

## CHAPTER 1.1

# The Global Competitiveness Index: Prioritizing the Economic Policy Agenda

XAVIER SALA-I-MARTIN

JENNIFER BLANKE

MARGARETA DRZENIEK HANOZ

THIERRY GEIGER

IRENE MIA

FIONA PAUA

World Economic Forum

After several years of rapid and almost unhampered growth, the global economic landscape is changing. Rising food and energy prices, a major international financial crisis, and the related slowdown in the world's leading economies are confronting policymakers with new economic management challenges. Today's volatility underscores the importance of a competitiveness-supporting economic environment that can help national economies to weather these types of shocks in order to ensure solid economic performance going into the future.

A nation's level of competitiveness reflects the extent to which it is able to provide rising prosperity to its citizens. Since 1979, the World Economic Forum's annual *Global Competitiveness Reports* have examined the many factors enabling national economies to achieve sustained economic growth and long-term prosperity. Our goal over the years has been to provide benchmarking tools for business leaders and policymakers to identify obstacles to improved competitiveness, stimulating discussion on strategies to overcome them. For the past several years, the World Economic Forum has based its competitiveness analysis on the Global Competitiveness Index (GCI), a highly comprehensive index for measuring national competitiveness, which captures the microeconomic and macroeconomic foundations of national 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 sustainable level of prosperity that can be earned by an economy. In other words, more competitive economies tend to be able to produce higher levels of income for their citizens. The productivity level also determines the rates of return obtained by investments in an economy. Because the rates of return are the fundamental drivers of the growth rates of the economy, a more competitive economy is one that is likely to grow faster over the medium to long run.

The concept of competitiveness thus involves static and dynamic components: although the productivity of a country clearly determines its ability to sustain a high *level* of income, it is also one of the central determinants of the returns to investment, which is one of the key factors explaining an economy's *growth potential*.

## The 12 pillars of competitiveness

The determinants of competitiveness are many and complex. For hundreds of years, economists have tried to understand what determines the wealth of nations. This attempt has ranged from Adam Smith's focus on specialization and the division of labor to neoclassical economists' emphasis on investment in physical capital and infrastructure, and, more recently, to interest in other mechanisms such as education and training, technological progress (whether created within the country or adopted from abroad),<sup>1</sup> macroeconomic stability, good governance, the rule of law, transparent and well-functioning

institutions, firm sophistication, demand conditions, market size, and many others. Each of these conjectures rests on solid theoretical foundations and makes common sense. The central point, however, is that they are not mutually exclusive—so that two or more of them could be true at the same time. Hundreds of econometric studies show that many of these conjectures are, in fact, simultaneously true.<sup>2</sup> This also can partly explain why, despite the present global financial crisis, we do not necessarily see large swings in competitiveness ratings, for example in the United States. Financial markets are only one of several important components of national competitiveness.

The GCI captures this open-ended dimension by providing a weighted average of many different components, each of which reflects one aspect of the complex reality that we call competitiveness. We group all these components into *12 pillars of economic competitiveness*:

#### First pillar: Institutions

The institutional environment forms the framework within which individuals, firms, and governments interact to generate income and wealth in the economy. The institutional framework has a strong bearing on competitiveness and growth.<sup>3</sup> It plays a central role in the ways in which societies distribute the benefits and bear the costs of development strategies and policies, and it influences investment decisions and the organization of production. Owners of land, corporate shares, and even intellectual property are unwilling to invest in the improvement and upkeep of their property if their rights as owners are insecure.<sup>4</sup> Of equal importance, if property cannot be bought and sold with the confidence that the authorities will endorse the transaction, the market itself will fail to generate dynamic growth.

The importance of institutions is not restricted to the legal framework. Government attitudes toward markets and freedoms and the efficiency of its operations are also very important: excessive bureaucracy and red tape,<sup>5</sup> overregulation, corruption, dishonesty in dealing with public contracts, lack of transparency and trustworthiness, or the political dependence of the judicial system impose significant economic costs to businesses and slow down the process of economic development.

Although the economic literature has mainly focused on public institutions, private institutions are also an important element in the process of creation of wealth. The significant corporate scandals that have occurred over the past few years, and the present global financial crisis, have highlighted the relevance of accounting and reporting standards and transparency for preventing fraud and mismanagement, ensuring good governance, and maintaining investor and consumer confidence. An economy is well served by businesses that are run honestly, where managers abide by strong ethical practices in their dealings with the government,

other firms, and the public.<sup>6</sup> Private-sector transparency is indispensable to business, and can be brought about through the use of standards as well as auditing and accounting practices that ensure access to information in a timely manner.<sup>7</sup>

#### Second pillar: Infrastructure

Extensive and efficient infrastructure is an essential driver of competitiveness. It is critical for ensuring the effective functioning of the economy, as it is an important factor determining the location of economic activity and the kinds of activities or sectors that can develop in a particular economy. Well-developed infrastructure reduces the effect of distance between regions, with the result of truly integrating the national market and connecting it to markets in other countries and regions. In addition, the quality and extensiveness of infrastructure networks significantly impact economic growth and reduce income inequalities and poverty in a variety of ways.<sup>8</sup> In this regard, a well-developed transport and communications infrastructure network is a prerequisite for the ability of less-developed communities to connect to core economic activities and schools.

Effective modes of transport for goods, people, and services—such as quality roads, railroads, ports, and air transport—enable entrepreneurs to get their goods 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 of 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 decisions made by economic actors take into account all available relevant information.

#### Third pillar: Macroeconomic stability

The stability of the macroeconomic environment is important for business and, therefore, is important for the overall competitiveness of a country.<sup>9</sup> 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. Firms cannot make informed decisions when inflation is raging out of control. The government cannot provide services efficiently if it has to make high-interest payments on its past debts. In sum, the economy cannot grow unless the macro environment is stable.

#### Fourth 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.<sup>10</sup>

In addition to health, this pillar takes into account the quantity and quality of basic education received by the population, which is increasingly important in today's economy. Basic education increases the efficiency of each individual worker. Moreover, a workforce that has received little formal education can carry out only basic manual work and finds it much more difficult to adapt to more advanced production processes and techniques. Lack of basic education can therefore become a constraint on business development, with firms finding it difficult to move up the value chain by producing more sophisticated or value-intensive products.

#### **Fifth 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.<sup>11</sup> In particular, today's globalizing economy requires economies to nurture pools of well-educated workers who are able to adapt rapidly to their changing environment. This pillar measures secondary and tertiary enrollment rates as well as the quality of education as assessed by the business community. 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 to the changing needs of the evolving economy.

#### **Sixth pillar: Goods market efficiency**

Countries with efficient goods markets are well positioned to produce the right mix of products and services given 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. The best possible environment for the exchange of goods requires a minimum of impediments to business activity through government intervention to be in place. For example, competitiveness is hindered by distortionary or burdensome taxes, and by restrictive and discriminatory rules on foreign ownership or foreign direct investment (FDI). Market efficiency also depends on demand conditions such as customer orientation and buyer sophistication. For cultural reasons, customers in some countries may be more demanding than in others. This can create an important competitive advantage, as it forces companies to be more innovative and customer-oriented and thus imposes the discipline necessary for efficiency to be achieved in the market.

#### **Seventh pillar: Labor market efficiency**

The efficiency and flexibility of the labor market are critical for ensuring that workers are allocated to their most efficient 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 a clear relationship between worker incentives and their efforts, as well as the best use of available talent—which includes equity in the business environment between women and men.

#### **Eighth pillar: Financial market sophistication**

The present global financial crisis has highlighted the critical importance of financial markets for the functioning of national economies. An efficient financial sector is necessary to allocate the resources saved by a nation's citizens as well as those entering the economy from abroad to their most productive uses. It channels resources to the entrepreneurial or investment projects with the highest expected rates of return, rather than to the politically connected. A thorough assessment of risk is therefore a key ingredient.

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. An efficient financial sector also ensures that innovators with good ideas have the financial resources to turn those ideas into commercially viable products and services. In order to fulfill all those functions, the banking sector needs to be trustworthy and transparent.<sup>12</sup>

#### **Ninth pillar: Technological readiness**

This pillar measures the agility with which an economy adopts existing technologies to enhance the productivity of its industries.<sup>13</sup> In today's globalized world, technology has increasingly become an important element for firms to compete and prosper. In particular, information and communication technologies (ICT) have evolved into the "general purpose technology" of our time,<sup>14</sup> given the critical spillovers to the other economic sectors and their role as efficient infrastructure for commercial transactions. Therefore ICT access (including the presence of an ICT-friendly regulatory framework) and usage are included in the pillar as essential components of economies' overall level of technological readiness.

Whether the technology used has or has not been developed within national borders is irrelevant for its effect on competitiveness. The central point is that the firms operating in the country have access to advanced products and blueprints and the ability to use them. That is, it does not matter whether the personal

computer or the Internet was invented in a particular country. What is important is that these inventions are available to the business community. This does not mean that the process of innovation is irrelevant. However, the level of technology available to firms in a country needs to be distinguished from the country's ability to innovate and expand the frontiers of knowledge. That is why we separate technological readiness from innovation, which is captured in the 12th pillar below.

#### Tenth pillar: Market size

The size of the market affects productivity because 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. There is vast empirical evidence that shows that trade openness is positively associated with growth. Even if some recent research casts doubts on the robustness of this relationship, the general sense is that trade has a positive effect on growth, especially for countries with small domestic markets.<sup>15</sup>

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.<sup>16</sup> 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 broken into many countries but have one common market.

#### Eleventh pillar: Business sophistication

Business sophistication is conducive to higher efficiency in the production of goods and services. This leads, in turn, to increased productivity, thus enhancing a nation's competitiveness. Business sophistication concerns the quality of a country's overall business networks as well as the quality of individual firms' operations and strategies. It is particularly important for countries at an advanced stage of development, when the more basic sources of productivity improvements have been exhausted to a large extent.

The quality of a country's business networks and supporting industries, which we capture by using variables on 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 ("clusters"), efficiency is heightened, greater opportunities for innovation are created, and barriers to entry for new firms are reduced. Individual firms' operations and strategies (branding, marketing, the presence of a value chain, and the production of unique and sophisticated products) all lead to sophisticated and modern business processes.

#### Twelfth pillar: Innovation

The last pillar of competitiveness is technological innovation. Although substantial gains can be obtained by improving institutions, building infrastructures, reducing macroeconomic instability, or improving the human capital of the population, all these factors eventually seem to run into diminishing returns. The same is true for the efficiency of the labor, financial, and goods markets. In the long run, standards of living can be expanded only with technological innovation. Innovation is particularly important for economies as they approach the frontiers of knowledge and the possibility of integrating and adapting exogenous technologies tends to disappear.<sup>17</sup>

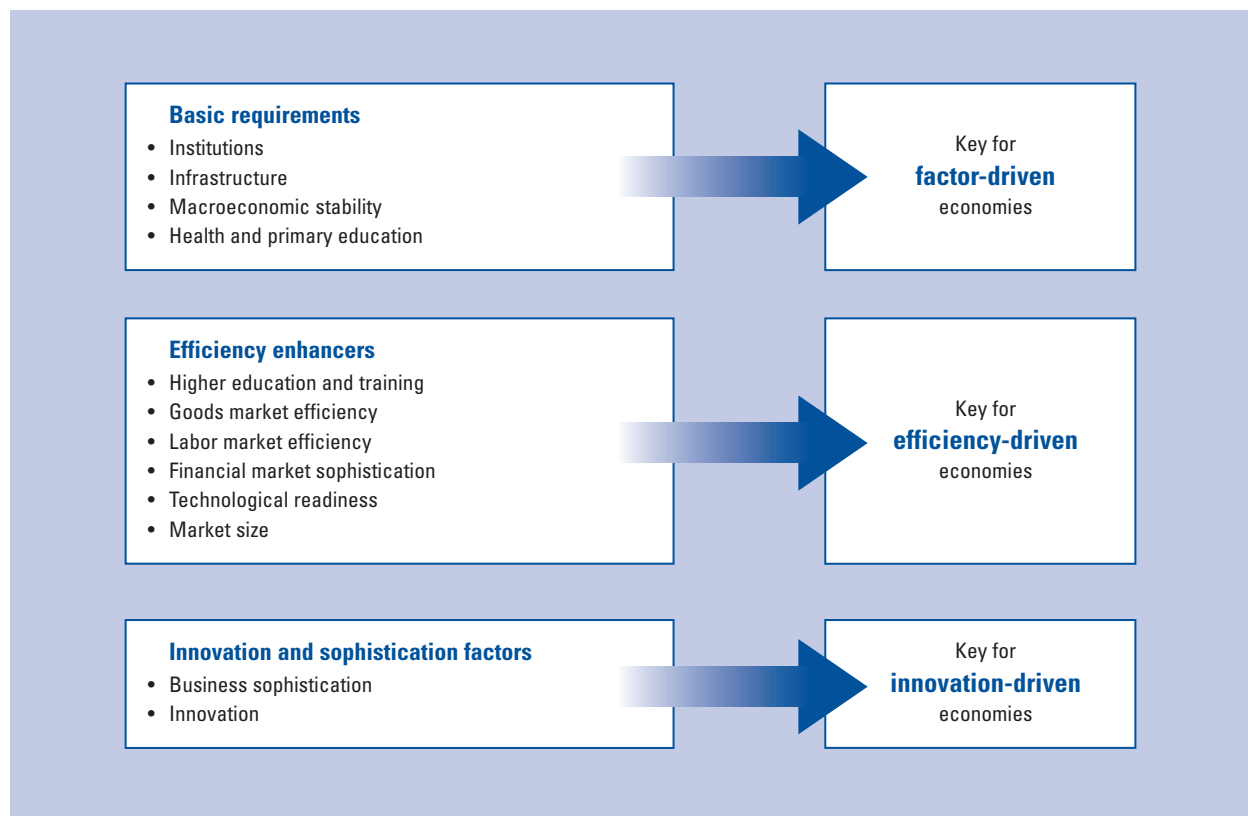
Although less-advanced countries can still improve their productivity by adopting existing technologies or making incremental improvements in other areas, for countries that have reached the innovation stage of development, this is no longer sufficient to increase productivity. Firms in these countries must design and develop cutting-edge products and processes to maintain a competitive edge. This requires an environment that is conducive to innovative activity, supported by both the public and the private sectors. In particular, this means sufficient investment in research and development (R&D) especially by the private sector, the presence of high-quality scientific research institutions, extensive collaboration in research between universities and industry, and the protection of intellectual property.

#### The interrelation of the 12 pillars

Although the 12 pillars of competitiveness are described separately, this should not obscure the fact that they are not independent: not only they are related to each other, but they tend to reinforce each other. For example, innovation (12th pillar) is not possible in a world without institutions (1st pillar) that guarantee intellectual property rights, cannot be performed in countries with poorly educated and poorly trained labor force (5th pillar), and will never take place in economies with inefficient markets (6th, 7th, and 8th pillars) or without extensive and efficient infrastructure (2nd pillar).

Although the actual construction of the Index will involve the aggregation of the 12 pillars into a single index, measures are reported for the 12 pillars separately because offering a more disaggregated analysis can be more useful to countries and practitioners: such an analysis gets closer to the actual areas in which a particular country needs to improve.

Figure 1: The 12 pillars of competitiveness



### Stages of development and the weighted Index

It is clear that different pillars affect different countries differently: the best way for Chad to improve its competitiveness is not the same as the best way for the United States. This is because Chad and the United States are in different stages of development: as countries move along the development path, wages tend to increase and, in order to sustain this higher income, labor productivity must improve.<sup>18</sup>

According to the GCI, in the first stage, the economy is *factor-driven* and countries compete based on their factor endowments, primarily unskilled labor and natural resources. Companies compete on the basis of price and sell basic products or commodities, with their low productivity reflected in low wages. Maintaining competitiveness at this stage of development hinges primarily on well-functioning public and private institutions (pillar 1), well-developed infrastructure (pillar 2), a stable macroeconomic framework (pillar 3), and a healthy and literate workforce (pillar 4).

As wages rise with advancing development, countries move into the *efficiency-driven* stage of development, when they must begin to develop more efficient production processes and increase product quality. At this point, competitiveness is increasingly driven by higher education and training (pillar 5), efficient goods markets (pillar 6), well-functioning labor markets (pillar 7),

sophisticated financial markets (pillar 8), a large domestic or foreign market (pillar 10), and the ability to harness the benefits of existing technologies (pillar 9).

Finally, as countries move into the *innovation-driven* stage, they are able to sustain higher wages and the associated standard of living only if their businesses are able to compete with new and unique products. At this stage, companies must compete through innovation (pillar 12), producing new and different goods using the most sophisticated production processes (pillar 11).

The concept of stages of development is integrated into the Index by attributing higher relative weights to those pillars that are relatively more relevant for a country given its particular stage of development. That is, although all 12 pillars matter to a certain extent for all countries, the importance of each one depends on a country's particular stage of development. To take this into account, 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 innovation-driven stage. The three subindexes are shown in Figure 1.



The specific weights we attribute to each subindex in every stage of development are shown in Table 1. To obtain the precise weights, a maximum likelihood regression of GDP per capita was run against each subindex for past years, allowing for different coefficients for each stage of development.<sup>19</sup> The rounding of these econometric estimates led to the choice of weights displayed in Table 1.

**Table 1: Weights of the three main groups of pillars at each stage of development**

Pillar group	Factor-driven stage (%)	Efficiency-driven stage (%)	Innovation-driven stage (%)
Basic requirements	60	40	20
Efficiency enhancers	35	50	50
Innovation and sophistication factors	5	10	30

### Implementation of stages of development: Smooth transitions

Countries are allocated to stages of development based on two criteria. The first criterion is the level of GDP per capita at market exchange rates. This widely available measure is used as a proxy for wages, as internationally comparable data for the latter are not available for all countries covered. The precise thresholds are shown in Table 2. A second criterion measures the extent to which countries are factor driven. We proxy this by the share of exports of primary goods in total exports (goods and services) and assume that countries that export more than 70 percent of primary products are to a large extent factor driven.<sup>20</sup>

**Table 2: Income thresholds for establishing stages of development**

Stage of Development	GDP per capita (in US\$)
Stage 1: Factor driven	< 2,000
<i>Transition from stage 1 to stage 2</i>	<i>2,000–3,000</i>
Stage 2: Efficiency driven	3,000–9,000
<i>Transition from stage 2 to stage 3</i>	<i>9,000–17,000</i>
Stage 3: Innovation driven	> 17,000

Countries falling in 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. By introducing this type of transition between stages into the model—that is, by placing increasingly more weight on those areas that are becoming more important for the country’s competitiveness as the country develops—the index can gradually “penalize”

those countries that are not preparing for the next stage. The classification of countries into stages of development is shown in Table 3.

### Country coverage

Four new economies have been included in the analysis: Brunei Darussalam, Côte d’Ivoire, Ghana, and Malawi (reintroduced after a one-year absence). On the other hand, one country covered last year, Uzbekistan, is not covered this year because of a lack of Survey data. This has led to a net increase in country coverage, for a total of 134 economies this year.

Appendix A describes the exact composition of the GCI and technical details of its construction.

### The Global Competitiveness Index 2008–2009 rankings

The detailed rankings from this year’s GCI are shown in Tables 4 through 8. As Table 4 shows, almost all of the countries in the top 10 remain the same as last year, with some small shifts in rank. The following sections reference the findings of the GCI 2008–2009 for the top performers globally, as well as for a number of selected economies in each of the five following regions: Europe, Latin America and the Caribbean, Asia and the Pacific, Middle East and North Africa, and sub-Saharan Africa.

#### Top 10

Notwithstanding the present financial crisis, the **United States** continues to be the most competitive economy in the world, a position it has held for several years. This is because the country is endowed with many structural features that make its economy extremely productive and that place it on a strong footing to ride out business cycle shifts and economic shocks. Thus, despite rising concerns about the soundness of the banking sector and macroeconomic weaknesses, the country’s many other strengths continue to make it a very productive environment. The United States is followed by Switzerland, Denmark, and Sweden, composing the same top four countries as last year.

The United States is home to highly sophisticated and innovative companies operating in very efficient factor markets. The country is also endowed with an excellent university system that collaborates strongly with the business sector in R&D. Combined with the scale opportunities afforded by the sheer size of its domestic economy, the largest in the world by far, these qualities make the United States the most competitive economy in the world.

The United States is ranked 1st on the innovation pillar, with the world’s top-rated scientific research institutions, high company spending on R&D (ranked 3rd), and significant collaboration between the business and university sectors in research (ranked 1st). The country’s markets support this innovative activity through their

**Table 3: List of countries/economies at each stage of development**

Stage 1	Transition from 1 to 2	Stage 2	Transition from 2 to 3	Stage 3
Bangladesh	Armenia	Albania	Bahrain	<b>Australia</b>
Benin	Azerbaijan	Algeria	Barbados	Austria
Bolivia	Botswana	Argentina	Chile	Belgium
Burkina Faso	Brunei Darussalam	Bosnia and Herzegovina	Croatia	Canada
Burundi	China	Brazil	Estonia	Cyprus
Cambodia	El Salvador	Bulgaria	Hungary	Czech Republic
Cameroon	Georgia	Colombia	Latvia	Denmark
Chad	Guatemala	Costa Rica	Lithuania	Finland
Côte d'Ivoire	Iran	Dominican Republic	Poland	France
Egypt	Jordan	Ecuador	Qatar	Germany
Ethiopia	Kazakhstan	Jamaica	<b>Russian Federation</b>	Greece
Gambia, The	Kuwait	Macedonia, FYR	Slovak Republic	Hong Kong SAR
Ghana	Libya	Malaysia	Taiwan, China	Iceland
Guyana	Morocco	Mauritius	Trinidad and Tobago	Ireland
Honduras	Oman	Mexico	Turkey	Israel
India	Saudi Arabia	Montenegro		Italy
Indonesia	Venezuela	Namibia		Japan
Kenya		Panama		Korea, Rep.
Kyrgyz Republic		Peru		Luxembourg
Lesotho		Romania		Malta
Madagascar		Serbia		Netherlands
Malawi		South Africa		<b>New Zealand</b>
Mali		Suriname		Norway
Mauritania		Thailand		Portugal
Moldova		Tunisia		Puerto Rico
Mongolia		Ukraine		Singapore
Mozambique		Uruguay		Slovenia
Nepal				Spain
Nicaragua				Sweden
Nigeria				Switzerland
Pakistan				United Arab Emirates
Paraguay				United Kingdom
Philippines				United States
Senegal				
Sri Lanka				
Syria				
Tajikistan				
Tanzania				
Timor-Leste				
Uganda				
Vietnam				
Zambia				
Zimbabwe				

efficient allocation of human and financial resources to their most effective use. In particular, labor markets are ranked 1st out of all countries, characterized by the ease and affordability of hiring workers and significant wage flexibility. The country's goods markets are also characterized by low levels of distortion within the context of a very competitive environment, providing consumers with a large selection of quality goods and services at reasonable prices, supplied in a timely manner. Financial markets are also rated as highly efficient, although in the context of the present financial crisis there has been a weakening of confidence in the financial sector, particularly the soundness of banks (40th this year, as opposed to 26th in 2007).

Although the country is thus very competitive overall, there are some weaknesses in more basic areas. Some aspects of its public institutions could be strength-

ened, with particular concerns on the part of the business community about the government's ability to maintain arms-length relationships with the private sector (40th), and in the perception that the government spends its resources wastefully (66th). The business costs of terrorism and of crime and violence more generally are also points of concern. But the country's greatest weakness is related to its macroeconomic stability, where it ranks a low 67th overall. The United States has built up large macroeconomic imbalances over recent years, with repeated fiscal deficits leading to rising and burgeoning levels of public indebtedness (reaching more than 60 percent of GDP by 2007, placing the country 102nd on this indicator). This indicates that the country is not preparing financially for its future liabilities and interest payments will increasingly restrict its fiscal policy freedom going into the future.

Table 4: Global Competitiveness Index rankings and 2007–2008 comparisons

Country/Economy	GCI 2008–2009		GCI 2008–2009 rank (among 2007 countries)*	GCI 2007–2008 rank	Country/Economy	GCI 2008–2009		GCI 2008–2009 rank (among 2007 countries)*	GCI 2007–2008 rank
	Rank	Score				Rank	Score		
United States	1	5.74	1	1	Azerbaijan	69	4.10	68	66
Switzerland	2	5.61	2	2	Vietnam	70	4.10	69	68
Denmark	3	5.58	3	3	Philippines	71	4.09	70	71
Sweden	4	5.53	4	4	Ukraine	72	4.09	71	73
Singapore	5	5.53	5	7	Morocco	73	4.08	72	64
Finland	6	5.50	6	6	Colombia	74	4.05	73	69
Germany	7	5.46	7	5	Uruguay	75	4.04	74	75
Netherlands	8	5.41	8	10	Bulgaria	76	4.03	75	79
Japan	9	5.38	9	8	Sri Lanka	77	4.02	76	70
Canada	10	5.37	10	13	Syria	78	3.99	77	80
Hong Kong SAR	11	5.33	11	12	El Salvador	79	3.99	78	67
United Kingdom	12	5.30	12	9	Namibia	80	3.99	79	89
Korea, Rep.	13	5.28	13	11	Egypt	81	3.98	80	77
Austria	14	5.23	14	15	Honduras	82	3.98	81	83
Norway	15	5.22	15	16	Peru	83	3.95	82	86
France	16	5.22	16	18	Guatemala	84	3.94	83	87
Taiwan, China	17	5.22	17	14	Serbia	85	3.90	84	91
Australia	18	5.20	18	19	Jamaica	86	3.89	85	78
Belgium	19	5.14	19	20	Gambia, The	87	3.88	86	102
Iceland	20	5.05	20	23	Argentina	88	3.87	87	85
Malaysia	21	5.04	21	21	Macedonia, FYR	89	3.87	88	94
Ireland	22	4.99	22	22	Georgia	90	3.86	89	90
Israel	23	4.97	23	17	Libya	91	3.85	90	88
New Zealand	24	4.93	24	24	Trinidad and Tobago	92	3.85	91	84
Luxembourg	25	4.85	25	25	Kenya	93	3.84	92	99
Qatar	26	4.83	26	31	Nigeria	94	3.81	93	95
Saudi Arabia	27	4.72	27	35	Moldova	95	3.75	94	97
Chile	28	4.72	28	26	Senegal	96	3.73	95	100
Spain	29	4.72	29	29	Armenia	97	3.73	96	93
China	30	4.70	30	34	Dominican Republic	98	3.72	97	96
United Arab Emirates	31	4.68	31	37	Algeria	99	3.71	98	81
Estonia	32	4.67	32	27	Mongolia	100	3.65	99	101
Czech Republic	33	4.62	33	33	Pakistan	101	3.65	100	92
Thailand	34	4.60	34	28	Ghana	102	3.62	n/a	n/a
Kuwait	35	4.58	35	30	Suriname	103	3.58	101	113
Tunisia	36	4.58	36	32	Ecuador	104	3.58	102	103
Bahrain	37	4.57	37	43	Venezuela	105	3.56	103	98
Oman	38	4.55	38	42	Benin	106	3.56	104	108
Brunei Darussalam	39	4.54	n/a	n/a	Bosnia and Herzegovina	107	3.56	105	106
Cyprus	40	4.53	39	55	Albania	108	3.55	106	109
Puerto Rico	41	4.51	40	36	Cambodia	109	3.53	107	110
Slovenia	42	4.50	41	39	Côte d'Ivoire	110	3.51	n/a	n/a
Portugal	43	4.47	42	40	Bangladesh	111	3.51	108	107
Lithuania	44	4.45	43	38	Zambia	112	3.49	109	122
South Africa	45	4.41	44	44	Tanzania	113	3.49	110	104
Slovak Republic	46	4.40	45	41	Cameroon	114	3.48	111	116
Barbados	47	4.40	46	50	Guyana	115	3.47	112	126
Jordan	48	4.37	47	49	Tajikistan	116	3.46	113	117
Italy	49	4.35	48	46	Mali	117	3.43	114	115
India	50	4.33	49	48	Bolivia	118	3.42	115	105
Russian Federation	51	4.31	50	58	Malawi	119	3.42	n/a	n/a
Malta	52	4.31	51	56	Nicaragua	120	3.41	116	111
Poland	53	4.28	52	51	Ethiopia	121	3.41	117	123
Latvia	54	4.26	53	45	Kyrgyz Republic	122	3.40	118	119
Indonesia	55	4.25	54	54	Lesotho	123	3.40	119	124
Botswana	56	4.25	55	76	Paraguay	124	3.40	120	121
Mauritius	57	4.25	56	60	Madagascar	125	3.38	121	118
Panama	58	4.24	57	59	Nepal	126	3.37	122	114
Costa Rica	59	4.23	58	63	Burkina Faso	127	3.36	123	112
Mexico	60	4.23	59	52	Uganda	128	3.35	124	120
Croatia	61	4.22	60	57	Timor-Leste	129	3.15	125	127
Hungary	62	4.22	61	47	Mozambique	130	3.15	126	128
Turkey	63	4.15	62	53	Mauritania	131	3.14	127	125
Brazil	64	4.13	63	72	Burundi	132	2.98	128	130
Montenegro	65	4.11	64	82	Zimbabwe	133	2.88	129	129
Kazakhstan	66	4.11	65	61	Chad	134	2.85	130	131
Greece	67	4.11	66	65					
Romania	68	4.10	67	74					

\* One country that was included last year is not shown because of the lack of Survey data (Uzbekistan). This explains why the lowest rank in this column is 131.



Table 5: The Global Competitiveness Index 2008–2009

Country/Economy	SUBINDEXES							
	OVERALL INDEX		Basic requirements		Efficiency enhancers		Innovation factors	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
United States	1	5.74	22	5.50	1	5.81	1	5.80
Switzerland	2	5.61	2	6.14	8	5.35	2	5.68
Denmark	3	5.58	4	6.14	3	5.49	7	5.37
Sweden	4	5.53	6	6.00	9	5.35	6	5.53
Singapore	5	5.53	3	6.14	2	5.52	11	5.16
Finland	6	5.50	1	6.18	13	5.21	5	5.53
Germany	7	5.46	7	5.96	11	5.22	4	5.54
Netherlands	8	5.41	10	5.81	7	5.38	9	5.20
Japan	9	5.38	26	5.36	12	5.22	3	5.65
Canada	10	5.37	8	5.84	5	5.44	16	4.96
Hong Kong SAR	11	5.33	5	6.05	6	5.43	21	4.69
United Kingdom	12	5.30	24	5.46	4	5.45	17	4.93
Korea, Rep.	13	5.28	16	5.71	15	5.15	10	5.20
Austria	14	5.23	9	5.81	20	5.03	12	5.16
Norway	15	5.22	14	5.76	14	5.19	18	4.91
France	16	5.22	13	5.76	16	5.09	14	5.08
Taiwan, China	17	5.22	20	5.53	18	5.06	8	5.26
Australia	18	5.20	15	5.75	10	5.31	22	4.66
Belgium	19	5.14	18	5.60	21	5.02	15	5.02
Iceland	20	5.05	11	5.80	22	4.89	19	4.82
Malaysia	21	5.04	25	5.42	24	4.82	23	4.63
Ireland	22	4.99	32	5.24	19	5.05	20	4.72
Israel	23	4.97	41	5.06	23	4.84	13	5.10
New Zealand	24	4.93	19	5.58	17	5.07	28	4.26
Luxembourg	25	4.85	12	5.78	27	4.69	24	4.51
Qatar	26	4.83	21	5.50	31	4.53	35	4.14
Saudi Arabia	27	4.72	34	5.21	45	4.35	37	4.09
Chile	28	4.72	36	5.15	30	4.58	44	4.00
Spain	29	4.72	27	5.34	25	4.75	29	4.25
China	30	4.70	42	5.01	40	4.41	32	4.18
United Arab Emirates	31	4.68	17	5.67	29	4.64	38	4.09
Estonia	32	4.67	30	5.27	26	4.73	40	4.06
Czech Republic	33	4.62	45	4.85	28	4.67	25	4.37
Thailand	34	4.60	43	4.97	36	4.45	46	3.91
Kuwait	35	4.58	39	5.12	52	4.19	52	3.82
Tunisia	36	4.58	35	5.17	53	4.19	30	4.21
Bahrain	37	4.57	28	5.31	46	4.32	54	3.76
Oman	38	4.55	31	5.25	61	4.09	48	3.87
Brunei Darussalam	39	4.54	29	5.30	77	3.84	87	3.35
Cyprus	40	4.53	23	5.48	39	4.43	41	4.05
Puerto Rico	41	4.51	44	4.96	38	4.44	26	4.32
Slovenia	42	4.50	38	5.13	37	4.45	33	4.15
Portugal	43	4.47	37	5.14	34	4.47	43	4.03
Lithuania	44	4.45	46	4.84	43	4.37	49	3.87
South Africa	45	4.41	69	4.41	35	4.46	36	4.13
Slovak Republic	46	4.40	52	4.66	32	4.52	53	3.80
Barbados	47	4.40	33	5.23	56	4.16	51	3.84
Jordan	48	4.37	47	4.80	63	4.07	47	3.90
Italy	49	4.35	58	4.53	42	4.38	31	4.19
India	50	4.33	80	4.23	33	4.49	27	4.29
Russian Federation	51	4.31	56	4.54	50	4.29	73	3.56
Malta	52	4.31	40	5.08	44	4.35	56	3.74
Poland	53	4.28	70	4.39	41	4.39	61	3.70
Latvia	54	4.26	55	4.63	47	4.31	84	3.39
Indonesia	55	4.25	76	4.25	49	4.29	45	3.98
Botswana	56	4.25	53	4.65	82	3.76	98	3.22
Mauritius	57	4.25	50	4.67	66	4.03	69	3.65
Panama	58	4.24	54	4.64	67	4.02	58	3.71
Costa Rica	59	4.23	63	4.45	60	4.09	39	4.07
Mexico	60	4.23	60	4.47	55	4.16	70	3.60
Croatia	61	4.22	49	4.69	62	4.08	62	3.70
Hungary	62	4.22	64	4.43	48	4.31	55	3.75
Turkey	63	4.15	72	4.34	59	4.10	63	3.70
Brazil	64	4.13	96	3.98	51	4.28	42	4.04
Montenegro	65	4.11	59	4.52	72	3.95	88	3.33
Kazakhstan	66	4.11	74	4.29	64	4.05	77	3.50
Greece	67	4.11	51	4.66	57	4.16	68	3.65

(Cont'd.)

Table 5: The Global Competitiveness Index 2008–2009 (cont'd.)

Country/Economy	SUBINDEXES							
	OVERALL INDEX		Basic requirements		Efficiency enhancers		Innovation factors	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Romania	68	4.10	87	4.15	54	4.18	75	3.53
Azerbaijan	69	4.10	62	4.45	79	3.82	57	3.72
Vietnam	70	4.10	79	4.23	73	3.94	71	3.59
Philippines	71	4.09	85	4.17	68	4.02	67	3.65
Ukraine	72	4.09	86	4.15	58	4.12	66	3.66
Morocco	73	4.08	67	4.42	85	3.73	76	3.51
Colombia	74	4.05	77	4.24	70	3.96	60	3.71
Uruguay	75	4.04	57	4.53	83	3.76	82	3.42
Bulgaria	76	4.03	82	4.20	65	4.05	92	3.30
Sri Lanka	77	4.02	92	4.07	74	3.92	34	4.14
Syria	78	3.99	71	4.38	104	3.41	80	3.45
El Salvador	79	3.99	66	4.43	84	3.75	96	3.24
Namibia	80	3.99	48	4.71	93	3.57	104	3.16
Egypt	81	3.98	83	4.18	88	3.70	74	3.54
Honduras	82	3.98	78	4.24	91	3.62	89	3.32
Peru	83	3.95	94	4.02	69	4.01	83	3.40
Guatemala	84	3.94	84	4.17	86	3.72	65	3.69
Serbia	85	3.90	88	4.15	78	3.82	91	3.30
Jamaica	86	3.89	97	3.95	75	3.91	72	3.57
Gambia, The	87	3.88	81	4.22	107	3.36	78	3.48
Argentina	88	3.87	89	4.12	81	3.76	81	3.43
Macedonia, FYR	89	3.87	68	4.42	92	3.58	105	3.16
Georgia	90	3.86	91	4.07	87	3.72	109	3.07
Libya	91	3.85	75	4.27	114	3.29	102	3.16
Trinidad and Tobago	92	3.85	65	4.43	80	3.78	79	3.47
Kenya	93	3.84	104	3.80	76	3.90	50	3.87
Nigeria	94	3.81	105	3.74	71	3.96	64	3.69
Moldova	95	3.75	95	3.99	98	3.48	128	2.83
Senegal	96	3.73	101	3.88	96	3.48	59	3.71
Armenia	97	3.73	93	4.04	103	3.41	113	3.03
Dominican Republic	98	3.72	99	3.90	90	3.64	86	3.38
Algeria	99	3.71	61	4.46	113	3.29	126	2.85
Mongolia	100	3.65	102	3.87	105	3.39	119	2.94
Pakistan	101	3.65	110	3.67	89	3.67	85	3.39
Ghana	102	3.62	106	3.74	95	3.49	107	3.09
Suriname	103	3.58	73	4.31	127	3.11	117	2.97
Ecuador	104	3.58	90	4.12	117	3.27	118	2.95
Venezuela	105	3.56	111	3.65	94	3.55	116	2.98
Benin	106	3.56	103	3.81	123	3.20	100	3.21
Bosnia and Herzegovina	107	3.56	98	3.93	102	3.42	129	2.80
Albania	108	3.55	100	3.89	99	3.44	130	2.74
Cambodia	109	3.53	107	3.72	115	3.28	112	3.04
Côte d'Ivoire	110	3.51	113	3.64	109	3.33	94	3.27
Bangladesh	111	3.51	117	3.57	97	3.48	115	2.98
Zambia	112	3.49	121	3.54	100	3.43	93	3.29
Tanzania	113	3.49	114	3.61	108	3.34	106	3.12
Cameroon	114	3.48	109	3.67	120	3.22	108	3.08
Guyana	115	3.47	115	3.60	112	3.31	111	3.04
Tajikistan	116	3.46	112	3.65	124	3.19	103	3.16
Mali	117	3.43	116	3.58	122	3.20	99	3.21
Bolivia	118	3.42	108	3.68	128	3.10	134	2.59
Malawi	119	3.42	127	3.43	101	3.42	101	3.20
Nicaragua	120	3.41	122	3.54	116	3.27	124	2.86
Ethiopia	121	3.41	119	3.56	121	3.21	114	2.98
Kyrgyz Republic	122	3.40	124	3.49	110	3.33	123	2.90
Lesotho	123	3.40	118	3.57	125	3.16	110	3.06
Paraguay	124	3.40	123	3.51	111	3.31	132	2.69
Madagascar	125	3.38	125	3.49	119	3.23	97	3.22
Nepal	126	3.37	120	3.55	126	3.12	121	2.91
Burkina Faso	127	3.36	126	3.43	118	3.25	95	3.27
Uganda	128	3.35	129	3.34	106	3.37	90	3.32
Timor-Leste	129	3.15	128	3.42	132	2.77	133	2.62
Mozambique	130	3.15	131	3.21	129	3.09	127	2.84
Mauritania	131	3.14	130	3.28	130	2.91	120	2.93
Burundi	132	2.98	132	3.14	133	2.73	125	2.85
Zimbabwe	133	2.88	134	2.88	131	2.87	122	2.90
Chad	134	2.85	133	2.96	134	2.69	131	2.70

Table 6: The Global Competitiveness Index: Basic requirements

Country/Economy	PILLARS									
	BASIC REQUIREMENTS		1. Institutions		2. Infrastructure		3. Macroeconomic stability		4. Health and primary education	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Albania	100	3.89	109	3.32	121	2.22	96	4.56	69	5.47
Algeria	61	4.46	102	3.45	84	2.96	5	6.08	76	5.34
Argentina	89	4.12	128	2.94	87	2.92	64	5.05	61	5.58
Armenia	93	4.04	96	3.50	90	2.87	83	4.73	97	5.06
<b>Australia</b>	<b>15</b>	<b>5.75</b>	<b>12</b>	<b>5.72</b>	<b>21</b>	<b>5.33</b>	<b>28</b>	<b>5.66</b>	<b>15</b>	<b>6.27</b>
Austria	9	5.81	11	5.72	10	5.86	44	5.36	13	6.28
Azerbaijan	62	4.45	62	4.05	61	3.70	45	5.35	102	4.72
Bahrain	28	5.31	31	4.89	28	4.77	20	5.78	45	5.82
Bangladesh	117	3.57	127	2.98	122	2.21	101	4.46	105	4.63
Barbados	33	5.23	20	5.19	24	5.21	114	4.21	10	6.32
Belgium	18	5.60	21	5.15	16	5.62	60	5.14	3	6.50
Benin	103	3.81	85	3.67	106	2.56	95	4.60	110	4.40
Bolivia	108	3.68	131	2.66	126	2.10	77	4.83	93	5.13
Bosnia and Herzegovina	98	3.93	123	3.06	123	2.20	57	5.15	82	5.30
Botswana	53	4.65	36	4.73	52	3.96	22	5.73	112	4.17
Brazil	96	3.98	91	3.56	78	3.15	122	3.89	79	5.31
Brunei Darussalam	29	5.30	41	4.65	39	4.45	2	6.33	47	5.79
Bulgaria	82	4.20	111	3.28	95	2.79	54	5.21	68	5.53
Burkina Faso	126	3.43	75	3.82	104	2.57	120	3.93	131	3.42
Burundi	132	3.14	124	3.03	129	2.05	124	3.76	124	3.70
Cambodia	107	3.72	103	3.44	97	2.77	105	4.39	111	4.27
Cameroon	109	3.67	116	3.24	117	2.32	34	5.47	125	3.66
Canada	8	5.84	15	5.50	6	6.12	43	5.36	6	6.39
Chad	133	2.96	133	2.54	134	1.65	97	4.54	134	3.09
Chile	36	5.15	37	4.73	30	4.59	14	5.90	73	5.37
China	42	5.01	56	4.18	47	4.22	11	5.95	50	5.71
Colombia	77	4.24	87	3.66	80	3.07	88	4.71	67	5.53
Costa Rica	63	4.45	50	4.35	94	2.80	85	4.73	37	5.92
Côte d'Ivoire	113	3.64	130	2.82	73	3.33	69	4.93	127	3.49
Croatia	49	4.69	74	3.82	51	3.98	61	5.10	41	5.85
Cyprus	23	5.48	24	5.03	25	5.17	46	5.33	7	6.39
Czech Republic	45	4.85	72	3.87	50	4.11	42	5.37	29	6.07
Denmark	4	6.14	3	6.18	8	6.01	12	5.92	4	6.44
Dominican Republic	99	3.90	119	3.14	81	3.05	78	4.80	106	4.58
Ecuador	90	4.12	129	2.92	108	2.54	16	5.88	92	5.13
Egypt	83	4.18	52	4.25	60	3.74	125	3.56	88	5.19
El Salvador	66	4.43	100	3.46	56	3.90	62	5.10	86	5.26
Estonia	30	5.27	33	4.85	40	4.44	23	5.72	28	6.08
Ethiopia	119	3.56	77	3.80	103	2.66	119	4.00	123	3.79
Finland	1	6.18	2	6.18	9	5.94	8	6.01	1	6.57
France	13	5.76	23	5.10	2	6.54	65	5.04	9	6.35
Gambia, The	81	4.22	38	4.73	62	3.68	99	4.51	119	3.96
Georgia	91	4.07	69	3.89	77	3.23	118	4.02	91	5.14
Germany	7	5.96	14	5.65	1	6.65	40	5.42	24	6.10
Ghana	106	3.74	63	4.02	82	2.98	121	3.91	115	4.04
Greece	51	4.66	58	4.10	45	4.28	106	4.37	40	5.89
Guatemala	84	4.17	98	3.48	71	3.47	87	4.72	99	5.02
Guyana	115	3.60	117	3.23	98	2.76	133	2.84	62	5.57
Honduras	78	4.24	82	3.69	75	3.29	89	4.67	83	5.30
Hong Kong SAR	5	6.05	9	5.78	5	6.32	3	6.26	43	5.82
Hungary	64	4.43	64	3.94	57	3.85	115	4.20	49	5.74
Iceland	11	5.80	6	5.93	17	5.60	56	5.17	2	6.50
India	80	4.23	53	4.23	72	3.38	109	4.32	100	4.99
Indonesia	76	4.25	68	3.89	86	2.95	72	4.91	87	5.26
Ireland	32	5.24	17	5.39	53	3.95	47	5.33	14	6.28
Israel	41	5.06	47	4.53	37	4.48	59	5.15	25	6.10
Italy	58	4.53	84	3.68	54	3.94	100	4.46	30	6.04
Jamaica	97	3.95	86	3.66	67	3.54	130	3.25	77	5.33
Japan	26	5.36	26	4.99	11	5.80	98	4.53	22	6.11
Jordan	47	4.80	27	4.98	44	4.30	111	4.24	56	5.67
Kazakhstan	74	4.29	81	3.71	76	3.26	74	4.87	81	5.30
Kenya	104	3.80	93	3.54	91	2.86	107	4.37	108	4.43
Korea, Rep.	16	5.71	28	4.95	15	5.63	4	6.15	26	6.10
Kuwait	39	5.12	48	4.46	49	4.16	1	6.51	75	5.35
Kyrgyz Republic	124	3.49	122	3.06	111	2.51	128	3.31	96	5.06
Latvia	55	4.63	60	4.05	58	3.81	71	4.91	48	5.76
Lesotho	118	3.57	114	3.26	125	2.14	39	5.42	129	3.44

Table 6: The Global Competitiveness Index: Basic requirements (cont'd.)

Country/Economy	PILLARS									
	BASIC REQUIREMENTS		1. Institutions		2. Infrastructure		3. Macroeconomic stability		4. Health and primary education	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Libya	75	4.27	65	3.93	112	2.47	6	6.03	103	4.65
Lithuania	46	4.84	55	4.19	46	4.24	52	5.23	52	5.69
Luxembourg	12	5.78	13	5.68	20	5.38	7	6.03	31	6.03
Macedonia, FYR	68	4.42	90	3.58	89	2.90	31	5.51	55	5.67
Madagascar	125	3.49	94	3.52	114	2.41	127	3.38	104	4.63
Malawi	127	3.43	51	4.33	119	2.27	129	3.26	120	3.87
Malaysia	25	5.42	30	4.91	23	5.25	38	5.43	23	6.11
Mali	116	3.58	79	3.73	107	2.55	94	4.60	130	3.43
Malta	40	5.08	32	4.88	38	4.46	68	4.97	32	6.02
Mauritania	130	3.28	107	3.42	127	2.10	126	3.49	114	4.13
Mauritius	50	4.67	39	4.68	43	4.32	117	4.03	57	5.66
Mexico	60	4.47	97	3.49	68	3.51	48	5.32	65	5.55
Moldova	95	3.99	92	3.55	113	2.43	80	4.79	89	5.19
Mongolia	102	3.87	121	3.08	133	1.85	37	5.44	94	5.11
Montenegro	59	4.52	59	4.07	100	2.72	35	5.46	42	5.83
Morocco	67	4.42	61	4.05	70	3.50	84	4.73	71	5.39
Mozambique	131	3.21	112	3.27	124	2.18	112	4.23	132	3.15
Namibia	48	4.71	42	4.59	33	4.56	27	5.69	118	3.99
Nepal	120	3.55	120	3.13	132	1.90	90	4.62	107	4.54
Netherlands	10	5.81	10	5.76	12	5.71	36	5.45	11	6.30
<b>New Zealand</b>	<b>19</b>	<b>5.58</b>	<b>8</b>	<b>5.81</b>	<b>42</b>	<b>4.37</b>	<b>25</b>	<b>5.72</b>	<b>5</b>	<b>6.42</b>
Nicaragua	122	3.54	118	3.20	128	2.07	123	3.86	98	5.03
Nigeria	105	3.74	106	3.42	120	2.24	26	5.70	126	3.59
Norway	14	5.76	7	5.93	27	4.99	17	5.83	12	6.28
Oman	31	5.25	19	5.21	32	4.56	13	5.92	80	5.31
Pakistan	110	3.67	95	3.51	85	2.96	116	4.17	116	4.03
Panama	54	4.64	70	3.88	55	3.94	55	5.19	64	5.56
Paraguay	123	3.51	132	2.64	130	1.91	113	4.22	85	5.27
Peru	94	4.02	101	3.45	110	2.53	67	4.98	95	5.10
Philippines	85	4.17	105	3.44	92	2.86	53	5.21	90	5.17
Poland	70	4.39	88	3.63	96	2.77	50	5.25	39	5.90
Portugal	37	5.14	35	4.75	26	5.07	82	4.74	33	6.00
Puerto Rico	44	4.96	44	4.56	31	4.59	81	4.77	38	5.92
Qatar	21	5.50	16	5.47	35	4.54	19	5.80	18	6.18
Romania	87	4.15	89	3.63	105	2.56	76	4.85	66	5.55
<b>Russian Federation</b>	<b>56</b>	<b>4.54</b>	<b>110</b>	<b>3.29</b>	<b>59</b>	<b>3.75</b>	<b>29</b>	<b>5.55</b>	<b>59</b>	<b>5.59</b>
Saudi Arabia	34	5.21	34	4.75	41	4.39	9	6.01	51	5.70
Senegal	101	3.88	83	3.69	83	2.97	103	4.44	109	4.43
Serbia	88	4.15	108	3.40	102	2.68	86	4.72	46	5.79
Singapore	3	6.14	1	6.19	4	6.39	21	5.74	16	6.24
Slovak Republic	52	4.66	73	3.85	64	3.64	49	5.31	44	5.82
Slovenia	38	5.13	49	4.40	36	4.49	33	5.48	21	6.15
South Africa	69	4.41	46	4.55	48	4.21	63	5.06	122	3.84
Spain	27	5.34	43	4.59	22	5.30	30	5.53	35	5.96
Sri Lanka	92	4.07	66	3.92	65	3.60	132	3.07	53	5.69
Suriname	73	4.31	99	3.47	99	2.72	32	5.51	63	5.56
Sweden	6	5.9975	4	6.05	13	5.71	15	5.88	8	6.35
Switzerland	2	6.14	5	5.97	3	6.40	10	5.97	17	6.22
Syria	71	4.38	54	4.20	74	3.30	93	4.61	70	5.42
Taiwan, China	20	5.53	40	4.67	19	5.46	18	5.82	20	6.16
Tajikistan	112	3.65	78	3.74	101	2.68	131	3.18	101	4.99
Tanzania	114	3.61	76	3.81	118	2.28	108	4.34	117	4.03
Thailand	43	4.97	57	4.17	29	4.67	41	5.41	58	5.61
Timor-Leste	128	3.42	125	3.03	131	1.90	73	4.88	121	3.87
Trinidad and Tobago	65	4.43	104	3.44	63	3.65	51	5.25	72	5.39
Tunisia	35	5.17	22	5.15	34	4.56	75	4.87	27	6.09
Turkey	72	4.34	80	3.72	66	3.54	79	4.79	78	5.33
Uganda	129	3.34	113	3.27	115	2.36	92	4.61	133	3.12
Ukraine	86	4.15	115	3.26	79	3.13	91	4.62	60	5.59
United Arab Emirates	17	5.67	18	5.37	14	5.66	24	5.72	36	5.93
United Kingdom	24	5.46	25	4.99	18	5.52	58	5.15	19	6.17
United States	22	5.50	29	4.93	7	6.10	66	4.99	34	5.97
Uruguay	57	4.53	45	4.55	69	3.50	104	4.41	54	5.68
Venezuela	111	3.65	134	2.41	109	2.54	110	4.29	74	5.36
Vietnam	79	4.23	71	3.87	93	2.86	70	4.91	84	5.29
Zambia	121	3.54	67	3.91	116	2.35	102	4.45	128	3.46
Zimbabwe	134	2.88	126	3.00	88	2.90	134	1.48	113	4.16

Table 7: The Global Competitiveness Index: Efficiency enhancers

Country/Economy	PILLARS													
	EFFICIENCY ENHANCERS		5. Higher education and training		6. Goods market efficiency		7. Labor market efficiency		8. Financial market sophistication		9. Technological readiness		10. Market size	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Albania	99	3.44	97	3.40	119	3.61	67	4.36	103	3.70	92	2.89	106	2.66
Algeria	113	3.29	102	3.28	124	3.52	132	3.30	132	2.94	114	2.52	51	4.17
Argentina	81	3.76	56	4.14	122	3.55	130	3.47	117	3.46	76	3.19	24	4.77
Armenia	103	3.41	94	3.43	110	3.75	45	4.57	107	3.68	112	2.56	111	2.48
<b>Australia</b>	<b>10</b>	<b>5.31</b>	<b>14</b>	<b>5.44</b>	<b>10</b>	<b>5.29</b>	<b>9</b>	<b>5.12</b>	<b>6</b>	<b>5.76</b>	<b>19</b>	<b>5.21</b>	<b>19</b>	<b>5.02</b>
Austria	20	5.03	17	5.28	5	5.38	39	4.65	33	5.01	16	5.34	32	4.56
Azerbaijan	79	3.82	80	3.76	89	3.96	34	4.70	92	3.89	72	3.23	73	3.37
Bahrain	46	4.32	54	4.22	32	4.77	64	4.37	14	5.50	39	4.29	100	2.78
Bangladesh	97	3.48	131	2.51	106	3.83	107	4.01	82	4.05	126	2.34	53	4.14
Barbados	56	4.16	29	4.76	72	4.16	46	4.53	38	4.80	26	4.81	127	1.88
Belgium	21	5.02	6	5.63	12	5.22	79	4.26	23	5.25	23	5.01	25	4.75
Benin	123	3.20	114	3.00	107	3.79	118	3.87	99	3.72	113	2.54	123	2.27
Bolivia	128	3.10	96	3.41	131	3.12	129	3.48	119	3.37	133	2.15	87	3.08
Bosnia and Herzegovina	102	3.42	109	3.13	123	3.55	85	4.20	86	4.00	109	2.61	92	3.00
Botswana	82	3.76	87	3.66	93	3.94	52	4.49	40	4.79	89	2.98	101	2.72
Brazil	51	4.28	58	4.12	101	3.90	91	4.15	64	4.36	56	3.59	10	5.54
Brunei Darussalam	77	3.84	69	3.93	91	3.95	16	4.94	75	4.15	54	3.64	116	2.41
Bulgaria	65	4.05	61	4.09	77	4.11	60	4.42	74	4.18	53	3.65	58	3.83
Burkina Faso	118	3.25	124	2.71	83	4.03	80	4.25	108	3.65	120	2.45	117	2.37
Burundi	133	2.73	130	2.55	128	3.39	95	4.12	134	2.76	131	2.19	131	1.40
Cambodia	115	3.28	127	2.66	88	4.00	33	4.71	130	2.96	123	2.42	95	2.96
Cameroon	120	3.22	121	2.78	108	3.77	114	3.91	124	3.21	110	2.60	89	3.06
Canada	5	5.44	9	5.52	16	5.18	7	5.29	10	5.58	9	5.61	14	5.43
Chad	134	2.69	134	2.06	134	2.91	119	3.85	133	2.80	134	2.06	113	2.43
Chile	30	4.58	50	4.34	26	4.91	17	4.90	29	5.05	42	3.99	47	4.26
China	40	4.41	64	4.05	51	4.48	51	4.49	109	3.64	77	3.19	2	6.58
Colombia	70	3.96	68	3.96	82	4.05	92	4.14	81	4.06	80	3.12	37	4.45
Costa Rica	60	4.09	49	4.35	49	4.50	35	4.68	70	4.24	60	3.49	78	3.28
Côte d'Ivoire	109	3.33	112	3.11	117	3.66	111	3.95	113	3.56	99	2.76	94	2.96
Croatia	62	4.08	48	4.35	76	4.11	68	4.35	63	4.37	47	3.72	66	3.57
Cyprus	39	4.43	32	4.68	28	4.88	56	4.44	27	5.11	35	4.35	82	3.12
Czech Republic	28	4.67	25	4.98	33	4.73	28	4.74	47	4.65	33	4.48	38	4.45
Denmark	3	5.49	2	5.98	4	5.39	5	5.60	4	5.82	3	5.87	46	4.27
Dominican Republic	90	3.64	99	3.36	86	4.02	86	4.20	101	3.71	73	3.20	72	3.38
Ecuador	117	3.27	115	2.96	129	3.29	122	3.76	125	3.21	104	2.69	61	3.73
Egypt	88	3.70	91	3.56	87	4.00	134	3.26	106	3.68	84	3.04	27	4.67
El Salvador	84	3.75	95	3.42	59	4.27	57	4.43	72	4.23	90	2.95	81	3.18
Estonia	26	4.73	19	5.23	24	4.98	29	4.74	28	5.08	17	5.30	90	3.04
Ethiopia	121	3.21	126	2.68	116	3.68	74	4.29	127	3.11	132	2.18	76	3.32
Finland	13	5.21	1	6.07	11	5.22	23	4.81	12	5.51	14	5.46	52	4.16
France	16	5.09	16	5.37	21	5.01	105	4.05	25	5.19	20	5.16	7	5.73
Gambia, The	107	3.36	105	3.21	68	4.18	38	4.66	87	3.96	91	2.90	132	1.26
Georgia	87	3.72	84	3.72	71	4.17	22	4.83	79	4.06	97	2.80	102	2.72
Germany	11	5.22	21	5.15	15	5.19	58	4.43	19	5.35	18	5.22	4	5.99
Ghana	95	3.49	111	3.12	97	3.91	108	4.00	69	4.28	115	2.52	86	3.09
Greece	57	4.16	38	4.52	64	4.22	116	3.89	67	4.29	59	3.50	33	4.52
Guatemala	86	3.72	103	3.27	54	4.38	81	4.25	95	3.85	74	3.20	74	3.36
Guyana	112	3.31	81	3.74	96	3.92	109	3.99	98	3.80	103	2.70	129	1.69
Honduras	91	3.62	93	3.43	75	4.11	82	4.23	84	4.02	96	2.81	84	3.12
Hong Kong SAR	6	5.43	28	4.78	2	5.71	4	5.62	1	6.19	10	5.60	26	4.68
Hungary	48	4.31	40	4.51	66	4.20	83	4.23	61	4.42	40	4.21	45	4.28
Iceland	22	4.89	4	5.69	27	4.89	6	5.41	20	5.31	6	5.65	118	2.36
India	33	4.49	63	4.06	47	4.52	89	4.16	34	4.98	69	3.27	5	5.96
Indonesia	49	4.29	71	3.88	37	4.67	43	4.59	57	4.48	88	3.02	17	5.11
Ireland	19	5.05	20	5.18	9	5.30	15	4.95	7	5.68	24	4.98	48	4.22
Israel	23	4.84	24	5.02	36	4.67	20	4.85	15	5.46	25	4.87	49	4.19
Italy	42	4.38	44	4.43	62	4.24	126	3.56	91	3.90	31	4.52	9	5.65
Jamaica	75	3.91	82	3.74	63	4.24	70	4.34	59	4.44	45	3.89	98	2.80
Japan	12	5.22	23	5.08	18	5.13	11	5.09	42	4.75	21	5.11	3	6.15
Jordan	63	4.07	42	4.46	44	4.55	93	4.13	48	4.61	57	3.59	88	3.08
Kazakhstan	64	4.05	59	4.12	80	4.09	12	5.02	97	3.81	75	3.19	55	4.08
Kenya	76	3.90	86	3.70	74	4.12	40	4.65	44	4.68	93	2.88	71	3.40
Korea, Rep.	15	5.15	12	5.51	22	5.00	41	4.60	37	4.85	13	5.51	13	5.44
Kuwait	52	4.19	76	3.82	53	4.46	24	4.79	51	4.59	50	3.70	59	3.79
Kyrgyz Republic	110	3.33	83	3.73	120	3.59	69	4.35	115	3.53	124	2.41	120	2.34
Latvia	47	4.31	33	4.67	52	4.46	32	4.71	39	4.80	41	4.00	79	3.24
Lesotho	125	3.16	106	3.20	102	3.89	84	4.21	118	3.42	125	2.41	128	1.83



Table 7: The Global Competitiveness Index: Efficiency enhancers (cont'd.)

Country/Economy	EFFICIENCY ENHANCERS		PILLARS											
	Rank	Score	5. Higher education and training		6. Goods market efficiency		7. Labor market efficiency		8. Financial market sophistication		9. Technological readiness		10. Market size	
Libya	114	3.29	75	3.83	121	3.56	133	3.27	131	2.95	98	2.79	77	3.31
Lithuania	43	4.37	26	4.85	48	4.52	49	4.52	56	4.50	38	4.29	69	3.51
Luxembourg	27	4.69	47	4.39	13	5.21	48	4.52	17	5.39	12	5.52	83	3.12
Macedonia, FYR	92	3.58	73	3.85	98	3.91	113	3.92	83	4.04	83	3.05	104	2.69
Madagascar	119	3.23	119	2.83	85	4.02	72	4.30	128	3.09	111	2.58	109	2.58
Malawi	101	3.42	116	2.85	84	4.03	42	4.60	62	4.40	127	2.33	121	2.34
Malaysia	24	4.82	35	4.63	23	5.00	19	4.86	16	5.40	34	4.41	28	4.65
Mali	122	3.20	122	2.77	95	3.93	94	4.13	120	3.35	105	2.64	119	2.36
Malta	44	4.35	39	4.51	43	4.55	100	4.08	18	5.36	27	4.75	97	2.84
Mauritania	130	2.91	133	2.35	126	3.45	112	3.92	126	3.13	102	2.71	126	1.91
Mauritius	66	4.03	67	3.97	40	4.64	65	4.37	32	5.02	55	3.62	110	2.54
Mexico	55	4.16	74	3.83	73	4.14	110	3.97	66	4.30	71	3.25	11	5.48
Moldova	98	3.48	88	3.62	105	3.84	55	4.45	104	3.69	95	2.85	114	2.42
Mongolia	105	3.39	85	3.71	109	3.76	71	4.32	110	3.63	101	2.74	124	2.16
Montenegro	72	3.95	55	4.18	69	4.17	53	4.47	35	4.96	43	3.96	125	1.95
Morocco	85	3.73	90	3.57	58	4.34	128	3.54	93	3.88	78	3.18	57	3.91
Mozambique	129	3.09	129	2.56	127	3.44	98	4.10	122	3.27	116	2.52	107	2.63
Namibia	93	3.57	110	3.13	94	3.93	50	4.49	53	4.54	85	3.03	122	2.31
Nepal	126	3.12	125	2.69	113	3.73	124	3.61	105	3.69	130	2.22	99	2.80
Netherlands	7	5.38	11	5.52	3	5.39	30	4.72	11	5.57	1	6.01	18	5.06
<b>New Zealand</b>	<b>17</b>	<b>5.07</b>	<b>15</b>	<b>5.40</b>	<b>17</b>	<b>5.17</b>	<b>10</b>	<b>5.10</b>	<b>3</b>	<b>5.87</b>	<b>22</b>	<b>5.09</b>	<b>60</b>	<b>3.78</b>
Nicaragua	116	3.27	113	3.06	112	3.73	99	4.10	100	3.72	122	2.42	108	2.61
Nigeria	71	3.96	108	3.13	56	4.37	59	4.43	54	4.53	94	2.87	39	4.41
Norway	14	5.19	10	5.52	20	5.05	14	4.97	13	5.51	4	5.81	44	4.29
Oman	61	4.09	66	3.98	39	4.65	44	4.58	50	4.60	68	3.34	75	3.36
Pakistan	89	3.67	123	2.74	100	3.90	121	3.79	71	4.24	100	2.75	29	4.58
Panama	67	4.02	77	3.82	57	4.36	77	4.27	26	5.17	62	3.45	85	3.10
Paraguay	111	3.31	117	2.85	104	3.87	117	3.87	96	3.81	119	2.46	93	2.98
Peru	69	4.01	89	3.62	61	4.25	75	4.28	45	4.68	87	3.03	50	4.19
Philippines	68	4.02	60	4.10	81	4.08	101	4.08	78	4.09	70	3.26	34	4.50
Poland	41	4.39	34	4.64	65	4.22	62	4.40	68	4.28	46	3.79	20	5.00
Portugal	34	4.47	37	4.59	45	4.53	87	4.18	43	4.71	32	4.51	43	4.32
Puerto Rico	38	4.44	36	4.62	29	4.87	37	4.66	30	5.04	44	3.92	68	3.53
Qatar	31	4.53	31	4.69	38	4.66	31	4.71	22	5.25	37	4.31	67	3.54
Romania	54	4.18	52	4.29	67	4.18	97	4.10	60	4.42	48	3.70	42	4.38
<b>Russian Federation</b>	<b>50</b>	<b>4.29</b>	<b>46</b>	<b>4.40</b>	<b>99</b>	<b>3.90</b>	<b>27</b>	<b>4.74</b>	<b>112</b>	<b>3.60</b>	<b>67</b>	<b>3.36</b>	<b>8</b>	<b>5.71</b>
Saudi Arabia	45	4.35	53	4.29	34	4.71	63	4.37	73	4.22	51	3.69	22	4.81
Senegal	96	3.48	92	3.44	60	4.26	120	3.82	111	3.60	81	3.11	105	2.66
Serbia	78	3.82	70	3.91	115	3.68	66	4.36	89	3.94	61	3.45	65	3.59
Singapore	2	5.52	8	5.56	1	5.83	2	5.71	2	5.94	7	5.65	41	4.41
Slovak Republic	32	4.52	45	4.43	35	4.71	36	4.67	31	5.04	36	4.35	56	3.94
Slovenia	37	4.45	22	5.15	50	4.49	61	4.41	46	4.67	30	4.53	70	3.44
South Africa	35	4.46	57	4.13	31	4.79	88	4.17	24	5.22	49	3.70	23	4.77
Spain	25	4.75	30	4.75	41	4.63	96	4.11	36	4.93	29	4.59	12	5.47
Sri Lanka	74	3.92	65	3.98	42	4.59	115	3.89	65	4.34	82	3.07	64	3.63
Suriname	127	3.11	100	3.30	125	3.50	104	4.07	114	3.54	108	2.61	130	1.64
Sweden	9	5.35	3	5.83	7	5.34	26	4.74	8	5.65	2	5.99	30	4.57
Switzerland	8	5.35	7	5.60	6	5.34	3	5.66	21	5.26	5	5.76	35	4.49
Syria	104	3.41	101	3.28	92	3.94	123	3.67	121	3.28	107	2.64	63	3.63
Taiwan, China	18	5.06	13	5.46	14	5.19	21	4.83	58	4.45	15	5.34	16	5.11
Tajikistan	124	3.19	104	3.24	118	3.64	78	4.26	123	3.26	128	2.31	115	2.41
Tanzania	108	3.34	132	2.42	111	3.74	73	4.30	94	3.86	117	2.51	80	3.21
Thailand	36	4.45	51	4.31	46	4.53	13	4.98	49	4.60	66	3.37	21	4.92
Timor-Leste	132	2.77	128	2.57	130	3.19	90	4.15	129	3.05	118	2.48	134	1.18
Trinidad and Tobago	80	3.78	78	3.81	90	3.96	76	4.28	52	4.57	63	3.40	103	2.69
Tunisia	53	4.19	27	4.85	30	4.80	103	4.07	77	4.09	52	3.68	62	3.63
Turkey	59	4.10	72	3.87	55	4.38	125	3.57	76	4.11	58	3.53	15	5.16
Uganda	106	3.37	120	2.81	114	3.69	25	4.75	102	3.70	121	2.44	96	2.85
Ukraine	58	4.12	43	4.46	103	3.87	54	4.47	85	4.00	65	3.38	31	4.56
United Arab Emirates	29	4.64	41	4.48	25	4.94	18	4.88	41	4.77	28	4.63	54	4.14
United Kingdom	4	5.45	18	5.27	19	5.05	8	5.19	5	5.81	8	5.62	6	5.77
United States	1	5.81	5	5.67	8	5.32	1	5.79	9	5.61	11	5.57	1	6.91
Uruguay	83	3.76	62	4.07	79	4.10	106	4.02	88	3.95	64	3.39	91	3.04
Venezuela	94	3.55	79	3.76	132	3.09	131	3.43	116	3.50	86	3.03	36	4.49
Vietnam	73	3.94	98	3.36	70	4.17	47	4.52	80	4.06	79	3.12	40	4.41
Zambia	100	3.43	118	2.83	78	4.11	102	4.08	55	4.51	106	2.64	112	2.43
Zimbabwe	131	2.87	107	3.18	133	3.05	127	3.56	90	3.92	129	2.28	133	1.25

Table 8: The Global Competitiveness Index: Innovation and sophistication factors

Country/Economy	INNOVATION AND SOPHISTICATION FACTORS		PILLARS			
	Rank	Score	11. Business sophistication		12. Innovation	
Albania	130	2.74	123	3.27	132	2.22
Algeria	126	2.85	132	3.03	113	2.66
Argentina	81	3.43	71	3.99	98	2.87
Armenia	113	3.03	120	3.30	106	2.77
<b>Australia</b>	<b>22</b>	<b>4.66</b>	<b>26</b>	<b>4.86</b>	<b>20</b>	<b>4.46</b>
Austria	12	5.16	6	5.65	15	4.68
Azerbaijan	57	3.72	81	3.91	40	3.53
Bahrain	54	3.76	44	4.49	75	3.04
Bangladesh	115	2.98	105	3.46	122	2.51
Barbados	51	3.84	56	4.27	49	3.41
Belgium	15	5.02	11	5.36	14	4.69
Benin	100	3.21	103	3.49	95	2.93
Bolivia	134	2.59	133	3.03	133	2.16
Bosnia and Herzegovina	129	2.80	125	3.23	128	2.37
Botswana	98	3.22	106	3.45	83	2.98
Brazil	42	4.04	35	4.58	43	3.50
Brunei Darussalam	87	3.35	89	3.75	91	2.94
Bulgaria	92	3.30	92	3.69	96	2.91
Burkina Faso	95	3.27	96	3.58	89	2.95
Burundi	125	2.85	127	3.21	123	2.50
Cambodia	112	3.04	110	3.41	112	2.67
Cameroon	108	3.08	108	3.43	108	2.72
Canada	16	4.96	18	5.10	13	4.82
Chad	131	2.70	129	3.06	130	2.35
Chile	44	4.00	31	4.65	56	3.35
China	32	4.18	43	4.50	28	3.87
Colombia	60	3.71	64	4.20	61	3.22
Costa Rica	39	4.07	42	4.51	38	3.62
Côte d'Ivoire	94	3.27	88	3.76	105	2.78
Croatia	62	3.70	72	3.98	50	3.41
Cyprus	41	4.05	36	4.57	41	3.53
Czech Republic	25	4.37	29	4.77	25	3.98
Denmark	7	5.37	5	5.66	10	5.09
Dominican Republic	86	3.38	75	3.97	103	2.78
Ecuador	118	2.95	99	3.54	129	2.36
Egypt	74	3.54	77	3.93	67	3.15
El Salvador	96	3.24	79	3.93	118	2.56
Estonia	40	4.06	50	4.38	31	3.74
Ethiopia	114	2.98	122	3.27	109	2.69
Finland	5	5.53	10	5.49	2	5.57
France	14	5.08	9	5.50	16	4.67
Gambia, The	78	3.48	74	3.97	81	2.99
Georgia	109	3.07	112	3.39	107	2.74
Germany	4	5.54	1	5.87	8	5.22
Ghana	107	3.09	98	3.56	114	2.62
Greece	68	3.65	66	4.13	63	3.18
Guatemala	65	3.69	52	4.33	74	3.05
Guyana	111	3.04	95	3.60	124	2.49
Honduras	89	3.32	82	3.87	104	2.78
Hong Kong SAR	21	4.69	13	5.26	24	4.11
Hungary	55	3.75	68	4.05	45	3.45
Iceland	19	4.82	20	5.03	18	4.62
India	27	4.29	27	4.85	32	3.74
Indonesia	45	3.98	39	4.55	47	3.42
Ireland	20	4.72	19	5.05	21	4.39
Israel	13	5.10	23	4.95	6	5.26
Italy	31	4.19	21	4.99	53	3.38
Jamaica	72	3.57	69	4.01	68	3.14
Japan	3	5.65	3	5.78	4	5.52
Jordan	47	3.90	47	4.41	51	3.40
Kazakhstan	77	3.50	86	3.79	62	3.21
Kenya	50	3.87	63	4.21	42	3.52
Korea, Rep.	10	5.20	16	5.22	9	5.18
Kuwait	52	3.82	38	4.56	71	3.07
Kyrgyz Republic	123	2.90	121	3.28	121	2.51
Latvia	84	3.39	83	3.85	93	2.94
Lesotho	110	3.06	126	3.22	97	2.91

Country/Economy	INNOVATION AND SOPHISTICATION FACTORS		PILLARS			
	Rank	Score	11. Business sophistication		12. Innovation	
Libya	102	3.16	101	3.51	100	2.82
Lithuania	49	3.87	49	4.39	55	3.35
Luxembourg	24	4.51	25	4.87	23	4.15
Macedonia, FYR	105	3.16	107	3.45	99	2.86
Madagascar	97	3.22	102	3.49	87	2.96
Malawi	101	3.20	104	3.46	94	2.93
Malaysia	23	4.63	22	4.99	22	4.28
Mali	99	3.21	111	3.41	79	3.01
Malta	56	3.74	59	4.23	60	3.25
Mauritania	120	2.93	114	3.38	125	2.48
Mauritius	69	3.65	55	4.29	80	3.01
Mexico	70	3.60	58	4.24	90	2.95
Moldova	128	2.83	131	3.05	116	2.61
Mongolia	119	2.94	130	3.06	102	2.82
Montenegro	88	3.33	90	3.71	88	2.96
Morocco	76	3.51	70	3.99	78	3.02
Mozambique	127	2.84	128	3.14	120	2.55
Namibia	104	3.16	94	3.63	111	2.68
Nepal	121	2.91	117	3.34	126	2.47
Netherlands	9	5.20	8	5.58	12	4.82
<b>New Zealand</b>	<b>28</b>	<b>4.26</b>	<b>37</b>	<b>4.57</b>	<b>26</b>	<b>3.95</b>
Nicaragua	124	2.86	119	3.30	127	2.42
Nigeria	64	3.69	61	4.23	65	3.16
Norway	18	4.91	15	5.22	19	4.60
Oman	48	3.87	54	4.29	44	3.45
Pakistan	85	3.39	87	3.79	82	2.99
Panama	58	3.71	51	4.36	73	3.07
Paraguay	132	2.69	118	3.32	134	2.06
Peru	83	3.40	67	4.12	110	2.68
Philippines	67	3.65	57	4.26	76	3.04
Poland	61	3.70	62	4.23	64	3.17
Portugal	43	4.03	48	4.39	35	3.66
Puerto Rico	26	4.32	28	4.85	30	3.80
Qatar	35	4.14	45	4.47	29	3.81
Romania	75	3.53	78	3.93	69	3.14
<b>Russian Federation</b>	<b>73</b>	<b>3.56</b>	<b>91</b>	<b>3.70</b>	<b>48</b>	<b>3.41</b>
Saudi Arabia	37	4.09	41	4.51	34	3.68
Senegal	59	3.71	65	4.15	59	3.27
Serbia	91	3.30	100	3.51	70	3.09
Singapore	11	5.16	14	5.25	11	5.08
Slovak Republic	53	3.80	53	4.33	58	3.28
Slovenia	33	4.15	34	4.59	33	3.72
South Africa	36	4.13	33	4.62	37	3.64
Spain	29	4.25	24	4.89	39	3.61
Sri Lanka	34	4.14	32	4.64	36	3.65
Suriname	117	2.97	113	3.38	117	2.57
Sweden	6	5.53	7	5.64	5	5.42
Switzerland	2	5.68	2	5.81	3	5.54
Syria	80	3.45	76	3.94	84	2.97
Taiwan, China	8	5.26	12	5.28	7	5.23
Tajikistan	103	3.16	116	3.35	85	2.97
Tanzania	106	3.12	109	3.41	101	2.82
Thailand	46	3.91	46	4.43	54	3.38
Timor-Leste	133	2.62	134	2.92	131	2.32
Trinidad and Tobago	79	3.47	73	3.98	86	2.97
Tunisia	30	4.21	40	4.51	27	3.91
Turkey	63	3.70	60	4.23	66	3.16
Uganda	90	3.32	97	3.57	72	3.07
Ukraine	66	3.66	80	3.91	52	3.40
United Arab Emirates	38	4.09	30	4.76	46	3.42
United Kingdom	17	4.93	17	5.20	17	4.66
United States	1	5.80	4	5.75	1	5.84
Uruguay	82	3.42	85	3.82	77	3.02
Venezuela	116	2.98	115	3.35	115	2.61
Vietnam	71	3.59	84	3.84	57	3.35
Zambia	93	3.29	93	3.64	92	2.94
Zimbabwe	122	2.90	124	3.26	119	2.55

This appendix presents the structure of the Global Competitiveness Index 2008–2009 (GCI).

The numbering of the variables matches the numbering of the Data Tables. The number preceding the period indicates to which pillar the variable belongs (e.g., variable 1.01 belongs to the 1st pillar).

The hard data indicators used in the GCI are normalized on a 1-to-7 scale in order to align them with the Executive Opinion Survey's results.<sup>a</sup> The Technical Notes and Sources at the end of this *Report* provide detailed information on all the hard data indicators.

Those variables that are followed by the symbol <sup>1/2</sup> enter the GCI in two different places. In order to avoid double counting, we give them a half-weight in each place by dividing their value by 2 when computing the aggregate score for the two categories in which they appear.<sup>b</sup>

The percentage next to each category represents this category's rounded weight within its immediate parent category. The computation of the GCI is based on successive aggregations of scores, from the variable level (i.e., the lowest level) all the way up to the overall GCI score (i.e., the highest level), using the weights reported below. For example, the score a country achieves in the 9th pillar accounts for 17 percent of this country's score in the *Efficiency enhancers* subindex. Similarly, the score achieved on the subpillar *Networks and supporting industries* accounts for 50 percent of the score of the 11th pillar. Reported percentages are rounded to the nearest integer, but exact figures are used in the calculation of the GCI.

Unlike for the lower levels of aggregation, the weight put on each of the three subindexes (Basic requirements, Efficiency enhancers, and Innovation factors) is not fixed. It depends on each country's stage of development, as discussed in the text.<sup>c</sup> For instance, in the case of Ecuador—a country in the second stage of development—the score in the *Basic requirements* subindex accounts for 40 percent of its overall GCI score, while it represents just 20 percent of the overall GCI score of Denmark, a country in the third stage of development.

Weight (%) within immediate parent category

**BASIC REQUIREMENTS**

**1st pillar: Institutions.....25%**

**A. Public institutions .....75%**

- 1. Property rights.....20%
  - 1.01 Property rights
  - 1.02 Intellectual property protection<sup>1/2</sup>
- 2. Ethics and corruption.....20%
  - 1.03 Diversion of public funds
  - 1.04 Public trust of politicians
- 3. Undue influence.....20%
  - 1.05 Judicial independence
  - 1.06 Favoritism in decisions of government officials
- 4. Government inefficiency .....20%
  - 1.07 Wastefulness of government spending
  - 1.08 Burden of government regulation
  - 1.09 Efficiency of legal framework
  - 1.10 Transparency of government policymaking
- 5. Security.....20%
  - 1.11 Business costs of terrorism
  - 1.12 Business costs of crime and violence
  - 1.13 Organized crime
  - 1.14 Reliability of police services

**B. Private institutions .....25%**

- 1. Corporate ethics .....50%
  - 1.15 Ethical behavior of firms
- 2. Accountability.....50%
  - 1.16 Strength of auditing and reporting standards
  - 1.17 Efficacy of corporate boards
  - 1.18 Protection of minority shareholders' interests

**2nd pillar: Infrastructure.....25%**

**A. General infrastructure .....50%**

- 2.01 Quality of overall infrastructure

**B. Specific infrastructure .....50%**

- 2.02 Quality of roads
- 2.03 Quality of railroad infrastructure
- 2.04 Quality of port infrastructure
- 2.05 Quality of air transport infrastructure
- 2.06 Available seat kilometers (hard data)
- 2.07 Quality of electricity supply
- 2.08 Telephone lines (hard data)

**3rd pillar: Macroeconomic stability.....25%**

- 3.01 Government surplus/deficit (hard data)
- 3.02 National savings rate (hard data)
- 3.03 Inflation (hard data)<sup>d</sup>
- 3.04 Interest rate spread (hard data)
- 3.05 Government debt (hard data)

(Cont'd.)

## Appendix A: Structure of the Global Competitiveness Index 2008–2009 (cont'd.)

### 4th pillar: Health and primary education .....25%

#### A. Health.....50%

- 4.01 Business impact of malaria<sup>e</sup>
- 4.02 Malaria incidence (hard data)<sup>e</sup>
- 4.03 Business impact of tuberculosis<sup>e</sup>
- 4.04 Tuberculosis incidence (hard data)<sup>e</sup>
- 4.05 Business impact of HIV/AIDS<sup>e</sup>
- 4.06 HIV prevalence (hard data)
- 4.07 Infant mortality (hard data)
- 4.08 Life expectancy (hard data)

#### B. Primary education .....50%

- 4.09 Quality of primary education
- 4.10 Primary enrollment (hard data)
- 4.11 Education expenditure (hard data)<sup>1/2</sup>

## EFFICIENCY ENHANCERS

### 5th pillar: Higher education and training .....17%

#### A. Quantity of education .....33%

- 5.01 Secondary enrollment (hard data)
- 5.02 Tertiary enrollment (hard data)
- 4.11 Education expenditure (hard data)<sup>1/2</sup>

#### B. Quality of education .....33%

- 5.03 Quality of the educational system
- 5.04 Quality of math and science education
- 5.05 Quality of management schools
- 5.06 Internet access in schools

#### C. On-the-job training .....33%

- 5.07 Local availability of specialized research and training services
- 5.08 Extent of staff training

### 6th pillar: Goods market efficiency .....17%

#### A. Competition .....67%

1. Domestic competition.....variable<sup>f</sup>
  - 6.01 Intensity of local competition
  - 6.02 Extent of market dominance
  - 6.03 Effectiveness of anti-monopoly policy
  - 6.04 Extent and effect of taxation<sup>1/2</sup>
  - 6.05 Total tax rate (hard data)<sup>1/2</sup>
  - 6.06 Number of procedures required to start a business (hard data)<sup>9</sup>
  - 6.07 Time required to start a business (hard data)<sup>9</sup>
  - 6.08 Agricultural policy costs
2. Foreign competition .....variable<sup>f</sup>
  - 6.09 Prevalence of trade barriers
  - 6.10 Trade-weighted tariff rate (hard data)
  - 6.11 Prevalence of foreign ownership
  - 6.12 Business impact of rules on FDI
  - 6.13 Burden of customs procedures
  - 10.04 Imports as a percentage of GDP (hard data)

#### B. Quality of demand conditions .....33%

- 6.14 Degree of customer orientation
- 6.15 Buyer sophistication

### 7th pillar: Labor market efficiency .....17%

#### A. Flexibility .....50%

- 7.01 Cooperation in labor-employer relations
- 7.02 Flexibility of wage determination
- 7.03 Non-wage labor costs (hard data)
- 7.04 Rigidity of employment (hard data)
- 7.05 Hiring and firing practices
- 6.04 Extent and effect of taxation<sup>1/2</sup>
- 6.05 Total tax rate (hard data)<sup>1/2</sup>
- 7.06 Firing costs (hard data)

#### B. Efficient use of talent .....50%

- 7.07 Pay and productivity
- 7.08 Reliance on professional management<sup>1/2</sup>
- 7.09 Brain drain
- 7.10 Female participation in labor force (hard data)

### 8th pillar: Financial market sophistication .....17%

#### A. Efficiency .....50%

- 8.01 Financial market sophistication
- 8.02 Financing through local equity market
- 8.03 Ease of access to loans
- 8.04 Venture capital availability
- 8.05 Restriction on capital flows
- 8.06 Strength of investor protection (hard data)

#### B. Trustworthiness and confidence .....50%

- 8.07 Soundness of banks
- 8.08 Regulation of securities exchanges
- 8.09 Legal rights index (hard data)

### 9th pillar: Technological readiness .....17%

- 9.01 Availability of latest technologies
- 9.02 Firm-level technology absorption
- 9.03 Laws relating to ICT
- 9.04 FDI and technology transfer
- 9.05 Mobile telephone subscribers (hard data)
- 9.06 Internet users (hard data)
- 9.07 Personal computers (hard data)
- 9.08 Broadband Internet subscribers (hard data)

### 10th pillar: Market size .....17%

#### A. Domestic market size.....75%

- 10.01 Domestic market size index (hard data)<sup>h</sup>

#### B. Foreign market size .....25%

- 10.02 Foreign market size index (hard data)<sup>i</sup>

## INNOVATION AND SOPHISTICATED FACTORS

### 11th pillar: Business sophistication .....50%

#### A. Networks and supporting industries .....50%

- 11.01 Local supplier quantity
- 11.02 Local supplier quality
- 11.03 State of cluster development

#### B. Sophistication of firms' operations and strategy 50%

- 11.04 Nature of competitive advantage
- 11.05 Value chain breadth
- 11.06 Control of international distribution
- 11.07 Production process sophistication

## Appendix A: Structure of the Global Competitiveness Index 2008–2009 (cont'd.)

- 11.08 Extent of marketing
- 11.09 Willingness to delegate authority
- 7.08 Reliance on professional management<sup>1/2</sup>

### 12th pillar: Innovation.....50%

- 12.01 Capacity for innovation
- 12.02 Quality of scientific research institutions
- 12.03 Company spending on R&D
- 12.04 University-industry research collaboration
- 12.05 Government procurement of advanced technology products
- 12.06 Availability of scientists and engineers
- 12.07 Utility patents (hard data)
- 1.02 Intellectual property protection<sup>1/2</sup>

### Notes

- a The standard formula for converting hard data is the following:

$$6 \times \frac{(\text{country score} - \text{sample minimum})}{(\text{sample maximum} - \text{sample minimum})} + 1$$

The *sample minimum* and *sample maximum* are, respectively, the lowest and highest country scores in the sample of countries covered by the GCI. In some instances, adjustments were made to account for extreme outliers. For those hard data variables for which a higher value indicates a worse outcome (e.g., disease incidence, government debt), we rely on a normalization formula that, in addition to converting the series to a 1-to-7 scale, reverses it, so that 1 and 7 still corresponds to the worst and best possible outcomes, respectively:

$$-6 \times \frac{(\text{country score} - \text{sample minimum})}{(\text{sample maximum} - \text{sample minimum})} + 7$$

- b For those groups of variables that contain one or several half-weight variables, country scores for those groups are computed as follows:

$$\frac{(\text{sum of scores on full-weight variables}) + \frac{1}{2} \times (\text{sum of scores on half-weight variables})}{(\text{count of full-weight variables}) + \frac{1}{2} \times (\text{count of half-weight variables})}$$

- c As described in the chapter, the weights are the following:

Weights	Factor-driven stage (%)	Efficiency-driven stage (%)	Innovation-driven stage (%)
Basic requirements	60	40	20
Efficiency enhancers	35	50	50
Innovation and sophistication factors	5	10	30

- d 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 values.

- e 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.
- f The *Competition* subpillar is the weighted average of two components: *Domestic competition* and *Foreign competition*. In both components, the included variables 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*.
- g Variables 6.06 and 6.07 combine to form one single variable.
- h The size of the domestic market is constructed by taking the natural log of the sum of the gross domestic product valued at PPP plus the total value (PPP estimates) of imports of goods and services, minus the total value (PPP estimates) of exports of goods and services. 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 underlying data are reported in the Data Tables section.
- i 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 and GDP valued at PPP. The underlying data are reported in the Data Tables section.

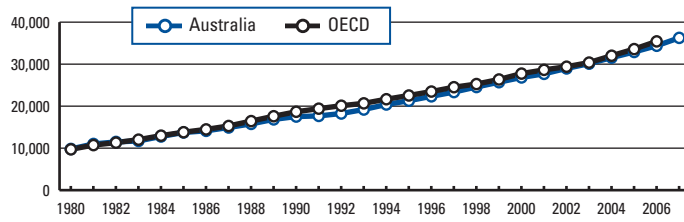


# Australia

## Key indicators

Total population (millions), 2007 .....	20.6
GDP (US\$ billions), 2007 .....	908.8
GDP per capita (US\$), 2007 .....	43,312.3
GDP (PPP) as share (%) of world total, 2007 .....	1.18

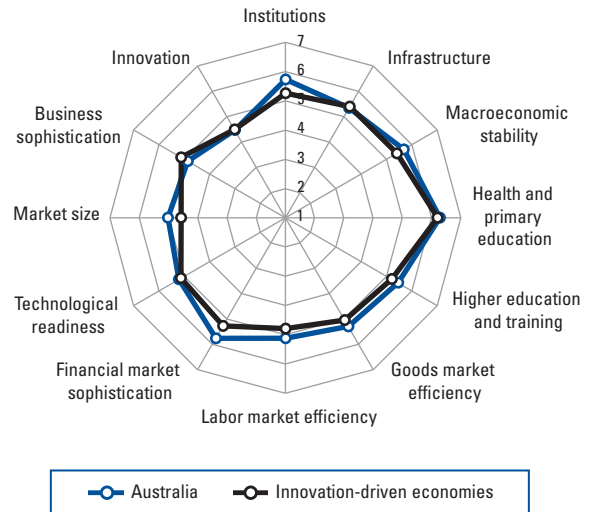
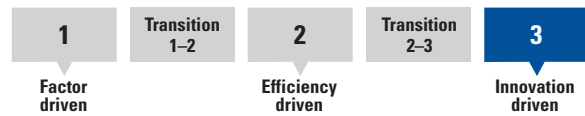
GDP (PPP US\$) per capita, 1980–2007



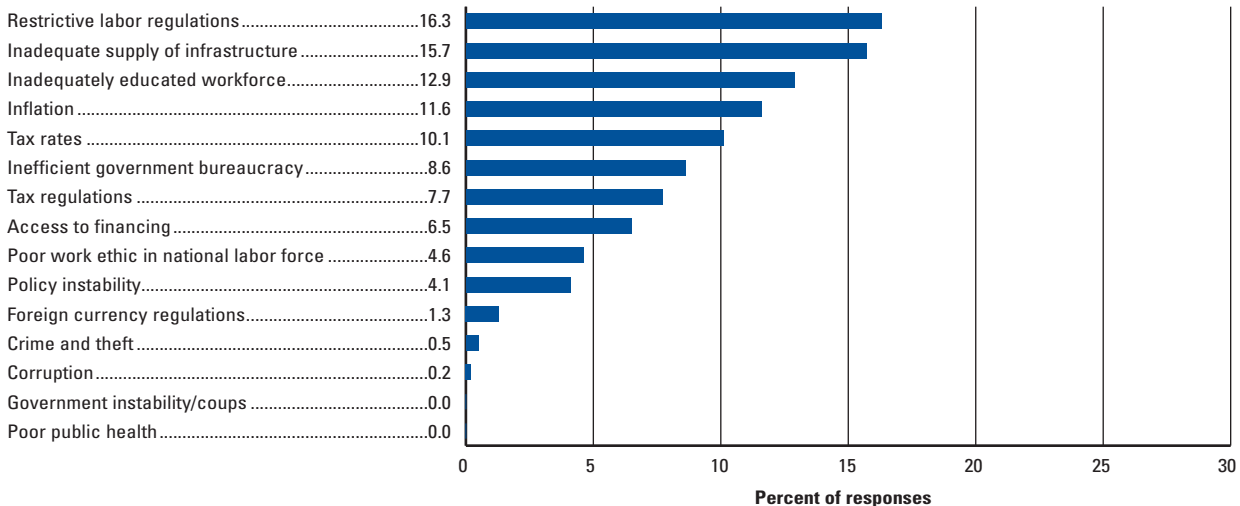
## Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
<b>GCI 2008–2009</b> .....	<b>18</b>	<b>5.2</b>
GCI 2007–2008 (out of 131) .....	19	5.2
GCI 2006–2007 (out of 122) .....	16	5.2
<b>Basic requirements</b> .....	<b>15</b>	<b>5.7</b>
1st pillar: Institutions .....	12	5.7
2nd pillar: Infrastructure .....	21	5.3
3rd pillar: Macroeconomic stability .....	28	5.7
4th pillar: Health and primary education .....	15	6.3
<b>Efficiency enhancers</b> .....	<b>10</b>	<b>5.3</b>
5th pillar: Higher education and training .....	14	5.4
6th pillar: Goods market efficiency .....	10	5.3
7th pillar: Labor market efficiency .....	9	5.1
8th pillar: Financial market sophistication .....	6	5.8
9th pillar: Technological readiness .....	19	5.2
10th pillar: Market size .....	19	5.0
<b>Innovation and sophistication factors</b> .....	<b>22</b>	<b>4.7</b>
11th pillar: Business sophistication .....	26	4.9
12th pillar: Innovation .....	20	4.5

### Stage of development



## The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

## The Global Competitiveness Index in detail

■ Competitive Advantage
■ Competitive Disadvantage

INDICATOR	RANK/134	INDICATOR	RANK/134
<b>1st pillar: Institutions</b>		<b>6th pillar: Goods market efficiency</b>	
1.01 Property rights .....	13 <span style="color: #0056b3;">■</span>	6.01 Intensity of local competition .....	18 <span style="color: #808080;">■</span>
1.02 Intellectual property protection .....	10 <span style="color: #0056b3;">■</span>	6.02 Extent of market dominance .....	14 <span style="color: #0056b3;">■</span>
1.03 Diversion of public funds .....	8 <span style="color: #0056b3;">■</span>	6.03 Effectiveness of anti-monopoly policy .....	5 <span style="color: #0056b3;">■</span>
1.04 Public trust of politicians .....	15 <span style="color: #0056b3;">■</span>	6.04 Extent and effect of taxation .....	62 <span style="color: #808080;">■</span>
1.05 Judicial independence .....	8 <span style="color: #0056b3;">■</span>	6.05 Total tax rate* .....	88 <span style="color: #808080;">■</span>
1.06 Favoritism in decisions of government officials .....	10 <span style="color: #0056b3;">■</span>	6.06 No. of procedures required to start a business* .....	1 <span style="color: #0056b3;">■</span>
1.07 Wastefulness of government spending .....	16 <span style="color: #0056b3;">■</span>	6.07 Time required to start a business* .....	1 <span style="color: #0056b3;">■</span>
1.08 Burden of government regulation .....	85 <span style="color: #808080;">■</span>	6.08 Agricultural policy costs .....	5 <span style="color: #0056b3;">■</span>
1.09 Efficiency of legal framework .....	10 <span style="color: #808080;">■</span>	6.09 Prevalence of trade barriers .....	22 <span style="color: #808080;">■</span>
1.10 Transparency of government policymaking .....	9 <span style="color: #0056b3;">■</span>	6.10 Trade-weighted tariff rate* .....	97 <span style="color: #808080;">■</span>
1.11 Business costs of terrorism .....	74 <span style="color: #808080;">■</span>	6.11 Prevalence of foreign ownership .....	37 <span style="color: #808080;">■</span>
1.12 Business costs of crime and violence .....	38 <span style="color: #808080;">■</span>	6.12 Business impact of rules on FDI .....	59 <span style="color: #808080;">■</span>
1.13 Organized crime .....	27 <span style="color: #808080;">■</span>	6.13 Burden of customs procedures .....	22 <span style="color: #808080;">■</span>
1.14 Reliability of police services .....	14 <span style="color: #0056b3;">■</span>	6.14 Degree of customer orientation .....	17 <span style="color: #0056b3;">■</span>
1.15 Ethical behavior of firms .....	10 <span style="color: #0056b3;">■</span>	6.15 Buyer sophistication .....	19 <span style="color: #808080;">■</span>
1.16 Strength of auditing and reporting standards .....	3 <span style="color: #0056b3;">■</span>	<b>7th pillar: Labor market efficiency</b>	
1.17 Efficacy of corporate boards .....	2 <span style="color: #0056b3;">■</span>	7.01 Cooperation in labor-employer relations .....	37 <span style="color: #808080;">■</span>
1.18 Protection of minority shareholders' interests .....	12 <span style="color: #0056b3;">■</span>	7.02 Flexibility of wage determination .....	75 <span style="color: #808080;">■</span>
<b>2nd pillar: Infrastructure</b>		7.03 Non-wage labor costs* .....	85 <span style="color: #808080;">■</span>
2.01 Quality of overall infrastructure .....	25 <span style="color: #808080;">■</span>	7.04 Rigidity of employment* .....	4 <span style="color: #0056b3;">■</span>
2.02 Quality of roads .....	31 <span style="color: #808080;">■</span>	7.05 Hiring and firing practices .....	46 <span style="color: #808080;">■</span>
2.03 Quality of railroad infrastructure .....	26 <span style="color: #808080;">■</span>	7.06 Firing costs* .....	7 <span style="color: #0056b3;">■</span>
2.04 Quality of port infrastructure .....	41 <span style="color: #808080;">■</span>	7.07 Pay and productivity .....	26 <span style="color: #808080;">■</span>
2.05 Quality of air transport infrastructure .....	19 <span style="color: #808080;">■</span>	7.08 Reliance on professional management .....	4 <span style="color: #0056b3;">■</span>
2.06 Available seat kilometers* .....	8 <span style="color: #0056b3;">■</span>	7.09 Brain drain .....	38 <span style="color: #808080;">■</span>
2.07 Quality of electricity supply .....	22 <span style="color: #808080;">■</span>	7.10 Female participation in labor force* .....	42 <span style="color: #808080;">■</span>
2.08 Telephone lines* .....	18 <span style="color: #808080;">■</span>	<b>8th pillar: Financial market sophistication</b>	
<b>3rd pillar: Macroeconomic stability</b>		8.01 Financial market sophistication .....	7 <span style="color: #0056b3;">■</span>
3.01 Government surplus/deficit* .....	45 <span style="color: #808080;">■</span>	8.02 Financing through local equity market .....	12 <span style="color: #0056b3;">■</span>
3.02 National savings rate* .....	69 <span style="color: #808080;">■</span>	8.03 Ease of access to loans .....	6 <span style="color: #0056b3;">■</span>
3.03 Inflation* .....	34 <span style="color: #808080;">■</span>	8.04 Venture capital availability .....	13 <span style="color: #0056b3;">■</span>
3.04 Interest rate spread* .....	68 <span style="color: #808080;">■</span>	8.05 Restriction on capital flows .....	52 <span style="color: #808080;">■</span>
3.05 Government debt* .....	20 <span style="color: #808080;">■</span>	8.06 Strength of investor protection* .....	39 <span style="color: #808080;">■</span>
<b>4th pillar: Health and primary education</b>		8.07 Soundness of banks .....	4 <span style="color: #0056b3;">■</span>
4.01 Business impact of malaria .....	30 <span style="color: #808080;">■</span>	8.08 Regulation of securities exchanges .....	3 <span style="color: #0056b3;">■</span>
4.02 Malaria incidence* .....	73 <span style="color: #808080;">■</span>	8.09 Legal rights index* .....	3 <span style="color: #0056b3;">■</span>
4.03 Business impact of tuberculosis .....	17 <span style="color: #0056b3;">■</span>	<b>9th pillar: Technological readiness</b>	
4.04 Tuberculosis incidence* .....	8 <span style="color: #0056b3;">■</span>	9.01 Availability of latest technologies .....	20 <span style="color: #808080;">■</span>
4.05 Business impact of HIV/AIDS .....	35 <span style="color: #808080;">■</span>	9.02 Firm-level technology absorption .....	17 <span style="color: #0056b3;">■</span>
4.06 HIV prevalence* .....	50 <span style="color: #808080;">■</span>	9.03 Laws relating to ICT .....	15 <span style="color: #0056b3;">■</span>
4.07 Infant mortality* .....	26 <span style="color: #808080;">■</span>	9.04 FDI and technology transfer .....	12 <span style="color: #0056b3;">■</span>
4.08 Life expectancy* .....	2 <span style="color: #0056b3;">■</span>	9.05 Mobile telephone subscribers* .....	32 <span style="color: #808080;">■</span>
4.09 Quality of primary education .....	10 <span style="color: #0056b3;">■</span>	9.06 Internet users* .....	24 <span style="color: #808080;">■</span>
4.10 Primary enrollment* .....	39 <span style="color: #808080;">■</span>	9.07 Personal computers* .....	16 <span style="color: #0056b3;">■</span>
4.11 Education expenditure* .....	48 <span style="color: #808080;">■</span>	9.08 Broadband Internet subscribers* .....	20 <span style="color: #808080;">■</span>
<b>5th pillar: Higher education and training</b>		<b>10th pillar: Market size</b>	
5.01 Secondary enrollment* .....	1 <span style="color: #0056b3;">■</span>	10.01 Domestic market size* .....	17 <span style="color: #0056b3;">■</span>
5.02 Tertiary enrollment* .....	15 <span style="color: #0056b3;">■</span>	10.02 Foreign market size* .....	34 <span style="color: #808080;">■</span>
5.03 Quality of the educational system .....	9 <span style="color: #0056b3;">■</span>	<b>11th pillar: Business sophistication</b>	
5.04 Quality of math and science education .....	19 <span style="color: #808080;">■</span>	11.01 Local supplier quantity .....	42 <span style="color: #808080;">■</span>
5.05 Quality of management schools .....	11 <span style="color: #0056b3;">■</span>	11.02 Local supplier quality .....	14 <span style="color: #0056b3;">■</span>
5.06 Internet access in schools .....	18 <span style="color: #808080;">■</span>	11.03 State of cluster development .....	34 <span style="color: #808080;">■</span>
5.07 Local availability of research and training services .....	15 <span style="color: #0056b3;">■</span>	11.04 Nature of competitive advantage .....	37 <span style="color: #808080;">■</span>
5.08 Extent of staff training .....	17 <span style="color: #0056b3;">■</span>	11.05 Value chain breadth .....	72 <span style="color: #808080;">■</span>
		11.06 Control of international distribution .....	33 <span style="color: #808080;">■</span>
		11.07 Production process sophistication .....	23 <span style="color: #808080;">■</span>
		11.08 Extent of marketing .....	10 <span style="color: #0056b3;">■</span>
		11.09 Willingness to delegate authority .....	14 <span style="color: #0056b3;">■</span>
		<b>12th pillar: Innovation</b>	
		12.01 Capacity for innovation .....	29 <span style="color: #808080;">■</span>
		12.02 Quality of scientific research institutions .....	8 <span style="color: #0056b3;">■</span>
		12.03 Company spending on R&D .....	23 <span style="color: #808080;">■</span>
		12.04 University-industry research collaboration .....	19 <span style="color: #808080;">■</span>
		12.05 Gov't procurement of advanced tech products .....	30 <span style="color: #808080;">■</span>
		12.06 Availability of scientists and engineers .....	33 <span style="color: #808080;">■</span>
		12.07 Utility patents* .....	15 <span style="color: #0056b3;">■</span>

\* Hard data

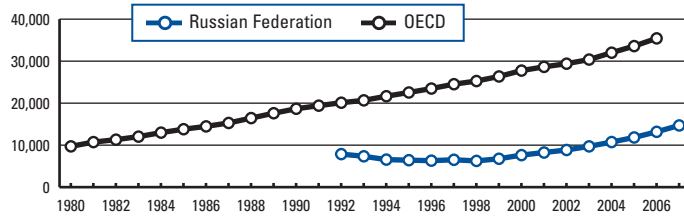
Note: For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" at the beginning of this chapter.

# Russian Federation

## Key indicators

Total population (millions), 2007 .....	141.9
GDP (US\$ billions), 2007 .....	1,289.6
GDP per capita (US\$), 2007 .....	9,075.1
GDP (PPP) as share (%) of world total, 2007 .....	3.18

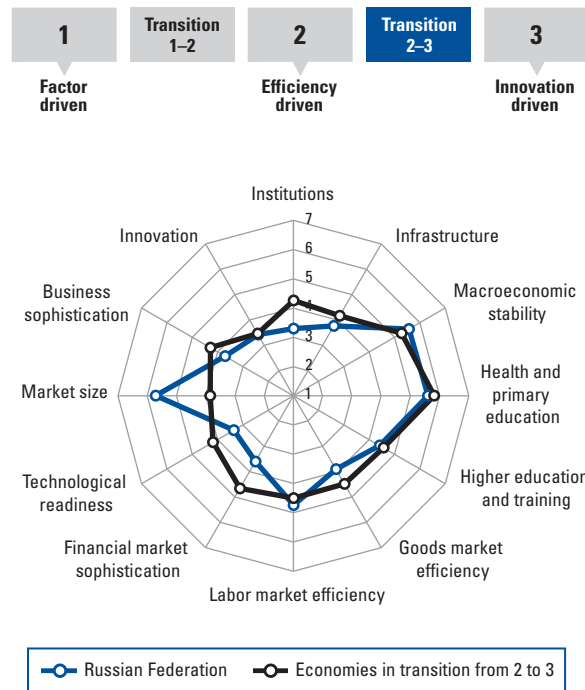
GDP (PPP US\$) per capita, 1980–2007



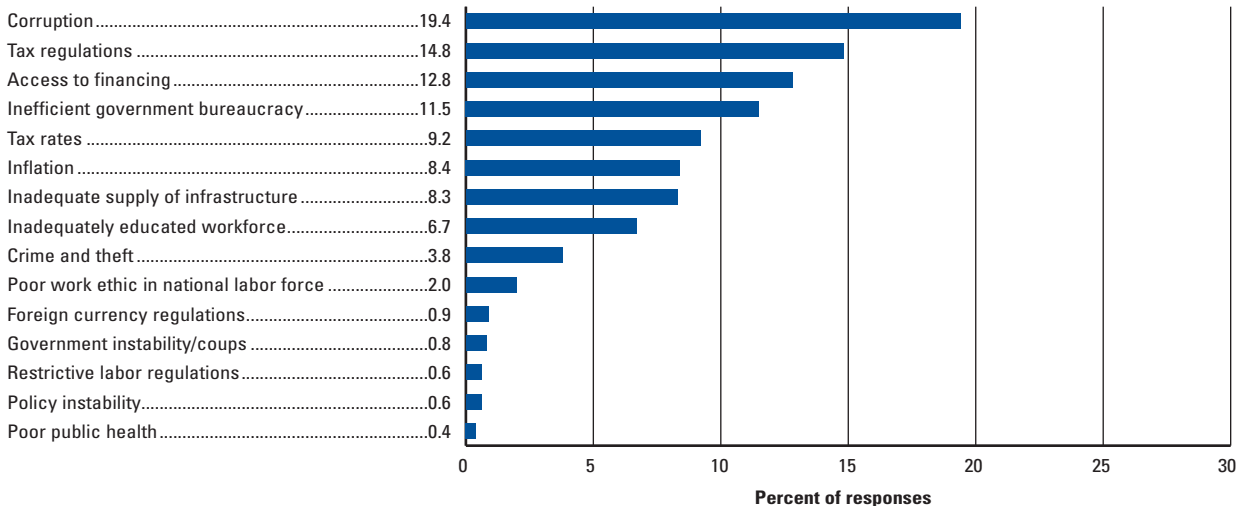
## Global Competitiveness Index

	Rank (out of 134)	Score (1–7)
<b>GCI 2008–2009</b> .....	<b>51</b>	<b>4.3</b>
GCI 2007–2008 (out of 131) .....	58	4.2
GCI 2006–2007 (out of 122) .....	59	4.1
<b>Basic requirements</b> .....	<b>56</b>	<b>4.5</b>
1st pillar: Institutions .....	110	3.3
2nd pillar: Infrastructure .....	59	3.7
3rd pillar: Macroeconomic stability .....	29	5.6
4th pillar: Health and primary education .....	59	5.6
<b>Efficiency enhancers</b> .....	<b>50</b>	<b>4.3</b>
5th pillar: Higher education and training .....	46	4.4
6th pillar: Goods market efficiency .....	99	3.9
7th pillar: Labor market efficiency .....	27	4.7
8th pillar: Financial market sophistication .....	112	3.6
9th pillar: Technological readiness .....	67	3.4
10th pillar: Market size .....	8	5.7
<b>Innovation and sophistication factors</b> .....	<b>73</b>	<b>3.6</b>
11th pillar: Business sophistication .....	91	3.7
12th pillar: Innovation .....	48	3.4

## Stage of development



## The most problematic factors for doing business



Note: From a list of 15 factors, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

## The Global Competitiveness Index in detail

■ Competitive Advantage ■ Competitive Disadvantage

INDICATOR	RANK/134	INDICATOR	RANK/134
<b>1st pillar: Institutions</b>		<b>6th pillar: Goods market efficiency</b>	
1.01 Property rights .....	122	6.01 Intensity of local competition .....	108
1.02 Intellectual property protection .....	98	6.02 Extent of market dominance .....	79
1.03 Diversion of public funds .....	102	6.03 Effectiveness of anti-monopoly policy .....	95
1.04 Public trust of politicians .....	111	6.04 Extent and effect of taxation .....	94
1.05 Judicial independence .....	109	6.05 Total tax rate* .....	94
1.06 Favoritism in decisions of government officials .....	88	6.06 No. of procedures required to start a business* .....	44
1.07 Wastefulness of government spending .....	82	6.07 Time required to start a business* .....	66
1.08 Burden of government regulation .....	118	6.08 Agricultural policy costs .....	104
1.09 Efficiency of legal framework .....	107	6.09 Prevalence of trade barriers .....	114
1.10 Transparency of government policymaking .....	119	6.10 Trade-weighted tariff rate* .....	125
1.11 Business costs of terrorism .....	100	6.11 Prevalence of foreign ownership .....	127
1.12 Business costs of crime and violence .....	80	6.12 Business impact of rules on FDI .....	129
1.13 Organized crime .....	105	6.13 Burden of customs procedures .....	121
1.14 Reliability of police services .....	105	6.14 Degree of customer orientation .....	79
1.15 Ethical behavior of firms .....	112	6.15 Buyer sophistication .....	74
1.16 Strength of auditing and reporting standards .....	108		
1.17 Efficacy of corporate boards .....	35	<b>7th pillar: Labor market efficiency</b>	
1.18 Protection of minority shareholders' interests .....	128	7.01 Cooperation in labor-employer relations .....	82
		7.02 Flexibility of wage determination .....	56
<b>2nd pillar: Infrastructure</b>		7.03 Non-wage labor costs* .....	112
2.01 Quality of overall infrastructure .....	78	7.04 Rigidity of employment* .....	87
2.02 Quality of roads .....	104	7.05 Hiring and firing practices .....	23
2.03 Quality of railroad infrastructure .....	32	7.06 Firing costs* .....	28
2.04 Quality of port infrastructure .....	76	7.07 Pay and productivity .....	11
2.05 Quality of air transport infrastructure .....	88	7.08 Reliance on professional management .....	58
2.06 Available seat kilometers* .....	11	7.09 Brain drain .....	44
2.07 Quality of electricity supply .....	65	7.10 Female participation in labor force* .....	21
2.08 Telephone lines* .....	39		
		<b>8th pillar: Financial market sophistication</b>	
<b>3rd pillar: Macroeconomic stability</b>		8.01 Financial market sophistication .....	89
3.01 Government surplus/deficit* .....	19	8.02 Financing through local equity market .....	87
3.02 National savings rate* .....	27	8.03 Ease of access to loans .....	86
3.03 Inflation* .....	109	8.04 Venture capital availability .....	64
3.04 Interest rate spread* .....	62	8.05 Restriction on capital flows .....	125
3.05 Government debt* .....	11	8.06 Strength of investor protection* .....	67
		8.07 Soundness of banks .....	107
		8.08 Regulation of securities exchanges .....	110
		8.09 Legal rights index* .....	93
<b>4th pillar: Health and primary education</b>			
4.01 Business impact of malaria .....	36	<b>9th pillar: Technological readiness</b>	
4.02 Malaria incidence* .....	1	9.01 Availability of latest technologies .....	98
4.03 Business impact of tuberculosis .....	47	9.02 Firm-level technology absorption .....	105
4.04 Tuberculosis incidence* .....	90	9.03 Laws relating to ICT .....	79
4.05 Business impact of HIV/AIDS .....	28	9.04 FDI and technology transfer .....	99
4.06 HIV prevalence* .....	103	9.05 Mobile telephone subscribers* .....	25
4.07 Infant mortality* .....	51	9.06 Internet users* .....	67
4.08 Life expectancy* .....	96	9.07 Personal computers* .....	58
4.09 Quality of primary education .....	31	9.08 Broadband Internet subscribers* .....	59
4.10 Primary enrollment* .....	81		
4.11 Education expenditure* .....	89	<b>10th pillar: Market size</b>	
		10.01 Domestic market size* .....	8
		10.02 Foreign market size* .....	6
<b>5th pillar: Higher education and training</b>			
5.01 Secondary enrollment* .....	76	<b>11th pillar: Business sophistication</b>	
5.02 Tertiary enrollment* .....	16	11.01 Local supplier quantity .....	89
5.03 Quality of the educational system .....	36	11.02 Local supplier quality .....	100
5.04 Quality of math and science education .....	24	11.03 State of cluster development .....	96
5.05 Quality of management schools .....	72	11.04 Nature of competitive advantage .....	109
5.06 Internet access in schools .....	59	11.05 Value chain breadth .....	105
5.07 Local availability of research and training services .....	71	11.06 Control of international distribution .....	98
5.08 Extent of staff training .....	80	11.07 Production process sophistication .....	66
		11.08 Extent of marketing .....	90
		11.09 Willingness to delegate authority .....	85
		<b>12th pillar: Innovation</b>	
		12.01 Capacity for innovation .....	45
		12.02 Quality of scientific research institutions .....	45
		12.03 Company spending on R&D .....	46
		12.04 University-industry research collaboration .....	48
		12.05 Gov't procurement of advanced tech products .....	66
		12.06 Availability of scientists and engineers .....	34
		12.07 Utility patents* .....	41

\* Hard data

Note: For further details and explanation, please refer to the section "How to Read the Country/Economy Profiles" at the beginning of this chapter.