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Best Markets for Business Access to Capital

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Ranking the Best Markets for Business Access to Capital

Business firms play a central role in every country in the world. As they grow and expand, they create jobs and provide goods and services to people. To do so, however, they require access to capital. It is therefore incumbent upon all countries to facilitate the raising of funds by firms through both domestic and foreign capital markets.

In recent years, many countries have significantly improved their own capital markets and promoted the inflow of capital from abroad. Indeed, there has been a worldwide abundance of liquidity to help finance economic activity. However, these funds have generally gone to firms in those countries that have promoted an environment in which investors are able to receive an appropriate risk-adjusted return.

Governments should be encouraged to aid business firms receiving relatively few funds for growth and expansion by providing a more suitable environment for investors. One way to accomplish this goal is to assess what is happening in other countries. The Milken Institute's Capital Access Index (CAI) enables countries to see how they compare to others in terms of creating the conditions necessary for firms to raise capital, and it assists countries in deciding what actions can improve the required linkage between finance and economic growth.

The CAI has ranked countries around the world since 1999 according to how well they support economic activity by providing businesses with access to capital, both domestic and foreign. That access is vital to growth, job creation, and, ultimately, to the quality of life. The index serves to help nations understand where financing barriers exist that could dampen their global competitiveness.

The 2007 index ranks 122 countries for which sufficient data were available in 2006, from Chad to China, from the U.K. to Uruguay. Together they account for 82 percent of world's land area, 94 percent of its population, 99 percent of all countries' gross domestic products, and 87 percent of the world's financial assets. For each country, fifty-eight variables are assessed across seven components that capture its economic, financial, and social infrastructures. The result is a composite score that determines the country's overall position on the index. The seven components include:

- *Macroeconomic environment:* the extent of favorable conditions for running and financing a business, based upon variables such as inflation and interest rates, tax rates, and financial sophistication relative to international norms.

- *Institutional environment:* the extent to which institutions support and enhance business-financing activities, based upon variables that include enforceable property rights, an equitable judicial system, efficient bankruptcy procedures, and corruption levels.

- *Financial and banking institutions:* the involvement of deposit-taking institutions in financing businesses, based upon variables such as the extension of credit to the private sector, the soundness of financial institutions, ease of access to bank loans, and the efficiency of the banking system.

- *Equity market development:* the extent to which equity-financing of business operations is important, based upon variables such as stock market capitalization relative to GDP, stock market liquidity, and changes in the number of listings.
- *Bond market development:* the importance of bond-financing of business operations. Variables include the amount of private and public bonds relative to GDP and the securitized asset issuance relative to GDP.
- *Alternative sources of capital:* a country's use of more diverse financing sources, such as venture capital, private placements, and credit cards.
- *International funding:* the level of foreign capital available to businesses in a particular country, based upon such variables as the volatility of exchange rates, international reserve holdings, portfolio and foreign direct investment, capital inflows and outflows, and sovereign ratings.

With substantial flows of funds across national borders in recent years, the global economy grew by a robust 5.4 percent in 2006, thanks in great part to emerging markets, especially China and India. Sixty percent of the listed countries saw increases in their composite CAI scores in 2007. The average composite score rose by 1.5 percentage points to 4.71. The median score increased slightly more, by 2.8 percentage points, to 4.51.

A country that scores extremely well in one component may score much lower in others. Saudi Arabia, for example, ranks number one in macroeconomic environment but comes in 35th in its institutional environment, 47th in equity market development, and 65th in bond market development. Belgium ranks number one in bond market development but 18th on equity market development, 24th in financial and banking institutions, and 35th in macroeconomic environment. And Ireland, which ranks number one in financial and banking institutions, scores 10th in institutional environment, 18th in equity market development, and 32nd in international funding. (A list of all the variables used to calculate the scores is found in Appendix A. Country rankings for each subcomponent are found in Appendix B.)

1. Hong Kong SAR
2. United Kingdom
3. Canada
4. Singapore
5. Sweden
6. Ireland
7. Switzerland
8. Australia
9. Finland, Norway (tie)

The Top Ten

First-place Hong Kong's financial environment is among the world's best. As Asia's financial center, Hong Kong possesses well-developed markets and diversified funding sources. These advantages, combined with greater integration with mainland China in 2006, led to its best economic performance since the United Kingdom's lease ended and the territory was returned to China in 1997. Hong Kong's high composite score for the second year in a row reflects a continued strong macroeconomic environment and further bond market development.

The United Kingdom and Canada moved up one ranking each in 2007, occupying 2nd and 3rd place, respectively. Singapore, meanwhile, dropped from 2nd to 4th, partly because of a sharp decline in the number of stock listings, which had grown at an average annual rate of 11 percent in the previous four years. Sweden displayed the most movement in the top ten, moving up five places from 10th to 5th. Ireland, Switzerland, and Australia were 6th, 7th, and 8th, respectively, followed by Finland and Norway (which tied at 9th).

Among the top ten countries, nine saw some improvement in financial and banking institutions, and eight in their macroeconomic environments. However, all ten generally declined in their international funding scores, which measure local firms' ability to tap funds from beyond their own borders. The decline in these scores is partly due to the continuing shift in funds to the emerging market economies.

The three Scandinavian countries in the top ten—Sweden, Finland, and Norway—enjoyed strong economic growth, as well as better access to alternative sources of capital, including increased venture capital funds relative to GDP.

The United States, for the first time, dropped out of the top ten. Although it showed considerable progress in the alternative capital and equity market development subcomponents, the United States still dropped from 5th to 11th on the CAI, mainly due to a weaker macroeconomic environment. The Netherlands also tumbled out of the top ten by moving from 8th to 15th place, due to lower scores for the year in both alternative funds and access to international capital.

The Top Half

Eighteen of the sixty-one countries in top half of the CAI, or nearly 30 percent, are developed European countries. The rest include twelve developing European countries, eleven Asian countries, ten South American and Caribbean countries, seven Middle Eastern countries, two North American countries, and one African country. Forty-three countries saw improved scores in this latest ranking, seventeen suffered drops in the CAI, and one remained unchanged.

Among Europe's developed countries, Germany and Austria dropped in ranking while their CAI scores improved. Belgium (up eight places to 21st), France, and Portugal saw improvements in their scores and rankings. Belgium's improvement was mainly due to macroeconomic performance and an increase in corporate bond market activity. Austria, France, and Portugal all saw the greatest improvement in the area of alternative capital, particularly the availability of venture capital funds. Germany's development of financial institutions was the largest component of its CAI improvement. This was due to the growth of credit available to the private sector and increasing utilization of syndicated loans.

Most of the developing countries in Europe moved up in their rankings from the previous year, including Lithuania (28th, up from 40th), the Czech Republic (37th, up from 39th), Latvia (38th, also up from 40th), Slovakia (44th, up from 48th), Slovenia (46th, up from 55th), Croatia (54th, up from 66th), and Romania (58th, up from 61st). There are some exceptions: Estonia dropped from 18th to 19th, Poland from 38th to 39th, and Bulgaria from 52nd to 53rd. Lithuania (the second-largest improvement in terms of ranks) and the Czech Republic both improved across a wide spectrum of CAI components, including financial institutions, equity and bond market development, and an increase in alternative sources of capital. Estonia stayed in the top twenty due to a macroeconomic environment relatively favorable to businesses seeking funding.

In Asia, China's ranking improved only slightly, from 47th to 45th on the list. It made significant improvements in both the macroeconomic environment and equity market development but slipped in alternative investment and access to international capital. Although China continued to be the world's primary destination for foreign direct investment, in the past few years, Chinese companies have increasingly invested abroad. Chinese investment beyond domestic firms has helped diversify the economy but also reduced the availability of capital within China's own borders.

Most Asian countries scoring in the top half also showed improvements since 2006. Japan moved from 16th to 15th, South Korea from 20th to 19th, Taiwan from 34th to 25th, and India from 46th to 41st. The relatively less-volatile interest-rate environment in Japan contributed to an enhanced macroeconomic environment for access to capital. Taiwan's improvement reflected a greater use of credit cards and an increase in the sovereign rating from A+ in 2005 to AA in 2006. Of Asian countries in the top half, only Malaysia (13th, down from 12th), Thailand (26th, down from 19th), and the Philippines (62nd, down from 56th) slipped in the rankings. Thailand's seven-point drop can be traced to a decline in nearly all components of the CAI except economic institutions and banking development. Political instability since the 2006 coup d'etat also played an indirect role in stifling capital flow and the business environment.

Meanwhile, among top-half scorers in Latin America, only Mexico (35th, up from 43rd) and Uruguay (54th, up from 63rd) improved their rankings from 2006. The index shows deterioration in Chile (27th, down from 22nd), Panama (40th, down from 37th), Peru (50th, down from 45th), El Salvador (52nd, down from 44th), Brazil (56th, down from 50th), Colombia (also 56th, down from 49th), and Argentina (60th, down from 57th). It is interesting to note that most of the countries in the region scored in a similar range in the index. A common factor in Latin American countries is that government bonds dominate the market, thereby limiting the development of a corporate bond market and the score for this subcomponent of the CAI. Mexico's improved showing was due to an increase in its deposit rating from A1 in 2005 to AAA in 2006, reflecting a strengthening banking sector there over the past year.

Among Middle Eastern countries, the United Arab Emirates (29th, down from 28th), Kuwait (32nd, down from 27th), Saudi Arabia (36th, down from 30th), Oman (42nd, down from 35th), and Lebanon (48th, down from 33rd) all displayed lower absolute scores, while Israel (12th, up from 25th) and Jordan (47th, up from 50th) climbed in the rankings. The decline of most Middle Eastern countries was due to lower stock market capitalization relative to GDP. For example, Saudi Arabia's market capitalization at the end of 2005 was nearly $650 billion, but declined by almost half, to $326 billion, by the end of 2006. Israel's 13-place jump, the largest in the CAI, was due to improvement in alternative sources of funding, including an increase in private placement from $3.9 billion in 2005 to $8.1 billion in 2006. New venture capital funding in 2006 also increased to half a billion dollars from $413 million. Israel's financial reform efforts over the past year improved both the depth and breadth of its financial services industry.

South Africa is the only country on the African continent ranked in the top half of the CAI. Its improvement in both score and ranking (30th, up from 32nd) can be attributed to an increase in alternative capital and bond market development. There have been significant increases in both venture capital funds and private placements. In 2006 total private placement in South Africa reached $11.4 billion, compared with $3.2 billion the previous year.

The Bottom Half

Among the largest improvements in the bottom half of the CAI were Belarus (63rd, up from 89th), Ethiopia (95th, up from 115th), Bolivia (76th, up from 94th), Egypt (65th, up from 82nd), and Guatemala (77th, up from 91st). Belarus moved up because of more stable macroeconomic policies and better economic institutions. Although the $92 million of private placements recorded by Belarus in 2006 was small by international standards, the initiation of this type of fund marked a significant improvement in access to capital. The large improvements in scores for Ethiopia, Bolivia, and Egypt were due to more stable macroeconomic environments, while Guatemala's score improved largely due to a better institutional environment.

Papua New Guinea (79th, down from 62nd), Laos (119th, down from 105th), Mozambique (109th, down from 95th), and Venezuela (93rd, down from 79th) suffered the worst declines in the bottom half of the CAI. Interestingly, all components of these four countries declined, except equity development for all four and alternative capital for Mozambique. The subcomponent that contributed the most to the decline for Papua New Guinea and Laos was the macroeconomic environment, while for Mozambique it was economic institutions. Poorer access to international sources of funds was the primary reason for Venezuela's decline.

As mentioned above, twenty-five of the twenty-six African nations ranked below the median CAI score. Indeed, twenty-two are among the bottom thirty countries. On average, Africa has lowest score in all categories compared with other regions. While all areas of financial structure (the composition of banking, equity market, bond market, and alternative capital) in Africa need attention, developing a strong equity market might generate the largest improvement. However, financial markets cannot develop and function smoothly without the rule of law and strong judicial institutions. Therefore, creating political stability and fostering the development of economic institutions should be the main priorities of the African countries that wish to improve access to capital for businesses.

Table 1: 2007 Capital Access Index

0 MEAN: 4.71 10

RANK 2007	RANK 2006	COUNTRY	CAI 2007
1	1	Hong Kong SAR	8.27
2	3	United Kingdom	8.23
3	4	Canada	8.01
4	2	Singapore	7.88
5	10	Sweden	7.86
6	9	Ireland	7.66
7	7	Switzerland	7.62
8	6	Australia	7.61
9	13	Finland	7.56
9	11	Norway	7.56
11	5	United States	7.50
12	25	Israel	7.15
13	12	Malaysia	7.14
14	14	Denmark	7.12
15	16	Japan	7.07
15	8	Netherlands	7.07
17	15	Germany	7.05
18	16	New Zealand	7.00
19	18	Estonia	6.87
19	20	South Korea	6.87
21	29	Belgium	6.86
22	23	France	6.83
23	21	Austria	6.80
24	26	Portugal	6.79
25	34	Taiwan, China	6.57
26	19	Thailand	6.36
27	22	Chile	6.32
28	40	Lithuania	6.25
29	28	United Arab Emirates	6.13
30	32	South Africa	6.12
31	31	Hungary	6.11
32	27	Kuwait	6.09
33	36	Italy	5.96
34	42	Greece	5.87
35	43	Mexico	5.78
36	30	Saudi Arabia	5.73
37	39	Czech Republic	5.63
38	40	Latvia	5.61
39	38	Poland	5.54
40	37	Panama	5.53
41	46	India	5.50
42	35	Oman	5.36
43	24	Spain	5.34
44	48	Slovakia	5.29
45	47	China	5.26
46	55	Slovenia	5.22
47	50	Jordan	5.14
48	33	Lebanon	5.12
49	53	Russia	5.00
50	45	Peru	4.98
51	54	Turkey	4.97
52	44	El Salvador	4.95
53	52	Bulgaria	4.85
54	66	Croatia	4.77
54	63	Uruguay	4.77
56	50	Brazil	4.76
56	49	Colombia	4.76
58	61	Romania	4.66
59	59	Tunisia	4.60
60	57	Argentina	4.52
60	58	Jamaica	4.52
62	56	Philippines	4.50
63	89	Belarus	4.46
64	63	Indonesia	4.40
65	82	Egypt	4.36
65	72	Ukraine	4.36
67	73	Macedonia	4.30
68	60	Botswana	4.29
69	71	Costa Rica	4.22
70	66	Sri Lanka	4.11
71	69	Morocco	4.08
72	65	Pakistan	4.06
73	74	Namibia	4.04
74	74	Vietnam	3.98
75	68	Armenia	3.96
76	94	Bolivia	3.85
77	91	Guatemala	3.83
78	70	Ghana	3.81
79	62	Papua New Guinea	3.77
80	80	Iran	3.71
81	81	Kenya	3.67
82	77	Nicaragua	3.66
83	84	Honduras	3.61
84	87	Ecuador	3.56
85	76	Dominican Republic	3.47
86	85	Tanzania	3.45
87	92	Bosnia and Herzegovina	3.44
88	82	Nigeria	3.40
89	78	Moldova	3.39
90	93	Mongolia	3.36
91	87	Uganda	3.25
92	97	Bangladesh	3.24
93	79	Venezuela	3.21
94	89	Paraguay	3.16
95	115	Ethiopia	3.11
96	95	Lesotho	3.08
97	86	Senegal	3.05
98	101	Cambodia	3.00
98	98	Zambia	3.00
100	100	Central African Republic	2.97
101	106	Mali	2.85
102	102	Burkina Faso	2.81
103	107	Syria	2.78
104	110	Yemen	2.68
105	108	Malawi	2.63
105	104	Mauritania	2.63
107	111	Zimbabwe	2.62
108	99	Cameroon	2.61
109	95	Mozambique	2.60
110	114	Angola	2.56
111	102	Benin	2.48
111	119	Togo	2.48
113	120	Niger	2.42
114	111	Madagascar	2.38
115	118	Burundi	2.34
116	116	Guinea	2.33
117	122	Republic of Congo	2.32
117	117	Rwanda	2.32
119	105	Laos	2.11
120	109	Haiti	2.09
120	111	Sierra Leone	2.09
122	121	Chad	1.69

Table 2 represents average composite scores and average scores by each of the subcomponents, broken down by development status and geographical region. Industrialized countries score higher in all seven subcomponents than developing countries. The Middle East enjoyed the highest scores, followed by developing Europe. Developing Asia, which led the emerging-market countries in 2005 and 2006, fell behind Europe in 2007. Although developing Asia still scored high in macroeconomic environment and financial and banking institutions, those countries' scores lagged in bond market development and alternative sources of capital. As the table shows, a sound macroeconomic environment is still the strongest component driving composite CAI scores. Equity market development was its weakest component in 2007.

Table 2: Average of Subcomponents for 2007 Capital Access Index

	2007 CAI	Macroeconomic Environment (ME)	Institutional Environment (IE)	Financial and Banking Institutions (FI)	Equity Market Development (EM)	Bond Market Development (BM)	Alternative Sources of Capital (AC)	International Funding (IF)
Industrialized Countries	7.01	7.84	7.56	7.14	6.33	6.49	6.12	5.52
Middle East	4.80	6.02	5.45	4.76	3.77	3.98	3.10	3.68
Europe	4.73	6.08	5.17	4.89	3.46	3.36	3.00	4.48
Asia	4.56	6.26	4.96	4.24	3.45	3.02	2.67	4.16
Americas and the Caribbean	4.35	5.83	5.03	3.96	2.93	3.10	2.31	4.11
Africa	3.06	4.54	3.99	2.75	1.07	1.24	1.23	2.91

Rankings: Best Markets for Business Access to Finance

Table 3 compares country rankings over the past three years. The average composite CAI score for all nations has been relatively stable in previous years, but steadily trending upward. For 2007, the score is 4.71, compared to 4.64 in 2006 and 4.59 in 2005. The median scores for 2005, 2006, and 2007 are 4.34, 4.39, and 4.51, respectively.

Alternative sources of capital, macroeconomic environment, and international funding were the three major components that contributed to the increase in the CAI composite score from 2006 to 2007. Equity market development and institutional environment, in contrast, are most responsible for holding down the composite scores.

The average score for countries ranking in the top half of the index is 2.9 points higher than the average for countries in the bottom half (6.17 points versus 3.25). This gap is slightly wider than the 2.7-point difference last year. The gap in score between countries in the top and bottom halves widened for all components except bond market development.

Table 3: Capital Access Index and Country Ranking, 2005 - 2007

	2007		2006		2005	
	CAI	Rank	CAI	Rank	CAI	Rank
Hong Kong SAR	8.27	1	8.07	1	7.84	2
United Kingdom	8.23	2	7.79	3	8.01	1
Canada	8.01	3	7.61	4	7.42	10
Singapore	7.88	4	8.00	2	7.77	3
Sweden	7.86	5	7.35	10	7.62	5
Ireland	7.66	6	7.46	9	7.42	10
Switzerland	7.62	7	7.52	7	7.39	12
Australia	7.61	8	7.55	6	7.60	7
Finland	7.56	9	7.09	13	7.46	9
Norway	7.56	9	7.16	11	7.47	8
United States	7.50	11	7.59	5	7.75	4
Israel	7.15	12	6.39	25	6.19	27
Malaysia	7.14	13	7.12	12	6.88	16
Denmark	7.12	14	6.99	14	7.61	6
Japan	7.07	15	6.88	16	6.76	19
Netherlands	7.07	15	7.50	8	7.20	13
Germany	7.05	17	6.92	15	6.93	15
New Zealand	7.00	18	6.88	16	7.04	14
Estonia	6.87	19	6.83	18	6.59	21
South Korea	6.87	19	6.58	20	6.37	23
Belgium	6.86	21	6.05	29	6.17	28
France	6.83	22	6.44	23	6.62	20
Austria	6.80	23	6.53	21	6.41	22
Portugal	6.79	24	6.37	26	6.31	26
Taiwan, China	6.57	25	5.76	34	6.34	25
Thailand	6.36	26	6.61	19	5.71	30
Chile	6.32	27	6.45	22	6.78	18
Lithuania	6.25	28	5.32	40	5.51	35
United Arab Emirates	6.13	29	6.08	28	5.14	39
South Africa	6.12	30	5.81	32	6.36	24
Hungary	6.11	31	5.94	31	5.36	36
Kuwait	6.09	32	6.18	27	5.52	34
Italy	5.96	33	5.63	36	5.66	31
Greece	5.87	34	5.25	42	5.85	29
Mexico	5.78	35	5.24	43	5.05	43
Saudi Arabia	5.73	36	6.00	30	5.56	33
Czech Republic	5.63	37	5.34	39	5.58	32
Latvia	5.61	38	5.32	40	4.92	46
Poland	5.54	39	5.54	38	4.98	45
Panama	5.53	40	5.61	37	5.13	40
India	5.50	41	5.18	46	4.58	53
Oman	5.36	42	5.75	35	5.30	37
Spain	5.34	43	6.42	24	6.80	17
Slovak Republic	5.29	44	5.10	48	5.05	43
China	5.26	45	5.15	47	5.17	38
Slovenia	5.22	46	4.73	55	4.56	55
Jordan	5.14	47	4.95	50	5.11	42
Lebanon	5.12	48	5.78	33	4.87	48
Russia	5.00	49	4.79	53	4.67	51
Peru	4.98	50	5.19	45	4.69	49
Turkey	4.97	51	4.74	54	4.37	60
El Salvador	4.95	52	5.23	44	4.90	47
Bulgaria	4.85	53	4.80	52	4.58	53
Croatia	4.77	54	4.21	66	4.30	63
Uruguay	4.77	54	4.34	63	3.48	85
Brazil	4.76	56	4.95	50	5.13	40
Colombia	4.76	56	5.03	49	4.68	50
Romania	4.66	58	4.42	61	3.62	81
Tunisia	4.60	59	4.49	59	4.67	51
Argentina	4.52	60	4.57	57	4.23	66
Jamaica	4.52	60	4.55	58	4.09	69

Table 3: Capital Access Index and Country Ranking, 2005 - 2007 *(cont.)*

	2007		2006		2005	
	CAI	Rank	CAI	Rank	CAI	Rank
Philippines	4.50	62	4.67	56	4.44	58
Belarus	4.46	63	3.44	89	3.36	88
Indonesia	4.40	64	4.34	63	4.48	57
Egypt	4.36	65	3.60	82	3.24	92
Ukraine	4.36	65	4.02	72	3.88	71
Macedonia	4.30	67	3.90	73	3.79	74
Botswana	4.29	68	4.44	60	4.11	68
Costa Rica	4.22	69	4.06	71	4.49	56
Sri Lanka	4.11	70	4.21	66	4.27	64
Morocco	4.08	71	4.08	69	4.40	59
Pakistan	4.06	72	4.23	65	3.79	74
Namibia	4.04	73	3.86	74	4.34	61
Vietnam	3.98	74	3.86	74	3.10	98
Armenia	3.96	75	4.19	68	4.26	65
Bolivia	3.85	76	3.37	94	3.32	90
Guatemala	3.83	77	3.43	91	3.30	91
Ghana	3.81	78	4.07	70	3.88	71
Papua New Guinea	3.77	79	4.35	62	4.31	62
Iran	3.71	80	3.66	80	3.66	79
Kenya	3.67	81	3.64	81	3.87	73
Nicaragua	3.66	82	3.81	77	3.78	76
Honduras	3.61	83	3.59	84	3.53	84
Ecuador	3.56	84	3.49	87	n.a.	n.a.
Dominican Republic	3.47	85	3.83	76	4.13	67
Tanzania	3.45	86	3.55	85	3.60	82
Bosnia and Herzegovina	3.44	87	3.41	92	3.46	86
Nigeria	3.40	88	3.60	82	3.18	94
Moldova	3.39	89	3.72	78	3.93	70
Mongolia	3.36	90	3.40	93	3.73	77
Uganda	3.25	91	3.49	87	3.73	77
Bangladesh	3.24	92	3.32	97	3.43	87
Venezuela	3.21	93	3.70	79	3.65	80
Paraguay	3.16	94	3.44	89	3.12	97
Ethiopia	3.11	95	2.45	115	2.55	112
Lesotho	3.08	96	3.33	95	3.19	93
Senegal	3.05	97	3.52	86	2.92	101
Cambodia	3.00	98	2.82	101	3.14	96
Zambia	3.00	98	2.92	98	3.07	99
Central African Republic	2.97	100	2.83	100	2.46	115
Mali	2.85	101	2.63	106	2.59	108
Burkina Faso	2.81	102	2.79	102	3.18	94
Syria	2.78	103	2.62	107	3.59	83
Yemen	2.68	104	2.56	110	2.50	114
Malawi	2.63	105	2.60	108	2.74	104
Mauritania	2.63	105	2.74	104	3.03	100
Zimbabwe	2.62	107	2.50	111	2.46	115
Cameroon	2.61	108	2.90	99	2.54	113
Mozambique	2.60	109	3.33	95	3.36	88
Angola	2.56	110	2.47	114	2.88	102
Benin	2.48	111	2.79	102	2.80	103
Togo	2.48	111	2.26	119	2.56	111
Niger	2.42	113	2.25	120	2.67	106
Madagascar	2.38	114	2.50	111	2.36	117
Burundi	2.34	115	2.29	118	2.59	108
Guinea	2.33	116	2.35	116	2.24	119
Republic of Congo	2.32	117	1.81	122	1.63	120
Rwanda	2.32	117	2.33	117	2.57	110
Laos	2.11	119	2.71	105	2.36	117
Haiti	2.09	120	2.58	109	2.66	107
Sierra Leone	2.09	120	2.50	111	2.74	104
Chad	1.69	122	1.94	121	1.62	121

In 2006, three Asian emerging countries — Malaysia (12th), Thailand (19th), and South Korea (20th) — made it into the top twenty. Although Malaysia (13th) and South Korea (19th) stayed in this group in 2007, Thailand dropped to 26th. Israel was a new member of the top twenty, surging thirteen places from 25th in 2006 to 12th in 2007. Emerging countries took five places in the top twenty in 2007.

Table 4 shows the average score of each subcomponent of the CAI composite score. The average score for alternative sources of financing is 3.10, the lowest among all subcomponents. However, this represents a significant increase compared to the 2.47 average score for alternative sources of financing in 2006. Bond market development and equity market development continued to score among the lowest subcomponents over the past five years, while macroeconomic environment and institutional environment continued to score the highest. However, the differences among all subcomponents have recently narrowed.

The widest gap between the top and bottom twenty countries is found in equity market development, followed by alternative sources of finance.

Table 4: Average Subcomponents of 2007 Capital Access Index by Ranking

	2007 CAI	Macroeconomic Environment (ME)	Institutional Environment (IE)	Financial and Banking Institutions (FI)	Equity Market Development (EM)	Bond Market Development (BM)	Alternative Sources of Capital (AC)	International Funding (IF)
Top 20	7.46	8.01	8.15	7.99	6.94	6.61	6.86	5.76
Top 50%	6.17	7.25	6.55	6.30	5.27	5.48	4.96	5.17
All	4.73	6.05	5.39	4.60	3.41	3.47	3.10	4.15
Bottom 50%	3.25	4.80	4.16	2.85	1.50	1.43	1.18	3.09
Bottom 20	2.41	3.90	3.45	1.76	0.50	0.90	0.43	2.13

Appendixes

Appendix A: Methodology

Seven subcomponents determine each nation's Capital Access Index score: macroeconomic environment (ME), institutional environment (IE), financial and banking institutions (FI), equity market development (EM), bond market development (BM), alternative sources of capital (AC), and international funding (IF).

The macroeconomic environment (ME) captures the extent to which a country's macroeconomic environment is favorable to running and financing a business. Macroeconomic variables include low and stable inflation and interest rates, low tax rates, and a level of financial sophistication compared to international norms.

The institutional environment (IE) reflects the extent to which a country has the institutions to support and enhance business-financing activities. That includes enforceable property rights, an efficient judicial system, efficient bankruptcy procedures, and low levels of corruption.

The subcomponent of financial and banking institutions (FI) measures the level of involvement of deposit-taking institutions in financing businesses. Some variables included in FI are the level of private-sector credit extended by deposit-taking institutions, the soundness of financial institutions, the ease of access to bank loans, and the efficiency of the banking system.

Equity market development (EM) reflects the extent to which the financing of business operations is important for a given country. Some EM variables include stock market capitalization relative to GDP, the liquidity of the stock market, and changes in the number of listings.

Bond market development (BM) captures the importance of bond financing of business operations. Some variables include the totals of private and public bonds relative to GDP and securitized asset issuance relative to GDP.

Alternative sources of capital (AC) measures a country's use of financing pools such as venture capital, private placements, and credit cards.

International funding (IF) measures the level of foreign capital available to businesses in a particular country and includes variables such as the volatility of exchange rates, international reserve holdings, portfolio and FDI capital inflows and outflows, and sovereign ratings.

To calculate the various scores, we begin by assigning the non-surveyed or missing variables in FI, EM, BM, AC, and IF subcomponents a score of zero. This reflects the fact that the industry or sector in question is either missing or so small that its effect on capital access is immaterial.

In some countries, non-survey variables are missing due to slow data reporting, and yet the industry exists, as evidenced from prior years' data. In these cases, we have continued to use the prior year's values rather than assigning a zero or missing value.

Second, the variables are ranked by decile according to the directional relationship to capital access. The resulting scores of one to ten are then assigned for countries ranking lowest to highest in terms of capital access. The score for each subcategory is calculated by a simple average of the variables, but only if the data in the category are greater or equal to 50 percent of the total variables in that category.

Third, the Capital Access Index is calculated using the weighted average of the seven subcategories. The first two subcategories, ME and IE, are weighted 25 percent each. The other five subcomponents, FI, EM, BM, AC, and IF, each are weighted as 10 percent of the final CAI score.

Theoretically, the scores can range from zero to ten. However, because every country has some kind of macroeconomic and institutional structure, the minimum for each of these two categories is one; therefore the lowest possible score is 0.5.

Capital Access Index Variables

Code	Category	Variable	Source	Directional Relationship
ME01	Macroeconomic environment	Absolute inflation rate	IFS	-
ME02	Macroeconomic environment	Lending rate	IFS	-
ME03	Macroeconomic environment	The absolute value of difference between interest rate volatility and the volatility of the International Monetary Fund's SDR (special drawing right) and the LIBOR (London Interbank Offered Rate)	IFS	-
ME04	Macroeconomic environment	Corporate tax	Heritage	-
ME05	Macroeconomic environment	Personal tax	Heritage	-
ME06	Macroeconomic environment	Financial market sophistication	WEF	+
IE01	Institutional environment	Contract enforcement (procedures, days, and costs)	WBD	-
IE02	Institutional environment	Absence of corruption	ICRG	+
IE03	Institutional environment	Property rights (procedures, days, and costs)	WBD	-
IE04	Institutional environment	Minimum paid in capital % of GNI (gross national income)	WBD	-
IE05	Institutional environment	Cost to create and register collateral	WBD	-
IE06	Institutional environment	Index of legal rights of borrowers and lenders	WBD	+
IE07	Institutional environment	Index of credit information availability	WBD	+
IE08	Institutional environment	Coverage of public registries	WBD	+
IE09	Institutional environment	Disclosure requirements	WBD	+
IE10	Institutional environment	Bankruptcy (procedure and costs)	WBD	-
IE11	Institutional environment	Bankruptcy recovery rate per dollar	WBD	+
IE12	Institutional environment	Effectiveness of bankruptcy law	WEF	+
IE13	Institutional environment	Judicial independence	WEF	+
IE14	Institutional environment	Efficiency of legal framework	WEF	+
IE15	Institutional environment	Property rights	WEF	+
IE16	Institutional environment	Intellectual property protection	WEF	+
IE17	Institutional environment	Burden of local government regulation	WEF	+
FI01	Financial and banking institutions	Claims to nonfinancial firms/GDP	IFS	+
FI02	Financial and banking institutions	Bank assets/GDP	IFS	+
FI03	Financial and banking institutions	Domestic assets/foreign assets	IFS	+
FI04	Financial and banking institutions	Moody's deposit rating	Moody's	+
FI05	Financial and banking institutions	Net interest margin	IFS	-
FI06	Financial and banking institutions	Syndicated loans/GDP	SDC, IFS	+
FI07	Financial and banking institutions	Actual reserves/bank assets	IFS	-
FI08	Financial and banking institutions	Soundness of banks	WEF	+
FI09	Financial and banking institutions	Access to credit	WEF	+
FI10	Financial and banking institutions	Ease of access to loans	WEF	+
EM01	Equity market development	Equity market cap/GDP	GMFB	+
EM02	Equity market development	Equity market liquidity (turnover ratio)	GMFB	+
EM03	Equity market development	Relative equity market volatility (standard deviation of 12-month daily returns)	Datastream	-
EM04	Equity market development	Change in number of listings	GMFB	-
EM05	Equity market development	Local equity market access	WEF	+
EM06	Equity market development	Regulation of securities exchange	WEF	+
BM01	Bond market development	Private sector bond/GDP	BIS, IFS	+
BM02	Bond market development	Public sector bond/GDP	BIS, IFS	+
BM03	Bond market development	Private-sector bond/public-sector bond	BIS	+
BM04	Bond market development	% Change in number of issuance	BIS	+
BM05	Bond market development	Securitized bond issuance/GDP	SDC, IFS	+
AC01	Alternative sources of capital	Venture capital funds/GDP	SDC, IFS	+
AC02	Alternative sources of capital	Private placements/GDP	SDC, IFS	+
AC03	Alternative sources of capital	Credit card issuance/GDP	NIL	+
AC04	Alternative sources of capital	Venture capital availability	WEF	+
IF01	International funding	Total international reserves/annual imports	IFS	+
IF02	International funding	Relative currency volatility	Datastream	-
IF03	International funding	Portfolio inflow/GDP	IFS	+
IF04	International funding	Portfolio outflow/GDP	IFS	-
IF05	International funding	Direct investment inflow/GDP	IFS	+
IF06	International funding	Direct investment outflow/GDP	IFS	-
IF07	International funding	Fitch rating	Fitch	+
IF08	International funding	S&P ratings	S&P	+

Notes:
IFS: International Financial Statistics; **Heritage:** The 2007 Index of Economic Freedom; **WEF:** World Economic Forum, The Global Competitiveness Report, various issues; **WBD:** World Bank Doing Business Database, http://www.doingbusiness.org; **ICRG:** International Country Risk Guide; **Moody's:** Moody's Ratings; **SDC:** Thomson Financial SDC Platinum; **GMFB:** S&P Global Stock Market Factbook; **BIS:** Bank of International Settlements, BIS quarterly report; **Datastream:** Thomson Financial Datastream; **NIL:** The Nilson Report, various issues; **Fitch:** Fitch Ratings; **S&P:** Standard and Poor's Ratings.

Appendix B: Capital Access Index Subcomponents

Appendix B.1: Macroeconomic Environment (ME)

ME captures the extent to which a country's macroeconomic environment is favorable to running and financing a business.

0 MEAN:6.03 10

RANK	COUNTRY	ME
1	Saudi Arabia	10.00
2	Singapore	9.83
3	Hong Kong SAR	9.33
3	Canada	9.33
5	Oman	9.20
6	Estonia	8.83
7	Finland	8.60
8	Kuwait	8.50
9	Switzerland	8.33
9	Malaysia	8.33
9	Lithuania	8.33
12	United Kingdom	8.17
12	Ireland	8.17
12	Japan	8.17
12	Czech Republic	8.17
12	Poland	8.17
12	Slovak Republic	8.17
18	Sweden	8.00
18	Netherlands	8.00
18	South Korea	8.00
21	Norway	7.83
21	Mexico	7.83
21	Panama	7.83
24	Lebanon	7.80
25	Israel	7.67
26	Germany	7.50
26	Chile	7.50
26	Hungary	7.50
26	Latvia	7.50
26	El Salvador	7.50
26	Macedonia	7.50
32	Taiwan, China	7.25
32	United Arab Emirates	7.25
34	Italy	7.17
35	Belgium	7.00
35	Austria	7.00
35	Slovenia	7.00
35	Belarus	7.00
35	Papua New Guinea	7.00
40	United States	6.83
40	Thailand	6.83
40	China	6.83
40	Jordan	6.83
44	Ecuador	6.80
45	Denmark	6.75
45	Portugal	6.75
45	Romania	6.75
48	Australia	6.67
48	Bosnia and Herzegovina	6.67
50	Bulgaria	6.50
50	Croatia	6.50
50	Bolivia	6.50
53	Uruguay	6.33
53	Egypt	6.33
53	Armenia	6.33
56	Greece	6.25
57	Syria	6.20
58	South Africa	6.17
58	Russia	6.17
60	France	6.00
60	India	6.00
62	New Zealand	5.83
62	Ukraine	5.83
62	Cambodia	5.83
65	Brazil	5.67
66	Iran	5.60
67	Spain	5.50
67	Peru	5.50
67	Philippines	5.50
67	Sri Lanka	5.50
67	Ghana	5.50
67	Ethiopia	5.50
73	Guatemala	5.33
73	Nicaragua	5.33
73	Senegal	5.33
73	Niger	5.33
77	Colombia	5.17
77	Argentina	5.17
77	Botswana	5.17
77	Namibia	5.17
77	Lesotho	5.17
82	Turkey	5.00
82	Tunisia	5.00
82	Moldova	5.00
82	Central African Republic	5.00
82	Burkina Faso	5.00
82	Yemen	5.00
82	Togo	5.00
89	Vietnam	4.83
89	Kenya	4.83
89	Nigeria	4.83
89	Bangladesh	4.83
93	Morocco	4.80
94	Mauritania	4.75
95	Jamaica	4.67
95	Costa Rica	4.67
95	Honduras	4.67
95	Tanzania	4.67
95	Paraguay	4.67
100	Mali	4.50
101	Angola	4.40
102	Mongolia	4.33
102	Burundi	4.33
104	Pakistan	4.25
105	Mozambique	4.20
106	Dominican Republic	4.17
106	Uganda	4.17
108	Venezuela	4.00
108	Cameroon	4.00
108	Rwanda	4.00
111	Indonesia	3.83
112	Benin	3.75
113	Madagascar	3.50
114	Guinea	3.33
115	Laos	3.20
115	Haiti	3.20
115	Sierra Leone	3.20
118	Zambia	2.83
118	Malawi	2.83
118	Zimbabwe	2.83
121	Chad	2.67
122	Republic of Congo	2.33

Appendix B.2: Institutional Environment (IE)

IE reflects the extent to which a country has the institutions needed to support and enhance business financing activities.

RANK	COUNTRY	IE	0 MEAN: 5.36 10
1	United Kingdom	8.94	
2	Singapore	8.71	
3	Hong Kong SAR	8.59	
3	Canada	8.59	
3	New Zealand	8.59	
6	Finland	8.47	
7	Australia	8.41	
7	United States	8.41	
7	Japan	8.41	
10	Ireland	8.24	
10	Norway	8.24	
12	Denmark	8.18	
12	Germany	8.18	
14	Switzerland	7.88	
14	Malaysia	7.88	
16	Netherlands	7.82	
17	Sweden	7.76	
17	Austria	7.76	
19	Estonia	7.59	
20	Chile	7.41	
21	Taiwan, China	7.24	
22	South Korea	7.18	
22	Botswana	7.18	
24	Spain	7.12	
25	Thailand	7.06	
26	Israel	6.88	
26	Belgium	6.88	
26	France	6.88	
26	Portugal	6.88	
30	South Africa	6.76	
31	Oman	6.55	
32	Tunisia	6.53	
33	Lithuania	6.47	
34	Latvia	6.18	
35	Saudi Arabia	6.00	
35	Namibia	6.00	
37	Armenia	5.81	
38	Peru	5.76	
39	Hungary	5.71	
39	Slovak Republic	5.71	
41	Kuwait	5.69	
42	El Salvador	5.65	
42	Uruguay	5.65	
42	Colombia	5.65	
45	Iran	5.64	
46	Mexico	5.53	
46	Jordan	5.53	
46	Turkey	5.53	
49	China	5.47	
49	Romania	5.47	
51	Yemen	5.45	
52	Italy	5.41	
52	Costa Rica	5.41	
54	Morocco	5.35	
55	Zambia	5.29	
56	Lebanon	5.27	
57	United Arab Emirates	5.24	
57	Slovenia	5.24	
57	Bulgaria	5.24	
60	Dominican Republic	5.19	
61	Pakistan	5.18	
61	Guatemala	5.18	
63	Panama	5.12	
63	India	5.12	
63	Argentina	5.12	
63	Jamaica	5.12	
67	Greece	5.06	
68	Mongolia	5.00	
69	Indonesia	4.88	
69	Ghana	4.88	
69	Nicaragua	4.88	
72	Belarus	4.85	
73	Czech Republic	4.76	
73	Malawi	4.76	
75	Moldova	4.75	
76	Papua New Guinea	4.73	
77	Mauritania	4.71	
78	Sri Lanka	4.65	
79	Tanzania	4.56	
80	Poland	4.53	
81	Vietnam	4.47	
81	Paraguay	4.47	
83	Burkina Faso	4.38	
84	Honduras	4.35	
84	Uganda	4.35	
86	Russia	4.29	
86	Bolivia	4.29	
88	Senegal	4.27	
89	Brazil	4.24	
90	Kenya	4.18	
90	Nigeria	4.18	
92	Croatia	4.00	
93	Ethiopia	3.88	
93	Mali	3.88	
95	Philippines	3.82	
95	Egypt	3.82	
95	Ecuador	3.82	
98	Guinea	3.82	
99	Lesotho	3.80	
100	Macedonia	3.75	
101	Bosnia and Herzegovina	3.69	
102	Benin	3.67	
103	Mozambique	3.63	
104	Angola	3.55	
105	Cameroon	3.50	
106	Central African Republic	3.45	
106	Syria	3.45	
108	Togo	3.36	
109	Bangladesh	3.35	
109	Zimbabwe	3.35	
111	Rwanda	3.33	
112	Ukraine	3.24	
113	Sierra Leone	3.18	
114	Madagascar	3.13	
115	Laos	3.10	
116	Cambodia	3.07	
117	Venezuela	3.06	
118	Burundi	3.00	
119	Niger	2.91	
120	Haiti	2.55	
121	Republic of Congo	2.45	
122	Chad	2.00	

Appendix B.3: Financial and Banking Institutions (FI)

FI measures the level of involvement of deposit-taking institutions in financing businesses.

0 — MEAN: 4.58 — 10

RANK	COUNTRY	FI
1	Ireland	9.67
2	Sweden	9.22
3	Norway	8.89
4	Hong Kong SAR	8.78
4	Switzerland	8.78
6	Canada	8.56
6	Australia	8.56
8	New Zealand	8.44
9	United Kingdom	8.22
9	Denmark	8.22
11	Singapore	8.11
11	Netherlands	8.11
13	South Africa	7.89
14	Japan	7.67
15	Germany	7.56
16	Malaysia	7.44
16	Portugal	7.44
18	Hungary	7.33
19	Finland	7.22
19	United States	7.22
19	France	7.22
19	Kuwait	7.22
19	Panama	7.22
24	Belgium	7.11
24	Latvia	7.11
26	Estonia	6.78
27	Chile	6.67
27	Czech Republic	6.67
29	Thailand	6.56
29	Greece	6.56
29	Slovak Republic	6.56
32	Austria	6.44
33	Israel	6.33
33	Lithuania	6.33
33	United Arab Emirates	6.33
36	South Korea	6.00
37	Italy	5.89
37	Slovenia	5.89
39	India	5.78
40	Jordan	5.67
41	Poland	5.56
42	Colombia	5.44
42	Belarus	5.44
42	Namibia	5.44
45	Mexico	5.33
46	Tunisia	5.22
47	Croatia	5.00
48	Spain	4.89
48	Sri Lanka	4.89
48	Vietnam	4.89
51	Russia	4.67
51	Egypt	4.67
53	Oman	4.56
53	Bulgaria	4.56
53	Brazil	4.56
53	Indonesia	4.56
57	Turkey	4.44
58	China	4.33
58	Jamaica	4.33
58	Honduras	4.33
61	Philippines	4.22
61	Ukraine	4.22
61	Botswana	4.22
61	Costa Rica	4.22
65	El Salvador	4.00
65	Guatemala	4.00
67	Taiwan, China	3.89
67	Argentina	3.89
69	Morocco	3.78
69	Bosnia and Herzegovina	3.78
69	Central African Republic	3.78
72	Iran	3.67
73	Lebanon	3.56
73	Bolivia	3.56
73	Mongolia	3.56
76	Pakistan	3.44
76	Kenya	3.44
76	Republic of Congo	3.44
79	Saudi Arabia	3.33
79	Peru	3.33
79	Romania	3.33
79	Macedonia	3.33
79	Moldova	3.33
79	Bangladesh	3.33
79	Ethiopia	3.33
79	Zambia	3.33
87	Tanzania	3.22
88	Nigeria	3.11
88	Venezuela	3.11
90	Ghana	3.00
91	Lesotho	2.78
91	Burkina Faso	2.78
91	Zimbabwe	2.78
94	Papua New Guinea	2.67
95	Nicaragua	2.56
96	Uruguay	2.44
96	Armenia	2.44
96	Madagascar	2.44
99	Uganda	2.33
99	Malawi	2.33
101	Dominican Republic	2.22
101	Benin	2.22
101	Laos	2.22
104	Mali	2.00
104	Angola	2.00
106	Cambodia	1.78
106	Cameroon	1.78
106	Mozambique	1.78
106	Burundi	1.78
106	Sierra Leone	1.78
111	Haiti	1.67
112	Paraguay	1.56
112	Guinea	1.56
112	Chad	1.56
115	Senegal	1.44
115	Togo	1.44
117	Rwanda	1.22
118	Ecuador	1.11
119	Mauritania	1.00
119	Niger	1.00
121	Syria	0.78
122	Yemen	0.33

Appendix B.4: Equity Market Development (EM)

EM reflects the extent to which financing of business operations is important for a given country.

RANK	COUNTRY	EM	0 MEAN: 3.39 10
1	United Kingdom	8.50	
2	Australia	8.00	
3	France	7.83	
4	Sweden	7.67	
4	Switzerland	7.67	
6	Israel	7.50	
6	Denmark	7.50	
8	Hong Kong SAR	7.33	
8	United States	7.33	
8	Germany	7.33	
11	Canada	7.17	
12	Finland	7.00	
12	Taiwan, China	7.00	
14	Malaysia	6.83	
14	Japan	6.83	
14	New Zealand	6.83	
14	South Africa	6.83	
18	Ireland	6.67	
18	Belgium	6.67	
20	Chile	6.50	
21	Netherlands	6.33	
21	Austria	6.33	
21	India	6.33	
24	South Korea	6.17	
24	Portugal	6.17	
24	Jordan	6.17	
27	Norway	6.00	
28	Thailand	5.83	
29	Italy	5.67	
29	Greece	5.67	
31	Singapore	5.50	
31	United Arab Emirates	5.50	
31	Spain	5.50	
34	Turkey	5.33	
34	Brazil	5.33	
36	Peru	5.17	
37	Indonesia	5.00	
38	Kuwait	4.83	
38	Jamaica	4.83	
40	Estonia	4.67	
40	Pakistan	4.67	
42	China	4.50	
42	Philippines	4.50	
44	Poland	4.17	
44	Morocco	4.17	
44	Kenya	4.17	
47	Hungary	4.00	
47	Mexico	4.00	
47	Saudi Arabia	4.00	
47	Russia	4.00	
47	Zimbabwe	4.00	
52	Slovenia	3.83	
52	Colombia	3.83	
54	Croatia	3.67	
55	Lithuania	3.50	
55	Bulgaria	3.50	
55	Egypt	3.50	
55	Ghana	3.50	
55	Zambia	3.50	
60	Czech Republic	3.33	
60	Bangladesh	3.33	
60	Venezuela	3.33	
63	El Salvador	3.17	
63	Sri Lanka	3.17	
65	Oman	3.00	
65	Tunisia	3.00	
67	Panama	2.83	
67	Botswana	2.83	
69	Argentina	2.67	
69	Ukraine	2.67	
71	Romania	2.50	
71	Armenia	2.50	
73	Nigeria	2.33	
74	Latvia	2.00	
74	Costa Rica	2.00	
74	Namibia	2.00	
74	Papua New Guinea	2.00	
74	Ecuador	2.00	
74	Uganda	2.00	
74	Malawi	2.00	
81	Lebanon	1.83	
82	Macedonia	1.67	
82	Vietnam	1.67	
84	Belarus	1.50	
84	Bolivia	1.50	
84	Tanzania	1.50	
84	Paraguay	1.50	
84	Republic of Congo	1.50	
89	Senegal	1.33	
90	Iran	1.17	
90	Mongolia	1.17	
90	Central African Republic	1.17	
93	Slovak Republic	1.00	
93	Uruguay	1.00	
95	Cameroon	0.83	
96	Nicaragua	0.67	
96	Bosnia and Herzegovina	0.67	
98	Guatemala	0.50	
98	Burkina Faso	0.50	
100	Honduras	0.33	
100	Ethiopia	0.33	
100	Mali	0.33	
100	Mozambique	0.33	
100	Benin	0.33	
100	Madagascar	0.33	
100	Chad	0.33	
107	Dominican Republic	0.17	
107	Moldova	0.17	
107	Lesotho	0.17	
107	Cambodia	0.17	
107	Mauritania	0.17	
107	Burundi	0.17	
113	Syria	0.00	
113	Yemen	0.00	
113	Angola	0.00	
113	Togo	0.00	
113	Niger	0.00	
113	Guinea	0.00	
113	Rwanda	0.00	
113	Laos	0.00	
113	Haiti	0.00	
113	Sierra Leone	0.00	

Appendix B.5: Bond Market Development (BM)

BM captures the importance of bond financing of business operations.

RANK	COUNTRY	BM	0 MEAN: 3.45 10
1	Belgium	8.25	
1	Austria	8.25	
3	United Kingdom	7.50	
3	Sweden	7.50	
3	Australia	7.50	
3	Malaysia	7.50	
3	Denmark	7.50	
3	France	7.50	
9	Norway	7.25	
9	United States	7.25	
9	Netherlands	7.25	
9	Portugal	7.25	
9	United Arab Emirates	7.25	
9	Italy	7.25	
15	Ireland	7.00	
15	South Korea	7.00	
17	Canada	6.75	
18	Hong Kong SAR	6.50	
18	Germany	6.50	
18	Greece	6.50	
18	Mexico	6.50	
22	Israel	6.25	
22	Thailand	6.25	
24	Switzerland	6.00	
24	Finland	6.00	
24	Taiwan, China	6.00	
24	Hungary	6.00	
24	Czech Republic	6.00	
24	Peru	6.00	
30	China	5.75	
30	Russia	5.75	
32	Singapore	5.50	
32	New Zealand	5.50	
32	Brazil	5.50	
35	Japan	5.25	
35	Chile	5.25	
35	South Africa	5.25	
35	India	5.25	
35	Uruguay	5.25	
35	Philippines	5.25	
41	Indonesia	5.00	
42	Estonia	4.75	
42	Spain	4.75	
42	Croatia	4.75	
42	Ukraine	4.75	
46	Lithuania	4.50	
46	Lebanon	4.50	
46	Argentina	4.50	
46	Jamaica	4.50	
50	Kuwait	4.25	
50	Turkey	4.25	
52	Slovenia	4.00	
53	Poland	3.75	
53	Slovak Republic	3.75	
55	Panama	3.50	
55	Bulgaria	3.50	
55	Colombia	3.50	
55	Egypt	3.50	
55	Venezuela	3.50	
60	Dominican Republic	3.25	
61	Latvia	3.00	
61	Costa Rica	3.00	
63	Romania	2.75	
63	Pakistan	2.75	
65	Saudi Arabia	2.50	
65	El Salvador	2.50	
65	Sri Lanka	2.50	
68	Iran	2.25	
69	Oman	2.00	
69	Jordan	2.00	
69	Tunisia	2.00	
69	Macedonia	2.00	
69	Vietnam	2.00	
69	Guatemala	2.00	
75	Belarus	1.50	
75	Morocco	1.50	
75	Namibia	1.50	
75	Bolivia	1.50	
75	Ghana	1.50	
75	Papua New Guinea	1.50	
75	Kenya	1.50	
75	Nicaragua	1.50	
75	Tanzania	1.50	
75	Nigeria	1.50	
75	Moldova	1.50	
75	Uganda	1.50	
75	Bangladesh	1.50	
75	Paraguay	1.50	
75	Lesotho	1.50	
75	Senegal	1.50	
75	Zambia	1.50	
75	Mali	1.50	
75	Malawi	1.50	
75	Zimbabwe	1.50	
75	Cameroon	1.50	
75	Mozambique	1.50	
75	Angola	1.50	
75	Benin	1.50	
75	Niger	1.50	
75	Guinea	1.50	
75	Republic of Congo	1.50	
75	Laos	1.50	
75	Haiti	1.50	
75	Chad	1.50	
105	Ecuador	0.25	
106	Botswana	0.00	
106	Armenia	0.00	
106	Honduras	0.00	
106	Bosnia and Herzegovina	0.00	
106	Mongolia	0.00	
106	Ethiopia	0.00	
106	Cambodia	0.00	
106	Central African Republic	0.00	
106	Burkina Faso	0.00	
106	Syria	0.00	
106	Yemen	0.00	
106	Mauritania	0.00	
106	Togo	0.00	
106	Madagascar	0.00	
106	Burundi	0.00	
106	Rwanda	0.00	
106	Sierra Leone	0.00	

Appendix B.6: Alternative Sources of Capital (AC)

AC measures the use of financing tools such as venture capital, private placements, and credit cards in a country.

RANK	COUNTRY	AC
1	United Kingdom	9.00
2	United States	8.75
3	Sweden	8.50
4	Australia	8.25
4	Israel	8.25
6	Hong Kong SAR	8.00
7	Norway	7.75
7	France	7.75
9	Ireland	7.25
9	Switzerland	7.25
9	Portugal	7.25
12	Canada	7.00
12	Singapore	7.00
12	Finland	7.00
15	New Zealand	6.75
16	Greece	6.50
17	South Korea	6.25
17	Taiwan, China	6.25
19	Estonia	6.00
19	Belgium	6.00
19	United Arab Emirates	6.00
22	Lithuania	5.75
22	Hungary	5.75
24	Denmark	5.50
24	Austria	5.50
26	Germany	5.25
26	South Africa	5.25
26	Poland	5.25
29	Netherlands	5.00
29	India	5.00
31	Thailand	4.75
31	Italy	4.75
31	Turkey	4.75
34	Japan	4.50
34	Kuwait	4.50
34	Latvia	4.50
37	Malaysia	4.00
37	Mexico	4.00
37	Russia	4.00
40	Panama	3.75
40	Slovenia	3.75
40	Argentina	3.75
40	Ukraine	3.75
40	Honduras	3.75
45	Czech Republic	3.50
45	Uruguay	3.50
45	Colombia	3.50
45	Philippines	3.50
45	Vietnam	3.50
50	Lebanon	3.25
50	Brazil	3.25
50	Indonesia	3.25
50	Costa Rica	3.25
54	Slovak Republic	3.00
54	Croatia	3.00
54	Macedonia	3.00
57	Chile	2.75
57	El Salvador	2.75
57	Bulgaria	2.75
57	Jamaica	2.75
57	Belarus	2.75
57	Ecuador	2.75
63	Saudi Arabia	2.50
63	Spain	2.50
63	China	2.50
63	Romania	2.50
67	Peru	2.25
67	Tunisia	2.25
69	Pakistan	2.00
69	Kenya	2.00
69	Dominican Republic	2.00
69	Republic of Congo	2.00
73	Sri Lanka	1.75
73	Morocco	1.75
73	Nicaragua	1.75
73	Nigeria	1.75
73	Central African Republic	1.75
78	Jordan	1.50
78	Egypt	1.50
78	Botswana	1.50
78	Cambodia	1.50
78	Zimbabwe	1.50
83	Namibia	1.25
83	Guatemala	1.25
83	Tanzania	1.25
83	Mongolia	1.25
83	Venezuela	1.25
83	Paraguay	1.25
83	Cameroon	1.25
90	Uganda	1.00
90	Madagascar	1.00
92	Oman	0.75
92	Bolivia	0.75
92	Bosnia and Herzegovina	0.75
92	Bangladesh	0.75
92	Haiti	0.75
97	Armenia	0.50
97	Ghana	0.50
97	Papua New Guinea	0.50
97	Iran	0.50
97	Moldova	0.50
97	Zambia	0.50
97	Mali	0.50
97	Chad	0.50
105	Ethiopia	0.25
105	Lesotho	0.25
105	Burkina Faso	0.25
105	Malawi	0.25
105	Mauritania	0.25
105	Mozambique	0.25
105	Benin	0.25
105	Burundi	0.25
105	Laos	0.25
114	Senegal	0.00
114	Syria	0.00
114	Yemen	0.00
114	Angola	0.00
114	Togo	0.00
114	Niger	0.00
114	Guinea	0.00
114	Rwanda	0.00
114	Sierra Leone	0.00

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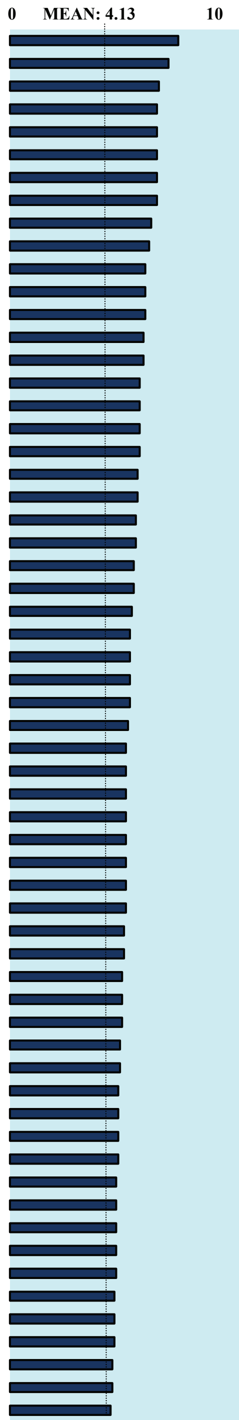
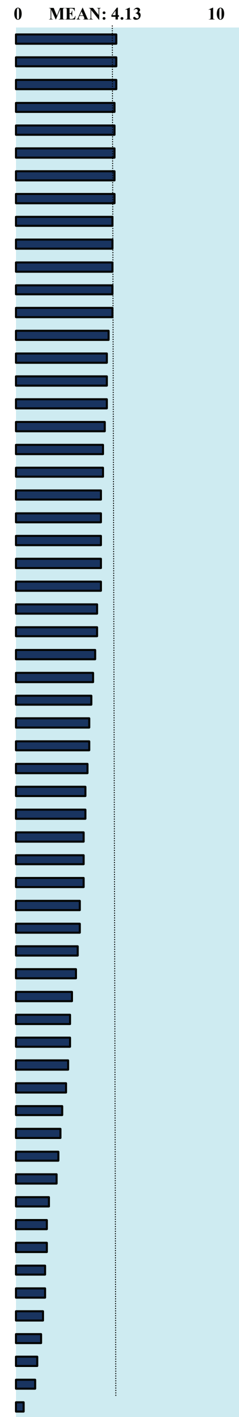
Appendix B.7: International Funding (IF)

IF measures the level of foreign capital available to businesses in a country.

RANK	COUNTRY	IF
1	Hong Kong SAR	7.25
2	Israel	6.83
3	New Zealand	6.42
4	United Kingdom	6.33
4	Singapore	6.33
4	Sweden	6.33
4	United States	6.33
4	Taiwan, China	6.33
9	Australia	6.08
10	Switzerland	6.00
11	Canada	5.83
11	Belgium	5.83
11	France	5.83
14	Finland	5.75
14	Portugal	5.75
16	Norway	5.58
16	Panama	5.58
16	Uruguay	5.58
16	Ukraine	5.58
20	Estonia	5.50
20	Thailand	5.50
22	Lithuania	5.42
22	Russia	5.42
24	South Korea	5.33
24	Lebanon	5.33
26	Latvia	5.25
27	Denmark	5.17
27	Greece	5.17
27	Jordan	5.17
27	Honduras	5.17
31	Malaysia	5.08
32	Ireland	5.00
32	Japan	5.00
32	United Arab Emirates	5.00
32	Hungary	5.00
32	Saudi Arabia	5.00
32	Croatia	5.00
32	Romania	5.00
32	Egypt	5.00
40	Poland	4.92
40	Peru	4.92
42	India	4.83
42	Bulgaria	4.83
42	Macedonia	4.83
45	Chile	4.75
45	China	4.75
47	Germany	4.67
47	Kuwait	4.67
47	Tunisia	4.67
47	Argentina	4.67
51	Austria	4.58
51	Italy	4.58
51	Mexico	4.58
51	Turkey	4.58
51	Nicaragua	4.58
56	Czech Republic	4.50
56	Costa Rica	4.50
56	Vietnam	4.50
59	Netherlands	4.42
59	Indonesia	4.42
61	Colombia	4.33
61	Jamaica	4.33
61	Mongolia	4.33
61	Uganda	4.33
65	Spain	4.25
65	Philippines	4.25
65	Morocco	4.25
65	Guatemala	4.25
65	Cambodia	4.25
70	Slovenia	4.17
70	El Salvador	4.17
70	Brazil	4.17
70	Pakistan	4.17
70	Bolivia	4.17
75	Moldova	4.00
76	Oman	3.92
76	Slovak Republic	3.92
76	Tanzania	3.92
79	Belarus	3.83
80	Armenia	3.75
80	Ethiopia	3.75
82	South Africa	3.67
82	Ghana	3.67
82	Dominican Republic	3.67
82	Lesotho	3.67
82	Rwanda	3.67
87	Botswana	3.50
87	Madagascar	3.50
89	Sri Lanka	3.42
90	Bosnia and Herzegovina	3.33
91	Venezuela	3.25
92	Mali	3.17
92	Sierra Leone	3.17
94	Kenya	3.08
95	Bangladesh	3.00
95	Paraguay	3.00
97	Ecuador	2.92
97	Syria	2.92
97	Burundi	2.92
100	Nigeria	2.75
100	Republic of Congo	2.75
102	Haiti	2.67
103	Mozambique	2.58
104	Togo	2.42
105	Namibia	2.33
105	Guinea	2.33
107	Angola	2.25
108	Senegal	2.17
109	Cameroon	2.00
110	Benin	1.92
111	Central African Republic	1.83
112	Papua New Guinea	1.75
113	Iran	1.42
114	Laos	1.33
114	Chad	1.33
116	Malawi	1.25
116	Mauritania	1.25
118	Burkina Faso	1.17
119	Niger	1.08
120	Zimbabwe	0.92
121	Zambia	0.83
122	Yemen	0.33





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