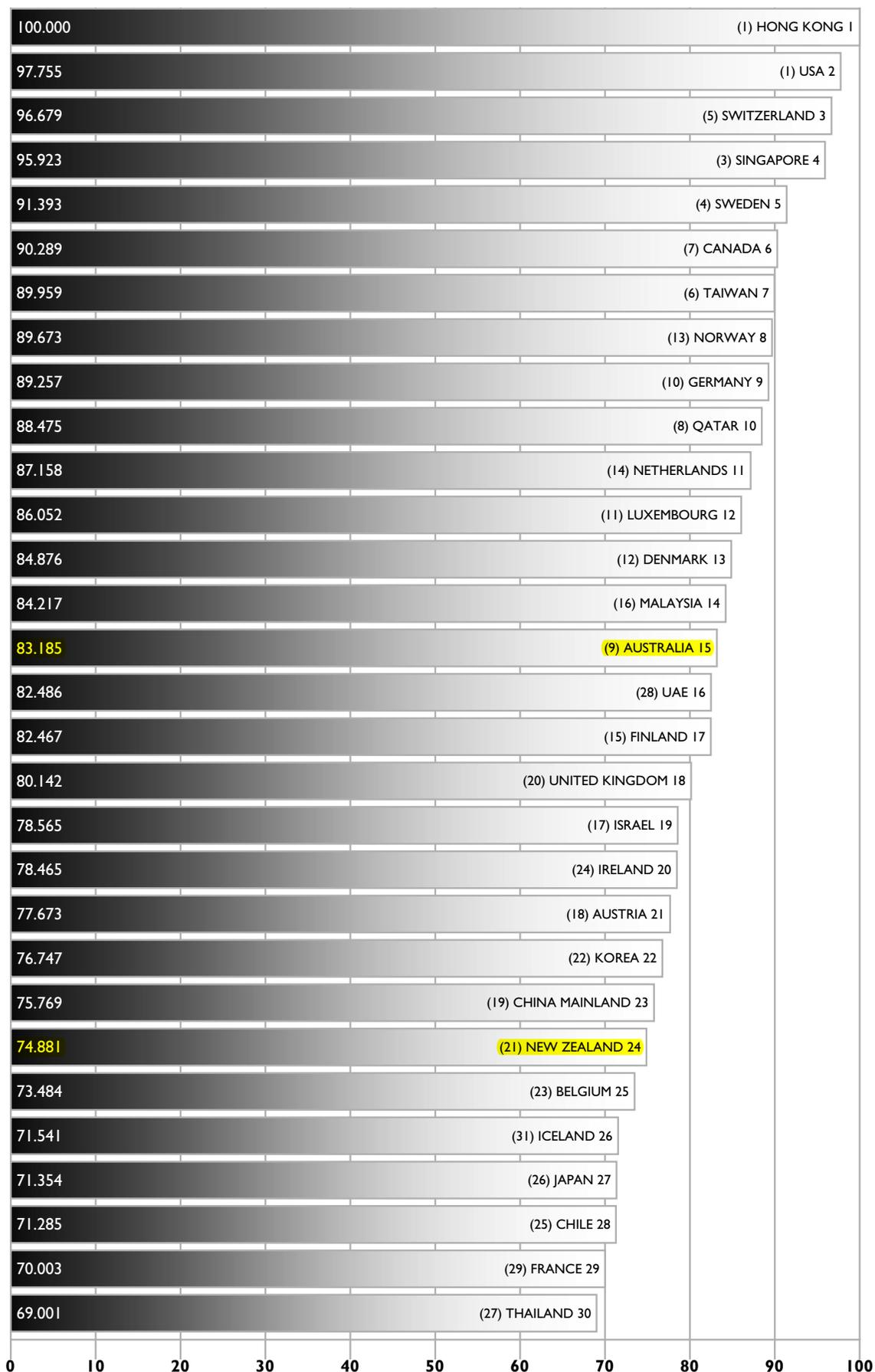
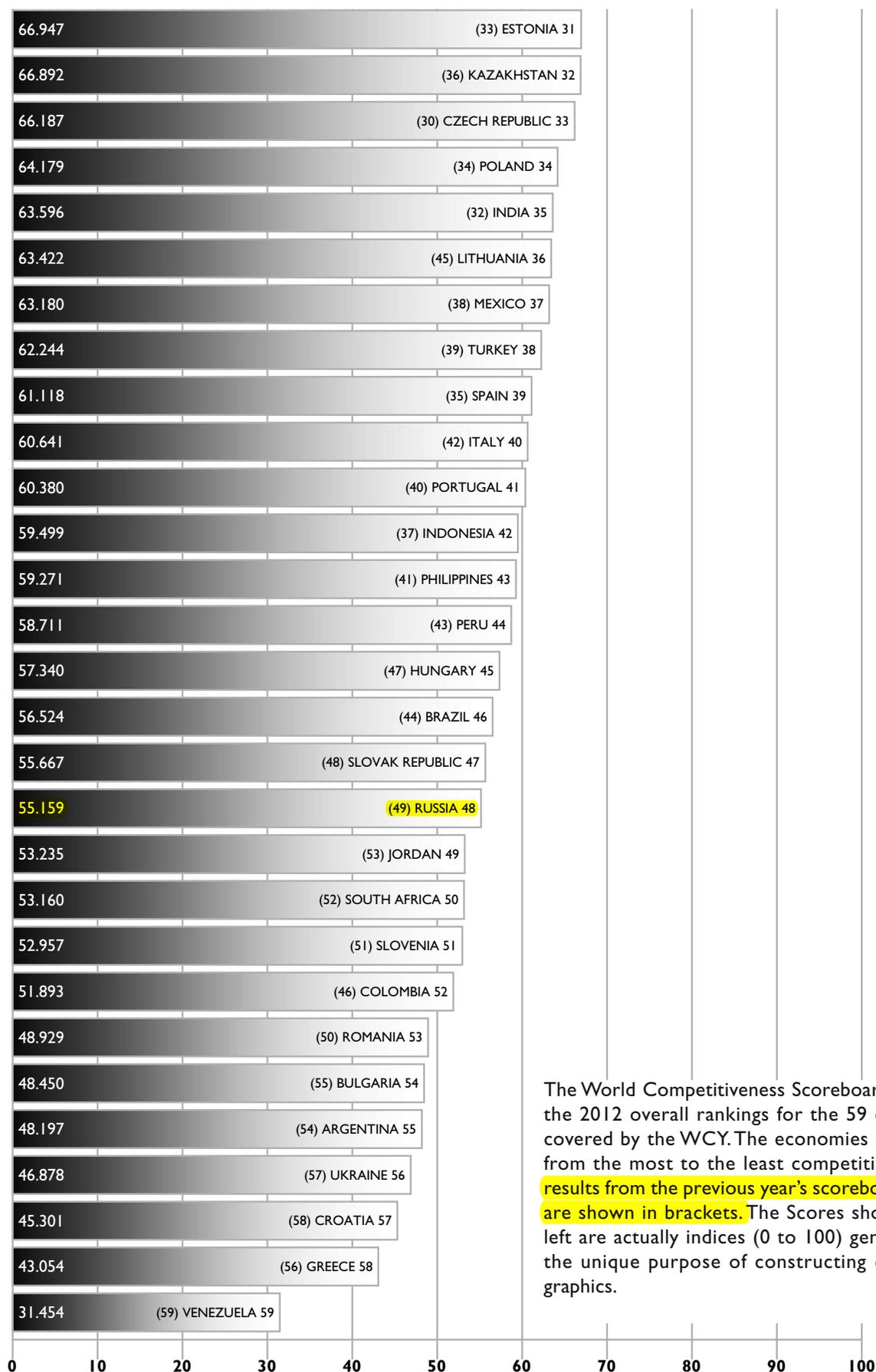


THE WORLD COMPETITIVENESS SCOREBOARD 2012



THE WORLD COMPETITIVENESS SCOREBOARD 2012



The World Competitiveness Scoreboard presents the 2012 overall rankings for the 59 economies covered by the WCY. The economies are ranked from the most to the least competitive and the results from the previous year's scoreboard (2011) are shown in brackets. The Scores shown to the left are actually indices (0 to 100) generated for the unique purpose of constructing charts and graphics.

OVERALL RANKING AND COMPETITIVENESS FACTORS



OVERALL

Economic Performance

	2008	2009	2010	2011	2012		2008	2009	2010	2011	2012
Argentina	52	55	55	54	55		37	29	32	39	50
Australia	7	7	5	9	15		15	15	7	13	23
Austria	14	16	14	18	21		17	18	18	24	20
Belgium	24	22	25	23	25		19	10	13	23	18
Brazil	43	40	38	44	46		41	31	37	30	47
Bulgaria	39	38	53	55	54		38	26	46	48	49
Canada	8	8	7	7	6		11	16	12	12	12
Chile	26	25	28	25	28		43	35	26	17	25
China Mainland	17	20	18	19	23		2	2	3	3	3
Colombia	41	51	45	46	52		46	50	35	41	33
Croatia	49	53	56	58	57		40	43	53	56	56
Czech Republic	28	29	29	30	33		20	25	29	34	29
Denmark	6	5	13	12	13		26	23	30	40	31
Estonia	23	35	34	33	31		23	48	52	51	38
Finland	15	9	19	15	17		36	40	44	37	40
France	25	28	24	29	29		13	17	17	22	22
Germany	16	13	16	10	9		6	6	9	6	5
Greece	42	52	46	56	58		48	52	48	58	58
Hong Kong	3	2	2	1	1		5	3	4	4	4
Hungary	38	45	42	47	45		39	33	40	44	35
Iceland			30	31	26				51	52	44
India	29	30	31	32	35		18	12	20	18	21
Indonesia	51	42	35	37	42		52	41	27	32	32
Ireland	12	19	21	24	20		24	37	22	28	37
Israel	20	24	17	17	19		27	38	36	36	36
Italy	46	50	40	42	40		45	47	33	38	39
Japan	22	17	27	26	27		29	24	39	27	24
Jordan	34	41	50	53	49		51	53	45	55	54
Kazakhstan		36	33	36	32			44	43	35	28
Korea	31	27	23	22	22		47	45	21	25	27
Lithuania	36	31	43	45	36		28	36	57	53	46
Luxembourg	5	12	11	11	12		4	4	11	9	6
Malaysia	19	18	10	16	14		8	9	8	7	10
Mexico	50	46	47	38	37		33	28	25	16	14
Netherlands	10	10	12	14	11		7	7	14	19	8
New Zealand	18	15	20	21	24		34	30	31	33	41
Norway	11	11	9	13	8		10	19	19	26	16
Peru	35	37	41	43	44		14	22	28	20	26
Philippines	40	43	39	41	43		42	51	34	29	42
Poland	44	44	32	34	34		31	39	24	31	30
Portugal	37	34	37	40	41		44	42	38	50	53
Qatar		14	15	8	10			5	2	2	2
Romania	45	54	54	50	53		35	32	47	49	52
Russia	47	49	51	49	48		49	49	49	42	45
Singapore	2	3	1	3	4		3	8	5	5	9
Slovak Republic	30	33	49	48	47		32	34	54	57	55
Slovenia	32	32	52	51	51		25	21	42	43	43
South Africa	53	48	44	52	50		55	56	56	54	57
Spain	33	39	36	35	39		30	46	41	47	51
Sweden	9	6	6	4	5		22	20	15	11	17
Switzerland	4	4	4	5	3		9	13	10	15	7
Taiwan	13	23	8	6	7		21	27	16	8	13
Thailand	27	26	26	27	30		12	14	6	10	15
Turkey	48	47	48	39	38		53	54	50	46	34
UAE				28	16					21	11
Ukraine	54	56	57	57	56		50	55	55	45	48
United Kingdom	21	21	22	20	18		16	11	23	14	19
USA	1	1	3	1	2		1	1	1	1	1
Venezuela	55	57	58	59	59		54	57	58	59	59

COMPETITIVENESS FACTORS



Government Efficiency					Business Efficiency					Infrastructure					
2008	2009	2010	2011	2012	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012	
54	57	57	57	57	54	57	52	51	50	47	47	47	45	46	Argentina
5	8	4	7	14	6	7	5	7	13	16	12	18	14	19	Australia
20	24	27	27	33	15	12	12	20	20	13	13	10	13	16	Austria
42	37	43	39	41	23	23	30	23	29	15	15	19	19	21	Belgium
51	52	52	55	55	29	27	24	29	27	50	46	49	51	45	Brazil
29	28	32	41	44	48	47	56	57	59	41	43	48	53	52	Bulgaria
8	9	10	9	9	11	9	10	8	9	8	7	4	5	6	Canada
9	13	14	12	17	22	14	21	21	21	38	36	44	40	42	Chile
12	15	25	33	34	33	37	28	25	32	31	32	31	28	29	China Mainland
35	47	38	45	50	39	40	39	37	48	44	51	53	54	57	Colombia
50	51	55	54	54	51	55	58	59	58	40	41	42	43	41	Croatia
33	31	33	28	30	34	36	40	35	41	24	25	26	29	30	Czech Republic
4	4	11	13	11	5	2	11	6	15	7	6	5	3	4	Denmark
10	22	24	20	24	27	41	36	32	38	26	28	27	33	32	Estonia
13	6	15	14	12	17	5	16	15	16	12	3	6	6	5	Finland
45	46	42	44	47	35	42	35	47	45	11	14	14	18	14	France
26	27	28	24	19	28	19	25	16	17	6	9	8	7	7	Germany
46	53	54	56	58	42	49	45	53	56	35	35	33	32	34	Greece
2	2	1	1	1	1	1	2	1	1	19	19	23	21	18	Hong Kong
47	50	51	52	51	45	52	47	50	49	27	33	35	35	35	Hungary
		48	40	38			33	34	31			9	9	10	Iceland
23	35	30	29	42	20	11	17	22	24	49	57	54	50	53	India
38	33	23	25	28	44	38	34	33	35	53	55	55	55	56	Indonesia
7	12	19	30	20	4	17	18	18	10	23	22	24	24	22	Ireland
21	23	16	16	21	16	20	14	17	18	14	18	16	15	13	Israel
53	54	49	51	49	46	48	48	48	44	33	34	32	30	28	Italy
39	40	37	50	48	24	18	23	27	33	4	5	13	11	17	Japan
25	32	39	31	31	21	44	46	52	51	34	40	52	52	47	Jordan
	21	20	21	18		34	29	36	34		44	39	46	43	Kazakhstan
37	36	26	22	25	36	29	27	26	25	21	20	20	20	20	Korea
36	25	34	47	37	41	35	41	45	36	32	29	30	36	31	Lithuania
14	16	12	15	16	9	15	6	9	12	18	17	21	22	23	Luxembourg
19	19	9	17	13	14	13	4	14	6	25	26	25	27	26	Malaysia
40	45	46	43	35	55	46	51	43	42	54	50	50	49	48	Mexico
17	14	17	18	15	12	8	15	13	14	9	11	12	12	11	Netherlands
6	7	5	8	10	18	21	22	24	28	22	21	22	23	24	New Zealand
15	11	7	11	6	13	10	8	12	8	10	10	7	8	9	Norway
32	41	35	36	27	30	33	42	39	40	52	49	57	58	59	Peru
41	42	31	37	32	31	32	32	31	26	48	56	56	57	55	Philippines
49	44	36	35	36	50	50	38	41	39	37	39	36	34	36	Poland
27	29	44	48	46	43	43	50	44	47	28	24	29	25	25	Portugal
	5	8	6	7		24	19	5	3		30	37	37	40	Qatar
48	49	50	49	52	47	56	49	49	52	43	53	43	42	50	Romania
30	39	40	46	45	49	54	53	54	53	45	38	38	38	38	Russia
1	1	2	2	2	2	4	1	2	2	3	8	11	10	8	Singapore
31	34	41	42	43	26	26	43	42	43	36	37	40	41	39	Slovak Republic
43	38	53	53	53	32	39	57	56	57	29	27	34	31	33	Slovenia
28	26	21	32	29	38	30	31	40	37	55	54	51	56	54	South Africa
34	43	45	38	40	40	45	44	38	46	30	31	28	26	27	Spain
11	10	13	5	8	8	6	9	4	5	5	2	2	2	3	Sweden
3	3	3	3	4	7	3	7	11	7	2	4	3	4	2	Switzerland
16	18	6	10	5	10	22	3	3	4	17	23	17	16	12	Taiwan
22	17	18	23	26	25	25	20	19	23	39	42	46	47	49	Thailand
44	48	47	34	39	37	31	37	30	30	42	45	45	44	44	Turkey
			4	3				46	19					39	UAE
52	56	56	58	56	52	53	54	55	55	46	48	41	48	51	Ukraine
24	30	29	26	23	19	28	26	28	22	20	16	15	17	15	United Kingdom
18	20	22	19	22	3	16	13	10	11	1	1	1	1	1	USA
55	55	58	59	59	53	51	55	58	54	51	52	58	59	58	Venezuela

Australia - Overall Performance

>> Overall Competitiveness

	2008	2009	2010	2011	2012
Rank	7	7	5	9	15

>> Economic Performance

	2008	2009	2010	2011	2012
Rank	15	15	7	13	23

>> Government Efficiency

	2008	2009	2010	2011	2012
Rank	5	8	4	7	14

>> Business Efficiency

	2008	2009	2010	2011	2012
Rank	6	7	5	7	13

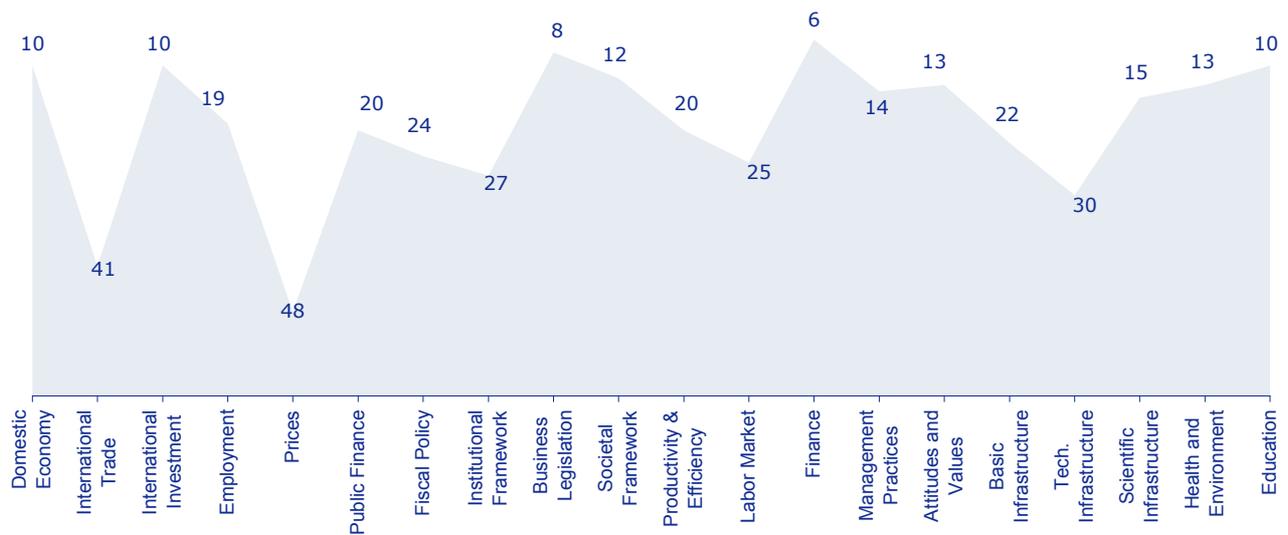
>> Infrastructure

	2008	2009	2010	2011	2012
Rank	16	12	18	14	19

Basic Facts

	Value	Year
Population (million)	22.62	2011
Land area (km ² '000)	7,741.2	2010
GDP (\$ billion)	1,500.6	2011
GDP (PPP) per capita (\$)	38,430	2011
Real GDP growth (%)	2.2	2011
Consumer price inflation (%)	3.4	2011
Unemployment rate (%)	5.10	2011
Labor force (million)	12.05	2011
Current account balance (%)	-2.22	2011
Direct investment		
Stocks inward (\$ billion)	508.12	2010
Flows inward (% of GDP)	2.45	2010

Competitiveness Landscape



New Zealand - Overall Performance

>> Overall Competitiveness

	2008	2009	2010	2011	2012
Rank	18	15	20	21	24

>> Economic Performance

	2008	2009	2010	2011	2012
Rank	34	30	31	33	41

>> Government Efficiency

	2008	2009	2010	2011	2012
Rank	6	7	5	8	10

>> Business Efficiency

	2008	2009	2010	2011	2012
Rank	18	21	22	24	28

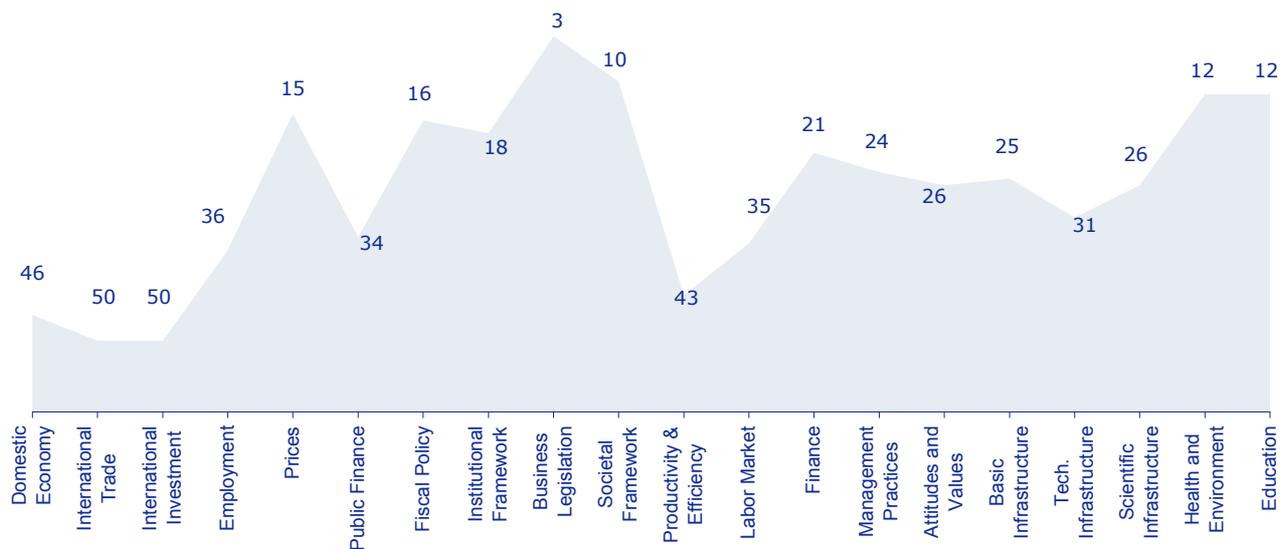
>> Infrastructure

	2008	2009	2010	2011	2012
Rank	22	21	22	23	24

Basic Facts

	Value	Year
Population (million)	4.42	2011
Land area (km ² '000)	267.7	2010
GDP (\$ billion)	161.6	2011
GDP (PPP) per capita (\$)	29,576	2011
Real GDP growth (%)	1.4	2011
Consumer price inflation (%)	4.0	2011
Unemployment rate (%)	6.50	2011
Labor force (million)	2.39	2011
Current account balance (%)	-4.03	2011
Direct investment		
Stocks inward (\$ billion)	70.13	2010
Flows inward (% of GDP)	0.50	2010

Competitiveness Landscape



Russia - Overall Performance

>> Overall Competitiveness

	2008	2009	2010	2011	2012
Rank	47	49	51	49	48

>> Economic Performance

	2008	2009	2010	2011	2012
Rank	49	49	49	42	45

>> Government Efficiency

	2008	2009	2010	2011	2012
Rank	30	39	40	46	45

>> Business Efficiency

	2008	2009	2010	2011	2012
Rank	49	54	53	54	53

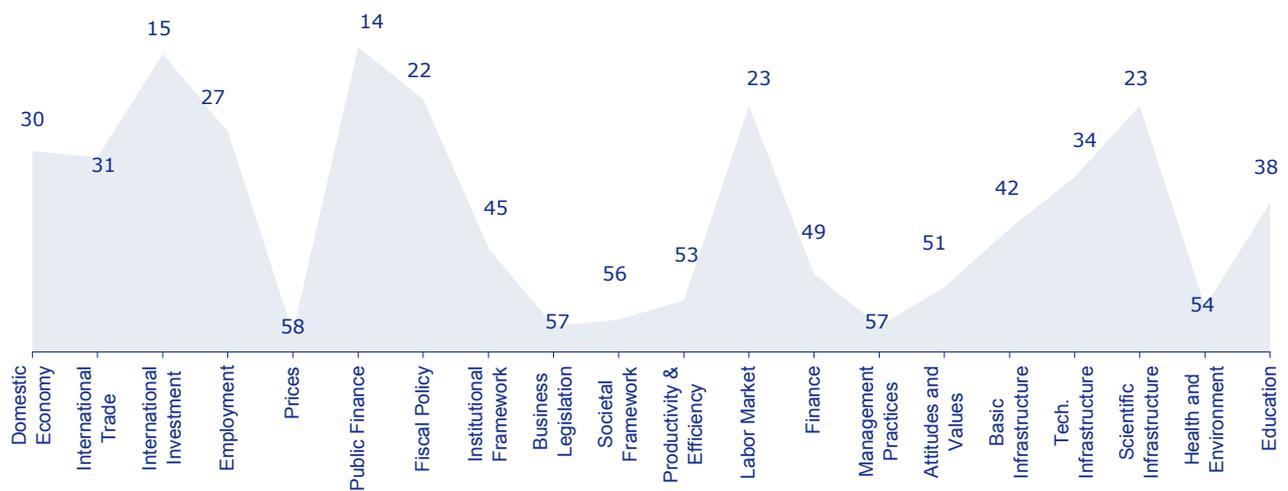
>> Infrastructure

	2008	2009	2010	2011	2012
Rank	45	38	38	38	38

Basic Facts

	Value	Year
Population (million)	142.89	2011
Land area (km ² '000)	17,098.2	2010
GDP (\$ billion)	1,857.8	2011
GDP (PPP) per capita (\$)	20,588	2011
Real GDP growth (%)	4.3	2011
Consumer price inflation (%)	8.4	2011
Unemployment rate (%)	6.63	2011
Labor force (million)	75.75	2011
Current account balance (%)	5.32	2011
Direct investment		
Stocks inward (\$ billion)	423.15	2010
Flows inward (% of GDP)	2.85	2011

Competitiveness Landscape



APPENDIX I

METHODOLOGY AND PRINCIPLES OF ANALYSIS

What is the World Competitiveness Yearbook?

The IMD World Competitiveness Yearbook (WCY) is the world's most thorough and comprehensive annual report on the competitiveness of nations, published without interruption since 1989. It is considered to be the first access point to world competitiveness, providing objective benchmarking and trends, as well as a worldwide reference point to statistics and opinion data that highlight the competitiveness of key economies. The WCY analyzes and ranks how nations and enterprises manage the totality of their competencies to achieve increased prosperity. An economy's competitiveness cannot be reduced only to GDP and productivity because enterprises must also cope with political, social and cultural dimensions. Therefore nations need to provide an environment that has the most efficient structure, institutions and policies that encourage the competitiveness of enterprises.

This year, the WCY provides extensive coverage of 59 economies, all key players in world markets. All economies are chosen because of their impact on the global economy and the availability of comparable international statistics.

Over 300 competitiveness criteria have been selected as a result of extensive research using economic literature, international, national and regional sources and feedback from the business community, government agencies and academics. The criteria are revised and updated on a regular basis as new theory, research and data become available and as the global economy evolves. A long-established collaboration with our Partner Institutes worldwide also helps ensure that the data is reliable, accurate and as up-to-date as possible. This year, we have the privilege of collaborating with a unique network of 54 Partner Institutes.

Who uses the World Competitiveness Yearbook?

The WCY is an invaluable, dynamic and constantly updated benchmark for decision-makers. The business community uses it to help determine and validate investment plans and to assess locations for new operations. Governments find important indicators to benchmark their policies against those of other countries, to evaluate performance over time and to learn from the "success stories" of nations that have improved their competitiveness. The academic world also uses the exceptional wealth of data in the WCY to better understand and analyze how nations (and not only enterprises) compete in world markets.

TABLE I • Competitiveness Factors

Economic Performance (78 criteria)	Macro-economic evaluation of the domestic economy: Domestic Economy, International Trade, International Investment, Employment and Prices.
Government Efficiency (70 criteria)	Extent to which government policies are conducive to competitiveness: Public Finance, Fiscal Policy, Institutional Framework, Business Legislation and Societal Framework.
Business Efficiency (67 criteria)	Extent to which the national environment encourages enterprises to perform in an innovative, profitable and responsible manner: Productivity and Efficiency, Labor Market, Finance, Management Practices and Attitudes and Values.
Infrastructure (114 criteria)	Extent to which basic, technological, scientific and human resources meet the needs of business: Basic Infrastructure, Technological Infrastructure, Scientific Infrastructure, Health and Environment and Education.

How does the World Competitiveness Yearbook measure Competitiveness?

During the past two decades, the methodology to assess the competitiveness of nations has constantly been fine-tuned to take into account the evolution of the global environment and new research. In this way, the WCY keeps pace with structural changes in national environments and the rapidly changing technological revolution. We make these changes gradually so that we can continue to compare the results from year to year and highlight the evolution of an economy's performance relative to the competitiveness of others. Based on analysis made by leading scholars and by our own research and experience, the methodology of the WCY divides the national environment into four main Competitiveness Factors: Economic Performance, Government Efficiency, Business Efficiency and Infrastructure. Each of these four factors has been broken down into five sub-factors, each highlighting different facets of competitiveness. Altogether, the WCY features 20 such sub-factors. (See Tables 1 and 2).

Some of these sub-factors have been further divided into categories that define competitiveness issues more explicitly. All criteria have been grouped into these sub-factors and categories. However, each sub-factor does not necessarily include the same number of criteria (for example, it takes more criteria to assess Education than to evaluate Prices). Each sub-factor, independently of the number of criteria it contains, has the same weight in the overall consolidation of results, that is 5% ($20 \times 5 = 100$). This allows us to "lock" the weight of the sub-factors regardless of the number of criteria they include. We believe that this approach improves the reliability of the results and helps ensure a high degree of compatibility with past results. Statistics are sometimes prone to errors or omissions... Locking the weights of sub-factors has the same function as building "fire barriers"; it prevents problems from spreading in a disproportionate way. In addition, the past five years' results are shown for every economy, in order to highlight the evolution of its competitiveness.

The WCY uses different types of data to measure quantifiable and qualitative issues separately. Statistical indicators are acquired from international, national and regional organizations, private institutions and our network of 54 Partner Institutes worldwide. These statistics are referred to in the WCY as Hard Data and include 131 criteria used to determine the overall rankings and 83 criteria presented as valuable background information but not used in the calculation of the rankings. The Hard Data represent a weight of approximately two-thirds in the overall ranking. An additional 115 criteria are drawn from our annual Executive Opinion Survey and are referred to in the WCY as Survey Data. The survey questions are included in the Yearbook as individual criteria and are also used in calculating the overall ranking, representing a weight of approximately one-third.

Executive Opinion Survey

Every year, we conduct an Executive Opinion Survey in order to complement the statistics that we use from international, national and regional sources. Whereas the Hard Data shows how competitiveness is measured over a specific period of time, the Survey Data measures competitiveness as it is perceived. The survey was designed to quantify issues that are not easily measured, for example: management practices, labor relations, corruption, environmental concerns or quality of life. The survey responses reflect present and future perceptions of competitiveness by business executives who are dealing with international business situations. Their responses are more recent and closer to reality since there is no time lag, which is often a problem with Hard Data that shows a "picture of the past".

The Executive Opinion Survey is sent to executives in top- and middle management in all of the economies covered by the WCY. In order to be statistically representative, we select a

TABLE 2 • The Breakdown of Competitiveness Factors

 Economic Performance	 Government Efficiency	 Business Efficiency	 Infrastructure
Domestic Economy	Public Finance	Productivity	Basic Infrastructure
International Trade	Fiscal Policy	Labor Market	Technological Infrastructure
International Investment	Institutional Framework	Finance	Scientific Infrastructure
Employment	Business Legislation	Management Practices	Health and Environment
Prices	Societal Framework	Attitudes and Values	Education

sample size which is proportional to the GDP of each economy. The sample of respondents are representative of the entire economy, covering a cross-section of the business community in each economic sector: primary, manufacturing and services, based on their contribution to the GDP of the economy. The survey respondents are nationals or expatriates, located in local and foreign enterprises in the economy and which, in general, have an international dimension. They are asked to evaluate the present and expected competitiveness conditions of the economy in which they work and have resided during the past year, drawing from the wealth of their international experience, thereby ensuring that the evaluations portray an in-depth knowledge of their particular environment. We try to contact most IMD alumni and all responses returned to IMD are treated as confidential. The surveys are sent in January and are returned in April; in 2012, we received 4,210 responses from the 59 economies worldwide.

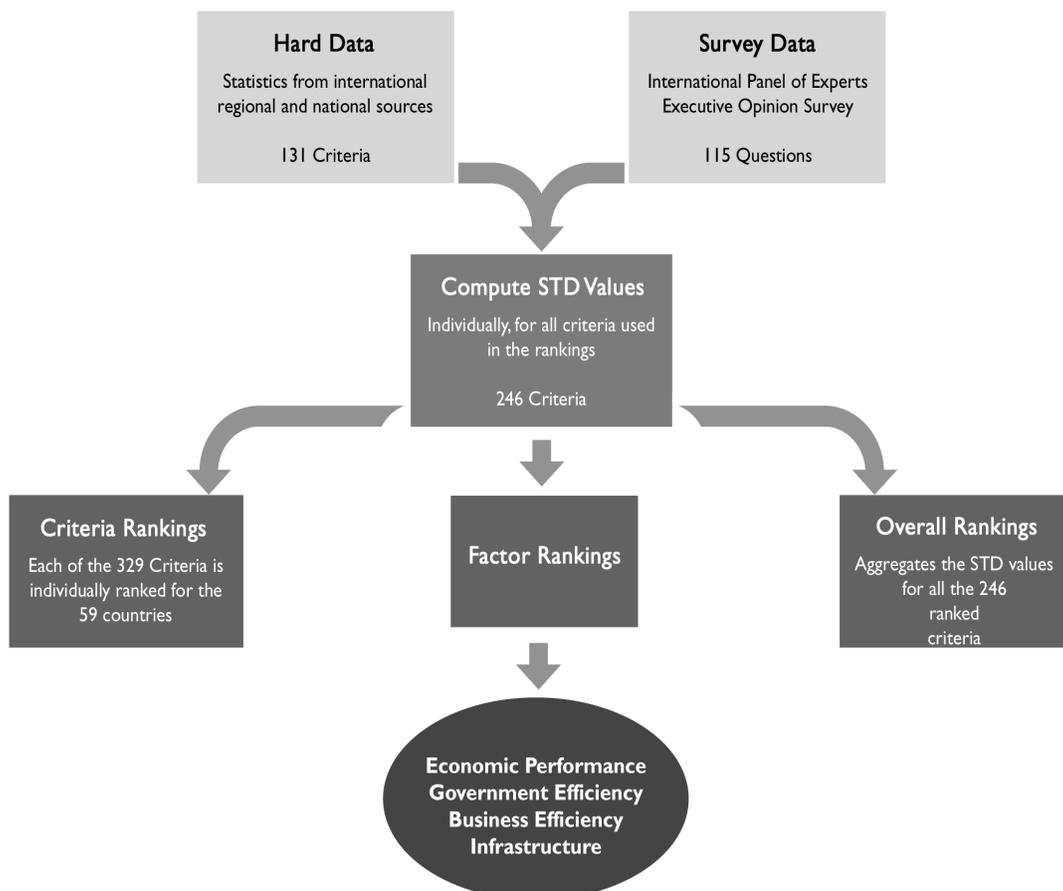
The respondents assess the competitiveness issues by answering the questions on a scale of 1 to 6. The average value for each economy is then calculated and converted into a 0 to 10 scale. Finally, the survey responses are transformed into their standard deviation values, from which the rankings are calculated.

How are the rankings computed?

The essential building block for the rankings is the standardized value for all the criteria, which we call the STD value. The first step is to compute the STD value for each criterion using the data available for all of the economies. (For more details, see Data Processing Methodology that follows). We then rank the economies based on the 246 criteria that are used in the aggregation: 131 Hard and 115 Survey data. The additional 83 criteria are presented for background information only. They are not included in the aggregation of data to determine the overall rankings. In most cases, a higher value is better, for example, for Gross Domestic Product; the economy with the highest standardized value is ranked first while the one with the lowest is last. However, with some criteria the inverse may be true, where the lowest value is the most competitive, for example, Consumer Price Inflation. In these cases, a reverse ranking is used: the economy with the highest standardized value is ranked last and the one with the lowest is first.

Since all economies' statistics are standardized, they can be aggregated to compute indices. We use these index values, which we call "scores", to compute the following rankings: the Overall Scoreboard, Competitiveness Factor rankings and

TABLE 3 • Computing the Rankings



Sub-factor rankings. When data is unavailable or too old to be relevant for a particular economy, the name of the economy appears at the bottom of the statistical table for the criterion being measured and a dash is shown. In the aggregation of the statistics, all missing data are given STD values imputed from the average of existing data within the sub-factor. See Table 3: Computing the Rankings.

Data Processing Methodology

There are 329 criteria in the World Competitiveness Yearbook, of which 246 are used to calculate the Overall Competitiveness rankings. The remaining 83 criteria are presented as background information only.

Every economy's performance is assessed for each criterion using the Standard Deviation Method (SDM) which is described below. In most cases, a higher value is better, for example, for Gross Domestic Product; the economy with the highest standardized value is ranked first while the one with the lowest is last. However, with some criteria, the lowest value is the most competitive, which is the case for Consumer Price Inflation. In these cases, a reverse ranking is used: the economy with the highest standardized value is ranked last and the one with the lowest is first.

Standard Deviation Method

As most of the criteria are scaled differently, a comparable standard scale is used to compute the overall, factor and sub-factor results. The Standard Deviation Method (SDM) is used. It measures the relative difference between the economies' performances; therefore, each country's relative position in the final rankings is more accurately assessed.

First, for each criterion, we compute the average value for the entire population of economies. Then, the standard deviation is calculated using the following formula:

$$S = \sqrt{\frac{\sum (x - \bar{x})^2}{N}}$$

Finally, we compute each of the 59 economies' standardized values (STD) for the 246 ranked criteria. The STD is calculated by subtracting the average value of the 59 economies from the economy's original value and then dividing the result by the standard deviation.

The STD value for criteria i is calculated as follows:

$$(\text{STD value})_i = \frac{x - \bar{x}}{S}$$

Where:

x = original value

\bar{x} = average value of the 59 economies

N = number of economies

S = standard deviation

Aggregation of Data and Rankings

Standardized values are calculated for each individual criterion, based on the STD Method described above. All Hard data indicators are reviewed to determine the shape of the distribution. Non-normal data is normalized by taking the log. The STD is then calculated using the logged values.

The sub-factor rankings are determined by calculating the average of the criteria STD values that make up the sub-factor, excluding the background criteria. All the hard data have a weight of 1. The survey data are weighted so that the survey accounts for one-third in the determination of the overall ranking. Thus, for 2012, each survey criterion has a weight of 0.55. When data is unavailable for particular economies, the missing values are replaced by STD values that are imputed from the average of existing data within the sub-factor. Taking the average for each sub-factor enables us to "lock" the weight of the 20 sub-factors independently of the number of criteria they contain so that each sub-factor has an equal impact on the overall ranking, that is 5%.

Next, we aggregate the sub-factor STD values to determine the Competitiveness Factor rankings. Only ranked criteria are aggregated to obtain these rankings. The STD values of the Competitiveness Factors are then aggregated to determine the Overall Scoreboard. All of the ranked criteria comprised in the four competitiveness factors are thus included in the consolidation of data.

The 83 remaining criteria are presented as background information only and are not included in any aggregation of data to determine rankings. Some background data are presented in ranking order while others are shown alphabetically, depending on what the data is meant to measure.

Since all of the statistics are standardized, they can be aggregated to compute indices. We use these index values, which we call "scores", to compute the rankings for the four Competitiveness Factors and the Overall Scoreboard.

It should be noted that across the four Competitiveness Factors, only one economy will have a value equal to 100 and one economy will have a value equal to 0. To calculate the Overall Scoreboard, we take the average of the four Factors' scores and then convert them into an index with the leading economy given a value of 100.

Survey Criteria

Each year we conduct a survey to quantify issues related to competitiveness for which there are no hard statistics. The survey is an in-depth 115-point questionnaire sent to top- and middle management in the 59 economies covered by the WCY. The distribution reflects a breakdown of industry by sectors: Primary, Industry/Manufacturing and Services/ Finance. In order to be statistically representative, we select a sample size which is proportional to the GDP breakdown of economic sectors of the economy.

In 2012, we had 4,210 executives respond to the survey for an average of approximately 72 per economy. The target list is determined by IMD and has been developed over many years with the collaboration of our Partner Institutes worldwide. Confidentiality is ensured and the list is revised and updated every year. Respondents are only answering with regard to the economy in which they have worked and resided for the past year; therefore, the results reflect widespread knowledge about each economy and draw on the wealth of their international experience.

The respondents assess the competitiveness issues by answering the questions on a scale of 1-6, with the response 1 generally indicating a negative perception and 6 indicating the most positive perception. The WCY calculates the average value for each economy, then the data is converted from a 1-6 scale to a 0-10 scale, using the formula below. Finally, the survey responses are transformed into their standard deviation values, from which the rankings are calculated.

$$(x * 2) - 2$$

where x = average value

Trends

A trend or growth rate, while offering a more dynamic assessment than absolute values, is meaningful only if a economy's actual comparative advantage or disadvantage at one point in time is also measured. The formulas used to calculate trends and growth rates are explained below:

1. Annual real growth rate (i = inflation rate):

$$\left(\frac{\text{value}_{\text{Year}}}{\text{value}_{\text{Year-1}} \left(1 + \frac{i_{\text{Year}}}{100} \right)} - 1 \right) \times 100$$

2. Average annual percentage growth rate (n = number of periods):

$$\frac{\text{value}_{\text{Year}} - \text{value}_{\text{Year-1}}}{\text{value}_{\text{Year-1}}} + \frac{\text{value}_{\text{Year-1}} - \text{value}_{\text{Year-2}}}{\text{value}_{\text{Year-2}}} + \dots}{n-1} \times 100$$

But growth formulas may have shortcomings. The average annual growth rate fails to reveal the real extent of changes, as it flattens or inflates year-to-year growth rates. For example, an average growth rate over two years might be calculated at 15 percent, while in reality there was 5 percent growth between the first and second years, and 25 percent between the second and third years. The average annual growth is used only when data vary widely in the middle years of a period, and less widely between the first and last years of the period. It is also used in cases where it is impossible to combine negative and positive initial and final values. This approach gives a more accurate picture than does the compound rate under these circumstances.

Deflated values

The following formula is used when calculating real growth rates from nominal values, because it takes into account cumulative inflation (e.g. real growth in Household Consumption Expenditure). The final deflated value is then used to obtain the annual real growth rate.

Taking a 5-year time span as an example:

Deflated final value (i = inflation rate):

$$\frac{\text{value}_{\text{Year}}}{\left(1 + \frac{i_{\text{Year-4}}}{100} \right) \times \left(1 + \frac{i_{\text{Year-3}}}{100} \right) \times \dots \times \left(1 + \frac{i_{\text{Year}}}{100} \right)}$$

Economic Performance

DOMESTIC ECONOMY

Size

I.1.01 Gross Domestic Product (GDP)	US\$ billions
I.1.02 GDP (PPP)	Estimates ; US\$ billions at purchasing power parity
I.1.03 World GDP contribution (%)	Percentage share of world GDP in market prices
I.1.04 Household consumption expenditure (\$bn)	US\$ billions
I.1.05 Household consumption expenditure (%)	Percentage of GDP
I.1.06 Government consumption expenditure (\$bn)	US\$ billions
I.1.07 Government consumption expenditure (%)	Percentage of GDP
I.1.08 Gross fixed capital formation (\$bn)	US\$ billions
I.1.09 Gross fixed capital formation (%)	Percentage of GDP
I.1.10 Gross domestic savings (\$bn)	US\$ billions
I.1.11 Gross domestic savings (%)	Percentage of GDP
I.1.12 Economic sectors	Breakdown of the economic sectors, percentage of GDP
I.1.13 Diversification of the economy	Diversification of the economy (industries, export markets, etc.) is extensive

Growth

I.1.14 Real GDP growth	Percentage change, based on national currency in constant prices
I.1.15 Real GDP growth per capita	Percentage change, based on national currency in constant prices
I.1.16 Household consumption expenditure - real growth	Percentage change, based on constant prices.
I.1.17 Government consumption expenditure - real growth	Percentage change, based on constant prices.
I.1.18 Gross fixed capital formation - real growth	Percentage change, based on constant prices.
I.1.19 Resilience of the economy	Resilience of the economy to economic cycles is strong

Wealth

I.1.20 GDP per capita	US\$ per capita
I.1.21 GDP (PPP) per capita	Estimates; US\$ per capita at purchasing power parity

Forecasts

I.1.22 Forecast: Real GDP growth	Percentage change, based on national currency in constant prices
I.1.23 Forecast: Inflation	Percentage change
I.1.24 Forecast: Unemployment	Percentage of total labor force
I.1.25 Forecast: Current account balance	Percentage of GDP/GNP

INTERNATIONAL TRADE

I.2.01 Current account balance (\$bn)	US\$ billions (minus sign = deficit)
I.2.02 Current account balance (%)	Percentage of GDP
I.2.03 Balance of trade (\$bn)	US\$ billions (minus sign = deficit)
I.2.04 Balance of trade (%)	Percentage of GDP
I.2.05 Balance of commercial services (\$bn)	US\$ billions (minus sign = deficit)
I.2.06 Balance of commercial services (%)	Percentage of GDP
I.2.07 World exports contribution (%)	Percentage share of world exports (goods and commercial services)
I.2.08 Exports of goods (\$bn)	US\$ billions
I.2.09 Exports of goods (%)	Percentage of GDP
I.2.10 Exports of goods per capita	US\$ per capita
I.2.11 Exports of goods - growth	Percentage change, based on US\$ values
I.2.12 Exports of commercial services (\$bn)	US\$ billions
I.2.13 Exports of commercial services (%)	Percentage of GDP
I.2.14 Exports of commercial services - growth	Percentage change, based on US\$ values
I.2.15 Exports of goods & commercial services (\$bn)	US\$ billions
I.2.16 Exports breakdown by economic sector	Percentage of total exports
I.2.17 Imports of goods & commercial services (\$bn)	US\$ billions
I.2.18 Imports of goods & commercial services (%)	Percentage of GDP
I.2.19 Imports of goods & commercial services - growth	Percentage change, based on US\$ values
I.2.20 Imports breakdown by economic sector	Percentage of total imports
I.2.21 Trade to GDP ratio	(Exports + Imports) / (2 * GDP)
I.2.22 Terms of trade index	Unit value of exports over unit value of imports (2005 = 100)
I.2.23 Tourism receipts (%)	International tourism receipts as a percentage of GDP
I.2.24 Exchange rates	Exchange rates support the competitiveness of enterprises

INTERNATIONAL INVESTMENT

Investment

I.3.01 Direct investment flows abroad (\$bn)	US\$ billions
I.3.02 Direct investment flows abroad (%)	Percentage of GDP
I.3.03 Direct investment stocks abroad (\$bn)	US\$ billions
I.3.04 Direct investment stocks abroad (%)	Percentage of GDP
I.3.05 Direct investment flows inward (\$bn)	US\$ billions
I.3.06 Direct investment flows inward (%)	Percentage of GDP
I.3.07 Direct investment stocks inward (\$bn)	US\$ billions
I.3.08 Direct investment stocks inward (%)	Percentage of GDP
I.3.09 Balance of direct investment flows (\$bn)	US\$ billions (flows abroad minus flows inward)
I.3.10 Balance of direct investment flows (%)	Percentage of GDP (flows abroad minus flows inward)
I.3.11 Net position in direct investment stocks (\$bn)	US\$ billions (stocks abroad minus stocks inward)
I.3.12 Net position in direct investment stocks (%)	Percentage of GDP (stocks abroad minus stocks inward)
I.3.13 Relocation threats of production	Relocation of production is not a threat to the future of your economy
I.3.14 Relocation threats of R&D facilities	Relocation of R&D facilities is not a threat to the future of your economy
I.3.15 Relocation threats of services	Relocation of services is not a threat to the future of your economy

Finance

I.3.16 Portfolio investment assets (\$bn)	US\$ billions
I.3.17 Portfolio investment liabilities (\$bn)	US\$ billions

EMPLOYMENT

I.4.01 Employment	Total employment in millions
I.4.02 Employment (%)	Percentage of population
I.4.03 Employment - growth	Estimates: percentage change
I.4.04 Employment by sector	Percentage of total employment
I.4.05 Employment in the public sector (%)	Percentage of total employment
I.4.06 Unemployment rate	Percentage of labor force
I.4.07 Long-term unemployment	Percentage of labor force
I.4.08 Youth unemployment	Percentage of youth labor force (under the age of 25)

PRICES

I.5.01 Consumer price inflation	Average annual rate
I.5.02 Cost-of-living index	Index of a basket of goods & services in major cities, including housing (New York City = 100)
I.5.03 Apartment rent	3-room apartment monthly rent in major cities, US\$
I.5.04 Office rent	Total occupation cost (US\$/Sq.M. per year)

Government Efficiency

PUBLIC FINANCE

2.1.01 Government budget surplus/deficit (\$bn)	US\$ billions
2.1.02 Government budget surplus/deficit (%)	Percentage of GDP
2.1.03 Total general government debt (\$bn)	US\$ billions
2.1.04 Total general government debt (%)	Percentage of GDP
2.1.05 Total general government debt-real growth	Percentage change, based on national currency in constant prices
2.1.06 Central government domestic debt (%)	Percentage of GDP
2.1.07 Central government foreign debt (%)	Percentage of GDP
2.1.08 Interest payment (%)	Percentage of current revenue
2.1.09 Public finances	Public finances are being efficiently managed
2.1.10 Tax evasion	Tax evasion is being adequately addressed
2.1.11 Pension funding	Pension funding is adequately addressed for the future
2.1.12 General government expenditure (%)	Percentage of GDP

FISCAL POLICY

2.2.01 Collected total tax revenues (%)	Percentage of GDP
2.2.02 Collected personal income tax (%)	On profits, income and capital gains, as a percentage of GDP
2.2.03 Collected corporate taxes (%)	On profits, income and capital gains, as a percentage of GDP
2.2.04 Collected indirect tax revenues (%)	Taxes on goods and services as a percentage of GDP
2.2.05 Collected capital and property taxes (%)	Percentage of GDP
2.2.06 Collected social security contribution (%)	Compulsory contribution of employees and employers as a percentage of GDP
2.2.07 Effective personal income tax rate	Percentage of an income equal to GDP per capita
2.2.08 Corporate tax rate on profit	Maximum tax rate, calculated on profit before tax
2.2.09 Consumption tax rate	Standard rate of VAT/GST
2.2.10 Employee's social security contribution rate	Compulsory contribution as a percentage of an income equal to GDP per capita
2.2.11 Employer's social security contribution rate	Compulsory contribution as a percentage of an income equal to GDP per capita
2.2.12 Real personal taxes	Real personal taxes do not discourage people from working or seeking advancement
2.2.13 Real corporate taxes	Real corporate taxes do not discourage entrepreneurial activity

INSTITUTIONAL FRAMEWORK

Central Bank

2.3.01 Real short-term interest rate	Real discount / bank rate
2.3.02 Cost of capital	Cost of capital encourages business development
2.3.03 Interest rate spread	Lending rate minus deposit rate
2.3.04 Country credit rating	Rating on a scale of 0-100 assessed by the Institutional Investor Magazine
2.3.05 Central bank policy	Central bank policy has a positive impact on economic development
2.3.06 Foreign currency reserves (\$bn)	US\$ billions
2.3.07 Exchange rate stability	Parity change from national currency to SDR, 2011 / 2009

State Efficiency

2.3.08 Legal and regulatory framework	The legal and regulatory framework encourages the competitiveness of enterprises
2.3.09 Adaptability of government policy	Adaptability of government policy to changes in the economy is high
2.3.10 Government decisions	Government decisions are effectively implemented
2.3.11 Transparency	Transparency of government policy is satisfactory
2.3.12 Bureaucracy	Bureaucracy does not hinder business activity
2.3.13 Bribing and corruption	Bribing and corruption do not exist

BUSINESS LEGISLATION

Openness

2.4.01	Tariff barriers	Tariffs on imports: Most favored nation simple average rate
2.4.02	Customs' authorities	Customs' authorities do facilitate the efficient transit of goods
2.4.03	Protectionism	Protectionism does not impair the conduct of your business
2.4.04	Public sector contracts	Public sector contracts are sufficiently open to foreign bidders
2.4.05	Foreign investors	Foreign investors are free to acquire control in domestic companies
2.4.06	Capital markets	Capital markets (foreign and domestic) are easily accessible
2.4.07	Investment incentives	Investment incentives are attractive to foreign investors

Competition and Regulations

2.4.08	Government subsidies (%)	To private and public companies as a percentage of GDP
2.4.09	Subsidies	Subsidies do not distort fair competition and economic development
2.4.10	State ownership of enterprises	State ownership of enterprises is not a threat to business activities
2.4.11	Competition legislation	Competition legislation is efficient in preventing unfair competition
2.4.12	Parallel economy	Parallel (black-market, unrecorded) economy does not impair economic development
2.4.13	Ease of doing business	Ease of doing business is supported by regulations
2.4.14	Creation of firms	Creation of firms is supported by legislation
2.4.15	Start-up days	Number of days to start a business
2.4.16	Start-up procedures	Number of procedures to start a business

Labor Regulations

2.4.17	Labor regulations	Labor regulations (hiring/firing practices, minimum wages, etc.) do not hinder business activities
2.4.18	Unemployment legislation	Unemployment legislation provides an incentive to look for work
2.4.19	Immigration laws	Immigration laws do not prevent your company from employing foreign labor
2.4.20	Redundancy costs	Number of weeks of salary

SOCIETAL FRAMEWORK

2.5.01	Justice	Justice is fairly administered
2.5.02	Personal security and private property rights	Personal security and private property rights are adequately protected
2.5.03	Ageing of society	Ageing of society is not a burden for economic development
2.5.04	Risk of political instability	The risk of political instability is very low
2.5.05	Social cohesion	Social cohesion is a priority for the government
2.5.06	Gini index	Equal distribution of income scale: 0 (absolute equality) to 100 (absolute inequality)
2.5.07	Income distribution - lowest 10%	Percentage of household incomes going to lowest 10% of households
2.5.08	Income distribution - highest 10%	Percentage of household incomes going to highest 10% of households
2.5.09	Equal opportunity	Equal opportunity legislation in your economy encourages economic development
2.5.10	Females in parliament (%)	Percentage of total seats in Parliament
2.5.11	Women on boards (%)	Boardmembers of all companies analyzed by GMI
2.5.12	Gender inequality	Gender Inequality Index (UNDP)

Business Efficiency

PRODUCTIVITY AND EFFICIENCY

3.1.01 Overall productivity (PPP)	Estimates: GDP (PPP) per person employed, US\$
3.1.02 Overall productivity	GDP per person employed, US\$
3.1.03 Overall productivity - real growth	Estimates: Percentage change of real GDP per person employed
3.1.04 Labor productivity (PPP)	Estimates: GDP (PPP) per person employed per hour, US\$
3.1.05 Labor productivity (PPP) growth	Percentage change of GDP (PPP) per person employed per hour
3.1.06 Agricultural productivity (PPP)	Estimates: Related GDP (PPP) per person employed in agriculture, US\$
3.1.07 Productivity in industry (PPP)	Estimates: Related GDP (PPP) per person employed in industry, US\$
3.1.08 Productivity in services (PPP)	Estimates: Related GDP (PPP) per person employed in services, US\$
3.1.09 Large corporations	Large corporations are efficient by international standards
3.1.10 Small and medium-size enterprises	Small and medium-size enterprises are efficient by international standards
3.1.11 Productivity of companies	Productivity of companies is supported by global strategies (supplies, offshoring, outsourcing)

LABOR MARKET

Costs

3.2.01 Compensation levels (\$)	Total hourly compensation in manufacturing (wages + supplementary benefits), US\$
3.2.02 Unit labor costs in the manufacturing sector (%)	Percentage change
3.2.03 Remuneration in services professions (\$)	Gross annual income including supplements such as bonuses, US\$
3.2.04 Remuneration of management (\$)	Total base salary plus bonuses and long-term incentives, US\$
3.2.05 Remuneration spread	Ratio of CEO to personal assistant remuneration

Relations

3.2.06 Working hours	Average number of working hours per year
3.2.07 Labor relations	Labor relations are generally productive
3.2.08 Worker motivation	Worker motivation in companies is high
3.2.09 Industrial disputes	Working days lost per 1,000 inhabitants per year (average 2008-2010)
3.2.10 Employee training	Employee training is a high priority in companies

Availability of Skills

3.2.11 Labor force	Employed and registered unemployed (millions)
3.2.12 Labor force (%)	Percentage of population
3.2.13 Labor force growth	Percentage change
3.2.14 Part-time employment (%)	Percentage of total employment
3.2.15 Female labor force (%)	Percentage of total labor force
3.2.16 Foreign labor force (%)	Percentage of total labor force
3.2.17 Skilled labor	Skilled labor is readily available
3.2.18 Finance skills	Finance skills are readily available
3.2.19 Attracting and retaining talents	Attracting and retaining talents is a priority in companies
3.2.20 Brain drain	Brain drain (well-educated and skilled people) does not hinder competitiveness in your economy
3.2.21 Foreign high-skilled people	Foreign high-skilled people are attracted to your country's business environment
3.2.22 International experience	International experience of senior managers is generally significant
3.2.23 Competent senior managers	Competent senior managers are readily available

FINANCE

Bank Efficiency

3.3.01 Banking sector assets (%)	Percentage of GDP
3.3.02 Financial cards in circulation	Number of cards per capita
3.3.03 Financial card transactions	US\$ per capita
3.3.04 Investment risk	Euromoney country risk overall (scale from 0-100)
3.3.05 Banking and financial services	Banking and financial services do support business activities efficiently
3.3.06 Finance and banking regulation	Finance and banking regulation is sufficiently effective
3.3.07 Financial risk factor	The risk factor in the financial system is adequately addressed

Stock Market Efficiency

3.3.08 Stock markets	Stock markets provide adequate financing to companies
3.3.09 Stock market capitalization (\$bn)	US\$ billions
3.3.10 Stock market capitalization (%)	Percentage of GDP
3.3.11 Value traded on stock markets	US\$ per capita
3.3.12 Listed domestic companies	Number of listed domestic companies
3.3.13 Stock market index (%)	Percentage change on index in national currency
3.3.14 Shareholders' rights	Shareholders' rights are sufficiently implemented

Finance Management

3.3.15 Credit	Credit is easily available for business
3.3.16 Venture capital	Venture capital is easily available for business
3.3.17 Corporate debt	Corporate debt does not restrain the ability of enterprises to compete

MANAGEMENT PRACTICES

3.4.01 Adaptability of companies	Adaptability of companies to market changes is high
3.4.02 Ethical practices	Ethical practices are implemented in companies
3.4.03 Credibility of managers	Credibility of managers in society is strong
3.4.04 Corporate boards	Corporate boards do supervise the management of companies effectively
3.4.05 Auditing and accounting practices	Auditing and accounting practices are adequately implemented in business
3.4.06 Customer satisfaction	Customer satisfaction is emphasized in companies
3.4.07 Entrepreneurship	Entrepreneurship of managers is widespread in business
3.4.08 Social responsibility	Social responsibility of business leaders is high
3.4.09 Health, safety & environmental concerns	Health, safety & environmental concerns are adequately addressed by management

ATTITUDES AND VALUES

3.5.01 Attitudes toward globalization	Attitudes toward globalization are generally positive in your society
3.5.02 Image abroad	The image abroad of your country encourages business development
3.5.03 National culture	The national culture is open to foreign ideas
3.5.04 Flexibility and adaptability	Flexibility and adaptability of people are high when faced with new challenges
3.5.05 Need for economic and social reforms	The need for economic and social reforms is generally well understood
3.5.06 Value system	The value system in your society supports competitiveness
3.5.07 Corporate values	Corporate values take into account the values of employees

Infrastructure

BASIC INFRASTRUCTURE

4.1.01 Land area	Square kilometers ('000)
4.1.02 Arable area	Square meters per capita
4.1.03 Water resources	Total internal renewable per capita in cubic meters
4.1.04 Access to water	Access to water is adequately ensured and managed
4.1.05 Access to commodities	Access to commodities (basic resources, food, etc.) is adequately addressed
4.1.06 Management of cities	Management of cities supports business development
4.1.07 Population - market size	Estimates in millions
4.1.08 Population under 15 years (%)	Percentage of total population
4.1.09 Population over 65 years (%)	Percentage of total population
4.1.10 Dependency ratio	Population under 15 and over 64 years old, divided by active population (15 to 64 years)
4.1.11 Roads	Density of the network, km roads/square km land area
4.1.12 Railroads	Density of the network, km per square km
4.1.13 Air transportation	Number of passengers carried by main companies, thousands
4.1.14 Quality of air transportation	Quality of air transportation encourages business development
4.1.15 Distribution infrastructure	The distribution infrastructure of goods and services is generally efficient
4.1.16 Water transportation	Water transportation (harbors, canals, etc.) meets business requirements
4.1.17 Maintenance and development	Maintenance and development of infrastructure are adequately planned and financed
4.1.18 Energy infrastructure	Energy infrastructure is adequate and efficient
4.1.19 Future energy supply	Future energy supply is adequately ensured
4.1.20 Total indigenous energy production	Millions MTOE
4.1.21 Total indigenous energy production (%)	Percentage of total requirements in tons of oil equivalent
4.1.22 Total final energy consumption	Millions MTOE
4.1.23 Total final energy consumption per capita	MTOE per capita
4.1.24 Electricity costs for industrial clients	US\$ per kwh
4.1.25 Gasoline prices	Premium unleaded gasoline (95 Ron) US\$ per litre

TECHNOLOGICAL INFRASTRUCTURE

4.2.01 Investment in telecommunications (%)	Percentage of GDP
4.2.02 Fixed telephone lines	Number of main lines per 1000 inhabitants
4.2.03 Fixed telephone tariffs	US\$ per 3 minutes local call (peak)
4.2.04 Mobile telephone subscribers	Number of subscribers per 1000 inhabitants
4.2.05 Mobile telephone costs	Prepaid Mobile cellular tariffs – US\$ per minute local call, off-net (peak)
4.2.06 Communications technology	Communications technology (voice and data) meets business requirements
4.2.07 Connectivity	Connectivity of people and firms (telecom, IT, etc.) is highly extensive
4.2.08 Computers in use	Worldwide share/ Source: Computer Industry Almanac
4.2.09 Computers per capita	Number of computers per 1000 people/ Source: Computer Industry Almanac
4.2.10 Internet users	Number of internet users per 1000 people/ Source: Computer Industry Almanac
4.2.11 Fixed broadband tariffs	Monthly fee (residential), US\$
4.2.12 Broadband subscribers	Number of subscribers per 1000 inhabitants
4.2.13 Internet bandwidth speed	Per internet user (kbps)
4.2.14 Information technology skills	Information technology skills are readily available
4.2.15 Qualified engineers	Qualified engineers are available in your labor market
4.2.16 Technological cooperation	Technological cooperation between companies is developed
4.2.17 Public and private sector ventures	Public and private sector ventures are supporting technological development
4.2.18 Development and application of technology	Development and application of technology are supported by the legal environment
4.2.19 Funding for technological development	Funding for technological development is readily available
4.2.20 Technological regulation	Technological regulation supports business development and innovation
4.2.21 High-tech exports (\$)	US\$ millions
4.2.22 High-tech exports (%)	Percentage of manufactured exports
4.2.23 Cyber security	Cyber security is being adequately addressed by corporations

SCIENTIFIC INFRASTRUCTURE

4.3.01 Total expenditure on R&D (\$)	US\$ millions
4.3.02 Total expenditure on R&D (%)	Percentage of GDP
4.3.03 Total expenditure on R&D per capita (\$)	US\$ per capita
4.3.04 Business expenditure on R&D (\$)	US\$ millions
4.3.05 Business expenditure on R&D (%)	Percentage of GDP
4.3.06 Total R&D personnel nationwide	Full-time work equivalent (FTE thousands)
4.3.07 Total R&D personnel nationwide per capita	Full-time work equivalent (FTE) per 1000 people
4.3.08 Total R&D personnel in business enterprise	Full-time work equivalent (FTE thousands)

SCIENTIFIC INFRASTRUCTURE

4.3.09 Total R&D personnel in business per capita	Full-time work equivalent (FTE) per 1000 people
4.3.10 Science degrees	Percentage of total first university degrees in science and engineering
4.3.11 Scientific articles	Scientific articles published by origin of author
4.3.12 Nobel prizes	Awarded in physics, chemistry, physiology or medicine and economics since 1950
4.3.13 Nobel prizes per capita	Awarded in physics, chemistry, etc and economics since 1950 per million people
4.3.14 Patent applications	Number of applications filed for residents and non-residents
4.3.15 Patent applications per capita	Number of applications filed per 100,000 inhabitants
4.3.16 Patents granted to residents	Number of patents granted to residents (average 2008-2010)
4.3.17 Number of patents in force	Per 100,000 inhabitants
4.3.18 Scientific research	Scientific research (public and private) is high by international standards
4.3.19 Researchers and scientists	Researchers and scientists are attracted to your country
4.3.20 Scientific research legislation	Laws relating to scientific research do encourage innovation
4.3.21 Intellectual property rights	Intellectual property rights are adequately enforced
4.3.22 Knowledge transfer	Knowledge transfer is highly developed between companies and universities
4.3.23 Innovative capacity	Innovative capacity of firms (to generate new products, processes and/or services) is high

HEALTH AND ENVIRONMENT

4.4.01 Total health expenditure (%)	Percentage of GDP
4.4.02 Total health expenditure per capita	US\$ per capita
4.4.03 Public expenditure on health (%)	Percentage of total health expenditure
4.4.04 Health infrastructure	Health infrastructure meets the needs of society
4.4.05 Life expectancy at birth	Average estimate
4.4.06 Healthy life expectancy	Average estimate
4.4.07 Infant mortality	Under five mortality rate per 1000 live births
4.4.08 Medical assistance	Number of inhabitants per physician and per nurse
4.4.09 Urban population (%)	Percentage of total population
4.4.10 Human development index	Combines economic - social - educational indicators/ Source: Human Development Report
4.4.11 Health problems	Health problems (sicknesses, AIDS, alcohol,...) do not have a significant impact on companies
4.4.12 Energy intensity	Commercial energy consumed for each dollar of GDP in kilojoules
4.4.13 Paper and cardboard recycling rate	Percentage of apparent consumption
4.4.14 Waste water treatment plants	Percentage of population served
4.4.15 Water consumption intensity	Water withdrawal for each 1000 US\$ of GDP in cubic meters
4.4.16 CO2 emissions	Metric tons of carbon dioxide
4.4.17 CO2 emissions intensity	CO2 industrial emissions in metric tons per one million US\$ of GDP
4.4.18 Renewable energies (%)	Share of renewables in total energy requirements, %
4.4.19 Renewable technologies	Renewable technologies are quickly turned into competitive advantages
4.4.20 Total biocapacity	Global hectares per capita of biologically productive space
4.4.21 Ecological footprint	Global hectares per person
4.4.22 Ecological balance (reserve/deficit)	Total biocapacity minus total footprint in global hectares per capita
4.4.23 Sustainable development	Sustainable development is a priority in companies
4.4.24 Pollution problems	Pollution problems do not seriously affect your economy
4.4.25 Environmental laws	Environmental laws and compliance do not hinder the competitiveness of businesses
4.4.26 Climate change	Climate change is being sufficiently addressed by your government
4.4.27 Quality of life	Quality of life is high

EDUCATION

4.5.01 Total public expenditure on education (%)	Percentage of GDP
4.5.02 Total public expenditure on education per capita	US\$ per capita
4.5.03 Pupil-teacher ratio (primary education)	Ratio of students to teaching staff
4.5.04 Pupil-teacher ratio (secondary education)	Ratio of students to teaching staff
4.5.05 Secondary school enrollment (%)	Percentage of relevant age group receiving full-time education
4.5.06 Higher education achievement (%)	Percentage of population that has attained at least tertiary education for persons 25-34
4.5.07 Student mobility inbound	Foreign tertiary-level students per 1000 inhabitants
4.5.08 Student mobility outbound	National tertiary-level students studying abroad per 1000 inhabitants
4.5.09 Educational assessment - PISA	PISA survey of 15-year olds
4.5.10 English proficiency - TOEFL	TOEFL scores
4.5.11 Educational system	The educational system meets the needs of a competitive economy
4.5.12 Science in schools	Science in schools is sufficiently emphasized
4.5.13 University education	University education meets the needs of a competitive economy
4.5.14 Management education	Management education meets the needs of the business community
4.5.15 Illiteracy (%)	Adult (over 15 years) illiteracy rate as a percentage of population
4.5.16 Language skills	Language skills are meeting the needs of enterprises