

The Growth Competitiveness Index 2006–2007

As noted in Chapter 1.1, although in this year's *Report* we complete the move to the Global Competitiveness Index as the main competitiveness indicator to be used by the World Economic Forum, for the sake of historical continuity we also present the rankings associated with the Growth Competitiveness Index (Growth CI). This is the subject of the present appendix.

This appendix first describes the composition of the Growth CI, with regard to the specific data used, as well as the weightings applied to the different variables. This is followed by four tables showing the results from this year: Table A presents the overall rankings of the Growth CI. Tables B, C, and D then show the results for each of the composite indexes (technology, public institutions, and the macroeconomic environment).

Composition of the Growth Competitiveness Index

The Growth Competitiveness Index is composed of three component indexes: the technology index, the public institutions index, and the macroeconomic environment index. These indexes are calculated on the basis of both "hard data" and "Survey data."

The sample of countries/economies is divided into two groups: the core innovators and the non-core innovators. Core innovators are countries/economies with more than 15 US utility patents registered per million population; non-core innovators are all other countries/economies.

For the core innovators, we place extra emphasis on the role of innovation and technology. The weightings for the core innovators are as follows:

$$\begin{aligned} \text{Growth Competitiveness} \\ \text{Index for core innovators} &= 1/2 \text{ technology index} \\ &+ 1/4 \text{ public institutions index} \\ &+ 1/4 \text{ macroeconomic environment} \\ &\text{index} \end{aligned}$$

For the non-core innovators, we calculate the Growth Competitiveness Index values as a simple average of the three component indexes:

$$\begin{aligned} \text{Growth Competitiveness} \\ \text{Index for non-core} \\ \text{innovators} &= 1/3 \text{ technology index} \\ &+ 1/3 \text{ public institutions index} \\ &+ 1/3 \text{ macroeconomic environment} \\ &\text{index} \end{aligned}$$

Technology index components

The technology index is calculated for the core and non-core innovators as follows:

$$\begin{aligned} \text{technology index for} \\ \text{core innovators} &= 1/2 \text{ innovation subindex} \\ &+ 1/2 \text{ information and communication} \\ &\text{technology subindex} \end{aligned}$$

$$\begin{aligned} \text{technology index for} \\ \text{non-core innovators} &= 1/8 \text{ innovation subindex} \\ &+ 3/8 \text{ technology transfer subindex} \\ &+ 1/2 \text{ information and communication} \\ &\text{technology subindex} \end{aligned}$$

Innovation subindex

$$\begin{aligned} \text{innovation subindex} &= 1/4 \text{ Survey data} \\ &+ 3/4 \text{ hard data} \end{aligned}$$

Innovation Survey questions

- 7.01 Technological readiness
- 7.02 Firm-level technology absorption
- 9.02 Company spending on research and development
- 9.03 University/industry research collaboration

Innovation hard data

- 9.06 Utility patents
- 5.02 Tertiary enrollment

Technology transfer subindex

$$\begin{aligned} \text{technology transfer} \\ \text{subindex} &= \text{unweighted average of two technology} \\ &\text{transfer Survey questions} \end{aligned}$$

- 7.04 FDI and technology transfer
- 7.08 Prevalence of foreign technology licensing

Information and communication technology (ICT) subindex

$$\begin{aligned} \text{information and} \\ \text{communication} \\ \text{technology subindex} &= 1/3 \text{ information and communication} \\ &\text{technology Survey data} \\ &+ 2/3 \text{ information and communication} \\ &\text{technology hard data} \end{aligned}$$

Information and communication technology Survey questions

- 7.13 Internet access in schools
- 7.11 Quality of competition in the ISP sector
- 7.09 Government prioritization of ICT
- 7.10 Government success in ICT promotion
- 7.03 Laws relating to ICT

Information and communication technology hard data

- 7.05 Cellular telephones
- 7.06 Internet users
- 7.15 Internet hosts
- 2.06 Telephone lines
- 7.07 Personal computers

Public institutions index components

public institutions index = $1/2$ contracts and law subindex
+ $1/2$ corruption subindex

Contracts and law subindex

- 1.04 Judicial independence
- 1.01 Property rights
- 1.05 Favoritism in decisions of government officials
- 1.11 Organized crime

Corruption subindex

- 1.22 Irregular payments in exports and imports
- 1.23 Irregular payments in public utilities
- 1.24 Irregular payments in tax collection

Macroeconomic environment index components

macroeconomic
environment index = $1/2$ macroeconomic stability subindex
+ $1/4$ country credit rating
+ $1/4$ government waste

Macroeconomic stability subindex

macroeconomic
stability subindex = $5/7$ macroeconomic stability hard data
+ $2/7$ macroeconomic stability Survey
data

Macroeconomic stability Survey questions

- 3.07 Recession expectations
- 6.32 Recent access to credit

Macroeconomic stability hard data

- 3.01 Government surplus/deficit
- 3.02 National savings rate
- 3.03 Inflation
- 3.06 Real effective exchange rate
- 3.04 Interest rate spread
- 3.05 Government debt

Country credit rating

- 3.08 Country credit rating

Government waste variable

- 1.06 Wastefulness of government spending

Results of the Growth Competitiveness Index 2006–2007

The tables in this section present the overall rankings of the Growth CI, with comparisons to last year's rankings, as well as the results of each of the three component indexes.

Table A: Growth Competitiveness Index components

Growth Competitiveness Index				Technology index			Public institutions index			Macroeconomic environment index		
Country/Economy	2006 Rank	2006 Score	2005 Rank	Country/Economy	Rank	Score	Country/Economy	Rank	Score	Country/Economy	Rank	Score
Finland	1	5.85	1	United States	1	6.05	Denmark	1	6.53	Singapore	1	5.88
Sweden	2	5.76	3	Taiwan, China	2	5.78	New Zealand	2	6.47	Norway	2	5.79
Denmark	3	5.63	4	Sweden	3	5.73	Iceland	3	6.46	Denmark	3	5.69
United States	4	5.56	2	Finland	4	5.66	Finland	4	6.45	Finland	4	5.64
Iceland	5	5.48	7	Japan	5	5.37	Germany	5	6.39	Qatar	5	5.62
Taiwan, China	6	5.47	5	Korea, Rep.	6	5.18	Norway	6	6.35	Netherlands	6	5.52
Norway	7	5.47	9	Denmark	7	5.16	Singapore	7	6.32	United Arab Emirates	7	5.50
Switzerland	8	5.45	8	Iceland	8	5.10	Netherlands	8	6.23	Switzerland	8	5.50
Netherlands	9	5.38	11	Switzerland	9	5.04	Switzerland	9	6.23	Hong Kong SAR	9	5.42
Singapore	10	5.37	6	Israel	10	4.97	Sweden	10	6.22	Sweden	10	5.35
Japan	11	5.32	12	Netherlands	11	4.88	Austria	11	6.15	Luxembourg	11	5.35
Australia	12	5.29	10	Norway	12	4.86	United Kingdom	12	6.14	Australia	12	5.35
United Kingdom	13	5.13	13	Australia	13	4.84	Australia	13	6.12	Iceland	13	5.27
Germany	14	5.13	15	Estonia	14	4.78	Hong Kong SAR	14	6.03	Ireland	14	5.25
Qatar	15	5.09	19	Canada	15	4.71	Japan	15	6.01	Chile	15	5.22
Canada	16	5.08	14	Singapore	16	4.64	Luxembourg	16	5.99	United Kingdom	16	5.16
Estonia	17	5.08	20	United Kingdom	17	4.61	Ireland	17	5.94	Kuwait	17	5.13
Israel	18	5.06	27	Germany	18	4.58	Canada	18	5.80	Austria	18	5.12
United Arab Emirates	19	5.06	18	Malta	19	4.56	Portugal	19	5.79	Canada	19	5.11
Austria	20	5.05	21	Austria	20	4.46	Israel	20	5.74	Malaysia	20	5.03
Korea, Rep.	21	4.98	17	Portugal	21	4.39	France	21	5.73	Spain	21	5.02
Luxembourg	22	4.98	25	Czech Republic	22	4.36	Qatar	22	5.69	Taiwan, China	22	5.00
Hong Kong SAR	23	4.97	28	Spain	23	4.32	Chile	23	5.66	Germany	23	4.96
Chile	24	4.96	23	Malaysia	24	4.31	Belgium	24	5.63	United States	24	4.95
New Zealand	25	4.94	16	Luxembourg	25	4.29	United Arab Emirates	25	5.54	Estonia	25	4.93
Malaysia	26	4.92	24	Hong Kong SAR	26	4.22	Estonia	26	5.53	Belgium	26	4.90
Portugal	27	4.91	22	New Zealand	27	4.21	Barbados	27	5.46	New Zealand	27	4.87
Spain	28	4.87	29	Slovenia	28	4.19	Malaysia	28	5.42	Bahrain	28	4.84
Ireland	29	4.80	26	Hungary	29	4.17	Slovenia	29	5.38	Tunisia	29	4.84
Slovenia	30	4.77	32	Slovak Republic	30	4.16	Taiwan, China	30	5.33	France	30	4.84
Malta	31	4.76	35	France	31	4.13	Malta	31	5.32	Thailand	31	4.81
France	32	4.71	30	United Arab Emirates	32	4.12	Spain	32	5.29	China	32	4.79
Belgium	33	4.67	31	Belgium	33	4.08	Uruguay	33	5.27	Slovenia	33	4.74
Bahrain	34	4.61	37	Chile	34	4.02	Chile	34	5.21	Korea, Rep.	34	4.73
Barbados	35	4.61	n/a	Ireland	35	4.00	Tunisia	35	5.20	South Africa	35	4.73
Kuwait	36	4.60	33	Qatar	36	3.95	United States	36	5.20	Algeria	36	4.72
Tunisia	37	4.56	40	Greece	37	3.92	Bahrain	37	5.19	Latvia	37	4.65
Czech Republic	38	4.55	38	Lithuania	38	3.91	Jordan	38	5.18	Kazakhstan	38	4.62
Slovak Republic	39	4.52	41	Latvia	39	3.89	South Africa	39	5.18	Israel	39	4.58
South Africa	40	4.51	42	Cyprus	40	3.87	Cyprus	40	5.18	Botswana	40	4.58
Cyprus	41	4.50	34	Croatia	41	3.82	Hungary	41	5.16	Barbados	41	4.57
Latvia	42	4.45	44	Barbados	42	3.81	Botswana	42	5.08	Portugal	42	4.55
Hungary	43	4.43	39	Bahrain	43	3.80	India	43	5.07	Japan	43	4.51
Thailand	44	4.39	36	Thailand	44	3.78	Mauritius	44	5.01	Cyprus	44	4.45
Lithuania	45	4.39	43	Italy	45	3.74	Slovak Republic	45	4.95	Indonesia	45	4.45
Greece	46	4.35	46	Jamaica	46	3.73	Czech Republic	46	4.87	Lithuania	46	4.44
India	47	4.33	50	Tunisia	47	3.64	Costa Rica	47	4.86	Slovak Republic	47	4.43
Botswana	48	4.24	48	Costa Rica	48	3.62	Korea, Rep.	48	4.83	Czech Republic	48	4.43
Italy	49	4.23	47	Brazil	49	3.62	Greece	49	4.83	Malta	49	4.41
Jordan	50	4.20	45	South Africa	50	3.62	Latvia	50	4.81	Mexico	50	4.37
Mauritius	51	4.14	52	Romania	51	3.60	Lithuania	51	4.81	India	51	4.32
Mexico	52	4.10	55	Mexico	52	3.59	Egypt	52	4.70	Greece	52	4.31
Costa Rica	53	4.10	64	India	53	3.59	Italy	53	4.69	Trinidad and Tobago	53	4.30
Uruguay	54	4.07	54	Jordan	54	3.56	Turkey	54	4.68	Italy	54	4.27
El Salvador	55	4.03	56	Turkey	55	3.53	El Salvador	55	4.61	Russian Federation	55	4.23
Croatia	56	4.02	62	Mauritius	56	3.53	Thailand	56	4.59	El Salvador	56	4.20
Turkey	57	3.99	66	Poland	57	3.52	Namibia	57	4.49	Colombia	57	4.12
China	58	3.97	49	Trinidad and Tobago	58	3.52	Panama	58	4.43	Azerbaijan	58	4.11
Colombia	59	3.96	57	Indonesia	59	3.48	Colombia	59	4.42	Poland	59	4.08
Kazakhstan	60	3.95	61	Dominican Republic	60	3.47	Peru	60	4.36	Peru	60	4.06
Algeria	61	3.94	78	Serbia and Montenegro	61	3.47	Moldova	61	4.35	Croatia	61	4.03
Panama	62	3.91	73	Argentina	62	3.46	Mexico	62	4.35	Bulgaria	62	4.02
Egypt	63	3.89	53	Kuwait	63	3.45	Bulgaria	63	4.33	Namibia	63	4.01
Bulgaria	64	3.89	58	Uruguay	64	3.45	Algeria	64	4.31	Hungary	64	3.95
Peru	65	3.89	68	Panama	65	3.42	Guatemala	65	4.28	Morocco	65	3.95
Poland	66	3.88	51	Colombia	66	3.33	Brazil	66	4.27	Mauritius	66	3.89
Trinidad and Tobago	67	3.87	60	Egypt	67	3.32	Malawi	67	4.23	Panama	67	3.89
Namibia	68	3.85	63	Philippines	68	3.32	Croatia	68	4.21	Vietnam	68	3.88
Indonesia	69	3.79	74	Bulgaria	69	3.32	Morocco	69	4.20	Jordan	69	3.85

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Table A: Growth Competitiveness Index components (cont'd.)

Growth Competitiveness Index				Technology index			Public institutions index			Macroeconomic environment index		
Country/Economy	2006 Rank	2006 Score	2005 Rank	Country/Economy	Rank	Score	Country/Economy	Rank	Score	Country/Economy	Rank	Score
Romania	70	3.78	67	El Salvador	70	3.29	Jamaica	70	4.11	Guatemala	70	3.84
Morocco	71	3.77	76	Peru	71	3.25	China	71	4.04	Costa Rica	71	3.83
Guatemala	72	3.77	97	Kazakhstan	72	3.22	Romania	72	4.03	Venezuela	72	3.76
Brazil	73	3.75	65	Russian Federation	73	3.20	Poland	73	4.03	Turkey	73	3.75
Russian Federation	74	3.74	75	Venezuela	74	3.19	Dominican Republic	74	4.01	Philippines	74	3.73
Azerbaijan	75	3.70	69	Guatemala	75	3.19	Armenia	75	4.01	Pakistan	75	3.70
Jamaica	76	3.64	70	Morocco	76	3.17	Kazakhstan	76	4.00	Romania	76	3.70
Philippines	77	3.61	77	Mauritania	77	3.14	Tanzania	77	3.99	Macedonia, FYR	77	3.68
Argentina	78	3.61	72	Kenya	78	3.11	Burkina Faso	78	3.99	Argentina	78	3.65
Dominican Republic	79	3.60	102	Azerbaijan	79	3.09	Ethiopia	79	3.97	Egypt	79	3.65
Serbia and Montenegro	80	3.60	80	Uganda	80	3.07	Gambia	80	3.97	Tanzania	80	3.61
Tanzania	81	3.52	71	Sri Lanka	81	3.07	Lesotho	81	3.96	Ukraine	81	3.60
Armenia	82	3.49	79	Namibia	82	3.07	Serbia and Montenegro	82	3.95	Lesotho	82	3.59
Moldova	83	3.48	82	Nigeria	83	3.07	Azerbaijan	83	3.89	Armenia	83	3.58
Pakistan	84	3.45	83	China	84	3.07	Suriname	84	3.88	Uruguay	84	3.51
Ukraine	85	3.45	84	Botswana	85	3.05	Georgia	85	3.86	Bangladesh	85	3.50
Vietnam	86	3.44	81	Pakistan	86	2.96	Ukraine	86	3.83	Mongolia	86	3.49
Macedonia, FYR	87	3.42	85	Tanzania	87	2.96	Sri Lanka	87	3.82	Nigeria	87	3.49
Georgia	88	3.41	86	Gambia	88	2.92	Trinidad and Tobago	88	3.81	Suriname	88	3.49
Sri Lanka	89	3.40	98	Ukraine	89	2.91	Bosnia and Herzegovina	89	3.81	Ecuador	89	3.48
Mongolia	90	3.39	96	Zambia	90	2.91	Mongolia	90	3.80	Georgia	90	3.47
Gambia	91	3.38	94	Macedonia, FYR	91	2.90	Philippines	91	3.80	Bosnia and Herzegovina	91	3.40
Venezuela	92	3.37	89	Georgia	92	2.90	Bolivia	92	3.79	Honduras	92	3.37
Bosnia and Herzegovina	93	3.37	95	Bosnia and Herzegovina	93	2.89	Russian Federation	93	3.78	Serbia and Montenegro	93	3.37
Lesotho	94	3.34	n/a	Mongolia	94	2.89	Nicaragua	94	3.76	Brazil	94	3.36
Burkina Faso	95	3.32	n/a	Armenia	95	2.88	Mali	95	3.75	Albania	95	3.35
Suriname	96	3.31	n/a	Vietnam	96	2.86	Mozambique	96	3.72	Dominican Republic	96	3.32
Ecuador	97	3.27	103	Burkina Faso	97	2.84	Argentina	97	3.71	Nepal	97	3.31
Uganda	98	3.27	87	Honduras	98	2.83	Nepal	98	3.70	Sri Lanka	98	3.30
Kenya	99	3.27	92	Moldova	99	2.81	Pakistan	99	3.70	Tajikistan	99	3.28
Nepal	100	3.26	n/a	Algeria	100	2.80	Angola	100	3.68	Bolivia	100	3.28
Nigeria	101	3.25	88	Ecuador	101	2.77	Macedonia, FYR	101	3.66	Moldova	101	3.27
Bolivia	102	3.23	101	Nepal	102	2.76	Mauritania	102	3.66	Cambodia	102	3.27
Albania	103	3.22	100	Albania	103	2.76	Vietnam	103	3.58	Cameroon	103	3.25
Honduras	104	3.21	93	Guyana	104	2.74	Ecuador	104	3.57	Timor-Leste	104	3.25
Ethiopia	105	3.20	106	Zimbabwe	105	2.71	Kenya	105	3.56	Uganda	105	3.24
Nicaragua	106	3.18	99	Malawi	106	2.69	Tajikistan	106	3.56	Gambia	106	3.24
Malawi	107	3.17	105	Cambodia	107	2.67	Albania	107	3.56	Benin	107	3.16
Tajikistan	108	3.16	104	Nicaragua	108	2.67	Uganda	108	3.50	Kenya	108	3.14
Mauritania	109	3.15	n/a	Bangladesh	109	2.67	Timor-Leste	109	3.49	Nicaragua	109	3.13
Mali	110	3.15	90	Madagascar	110	2.65	Indonesia	110	3.45	Burkina Faso	110	3.13
Mozambique	111	3.12	91	Mali	111	2.63	Honduras	111	3.42	Jamaica	111	3.09
Cameroon	112	3.02	111	Tajikistan	112	2.63	Madagascar	112	3.41	Ethiopia	112	3.08
Timor-Leste	113	3.02	108	Angola	113	2.62	Benin	113	3.37	Mali	113	3.07
Benin	114	3.01	114	Bolivia	114	2.61	Paraguay	114	3.36	Mozambique	114	3.03
Madagascar	115	2.99	107	Mozambique	115	2.60	Burundi	115	3.28	Paraguay	115	3.03
Cambodia	116	2.99	112	Cameroon	116	2.57	Zimbabwe	116	3.25	Madagascar	116	2.92
Angola	117	2.97	n/a	Suriname	117	2.55	Cameroon	117	3.24	Guyana	117	2.76
Paraguay	118	2.93	113	Ethiopia	118	2.54	Guyana	118	3.22	Zambia	118	2.70
Zambia	119	2.93	n/a	Kyrgyz Republic	119	2.53	Nigeria	119	3.19	Mauritania	119	2.65
Guyana	120	2.91	115	Benin	120	2.50	Zambia	120	3.18	Angola	120	2.62
Bangladesh	121	2.88	110	Lesotho	121	2.47	Venezuela	121	3.15	Malawi	121	2.59
Kyrgyz Republic	122	2.68	116	Paraguay	122	2.41	Cambodia	122	3.03	Kyrgyz Republic	122	2.58
Zimbabwe	123	2.60	109	Timor-Leste	123	2.31	Kyrgyz Republic	123	2.94	Chad	123	2.55
Burundi	124	2.58	n/a	Chad	124	2.05	Chad	124	2.79	Burundi	124	2.43
Chad	125	2.46	117	Burundi	125	2.04	Bangladesh	125	2.48	Zimbabwe	125	1.84

Table B: Technology index components

Country/Economy	Technology index		Innovation subindex		ICT subindex		Tech transfer subindex	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Albania	103	2.76	95	1.78	105	1.90	93	4.22
Algeria	100	2.80	84	2.02	90	2.06	103	4.05
Angola	113	2.62	121	1.41	120	1.68	91	4.29
Argentina	62	3.46	36	3.14	61	2.62	70	4.67
Armenia	95	2.88	76	2.23	92	2.04	94	4.22
Australia	13	4.84	14	4.20	7	5.48	8	5.53
Austria	20	4.46	20	3.81	16	5.11	68	4.68
Azerbaijan	79	3.09	83	2.03	77	2.31	81	4.47
Bahrain	43	3.80	58	2.44	43	3.23	45	5.03
Bangladesh	109	2.67	109	1.63	116	1.75	92	4.23
Barbados	42	3.81	99	1.73	32	3.73	74	4.60
Belgium	33	4.08	17	4.08	27	4.09	38	5.13
Benin	120	2.50	117	1.46	111	1.85	117	3.71
Bolivia	114	2.61	60	2.43	103	1.93	121	3.58
Bosnia and Herzegovina	93	2.89	80	2.13	71	2.39	111	3.83
Botswana	85	3.05	98	1.74	82	2.24	76	4.58
Brazil	49	3.62	71	2.27	51	2.83	39	5.12
Bulgaria	69	3.32	52	2.50	49	2.92	99	4.13
Burkina Faso	97	2.84	110	1.60	112	1.83	75	4.58
Burundi	125	2.04	123	1.40	124	1.50	125	2.97
Cambodia	107	2.67	105	1.65	114	1.80	95	4.18
Cameroon	116	2.57	112	1.57	115	1.76	106	3.99
Canada	15	4.71	12	4.35	17	5.08	10	5.50
Chad	124	2.05	125	1.31	125	1.40	124	3.16
Chile	34	4.02	39	2.91	42	3.38	27	5.25
China	84	3.07	75	2.24	65	2.47	98	4.13
Colombia	66	3.33	68	2.34	66	2.47	61	4.80
Costa Rica	48	3.62	65	2.40	59	2.71	26	5.25
Croatia	41	3.82	45	2.67	39	3.41	64	4.74
Cyprus	40	3.87	46	2.65	31	3.74	83	4.46
Czech Republic	22	4.36	38	2.99	29	3.94	17	5.39
Denmark	7	5.16	9	4.62	3	5.69	46	5.00
Dominican Republic	60	3.47	54	2.48	67	2.46	37	5.15
Ecuador	101	2.77	87	1.98	94	2.03	105	4.02
Egypt	67	3.32	59	2.43	76	2.31	49	4.97
El Salvador	70	3.29	81	2.13	64	2.52	66	4.70
Estonia	14	4.78	25	3.57	22	4.64	19	5.37
Ethiopia	118	2.54	122	1.41	122	1.60	96	4.16
Finland	4	5.66	4	5.85	8	5.47	60	4.81
France	31	4.13	19	3.82	24	4.43	72	4.64
Gambia	88	2.92	115	1.49	91	2.06	78	4.54
Georgia	92	2.90	53	2.49	87	2.10	101	4.10
Germany	18	4.58	11	4.53	21	4.64	50	4.95
Greece	37	3.92	24	3.63	41	3.40	65	4.71
Guatemala	75	3.19	88	1.96	80	2.25	55	4.85
Guyana	104	2.74	107	1.65	85	2.16	108	3.89
Honduras	98	2.83	93	1.88	102	1.94	89	4.32
Hong Kong SAR	26	4.22	33	3.20	11	5.24	11	5.48
Hungary	29	4.17	31	3.34	34	3.59	30	5.20
Iceland	8	5.10	13	4.32	2	5.87	53	4.86
India	53	3.59	77	2.21	69	2.40	5	5.62
Indonesia	59	3.48	79	2.16	93	2.03	2	5.86
Ireland	35	4.00	21	3.81	25	4.19	4	5.78
Israel	10	4.97	7	4.96	18	4.98	16	5.39
Italy	45	3.74	29	3.45	28	4.03	79	4.49
Jamaica	46	3.73	74	2.25	45	3.16	48	4.99
Japan	5	5.37	3	5.86	19	4.89	34	5.16
Jordan	54	3.56	47	2.64	60	2.65	43	5.06
Kazakhstan	72	3.22	42	2.84	68	2.43	84	4.40
Kenya	78	3.11	96	1.77	104	1.92	36	5.16
Korea, Rep.	6	5.18	6	5.19	14	5.17	69	4.67
Kuwait	63	3.45	72	2.26	46	3.04	85	4.39
Kyrgyz Republic	119	2.53	66	2.38	108	1.86	122	3.48
Latvia	39	3.89	26	3.57	40	3.40	71	4.66
Lesotho	121	2.47	119	1.45	119	1.73	113	3.80
Lithuania	38	3.91	27	3.53	37	3.57	80	4.49
Luxembourg	25	4.29	37	3.04	6	5.54	44	5.05
Macedonia, FYR	91	2.90	78	2.19	72	2.38	112	3.83
Madagascar	110	2.65	104	1.66	110	1.85	104	4.04
Malawi	106	2.69	116	1.47	118	1.75	86	4.36

(cont'd.)

Table B: Technology index components (cont'd.)

Country/Economy	Technology index		Innovation subindex		ICT subindex		Tech transfer subindex	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Malaysia	24	4.31	43	2.83	35	3.58	3	5.78
Mali	111	2.63	113	1.54	98	1.98	109	3.86
Malta	19	4.56	62	2.43	23	4.56	24	5.26
Mauritania	77	3.14	114	1.53	95	2.00	29	5.21
Mauritius	56	3.53	82	2.09	48	2.93	59	4.81
Mexico	52	3.59	70	2.28	57	2.72	31	5.20
Moldova	99	2.81	67	2.38	78	2.30	120	3.64
Mongolia	94	2.89	56	2.48	83	2.21	107	3.92
Morocco	76	3.17	89	1.94	79	2.30	63	4.74
Mozambique	115	2.60	118	1.45	117	1.75	100	4.12
Namibia	82	3.07	97	1.76	89	2.08	58	4.83
Nepal	102	2.76	111	1.59	109	1.86	88	4.35
Netherlands	11	4.88	15	4.12	4	5.63	22	5.33
New Zealand	27	4.21	22	3.76	20	4.65	20	5.36
Nicaragua	108	2.67	90	1.93	100	1.97	110	3.85
Nigeria	83	3.07	91	1.90	96	1.99	52	4.90
Norway	12	4.86	10	4.55	12	5.18	41	5.10
Pakistan	86	2.96	100	1.71	86	2.15	82	4.46
Panama	65	3.42	41	2.87	73	2.37	47	5.00
Paraguay	122	2.41	85	2.02	113	1.81	123	3.34
Peru	71	3.25	57	2.45	75	2.31	62	4.76
Philippines	68	3.32	63	2.42	70	2.40	54	4.85
Poland	57	3.52	32	3.23	47	2.99	90	4.31
Portugal	21	4.39	35	3.17	30	3.91	13	5.43
Qatar	36	3.95	73	2.25	44	3.20	9	5.53
Romania	51	3.60	48	2.63	55	2.74	42	5.08
Russian Federation	73	3.20	30	3.34	56	2.72	114	3.80
Serbia and Montenegro	61	3.47	64	2.40	58	2.71	56	4.84
Singapore	16	4.64	16	4.10	13	5.17	1	6.08
Slovak Republic	30	4.16	44	2.69	36	3.58	14	5.42
Slovenia	28	4.19	23	3.69	26	4.19	87	4.35
South Africa	50	3.62	69	2.31	62	2.56	12	5.46
Spain	23	4.32	28	3.48	33	3.71	15	5.41
Sri Lanka	81	3.07	102	1.70	88	2.10	57	4.83
Suriname	117	2.55	103	1.68	101	1.95	119	3.64
Sweden	3	5.73	5	5.57	1	5.89	28	5.23
Switzerland	9	5.04	8	4.78	9	5.29	25	5.26
Taiwan, China	2	5.78	2	6.32	10	5.24	6	5.55
Tajikistan	112	2.63	92	1.89	97	1.98	115	3.74
Tanzania	87	2.96	101	1.71	99	1.98	67	4.69
Thailand	44	3.78	40	2.89	50	2.85	23	5.33
Timor-Leste	123	2.31	124	1.32	123	1.55	118	3.65
Trinidad and Tobago	58	3.52	86	1.99	63	2.54	21	5.33
Tunisia	47	3.64	50	2.57	54	2.76	33	5.18
Turkey	55	3.53	55	2.48	53	2.77	51	4.90
Uganda	80	3.07	106	1.65	107	1.86	35	5.16
Ukraine	89	2.91	34	3.20	81	2.24	116	3.72
United Arab Emirates	32	4.12	61	2.43	38	3.48	7	5.54
United Kingdom	17	4.61	18	4.07	15	5.14	18	5.38
United States	1	6.05	1	6.51	5	5.59	32	5.19
Uruguay	64	3.45	51	2.56	52	2.79	73	4.63
Venezuela	74	3.19	49	2.59	74	2.32	77	4.56
Vietnam	96	2.86	94	1.86	84	2.19	102	4.08
Zambia	90	2.91	120	1.44	121	1.63	40	5.11
Zimbabwe	105	2.71	108	1.64	106	1.88	97	4.16

Table C: Public institutions index components

Country/Economy	Public institutions index		Contracts and law subindex		Corruption subindex	
	Rank	Score	Rank	Score	Rank	Score
Albania	107	3.56	115	2.86	89	4.26
Algeria	64	4.31	53	4.21	83	4.42
Angola	100	3.68	96	3.31	97	4.06
Argentina	97	3.71	118	2.81	70	4.61
Armenia	75	4.01	80	3.54	78	4.48
Australia	13	6.12	11	5.75	13	6.49
Austria	11	6.15	12	5.73	11	6.57
Azerbaijan	83	3.89	70	3.68	95	4.11
Bahrain	37	5.19	48	4.42	29	5.97
Bangladesh	125	2.48	111	2.91	125	2.06
Barbados	27	5.46	21	5.27	42	5.65
Belgium	24	5.63	25	5.18	27	6.08
Benin	113	3.37	87	3.46	119	3.29
Bolivia	92	3.79	110	3.00	71	4.57
Bosnia and Herzegovina	89	3.81	103	3.13	77	4.48
Botswana	42	5.08	38	4.75	49	5.41
Brazil	66	4.27	95	3.35	56	5.19
Bulgaria	63	4.33	116	2.86	34	5.81
Burkina Faso	78	3.99	66	3.77	92	4.21
Burundi	115	3.28	114	2.86	110	3.69
Cambodia	122	3.03	107	3.04	122	3.03
Cameroon	117	3.24	106	3.05	115	3.44
Canada	18	5.80	23	5.25	19	6.34
Chad	124	2.79	124	2.25	117	3.32
Chile	23	5.66	32	4.88	15	6.44
China	71	4.04	81	3.54	73	4.54
Colombia	59	4.42	75	3.62	54	5.22
Costa Rica	47	4.86	46	4.46	51	5.27
Croatia	68	4.21	76	3.62	63	4.80
Cyprus	40	5.18	35	4.83	47	5.52
Czech Republic	46	4.87	57	4.14	44	5.61
Denmark	1	6.53	1	6.27	4	6.79
Dominican Republic	74	4.01	86	3.48	72	4.54
Ecuador	104	3.57	117	2.83	85	4.32
Egypt	52	4.70	40	4.64	64	4.76
El Salvador	55	4.61	91	3.42	35	5.80
Estonia	26	5.53	28	5.07	28	5.99
Ethiopia	79	3.97	90	3.43	74	4.51
Finland	4	6.45	3	6.19	5	6.72
France	21	5.73	22	5.26	22	6.20
Gambia	80	3.97	52	4.23	109	3.71
Georgia	85	3.86	93	3.36	84	4.35
Germany	5	6.39	2	6.20	9	6.58
Greece	49	4.83	39	4.74	62	4.92
Guatemala	65	4.28	92	3.40	59	5.16
Guyana	118	3.22	119	2.80	111	3.65
Honduras	111	3.42	120	2.74	96	4.10
Hong Kong SAR	14	6.03	14	5.62	16	6.43
Hungary	41	5.16	49	4.40	31	5.92
Iceland	3	6.46	5	6.04	1	6.87
India	43	5.07	27	5.14	61	5.01
Indonesia	110	3.45	62	3.92	123	2.98
Ireland	17	5.94	16	5.51	18	6.38
Israel	20	5.74	20	5.29	23	6.18
Italy	53	4.69	79	3.56	33	5.81
Jamaica	70	4.11	85	3.48	66	4.73
Japan	15	6.01	19	5.38	8	6.64
Jordan	38	5.18	31	4.93	48	5.43
Kazakhstan	76	4.00	82	3.53	79	4.47
Kenya	105	3.56	97	3.23	105	3.89
Korea, Rep.	48	4.83	45	4.47	55	5.20
Kuwait	34	5.21	36	4.78	41	5.65
Kyrgyz Republic	123	2.94	121	2.62	121	3.25
Latvia	50	4.81	50	4.28	50	5.34
Lesotho	81	3.96	69	3.69	90	4.24
Lithuania	51	4.81	61	3.94	40	5.67
Luxembourg	16	5.99	15	5.57	17	6.40
Macedonia, FYR	101	3.66	112	2.89	81	4.43
Madagascar	112	3.41	98	3.23	113	3.59
Malawi	67	4.23	55	4.18	87	4.29
Malaysia	28	5.42	24	5.22	43	5.62

(cont'd.)

Table C: Public institutions index components (cont'd.)

Country/Economy	Public institutions index		Contracts and law subindex		Corruption subindex	
	Rank	Score	Rank	Score	Rank	Score
Mali	95	3.75	67	3.76	108	3.73
Malta	31	5.32	30	4.95	38	5.69
Mauritania	102	3.66	59	4.02	118	3.29
Mauritius	44	5.01	37	4.76	52	5.26
Mexico	62	4.35	83	3.52	57	5.18
Moldova	61	4.35	102	3.15	46	5.55
Mongolia	90	3.80	89	3.43	93	4.16
Morocco	69	4.20	56	4.17	91	4.22
Mozambique	96	3.72	101	3.17	88	4.27
Namibia	57	4.49	43	4.55	82	4.42
Nepal	98	3.70	73	3.67	107	3.74
Netherlands	8	6.23	8	5.96	12	6.50
New Zealand	2	6.47	4	6.08	2	6.85
Nicaragua	94	3.76	108	3.02	75	4.49
Nigeria	119	3.19	104	3.13	120	3.26
Norway	6	6.35	6	6.03	7	6.66
Pakistan	99	3.70	84	3.48	102	3.92
Panama	58	4.43	65	3.82	60	5.03
Paraguay	114	3.36	123	2.58	94	4.14
Peru	60	4.36	109	3.01	37	5.71
Philippines	91	3.80	74	3.63	100	3.96
Poland	73	4.03	77	3.58	76	4.48
Portugal	19	5.79	18	5.40	24	6.18
Qatar	22	5.69	17	5.41	30	5.96
Romania	72	4.03	88	3.45	69	4.62
Russian Federation	93	3.78	113	2.88	68	4.69
Serbia and Montenegro	82	3.95	100	3.20	67	4.70
Singapore	7	6.32	9	5.81	3	6.83
Slovak Republic	45	4.95	60	4.01	32	5.89
Slovenia	29	5.38	44	4.51	21	6.26
South Africa	39	5.18	42	4.58	36	5.78
Spain	32	5.29	51	4.27	20	6.30
Sri Lanka	87	3.82	71	3.68	99	3.97
Suriname	84	3.88	63	3.87	104	3.89
Sweden	10	6.22	10	5.76	6	6.68
Switzerland	9	6.23	7	5.99	14	6.46
Taiwan, China	30	5.33	41	4.59	26	6.08
Tajikistan	106	3.56	72	3.67	114	3.45
Tanzania	77	3.99	58	4.13	106	3.86
Thailand	56	4.59	47	4.46	65	4.73
Timor-Leste	109	3.49	105	3.05	101	3.93
Trinidad and Tobago	88	3.81	78	3.57	98	4.05
Tunisia	35	5.20	26	5.18	53	5.22
Turkey	54	4.68	54	4.19	58	5.18
Uganda	108	3.50	94	3.35	112	3.65
Ukraine	86	3.83	99	3.21	80	4.46
United Arab Emirates	25	5.54	29	4.98	25	6.10
United Kingdom	12	6.14	13	5.72	10	6.57
United States	36	5.20	34	4.83	45	5.57
Uruguay	33	5.27	33	4.86	39	5.68
Venezuela	121	3.15	125	2.00	86	4.30
Vietnam	103	3.58	68	3.74	116	3.41
Zambia	120	3.18	64	3.82	124	2.54
Zimbabwe	116	3.25	122	2.60	103	3.90

Table D: Macroeconomic environment index components

Country/Economy	Macroeconomic environment index		Macroeconomic stability index		Country credit rating		Government waste	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Albania	95	3.35	80	4.25	100	2.16	88	2.72
Algeria	36	4.72	5	5.70	65	3.81	35	3.66
Angola	120	2.62	121	3.19	120	1.60	102	2.49
Argentina	78	3.65	48	4.71	86	2.72	106	2.47
Armenia	83	3.58	70	4.41	93	2.44	70	3.05
Australia	12	5.35	18	5.12	18	6.32	11	4.82
Austria	18	5.12	40	4.77	12	6.82	22	4.11
Azerbaijan	58	4.11	21	5.09	79	3.10	65	3.17
Bahrain	28	4.84	14	5.41	46	4.81	30	3.74
Bangladesh	85	3.50	57	4.57	96	2.29	99	2.56
Barbados	41	4.57	54	4.61	49	4.77	19	4.27
Belgium	26	4.90	50	4.67	15	6.65	39	3.63
Benin	107	3.16	101	3.99	104	2.02	92	2.65
Bolivia	100	3.28	96	4.08	90	2.49	103	2.48
Bosnia and Herzegovina	91	3.40	64	4.46	94	2.38	115	2.28
Botswana	40	4.58	53	4.63	48	4.78	18	4.28
Brazil	94	3.36	111	3.77	61	3.95	119	1.94
Bulgaria	62	4.02	51	4.65	56	4.29	101	2.50
Burkina Faso	110	3.13	114	3.60	109	1.89	47	3.41
Burundi	124	2.43	123	2.87	123	1.18	83	2.80
Cambodia	102	3.27	84	4.20	111	1.79	80	2.90
Cameroon	103	3.25	68	4.42	110	1.87	114	2.29
Canada	19	5.11	31	4.97	10	6.84	34	3.66
Chad	123	2.55	116	3.53	122	1.53	124	1.60
Chile	15	5.22	7	5.57	30	5.46	20	4.26
China	32	4.79	16	5.32	36	5.19	53	3.33
Colombia	57	4.12	52	4.64	66	3.79	48	3.41
Costa Rica	71	3.83	76	4.29	63	3.88	82	2.85
Croatia	61	4.03	75	4.30	54	4.37	66	3.13
Cyprus	44	4.45	71	4.39	35	5.24	29	3.78
Czech Republic	48	4.43	34	4.86	32	5.38	96	2.60
Denmark	3	5.69	10	5.49	5	6.89	7	4.90
Dominican Republic	96	3.32	86	4.19	87	2.71	117	2.20
Ecuador	89	3.48	36	4.82	89	2.51	122	1.76
Egypt	79	3.65	109	3.82	67	3.76	63	3.20
El Salvador	56	4.20	60	4.49	68	3.72	23	4.10
Estonia	25	4.93	12	5.43	39	5.14	32	3.71
Ethiopia	112	3.08	110	3.80	117	1.63	67	3.09
Finland	4	5.64	15	5.40	3	6.91	10	4.84
France	30	4.84	63	4.47	11	6.83	40	3.58
Gambia	106	3.24	108	3.84	113	1.77	43	3.52
Georgia	90	3.47	87	4.19	101	2.12	50	3.39
Germany	23	4.96	62	4.48	13	6.81	25	4.06
Greece	52	4.31	90	4.16	26	5.72	62	3.21
Guatemala	70	3.84	66	4.44	77	3.26	59	3.23
Guyana	117	2.76	122	2.94	97	2.26	79	2.90
Honduras	92	3.37	82	4.23	92	2.47	100	2.54
Hong Kong SAR	9	5.42	6	5.58	25	5.82	13	4.70
Hungary	64	3.95	93	4.10	45	4.88	87	2.73
Iceland	13	5.27	39	4.78	22	6.16	2	5.37
India	51	4.32	49	4.71	55	4.30	41	3.55
Indonesia	45	4.45	43	4.77	78	3.22	5	5.04
Ireland	14	5.25	9	5.49	14	6.72	55	3.31
Israel	39	4.58	42	4.77	41	4.96	28	3.82
Italy	54	4.27	92	4.12	20	6.23	95	2.60
Jamaica	111	3.09	117	3.49	81	2.83	98	2.56
Japan	43	4.51	72	4.37	19	6.28	74	3.02
Jordan	69	3.85	95	4.08	70	3.58	36	3.65
Kazakhstan	38	4.62	13	5.43	57	4.24	49	3.40
Kenya	108	3.14	100	4.00	99	2.18	113	2.38
Korea, Rep.	34	4.73	19	5.11	28	5.68	73	3.04
Kuwait	17	5.13	2	5.90	31	5.39	54	3.32
Kyrgyz Republic	122	2.58	120	3.23	108	1.91	118	1.94
Latvia	37	4.65	26	5.01	44	4.88	33	3.68
Lesotho	82	3.59	67	4.42	90	2.49	72	3.04
Lithuania	46	4.44	32	4.91	42	4.94	75	3.00
Luxembourg	11	5.35	25	5.03	6	6.87	15	4.47
Macedonia, FYR	77	3.68	55	4.61	80	2.90	94	2.63
Madagascar	116	2.92	118	3.41	116	1.68	64	3.19
Malawi	121	2.59	124	2.86	121	1.58	69	3.05

(cont'd.)

Table D: Macroeconomic environment index components (cont'd.)

Country/Economy	Macroeconomic environment index		Macroeconomic stability index		Country credit rating		Government waste	
	Rank	Score	Rank	Score	Rank	Score	Rank	Score
Malaysia	20	5.03	23	5.04	37	5.19	9	4.85
Mali	113	3.07	115	3.53	105	1.98	60	3.22
Malta	49	4.41	74	4.32	29	5.54	45	3.49
Mauritania	119	2.65	119	3.25	118	1.62	105	2.48
Mauritius	66	3.89	102	3.98	58	4.23	52	3.37
Mexico	50	4.37	56	4.58	43	4.90	46	3.42
Moldova	101	3.27	73	4.35	114	1.75	93	2.64
Mongolia	86	3.49	61	4.48	83	2.76	116	2.25
Morocco	65	3.95	81	4.25	62	3.93	51	3.38
Mozambique	114	3.03	113	3.62	98	2.19	89	2.71
Namibia	63	4.01	41	4.77	70	3.58	78	2.92
Nepal	97	3.31	91	4.12	107	1.96	68	3.07
Netherlands	6	5.52	20	5.11	8	6.86	6	5.02
New Zealand	27	4.87	37	4.82	21	6.20	37	3.65
Nicaragua	109	3.13	97	4.08	106	1.98	111	2.39
Nigeria	87	3.49	69	4.42	95	2.36	86	2.77
Norway	2	5.79	4	5.74	2	6.94	12	4.74
Pakistan	75	3.70	78	4.27	85	2.72	42	3.52
Panama	67	3.89	65	4.44	60	3.95	90	2.70
Paraguay	115	3.03	104	3.92	88	2.54	123	1.71
Peru	60	4.06	46	4.74	64	3.83	77	2.92
Philippines	74	3.73	59	4.50	73	3.49	109	2.42
Poland	59	4.08	83	4.23	40	5.08	84	2.79
Portugal	42	4.55	77	4.29	23	6.13	44	3.50
Qatar	5	5.62	1	5.98	34	5.32	4	5.19
Romania	76	3.70	89	4.16	59	4.00	107	2.46
Russian Federation	55	4.23	35	4.86	52	4.65	97	2.57
Serbia and Montenegro	93	3.37	106	3.90	82	2.78	81	2.90
Singapore	1	5.88	8	5.56	17	6.54	1	5.87
Slovak Republic	47	4.43	44	4.76	38	5.18	71	3.05
Slovenia	33	4.74	29	4.98	26	5.72	56	3.30
South Africa	35	4.73	30	4.98	50	4.74	21	4.22
Spain	21	5.02	33	4.89	16	6.57	31	3.72
Sri Lanka	98	3.30	107	3.84	84	2.74	85	2.78
Suriname	88	3.49	98	4.03	n/a	n/a	110	2.41
Sweden	10	5.35	11	5.45	7	6.87	38	3.65
Switzerland	8	5.50	17	5.16	1	7.00	14	4.67
Taiwan, China	22	5.00	24	5.04	24	5.85	24	4.08
Tajikistan	99	3.28	94	4.09	115	1.75	61	3.21
Tanzania	80	3.61	88	4.17	103	2.06	26	4.05
Thailand	31	4.81	27	5.01	46	4.81	16	4.40
Timor-Leste	104	3.25	103	3.97	112	1.78	57	3.27
Trinidad and Tobago	53	4.30	28	4.99	50	4.74	104	2.48
Tunisia	29	4.84	38	4.81	53	4.40	3	5.35
Turkey	73	3.75	99	4.02	69	3.69	58	3.26
Uganda	105	3.24	79	4.26	102	2.08	112	2.38
Ukraine	81	3.60	85	4.20	72	3.55	108	2.44
United Arab Emirates	7	5.50	3	5.89	33	5.33	8	4.89
United Kingdom	16	5.16	47	4.74	4	6.90	17	4.28
United States	24	4.95	58	4.53	8	6.86	27	3.88
Uruguay	84	3.51	105	3.90	76	3.27	76	2.96
Venezuela	72	3.76	22	5.04	74	3.37	125	1.60
Vietnam	68	3.88	45	4.75	75	3.34	91	2.68
Zambia	118	2.70	112	3.63	118	1.62	121	1.90
Zimbabwe	125	1.84	125	2.22	124	1.00	120	1.92