	79	3.84	56	4.55	63	3.97
Bahrain	36	4.62	39	4.99	23	4.98	37	4.55	46	4.30	31	5.57	90	3.31
Bangladesh	105	3.65	117	3.10	94	4.11	118	3.60	98	3.60	120	2.76	38	4.72
Belgium	18	5.15	11	5.82	16	5.18	44	4.47	26	4.68	19	5.94	34	4.79
Benin	125	3.27	114	3.13	127	3.66	50	4.41	112	3.36	129	2.39	121	2.66
Bhutan	101	3.68	90	4.01	88	4.16	24	4.73	67	4.01	105	3.21	132	1.94
Bosnia and Herzegovina Botswana	100 89	3.68 3.87	91 96	3.98	126 79	3.70 4.21	123 40	3.49 4.52	104 65	3.50 4.04	69 90	4.27 3.63	97 108	3.15 2.96
Brazil	60	4.27	79	4.21	122	3.79	114	3.68	92	3.70	55	4.57	100	5.69
Brunei Darussalam	74	4.06	67	4.47	67	4.34	47	4.44	87	3.75	60	4.49	110	2.89
Bulgaria	50	4.40	54	4.62	69	4.32	67	4.25	58	4.14	39	5.13	65	3.92
Burundi	133	2.89	131	2.62	123	3.74	66	4.26	130	2.80	135	2.11	133	1.78
Cambodia	96	3.73	124	2.88	85	4.17	48	4.42	61	4.09	97	3.42	84	3.38
Cameroon	114	3.54	103	3.52	114	3.94	79	4.14	97	3.62	123	2.63	83	3.40
Canada	7	5.52	13	5.77	18	5.15	7	5.43	7	5.44	23	5.88	16	5.44
Cape Verde	121	3.38	86	4.06	105	4.01	115	3.67	117	3.21	84	3.80	134	1.56
Chad	135	2.77	134	2.30	136	3.01	104	3.78	132	2.73	137	1.96	112	2.82
Chile	31	4.83	26	5.25	39	4.65	49	4.42	17	4.92	38	5.21	44	4.54
China Colombia	28 54	4.88 4.38	47 66	4.78 4.50	46 102	4.55 4.03	38 88	4.55 3.98	48 27	4.23 4.64	73 65	4.18 4.34	1 37	7.00 4.76
Congo, Democratic Rep.	126	3.24	127	2.75	130	3.59	59	4.34	127	3.04	127	2.50	93	3.22
Costa Rica	48	4.43	31	5.13	63	4.38	69	4.22	39	4.45	45	4.93	80	3.45
Croatia	69	4.11	60	4.54	99	4.04	107	3.77	95	3.65	43	5.04	77	3.62
Cyprus	55	4.36	46	4.86	25	4.90	39	4.53	108	3.44	32	5.52	109	2.90
Czech Republic	29	4.86	27	5.25	38	4.66	41	4.49	23	4.80	33	5.50	46	4.49
Denmark	15	5.26	6	5.97	19	5.11	10	5.19	21	4.87	12	6.09	57	4.29
Dominican Republic	93	3.77	93	3.93	115	3.91	117	3.62	99	3.57	87	3.71	68	3.89
Ecuador	98	3.69	77	4.25	128	3.65	126	3.41	113	3.34	92	3.60	66	3.92
Egypt El Salvador	87 107	3.90 3.62	100 104	3.60 3.49	90	4.15 3.96	134 125	3.22	77 57	3.89 4.15	94 95	3.45 3.44	25 91	5.08 3.26
Estonia	27	4.92	19	5.52	21	5.09	15	5.02	22	4.15	20	5.91	98	3.10
Ethiopia	120	3.39	125	2.77	124	3.71	72	4.19	109	3.41	130	2.36	67	3.89
Finland	11	5.30	2	6.18	17	5.15	23	4.78	4	5.54	16	5.98	60	4.16
France	20	5.10	22	5.41	36	4.68	56	4.35	33	4.53	21	5.90	8	5.75
Gambia, The	111	3.56	109	3.44	52	4.51	31	4.64	66	4.04	104	3.22	136	1.53
Georgia	75	4.06	87	4.02	50	4.51	53	4.39	63	4.06	70	4.26	100	3.09
Germany	6	5.53	15	5.70	11	5.27	14	5.03	12	5.03	8	6.17	5	6.00
Ghana	88	3.90	98	3.67	71	4.30	62	4.30	84	3.78	93	3.56	72	3.77
Greece	77	4.05	44	4.87	93	4.12	110	3.72	133	2.49	50	4.80	58	4.28
Guatemala	79	4.02	99	3.67	48	4.52	102	3.85	18	4.90	96	3.44	73	3.75
Guinea Haiti	109 134	3.59 2.81	122 129	2.91	78 135	4.26 3.03	54 99	4.36 3.89	29 134	4.60 2.45	113 134	2.97	127 124	2.45
Honduras	103	3.66	102	3.56	98	4.05	124	3.48	38	4.46	99	3.26	95	3.15
Hong Kong SAR	4	5.58	14	5.70	2	5.74	4	5.59	5	5.51	9	6.17	33	4.80
Hungary	45	4.44	73	4.33	64	4.38	71	4.21	45	4.31	40	5.09	55	4.33
Iceland	32	4.77	12	5.79	32	4.78	9	5.21	49	4.22	10	6.17	126	2.46
India	42	4.47	75	4.31	56	4.47	75	4.15	42	4.37	107	3.12	3	6.43
Indonesia	41	4.52	64	4.52	43	4.59	96	3.91	37	4.50	80	3.86	9	5.73
Iran, Islamic Rep.	83	3.99	51	4.71	100	4.04	130	3.30	128	3.02	91	3.62	19	5.24
Ireland	21	5.09	10	5.85	8	5.35	21	4.87	69	3.99	18	5.97	45 EG	4.50
Israel	19	5.12	21	5.44	30 60	4.82	116	4.90	11	5.07	7	6.17	56	4.29 5.50
Italy Jamaica	43 68	4.46 4.12	41 72	4.96 4.38	60 62	4.41 4.40	116 46	3.67 4.45	126 31	3.05 4.57	41 76	5.09 4.12	12 116	5.59 2.78
Japan	10	5.39	23	5.38	13	5.24	22	4.45	20	4.89	15	6.01	4	6.07
Jordan	67	4.15	63	4.52	51	4.51	90	3.97	70	3.99	67	4.29	76	3.62
Kazakhstan	56	4.32	56	4.57	72	4.29	35	4.57	114	3.30	52	4.63	43	4.55
Kenya	71	4.09	97	3.80	66	4.35	27	4.70	55	4.16	88	3.71	71	3.80
Korea, Rep.	26	4.93	25	5.34	24	4.97	73	4.18	74	3.90	29	5.65	13	5.53
Kuwait	73	4.07	95	3.91	89	4.16	119	3.59	62	4.07	68	4.27	50	4.39
Kyrgyz Republic	108	3.61	89	4.01	81	4.21	113	3.69	86	3.75	102	3.24	117	2.78
Lao PDR	97	3.71	105	3.47	76	4.28	36	4.56	75	3.89	110	2.99	101	3.06
Latvia	49	4.40	42	4.95	59	4.42	43	4.47	64	4.05	37	5.27	92	3.24
Lebanon	76	4.05	74	4.32	61	4.40	109	3.74	76	3.89	64	4.35	75	3.63

(Cont'd.)

Table 3: The Global Competitiveness Index 2017–2018: Efficiency enhancers (cont'd.)

Penersy   Seas   Soors   Bres   Soors   Bres   Soors   Bres   Soors   Sart   Soors						ARS	PILL									
	arket size	10. Ma														
Uberlay   15   302   332   259   704   401   77   414   39   370   133   222   155   105	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Economy	
Hamans	2.11	131	2.58	125	2.39	135	3.83	103	4.29	73	3.03	118	3.04	130	Lesotho	
Isomothogy	1.55	135	2.22	133	3.70	90	4.14	77	4.01	104	2.50	133	3.02	131	Liberia	
Membarian   129	3.62			30			4.33		4.57						Lithuania	
Males	3.34														<del>-</del>	
Male	2.99														Ü	
Mail	2.65 5.09															
Multurban   37	2.98														•	
Muntimina	2.68															
Manuface	2.51															
Montpolis	2.82															
Memoration	5.67	11	4.21	71	4.51	36	3.77	105	4.32	70	4.11	80	4.43	47	Mexico	
Membrange   72	2.68	120	4.62	53	3.08	124	3.94	94	4.06	97	4.09	83	3.75	94	Moldova	
Memocon	3.00	104	4.18	74	3.00		4.23		3.95	111	4.51		3.81	91	Mongolia	
Mezambiou   12	2.28														•	
Number   92   3,80   111   3,32   84   4,18   3,3   4,59   50   4,21   89   3,63   111   13,22   84   4,18   3,97   97   399   73   391   139   3,93   139   2,77   8,56   8,64   4   6,09   5   5,50   1,3   5,07   28   4,83   3,3   6,34   23   8,00   64   8,00   18   1	4.34															
Negal	3.09														and the second second	
New Zesibard	2.87 3.37															
New Zeechand	5.10														•	
Nearging	3.94															
Norway	3.01															
Orane         66         4 19         71         4.40         47         4.53         122         3.50         54         4.16         59         4.51         6.2           Pakistan         104         3.65         1.20         3.00         107         3.83         122         3.37         36         3.64         111         2.98         2.93           Paragnay         106         3.63         107         3.44         86         4.17         106         3.77         20         3.00         103         3.23         87           Perug         64         4.22         81         4.10         7.5         4.28         4.4         4.02         33         4.17         4.0         83         4.0         4.0         2.7         1.0         8.0         3.7         4.0         8.0         3.2         4.1         9.3         4.0         9.2         1.4         4.0         2.2         4.1         9.3         3.0         2.7         4.0         8.0         3.7         4.0         8.3         3.7         4.0         8.3         3.7         4.0         8.0         3.2         4.1         4.9         4.1         4.0         8.0         9.2 <td>4.98</td> <td></td>	4.98															
Pakistan	4.43	49	6.12	11	5.19	9	5.11	12	4.98	22	5.88	8	5.29	14	Norway	
Paragalay	4.06	62	4.51	59	4.16	54	3.50	122	4.53	47	4.40	71	4.19	66	Oman	
Pengugy	4.95	28	2.98	111	3.64	96	3.37		3.98	107	3.00		3.65	104	Pakistan	
Penta   G-4   4.22   81	3.59								4.60						Panama	
Philippines	3.34															
Potend         34         4.65         40         4.98         45         4.55         78         4.14         53         4.17         47         4.89         21           Portugal         39         4.58         34         5.09         34         4.70         55         4.35         116         326         26         5.74         4.51           Romania         58         4.28         70         4.41         92         4.14         89         3.97         88         3.74         51         4.78         41           Russian Federation         38         4.59         32         5.52         80         4.21         60         4.33         107         3.45         57         4.65         6           Rwanda         84         3.95         113         3.24         37         4.68         8         5.37         3.44         4.52         101           South Arabia         33         4.69         43         4.87         42         4.60         80         4.10         156         4.14         4.94         4.95           Sendia         82         3.99         59         4.55         110         3.96         92	4.45															
Portugal         39         4.58         34         5.09         34         4.70         55         4.35         116         3.26         2.6         5.74         54         51         51         52         19         4.89         25         4.71         34         541         51         4.78         41         51         4.78         34         51         4.78         41         489         3.97         4.83         3.71         4.63         3.97         3.45         5.77         4.55         6.6         6.78         4.55         16         7.82         4.55         16         4.55         16         8.73         4.68         8.6         5.37         34         4.52         101         3.24         3.77         4.68         8.6         5.37         34         4.22         10         3.25         102         3.24         37         4.68         8.6         5.37         34         4.22         10         3.36         40         3.24         132         4.20         95         3.91         93         3.67         10         3.22         172           Schala         3.9         3.9         9.92         3.96         10         3.05         7.22 </td <td>4.97</td> <td></td>	4.97															
Cater         25         4.94         37         5.01         15         5.22         19         4.89         25         4.71         34         541         4.76         41           Romania         58         4.28         70         4.41         89         4.21         60         4.33         10.7         3.45         57         4.55         6           Rwanda         84         4.39         113         3.24         37         4.68         8         5.37         34         4.52         101         3.24         122           Saudi Arabia         33         4.69         43         4.87         42         4.60         80         4.10         56         4.16         4.94         4.95           Sencial         10         3.59         166         3.44         82         4.20         95         3.91         10         0.22         10         10         3.92         74         4.28         81         4.10         115         3.52         4.15         137         11         3.72         75         4.15         137         11         3.72         12         4.54         156         4.28         81         4.28         81	5.17 4.33															
Russian Federation   Sa	4.33															
Pussian Federation   38	4.61															
Saudi Arabia         33         4.69         43         4.87         42         4.60         80         4.10         56         4.16         44         4.94         15           Senegal         110         3.59         106         3.44         82         4.20         95         3.91         93         3.67         100         3.25         102           Seychelles         115         3.53         94         3.92         74         4.28         81         4.10         115         3.27         75         4.15         137           Sierra Leone         132         2.97         132         2.54         125         3.71         111         3.72         18         3.17         128         2.46         129           Singapore         2         2.572         1         6.24         4.58         8.71         111         3.72         18         3.14         2.09         3.5         6.60         4.81         8.76         4.88         87         4.01         3.2         4.55         4.2         5.08         6.1         5.00         4.64         82         4.10         106         3.45         5.35         5.37         8.2         4.20 <t< td=""><td>5.90</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	5.90															
Senegal         110         3.59         106         3.44         82         4.20         95         3.91         93         3.67         100         3.25         1102           Serbia         82         3.93         59         4.55         110         3.96         92         3.96         101         3.56         72         4.13         74           Serbia         115         3.33         94         3.92         74         4.28         81         4.10         115         3.27         75         4.15         137           Slorak Republic         4         4.46         62         4.54         55         4.48         87         4.01         30         5.66         14         6.09         3.56         6.1           Stowerla         53         4.39         24         4.57         4.0         4.48         87         4.0         106         4.35         5.58         16           Stowerla         53         4.39         24         4.51         55         4.48         89         3.09         44         4.35         4.58         102           Spain         30         4.84         2.50         4.9         4.51	2.64	123	3.24	101	4.52	34	5.37	8	4.68	37	3.24	113	3.95	84	Rwanda	
Serbia         82         3.99         59         4.55         110         3.96         92         3.96         101         3.66         72         4.19         74           Seycheles         115         3.53         94         3.92         74         4.28         81         4.10         115         3.27         75         4.15         137           Sierra Leone         132         2.97         132         2.54         125         3.71         111         3.72         118         3.17         128         2.66         126         60         3.5           Slorenta Leone         132         2.57         1         6.62         4.54         55         4.48         87         4.01         32         4.55         4.6         6.02           Slovarini         53         4.39         24         5.57         4.48         87         4.01         106         3.45         5.08         6.01           Slovarini         53         4.39         24         5.57         4.48         83         4.01         106         3.45         5.5         4.68         8.02         9.02         5.03         102         8.03         106         4.01	5.44	15	4.94	44	4.16	56	4.10	80	4.60	42	4.87	43	4.69	33	Saudi Arabia	
Seychelles         115         3.53         94         3.92         74         4.28         81         4.10         115         3.27         75         4.15         132           Siera Leone         132         2.97         132         2.54         125         3.71         111         3.72         118         3.17         128         2.46         129           Siongapore         2         5.72         1         6.27         1         5.76         1         5.79         3         5.66         14         6.08         6.75           Slowak Republic         44         446         62         4.54         455         4.48         87         4.01         106         3.45         5.08         6.61           South Afficia         53         4.39         24         5.37         40         4.64         82         4.01         106         3.45         5.08         6.20           Spain         30         4.84         28         4.20         4.48         83         3.96         4.01         4.35         5.64         4.58         9.02           Spain         30         5.59         4.23         3.87         4.20         13	3.06	102	3.25	100	3.67	93	3.91	95	4.20	82	3.44	106	3.59	110	Senegal	
Serral Leone         132         2.97         132         2.54         125         3.71         111         3.72         118         3.17         128         2.46         129           Singapore         2         5.72         1         6.27         1         5.76         2         5.79         3         5.66         14         6.09         35           Slowak Republic         44         4.46         62         4.54         55         4.48         87         4.01         32         4.55         35         5.37         82           Slowah Africa         52         4.39         85         4.06         54         4.48         93         3.96         44         4.35         54         4.58         30           Spain         30         4.84         28         5.20         49         4.51         70         4.21         68         4.01         28         5.68         17           Sri Lanka         90         3.81         78         4.23         4.20         131         3.30         83         3.78         106         3.16         59           Swaziland         12         5.30         18         5.59         14	3.72															
Singapore         2         5.72         1         6.27         1         5.76         2         5.79         3         5.66         14         6.09         3.5           Slovak Republic         44         4.46         62         4.54         55         4.48         87         4.01         32         4.55         42         5.08         61           Slovarial         53         4.39         24         5.37         40         4.68         82         4.10         106         3.45         35         5.37         82           Spain         30         4.84         28         5.20         49         4.51         70         4.21         68         4.01         28         5.68         17           Sri Lanka         90         3.81         78         4.23         83         4.20         131         3.30         83         3.78         106         3.16         5.98         17           Svaziland         124         5.30         112         3.24         119         3.87         83         4.07         85         3.77         124         2.61         130           Swaziland         12         5.30         119         <	1.45														,	
Stowak Republic         44         4.46         62         4.54         55         4.48         87         4.01         32         4.55         42         5.08         61           Slowah Republic         53         4.39         24         5.37         40         4.64         82         4.10         106         3.45         35         5.37         82           South Africa         52         4.39         85         4.06         54         4.48         93         3.96         44         4.35         54         4.58         30           Spain         30         4.84         28         5.20         49         4.51         70         421         68         4.01         28         5.68         17         59           Swaziland         124         3.29         112         3.24         119         3.87         83         4.07         85         3.77         124         2.61         130           Sweden         12         5.30         18         5.59         14         5.23         20         4.87         10         5.13         5         6.30         40           Switzerland         3         5.65         5.76	2.22															
Slovenia         53         4.39         24         5.37         40         4.64         82         4.10         106         3.45         35         5.37         82           South Africa         52         4.39         85         4.06         54         4.48         93         3.96         44         4.35         54         4.58         30           Spain         30         4.84         28         5.20         49         4.51         70         4.21         68         4.01         28         5.68         17           Swaziland         124         3.29         112         3.24         119         3.87         83         4.07         85         3.77         124         2.61         130           Switzerland         12         5.30         18         5.59         14         5.23         20         4.87         10         5.13         5         6.30         40           Switzerland         13         5.65         5         6.07         6         5.50         1         5.94         8         5.29         2         6.39         39           Taiwan, China         16         5.25         17         6.63 <t< td=""><td>4.78 4.08</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	4.78 4.08															
South Africa         52         4.39         85         4.06         54         4.48         93         3.96         44         4.35         54         4.58         30           Spain         30         4.84         28         5.20         49         4.51         70         4.21         68         4.01         28         5.68         17           Sri Lanka         90         3.81         78         4.23         83         4.20         131         3.30         83         3.78         106         3.16         59           Swazland         124         3.29         112         3.24         119         3.87         83         4.07         85         3.77         124         2.61         130           Switzerland         12         5.30         18         5.59         14         5.23         20         4.87         10         5.13         5         6.03         40           Switzerland         16         5.25         17         5.63         12         5.26         25         4.73         19         4.90         25         5.74         2.02           Tailwan, China         35         3.62         137         4.56	3.41														•	
Spain         30         4.84         28         5.20         49         4.51         70         4.21         68         4.01         28         5.68         17           Sri Lanka         90         3.81         78         4.23         83         4.20         131         3.30         83         3.78         106         3.16         59           Swazland         124         3.29         112         3.24         119         3.87         83         4.07         85         3.77         124         2.61         130           Switzerland         12         5.30         18         5.59         14         5.23         20         4.87         10         5.13         5         6.30         40           Switzerland         13         5.65         5         60.77         6.60         5.50         1         5.94         8         5.29         2         6.30         39           Taiwan, China         16         5.25         17         5.63         12         5.26         25         4.73         19         4.90         25         5.74         20           Tailwan, China         35         3.74         130         2.63	4.91															
Sri Lanka         90         3.81         78         4.23         83         4.20         131         3.30         83         3.78         106         3.16         59           Swaziland         124         3.29         112         3.24         119         3.87         83         4.07         85         3.77         124         2.61         130           Swdeen         12         5.30         18         5.59         14         5.23         20         4.87         10         5.13         5         6.30         40           Switzerland         3         5.65         5         6.07         6         5.50         1         5.94         8         5.29         2         6.39         39           Taiwan, China         16         5.25         17         5.63         12         5.26         25         4.73         19         4.90         25         5.74         20           Taijkistan         95         3.74         76         4.31         68         4.34         34         4.59         105         3.49         114         2.95         118           Tainzania         117         3.44         33         5.10	5.42															
Swaziland         124         3.29         112         3.24         119         3.87         83         4.07         85         3.77         124         2.61         130           Sweden         12         5.30         18         5.59         14         5.23         20         4.87         10         5.13         5         6.30         40           Switzerland         3         5.65         5         6.07         6         5.50         1         5.94         8         5.29         2         6.39         39           Taiwan, China         16         5.25         17         5.63         12         5.26         25         4.73         19         4.90         25         5.74         20           Taijkistan         95         3.74         76         4.31         68         4.34         34         4.59         105         3.49         114         2.95         118           Tanzania         117         3.46         130         2.63         116         3.90         63         4.29         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04	4.20															
Switzerland         3         5.65         5         6.07         6         5.50         1         5.94         8         5.29         2         6.39         39           Taiwan, China         16         5.25         17         5.63         12         5.26         25         4.73         19         4.90         25         5.74         20           Tajikistan         95         3.74         76         4.31         68         4.34         34         4.59         105         3.49         114         2.95         118           Tanzania         117         3.46         130         2.63         116         3.90         63         4.29         103         3.52         122         2.64         70           Thailand         35         4.62         57         4.56         33         4.72         65         4.26         40         4.44         61         4.48         18           Tinidad and Tobago         63         4.24         33         5.10         95         4.09         85         4.01         51         4.19         49         4.86         94           Turisia         99         3.69         82         4.09	2.21	130				85				119				124		
Taiwan, China         16         5.25         17         5.63         12         5.26         25         4.73         19         4.90         25         5.74         20           Tajikistan         95         3.74         76         4.31         68         4.34         34         4.59         105         3.49         114         2.95         118           Tanzania         117         3.46         130         2.63         116         3.90         63         4.29         103         3.52         122         2.64         70           Thailand         35         4.62         57         4.56         33         4.72         65         4.26         40         4.44         61         4.48         18           Tinidad and Tobago         63         4.24         33         5.10         95         4.09         85         4.01         51         4.19         49         4.86         94           Tunisia         99         3.69         82         4.09         112         3.95         135         3.09         110         3.38         85         3.73         69           Turkey         51         4.40         48         4.78 <td>4.66</td> <td>40</td> <td>6.30</td> <td></td> <td>5.13</td> <td>10</td> <td>4.87</td> <td>20</td> <td>5.23</td> <td>14</td> <td>5.59</td> <td>18</td> <td>5.30</td> <td>12</td> <td></td>	4.66	40	6.30		5.13	10	4.87	20	5.23	14	5.59	18	5.30	12		
Tajlkistan         95         3.74         76         4.31         68         4.34         34         4.59         105         3.49         114         2.95         118           Tanzania         117         3.46         130         2.63         116         3.90         63         4.29         103         3.52         122         2.64         70           Thailand         35         4.62         57         4.56         33         4.72         65         4.26         40         4.44         61         4.48         18           Tinidad and Tobago         63         4.24         33         5.10         95         4.09         85         4.01         51         4.19         49         4.86         94           Tunisia         99         3.69         82         4.09         112         3.95         135         3.09         110         3.39         85         3.73         69           Turkey         51         4.40         48         4.78         53         4.48         127         3.39         80         3.82         62         4.42         14           Uganda         113         3.56         126         2.76	4.69															
Tanzania         117         3.46         130         2.63         116         3.90         63         4.29         103         3.52         122         2.64         70           Thailand         35         4.62         57         4.56         33         4.72         65         4.26         40         4.44         61         4.48         18           Trinidad and Tobago         63         4.24         33         5.10         95         4.09         85         4.01         51         4.19         49         4.86         94           Tunisia         99         3.69         82         4.09         112         3.95         135         3.09         110         3.39         85         3.73         69           Turkey         51         4.40         48         4.78         53         4.48         127         3.39         80         3.82         62         4.42         14           Uganda         113         3.56         126         2.76         118         3.88         30         4.64         89         3.72         115         2.90         81           Ukraine         70         4.09         35         5.05	5.22															
Thailand         35         4.62         57         4.56         33         4.72         65         4.26         40         4.44         61         4.48         18           Trinidad and Tobago         63         4.24         33         5.10         95         4.09         85         4.01         51         4.19         49         4.86         94           Tunisia         99         3.69         82         4.09         112         3.95         135         3.09         110         3.39         85         3.73         69           Turkey         51         4.40         48         4.78         53         4.48         127         3.39         80         3.82         62         4.42         14           Uganda         113         3.56         126         2.76         118         3.88         30         4.64         89         3.72         115         2.90         81           Ukraine         70         4.09         35         5.09         101         4.04         86         4.01         120         3.11         81         3.83         47           United Arab Emirates         17         5.23         36         5.05 </td <td>2.77</td> <td></td>	2.77															
Trinidad and Tobago         63         4.24         33         5.10         95         4.09         85         4.01         51         4.19         49         4.86         94           Tunisia         99         3.69         82         4.09         112         3.95         135         3.09         110         3.39         85         3.73         69           Turkey         51         4.40         48         4.78         53         4.48         127         3.39         80         3.82         62         4.42         14           Uganda         113         3.56         126         2.76         118         3.88         30         4.64         89         3.72         115         2.90         81           Ukraine         70         4.09         35         5.09         101         4.04         86         4.01         120         3.11         81         3.83         47           United Arab Emirates         17         5.23         36         5.05         3         5.62         11         5.17         24         4.76         24         5.81         29           United Kingdom         5         5.55         20         5.	3.81															
Tunisia         99         3.69         82         4.09         112         3.95         135         3.09         110         3.39         85         3.73         69           Turkey         51         4.40         48         4.78         53         4.48         127         3.39         80         3.82         62         4.42         14           Uganda         113         3.56         126         2.76         118         3.88         30         4.64         89         3.72         115         2.90         81           Ukraine         70         4.09         35         5.09         101         4.04         86         4.01         120         3.11         81         3.83         47           United Arab Emirates         17         5.23         36         5.05         3         5.62         11         5.17         24         4.76         24         5.81         29           United Kingdom         5         5.55         20         5.48         10         5.29         6         5.44         13         5.03         4         6.33         7           United States         1         6.01         3         4.62	5.24															
Turkey         51         4.40         48         4.78         53         4.48         127         3.39         80         3.82         62         4.42         14           Uganda         113         3.56         126         2.76         118         3.88         30         4.64         89         3.72         115         2.90         81           Ukraine         70         4.09         35         5.09         101         4.04         86         4.01         120         3.11         81         3.83         47           United Arab Emirates         17         5.23         36         5.05         3         5.62         11         5.17         24         4.76         24         5.81         29           United Kingdom         5         5.55         20         5.48         10         5.29         6         5.44         13         5.03         4         6.33         7           United States         1         6.01         3         6.12         7         5.47         3         5.64         2         5.73         6         6.23         2           United States         119         3.42         58         4.56	3.16 3.86															
Uganda         113         3.56         126         2.76         118         3.88         30         4.64         89         3.72         115         2.90         81           Ukraine         70         4.09         35         5.09         101         4.04         86         4.01         120         3.11         81         3.83         47           United Arab Emirates         17         5.23         36         5.05         3         5.62         11         5.17         24         4.76         24         5.81         29           United Kingdom         5         5.55         20         5.48         10         5.29         6         5.44         13         5.03         4         6.33         7           United States         1         6.01         3         6.12         7         5.47         3         5.64         2         5.73         6         6.23         2           Uruguay         65         4.20         53         4.62         77         4.28         121         3.53         60         4.09         36         5.34         89           Venezuela         119         3.42         58         4.56	5.50															
Ukraine         70         4.09         35         5.09         101         4.04         86         4.01         120         3.11         81         3.83         47           United Arab Emirates         17         5.23         36         5.05         3         5.62         11         5.17         24         4.76         24         5.81         29           United Kingdom         5         5.55         20         5.48         10         5.29         6         5.44         13         5.03         4         6.33         7           United States         1         6.01         3         6.12         7         5.47         3         5.64         2         5.73         6         6.23         2           Uruguay         65         4.20         53         4.62         77         4.28         121         3.53         60         4.09         36         5.34         89           Venezuela         119         3.42         58         4.56         137         2.76         137         2.72         122         3.10         109         3.02         52           Vietnam         62         4.24         84         4.07	3.44														•	
United Arab Emirates         17         5.23         36         5.05         3         5.62         11         5.17         24         4.76         24         5.81         29           United Kingdom         5         5.55         20         5.48         10         5.29         6         5.44         13         5.03         4         6.33         7           United States         1         6.01         3         6.12         7         5.47         3         5.64         2         5.73         6         6.23         2           Uruguay         65         4.20         53         4.62         77         4.28         121         3.53         60         4.09         36         5.34         89           Venezuela         119         3.42         58         4.56         137         2.76         137         2.72         122         3.10         109         3.02         52           Vietnam         62         4.24         84         4.07         91         4.15         57         4.35         71         3.98         79         3.98         31           Yemen         136         2.67         136         2.25	4.49														-	
United Kingdom         5         5.55         20         5.48         10         5.29         6         5.44         13         5.03         4         6.33         7           United States         1         6.01         3         6.12         7         5.47         3         5.64         2         5.73         6         6.23         2           Unuguay         65         4.20         53         4.62         77         4.28         121         3.53         60         4.09         36         5.34         89           Venezuela         119         3.42         58         4.56         137         2.76         137         2.72         122         3.10         109         3.02         52           Vietnam         62         4.24         84         4.07         91         4.15         57         4.35         71         3.98         79         3.98         31           Yemen         136         2.67         136         2.25         132         3.44         136         3.00         136         2.18         136         2.04         96	4.94															
Uruguay         65         4.20         53         4.62         77         4.28         121         3.53         60         4.09         36         5.34         89           Venezuela         119         3.42         58         4.56         137         2.76         137         2.72         122         3.10         109         3.02         52           Vietnam         62         4.24         84         4.07         91         4.15         57         4.35         71         3.98         79         3.98         31           Yemen         136         2.67         136         2.25         132         3.44         136         3.00         136         2.18         136         2.04         96	5.75															
Venezuela         119         3.42         58         4.56         137         2.76         137         2.72         122         3.10         109         3.02         52           Vietnam         62         4.24         84         4.07         91         4.15         57         4.35         71         3.98         79         3.98         31           Yemen         136         2.67         136         2.25         132         3.44         136         3.00         136         2.18         136         2.04         96	6.86	2	6.23	6	5.73	2	5.64	3	5.47	7	6.12	3	6.01	1	United States	
Vietnam         62         4.24         84         4.07         91         4.15         57         4.35         71         3.98         79         3.98         31           Yemen         136         2.67         136         2.25         132         3.44         136         3.00         136         2.18         136         2.04         96	3.33				4.09						4.62					
Yemen         136         2.67         136         2.25         132         3.44         136         3.00         136         2.18         136         2.04         96	4.38															
	4.91															
/ampia 116 3.48 121 2.92 8/ 4.17 100 3.86 04 3.66 116 2.00 96	3.15															
Zimbabwe 128 3.17 115 3.11 131 3.46 112 3.72 119 3.17 121 2.74 114	3.35 2.80	86		116	3.66		3.86	100	4.17	87	2.92	121	3.48	116	Zambia	

Note: Ranks out of 137 economies and scores measured on a 1-to-7 scale.

Table 4: The Global Competitiveness Index 2017–2018: Innovation and sophistication factors

				PILL	ARS						PILL	ARS	
	INNOV AND SOPH FACT	ISTICATION		isiness tication	12. In	novation		INNOVATION AND SOPHISTICATION FACTORS		11. Bu		12. In	novation
Economy	Rank	Score	Rank	Score	Rank	Score	Economy	Rank	Score	Rank	Score	Rank	Score
Albania	76	3.55	74	3.90	87	3.20	Lesotho	114	3.20	107	3.56	115	2.84
Algeria	118	3.13	122	3.32	104	2.94	Liberia	117	3.14	113	3.49	119	2.79
Argentina	75	3.56	78	3.82	72	3.30	Lithuania	44	4.04	46	4.35	41	3.73
Armenia	67	3.65	68	3.99	70	3.31	Luxembourg	16	5.11	17	5.23	15	4.99
Australia	27	4.68	28	4.85	27	4.52	Madagascar	113	3.21	121	3.35	97	3.08
Austria	10 33	5.30 4.22	8 40	5.58 4.44	13 33	5.03 4.00	Malawi Malavsia	126 21	2.99 4.91	125 20	3.27 5.15	124 22	2.71 4.67
Azerbaijan Bahrain	43	4.22	36	4.44	33 45	3.60	Mali	98	3.37	109	3.55	89	3.20
Bangladesh	106	3.28	91	3.70	114	2.85	Malta	34	4.20	31	4.58	38	3.83
Belgium	14	5.18	9	5.42	16	4.95	Mauritania	136	2.52	136	2.71	136	2.32
Benin	115	3.16	124	3.30	100	3.03	Mauritius	46	3.93	38	4.49	63	3.36
Bhutan	78	3.53	77	3.83	79	3.24	Mexico	51	3.84	49	4.27	56	3.41
Bosnia and Herzegovina	119	3.09	115	3.47	123	2.72	Moldova	124	3.00	120	3.36	128	2.64
Botswana	91	3.44	93	3.69	90	3.19	Mongolia	116	3.15	123	3.30	101	2.99
Brazil	65	3.66	56	4.12	85	3.21	Montenegro	92	3.40	101	3.63	91	3.17
Brunei Darussalam	88	3.46	92	3.69	80	3.23	Morocco	74	3.56	69	3.99	94	3.14
Bulgaria	73	3.57	79	3.82	68	3.32	Mozambique	127	2.98	132	3.16	117	2.80
Burundi Cambodia	123 111	3.01	126 106	3.27 3.58	122 110	2.75 2.91	Namibia Nepal	82 122	3.51	87 119	3.77	78 121	3.24 2.76
Cameroon	96	3.38	111	3.52	77	3.25	Netherlands	4	5.62	4	5.69	6	5.55
Canada	24	4.82	23	4.98	23	4.67	New Zealand	25	4.81	24	4.93	20	4.69
Cape Verde	109	3.26	118	3.44	98	3.08	Nicaragua	132	2.85	129	3.22	133	2.47
Chad	134	2.71	135	2.85	129	2.58	Nigeria	108	3.27	94	3.68	112	2.85
Chile	50	3.86	50	4.26	52	3.46	Norway	13	5.19	12	5.37	14	5.01
China	29	4.33	33	4.51	28	4.14	Oman	70	3.61	72	3.95	76	3.26
Colombia	64	3.67	64	4.07	73	3.27	Pakistan	72	3.59	81	3.81	60	3.38
Congo, Democratic Rep.	125	2.99	131	3.18	116	2.81	Panama	48	3.89	44	4.37	55	3.42
Costa Rica Croatia	42 99	4.08 3.37	35 82	4.50 3.79	43 106	3.66 2.94	Paraguay Peru	121 103	3.08	114 80	3.49 3.81	127 113	2.67 2.85
Cyprus	55	3.79	55	4.15	53	3.42	Philippines	61	3.72	58	4.10	65	3.35
Czech Republic	32	4.24	30	4.61	36	3.87	Poland	59	3.75	57	4.11	59	3.40
Denmark	11	5.28	10	5.42	10	5.13	Portugal	36	4.18	43	4.37	32	4.00
Dominican Republic	105	3.28	85	3.78	120	2.78	Qatar	22	4.85	22	5.02	21	4.68
Ecuador	110	3.25	105	3.59	111	2.90	Romania	107	3.28	116	3.47	96	3.08
Egypt	101	3.35	84	3.79	109	2.92	Russian Federation	57	3.76	71	3.97	49	3.55
El Salvador	120	3.08	104	3.60	130	2.56	Rwanda	49	3.87	61	4.09	44	3.65
Estonia	35	4.20	45	4.36	30	4.04	Saudi Arabia	40	4.12	34	4.50	40	3.73
Ethiopia	100	3.36	112	3.51	86	3.20	Senegal	69	3.62	86	3.78	51	3.46
Finland France	8 17	5.48 5.07	14 16	5.26 5.25	4 17	5.69 4.89	Serbia	104 93	3.31 3.40	110 76	3.52 3.85	95 105	3.11 2.94
Gambia, The	83	3.50	63	4.07	107	2.93	Seychelles Sierra Leone	129	2.96	128	3.24	125	2.68
Georgia	112	3.23	99	3.67	118	2.79	Singapore	12	5.25	18	5.22	9	5.28
Germany	3	5.65	5	5.65	5	5.65	Slovak Republic	56	3.76	54	4.19	67	3.33
Ghana	60	3.75	60	4.09	57	3.40	Slovenia	37	4.18	41	4.38	35	3.98
Greece	71	3.60	73	3.94	75	3.27	South Africa	39	4.14	37	4.49	39	3.80
Guatemala	63	3.70	53	4.20	88	3.20	Spain	38	4.17	29	4.62	42	3.72
Guinea	53	3.82	66	4.06	48	3.57	Sri Lanka	58	3.76	59	4.09	54	3.42
Haiti	137	2.36	137	2.64	137	2.08	Swaziland	130	2.92	117	3.45	135	2.40
Honduras	102	3.34	88	3.75	108	2.93	Sweden	5	5.57	6	5.63	7	5.50
Hong Kong SAR Hungary	18 79	4.96 3.52	11 96	5.38 3.68	26 62	4.53 3.36	Switzerland Taiwan, China	1 15	5.86 5.12	1 21	5.89 5.13	1 11	5.82 5.11
Iceland	26	4.77	27	4.87	24	4.66	Tajikistan	62	3.72	75	3.87	47	3.58
India	30	4.77	39	4.49	29	4.00	Tanzania	89	3.45	95	3.68	82	3.22
Indonesia	31	4.29	32	4.56	31	4.02	Thailand	47	3.92	42	4.37	50	3.46
Iran, Islamic Rep.	81	3.51	97	3.68	66	3.34	Trinidad and Tobago	80	3.52	65	4.06	102	2.98
Ireland	19	4.93	19	5.16	19	4.70	Tunisia	97	3.37	98	3.67	99	3.07
Israel	7	5.53	15	5.26	3	5.80	Turkey	66	3.65	67	3.99	69	3.31
Italy	28	4.45	25	4.92	34	3.98	Uganda	90	3.45	102	3.62	74	3.27
Jamaica	54	3.81	51	4.26	64	3.35	Ukraine	77	3.55	90	3.72	61	3.37
Japan	6	5.55	3	5.73	8	5.37	United Arab Emirates	20	4.93	13	5.28	25	4.58
Jordan	45	3.96	48	4.33	46	3.59	United Kingdom	9	5.34	7	5.58	12	5.09
Kazakhstan	95	3.39	108	3.56	84	3.22	United States	2	5.80	2	5.77	2	5.82
Kenya Pop	41	4.10	47	4.35	37	3.85	Uruguay	87	3.47	83	3.79	93	3.15
Korea, Rep. Kuwait	23 86	4.85 3.47	26 70	4.91 3.97	18 103	4.78 2.97	Venezuela Vietnam	133 84	2.79 3.49	133 100	3.02 3.67	131 71	2.56 3.31
Kyrgyz Republic	128	2.97	127	3.97	126	2.68	Yemen	135	2.68	134	2.94	134	2.42
Lao PDR	85	3.49	89	3.75	81	3.22	Zambia	94	3.39	103	3.62	92	3.17
Latvia	68	3.65	62	4.07	83	3.22	Zimbabwe	131	2.87	130	3.19	132	2.55
Lebanon	52	3.82	52	4.24	58	3.40							

Note: Ranks out of 137 economies and scores measured on a 1-to-7 scale.

#### **APPENDIX C**

# The Executive **Opinion Survey:** The Voice of the **Business Community**

For almost 40 years, The Global Competitiveness Report has been used by policymakers, business executives, and academics as a tool that contributes a valuable portrait of an economy's productivity and its ability to achieve sustained levels of prosperity and growth. Central to the Report's index, the Executive Opinion Survey (the Survey) is the longest-running and most extensive survey of its kind, capturing the opinions of business leaders around the world on a broad range of topics for which statistics are unreliable, outdated, or nonexistent for many countries. Thus the Survey aims to measure critical concepts—such as appetite for entrepreneurship, the extent of the skills gap, and the incidence of corruption—to complement the traditional sources of statistics and provide a more accurate assessment of the business environment and, more broadly, of the many drivers of economic development.

The indicators derived from the Survey are used in the calculation of the Global Competitiveness Index (GCI) as well as a number of other World Economic Forum indexes, such as the Networked Readiness Index, the Enabling Trade Index, the Travel & Tourism Competitiveness Index, the Gender Gap Index, and the Human Capital Index as well as several other reports, including The Inclusive Economic Growth and Development Report and a number of regional competitiveness studies. A truly unique source of data, the Survey has also long been used by a number of international and nongovernmental organizations, think tanks, and academia for empirical and policy work.

#### THE SURVEY 2017 IN NUMBERS

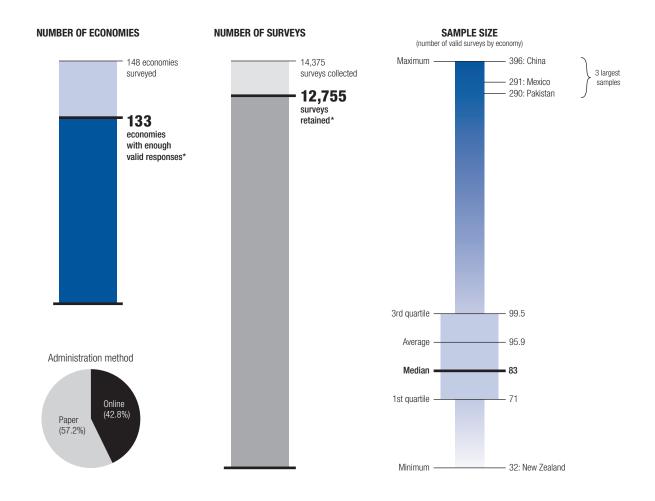
The 2017 edition captured the views of 14,375 business executives in over 148 economies between February and June 2017 (see Figure 1). Following the data editing process described below, a total of 12,775 responses from 133 economies were retained. The 2017 edition of the Survey was made available in 39 languages (see Table 1).

# SURVEY STRUCTURE, ADMINISTRATION, AND **METHODOLOGY**

The Survey comprises 150 questions divided into 15 sections. Most ask respondents to evaluate an aspect of their operating environment, on a scale of 1 (the worst possible situation) to 7 (the best). The 2017 edition of the Survey instrument is available in the Downloads section of the Global Competitiveness Report's page at http:// gcr.weforum.org/.

The administration of the Survey is centralized by the World Economic Forum and conducted at the national level by the Forum's network of Partner Institutes. Partner Institutes are recognized research or academic institutes, business organizations, national competitiveness councils, or other established professional entities and, in some cases, survey

Figure 1: Descriptive statistics of the Executive Opinion Survey 2017



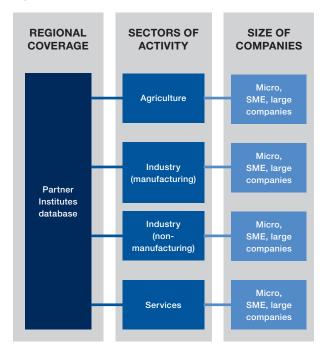
Source: World Economic Forum, Executive Opinion Survey, 2017 edition. Note: Not all charts are drawn to scale.

Table 1: Available languages in 2017

Albanian	Croatian	Hungarian	Macedonian	Serbian
Arabic	Czech	Italian	Mongolian	Slovak
Armenian	Danish	Japanese	Montenegrin	Slovenian
Azeri	English	Khmer	Persian	Spanish
Bosnian	Estonian	Korean	Polish	Thai
Bulgarian	French	Lao	Portuguese	Turkish
Chinese	German	Latvian	Romanian	Vietnamese
Chinese traditional	Greek	Lithuanian	Russian	

<sup>\*</sup> Following data treatment. See text for details.

Figure 2: Sample frame requirements



consultancies. These institutes have the network to reach out to the business community, are reputable organizations, and have a firm commitment to improving the competitiveness conditions of their economies. (For the full list, see the Acknowledgments section of this Report.)

In administering the Survey and in order to gather the strongest dataset, Partner Institutes are asked to follow detailed sampling guidelines to ensure that the sample of respondents is the most representative possible and comparable across the globe and in a specific timeframe. The sampling guidelines are based on best practices in the field of survey administration and on discussions with survey experts.

The Survey sampling guidelines specify that the Partner Institute build a "sample frame" (Figure 2)—that is, a list of potential business executives from micro companies, small and medium-sized enterprises, and large companies—from the various sectors of activity, as detailed below. Specifically, the Partner Institutes are asked to carry out the following steps:

• Prepare a "sample frame," or large list of potential respondents, which includes firms in proportion to the share of GDP accounted for by the sector they represent: agriculture, manufacturing industry, non-manufacturing industry (mining and quarrying, electricity, gas and water supply, construction), and services.

- Separate the frame into three lists: micro companies (< 10 employees), small and medium-sized enterprises (11-250 employees), and large firms (> 251 employees), again in proportion to the overall representation of these companies in the economy, and with each list ranging over all the sectors.
- Ensure that the list of chosen companies also represents a good geographical coverage.
- To reduce bias, randomly select firms from these lists to receive the survey.

The Survey is administered in a variety of formats, including face-to-face or telephone interviews with business executives, mailed paper forms, and online surveys. For energy, time, and cost considerations, the Forum encourages the use of a dedicated online survey tool provided to the Partner Institutes.

The Partner Institutes also play an active and essential role in disseminating the findings of The Global Competitiveness Report and other reports published by the World Economic Forum by holding press events and workshops to highlight the results at the national level to the business community, the public sector, and other stakeholders.

#### DATA TREATMENT AND SCORE COMPUTATION

This section details the process whereby individual responses are edited and aggregated in order to produce the scores of each economy on each individual question of the Survey. These results, together with other indicators obtained from other sources, feed into the GCI and other research projects.

#### Data editing

Prior to aggregation, the respondent-level data are subjected to a careful editing process. A first series of tests is run to identify and exclude those surveys whose patterns of answers demonstrate a lack of sufficient focus on the part of the respondents. Surveys with at least 80 percent of the same answers are excluded. Surveys with a completion rate inferior to 50 percent are also excluded. The very few cases of duplicate surveyswhich can occur, for example, when a survey is both completed online and mailed in—are also excluded in this phase.

In a second step, a multivariate test is applied to the data using the Mahalanobis distance method. This test estimates the probability that an individual survey in a specific country "belongs" to the sample of that country by comparing the pattern of answers of that survey against the average pattern of answers in the country sample.1

A univariate outlier test is then applied at the country level for each question of each survey. We use the standardized score—or "z-score"—method, which

Table 2: Executive Opinion Survey: Descriptive statistics and weightings

		Period 1			Perio	id 2
F	0	No of accordants	M/-1-b+ (0/)+	0	No. of managed and	18/-1-1-4 (0/14

Economy	Survey edition	No. of respondents	Weight (%)*	Survey edition	No. of respondents	Weight (%)*	Online (%) <sup>†</sup>
Albania	2016	95	48.6	2017	71	51.4	Offilite (70)
Algeria	2016	118	43.9	2017	130	56.1	0.8
Argentina	2016	99	45.0	2017	99	55.0	99.0
Armenia	2016	77	44.4	2017	76	55.6	100.0
Australia	2016	91	46.9	2017	78	53.1	78.2
Austria	2016	111	46.6	2017	98	53.4	75.5
Azerbaijan	2016	77	42.8	2017	92	57.2	
Bahrain	2015	50	38.0	2016	89	62.0	n/a
Bangladesh	2016	88	46.0	2017	81	54.0	
Belgium	2016	51	37.0	2017	99	63.0	100.0
Benin	2016	67	43.1	2017	78	56.9	
Bhutan	2016	116	47.1	2017	98	52.9	_
Bosnia and Herzegovina	2016	112	49.8	2017	76	50.2	_
Botswana	2016	98	43.6	2017	110	56.4	0.9
Brazil	2016	128	47.7	2017	103	52.3	99.0
Brunei Darussalam	2016	80	45.5	2017	77	54.5	49.4
Bulgaria	2016	116	46.4	2017	104	53.6	5.8
Burundi	2016	96	47.1	2017	81	52.9	-
Cambodia	2016	63	43.9	2017	69	56.1	
Cameroon	2016	95	47.0	2017	81	53.0	_
Canada	2016	137	51.7	2017	79	48.3	100.0
Cape Verde	2016	81	46.6	2017	79	53.4	100.0
Chad	2016	102	49.1	2017	73	50.9	_
Chile	2016	206	49.1	2017	140	50.9	99.3
China							99.5
Colombia	2016	355	43.6	2017	396	56.4	
	2016	158	47.1	2017	134	52.9	64.9
Congo, Dem. Rep. Costa Rica	2016	97	41.7	2017	126	58.3	
	2016	79	46.5	2017	69	53.5	98.6
Croatia	2016	85	45.6	2017	81	54.4	100.0
Cyprus	2016	65	43.6	2017	73	56.4	17.8
Czech Republic	2016	106	47.9	2017	84	52.1	100.0
Denmark Denmark	2016	110	48.2	2017	85	51.8	
Dominican Republic	2016	78	49.4	2017	54	50.6	87.0
Ecuador	2016	92	44.1	2017	99	55.9	38.4
Egypt	0010	2016 data not available	47.5	2017	99	100.0	2.0
El Salvador	2016	50	47.5	2017	41	52.5	92.7
Estonia	2016	89	46.8	2017	77	53.2	100.0
Ethiopia	2016	89	46.5	2017	79	53.5	_
Finland	2016	47	44.2	2017	50	55.8	100.0
France	2016	94	46.9	2017	81	53.1	100.0
Gambia, The	2016	92	47.7	2017	74	52.3	
Georgia	2016	45	45.3	2017	44	54.7	100.0
Germany	2016	103	44.0	2017	112	56.0	91.1
Ghana	2016	100	47.8	2017	80	52.2	_
Greece	2016	81	45.5	2017	78	54.5	97.4
Guatemala	2016	82	43.4	2017	93	56.6	_
Guinea		New in 2017		2017	66	100.0	
Haiti		New in 2017		2017	52	100.0	_
Honduras	2016	92	45.3	2017	90	54.7	
Hong Kong SAR		2016 data not available		2017	93	100.0	80.6
Hungary	2016	52	39.3	2017	83	60.7	14.5
Iceland	2016	86	47.6	2017	70	52.4	100.0
India	2016	266	48.5	2017	201	51.5	_
Indonesia	2016	86	43.9	2017	94	56.1	_
Iran, Islamic Rep.	2016	176	43.4	2017	200	56.6	100.0
Ireland	2016	38	33.3	2017	105	66.7	100.0
Israel	2016	80	44.7	2017	82	55.3	100.0
Italy	2016	122	47.7	2017	98	52.3	_
Jamaica	2016	68	44.5	2017	71	55.5	98.6
Japan	2016	120	52.8	2017	63	47.2	14.3
Jordan	2016	101	39.8	2017	154	60.2	6.5
Kazakhstan	2016	99	46.8	2017	86	53.2	_
Kenya	2016	114	45.1	2017	113	54.9	_
Korea, Rep.	2016	100	45.0	2017	100	55.0	_
Kuwait	2016	59	43.2	2017	68	56.8	63.2
Kyrgyz Republic	2016	100	45.4	2017	97	54.6	_
Lao PDR	2016	108	47.7	2017	87	52.3	_
Latvia	2016	89	50.9	2017	55	49.1	100.0
Lebanon	2016	79	45.2	2017	78	54.8	100.0
	2010	, ,	10.2	2011	7.0	0 1.0	100.0

(Cont'd.)

Table 2: Executive Opinion Survey: Descriptive statistics and weightings (cont'd.)

Period 1 Period 2 Economy Survey edition No. of respondents Weight (%)\* Survey edition No. of respondents Weight (%)\* Online (%) Lesotho 43.7 2016 83 2017 92 56.3 52.2 Liberia 2016 69 47.8 2017 55 Lithuania 2016 121 45.5 2017 116 54.5 62.9 Luxembourg 2016 62 49.5 2017 43 50.5 100.0 Madagascar 2016 84 47.6 2017 68 52.4 Malawi 2016 57 41.6 2017 75 58.4 42.7 Malaysia 2016 101 45.6 96 54.4 2017 7.3 Mali 2016 98 50.1 2017 65 49.9 Malta 2016 74 48.0 2017 58 52.0 89.7 Mauritania 2016 96 42.4 118 2017 57.6 Mauritius 57 44.2 98.4 2016 2017 61 55.8 Mexico 2016 304 45.5 2017 291 54.5 83.5 126 Moldova 2016 44.4 132 55.6 2017 Mongolia 2016 80 44.5 2017 82 55.5 59.8 46.9 Montenegro 2016 93 2017 80 53.1 100.0 Morocco 2016 105 47.1 2017 89 52.9 Mozambique 2016 110 46.8 2017 95 53.2 Namibia 2016 78 45.7 2017 74 54.3 2016 99 46.1 91 53.9 Nepal 2017 Netherlands 2016 75 44.5 2017 78 55.5 100.0 47.5 New Zealand 2016 39 2017 32 52.5 100.0 2016 data not available 100.0 Nicaragua 2017 47 85 1 2016 Nigeria 106 47.7 2017 85 52.3 Norway 2016 32 42.5 2017 39 57.5 100.0 Oman 2015 79 42.2 2016 99 57.8 n/a Pakistan 2016 236 42.4 290 57.6 4.5 2017 Panama 2016 120 48.7 2017 89 51.3 69.7 Paraguay 2016 79 40.8 2017 111 592 45.9 Peru 2016 88 44.7 2017 90 55.3 85.6 Philippines 2016 84 50.2 55 49.8 83.6 2017 Poland 2016 206 45.1 2017 204 54.9 99.0 Portugal 2016 50.6 140 49.4 92.9 220 2017 Qatar 2016 130 48.6 2017 97 51.4 9.3 Romania 2016 100 44.6 2017 103 55.4 42.7 Russian Federation 2016 293 46.1 2017 268 53.9 48.3 1.1 Rwanda 2016 120 2017 92 51.7 Saudi Arabia 2016 96 38.5 2017 164 61.5 60.4 Senegal 2016 99 47.7 2017 80 52.3 Serbia 2016 99 45.1 98 54.9 2017 Seychelles New in 2017 2017 47 100.0 Sierra Leone 2016 47.6 2017 79 52.4 76.4 Singapore 2016 146 44 8 2017 148 55.2 Slovak Republic 2016 109 44.9 2017 110 55.1 100.0 2016 85 44.4 2017 89 55.6 83.1 Slovenia South Africa 2016 44 29.5 170 70.5 100.0 2017 Spain 2016 104 49.1 2017 75 50.9 84.0 Sri Lanka 2016 100 48.6 2017 75 51.4 48.0 New in 2017 Swaziland 2017 50 100.0 Sweden 2016 54 41.6 2017 71 58.4 100.0 2016 43 41.4 52 58.6 100.0 Switzerland 2017 Taiwan, China 2016 126 45.5 2017 121 54.5 62.0 Tajikistan 2015 101 46.3 2016 91 53.7 n/a Tanzania 80 2016 98 47.5 2017 52.5 Thailand 2016 148 48.1 2017 115 51.9 100.0 Trinidad and Tobago 2016 116 51.2 2017 70 48.8 100.0 55.9 Tunisia 2016 95 44.1 2017 102 87.3 Turkey 2015 83 45.3 2016 81 54.7 n/a Uganda 2016 95 46.2 2017 86 53.8 106 45.9 99 Ukraine 2016 2017 54.1 United Arab Emirates 2016 111 48.3 2017 85 51.7 18.8 United Kingdom 2016 73 43.4 2017 83 56.6 100.0 United States 2016 485 53.0 2017 249 47.0 100.0 Uruguay 2016 89 47.8 2017 71 52.2 87.3 Venezuela 49.9 47 2016 70 2017 50.1 100.0 Vietnam 2016 100 46.3 2017 90 53.7 3.3 Yemen 2016 51 42.0 65 58.0 2017 Zambia 2016 77 47.9 61 52.1 2017 Zimbabwe 2016 52 47.4 2017 43 52.6 58.1

Note: All statistics are computed following the editing of the data; see text for details. "n/a" indicates that this information is not provided for economies for which 2017 data are not available; "—" indicates that there was no online administration of the Survey.

Weight applied to the country score in that edition of the Survey. See Box 1 for details.

<sup>†</sup> Share of surveys completed online (2017 only).

# Box 1: Country score calculation

This box presents the method applied to compute the scores for the vast majority of economies included in The Global Competitiveness Report 2017-2018 (see text for exceptions).

For any given Survey question *i*, country *c*'s final score,  $q_{ic}^{2016-17}$ , is given by:

$$q_{i,c}^{2016-17} = W_c^{2016} \times q_{i,c}^{2016} + W_c^{2017} \times q_{i,c}^{2017}$$
(1)

where

 $q_{ic}^t$  is country c's score on question i in year t, with t = 2016, 2017, as computed following the approach described in the text; and  $w_c^t$  is the weight applied to country c's score in year t (see below).

The weights for each year are determined as follows:

$$w_c^{2016} = \frac{(1-\alpha) + \frac{N_c^{2016}}{N_c^{2016} + N_c^{2017}}}{2} \quad \text{(2a)} \qquad \text{and} \qquad w_c^{2017} = \frac{\alpha + \frac{N_c^{2017}}{N_c^{2016} + N_c^{2017}}}{2} \quad \text{(2b)}$$

where  $N_c^t$  is the sample size (i.e., the number of respondents) for country c in year t, with t = 2016, 2017.  $\alpha$  is a discount factor. Its value is set at 0.6. That is, the 2016 score of country c is given 2/3 of the weight given to the 2017 score.

Plugging Equations (2a) and (2b) into (1) and rearranging yields:

$$q_{l,c}^{2016-17} = \frac{1}{2} \times \left[ \underbrace{(1-\alpha) \times q_{l,c}^{2016} + \alpha \times q_{l,c}^{2017}}_{\text{discounted-past weighted average}} \right] + \frac{1}{2} \times \left[ \underbrace{\frac{N_c^{2016}}{N_c^{2016} + N_c^{2017}} \times q_{l,c}^{2016} + \frac{N_c^{2017}}{N_c^{2016} + N_c^{2017}} \times q_{l,c}^{2017}}_{\text{sample-size weighted average}} \right]$$
(3)

In Equation (3), the first component of the weighting scheme is the discounted-past weighted average. The second component is the sample-size weighted average. The two components are given half-weight each. One additional characteristic of this approach is that it prevents a country sample that is much larger in one year from overwhelming the smaller sample from the other year.

## **EXCEPTIONS**

As noted in the text, there are a number of exceptions to the approach described above. In illustrating them below, we use actual years—rather than letters—in equations for the sake of concreteness.

In the case of Survey questions that were introduced in 2017, where, by definition, no past data exist, full weight is given to the 2017 score. For newly covered economies, this treatment applied to all questions.

For countries whose 2017 data were discarded, the results from the previous editions of the Report are used instead. In some countries, with a small sample of respondents, for some questions the number of answers is below the threshold of 30. In this case, the same treatment applies. Formally, we have:  $q_{ic}^{2016,2017} \equiv q_{ic}^{2015,2016} = w_c^{2015} \times q_{ic}^{2015} + w_c^{2016} \times q_{ic}^{2016}$ 

## **EXAMPLE OF SCORE COMPUTATION**

For this example, we compute the score of Uruguay for the indicator Burden of government regulation, which is included in the Global Competitiveness Index (indicator 1.09) and derived from the following Survey question: "In your country, how burdensome is it for companies to comply with public administration's requirements (e.g., permits, regulations, reporting)? [1 = extremely burdensome; 7 = not burdensome at all]." This question is not a new Survey question and therefore the normal treatment applies, using Equation (1). Uruguay's Survey score was 3.03 in 2016 and 2.72 in 2017. The weighting scheme described above indicates how the two scores are combined. In Uruguay, the size of the sample was 89 in 2016 and 71 in 2017. Using  $\alpha = 0.6$  and applying Equations (2a) and (2b) yields weights of 47.8 percent for 2016 and 52.2 percent for 2017 (see Table 2). The final country score for this question is therefore: therefore:

$$\underbrace{0.478 \times 3.03}_{2016} + \underbrace{0.522 \times 2.72}_{2017} = 2.87$$

This is the final score used in the computation of the GCI. Although numbers are rounded to two decimal places in this example and to one decimal place in the Uruguay country profile, exact figures are used in all calculations.

indicates by how many standard deviations any one individual answer deviates from the mean of the country sample. Individual answers with a standardized score greater than 3 are dropped.

# Aggregation and computation of country averages

We use a simple average to compute scores at the economy level. That is, for a given question, all individual answers carry the same weight.

Formally, the country average of a Survey indicator i for country c, denoted  $q_{i,c}$ , is computed as follows:

$$q_{i,c} = \frac{\sum_{j}^{N_{i,c}} q_{i,c,j}}{N_{i,c}}$$

where

 $q_{i,c,i}$  is the answer to question i in country c from respondent j; and

 $N_{i,c}$  is the number of respondents to question i in country c.

Once responses have been aggregated at the country level, a test to detect statistically excessive perception bias is run. We leverage the strong relationship between the indicators derived from the Survey on one hand and other statistical indicators used in the Global Competitiveness Index on the other hand. A linear regression is used to predict the average score in Survey indicators from the average performance in the other indicators. Survey scores that lie outside the 95 percent confidence interval around the predicted values are automatically corrected by a factor derived from the difference between the observed value and the limit of the confidence interval.

Finally, an analysis to assess the reliability and consistency of the Survey data over time is carried out. As part of this analysis, an inter-quartile range test, or IQR test, is performed to identify large swings—positive and negative—in the results. More specifically, for each country we compute the year-on-year difference, d, in the average score of a core set of 66 Survey questions. We then compute the inter-quartile range (i.e., the difference between the 25th percentile and the 75th percentile). Any value d lying outside the range bounded by the 25th percentile minus 1.5 times the IQR and the 75th percentile plus 1.5 times the IQR is identified as a potential outlier. This test is complemented by a series of additional empirical tests, including an analysis of fiveyear trends and a comparison of changes in the Survey results with changes in other indicators capturing similar concepts. We interview local experts and consider the latest developments in a country in order to assess the plausibility of the Survey results. Based on the result of this test and additional qualitative analysis, and in light

of the developments in these respective countries, the data collected in 2017 in Bahrain, Oman, Tajikistan, and Turkey were not used. In those cases, the Survey results from the previous edition are used instead (see Exceptions in Box 1).

#### Moving average and computation of country scores

We then proceed to compute moving averages. The moving average technique consists of taking a weighted average of the most recent year's Survey results together with a discounted average of the previous year. There are several reasons for doing this. First, it makes results less sensitive to the specific point in time when the Survey is administered. Second, it increases the amount of available information by providing a larger sample size. Additionally, because the Survey is carried out during the first quarter of the year, the average of the responses in the first guarter of 2016 and the first guarter of 2017 better aligns the Survey data with many of the data indicators from sources other than the Survey, which are often year-average data.

To calculate the moving average, we use a weighting scheme composed of two overlapping elements. On one hand, we want to give each response an equal weight and, therefore, place more weight on the year with the larger sample size. At the same time, we would like to give more weight to the most recent responses because they contain more updated information. That is, we also "discount the past." Table 2 reports the exact weights used in the computation of the scores of each country, while Box 1 details the methodology and provides a clarifying example.

#### NOTE

1 For a more detailed formal description of the various tests presented here, see Browne et al. 2016.

#### REFERENCE

Browne, C., A. Di Batista, T. Geiger, and S. Verin. 2016. "The Executive Opinion Survey: The Voice of the Business Community." The Global Competitiveness Report 2016-2017. Geneva: World Economic Forum.

#### **APPENDIX D**

# Technical Notes and Sources

The data in this Report represent the best available estimates from various national authorities, international agencies, and private sources at the time the Report was prepared. It is possible that some data will have been revised or updated by the sources after publication. The following notes provide sources for all the indicators listed in the Economy Profiles. The title of each indicator appears on the first line, preceded by its number to allow for quick reference. The numbering is consistent with the one adopted in Appendix A. Below is a description of each indicator or, in the case of Executive Opinion Survey data, the full question and associated answers. If necessary, additional information is provided underneath.

In this year's edition, missing values and reported values older than 2007 have been estimated by the authors for the purpose of calculating the Global Competitiveness Index. Depending on data availability, these values have been imputed by using either a multivariate linear regression or income-regional group means. The multivariate linear regression method substitutes missing values by the predicted values obtained from estimating a regression. The dependent variable of the regression is the indicator hosting the missing value, and the regressors are other indicators showing a high degree of correlation and conceptually linked with the dependent variable. Imputation using the income-regional group mean method replaces missing values with the sample mean. This sample is determined by the region and the income group to which the economy of the missing value belongs. Table 1 at the end of this appendix reports the imputed values by indicator and economy, and the method used. Note that in the ranking tables available online at http:// gcr.weforum.org, imputed values are not reported.

#### Pillar 1: Institutions

#### 1.01 Property rights

In your country, to what extent are property rights, including financial assets, protected? [1 = not at all; 7 = to a great extent] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

### 1.02 Intellectual property protection

In your country, to what extent is intellectual property protected? [1 = not at all; 7 = to a great extent] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 1.03 Diversion of public funds

In your country, how common is illegal diversion of public funds to companies, individuals, or groups? [1 = very commonly occurs; 7 = never occurs] | 2016-17 weighted average

#### 1.04 Public trust in politicians

In your country, how do you rate the ethical standards of politicians? [1 = extremely low; 7 = extremely high] | 2016–17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 1.05 Irregular payments and bribes

Average score across the five components of the following Executive Opinion Survey question: In your country, how common is it for firms to make undocumented extra payments or bribes connected with (a) imports and exports; (b) public utilities; (c) annual tax payments; (d) awarding of public contracts and licenses; (e) obtaining favorable judicial decisions? In each case, the answer ranges from 1 [very common] to 7 [never occurs] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 1.06 Judicial independence

In your country, how independent is the judicial system from influences of the government, individuals, or companies? [1 = not independent at all; 7 = entirely independent] | 2016–17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 1.07 Favoritism in decisions of government officials

In your country, to what extent do government officials show favoritism to well-connected firms and individuals when deciding upon policies and contracts? [1 = show favoritism to a great extent; 7 = do not show favoritism at all] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 1.08 Efficiency of government spending

In your country, how efficient is the government in spending public revenue? [1 = extremely inefficient; 7 = extremely efficientl | 2017

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 1.09 Burden of government regulation

In your country, how burdensome is it for companies to comply with public administration's requirements (e.g., permits, regulations, reporting)? [1 = extremely burdensome; 7 = not burdensome at all] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 1.10 Efficiency of legal framework in settling disputes

In your country, how efficient are the legal and judicial systems for companies in settling disputes? [1 = extremely inefficient; 7 = extremely efficient] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 1.11 Efficiency of legal framework in challenging regulations

In your country, how easy is it for private businesses to challenge government actions and/or regulations through the legal system? [1 = extremely difficult; 7 = extremely easy] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 1.12 Transparency of government policymaking

In your country, how easy is it for companies to obtain information about changes in government policies and regulations affecting their activities? [1 = extremely difficult; 7 = extremely easy] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 1.13 Business costs of terrorism

In your country, to what extent does the threat of terrorism impose costs on businesses? [1 = to a great extent— imposes huge costs; 7 = not at all - imposes no costs] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 1.14 Business costs of crime and violence

In your country, to what extent does the incidence of crime and violence impose costs on businesses? [1 = to a great extent—imposes huge costs; 7 = not at all—imposes no costs] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 1.15 Organized crime

In your country, to what extent does organized crime (mafiaoriented racketeering, extortion) impose costs on businesses? [1 = to a great extent—imposes huge costs; 7 = not at all imposes no costs] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 1.16 Reliability of police services

In your country, to what extent can police services be relied upon to enforce law and order? [1 = not at all; 7 = to a great extent] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 1.17 Ethical behavior of firms

In your country, how do you rate the corporate ethics of companies (ethical behavior in interactions with public officials, politicians and other firms)? [1 = extremely poor—among the worst in the world; 7 = excellent—among the best in the world] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 1.18 Strength of auditing and reporting standards

In your country, how strong are financial auditing and reporting standards? [1 = extremely weak; 7 = extremely strong] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 1.19 Efficacy of corporate boards

In your country, to what extent is management accountable to investors and boards of directors? [1 = not at all; 7 = to a greatextent] | 2016-17 weighted average

#### 1.20 Protection of minority shareholders' interests

In your country, to what extent are the interests of minority shareholders protected by the legal system? [1 = not protected at all; 7 = fully protected] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 1.21 Strength of investor protection

Strength of Investor Protection Index on a 0-10 (best) scale | 2016

This variable is a combination of the Extent of disclosure index (transparency of transactions), the Extent of director liability index (liability for self-dealing), and the Ease of shareholder suit index (shareholders' ability to sue officers and directors for misconduct). For more details about the methodology employed and the assumptions made to compute this indicator, visit http://www. doingbusiness.org/methodologysurveys/.

Source: World Bank/International Finance Corporation, Doing Business 2017: Equal Opportunity for All

#### Pillar 2: Infrastructure

#### 2.01 Quality of overall infrastructure

How do you assess the general state of infrastructure (e.g., transport, communications, and energy) in your country? [1 = extremely underdeveloped—among the worst in the world; 7 = extensive and efficient—among the best in the world] | 2016–17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 2.02 Quality of roads

In your country, what is the quality (extensiveness and condition) of road infrastructure? [1 = extremely poor—among the worst in the world; 7 = extremely good—among the best in the world] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 2.03 Quality of railroad infrastructure

In your country, what is the quality (extensiveness and condition) of the railroad system? [1 = extremely poor-among the worst in the world; 7 = extremely good—among the best in the world] | 2016-17 weighted average

N/Appl. is used for economies where there is no regular train service or where the network covers only a negligible portion of the territory. Assessment of the existence of a network was conducted by the World Economic Forum based on various

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 2.04 Quality of port infrastructure

In your country, what is the quality (extensiveness and condition) of seaports (for landlocked countries, assess access to seaports)? [1 = extremely poor-among the worst in the world; 7 = extremely good—among the best in the world] 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 2.05 Quality of air transport infrastructure

In your country, what is the quality (extensiveness and condition) of airports? [1 = extremely poor—among the worst in the world; 7 = extremely good—among the best in the world] 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 2.06 Available airline seat kilometers

Airline seat kilometers (in millions) available on all flights (domestic and international service) originating in country per week (year average) | Monthly average for 2017

This indicator measures the total passenger-carrying capacity of all scheduled flights, including domestic flights, originating in a country. It is computed by multiplying the number of seats available on each flight by the flight distance in kilometers and summing the result across all scheduled flights in a week. The final value represents the weekly average for the year (Jan-Dec), taking into account flights scheduled beforehand by airline

Source: International Air Transport Association, SRS Analyser

#### 2.07 Quality of electricity supply

In your country, how reliable is the electricity supply (lack of interruptions and lack of voltage fluctuations)? [1 = extremely unreliable; 7 = extremely reliable] | 2016–17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 2.08 Mobile-cellular telephone subscriptions

Number of mobile-cellular telephone subscriptions per 100 population | 2016

Mobile-cellular telephone subscriptions refers to the number of subscriptions to a public mobile telephone service that provides access to the public switched telephone network (PSTN) using cellular technology. It includes both the number of postpaid subscriptions and the number of active prepaid accounts (i.e., that have been active during the past three months). It includes all mobile-cellular subscriptions that offer voice communications. It excludes subscriptions via data cards or USB modems, subscriptions to public mobile data services, and private trunked mobile radio, telepoint, radio paging, and telemetry services.

Source: International Telecommunication Union, ITU World Telecommunication/ICT Indicators (June 2017 edition)

#### 2.09 Fixed-telephone lines

# Number of fixed-telephone lines per 100 population | 2016

Fixed-telephone subscriptions refers to the sum of active analogue fixed-telephone lines, voice over IP (VoIP) subscriptions, fixed wireless local loop (WLL) subscriptions, ISDN voice-channel equivalents, and fixed-public payphones. It includes all accesses over fixed infrastructure supporting voice telephony using copper wire, voice services using Internet Protocol (IP) delivered over fixed (wired)-broadband infrastructure (e.g., DSL, fiber optic), and voice services provided over coaxial-cable television networks (cable modem). It also includes fixed wireless local loop (WLL) connections, which are defined as services provided by licensed fixed-line telephone operators that provide last-mile access to the subscriber using radio technology, when the call is then routed over a fixed-line telephone network (and not a mobile-cellular network). In the case of VoIP, it refers to subscriptions that offer the ability to place and receive calls at any time and do not require a computer. VoIP is also known as voice-over broadband (VoB), and includes subscriptions through fixed-wireless, DSL, cable, fiber optic, and other fixed-broadband platforms that provide fixed telephony using IP.

Source: International Telecommunication Union, ITU World Telecommunication/ICT Indicators (June 2017 edition)

#### Pillar 3: Macroeconomic environment

#### 3.01 Government budget balance

# General government budget balance as a percentage of GDP

General government budget balance is calculated as general government revenue minus total expenditure. This is a core Government Finance Statistics (GFS) balance that measures the extent to which the general government is either putting financial resources at the disposal of other sectors in the economy and nonresidents (net lending), or utilizing the financial resources generated by other sectors and nonresidents (net borrowing). This balance may be viewed as an indicator of the financial impact of general government activity on the rest of the economy and nonresidents. Revenue consists of taxes, social contributions, grants receivable, and other revenue. Revenue increases a government's net worth, which is the difference between its assets and liabilities. General government total expenditure consists of total expenses and the net acquisition of nonfinancial

Source: International Monetary Fund, World Economic Outlook Database (April 2017 edition)

#### 3.02 Gross national savings

#### Gross national savings as a percentage of GDP | 2016 or most recent year available

Gross national savings is expressed as a ratio of gross national savings in current local currency and GDP in current local currency. It corresponds to gross disposable income less final consumption expenditure after taking account of an adjustment for pension funds. For many countries, the estimates of national savings are built up from national accounts data on gross domestic investment and from balance of payments-based data on net foreign investment.

For this indicator, some values were imputed. See Table 1 at the end of this appendix for details.

Source: International Monetary Fund, World Economic Outlook Database (April 2017 edition)

#### 3.03 Inflation

Annual percent change in consumer price index (year average) 2016 or most recent year available

Source: International Monetary Fund, World Economic Outlook Database (April 2017 edition)

#### 3.04 Government debt

#### Gross general government debt as a percentage of GDP | 2016 or most recent year available

Gross debt consists of all liabilities that require payment or payments of interest and/or principal by the debtor to the creditor at a date or dates in the future. This includes debt liabilities in the form of special drawing rights, currency and deposits, debt securities, loans, insurance, pensions and standardized guarantee schemes, and other accounts payable. Thus all liabilities in the Government Finance Statistics Manual (GFSM) 2001 system are debt, except for equity and investment fund shares, financial derivatives, and employee stock options. For Australia, Belgium, Canada, Hong Kong SAR, Iceland, New Zealand, and Sweden, government debt coverage also includes insurance technical reserves, following the GFSM 2001 definition.

Source: International Monetary Fund, World Economic Outlook Database (April 2017 edition) and Article IV Consultation Staff

#### 3.05 Country credit rating

Institutional Investor's Country Credit Ratings™ assessing the probability of sovereign debt default on a 0-100 (lowest probability) scale | March 2016

Institutional Investor's Country Credit Ratings™ developed by Institutional Investor are based on information provided by senior economists and sovereign-debt analysts at leading global banks and money management and security firms. Twice a year, the respondents grade each country on a scale of 0 to 100, with 100 representing the least chance of default.

For this indicator, some values were imputed. See Table 1 at the end of this appendix for details

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#### Pillar 4: Health and primary education

#### 4.01 Malaria incidence

#### Estimated number of malaria cases per 100,000 population 2015 or most recent year available

For economies that: (1) were declared free of malaria by the World Health Organization (WHO) (except in the case of Hong Kong SAR, for which malaria assessment is from the CDC); (2) are included in the WHO's supplementary list of areas where malaria has never existed or has disappeared without specific measures: or (3) are currently in the prevention of reintroduction phase as identified by the WHO, this indicator is excluded from the calculation of the GCI. In the Economy Profiles of these economies, the following abbreviations are used: M.F. for malariafree economies; P.R. means the economy is in the prevention of reintroduction phase; and S.L. means the economy is on the WHO's supplementary list.

Sources: The World Health Organization, World Malaria Report 2012 and 2016 editions; United States Centers for Disease Control and Prevention (CDC), Malaria Information and Prophylaxis information (accessed July 29, 2017)

#### 4.02 Business impact of malaria

How serious an impact do you consider malaria will have on your company in the next five years (e.g., death, disability, medical and funeral expenses, productivity and absenteeism, recruitment and training expenses, revenues)? [1 = a serious impact; 7 = no impact at all] | 2017

For economies that are considered free of malaria; that are included in the World Health Organization's supplementary list; or that are in the prevention of reintroduction phase (see indicator 4.01 above), this indicator is excluded from the calculation of the GCI. In the Economy Profiles of these economies, N/Appl. is used for this indicator.

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 4.03 Tuberculosis incidence

Estimated number of tuberculosis cases per 100,000 population | 2015 or most recent year available

Incidence of tuberculosis is the estimated number of new pulmonary, smear positive, and extra-pulmonary tuberculosis

Sources: The World Bank, World Development Indicators (accessed June 8, 2017); national sources

#### 4.04 Business impact of tuberculosis

How serious an impact do you consider tuberculosis will have on your company in the next five years (e.g., death, disability, medical and funeral expenses, productivity and absenteeism, recruitment and training expenses, revenues)? [1 = a serious impact; 7 = no impact at all] | 2017

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 4.05 HIV prevalence

HIV prevalence as a percentage of adults aged 15-49 years | 2016 or most recent year available

HIV prevalence refers to the percentage of people aged 15-49 who are infected with HIV at a particular point in time, no matter when infection occurred.

For this indicator, some values were imputed. See Table 1 at the end of this appendix for details

Sources: The World Bank, World Development Indicators (accessed July 27, 2017); UNAIDS, UNAIDS Global Report 2012; UNAIDS, UNAIDS Gap Report 2014; national sources

Note: Economies with a prevalence rate equal to or less than 0.2 percent are all ranked first and listed alphabetically.

#### 4.06 Business impact of HIV/AIDS

How serious an impact do you consider HIV/AIDS will have on your company in the next five years (e.g., death, disability, medical and funeral expenses, productivity and absenteeism, recruitment and training expenses, revenues)? [1 = a serious impact; 7 = no impact at all] | 2017

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 4.07 Infant mortality

Infant (children aged 0-12 months) mortality per 1,000 live births | 2015 or most recent year available

Infant mortality rate is the number of infants dying before reaching one year of age per 1,000 live births in a given year.

Sources: The World Bank, World Development Indicators (accessed June 8, 2017); national sources

#### 4.08 Life expectancy

# Life expectancy at birth (years) | 2015

Life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life.

Sources: The World Bank, World Development Indicators (accessed June 8, 2017); national sources

# 4.09 Quality of primary education

In your country, how do you assess the quality of primary education? [1 = extremely poor-among the worst in the world; 7 = excellent—among the best in the world] | 2016–17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 4.10 Primary education enrollment rate

#### Net primary education enrollment rate | 2015 or most recent vear available

The reported value corresponds to the ratio of children of official primary school age (as defined by the national education system) who are enrolled in primary school. Primary education (ISCED level 1) provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music.

For this indicator, some values were imputed. See Table 1 at the end of this appendix for details

Sources: UNESCO Institute for Statistics, Data Centre (accessed June 8, 2017); Organisation for Economic Co-operation and Development (OECD), Education at a Glance 2016; UNICEF; national sources

#### Pillar 5: Higher education and training

#### 5.01 Secondary education enrollment rate

#### Gross secondary education enrollment rate | 2015 or most recent year available

The reported value corresponds to the ratio of total secondary enrollment, regardless of age, to the population of the age group that officially corresponds to the secondary education level. Secondary education (ISCED levels 2 and 3) completes the provision of basic education that began at the primary level, and aims to lay the foundations for lifelong learning and human development by offering more subject- or skills-oriented instruction using more specialized teachers.

For this indicator, some values were imputed. See Table 1 at the end of this appendix for details

Sources: UNESCO Institute for Statistics, Data Centre (accessed June 8, 2017); national sources

#### 5.02 Tertiary education enrollment rate

#### Gross tertiary education enrollment rate | 2015 or most recent year available

The reported value corresponds to the ratio of total tertiary enrollment, regardless of age, to the population of the age group that officially corresponds to the tertiary education level. Tertiary education (ISCED levels 5 and 6), whether or not leading to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level.

For this indicator, some values were imputed. See Table 1 at the end of this Appendix for details

Sources: UNESCO Institute for Statistics, Data Centre (accessed June 8, 2017); national sources

# 5.03 Quality of the education system

In your country, how well does the education system meet the needs of a competitive economy? [1 = not well at all; 7 = extremely well] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 5.04 Quality of math and science education

In your country, how do you assess the quality of math and science education? [1 = extremely poor—among the worst in the world; 7 = excellent-among the best in the world] | 2016-17 weighted average

#### 5.05 Quality of management schools

In your country, how do you assess the quality of business schools? [1 = extremely poor—among the worst in the world; 7 = excellent—among the best in the world] | 2016–17 weighted

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 5.06 Internet access in schools

In your country, to what extent is the Internet used in schools for learning purposes? [1 = not at all; 7 = to a great extent] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey, For more details, refer to Appendix C of this Report

#### 5.07 Local availability of specialized training services

In your country, how available are high-quality, professional training services? [1 = not available at all; 7 = widely available] 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 5.08 Extent of staff training

In your country, to what extent do companies invest in training and employee development? [1 = not at all; 7 = to a great extent] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### Pillar 6: Goods market efficiency

#### 6.01 Intensity of local competition

In your country, how intense is competition in the local markets? [1 = not intense at all; 7 = extremely intense] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 6.02 Extent of market dominance

In your country, how do you characterize corporate activity? [1 = dominated by a few business groups; 7 = spread among many firms] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 6.03 Effectiveness of anti-monopoly policy

In your country, how effective are anti-monopoly policies at ensuring fair competition? [1 = not effective at all; 7 = extremely effective] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 6.04 Effect of taxation on incentives to invest

In your country, to what extent do taxes reduce the incentive to invest? [1 = to a great extent; 7 = not at all] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 6.05 Total tax rate

This variable is a combination of profit tax (% of profits), labor tax and contribution (% of profits), and other taxes (% of profits) | 2016

The total tax rate measures the amount of taxes and mandatory contributions payable by a business in the second year of operation, expressed as a share of commercial profits. The total amount of taxes is the sum of five different types of taxes and contributions payable after accounting for deductions and exemptions: profit or corporate income tax, social contributions and labor taxes paid by the employer, property taxes, turnover taxes, and other small taxes. For more details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/ methodologysurveys/.

Source: World Bank/International Finance Corporation, Doing Business 2017: Equal Opportunity for All

#### 6.06 Number of procedures required to start a business

#### Number of procedures required to start a business | 2016

For details about the methodology employed and the assumptions made to compute this indicator, visit http://www. doingbusiness.org/methodologysurveys/.

Source: World Bank/International Finance Corporation, Doing Business 2017: Equal Opportunity for All

#### 6.07 Time required to start a business

#### Number of days required to start a business | 2016

For details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/methodologysurveys/.

Source: World Bank/International Finance Corporation, Doing Business 2017: Equal Opportunity for All

#### 6.08 Agricultural policy costs

In your country, how do you assess the agricultural policy? [1 = excessively burdensome for the economy; 7 = balances well the interests of taxpayers, consumers, and producers] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 6.09 Prevalence of non-tariff barriers

In your country, to what extent do non-tariff barriers (e.g., health and product standards, technical and labeling requirements, etc.) limit the ability of imported goods to compete in the domestic market? [1 = strongly limit; 7 = do not limit at all] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 6.10 Trade tariffs

# Trade-weighted average tariff rate | 2016 or most recent year

An applied tariff is a customs duty that is levied on imports of merchandise goods. This indicator is calculated as a weighted average of all the applied tariff rates, including preferential rates that a country applies to the rest of the world. The weights are the trade patterns of the importing country's reference group.

Sources: International Trade Centre; Trade Competitiveness Map Data

# 6.11 Prevalence of foreign ownership

In your country, how prevalent is foreign ownership of companies? [1 = extremely rare; 7 = extremely prevalent] | 2016-17 weighted average

#### 6.12 Business impact of rules on FDI

In your country, how restrictive are rules and regulations on foreign direct investment (FDI)? [1 = extremely restrictive; 7 = not restrictive at all] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 6.13 Burden of customs procedures

In your country, how efficient are customs procedures (related to the entry and exit of merchandise)? [1 = extremely inefficient; 7 = extremely efficient] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 6.14 Imports as a percentage of GDP

Imports of goods and services as a percentage of gross domestic product | 2016 or most recent year available

Total imports is the sum of total imports of merchandise and commercial services.

Sources: World Trade Organization, Online Statistics Database (accessed June 6, 2017); International Monetary Fund, World Economic Outlook Database (April 2017 edition); national sources

#### 6.15 Degree of customer orientation

In your country, how well do companies treat customers? [1 = poorly-mostly indifferent to customer satisfaction; 7 = extremely well—highly responsive to customers and seek customer retention] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 6.16 Buyer sophistication

In your country, on what basis do buyers make purchasing decisions? [1 = based solely on the lowest price; 7 = based on sophisticated performance attributes] | 2016-17 weighted

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

### Pillar 7: Labor market efficiency

#### 7.01 Cooperation in labor-employer relations

In your country, how do you characterize labor-employer relations? [1 = generally confrontational; 7 = generally cooperative] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 7.02 Flexibility of wage determination

In your country, how are wages generally set? [1 = by a centralized bargaining process; 7 = by each individual company] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 7.03 Hiring and firing practices

In your country, to what extent do regulations allow flexible hiring and firing of workers? [1 = not at all; 7 = to a great extent] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 7.04 Redundancy costs

#### Redundancy costs in weeks of salary | 2016

This variable estimates the cost of advance notice requirements, severance payments, and penalties due when terminating a redundant worker, expressed in weekly wages. For more details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/ methodologysurveys/.

Sources: World Bank/International Finance Corporation, Doing Business 2017: Equal Opportunity for All; World Economic Forum's calculations

#### 7.05 Effect of taxation on incentives to work

In your country, to what extent do taxes and social contributions reduce the incentive to work? [1 = to a great extent; 7 = not at all] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 7.06 Pay and productivity

In your country, to what extent is pay related to employee productivity? [1 = not at all; 7 = to a great extent] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 7.07 Reliance on professional management

In your country, who holds senior management positions in companies? [1 = usually relatives or friends without regard to merit; 7 = mostly professional managers chosen for merit and qualifications] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 7.08 Country capacity to retain talent

To what extent does your country retain talented people? [1 = not at all—the best and brightest leave to pursue opportunities abroad; 7 = to a great extent—the best and brightest stay and pursue opportunities in the country] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey, For more details, refer to Appendix C of this Report

#### 7.09 Country capacity to attract talent

To what extent does your country attract talented people from abroad? [1 = not at all; 7 = to a great extent—the country attracts the best and brightest from around the world] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 7.10 Female participation in the labor force

# Ratio of women to men in the labor force\* | 2016

This measure is the percentage of women aged 15-64 participating in the labor force divided by the percentage of men aged 15-64 participating in the labor force.

Source: International Labour Organization, Key Indicators of the Labour Markets, 9th Edition.

### Pillar 8: Financial market development

#### 8.01 Availability of financial services

In your country, to what extent does the financial sector provide the products and services that meet the needs of businesses? [1 = not at all; 7 = to a great extent] | 2017

#### 8.02 Affordability of financial services

In your country, to what extent does the cost of financial services (e.g. insurance, loans, trade finance) impede business activity? [1 = to a great extent; 7 = not at all] | 2017

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 8.03 Financing through local equity market

In your country, to what extent can companies raise money by issuing shares and/or bonds on the capital market? [1 = not at all; 7 = to a great extent] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 8.04 Ease of access to loans

In your country, how easy is it for businesses to obtain a bank loan? [1 = extremely difficult; 7 = extremely easy] | 2016–17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this  $\ensuremath{\textit{Report}}$ 

#### 8.05 Venture capital availability

In your country, how easy is it for start-up entrepreneurs with innovative but risky projects to obtain equity funding? [1 = extremely difficult; 7 = extremely easy] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 8.06 Soundness of banks

In your country, how do you assess the soundness of banks? [1 = extremely low—banks may require recapitalization; 7 = extremely high—banks are generally healthy with sound balance sheets] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

## 8.07 Regulation of securities exchanges

In your country, to what extent do regulators ensure the stability of the financial market? [1 = not at all; 7 = to a great extent] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 8.08 Legal rights index

Degree of legal protection of borrowers' and lenders' rights on a 0-12 (best) scale | 2016

This index measures the degree to which collateral and bankruptcy laws protect borrowers' and lenders' rights and thus facilitate lending. For more details about the methodology employed and the assumptions made to compute this indicator, visit http://www.doingbusiness.org/methodologysurveys/.

Source: World Bank/International Finance Corporation, Doing Business 2017: Equal Opportunity for All

### Pillar 9: Technological readiness

#### 9.01 Availability of latest technologies

In your country, to what extent are the latest technologies available? [1 = not at all; 7 = to a great extent] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 9.02 Firm-level technology absorption

In your country, to what extent do businesses adopt the latest technologies? [1 = not at all; 7 = to a great extent] | 2016-17weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 9.03 FDI and technology transfer

To what extent does foreign direct investment (FDI) bring new technology into your country? [1 = not at all; 7 = to a great extent] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

#### 9.04 Internet users

#### Percentage of individuals using the Internet | 2016

Individuals using the Internet refers to people who used the Internet from any location and for any purpose, irrespective of the device and network used, in the last three months. It can be via a computer (i.e., desktop computer, laptop computer or tablet, or similar handheld computer), mobile phone, games machine, digital TV, etc. Access can be via a fixed or mobile network.

Source: International Telecommunication Union, ITU World Telecommunication/ICT Indicators (June 2017 edition)

#### 9.05 Fixed-broadband Internet subscriptions

Fixed-broadband Internet subscriptions per 100 population | 2016 or most recent year available

Fixed (wired)-broadband subscriptions refers to the number of subscriptions for high-speed access to the public Internet (a TCP/ IP connection). Highspeed access is defined as downstream speeds equal to, or greater than, 256 kbit/s. Fixed (wired)broadband includes cable modem, DSL, fiber, and other fixed (wired)-broadband technologies-such as Ethernet LAN, and broadband over powerline (BPL) communications. Subscriptions with access to data communications (including the Internet) via mobile-cellular networks are excluded.

Source: International Telecommunication Union, ITU World Telecommunication/ICT Indicators (June 2017 edition)

# 9.06 Internet bandwidth

#### International Internet bandwidth (kb/s) per Internet user | 2016

International Internet bandwidth refers to the total used capacity of international Internet bandwidth, in megabits per second (Mb/s), It is measured as the sum of used capacity of all Internet exchanges offering international bandwidth. If capacity is asymmetric, then the incoming capacity is used. International Internet bandwidth (kb/s) per Internet user is calculated by dividing the capacity in Mb/s by a thousand and dividing it by the total number of Internet users.

Source: International Telecommunication Union, ITU World Telecommunication/ICT Indicators (June 2017 edition)

# 9.07 Mobile-broadband subscriptions

# Active mobile-broadband subscriptions per 100 population | 2016

Active mobile-broadband subscriptions refers to the sum of standard mobile-broadband subscriptions and dedicated mobilebroadband data subscriptions to the public Internet. It covers actual subscribers, not potential subscribers, even though the latter may have broadband-enabled handsets. Standard mobile-broadband subscriptions refers to active mobile-cellular subscriptions with advertised data speeds of 256 kb/s or greater that allow access to the greater Internet via HTTP and that have been used to set up an Internet data connection using Internet Protocol (IP) in the past three months. Standard SMS and MMS messaging do not count as an active Internet data connection, even if the messages are delivered via IP. Dedicated mobile-broadband data subscriptions refers to subscriptions to dedicated data services (over a mobile network) that allow access to the greater Internet and that are purchased separately from voice services, either as a standalone service (e.g., using a data card such as a USB modem/dongle) or as an add-on data package to voice services that requires an additional subscription. All dedicated mobile-broadband subscriptions with recurring subscription fees are included regardless of actual use. Prepaid mobile-broadband plans require use if there is no monthly subscription. This indicator could also include mobile WiMAX

Source: International Telecommunication Union, ITU World Telecommunication/ICT Indicators (June 2017 edition)

# Pillar 10: Market size

# 10.01 Domestic market size index

Sum of gross domestic product plus value of imports of goods and services, minus value of exports of goods and services, normalized on a 1-7 (best) scale | 2016 or most recent year available

Source: World Economic Forum. For more details, refer to Appendix A of this Report

# 10.02 Foreign market size index

Value of exports of goods and services, normalized on a 1-7 (best) scale | 2016 or most recent year available

Source: World Economic Forum. For more details, refer to Appendix A of this Report

# 10.03 GDP (PPP)

Gross domestic product valued at purchasing power parity in billions of international dollars | 2016

Source: International Monetary Fund, World Economic Outlook Database (April 2017 edition)

# 10.04 Exports as a percentage of GDP

Exports of goods and services as a percentage of gross domestic product | 2016 or most recent year available Total exports is the sum of total exports of merchandise and commercial services.

Sources: World Trade Organization, Online Statistics Database (accessed June 08, 2017); International Monetary Fund, World Economic Outlook Database (April 2017 edition); national sources

# Pillar 11: Business sophistication

# 11.01 Local supplier quantity

In your country, how numerous are local suppliers? [1 = largely nonexistent; 7 = extremely numerous] | 2016-17 weighted

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 11.02 Local supplier quality

In your country, how do you assess the quality of local suppliers? [1 = extremely poor quality; 7 = extremely high quality] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 11.03 State of cluster development

In your country, how widespread are well-developed and deep clusters (geographic concentrations of firms, suppliers, producers of related products and services, and specialized institutions in a particular field)? [1 = nonexistent; 7 = widespread in many fields] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 11.04 Nature of competitive advantage

On what is the competitive advantage of your country's companies in international markets based? [1 = primarily lowcost labor or natural resources; 7 = primarily unique products and processes] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 11.05 Value chain breadth

In your country, how broad is companies' presence in the value chain? [1 = narrow, primarily involved in individual steps of the value chain (e.g., resource extraction or production); 7 = broad, present across the entire value chain (e.g., including production, marketing, distribution, design, etc.)] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey, For more details, refer to Appendix C of this Report

# 11.06 Control of international distribution

In your country, to what extent do domestic companies control the international distribution of their products? [1 = not at all; 7 = to a great extent] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 11.07 Production process sophistication

In your country, how sophisticated are production processes? [1 = not at all—production uses labor-intensive processes: 7 = highly—production uses latest technologies] | 2016–17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 11.08 Extent of marketing

In your country, how successful are companies in using marketing to differentiate their products and services? [1 = not successful at all; 7 = extremely successful] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 11.09 Willingness to delegate authority

In your country, to what extent does senior management delegate authority to subordinates? [1 = not at all; 7 = to a great extent] | 2017

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# Pillar 12: Innovation

# 12.01 Capacity for innovation

In your country, to what extent do companies have the capacity to innovate? [1 = not at all; 7 = to a great extent] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 12.02 Quality of scientific research institutions

In your country, how do you assess the quality of scientific research institutions? [1 = extremely poor-among the worst in the world; 7 = extremely good—among the best in the world] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 12.03 Company spending on R&D

In your country, to what extent do companies invest in research and development (R&D)? [1 = do not invest at all in R&D; 7 = invest heavily in R&D] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 12.04 University-industry collaboration in R&D

In your country, to what extent do business and universities collaborate on research and development (R&D)? [1 = do not collaborate at all; 7 = collaborate extensively] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 12.05 Government procurement of advanced technology

In your country, to what extent do government purchasing decisions foster innovation? [1 = not at all; 7 = to a great extent] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 12.06 Availability of scientists and engineers

In your country, to what extent are scientists and engineers available? [1 = not available at all; 7 = widely available] | 2016-17 weighted average

Source: World Economic Forum, Executive Opinion Survey. For more details, refer to Appendix C of this Report

# 12.07 PCT patent applications

Number of applications filed under the Patent Cooperation Treaty (PCT) per million population | 2013-2014 average

This indicator measures the total count of applications filed under the Patent Cooperation Treaty (PCT), by priority date and inventor nationality, using fractional count if an application is filed by multiple inventors. The average count of applications filed in 2013 and 2014 is divided by population figures for 2014. For more details about the treatment of Hong Kong SAR and Taiwan (China), refer to the imputation methodology described at the beginning of this section.

For this indicator, some values were imputed. See Table 1 at the end of this appendix for details.

Sources: Organisation for Economic Co-operation and Development (OECD), Patent Database, (situation as of July 2017). For population data: International Monetary Fund, World Economic Outlook Database (April 2017 edition); World Economic Forum's calculations.

Table 1: Imputation methodology details and imputed values

Indicator	Imputaton method	Economy	Imputed value	
3.02 Gross national savings	Linear multivariate regression estimation. Regressors: government debt-to-GDP ratio; exports-to-GDP ratio; GDP valued at purchasing power parity; inflation rate; imports-to-GDP ratio	Liberia	5.33	
3.05 Country credit rating	Linear multivariate regression estimation. Regressors: government debt-to-GDP ratio; GDP valued at purchasing power parity; inflation rate	Brunei Darussalam	52.73	
4.05 HIV prevalence	Peer group mean. <i>Group</i> is defined as the combination or World Bank income group and IMF regional classification	Bosnia and Herzegovina Brunei Darussalam United Arab Emirates	2.00 0.27 0.27	
4.10 Primary education enrollment rate	Linear multivariate regression estimation. Regressors: Mean years of schooling; GDP per capita (log)	Haiti Madagascar Slovak Republic	86.69 86.92 97.74	
5.01 Secondary education enrollment rate	Linear multivariate regression estimation. Regressors: Mean years of schooling; GDP per capita (log)	Haiti Trinidad and Tobago United Arab Emirates	54.69 103.91 107.29	
5.02 Tertiary education enrollment rate	Linear multivariate regression estimation. Regressors: Mean years of schooling; GDP per capita (log)	Haiti Nicaragua Sierra Leone	13.60 25.64 4.52	
7.10 Female participation in the labor force	Peer group mean. <i>Group</i> is defined as the combination or World Bank income group and IMF regional classification	Seychelles	0.69	
12.07 PCT patent applications	Linear univariate regression estimation. Regressor: IP 5 patent applications. The estimated number is then divided by total population.	Hong Kong SAR Taiwan (China)	60.31 460.13	

# **APPENDIX E**

# The Future of Competitiveness Benchmarking: A Proposal

Three years ago, the World Economic Forum embarked on a major review of its flagship Global Competitiveness Index (GCI), originally launched in 2004. The review was prompted by the new economic reality, the advent of the Fourth Industrial Revolution (4IR), new empirical evidence, and new data. Its goal is to ensure that the index remains relevant and continues to inform multi-stakeholder dialogue and find its way into the toolkits of policymakers in the years to come. The new methodology-working title: GCI 4.0-builds on the success of the current methodology and retains some of its key features. It places more emphasis on future orientation, adaptability, and agility than the current GCI-all important features in the context of the 4IRand is less prescriptive about the path of development.

The review was conducted under the auspices of Professor Klaus Schwab, Chairman of the Forum, and the guidance of Professor Xavier Sala-i-Martin of Columbia University, the long-standing academic advisor of The Global Competitiveness Report series. The team leveraged the Forum's extensive network of experts and partner organizations and held numerous consultations and events on key conceptual and technical aspects of the methodology. At various stages of the process, it also consulted with and solicited feedback from many practitioners, including governments from around the world (see Acknowledgments at the end of this appendix).

The 2015–2016 edition of the GCR presented the first reflections on this process, providing a thorough literature review of competitiveness drivers and a first draft of the structure for an updated index. The 2016-2017 edition featured preliminary rankings for selected pillars related to innovation and human capital. This edition presents the key conceptual and technical features of the new index, its detailed structure (Appendix E1), and notional results for 2017 for the overall index and its 12 pillars (Appendix E2).

Publishing the methodology under development offers users the opportunity to familiarize themselves with it and the ways in which the results differ. However, given the many and significant differences, any comparison of the results of the GCI 4.0 with those of the current GCI would be misguided and spurious, and is therefore discouraged (see Box 1).1 The team will hold further consultations and collect feedback before finalizing the methodology.

# **KEY FEATURES AND CONCEPTUAL INNOVATIONS**

Following initial consultations, it was decided to keep the key objective of the original GCI: to measure the determinants of competitiveness, defined as the set of institutions, policies, and factors that determine an economy's level of productivity. Despite the difficulties associated with measuring it, productivity remains a key driver of prosperity and ultimately of economic progress.

# Box 1: Main causes of differences in performance across the two methodologies

The GCI 4.0 introduces significant changes to the methodology, so the re-stated ranking is therefore not comparable with that of the current methodology. Here is a description of the main types of changes, along with illustrative examples.

- Changes in weights. The discontinuation of stages of development significantly alters the weighting scheme used to compute the overall GCI score. The 12 pillars in the GCI 4.0 are weighted equally, each contributing 8.3 percent. With the current methodology, the weight varies by pillar and country, from 5 to 15 percent, according to (1) the subindex to which the pillar belongs and (2) the country's stage of development. In the current methodology, the basic requirements (i.e., institutions, infrastructure, macroeconomic environment, and health and primary education) account for 65 percent of the overall GCI score in the case of low-income countries (i.e., those with GDP per capita of less than US\$2,000) and commodity-dependent economies (i.e., those whose share of minerals in exports exceeds 70 percent), while innovation and sophistication factors obtain a weight of 5 percent. In the proposed methodology, each of the pillars will receive equal weight. The new scheme will therefore benefit those low-income and commodity-dependent countries that perform better in the innovation ecosystem; but it will penalize countries that have been neglecting some key enablers of competitiveness. This change reflects the latest thinking that many paths to growth are possible and better reflects the aspirations of low-income and commodity-exporting countries.
- Changes within pillars. Within each pillar, changes in the form of the addition, deletion, modification, and reshuffling of concepts and/or individual indicators can significantly impact the performance of a country (a concept is a welldefined driver of competitiveness that is assessed through one or more individual indicators). The direction and magnitude of this impact is a function of (1) the country's performance in the concept/indicator that has been added/deleted/modified, and (2) the change in the implicit weight of the various components of the pillar. Four types of changes are distinguished:
  - Reorganization within pillars. In some pillars, a number of concepts were regrouped, while in others concepts were split into several categories. For instance, the health and primary education pillar of the current methodology has been broken into two: the health component is a pillar of its own in the new methodology, while primary education is part of an enlarged Education and skills pillar.

- Change in concept definition. In several pillars, the scope of certain concepts has been either expanded or reduced. For instance, transport infrastructure includes a connectivity dimension, beyond mere availability and quality, while in the Labor market functioning pillar, the female-to-male labor participation ratio is replaced with a more restrictive measure that takes into account only salaried workers.
- Change in concept measurement. A majority of concepts have been retained in the new methodology, but the ways in which they are assessed has changed or been refined. For instance, the Health pillar is composed of a single indicator, namely health-adjusted life expectancy, which replaces eight health-related indicators in the current GCI. In several cases, indicators derived from the Executive Opinion Survey (EOS) have been replaced by statistical indicators. For example, the perceived impact of terrorism is replaced with a measure of actual terrorism incidence. In the Innovation capacity pillar, the current methodology includes an EOS indicator assessing the propensity of companies to spend on research and development (R&D), which has been replaced with R&D expenditures as a share of GDP.
- Introduction/deletion of concepts/indicators. In the new methodology, recent empirical evidence has led to the introduction of new concepts; other concepts have been dropped, notably to avoid conceptual overlaps or because their link to productivity is less certain. For example, the Institutions pillar now features two new concepts-checks and balances and social capital-both assessed through new indicators and existing ones that were moved to these categories. In another example, the education and skills pillars, which in the current methodology look only at the education of the future workforce, now includes an assessment of the skills and education attainment of the current workforce. This concept is composed of new indicators exclusively.

Each of the changes to the current methodology has an impact—positive or negative—on how a country fares in a concept, pillar, or the overall GCI. However, the overall impact is difficult to isolate and therefore quantify because of the many overlapping and interconnected changes.

Figure 1: Global Competitiveness Index 4.0: Proposed framework

# **Enabling Environment**



1st pillar Institutions



2nd pillar Infrastructure



3rd pillar Technological readiness



4th pillar Macroeconomic context

# **Human Capital**



5th pillar Health



6th pillar Education and skills

# Markets



7th pillar Product market efficiency



8th pillar Labor market functioning



9th pillar



Financial market development



10th pillar Market size

# Innovation Ecosystem



11th pillar Business dynamism



12th pillar Innovation capacity

Prosperity can increase only if inputs of production are used in smarter and more efficient ways to fulfill constantly evolving human demands. Once this definition was confirmed, the process was guided by the following objectives:

- Embracing the Fourth Industrial Revolution.
  - The 4IR is disrupting economies and societies. It redefines the way we work, live, and interact with each other. It is very quickly reshaping the business landscape, often in unexpected ways. In this context, the primary feature of successful economies will be their capacity to be agile, adapt to changes, and respond to shocks relatively smoothly and speedily.
- Rethinking innovation. Innovation represents a critical driver of productivity growth and value creation; this is even more essential in the age of the 4IR. Three postulates guided the re-design of the entire innovation pillar, and several concepts across other pillars. First, a country's capacity to innovate depends on the quality of a vast and complex ecosystem made up of a myriad of factors: beyond traditional factors such as R&D investment, technology, and financing, intangibles

such as flexibility, openness to ideas, willingness to collaborate, and risk taking play critical roles. Second, innovation is a process through which ideas become successful products. Third, innovation happens everywhere, not just in a laboratory, and its outcomes take many forms, from products—goods and services—to business models and organizational models.

- Integrating the lessons from the global financial crisis and latest empirical evidence. The historical proportions of the crisis led to rethinking how financial development, financial stability, and debt sustainability are assessed. The Macroeconomic context pillar and the Financial market development pillar of the GCI 4.0 were completely redesigned to reflect this evolution.
- Leveraging new data sources. Over the past decade, governments and international and nongovernmental organizations have greatly increased their capacity to collect reliable data, aided by new technology and partnerships and pressed by the growing need for data and information to guide decision-making. This has resulted in a proliferation of data and new indicators.

# Box 2: Conceptual innovations in the GCI 4.0 framework

Some of the most significant conceptual innovations introduced in the GCI 4.0 include:

- The Institutions pillar has been entirely re-designed. Two new categories, Social capital and Checks and balances, capture elements that constitute the bedrock of society and of all economic activity. The pillar also now features a set of indicators that assess the agility and adaptability of the government.
- By making the Technological readiness pillar one of the "Enablers" (see Figure 1 of the main text), the status of digital infrastructure as a general purpose technology is reasserted: for any type of economic activity, information and communication technologies (ICTs) have become as important as electricity and transport infrastructure-for which they can, in some cases, be a substitute.
- Achieving economic progress requires a human-centric approach to policymaking. The GCI 4.0 assigns more weight to human capital-related factors. The Education and skills pillar assesses the capacity to educate, train, and attract talent, drawing a distinction between current and future workforces, while the Labor market functioning pillar measures the capacity of an economy to allocate the available labor to its most productive use. The Health pillar now relies on a single, intuitive indicator—the number of years a newborn can expect to live in good health—which captures with unprecedented accuracy the health status of a population.
- The GCI's Macroeconomic environment pillar has been completely redesigned and renamed Macroeconomic context. Brand new indicators now capture the sustainability of government finances rather than mere levels of deficits or indebtedness. Similarly, the Financial market development pillar has been entirely rethought. As part of the depth assessment, the main sources of financing are now taken into account separately, while financial stability is now assessed through a set of macro-prudential indicators.
- The Innovation capacity pillar and the Business dynamism pillar capture core elements of the innovation ecosystem. Innovation is seen as a complex process that spans the generation of ideas, their translation into products, and the commercialization of these products. The success of this process depends on a myriad of factors that these pillars capture to the extent possible: entrepreneurship, intrapreneurship, diversity, collaboration, and research and development. Beyond these two pillars, the GCI 4.0 includes a number of factors that contribute to shaping the innovation ecosystem, including human capital (Pillar 6), competition and efficiency of the product market (Pillar 7), availability of venture capital (Pillar 8), and, of course, technological readiness (Pillar 3), assessed through the adoption of ICTs.

• Integrating feedback from practitioners. Since 2004, users of the GCI have been sharing their comments and suggestions about the methodology; this feedback was taken into account when developing the GCI 4.0.

The GCI 4.0 is the result of the natural evolution of its predecessor rather than a completely new approach. The overall structure of 12 pillars remains relevant because it captures general concepts that are important for any type of market-based economy to thrive. Yet some reshuffling, regrouping, and re-labeling at the pillar level result in a more streamlined framework (see Figure 1). The pillars are organized into four components: Enabling environment, Human capital, Markets, and Innovation ecosystem. These four components are used only for presentation and analysis purposes; they do not enter the calculation of the index, where the 12 pillar scores are averaged to produce the overall GCI score, with each pillar weighted equally.

The GCI 4.0 comprises 106 indicators (compared with 114 in the current methodology). The extent of the changes is significant: 67 percent of the indicators are new. The number of indicators derived from the Executive Opinion Survey (EOS) was reduced from 80 to 45, and their combined weight accounts for 30 percent of the overall score, down from between 69 percent (for advanced economies) and 57 percent (for leastdeveloped economies) in the current methodology.<sup>2</sup> The global coverage of the current GCI is one of its defining features and a main reason for its success, and it was decided from the outset that the GCI 4.0 would maintain similar coverage: this iteration includes 137 economies, accounting for 95 percent of the world's population and 99 percent of global GDP.

The GCI 4.0 discontinues the concept of stages of development that is used in the current methodology to determine the weight assigned to the different pillars based on a country's level of income. In the GCI 4.0, the overall GCI score is simply the average of the 12 pillar scores. The 4IR makes it reasonable to take this more agnostic approach to income level, recognizing that all competitiveness factors matter for all countries and policy prioritization is more complex than has previously been believed. For example, robotics is making light manufacturing less labor-intensive, which reduces the feasibility of lower-income countries developing by leveraging unskilled labor; however, because information and communication technologies (ICTs) enable the rapid transfer of ideas and technologies, they also make innovation less capital-intensive, offering those countries new ways to develop. The GCI 4.0 is less prescriptive about the path to prosperity, rewarding countries that leapfrog while penalizing those that neglect aspects of their competitiveness, regardless of their stage of development.

Each pillar of the current GCI was thoroughly reviewed, taking into account the latest empirical evidence. A significant part of the review process consisted in identifying, validating, and securing access to new indicators, making it possible to cover concepts previously left out because of lack of data and to improve the measurement of existing ones. In the process, many data providers granted privileged access to their data. For some organizations, the prospect of having an indicator included in the GCI 4.0 provided the incentive to commit resources to create or refine an indicator. In addition, several indicators were developed in-house (e.g., the road quality index, an indicator of debt dynamics). Finally, empirical evidence and statistical analysis also prompted the exclusion of a number of indicators and concepts. Box 2 presents some of the most significant conceptual innovations.

# **COMPUTATIONAL INNOVATIONS**

Like its predecessor, the GCI 4.0 is a composite indicator: its computation is based on successive aggregations of scores from the indicator level (i.e., the most disaggregated level) all the way up to the overall GCI score. Yet the GCI 4.0 introduces a number of innovations.

The normalization of the individual indicators remains based on a min-max approach, which converts values for all indicators into unit-less scores ranging from 0 to 100. These normalized scores can then be combined to produce aggregated scores. Formally we have:

$$score_{i,c} = \underbrace{\frac{value_{i,c} - low_i}{high_i - low_i} \times 100}_{\Omega},$$

where  $value_{i,c}$  is the value of country c in indicator i; low, is the the threshold value, which usually—but not always-corresponds to the lowest value in the sample of countries covered; and high<sub>ic</sub>, which usually corresponds to the highest value in the sample.

In the case of "flipped" indicators where a higher value corresponds to a worse outcome (e.g., terrorism incidence, power losses), the normalized score becomes  $100 - \alpha$  so that 100 always corresponds to the ideal outcome. For each indicator, the high value (or the low value in the case of a flipped indicator) corresponds to widely accepted policy targets or aspirations, the maximum (or minimum) theoretical value, or was derived from research, consultations, and trend and statistical analysis of the distribution. Therefore the ideal value does not always correspond to the actual maximum (or minimum) values in the country sample. In this case, score<sub>ic</sub> is capped to 100 (or 0). The high and low values will be kept constant in future iterations of the model.

A distance-to-frontier approach is used for computation of the pillar scores. Normalized scores of individual indicators (or concepts) are averaged to produce pillar averages. Using the same min-max approach as described above, these pillar averages are transformed onto a 0-to-100 scale to produce the pillar scores used in the computation of the overall GCI 4.0 and reported in Table 2 of Appendix E2. The economy with the highest average is assigned a pillar score of 100 and is considered to be the "frontier," whereas the pillar score of the economy with the lowest pillar score is 0, to signal that it is the one the furthest away from the frontier.3 With this approach, the score has a straightforward interpretation: it informs how close a country is to the set frontier (the higher the score, the closer the country is to the frontier) and, over time, it shows whether it is moving away from or closer to this goal post or has even exceeded it, in which case its pillar score exceeds 100. Conversely, it is possible that in the future a pillar score could be negative (e.g., if a newly covered country performs worse than the worst performer did in 2017).

The structure of the index has been greatly simplified to make it more transparent and easier to communicate, understand, and use. In particular, the number of aggregation levels has been drastically reduced. Indicators enter only once into the index, unlike in the current GCI, where some indicators appear in two pillars and are given half-weight in each case. Special weights assigned to certain pillars and concepts have also been abandoned. And, as noted above, the decision to discard the stages and to be more agnostic about the path of development translates into a much simpler weighting scheme, common to all economies covered: the overall GCI 4.0 score is an average (arithmetic mean) of the 12 pillar scores.

Finally, missing data points are now imputed, using econometric methods that rely on the performance of the country on similar indicators and/or the performance of peer countries on the indicator for which the value is missing. A carefully estimated value is greatly preferable to a missing value, which effectively amounts to assigning the average score of the other indicators in the category that contains the missing value.

# **NOTES**

- 1 Time series will be available only for those individual indicators that are included in both indexes.
- 2 In the current methodology, the weight of EOS-derived indicators ranges from 57 percent to 69 percent, depending on the country's stage of development. The weight is larger when the weighting scheme specific to a stage of development puts more weight on those pillars that have relatively more EOS-derived indicators.
- 3 It does not mean that the best- and worst-performing economies necessarily achieved, respectively, the highest and lowest marks in every concept or indicator composing the pillar.

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# **SESSIONS AND WORKSHOPS**

We are very grateful to the participants and panelists of the following events held since 2014:

- "Revision of the Global Competitiveness Index," Expert Session, Annual Meeting of World Economic Forum 2014, January 24, 2014, Davos-Klosters, Switzerland
- "The Evolving Nature of Innovation in Enhancing Competitiveness," Workshop, June 19, 2014, Geneva, Switzerland
- "Mineral Resources and National Competitiveness in the Context of the Global Competitiveness Index," Workshop, November 12, 2014, Dubai, United Arab Emirates
- "Macroeconomics under the Microscope: The Link between Macroeconomic Stability, Financial Development and Productivity Growth," Expert Session, Annual Meeting of the World Economic Forum 2015, January 23, 2015, Davos-Klosters, Switzerland
- Workshop on the Global Competitiveness Index, October 28, 2015, Abu Dhabi, United Arab Emirates
- "Productivity Growth Slowdown in the Age of the Fourth Industrial Revolution," Expert

- Session, Annual Meeting of the World Economic Forum 2016, January 21, 2016, Davos-Klosters, Switzerland
- "The Future of Competitiveness," Seminar, World Bank, April 20, 2016, Washington DC, USA
- "The Global Competitiveness Index: A New Index and Methodology," Seminar, World Bank, April 20, 2017, Washington DC, USA
- "A New Framework for Competitiveness," Hub Session, World Economic Forum on Latin America, April 6, 2017, Buenos Aires, Argentina
- "Competitiveness in the Era of the Fourth Industrial Revolution," Hub Session, World Economic Forum on ASEAN, May 11, 2017, Phnom Penh, Cambodia
- "Introducing the Updated Global Competitiveness Index: Briefing for the Geneva-Based Diplomatic Community," Presentation and Q&As, June 9, 2017, Geneva, Switzerland

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- International Telecommunications Union
- International Trade Centre
- International Trade Union Confederation
- Organisation for Economic Co-operation and Development

- The World Bank Group
- United Nations Educational, Scientific and Cultural Organization
- World Intellectual Property Organization

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- Public Authority for Investment Promotion and Export of Oman
- Ministry of Economy of Portugal
- Rwanda Development Board
- Federal Department of Foreign Affairs of Switzerland

# **Appendix E1:** Preliminary Structure and Composition of the Global Competitiveness Index 4.0

The following table provides the preliminary structure and composition of the Global Competitiveness Index 4.0 to date. It informs on the hierarchy of the index, showing each level of aggregation. At each level, starting from the lowest level (i.e., the individual indicator), values are aggregated using an arithmetic mean (unless noted otherwise) in order to produce the score of their respective parent categories, which in turn are combined to produce the score of their respective categories. At the highest level of aggregation, the scores of the 12 pillars are averaged out to yield the overall GCI score, as described in this appendix.

For each individual indicator, the table provides a short description; the name of the organization from which all, or the majority of data points was collected; and the reference period—that is, the most frequent measurement period. For more details about the indicators derived from the Executive Opinion Survey, refer to Appendix C of this Report. For additional information on the methodology, specific indicators, and/or data points, contact gcp@weforum.org.

# Table E1: Preliminary structure and composition

# Global Competitiveness Index 4.0

1.A Security

# Enabling environment component

Not used in calculation, only for presentation purposes

1st pillar: Institutions

### 1.01 Business costs of organized crime

Individual indicator

In your country, to what extent does organized crime (mafia-oriented racketeering, extortion) impose costs on businesses? [1 = to a great extent—imposes huge costs: 7 = not at all—imposes no costs]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 1.02 Homicide rate

Individual indicator

Number of homicides per 100,000 population.

United Nations Office on Drugs and Crime (UNODC) | 2015

### 1.03 Terrorism incidence

Individual indicator

This custom-built index is the weighted average of the number of terrorism-related casualties (injuries and fatalities) and the number of terrorist attacks, discounted by time. Each component is normalized separately and then averaged. Values range from 1 [highest incidence] to 7 [no incidence].

World Economic Forum analysis based on the National Consortium for the Study of Terrorism and Responses to Terrorism (START) | Weighted count 2012-2016

## 1.04 Reliability of police services

Individual indicator

In your country, to what extent can police services be relied upon to enforce law and order? [1 = not at all: 7 = to a great extent]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

# 1.B Social capital

### 1.05 Generosity among population

Individual indicator

This indicator corresponds to the average percentage of people in each country who (a) donate money, (b) volunteer, or (c) help a stranger.

Charities Aid Foundation | 2015

## 1.06 Trust among population

Individual indicator

This indicator is derived from the question from the World Value Survey asking: "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?" It is calculated as the share of respondents who answered "Most people can be trusted."

World Economic Forum's calculations based on World Value Survey data | 2013

### 1.07 E-Participation Index

Individual indicator

This indicator assesses the use of online services to facilitate the provision of information by governments to citizens ("e-information sharing"), interaction with stakeholders ("e-consultation"), and engagement in decision-making processes. United Nations, Department of Economic and Social Affairs (UNDESA) | 2016

1.C Checks and balances

### 1.08 **Budget transparency**

Individual indicator

This indicator assesses on a scale of 0 to 100 [most transparent] the extent to which governments publish data related to budget and spending.

World Bank Group | 2015

### 1.09 Judicial independence

Individual indicator

In your country, how independent is the judicial system from influences of the government, individuals, or companies? [1 = not independent at all; 7 = entirely independent]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 1.10 Efficiency of legal framework in challenging regulations

Individual indicator

In your country, how easy is it for private businesses to challenge government actions and/or regulations through the legal system? [1 = extremely difficult; 7 = extremely easy]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 1.11 Freedom of the press

Individual indicator

The World Press Freedom Index measures media independence, the quality of the infrastructure that supports the production of news, and information and acts of violence against journalists. It is based on two sources: a database of the level of abuses and violence against journalists and media; and an expert opinion survey on pluralism, media independence, self-censorship, transparency, and infrastructure in each country. The scale ranges from 0 [good] to 100 [very bad].

Reporters Without Borders (RSF) | 2016

# 1.D Public-sector performance

### 1.12 Burden of government regulation

Individual indicator

In your country, how burdensome is it for companies to comply with public administration's requirements (e.g., permits, regulations, reporting)? [1 = extremely burdensome; 7 = not burdensome at all]

World Economic Forum, Executive Opinion Survey | 2016–2017 weighted average

### 1.13 Efficiency of legal framework in settling disputes

Individual indicator

In your country, how efficient are the legal and judicial systems for companies in settling disputes? [1 = extremely inefficient; 7 = extremely efficient]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 1.14 Future orientation of government

Individual indicator

Average score of the following four EOS questions: In your country, how fast is the legal framework of your country in adapting to digital business models (e.g., e-commerce, sharing economy, fintech, etc.)? [1 = not fast at all; 7 = very fast]; In your country, to what extent does the government ensure a stable policy environment for doing business?; In your country, to what extent does the government respond effectively to change (e.g., technological changes, societal and demographic trends, security and economic challenges)?; In your country, to what extent does the government have a long-term vision in place? For the last three questions, the answer ranges from 1 [not at all] to 7 [to a great extent].

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

# 1.E Undue influence and corruption

## 1.15 Incidence of corruption

Individual indicator

The Corruption Perceptions Index aggregates data from a number of different sources that provide perceptions of business people and country experts of the level on corruption in the public sector. The scale ranges from 0 [very clean] to 100 [highly

Transparency International | 2016

### 1.16 Ethics of politicians

Individual indicator

In your country, how do you rate the ethical standards of politicians? [1 = extremely low; 7 = extremely high] World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

# 1.F Property rights

Aggregate

### 1.17 Property rights

Individual indicator

In your country, to what extent are property rights, including financial assets, protected? [1 = not at all; 7 = to a great extent] World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 1.18 Intellectual property protection

Individual indicator

In your country, to what extent is intellectual property protected? [1 = not at all; 7 = to a great extent]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

## 1.19 Quality of land administration

Individual indicator

The quality of land administration index assesses five dimensions: reliability of infrastructure, transparency of information geographic coverage, land dispute resolution, and equal access to property rights. The scale ranges from 0 to 30 [best].

World Bank Group | 2016

1.G Corporate governance

### 1.20 Strength of auditing and accounting standards

Individual indicator

In your country, how strong are financial auditing and reporting standards? [1 = extremely weak; 7 = extremely strong] World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 1 21 Conflict of interest regulation

Individual indicator

The Extent of conflict of interest regulation index measures the protection of shareholders against directors' misuse of corporate assets for personal gain by distinguishing three dimensions of regulation that address conflicts of interest: transparency of related-party transactions, shareholders' ability to sue and hold directors liable for self-dealing, and access to evidence and allocation of legal expenses in shareholder litigation. The scale ranges from 0 to 10 [best].

World Bank Group | 2016

### 1.22 Shareholder governance

The Extent of shareholder governance index measures shareholders' rights in corporate governance by distinguishing three dimensions of good governance; shareholders' rights and role in major corporate decisions; governance safeguards protecting shareholders from undue board control and entrenchment; and corporate transparency on ownership stakes, compensation, audits and financial prospects. The scale ranges from 0 to 10 [best].

World Bank Group | 2016

# 2nd pillar: Infrastructure

Roads

Aggregate

# 2.A Transport infrastructure

Aggregate

2.01 Quality of road network Individual indicator

The Road Quality Index is composed of two elements: a measure of the average speed of a driving itinerary connecting the 10 or more largest cities in an economy accounting for at least 15 percent of the economy's total population, and a measure of

World Economic Forum's calculations based on data from Open Street Maps and Google Directions, and the Geonames database. | 2016

### 2.02 Quality of road infrastructure

Individual indicator

In your country, how is the quality (extensiveness and condition) of road infrastructure [1 = extremely poor—among the worst in the world; 7 = extremely good—among the best in the world]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

Railroads

Aggregate

### 2.03 Railroad density

Individual indicator

Kilometers of railroad per 1.000 square kilometers of land.

World Economic Forum calculations based on World Bank data | 2016

### 2.04 Efficiency of train services

Individual indicator

In your country, how efficient (i.e., frequency, punctuality, speed, price) are train transport services? [1 = extremely inefficient among the worst in the world; 7 = extremely efficient—among the best in the world]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

Air transport Aggregate

## 2.05 Airport connectivity

Individual indicator

The IATA airport connectivity indicator measures the degree of integration of a country within the global air transport network. It is based on the number of available seats offered in flights originating from a country. For each airport, the number of available seats to each destination is weighted by the size of the destination airport (in terms of number of passengers handled). The weighted totals are then summed for all destinations, then for all airports in the country to produce a score. This score is then divided by the highest score (United States) and multiplied by 100. The scale of this indicator ranges from 0 to 100 [best]. International Air Transport Association (IATA) | 2017

### 2.06 Efficiency of air transport services

Individual indicator

In your country, how efficient (i.e., frequency, punctuality, speed, price) are air transport services? [1 = extremely inefficient among the worst in the world; 7 = extremely efficient—among the best in the world]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

Water transport Aggregate

### 2.07 Liner shipping connectivity

Individual indicator

The Liner Shipping Connectivity Index assesses a country's connectivity to global shipping networks. It is based on five components of the maritime transport sector: the number of ships, their container-carrying capacity, the maximum vessel size, the number of services, and the number of companies that deploy container ships in a country's ports. The index uses an open scale, with 100 corresponding to the most connected country in 2004.

United Nations Conference on Trade and Development (UNCTAD) | 2016

### 2.08 Efficiency of seaport services

In your country, how efficient (i.e., frequency, punctuality, speed, price) are seaport services (ferries, boats) (for landlocked countries: assess access to seaport services) [1 = extremely inefficient - among the worst in the world; 7 = extremely efficient -

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

2.B Utility infrastructure

Electricity infrastructure

Aggregate

### 2.09 Electrification rate

Individual indicator

Share of population with access to electricity.

International Energy Agency | 2014

### 2.10 Electric power transmission and distribution losses

Individual indicator

Electric power transmission and distribution losses as a percentage of output.

International Energy Agency | 2014

Water infrastructure

Aggregate

# Exposure to unsafe drinking water

Individual indicator

Percentage of population exposed to unsafe water.

Institute for Health Metrics and Evaluation (IHME) | 2015

### 2.12 Reliability of water supply

Individual indicator

In your country, how reliable is the water supply (lack of interruptions and flow fluctuations)? [1 = extremely unreliable; 7 = extremely reliable

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

# 3rd pillar: Technological readiness

Note: In computing the score of this pillar, indicator 3.02 is not directly used in the calculation. Instead the ratio of indicator 3.02 to indicator 3.01 is used and serves as an approximation of the share of mobile-cellular telephone subscriptions that have broadband capability. The same approach is used for indicator 3.04, to approximate the share fixed broadband connections that are optical fiber subscriptions.

### 3.01 Mobile-cellular telephone subscriptions

Individual indicator

Number of mobile-cellular telephone subscriptions per 100 population. This includes postpaid subscriptions, active prepaid accounts (i.e., that have been active during the past three months), and all mobile-cellular subscriptions that offer voice communications.

International Telecommunications Union (ITU) | 2016

### 3.02 Mobile-broadband subscriptions

Individual indicator

Number of active mobile-broadband subscriptions per 100 population. This includes standard mobile-broadband subscriptions and dedicated mobile-broadband data subscriptions to the public Internet.

International Telecommunications Union (ITU) | 2016

## 3.03 Fixed-broadband Internet subscriptions

Individual indicator

Number of fixed-broadband Internet subscriptions per 100 population. This refers to subscriptions for high-speed access to the public Internet (a TCP/IP connection). It includes cable modem, DSL, fiber, and other fixed (wired)-broadband technologiessuch as Ethernet LAN, and broadband over powerline communications.

International Telecommunications Union (ITU) | 2016

## 3.04 Optical fiber subscriptions

Individual indicator

Fiber-to-the-home/building Internet subscriptions divided by 100 population. Fiber-to-the-home/building Internet refers to the number of Internet subscriptions using fiber-to-the-home or fiber-to-the-building at downstream speeds equal to, or greater than, 256 kb/s. This should include subscriptions where fiber goes directly to the subscriber's premises or fiber-to-the-building subscriptions that terminate no more than 2 meters from an external wall of the building. Fiber-to-the-cabinet and fiber-to-thenode are excluded.

International Telecommunications Union (ITU) | 2015

### 3.05 Internet users

Individual indicator

Percentage of individuals who used the Internet from any location and for any purpose, irrespective of the device and network used, in the last three months.

International Telecommunications Union (ITU) | 2016

# 4th pillar: Macroeconomic context

Aggregate

4.01 Inflation Individual indicator

Annual percent change in the consumer price index (year average).

International Monetary Fund (IMF) | 2016

### 4.02 Government debt-to-revenue ratio

Individual indicator

General government gross debt as a percentage of general government revenue.

International Monetary Fund (IMF) | 2016

### 4.03 Debt dynamics

Individual indicator

This indicator measures the sustainability of public debt. It is calculated according to the following formula: forimary budget balance] + [public debt] \* ([interest rate paid on debt] - [inflation] - [GDP growth rate]). It takes into account that public debtto-GDP ratio: increases with budget deficit; decreases with inflation; increases with interest rate; and decreases with GDP growth. The value of inflation, GDP growth, primary budget and interest rates are calculated as moving averages for the period 2011-2016. The value of public debt is defined by the ratio of debt to GDP in 2015.

World Economic Forum's calculations based on International Monetary Fund (IMF) data | 2016

# Human capital component

Not used in calculation, only for presentation purposes

5th pillar: Health

Aggregate

### 5.01 Healthy life expectancy

Individual indicator

Number of years that a newborn can expect to live in good health, taking into account mortality and disability. Institute for Health Metrics and Evaluation (IHME) | 2015

# 6th pillar: Education and skills

Aggregate

6.A Current workforce

Note: The score of subpillar 6.A is the average of indicator 6.01 and of the aggregate measure Skills of current workforce.

### 6.01 Mean years of schooling

Individual indicator

Average number of completed years of education of a country's population aged 25 years and older.

United Nations Educational, Scientific and Cultural Organization (UNESCO) | 2015

Skills of current workforce

Aggregate

### 6.02 Extent of staff training

Individual indicator

In your country, to what extent do companies invest in training and employee development? [1 = not at all; 7 = to a great

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 6.03 Quality of vocational training

Individual indicator

In your country, how do you assess the quality of vocational training? [1 = extremely poor - among the worst in the world; 7 = excellent—among the best in the world]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

## 6.04 Skillset of graduates

Individual indicator

Average score of the two following EOS questions: In your country, to what extent do graduating students from secondary education possess the skills needed by businesses? and In your country, to what extent do graduating students from university possess the skills needed by businesses? In each case, the answer ranges from 1 [not at all] to 7 [to a great extent] World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

## 6.05 Digital skills among population

Individual indicator

In your country, to what extent does the active population possess sufficient digital skills (e.g., computer skills, basic coding, digital reading)? [1 = not all; 7 = to a great extent]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 6.06 Ease of finding skilled employees

Individual indicator

In your country, to what extent can companies find people with the skills required to fill their vacancies? [1 = not at all; 7 = to a great extent]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

# 6.B Future workforce

Note: The score of subpillar 6.B is the average of indicator 6.07 and of the aggregate measure Skills of future workforce.

## 6.07 School life expectancy

Individual indicator

Total number of years of schooling (primary through tertiary) that a child can expect to receive, assuming that the probability of his or her being enrolled in school at any particular future age is equal to the current enrollment ratio at that age.

United Nations Educational, Scientific and Cultural Organization (UNESCO) | 2015

# Skills of future workforce

Aggregate

### 6.08 Critical thinking in teaching

Individual indicator

In your country, how do you assess the style of teaching? [1 = frontal, teacher based, and focused on memorizing; 7 = encourages creative and critical individual thinking]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 6.09 Pupil-to-teacher ratio in primary education

Individual indicator

Average number of pupils per teacher, based on headcounts of both pupils and teachers.

World Bank | 2015

# Markets component

Not used in calculation, only for presentation purposes

# 7th pillar: Product market efficiency

Aggregate

# 7.A Domestic competition

### 7.01 Extent of market dominance

Individual indicator

In your country, how do you characterize corporate activity? [1 = dominated by a few business groups; 7 = spread among

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 7.02 Competition in services

Individual indicator

Average of the scores of the three components of the following EOS question: In your country, how competitive is the provision of the following services: (a) professional services (legal services, accounting, engineering, etc.); (b) retail services; and (c) network sector (telecommunications, utilities, postal, transport, etc.)? In each case, the answer ranges from 1 [not at all competitive] to 7 [extremely competitive]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

# 7.B Foreign competition

Aggregate

### 7.03 Prevalence of non-tariff barriers

Individual indicator

In your country, to what extent do non-tariff barriers (e.g., health and product standards, technical and labeling requirements, etc.) limit the ability of imported goods to compete in the domestic market? [1 = strongly limit; 7 = do not limit at all] World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 7.04 Trade tariffs

Individual indicator

Trade-weighted average applied tariff rate (%).

International Trade Centre | 2016

### 7.05 Complexity of tariffs

Individual indicator

Index (1-7 best) that measures the complexity of a country's tariff regime based on three criteria: tariff dispersion, the prevalence of tariff peak and specific tariffs, and the number of distinct tariffs.

International Trade Centre | 2016

### 7.06 Efficiency of customs clearance

Individual indicator

This indicator assesses the effectiveness and efficiency of the clearance process by customs and other border control agencies in the eight major trading partners of each country. The scale ranges from 1 to 5 [best].

World Bank and Turku School of Economics | 2016

### 7.07 Services trade openness

Individual indicator

The Services Trade Restrictiveness Index assesses the overall openness of the service sector of a country for five major services sectors (financial services, telecommunications, retail distribution, transportation, professional services) and three modes of supply (cross-border supply of services, supply of services through commercial presence or FDI, and temporary presence of natural persons). The scale ranges from 0 [completely open] to 100 [completely closed].

World Bank | 2009

# 7.C Taxation and regulation distortions

Aggregate

### 7.08 Non-labor tax rate

Individual indicator

Sum of profit tax and other taxes paid by businesses as a percentage of profit.

World Bank Group | 2016

## 7.09 Distortive effect of taxes and subsidies on competition

Individual indicator

In your country, to what extent do fiscal measures (subsidies, tax breaks, etc.) distort competition? [1 = distort competition to a great extent; 7 = do not distort competition at all]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

# 8th pillar: Labor market functioning

Aggregate

8.A Flexibility

### 8.01 Redundancy costs

Individual indicator

Cost (in weekly wages) of advance notice requirements, severance payments, and penalties due when terminating a redundant

World Bank Group | 2016

### 8.02 Hiring and firing practices

Individual indicator

In your country, to what extent do regulations allow for the flexible hiring and firing of workers? [1 = not at all; 7 = to a great

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 8.03 Cooperation in labor-employer relations

Individual indicator

In your country, how do you characterize labor-employer relations? [1 = generally confrontational; 7 = generally cooperative] World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 8.04 Flexibility of wage determination

In your country, how are wages generally set? [1 = by a centralized bargaining process; 7 = by each individual company] World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 8.05 Active labor policies

Individual indicator

In your country, to what extent do labor market policies help unemployed people to reskill and find new employment (including skills matching, retraining, etc.)? [1 = not at all; 7 = to a great extent]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 8.06 Workers' rights

Individual indicator

This index is adapted from the ITUC Global Rights Index, which measures the level of protection of internationally recognized core labor standards including civil rights, the right to bargain collectively, the right to strike, the right to associate freely, and access to due process rights. It does not take into account any element of firing regulations. The scale ranges from 1 [no protection] to 7 [high protection].

World Economic Forum's calculations based on International Trade Union Confederation (ITUC) data 2016

### 8.07 Ease of hiring foreign labor

Individual indicator

In your country, how restrictive are regulations related to the hiring of foreign labor? [1 = highly restrictive; 7 = not restrictive at

World Economic Forum, Executive Opinion Survey | 2016–2017 weighted average

### 8.08 Internal labor mobility

Individual indicator

In your country, to what extent do people move to other parts of the country for professional reasons? [1 = not at all; 7 = to a

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

# 8.B Talent utilization

## 8.09 Reliance of professional management

Individual indicator

In your country, who holds senior management positions in companies? [1 = usually relatives or friends without regard to merit; 7 = mostly professional managers chosen for merit and qualifications

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

## 8.10 Pay and productivity

Individual indicator

In your country, to what extent is pay related to employee productivity? [1 = not at all; 7 = to a great extent]

World Economic Forum, Executive Opinion Survey | 2016–2017 weighted average

### 8.11 Female participation in labor force

Individual indicator

The ratio of the percentage of women aged 15-64 participating in the labor force as wage and salaried workers to the percentage of men aged 15-64 participating in the labor force as wage and salaried workers.

World Economic Forum's calculations based on International Labour Organization (ILO) data | 2016

### 8.12 Labor tax rate

Individual indicator

The amount of labor taxes and social contributions paid by the employer as a percentage of profits.

World Bank Group | 2016

# 9th pillar: Financial market development

Aggregate Aggregate

### 9.01 Domestic credit to private sector

Individual indicator

Financial resources provided to the private sector by financial corporations as a percentage of GDP. Financial resources are loans, purchases of non-equity securities, and trade credits and other accounts receivable, that establish a claim for repayment. World Bank | 2015

### 9.02 Financing of SMEs

Individual indicator

In your country, to what extent can small- and medium-sized enterprises (SMEs) access finance they need for their business operations through the financial sector? [1 = not at all; 7 = to a great extent]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

## 9.03 Venture capital availability

Individual indicator

In your country, how easy is it for start-up entrepreneurs with innovative but risky projects to obtain equity funding? [1 = extremely difficult; 7 = extremely easy]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 9.04 Market capitalization

Individual indicator

Total value of listed companies as a percentage of GDP. The total value is calculated as the price of all listed domestic companies multiplied by the number of their outstanding shares. It is a measure of the depth of the equity market.

World Bank | 2014

### 9.05 Stock market turnover

Individual indicator

Total value of shares traded during a calendar year divided by the average market capitalization for that year.

World Bank | 2014

### 9.06 Non-life insurance premiums

Individual indicator

Ratio of non-life insurance premium volume as a percentage of GDP. Premium volume is the insurer's direct premiums earned (if Property/Casualty) or received (if Life/Health) during the previous calendar year.

World Bank | 2014

### 9.07 Collateral and bankruptcy regulation

Individual indicator

This indicator combines two measures: the Strength of legal rights index, which assesses the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders and thus facilitate lending; and the Depth of credit information index, which measures rules and practices affecting the coverage, scope, and accessibility of credit information available through either a credit bureau or a credit registry. The scale ranges from 1 to 7 [best].

World Economic Forum's calculations based on World Bank Group data | 2016

9.B Stability

### 9.08 Soundness of banks

Individual indicator

In your country, how do you assess the soundness of banks? [1 = extremely low-banks may require recapitalization;

7 = extremely high—banks are generally healthy with sound balance sheets]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

## 9.09 Non-performing loans

Individual indicator

Value of non-performing loans divided by the total value of the loan portfolio (including non-performing loans before the deduction of specific loan-loss provisions).

World Bank | 2016

### 9.10 Credit gap

Individual indicator

Difference between the most recent domestic credit to private sector, as a percentage of GDP, and its 20-year trend.

World Economic Forum's calculations based on World Bank data | 2015

### 9.11 Banks' regulatory capital ratio

Individual indicator

Ratio of total regulatory capital of banks to their assets, weighted according to the risk of those assets.

World Bank | 2014

# 10th pillar: Market size

Aggregate

Note: The score of this pillar corresponds to the natural logarithm of the sum of GDP and imports, valued at purchasing power parity (PPP). Valuation of imports at PPP is estimated by multiplying the share of exports (indicator 10.02) by the value of GDP (indicator 10.02).

### 10.01 Gross domestic product

Individual indicator

Gross domestic product (GDP) valued at purchasing power parity in billions of international dollars.

International Monetary Fund (IMF) | 2016

## 10.02 Imports of goods and services

Individual indicator

Imports of goods and services as a percentage of GDP.

World Trade Organization (WTO) and International Monetary Fund (IMF) | 2016

# Innovation ecosystem component

Not used in calculation, only for presentation purposes

# 11th pillar: Business dynamism

Aaareaate

# 11.A Regulation

### 11.01 Cost of starting a business

Individual indicator

Ratio of total cost to start a business to the economy's income per capita. Total cost includes all official fees and fees for legal or professional services if such services are required by law or commonly used in practice.

World Bank Group | 2016

### 11.02 Time to start a business

Individual indicator

Number of days required to start a business. This is the median duration that incorporation lawyers indicate is necessary to complete a procedure with minimum follow-up with government agencies and no extra payments

World Bank Group | 2016

### 11.03 Insolvency recovery rate

Individual indicator

The recovery rate is recorded as cents on the dollar recovered by secured creditors through judicial reorganization, liquidation, or debt enforcement (foreclosure or receivership) proceedings.

World Bank Group | 2016

### 11.04 Insolvency regulatory framework

Individual indicator

Index (0-16 best) measuring the adequacy and integrity of the legal framework applicable to liquidation and reorganization proceedings. This is based on four other indexes: the Commencement of proceedings index, the Management of debtor's assets index, the Reorganization proceedings index, and the Creditor participation index.

World Bank Group | 2016

# 11.B Entrepreneurship

### 11.05 Attitudes toward entrepreneurial risk

Individual indicator

In your country, to what extent do people have an appetite for entrepreneurial risk? [1 = not at all; 7 = to a great extent] World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 11.06 Willingness to delegate authority

Individual indicator

In your country, to what extent does senior management delegate authority to subordinates? [1 = not at all; 7 = to a great

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 11.07 Growth of innovative companies

In your country, to what extent do new companies with innovative ideas grow rapidly? [1 = not at all; 7 = to a great extent] World Economic Forum, Executive Opinion Survey | 2016–2017 weighted average

### 11.08 Companies embracing disruptive ideas

Individual indicator

In your country, to what extent do companies embrace risky or disruptive business ideas? [1 = not at all; 7 = to a great extent] World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

# 12th pillar: Innovation capacity

Aggregate

12.A: Interaction and diversity

### 12.01 Urbanization rate

Share of urban population to total population. Urban population refers to people living in urban areas as defined by national statistical offices.

United Nations, Department of Economic and Social Affairs (UNDESA) | 2015

### 12.02 Diversity of workforce

Individual indicator

In your country, to what extent do companies have a diverse workforce (e.g., in terms of ethnicity, religion, sexual orientation, gender) ? [1 = not at all; 7 = to a great extent]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

## 12.03 State of clusters development

Individual indicator

In your country, how widespread are well-developed and deep clusters (geographic concentrations of firms, suppliers, producers of related products and services, and specialized institutions in a particular field)? [1 = nonexistent; 7 = widespread in many fieldsl

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

## 12.04 International co-inventions

Individual indicator

Number of patent families with co-inventors located abroad, filed in at least two of the major 5 (IP5) offices in the World: the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), and the United States Patent and Trademark Office (USPTO). Data are extracted from the PATSTAT database by earliest filing date and inventor country, using fractional counts. Organisation for Economic Co-operation and Development (OECD) | 2013-2015 moving average

## 12.05 Multi-stakeholder collaboration

Individual indicator

Average score of the three following EOS questions: In your country, to what extent do people collaborate and share ideas within a company? [1 = not at all; 7 = to a great extent]; In your country, to what extent do companies collaborate in sharing ideas and innovating? [1 = not at all; 7 = to a great extent]; In your country, to what extent do business and universities collaborate on research and development (R&D)? [1 = not at all; 7 = to a great extent]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

# 12.B: Research and development

### 12.06 Citable publications

Individual indicator

Number of citable documents published by a journal in the three previous years (selected year documents are excluded). Exclusively articles, reviews, and conference papers are considered. The documents universe is defined by the documents tracked by Scopus, the largest abstract and citation database of peer-reviewed literature: scientific journals, books, and conference proceedings.

SCImago | 2014-2016 moving average

### 12.07 Patent applications

Individual indicator

Total number of patent families filed in at least two of the major 5 (IP5) offices in the World: the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), and the United States Patent and Trademark Office (USPTO). Data are extracted from the PATSTAT database by earliest filing date and inventor country, using fractional counts.

Organisation for Economic Co-operation and Development (OECD) | 2013–2015 moving average

### 12.08 R&D expenditures

Individual indicator

Expenditure on research and development (R&D) as a percentage of GDP. Expenditures for research and development are current and capital expenditures (both public and private) on creative work undertaken systematically to increase knowledge, including knowledge of humanity, culture, and society, and the use of knowledge for new applications. R&D covers basic research, applied research, and experimental development.

World Bank | 2014

### 12.09 Quality of research institutions

Individual indicator

This indicator assesses the prevalence and standing of private and public research institutions. It is calculated as the sum of the inverse ranks of all research institutions of a country included in the SCImago Institutions Rankings.

World Economic Forum's calculations based on SCImago data | 2016

# 12.C: Commercialization

### 12.10 Buyer sophistication

Individual indicator

In your country, on what basis do buyers make purchasing decisions? [1 = based solely on the lowest price; 7 = based on sophisticated performance attributes]

World Economic Forum, Executive Opinion Survey | 2016-2017 weighted average

### 12.11 Trademark applications

Individual indicator

Number of international trademark applications issued directly or through the Madrid System by country of origin per 1,000 population.

World Intellectual Property Organization (WIPO) | 2013–2015 moving average

# Appendix E2: Global Competitiveness Index 4.0: 2017 notional results

Table E2.1: 2017 notional overall score (0-100)

Economy	Score
Albania	50.6
Algeria	38.1
Argentina	48.6
Armenia	51.8
Australia	79.4
Austria	74.6
Azerbaijan	53.3
Bahrain	60.5
Bangladesh	35.3
Belgium	76.1
Benin	29.7
Bhutan	41.3
Bosnia and Herzegovina Botswana	47.2
	44.1
Brazil Brunei Darussalam	49.9 57.1
Bulgaria	56.5
Burundi	22.8
Cambodia	40.1
Cameroon	32.4
Canada	83.5
Cape Verde	36.0
Chad	15.2
Chile	64.9
China	67.1
Colombia	50.9
Congo, Democratic Rep.	22.0
Costa Rica	53.7
Croatia	53.3
Cyprus	59.8
Czech Republic	68.5
Denmark	84.2
Dominican Republic	47.1
Ecuador	46.8
Egypt	39.6
El Salvador	41.1
Estonia	70.5
Ethiopia	28.5
Finland	82.7
France	77.0
Gambia, The	30.0
Georgia	56.4
Germany	86.4
Ghana	36.9
Greece Guatemala	51.3 45.2
Guinea	27.6
Haiti	16.6
Honduras	41.8
Hong Kong SAR	84.8
Hungary	58.2
Iceland	77.2
India	48.9
Indonesia	57.8
Iran, Islamic Rep.	43.6
Ireland	74.8
Israel	75.9
Italy	64.4
Jamaica	49.5
Japan	80.5
Jordan	51.3
Kazakhstan	52.0
Kenya	42.6
Korea, Rep.	78.4
Kuwait	53.5
Kyrgyz Republic	44.4
Lao PDR	38.7
Latvia	61.1
Lebanon	46.9

Economy	Score
Lesotho	28.9
Liberia	25.8
Lithuania	61.6
Luxembourg Madagascar	77.0 28.3
Malawi	22.9
Malaysia	70.2
Mali	30.8
Malta	64.1
Mauritania	24.4
Mauritius	58.7
Mexico	54.9
Moldova	47.2
Mongolia Mantanagra	46.2
Montenegro Morocco	52.2 46.0
Mozambique	22.4
Namibia	43.9
Nepal	34.6
Netherlands	85.6
New Zealand	81.1
Nicaragua	41.2
Nigeria	32.5
Norway	82.3
Oman	53.3
Pakistan	36.6
Panama	54.1
Paraguay	44.8
Peru Philippines	53.2 50.2
Poland	63.3
Portugal	63.7
Qatar	69.9
Romania	55.8
Russian Federation	58.9
Rwanda	43.8
Saudi Arabia	62.0
Senegal	35.4
Serbia	52.2
Seychelles Signal Lagra	47.6 22.8
Sierra Leone Singapore	22.8 85.9
Slovak Republic	60.5
Slovenia	63.4
South Africa	52.8
Spain	69.6
Sri Lanka	45.3
Swaziland	34.1
Sweden	85.1
Switzerland	87.0
Taiwan, China	77.9
Tajikistan	44.6
Tanzania Thailand	34.4 60.7
Trinidad and Tobago	49.3
Tunisia	42.3
Turkey	56.1
Uganda	37.7
Ukraine	45.6
United Arab Emirates	74.9
United Kingdom	87.1
United States	88.8
Uruguay	53.1
Venezuela	30.8
Vernan	51.2
Yemen Zambia	18.8 30.7
Zimbabwe	27.7
	£1.1

Note: The methodology on which these results are based is under development and subject to

Table E2.2: 2017 notional pillar scores (0-100)

		ENAB ENVIRO			HUMAN CAPITAL MARKETS					INNOVATION ECOSYSTEM		
-	1st pillar: Institu-	2nd pillar: Infrastruc-	3rd pillar: Techno- logical	4th pillar: Macro- economic	5th pillar:	6th pillar: Education	7th pillar: Product market ef-	8th pillar: Labor market	9th pillar: Financial market develop-	10th pillar: Market	11th pillar: Business dyna-	12th pillar:
Economy	tions	ture	readiness	context	Health	and skills	ficiency	functioning	ment	size	mism	capacity
Albania Algeria	45.6 29.9	37.5 37.4	42.8 33.0	79.1 55.2	88.8 81.4	64.9 46.4	51.1 21.6	57.5 3.0	32.1 23.6	26.8 59.6	67.1 52.0	13.7 13.8
Argentina	36.5	55.6	52.8	51.6	85.9	68.1	16.9	22.8	42.7	61.7	60.2	27.9
Armenia	45.3	46.9	53.0	77.7	79.6	59.7	56.6	62.9	33.6	23.0	65.8	17.3
Australia	81.2	80.8	73.3	94.6	98.1	95.0	62.1	64.7	82.6	66.0	84.4	69.9
Austria	75.7	88.1	63.1	93.7	96.9	80.5	70.0	54.9	67.1	56.5	78.9	70.5
Azerbaijan	53.6	60.8	53.0	44.0	74.7	64.6	63.1	52.1	38.3	44.8	71.7	18.6
Bahrain	65.9	65.8	66.5	60.9	87.0	70.6	75.9	52.7	59.1	33.1	67.9	20.7
Bangladesh	31.2	31.5	29.4	63.9	64.4	15.1	23.6	27.6	18.1	58.6	51.7	8.6
Belgium	70.2	87.7	66.0	87.6	94.5	94.5	75.4	47.1	67.3	62.1	85.9	75.3
Benin	28.1	11.4	24.4	75.7	44.1	16.1	29.2	21.9	22.5	20.9	55.2	7.4
Bhutan	63.2	43.4	29.6	78.0	68.9	31.1	25.0	49.9	41.5	7.5	47.6	10.1
Bosnia and Herzegovina	28.6	52.3	41.0	85.4	90.6	50.0	49.5	40.7	38.3	29.7	54.3	6.2
Botswana	46.5	35.9	47.2	78.9	33.5	46.0	42.4	56.4	45.5	27.0	57.6	12.9
Brazil	33.9	46.9	52.7	52.0	76.7	48.4	35.6	19.7	61.3	76.6	55.1	40.3
Brunei Darussalam	47.5	66.4	72.9	85.6	88.7	63.3	64.0	54.1	34.0	25.3	64.1	19.6
Bulgaria	41.2	61.5	68.9	82.4	80.7	59.1	59.4	52.5	33.6	44.7	63.5	30.3
Burundi	22.9	7.5	0.0	79.1	43.7	7.2	27.5	19.9	7.0	7.4	51.2	0.0
Cambodia Cameroon	23.4 28.0	19.9 22.3	35.6 33.1	93.7 88.2	64.4 34.8	13.7 24.7	43.9 22.3	52.5 29.0	47.3 10.6	34.8 34.5	42.9 51.8	8.7 9.6
Cameroon	28.0 84.7	82.2	67.9	88.2	97.0	86.9	76.0	92.7	86.3	71.4	86.0	9.6 82.9
Canada Cape Verde	39.9	22.7	38.4	37.9	72.9	42.2	46.6	37.5	39.8	0.6	42.1	11.8
Chad	12.0	4.5	0.5	70.2	28.2	0.0	5.2	0.0	13.2	24.2	23.8	0.5
Chile	58.7	70.9	51.8	99.4	94.0	66.9	58.4	59.1	66.3	55.0	69.6	28.6
China	53.7	73.2	63.2	95.3	87.1	56.3	55.5	33.9	60.1	100.0	70.5	56.3
Colombia	34.2	46.9	40.3	69.2	88.5	51.5	25.5	43.9	60.3	59.5	72.3	18.7
Congo, Democratic Rep.	14.5	4.5	29.3	22.9	31.0	19.6	15.0	39.0	13.7	31.2	38.3	4.8
Costa Rica	46.2	44.5	53.1	68.5	95.0	67.2	50.2	39.4	59.2	35.2	60.7	25.0
Croatia	39.7	67.5	59.1	66.7	88.2	61.3	58.3	41.4	39.0	38.7	60.3	19.3
Cyprus	52.9	71.5	67.7	58.7	97.8	74.1	69.0	61.3	33.6	25.7	75.4	29.7
Czech Republic	52.2	81.1	64.8	98.3	90.9	78.9	65.3	45.7	63.2	56.6	78.4	47.1
Denmark	86.0	86.0	88.2	96.6	94.5	100.0	64.4	95.7	82.7	50.9	90.7	74.5
Dominican Republic	27.1	46.6	39.5	87.3	80.7	45.0	38.5	43.0	45.1	43.1	52.2	17.4
Ecuador	29.0	56.8	39.0	91.9	81.9	53.1	35.4	29.3	44.9	43.8	45.4	11.1
Egypt	31.8	51.3	41.2	26.4	67.5	37.1	42.1	6.5	32.6	65.6	56.6	16.5
El Salvador	21.0	40.9	26.1	73.0	79.0	32.2	43.9	32.3	48.2	31.6	54.4	10.6
Estonia	71.9	70.7 16.9	82.6 0.5	100.0 56.7	87.9	84.0 2.7	75.7	63.1 38.7	62.3 19.4	30.3 44.2	78.2 46.9	39.1 7.7
Ethiopia Finland	32.8 96.4	82.3	82.9	90.7	52.5 95.1	96.4	23.1 76.2	68.7	88.0	44.2	91.0	76.5
France	68.0	95.8	73.3	82.8	98.7	74.2	70.3	44.5	74.6	77.1	78.4	86.7
Gambia, The	38.5	25.8	18.9	41.9	59.8	14.0	28.8	44.9	23.3	0.1	50.2	13.5
Georgia	53.5	51.4	58.4	96.0	75.4	69.6	60.1	65.0	46.7	28.5	61.3	10.9
Germany	81.1	97.3	70.8	93.8	95.4	97.9	68.5	77.8	79.8	82.1	95.1	96.7
Ghana	46.8	23.5	58.7	0.0	53.4	35.0	52.3	38.1	22.8	41.1	56.8	14.2
Greece	34.0	71.7	54.4	40.5	97.2	75.1	47.3	28.3	22.7	50.2	64.5	30.4
Guatemala	27.0	39.3	21.1	85.3	71.6	36.8	59.9	37.9	51.3	40.8	59.6	11.9
Guinea	23.8	6.7	33.1	58.3	34.2	0.6	23.9	29.3	28.3	16.8	63.3	12.6
Haiti	9.6	0.0	28.7	27.1	47.2	7.0	14.6	28.5	12.5	19.9	0.0	3.9
Honduras	24.1	31.8	28.6	91.5	75.2	30.9	26.7	39.7	54.8	29.9	55.2	13.0
Hong Kong SAR	87.7	92.0	84.5	100.0	100.0	80.8	87.4	90.5	87.5	64.5	87.8	55.2
Hungary	41.6	72.0	58.5	93.8	84.9	68.2	49.1	37.1	47.3	53.7	57.7	33.9
Iceland	81.9	74.9	86.1	95.9	100.0	99.1	67.9	84.9	67.4	17.5	89.3	61.9
India	52.3	51.4	14.8	72.1	54.9	36.6	26.1	37.7	45.5	89.7	63.3	41.7
Indonesia	51.2	55.2	46.8	93.1	69.4	54.9	57.2	49.0	52.5	76.9	68.5	19.3
Iran, Islamic Rep.	29.3	46.2	33.2	59.2	76.8	51.7	34.9	7.9	39.5	67.8	52.2	24.8
Ireland	78.4	72.6	67.0	77.7	97.8	88.4	71.7	90.3	48.2	56.1	88.7	60.3
Israel	67.2 44.8	83.4 85.4	72.2 57.2	80.7	99.2	86.7	58.3	78.1 26.7	68.9 45.1	50.5	92.0	73.8
Italy Jamaica	44.8 37.0	85.4 37.4	57.2 44.8	71.3 66.9	99.7 78.4	70.4 50.0	60.0 47.3	66.6	45.1 52.4	74.2 22.9	72.7 73.4	64.9 17.0
Japan	75.4	98.2	96.3	48.6	100.0	73.5	64.4	71.5	52.4 84.4	83.2	73.4 84.8	85.2
Jordan	50.4	50.9	46.9	56.9	86.0	56.0	56.4	39.7	54.6	38.3	55.9	23.7
Kazakhstan	47.9	54.8	63.2	29.4	66.7	68.0	52.1	65.7	33.2	55.2	73.8	13.4
Kenya	43.3	26.2	36.1	68.4	48.9	31.2	35.8	54.5	45.9	42.1	65.7	13.4
Korea, Rep.	62.3	89.3	100.0	93.2	99.2	73.8	50.2	53.0	80.5	73.3	81.0	85.3
Kuwait	49.1	52.1	49.8	100.0	92.9	48.1	59.9	23.3	43.2	52.6	49.7	20.8
Kyrgyz Republic	42.0	30.7	41.3	93.4	66.6	49.7	50.6	39.5	32.7	22.9	56.1	7.2
Lao PDR	33.6	34.2	28.3	81.1	57.7	30.2	46.4	42.0	31.7	28.1	38.8	12.2
Latvia	43.7	63.6	77.8	97.3	81.3	69.0	63.6	59.6	47.6	32.0	69.8	28.2
Lebanon	27.5	37.1	62.8	44.7	85.0	53.7	54.5	30.6	48.2	38.4	57.0	23.2

(Cont'd.)

Table E2.2: 2017 notional pillar scores (0-100) (cont'd.)

		ENAE ENVIRO			HUN CAP			MARK	ETS		INNOVATION ECOSYSTEM	
Economy	1st pillar: Institu- tions	2nd pillar: Infrastruc- ture	3rd pillar: Techno- logical readiness	4th pillar: Macro- economic context	5th pillar: Health	6th pillar: Education and skills	7th pillar: Product market ef- ficiency	8th pillar: Labor market functioning	9th pillar: Financial market develop- ment	10th pillar: Market size	11th pillar: Business dyna- mism	12th pillar Innovation capacity
Lesotho	31.9	9.6	21.5	80.0	0.0	24.0	52.4	41.2	18.7	10.6	50.1	6.6
Liberia	30.1	3.2	30.0	63.0	42.2	16.6	17.4	28.1	20.2	2.0	46.3	10.2
Lithuania	54.6	59.0	77.0	98.1	80.3	68.8	65.6	48.1	45.3	39.3	70.0	33.3
Luxembourg	81.2	84.0	76.8	97.4	97.9	75.6	81.3	76.8	73.9	39.6	71.3	68.5
Madagascar	25.9	4.2	4.9	63.3	46.1	19.7	44.1	33.7	16.5	26.7	50.0	4.5
Malawi Malaysia	33.8 69.9	8.2 75.4	7.7 64.7	14.1 85.5	38.3 81.4	10.3 71.1	37.2 60.0	38.3 68.8	21.5 76.4	20.7 66.3	42.4 82.7	1.9 40.0
Mali	23.3	11.8	41.1	77.0	36.5	5.8	50.9	12.3	23.4	26.6	53.1	8.3
Malta	59.7	75.7	66.9	94.8	98.7	75.2	49.0	70.2	49.0	23.9	65.1	41.4
Mauritania	17.7	8.4	40.7	78.7	61.9	6.8	0.0	9.1	2.2	18.0	36.8	12.1
Mauritius	56.8	61.2	51.1	84.0	79.3	58.0	65.2	63.2	60.8	23.7	75.0	26.0
Mexico Moldova	31.9 34.2	59.1 46.1	45.3 62.2	85.6 84.1	83.6 77.6	45.5 52.9	44.3 55.4	32.5 37.5	54.9 22.3	75.8 21.1	72.9 62.5	27.5 10.1
Mongolia	38.4	35.6	44.7	91.2	59.6	49.7	50.1	57.9	29.7	27.3	57.0	13.8
Montenegro	44.6	46.0	52.4	72.2	87.0	61.9	60.2	62.3	43.5	13.7	67.5	15.6
Morocco	49.3	51.4	35.9	79.6	74.4	26.5	42.3	21.8	47.5	51.3	55.5	15.9
Mozambique	23.4	16.8	26.3	6.1	27.2	0.4	28.3	17.1	32.0	28.7	56.0	6.6
Namibia	48.6	30.2	31.5	73.6	46.4	30.4	50.0	60.2	65.8	24.6	52.3	12.8
Nepal Netherlands	36.7 92.6	17.0 96.1	27.0 78.6	58.2 89.1	62.9 96.5	25.2 95.7	34.8 77.0	28.2 81.2	30.7 78.6	35.4 67.5	54.4 92.1	5.3 82.1
New Zealand	100.0	73.9	74.4	100.0	96.4	97.5	66.9	100.0	75.3	44.0	90.3	55.0
Nicaragua	24.7	31.1	32.8	97.9	88.4	24.7	25.3	40.2	40.3	27.3	51.7	10.1
Nigeria	20.8	15.3	19.2	13.5	46.3	16.6	47.3	52.3	25.0	64.2	57.4	12.1
Norway	93.1	73.4	87.9	100.0	98.4	97.2	60.6	81.5	80.5	53.1	92.0	69.3
Oman	60.3	61.2	48.3	82.5	81.7	54.6	62.8	23.7	43.8	46.3	61.7	12.5
Pakistan	28.0	35.1	10.1	69.6	51.7	10.8	40.6	21.9	33.1	63.7	61.3	13.4
Panama Paraguay	38.2 26.9	54.8 40.8	34.8 32.3	92.0 99.4	88.2 77.0	47.5 38.6	61.0 51.7	44.5 36.1	60.2 41.6	37.8 33.2	63.5 51.8	26.3 8.8
Peru	34.3	47.0	37.5	98.6	92.1	50.8	49.7	49.6	47.0	53.5	60.7	17.8
Philippines	28.2	39.7	49.1	92.3	67.7	48.2	33.7	50.6	51.2	62.9	66.2	12.9
Poland	48.2	74.8	52.1	83.7	88.0	76.5	63.7	46.3	55.6	67.2	67.3	36.8
Portugal	54.7	80.2	63.7	66.1	95.3	69.7	67.5	55.2	41.1	51.5	80.2	40.0
Qatar	67.9	66.4	87.2	100.0	89.7	69.4	84.6	53.2	54.3	52.5	75.7	38.0
Romania Russian Federation	43.0 43.2	58.9 65.7	65.6 72.2	82.1 78.1	81.8 67.3	58.1 68.6	59.7 55.2	45.5 39.7	36.4 32.2	56.6 79.8	63.0 67.6	19.5 37.4
Rwanda	67.0	25.3	13.6	85.0	53.3	17.4	52.5	70.4	42.9	20.8	67.0	10.1
Saudi Arabia	61.7	62.9	53.1	86.4	91.4	70.3	71.9	35.2	62.1	71.5	49.8	27.0
Senegal	41.0	30.1	17.4	82.4	52.9	15.8	46.9	25.5	21.7	28.0	52.7	10.6
Serbia	37.8	59.1	51.9	87.6	84.0	62.5	45.6	49.0	28.1	40.4	63.6	17.0
Seychelles	43.1	53.2	43.5	79.9	78.6	60.4	38.7	49.8	39.9	0.0	55.5	28.3
Sierra Leone	30.0	7.4	38.0	32.2	29.0	12.3	30.9	18.5	7.7	13.3	49.3	5.4
Singapore Slovak Republic	97.2 41.9	100.0 75.8	89.9 68.3	58.6 86.3	100.0 87.6	81.7 68.7	100.0 56.5	94.1 38.0	81.8 52.3	64.1 48.6	85.7 72.4	77.4 30.0
Slovenia	56.2	74.6	63.6	71.0	96.7	78.0	65.7	51.8	45.1	36.5	77.9	43.1
South Africa	44.7	55.3	37.3	77.0	37.9	46.5	49.3	52.5	75.5	61.8	68.3	26.9
Spain	60.2	91.4	71.6	61.3	100.0	72.8	65.7	37.7	68.7	71.2	75.2	59.4
Sri Lanka	43.1	54.6	21.8	63.4	87.5	58.2	22.0	27.5	44.1	49.0	63.3	9.0
Swaziland	34.9	36.0	36.7	68.0	11.5	30.8	35.6	47.3	38.5	12.7	52.1	5.2
Sweden Switzerland	88.2 87.9	84.8 94.0	91.9 81.7	100.0 90.2	99.7	97.0 98.9	76.6 80.2	61.4 94.2	88.6 92.8	57.4 58.7	94.2 82.9	80.8 82.1
Taiwan, China	70.4	81.6	80.1	86.8	94.4	67.3	71.9	75.6	70.6	68.3	83.9	83.3
Tajikistan	48.0	44.2	40.1	86.2	73.5	51.0	32.2	53.2	19.6	23.3	59.9	4.2
Tanzania	39.0	21.3	4.8	79.2	48.6	10.2	36.4	34.4	32.7	41.9	55.7	8.9
Thailand	43.4	62.2	46.5	89.2	80.1	59.2	40.2	60.5	80.5	69.0	76.5	21.6
Trinidad and Tobago	30.6	50.2	54.4	84.0	71.2	57.1	43.7	55.9	52.6	24.6	60.6	7.1
Tunisia Turkey	39.0 41.6	40.4 58.8	39.4 49.7	83.3 74.9	85.0 89.0	48.4 54.8	25.8 53.3	11.0 23.5	19.5 64.4	42.7 72.6	59.4 57.8	13.3 32.7
Uganda	33.8	14.8	43.1	77.8	40.8	16.1	40.3	51.1	34.7	35.5	58.0	6.3
Ukraine	31.3	54.2	47.4	25.6	70.5	72.3	56.4	32.8	22.5	54.5	59.0	21.1
United Arab Emirates	86.0	82.2	87.6	100.0	79.0	64.7	91.7	63.3	62.1	64.1	75.6	42.2
United Kingdom	87.6	93.0	81.5	78.8	96.7	88.6	72.7	91.0	95.2	77.2	92.1	91.3
United States	82.0	94.1	74.8	73.7	87.5	94.5	62.3	99.0	100.0	98.0	100.0	100.0
Uruguay	58.2	63.6	60.6	51.7	87.0	60.7	45.1	46.2	45.3	33.1	62.1	23.3
Venezuela Vietnam	0.0 45.2	22.5 56.3	35.8 44.3	18.5 84.0	76.5 83.1	54.9 44.7	2.2 50.9	18.9 31.2	46.8 43.1	52.9 63.6	25.1 56.5	15.6 10.9
Yemen	6.6	4.5	6.4	51.5	53.0	2.8	25.4	3.3	0.0	32.4	35.3	4.0
Zambia	35.5	22.4	18.3	12.1	28.0	29.2	53.6	29.9	35.9	33.3	61.5	9.0
Zimbabwe	23.2	22.7	21.7	73.2	34.0	29.0	20.9	25.7	22.2	23.3	31.9	4.6

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Ana Burcharth, Associate Professor Arthur Paiva Ramos, Research Assistant

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Center for Economic Development Adriana Daganova, Expert, International Programmes and Proiects Anelia Damianova, Senior Expert

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Center for Applied Statistics and Econometrics Research -INOVE Júlio Delgado, Director

Jerónimo Freire, Project Manager Frantz Tavares, Chief Executive Officer

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School of Government, Universidad Adolfo Ibáñez Ignacio Briones, Dean Julio Guzman, Assistant Professor

Institute of Economic System and Management Chen Wei, Division Director and Professor Li Xiaolin, Research Fellow Li Zhenjing, Deputy Director and Professor

The China Center for Economic Statistics Research, Tianjin University of Finance and Economics

Bojuan Zhao, Professor Lu Dong, Professor Jian Wang, Associate Professor Hongye Xiao, Professor Huazhang Zheng, Associate Professor

National Development Council

# Chinese Taipei

Shien-Quey Kao, Deputy Minister Chung-Chung Shieh, Researcher, Economic Research

Minghuei Wu, Director, Economic Research Department

# Colombia

National Planning Department Simon Gaviria, Director National Planning Department Adriana Quiñones, Project Manager Andres Felipe Trejos, Director of Enterprise Development

Colombian Private Council on Competitiveness Rosario Córdoba, President Rafael Puyana, Vice President

# Congo, Republic Democratic of

Congo-Invest Consulting (CIC) Teza Bila, Managing Director Alphonse Mande, Project Coordinator

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National Competitiveness Council Jadranka Gable, Advisor Kresimir Jurlin, Research Fellow

European University of Cyprus Research Center Bambos Papageorgiou, Head of Socioeconomic & Academic

Bank of Cyprus Public Company Ltd Maria Georgiadou, Consultant for Innovation & Entrepreneurship Charis Pouangare, Director of Corporate Banking and SME

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CMC Graduate School of Business Tomáš Janča, Executive Director

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Danish Technological Institute Hanne Shapiro, Innovation Director, Division for Business and

Stig Yding Sørensen, Center Director, Center for Business and Policy Analysis

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ESPAE Graduate School of Management, Escuela Superior Politécnica del Litoral (ESPOL) Virginia Lasio, Dean Andrea Samaniego, Project Coordinator Sara Wong, Professor

The Egyptian Center for Economic Studies (ECES) Abla Abdel Latif, Executive Director and Director of Research Khaled Wahid, Head of Statistical Department

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Gambia Economic and Social Development Research Institute

Makaireh A. Njie, Director

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Business Initiative for Reforms in Georgia Tamara Janashia, Executive Director

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WHU-Otto Beisheim School of Management Ralf Fendel, Professor, Chair of Monetary Economics Michael Frenkel, Professor, Chair of Macroeconomics and International Economics

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Association of Ghana Industries (AGI) James Asare-Adjei, President John Defor, Deputy Director, Policy & Research Seth Twum-Akwaboah, Chief Executive Officer

## Greece

SEV Hellenic Federation of Enterprises

Michael Mitsopoulos, Senior Advisor, Macroeconomic Analysis and European Policy

Thanasis Printsipas, Associate Advisor, Macroeconomic Analysis and European Policy

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Center for Industry, SME & Business Competition Studies, University of Trisakti Ida Busnetty, Vice Director Tulus Tambunan, Director

# Iran, Islamic Republic of

Iran Chamber of Commerce, Industries, Mines and Agriculture, Department of Economic Affairs Hamed Nikraftar, Project Manager Farnaz Safdari, Research Associate Homa Sharifi, Research Associate

# Ireland

Department of Jobs, Enterprise and Innovation, Competitiveness Unit, Strategic Policy Division John Maher, Senior Policy Analyst

lbec, representing Irish Business

Fergal Obrien, Director of Policy and Public Affairs Geraldine Anderson, Head of Research

School of Economics, University College Cork Stephen Brosnan, Research Assistant Eleanor Doyle, Head of School Sean O'Connor, Research Assistant

Manufacturers Association of Israel (MAI) Shraga Brosh, President Dan Catarivas, Foreign Trade & International Relations Director Ruby Ginel, Managing Director

SDA Bocconi School of Management Paola Dubini, Associate Professor, Bocconi University Francesco A. Saviozzi, SDA Professor, Strategic and Entrepreneurial Management Department

# Jamaica

Mona School of Business & Management (MSBM), The University of the West Indies Michael Williams, Executive Director (Acting) William Lawrence, Director, Professional Services Unit Patricia Douce, Project Administrator, Professional Services Unit

# Japan

Keio University

Jiro Tamura, Professor of Law, Keio University

In cooperation with Keizai Doyukai (Japan Association of Corporate Executives)

Hironori Saito, General Manager, Planning & Co-ordination, Keizai Doyukai

# Jordan

Ministry of Planning and International Cooperation Dr. Saleh Al-Kharabsheh, Secretary General Ministry H.E Imad Najib Fakhoury, Minister of Planning and International Cooperation

Basma Suleiman Arabiyat, National Competitiveness Team Coordinator

# Kazakhstan

Center for Strategic Initiatives Olzhas Khudaibergenov, Senior Partner Darmen Sadvakasov, Senior Partner Abzal Sagatov, Project Manager

# Kenya

Institute for Development Studies, University of Nairobi Paul Kamau, Senior Research Fellow Dorothy McCormick, Research Professor Winnie Mitullah, Director and Associate Research Professor

# Korea, Republic of

Korea Development Institute

Joohoon Kim, Executive Director, Economic Information and Education Center

Youngho Jung, Chief, Public Opinion Analysis Unit Jayoung Kim, Senior Research Associate, Public Opinion Analysis Unit

# Kuwait

Kuwait National Competitiveness Committee Adel Al-Husainan, Committee Member Fahed Al-Rashed, Committee Chairman Sayer Al-Sayer, Committee Member

# Kyrgyz Republic

Economic Policy Institute Marat Tazabekov, Chairman

Enterprise & Development Consultants Co., Ltd

Stockholm School of Economics in Riga Arnis Sauka, Head of the Centre for Sustainable Development

# Lebanon

Bader Young Entrepreneurs Program Fadi Bizri, Managing Director Sandrine Hachem, Programs Manager

InfoPro, Research Department

## Lesotho

Private Sector Foundation of Lesotho Nthati Mapitsi, Researcher Thabo Qhesi, Chief Executive Officer Kutloano Sello, President, Researcher

# Lithuania

Statistics Lithuania

Ona Grigiene, Deputy Head, Knowledge Economy and Special Surveys Statistics Division

Vilija Lapeniene, Director General

Gediminas Samuolis, Head, Knowledge Economy and Special Surveys Statistics Division

# Luxembourg

Luxembourg Chamber of Commerce Carlo Thelen, Chief Economist, Director General Lynn Zoenen, Research Analyst Ricarda Braun, Research Analyst

# Madagascar

Centre of Economic Studies, University of Antananarivo Ravelomanana Mamy Raoul, Director Razato Rarijaona Simon, Executive Secretary

# Malawi

Malawi Confederation of Chambers of Commerce and Industry

Hope Chavula, Head, Public Private Dialogue Chancellor L. Kaferapanjira, Chief Executive Officer

# Malaysia

Malaysia Productivity Corporation (MPC) Zainon Bakar, Director Mohd Razali Hussain, Director General Abdul Latif Abu Seman, Deputy Director General

# Mali

Groupe de Recherche en Economie Appliquée et Théorique (GREAT)

Massa Coulibaly, Executive Director

# Malta

Competitive Malta Matthew Castillo, Board Secretary Margrith Lütschg-Emmenegger, President

# Mauritania

Mauritania Bicom-Service Commercial Oumou El Khairy Youssouf, Administrative Financial Director Ousmane Samb, Technical and Marketing Director Habib Sy, Analyst

# Mauritius

Board of Investment, Mauritius Ken Poonoosamy, Managing Director Manaesha Fowdar, Senior Investment Executive

Business Mauritius

Raj Makoond, Chief Executive Officer

# Mexico

Center for Intellectual Capital and Competitiveness Erika Ruiz Manzur, Executive Director René Villarreal Arrambide, President and Chief Executive Tania Guiot, Directot

Instituto Mexicano para la Competitividad (IMCO) Juan E. Pardinas, General Director

Mariana Tapia, Researcher

Ministry of the Economy

María del Rocío Ruiz Chávez, Undersecretary for Competitiveness and Standardization

Francisco Javier Anaya Rojas, Technical Secretary for Competitiveness

Daniel Zaga Szenker, Deputy General Director

Academy of Economic Studies of Moldova (AESM) Grigore Belostecinic, Rector Institute of Economic Research and European Studies (IERES) Corneliu Gutu, Director

# Mongolia

Open Society Forum (OSF), Mongolia Oyunbadam Davaakhuu, Manager of Economic Policy Program Erdenejargal Perenlei, Executive Director

# Montenegro

Institute for Strategic Studies and Prognoses (ISSP) Maja Drakic Grgur, Project Manager Jadranka Kaludjerovic, Program Director Veselin Vukotic, President

# Morocco

Confédération Générale des Entreprises du Maroc (CGEM) Meriem Bensalah Chegroun, President Si Mohamed Elkhatib, Project Head, Commission Climat des Affaires et Partenariat Public Privé

Ahmed Rahhou, President, Commission Climat des Affaires et Partenariat Public Privé

# Mozambique

EconPolicy Research Group, Lda. Peter Coughlin, Director Mwikali Kieti, Project Coordinator

# Namibia

Institute for Public Policy Research (IPPR) Ndeshi Fikameni. Research Associate Graham Hopwood, Executive Director Salmi Shigwedha, Research Associate

# Nepal

Competitiveness and Development Institute (CODE) Ramesh Chandra Chitrakar, Professor, Country Coordinator and Project Director Menaka Shrestha, Team Member

# **Netherlands**

Erasmus Centre for Business Innovation, Erasmus University Henk W. Volberda, Director and Professor

# New Zealand

**BusinessNZ** Kirk Hope, Chief Executive

# Nigeria

Nigerian Economic Summit Group (NESG) Olaoye Jaiyeola, Chief Executive Officer Olusegun Omisakin, Head of Research and Information Services Olajiire Onatade-Abati, Research Analyst

# Norway

Menon Economics

Christian Svane Mellbye, Senior Consultant Erik W Jakobsen, Managing Partner in Menon

National Competitiveness Office Tahani Bait Koraa, Director

# **Pakistan**

Mishal Pakistan

Puruesh Chaudhary, Director Content Amir Jahangir, Chief Executive Officer

Centro de Análisis y Difusión de Economia Paraguaya (CADEP)

Dionisio Borda, Research Member

Fernando Masi, Director

María Belén Servín, Research Member

Centro de Desarrollo Industrial (CDI), Sociedad Nacional de Industrias

Néstor Asto, Associate Consultant Maria Elena Baraybar, Project Assistant Luis Tenorio, Executive Director

# **Philippines**

Makati Business Club (MBC)

Elizabeth A. Bautista, Programs Officer

Edgar O. Chua, Chairman

Roxanne V. Lu, Programs and Projects Director Peter Angelo V. Perfecto, Executive Director

Department of Financial Stability, National Bank of Poland Piotr Boguszewski, Advisor

Dorota Mirowska-Wierzbicka, Economist

Jacek Osinski, Director

# **Portugal**

PROFORUM, Associação para o Desenvolvimento da Engenharia

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Issa Abdul Salam Abu Issa, Secretary-General

Social and Economic Survey Research Institute (SESRI)

Hanan Abdul Rahim, Associate Director

Darwish Al-Emadi, Director

Raymond Carasig, Contracts and Grants Administrator

# Romania

The Chamber of Commerce and Industry of Romania Traian Caramanian, Secretary General

Irina Ion, Collaborator

Daniela Paul, World Economic Forum Project Country Coordinator

# **Russian Federation**

Eurasia Competitiveness Institute (ECI) Katerina Marandi, Programme Manager Alexey Prazdnichnykh, Managing Director

# Rwanda

Private Sector Federation (PSF) Benjamin Gasamagera, Chairman Fiona Uwera, Head of Research and Policy Analysis

# Saudi Arabia

Alfaisal University

Mohammed Kafaji, Director of Quality Assurance and Accreditation

National Competitiveness Center (NCC)

Ayedh Hadi AlOtaibi, President

Asem Ali Alforih, Manager of Research and Development

# Senegal

Centre de Recherches Economiques Appliquées (CREA), University of Dakar

Ahmadou Aly Mbaye, Director

Ndiack Fall, Deputy Director

Youssou Camara, Administrative Staff

Foundation for the Advancement of Economics (FREN) Aleksandar Radivojevic, Project Coordinator Svetozar Tanaskovic, Researcher Jelena Zarkovic Rakic, Director

# Singapore

Economic Development Board

Thien Kwee Eng, Assistant Managing Director, Planning Cheng Wai San, Director, Research & Statistics Unit Teo Xinyu, Executive, Research & Statistics Unit

# Slovak Republic

Business Alliance of Slovakia (PAS) Peter Kremsky, Executive Director

# Slovenia

Institute for Economic Research Peter Stanovnik, Professor Sonja Uršic, Senior Research Assistant

University of Ljubljana, Faculty of Economics Mateja Drnovšek, Professor

# South Africa

Business Leadership South Africa Jurgens van Zyl, Infrastructure Manager Bonang Mohale, Chief Executive Officer

Business Unity South Africa Tanya Cohen, Chief Executive Officer

Olivier Serrao, Director, Economic Policy

Phila Fakude, Deputy Director, Social Policy

# Spain

IESE Business School. International Center for Competitiveness Pascual Berrone. Professor

María Luisa Blázquez, Research Associate

# Sri Lanka

Institute of Policy Studies of Sri Lanka (IPS) Saman Kelegama, Executive Director Kithmina Hewage, Research Officer Vishvanathan Subramaniam, Research Assistant

# Sweden

International University of Entrepreneurship and Technology Association (IUET)

Thomas Andersson, President In partnership with Deloitte Sweden

# Switzerland

University of St. Gallen, Executive School of Management, Technology and Law (ES-HSG) Tobias Trütsch, Communications Manager

# Tajikistan

Center of Sociological Research "Zerkalo" Qahramon Bagozoda, Director

Policy Research for Development, REPOA Cornel Jahari, Assistant Researcher Blandina Kilama, Senior Researcher Donald Mmari, Executive Director

# Thailand

Chulalongkorn Business School, Chulalongkorn University Pasu Decharin, Dean

Siri-on Setamanit, Assistant Dean

# **Trinidad and Tobago**

Arthur Lok Jack Graduate School of Business Dr. Balraj Kistow, Lecturer and Programme Director Nirmala Maharaj, Director, Internationalisation and Institutional Relations

The University of the West Indies, St. Augustine Rolph Balgobin, NGC Distinguished Fellow, Department of Management Studies

## **Tunisia**

Institut Arabe des Chefs d'Entreprises Ahmed Bouzguenda, President Majdi Hassen, Executive Counsellor

TUSIAD Sabanci University Competitiveness Forum Izak Atiyas, Director Sezen Ugurlu, Project Specialist

# Uganda

Kabano Research and Development Centre Robert Apunyo, Program Manager Delius Asiimwe, Executive Director Anna Namboonze, Research Associate

# Ukraine

CASE Ukraine, Center for Social and Economic Research Dmytro Boyarchuk, Executive Director Vladimir Dubrovskiy, Leading Economist

# **United Arab Emirates**

Federal Competitiveness and Statistics Authority H.E. Abdulla Nasser Lootah, Director General

Department of Economic Development-Abu Dhabi, Competitiveness Office of Abu Dhabi H.E. Khaleefa Salem Al Mansouri, Undersecretary

Department of Economic Development-Dubai, Competitiveness Office

H.E. Khaled Ibrahim Al Kassim, Director of Dubai Competitiveness Office

Zayed University

Mouawiya Al Awad, Director of Institute of Social and Economic Research

# **United Kingdom**

LSE Enterprise Ltd

Elitsa Garnizova, Project Manager and Researcher Robyn Klingler-Vidra, Senior Researcher

# Uruguay

Universidad ORT Uruguay Bruno Gili, Professor Isidoro Hodara, Professor

# Venezuela

CONAPRI—The Venezuelan Council for Investment Promotion Litsay Guerrero, Economic Affairs and Investor Services Manager

Eduardo Porcarelli, Executive Director

# **Vietnam**

Ho Chi Minh Institute for Development Studies (HIDS) Tran Anh Tuan, Acting Director Du Phuoc Tan, Head of Urban Management Studies Department

Trieu Thanh Son, Deputy Head of Research Management and Cooperation Department

# Yemen

Yemeni Business Club (YBC) Fathi Abdulwasa Hayel Saeed, Chairman Ghadeer Ahmed Almaqhafi, Acting Executive Director

# Zambia

Institute of Economic and Social Research (INESOR), University of Zambia

Patricia Funjika, Research Fellow and Project Coordinator Jolly Kamwanga, Senior Research Fellow and Director Grayson Koyi, Research Fellow

# Zimbabwe

Fulham Economics, Harare A. M. Hawkins, Chairman

# Bolivia, Costa Rica, Dominican Republic, El Salvador, Honduras, Nicaragua, Panama

INCAE Business School, Latin American Center for Competitiveness and Sustainable Development (CLACDS) Ronald Arce, Researcher Enrique Bolaños, President Víctor Umaña, Director

# Liberia and Sierra Leone

FJP Development and Management Consultants Omodele R. N. Jones, Chief Executive Officer



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The Global Competitiveness Report 2017–2018 comes out in the context of recovering global growth. This is welcome news, but many challenges remain: countries are facing disruptive inequalities; rising protectionism and a backlash against globalization; and the challenges and uncertainties of the Fourth Industrial Revolution, with its innovation and technological change. In this context, competitiveness remains central to achieving broadbased, sustainable economic progress.

The Report this year identifies three main trends that call for policy action: first, indicators of financial vulnerability have not fully recovered to pre-financial crisis levels, and new vulnerabilities are surfacing because private debt has increased in emerging economies and unregulated segments of the financial sector have grown. Second, although innovation capacity has converged between emerging and advanced economies, the ability to spread the benefits of these innovations has not. Third, labor markets have become more flexible in more open and globalized economies. Accompanying flexibility with income protection and workers' rights contributes to the adjustment process and to shared prosperity.

Against this background, the *Report* serves as a critical reminder of the role competitiveness is called to play in both solving the world's challenges and laying the ground for future prosperity.

Produced in collaboration with leading academics and a global network of Partner Institutes, *The Global Competitiveness Report 2017–2018* offers users a unique dataset of a broad array of competitiveness indicators for 137 economies. The data used in the *Report* are obtained from leading international sources as well as from the World Economic Forum's annual Executive Opinion Survey, a distinctive source that captures the perspectives of more than 14,000 business leaders on topics related to national competitiveness.

The Report presents the rankings of the Global Competitiveness Index (GCI). The GCI is based on 12 pillars that provide a comprehensive picture of the competitiveness landscape—the set of institutions, policies, and factors that determine the level of productivity of an economy—in countries around the world at different stages of economic development.

Detailed profiles highlighting competitive strengths and weaknesses for each of the 137 economies included in the Index as well as the interactive data platform are available at www.weforum.org/gcr.

World Economic Forum 91-93 route de la Capite CH-1223 Cologny/Geneva Switzerland

Tel +41 (0) 22 869 1212 Fax +41 (0) 22 786 2744

contact@weforum.org www.weforum.org