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## *Potential Competitiveness Ranking 2008*

### *Japan Recovers to 12th Place*

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- The potential competitiveness ranking of 50 nations and regions has been compiled. Potential competitiveness here denotes the extent to which a nation or a region will be able to increase per capita gross domestic product (GDP) in the coming decade or so. It shows how much every nation and region will grow after ongoing turmoil.
- Japan has recovered to 12th place in the 2008 survey, from 13th place in the 2007 survey. Japan is strong in “science and technology” and “enterprises,” but is weak in “government,” “infrastructure” and “finance.”
- Hong Kong has remained on top for four consecutive years. And Singapore is in second place and the United States was in third place.
- The competitiveness of the United States has declined in “government” and “finance”. But, it maintains competitiveness in “science technology”, “internationalization” and “education”.
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### *Introduction*

We have developed a ranking of potential competitiveness for 50 nations and regions. The ranking was developed on the basis of results from data in 1980, 1990 and 2000. Since the 2004 survey, potential competitiveness has been computed by using the latest data available at the time of each survey. The latest ranking is based on data collected in the 2008 survey.

We have ranked countries by eight determinants of competitiveness: (1) internationalization, (2) enterprises, (3) education, (4) finance, (5) government, (6) science and technology, (7) infrastructure, and (8) IT (Information Technology), and have then generated overall potential competitiveness indices (see “Ranking Method” for the method employed) using Principal Component Analysis (see “Annotation 1 Principal Component Analysis”).

## 1. Ranking Results

### Hong Kong is in Ranks Top in Overall Competitiveness

The latest potential competitiveness ranking shows that Hong Kong has remained in first place for four consecutive years (Table 1 and Figure 1). Singapore was in second place and the United States was in third place.

When we examine Hong Kong by item, it is in first place in “internationalization” and “finance” and in second place in “enterprises” and “infrastructure.” Singapore, which comes second in overall competitiveness, is in first place in “enterprises” and “infrastructure.”

The United States ranked low in “finance” and “government” in the previous survey, and it has further moved down in the ranking in the latest survey. Huge fiscal deficit is the cause of its weak competitiveness. “The ratio of private-sector credit to total credit” makes the rank in “finance” low. It shows that financial institutions entrust their funds not to lending, but to another asset such as government bonds. However, it ranked high in “internationalization”, “education” and “science and technology”. It indicates the United States still maintains long term potential competitiveness. After the sub-prime problem, the United States has been suffering from economic stagnation, but it is not correct that it lost competitiveness in every determinant.

China has risen from 41st place in 1990 to 37th place in 2000, in the 2008 survey, it rose in 34th place from 35th in the previous survey. Given China’s large presence in international trade, its ranking may to be too low, but this is because this survey measured the economic strength of not only the coastal regions which have developed dramatically but also that of the hinterlands, which have lagged behind in economic development. In other words, it measures China’s overall competitiveness. When the ranking of China including Hong Kong was obtained by combining the competitiveness indices of China and Hong Kong weighted to their respective nominal GDP, the nation rises from 34th in the previous survey to 33rd in the 2008 survey.

The nations which have risen sharply in the ranking were Greece and Egypt. Greece has climbed from 30th place in the 2007 survey to 26th place in the latest survey due to its sharp rise in “Education” ranking, Egypt has advanced from 48th to 44th place in the latest survey. It rose sharply in “government”

Table 1 Rankings of the top three countries

	Hong Kong	Singapore	United States
Overall	1 (1)	2 (2)	3 (3)
Internationalization	1 (1)	3 (3)	2 (2)
Enterprises	2 (2)	1 (1)	4 (9)
Education	24 (18)	37 (33)	3 (3)
Finance	1 (1)	5 (2)	20 (18)
Government	6 (12)	3 (3)	29 (28)
Science and technology	24 (25)	21 (21)	1 (1)
Infrastructure	2 (2)	1 (1)	9 (10)
IT	10 (12)	14 (23)	6 (8)

Note: Numbers in parentheses are 2006 rankings

because “Customs as percent of tax revenue” has declined.

In contrast, Russia slipped from 25th to 30th. Drops in the ranking of “Education” and “IT” have made the overall rank low.

#### Japan Recovers to 12th Place, but “Government” Should become worse

In the 2008 survey, Japan was in 12th place (Table 2), rising one place from the previous year’s survey. It was in the 6th place in 1980, 9th place in 1990, but it dropped greatly to 15th place in 2000. After 2000, it has been rising gradually, but its ranking remains low compared with in 1980 and 1990.

Table 2 Japan’s ranking

	Deviation			Ranking		
	2007	2008	Change	2007	2008	Change
Overall	57.7	58.1	0.4	13	12	-1
Internationalization	49.9	49.7	-0.2	17	17	0
Enterprises	65.2	65.3	0.1	4	5	1
Education	58.4	57.4	-0.9	11	15	4
Finance	45.5	46.1	0.6	32	35	3
Government	51.0	53.4	2.4	32	24	-8
Science and technology	68.5	68.4	-0.1	2	2	0
Infrastructure	49.2	49.1	-0.1	27	27	0
IT	58.0	57.0	-1.0	15	18	3

Note: – (minus) indicates a rise in ranking.

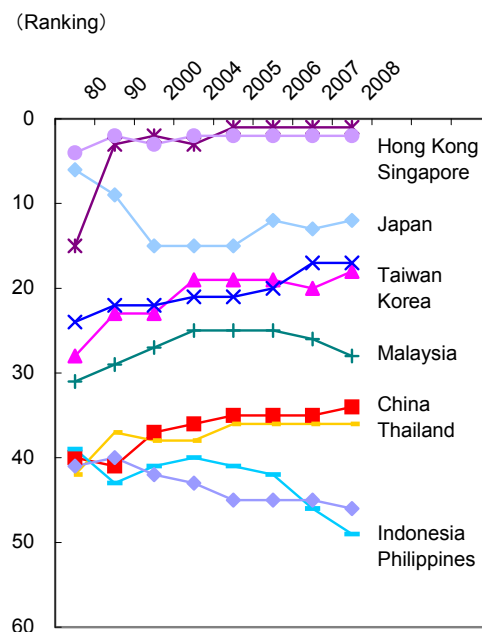
Japan has ranked high in “science and technology” (second place) and “enterprises” (5th place). It has ranked in 10th place or below in all other items.

While its rank rose in “government” because of improvement of fiscal deficit to GDP, it has dropped in “education”, “IT” and “finance”. In “education”, the score of TOEFL was very low in the ranking, it was in the 49th place out of 50 nations and regions. Each component of the “IT” has improved, but magnitude of the improvement is smaller than other countries.

The ratio of fiscal deficit to GDP, which was used for this survey as one of the indicators of “government”, constituted data for 2006, was much smaller than the previous year. However, since 2007, the fiscal deficit again shows increase trend. Therefore, Japan’s competitiveness indicator is very likely become worse henceforth.

In the area of “finance,” thanks to the easing of financial uncertainties, the ratio of total market capitalization of shares to GDP and the ratio of liquid reserves to total assets have been improving. On the other hand, the ratio of private-sector credit to total credit declined sharply from 64 percent to 43 percent. This is because starting from the latest survey, the definition of total credit includes non-deposit-taking banks (non-bank

Figure 1 Rankings of Potential Competitiveness in Asian countries or regions



banks), a change which results in a larger denominator. Therefore, the drop in the ratio of private-sector credit is due to this change in definition. Nevertheless, given the fact that financial institutions hold massive amounts of Japanese government bonds, there is ample room for improvement in terms of the efficiency of the financial system, which is supposed to lend deposits efficiently to private enterprises. When we calculate the ratio of private-sector credit to total credit using the old definition, Japan's ranking in "finance" rises from 32nd place to 27th place, but this has no effect on Japan's overall ranking.

#### In Asia, Indonesia and the Philippines are Conspicuously Behind

The latest findings on the potential competitiveness of Asian countries and regions show that Hong Kong is at the top (Figure 1). Singapore is also strong at second place, followed by Japan.

Taiwan is in 17th place in overall ranking closely followed by South Korea pursue it, it was in 18th place in overall ranking.

In the Association of Southeast Asian Nations (ASEAN), the ranking is Singapore, Malaysia, Thailand, Indonesia and the Philippines in descending order. The Philippines' ranking has dropped, while Indonesia's ranking made no improvement.

## 2. What is Potential Competitiveness Ranking?

### Significance of Potential Competitiveness

Competitiveness can be measured in different ways. This project discusses “potential competitiveness”, which is defined not as an outcome of economic growth, but as an ability to be competitive in future.

The measure primarily seeks to determine if a country is equipped with the necessary groundwork for future improvement in competitiveness. For example, high-level education and good infrastructure mean strong potential competitiveness.

One of the existing, representative competitiveness indicators is provided by The World Competitiveness Yearbook, published by the International Institute for Management Development (IMD) in Switzerland. The IMD develops rankings of competitiveness using a variety of different indicators but does not give reasons for its selection of such indicators. While the IMD uses questionnaire surveys, our project features quantitative analyses based on available socio-economic data.

### Thoughts on competitiveness

Competitiveness may be defined in many ways. When an indicator is assumed to express competitiveness, it is important to determine if it represents the “cause” or the “effect” of competitiveness. For example, high-level education or labor productivity is a cause of a nation’s strong competitiveness, while an increase in income is an indicator that represents the effect of such competitiveness.

In this project, we have used per-capita GDP as an overall competitiveness indicator. The greater the per-capita capital and the higher the productivity for a given period, the greater the growth of per-capita income. A competitive country is one that can provide products or services to domestic or foreign markets efficiently. An appropriate comprehensive indicator that measures such competitiveness should be based on per-capita output.

There are different ways of defining factors that contribute to a country’s competitiveness. A multinational company performs many business activities outside of its home country and contributes to production and employment in the host country. The “national” competitiveness of a country may be considered to be represented by competitiveness that also includes overseas activities performed by the country’s multinational companies.

This project, however, is focused on analyzing primarily the competitiveness of different countries and regions within Asia, and we regard ease of foreign investment as influencing competitiveness. We have therefore included contributions by foreign-owned companies established locally in the calculation of competitiveness of the host country or region.

The level of per-capita GDP may be regarded as an indicator of the competitiveness of a country, but what is important is the per-capita increment of GDP. For measurement of growth, the rate of change may be regarded as an indicator of competitiveness, in which case, generally, the lower the level of GDP, the higher the rate of growth. A currently highly

competitive country should naturally be considered more competitive than a country without any existing competitiveness. So it is not appropriate to use the rate of change in the calculation of competitiveness. We have therefore adopted the amount of change in per-capita GDP as a competitiveness indicator that adds the level of GDP to the rate of change as follows:

$$\text{Level} \times \text{rate of change} = \text{amount of change}$$

“Per-capita GDP” may be real or nominal. Here, we have decided to compare results in terms of nominal GDP because it is difficult to use real values for comparison of income between countries.

International comparison requires a unified unit, which may be dollar-based or purchasing power parity (PPP)-based. We have adopted the dollar as a measure that is exchangeable via trade. A PPP-based measurement indicates the strength of a country’s domestic purchasing power, but for international comparison a measurement that is based on the internationally arbitrated dollar value is more appropriate.

#### Time relationship between potential competitiveness and per-capita GDP increment

Potential competitiveness computed using various indicators shows the potential capabilities of a country at a given moment to compete over the next ten years. For instance, the potential competitiveness indicator as of 1980 indicates a country’s ability to increase per-capita GDP during the 1980s.

Potential competitiveness as of '80 → influential on competitiveness in the 1980s  
 Potential competitiveness as of '90 → influential on competitiveness in the 1990s  
 Potential competitiveness as of the latest period  
 → will be influential on competitiveness over the next 10 years

A look at the relationship between potential competitiveness and realized competitiveness as of '80 and '90 finds a correlation coefficient of 0.77 for the 1980s and of 0.73 for the 1990s.

Potential competitiveness and realized competitiveness do not correspond completely because potential competitiveness indicators are based on data provided at the initial point in time of the period under measurement and the possibility of unforeseen events occurring over the next ten years needs to be acknowledged. For example, Japan’s potential competitiveness, which ranked ninth as of '90, resulted in realized competitiveness falling to 14th place as measured by the '90-'98 per-capita GDP because of the collapsed financial bubble and the delayed disposal of subsequent bad loans.

#### Ranking method

First, create rankings for the following eight areas:(1) internationalization, (2) enterprise, (3) education, (4) finance, (5) government, (6) science and technology, (7) infrastructure, and (8) IT.

Next, adopt the per-capita increment of GDP as a judgment criterion for international competitiveness, and then look for factors that increase this increment for each item. We



Below are the resultant socio-economic indicators adopted for each item.

Table 3 Indicators adopted for each item

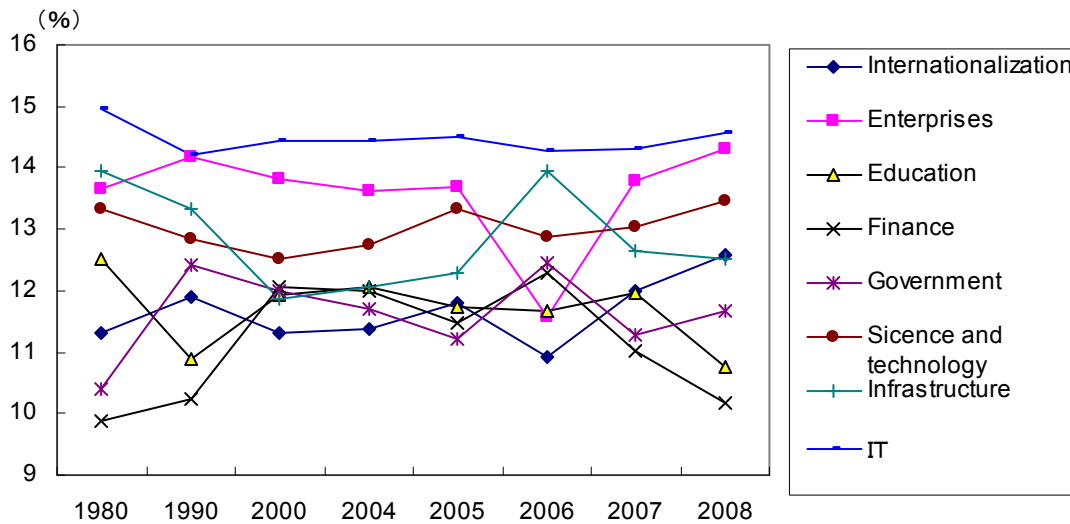
Item	Indicator			
Internationalization (average)	Export of goods and services (ratio to GDP and absolute amount)	Import of goods and services (ratio to GDP and absolute amount)	Outflow of direct investment (ratio to GDP and absolute amount)	Inflow of direct investment (ratio to GDP and absolute amount)
Enterprises (estimate)	Ratio of combined exports & imports to GDP (adjustment of GDP factor)	Labor productivity of manufacturing industry	Developing country dummy	
Education (estimate)	Rate of enrollment in higher education	TOEFL scores	Average years of school attendance	Ratio of government education expenditure to GDP
Finance (estimate)	Ratio of bank liquidity reserves to its assets (opposite sign)	Ratio of credit to private sector to total domestic credit	Ratio of stock market capitalization to nominal GDP	
Government (estimate)	Ratio of customs duties to tax revenue (opposite sign)	Ratio of budget balance to GDP	Inflation (opposite sign)	
Science and Technology (product log)	Cumulative number of patents granted to U.S.	Number of R&D researchers per population		
Infrastructure (estimate)	Aircraft departures per capita	Containers handled per capita	Rate of power transmission/distribution loss	Ratio of paved roads
IT (principal component analysis)	Rate of fixed-line phone diffusion	Rate of mobile phone diffusion	Rate of PC diffusion	Rate of Internet diffusion
	Rate of broadband diffusion			

Note: The above indicators have been used to compute competitiveness for the latest period.

#### Integration of deviation score by item

Each item is converted into a deviation score and is then included in a Principal Component Analysis. As each selected item is related to competitiveness, its first principal component should be a comprehensive indicator of competitiveness. As the analysis performed gave positive coefficients (eigenvector) for all items, the comprehensive indicator is assumed to be the weighted average of all items. Weights are shown in Figure 2.

Figure 2 Weight of the Comprehensive Indicator by item



If each item has an equal weight, the weight would be 12.5% (=100/8). Although slightly variable, the weight obtained for each item is close to the average weight. “IT” and “enterprises” show a heavier weight while “government” and “finance” have lower weight.

#### Annotation 1 Principal Component Analysis

What is Principal Component Analysis?

Principal Component Analysis is intended to express multiple variables  $x_1, x_2, x_3, \dots$  as a comprehensive variable  $z_m$  (principal component) where the first principal component is expressed as follows:

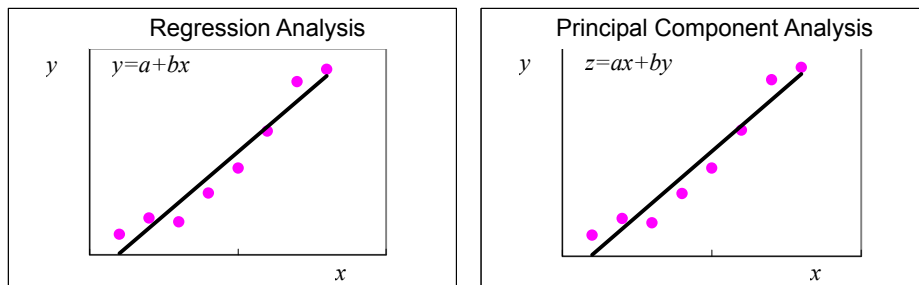
$$z_1 = a_{11}x_1 + a_{12}x_2 + \dots + a_{1p}x_p$$

Coefficients  $a_1, a_2, \dots, a_p$  of the principal component  $z_1$  should be determined so that  $z_1$  and each of variables  $x_1, x_2, x_3, \dots$  may be correlated to a maximum extent. This method will enable a series  $z_1$  to be determined that incorporates to a maximum degree the characteristics of the original variables.

How Regression Analysis and Principal Component Analysis differ from each other

Regression Analysis estimates parameters  $a$  and  $b$ , assuming that they have a relationship with  $y$  and  $x$ , whereas Principal Component Analysis estimates parameters  $a$  and  $b$  in order to obtain the indicator  $z$ , which is the integration of  $x$  and  $y$ . When there are two variables, each of them can be obtained by drawing a straight line on the plane in a way that is suitable for each variable. Regression Analysis seeks to obtain parameters  $a$  and  $b$ , while Principal Component Analysis creates a new series  $z$  after obtaining these parameters.

## Difference between Regression Analysis and Principal Component Analysis



## Method for computing two variables

Below, a specific explanation of two variables is given. Let  $X_1$  and  $X_2$  be economic indicators, such as GDP indicators, and suppose you have  $X_1$  and  $X_2$  data pertaining to various countries. Now you intend to create the indicator  $z$ , which synthesizes the two data variables as follows:

$$Z_1 = a_1 X_1 + a_2 X_2$$

Ensuring  $z_1$  reflects the characteristics of each of  $X_1$  and  $X_2$  to a maximum degree is the same as maximizing the dispersion of  $Z_1$ . However, if this is the only condition, it will permit  $a_1$  and  $a_2$  to be combined in many ways; therefore,  $a_1^2 + a_2^2 = 1$  is set as an additional condition.

The condition can be computed by finding the eigenvectors  $(a_1, a_2)'$  and the eigenvalue ( $\lambda$ ) of  $A$ .

$$A \begin{pmatrix} a_1 \\ a_2 \end{pmatrix} = \lambda \begin{pmatrix} a_1 \\ a_2 \end{pmatrix} \quad \dots (1)$$

$A$  is a correlation coefficient matrix of  $X_1$  and  $X_2$ .

$$A = \begin{pmatrix} 1 & r_{12} \\ r_{21} & 1 \end{pmatrix}$$

If the correlation coefficient matrix  $A$  is found, then from the expression (1) above, the eigenvectors  $(a_1, a_2)'$  and the eigenvalues  $\lambda_1 \lambda_2 (\lambda_1 > \lambda_2)$  will be found, whereby  $\lambda_1$  will be the eigenvalue of the first principal component and  $\lambda_2$  that of the second principal component.

## Scores of principal component

The principal components obtained above will enable the synthesized indicator of indicators  $X_1$  and  $X_2$  to be created for each country. Scores of principal components have been created for each country by normalizing the synthesized indicator.

If  $x = (X - \text{average of } X) / \text{standard deviation of } X$ ,

$$X = a_1 x_1 + a_2 x_2$$

## Cumulative contribution rate

The rate of cumulative contribution shows the extent to which each principal component reflects the information of the original variable. If the rates of cumulative contribution of all

principal components are put together, they will represent 100%.

Rate of contribution of first principal component =  
eigenvalue of first principal component/total of all eigenvalues

Rate of cumulative contribution = rate of contribution of first principal component +  
rate of contribution of second principal component + ...

Factor loading

Factor loading = correlation coefficient of Z and X

Factor loading =  $\sqrt{\text{eigenvalue}} \times \text{eigenvector}$

[References]

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Appendix Table 1 Overall Ranking

	80		90		2000		2007		2008		
1	United States	73.0	United States	70.1	United States	69.4	Hong Kong	74.4	Hong Kong	76.0	1
2	Switzerland	66.4	Singapore	64.8	Hong Kong	68.6	Singapore	70.7	Singapore	71.2	2
3	Sweden	63.6	Hong Kong	63.1	Singapore	67.5	United States	65.3	United States	66.9	3
4	Singapore	63.0	United Kingdom	62.9	Switzerland	63.5	United Kingdom	60.5	Germany	60.3	4
5	Germany	62.6	Germany	62.8	Norway	61.8	Switzerland	60.4	Netherlands	59.9	5
6	Japan	62.0	Norway	62.5	Sweden	61.4	Netherlands	60.4	Sweden	59.8	6
7	Netherlands	61.9	Switzerland	62.1	United Kingdom	61.1	Germany	59.8	Switzerland	59.8	7
8	Denmark	61.4	Netherlands	61.6	Netherlands	61.1	Sweden	59.4	United Kingdom	59.3	8
9	Canada	61.0	Japan	61.5	Finland	60.7	Norway	59.3	Norway	58.9	9
10	Norway	60.5	Sweden	61.1	Germany	60.7	Belgium	59.0	Belgium	58.7	10
11	United Kingdom	60.5	Canada	61.0	Canada	59.6	Canada	59.0	Ireland	58.5	11
12	Finland	60.0	France	59.7	Ireland	59.4	Ireland	58.6	Japan	58.1	12
13	France	59.9	Belgium	59.4	Belgium	58.2	Japan	57.7	Canada	58.0	13
14	Austria	59.3	Denmark	58.7	Denmark	58.0	Denmark	57.7	Denmark	57.4	14
15	Hong Kong	59.0	Ireland	57.9	Japan	58.0	France	57.2	France	57.0	15
16	Australia	57.8	Finland	57.7	France	57.5	Finland	57.2	Finland	56.8	16
17	Belgium	57.2	Australia	57.5	Australia	56.1	Taiwan	55.3	Taiwan	55.1	17
18	Italy	55.3	New Zealand	57.2	New Zealand	55.7	Israel	55.2	South Korea	54.9	18
19	New Zealand	54.9	Austria	55.0	Austria	54.2	Australia	54.8	Australia	54.6	19
20	Czech Rep.	53.7	Israel	53.9	Israel	54.0	South Korea	54.8	Israel	54.1	20
21	Ireland	52.8	Italy	53.3	Italy	53.6	New Zealand	54.4	New Zealand	53.8	21
22	Russia	52.3	Taiwan	53.3	Taiwan	53.4	Austria	54.1	Austria	53.4	22
23	Israel	50.4	South Korea	51.3	South Korea	53.1	Spain	53.2	Spain	53.1	23
24	Taiwan	50.2	Spain	51.0	Spain	52.6	Italy	53.2	Italy	53.0	24
25	Spain	49.4	Russia	49.5	Greece	48.5	Russia	49.8	Czech Rep.	50.0	25
26	Greece	49.0	Czech Rep.	48.8	Czech Rep.	48.5	Malaysia	49.6	Greece	49.1	26
27	South Africa	48.1	Saudi Arabia	47.6	Malaysia	48.0	Saudi Arabia	49.4	Hungary	49.1	27
28	South Korea	47.4	South Africa	47.5	Portugal	46.9	Czech Rep.	49.3	Malaysia	48.5	28
29	Hungary	47.1	Malaysia	47.1	Hungary	46.6	Hungary	48.1	Saudi Arabia	48.3	29
30	Portugal	45.8	Greece	46.9	Russia	46.5	Greece	47.7	Russia	48.2	30
31	Malaysia	45.6	Hungary	45.4	Poland	46.5	Poland	47.2	Poland	47.6	31
32	Argentina	44.4	Portugal	45.1	South Africa	46.2	Portugal	46.3	Chile	46.2	32
33	Saudi Arabia	44.2	Poland	44.6	Saudi Arabia	44.6	Chile	46.0	Portugal	45.8	33
34	Poland	42.6	Mexico	43.6	Argentina	43.5	South Africa	45.0	China	44.0	34
35	Venezuela	42.4	Chile	43.3	Chile	43.1	China	43.5	South Africa	44.0	35
36	Mexico	41.9	Argentina	42.9	Mexico	43.0	Thailand	43.1	Thailand	43.3	36
37	Chile	41.8	Thailand	42.1	China	42.8	Argentina	42.0	Argentina	42.9	37
38	Brazil	41.7	Venezuela	41.7	Thailand	42.4	Mexico	41.4	Mexico	42.6	38
39	Philippines	40.6	Turkey	41.5	Brazil	40.0	Brazil	40.1	Turkey	41.9	39
40	China	39.9	Indonesia	41.2	Turkey	39.5	Turkey	39.7	Brazil	41.2	40
41	Indonesia	39.4	China	39.7	Philippines	39.3	Venezuela	39.7	Peru	38.9	41
42	Thailand	39.2	Brazil	39.5	Indonesia	39.1	Colombia	38.8	Venezuela	38.7	42
43	Turkey	37.9	Philippines	38.8	Venezuela	38.5	Peru	38.3	Iran	37.4	43
44	Peru	37.8	Egypt	38.2	Peru	38.3	Iran	37.2	Egypt	36.7	44
45	Iran	37.6	Iran	36.9	Colombia	36.8	Indonesia	36.3	Colombia	36.6	45
46	Egypt	36.9	Colombia	36.4	Egypt	36.0	Philippines	35.7	Indonesia	36.2	46
47	India	36.8	Peru	34.5	Iran	36.0	India	34.8	India	35.0	47
48	Vietnam	36.6	India	33.9	Vietnam	35.4	Egypt	34.7	Vietnam	34.5	48
49	Colombia	35.5	Vietnam	32.5	India	33.2	Vietnam	34.5	Philippines	34.2	49
50	Pakistan	31.8	Pakistan	31.6	Pakistan	31.5	Pakistan	30.0	Pakistan	30.5	50

Appendix Table 2-1 Rankings for 1980

	Overall	Internationalization	Enterprises	Education	Finance	Government	Science and technology	Infrastructure	IT				
1	United States	73.0	United States	81.9	Japan	71.4	United States	69.9	Singapore	74.0	Sweden	77.1	1
2	Switzerland	66.4	Singapore	80.2	Switzerland	67.0	Austria	65.4	France	66.8	Norway	68.6	2
3	Sweden	63.6	Hong Kong	79.4	United States	65.6	Sweden	71.7	South Africa	65.0	Germany	59.7	3
4	Singapore	63.0	United Kingdom	66.5	Singapore	64.2	Switzerland	71.5	Japan	62.8	Denmark	59.2	4
5	Germany	62.6	Netherlands	63.9	Finland	63.8	Denmark	64.4	United Kingdom	60.8	Norway	59.0	5
6	Japan	62.0	Germany	62.9	Canada	62.9	Finland	62.5	Switzerland	60.6	Argentina	59.0	6
7	Netherlands	61.9	France	56.8	Germany	62.2	Norway	61.4	United States	57.5	Netherlands	58.5	7
8	Denmark	61.4	Canada	56.2	Australia	61.8	Israel	58.1	Netherlands	57.3	United Kingdom	58.3	8
9	Canada	61.0	Switzerland	54.9	Norway	61.2	Germany	57.7	Finland	57.2	United States	57.8	9
10	Norway	60.5	Belgium	54.4	Italy	60.5	Canada	57.3	South Korea	57.1	Austria	57.6	10
11	United Kingdom	60.5	Japan	53.5	Ireland	60.4	Australia	56.9	Canada	56.8	Chile	57.5	11
12	Finland	60.0	Ireland	52.4	Sweden	59.0	New Zealand	54.5	Chile	56.8	Finland	57.4	12
13	France	59.9	Italy	51.0	France	58.9	Russia	54.3	Denmark	56.7	Belgium	57.0	13
14	Austria	59.3	Brazil	50.9	Austria	57.6	Ireland	53.8	France	56.3	South Africa	56.1	14
15	Hong Kong	59.0	Saudi Arabia	50.5	Belgium	57.5	Czech Rep.	53.6	Sweden	55.9	Sweden	55.8	15
16	Australia	57.8	South Africa	49.1	Netherlands	57.2	Japan	53.3	Germany	54.4	Italy	55.6	16
17	Belgium	57.2	Malaysia	48.4	Denmark	54.2	Netherlands	52.8	Venezuela	53.9	Indonesia	55.1	17
18	Italy	55.3	Taiwan	48.0	China	53.6	South Korea	51.7	Sweden	52.3	Japan	55.2	18
19	New Zealand	54.9	Israel	47.4	Spain	53.2	Poland	50.0	New Zealand	52.1	Spain	54.7	19
20	Czech Rep.	53.7	Norway	47.1	Hong Kong	52.9	Taiwan	50.0	Austria	51.6	Australia	54.5	20
21	Ireland	52.8	Sweden	47.0	Portugal	52.0	France	49.7	Australia	51.3	New Zealand	54.4	21
22	Russia	52.3	Hungary	46.8	Taiwan	51.3	Belgium	49.6	Thailand	50.8	Hungary	54.0	22
23	Israel	50.4	Austria	46.6	Czech Rep.	50.3	Greece	49.2	Portugal	50.3	Greece	53.3	23
24	Taiwan	50.2	Denmark	46.4	United Kingdom	49.5	Vietnam	49.0	Belgium	50.2	Venezuela	52.8	24
25	Spain	49.4	Greece	45.9	South Korea	49.1	Hong Kong	48.9	Norway	50.0	Canada	52.8	25
26	Greece	49.0	South Korea	45.7	Hungary	48.5	Saudi Arabia	48.7	China	49.7	Hong Kong	52.4	26
27	South Africa	48.1	Indonesia	45.2	Russia	48.2	United Kingdom	48.3	Brazil	49.6	Turkey	52.3	27
28	South Korea	47.4	Finland	45.1	New Zealand	48.1	Italy	47.5	Philippines	49.4	Mexico	52.2	28
29	Hungary	47.1	Egypt	44.9	Philippines	46.7	Chile	47.2	Argentina	48.4	Singapore	51.9	29
30	Portugal	45.8	Australia	44.9	Thailand	46.1	Hungary	47.1	Indonesia	48.2	Portugal	51.7	30
31	Malaysia	45.6	Portugal	44.8	Iran	45.9	Malaysia	46.4	Ireland	48.1	Switzerland	50.6	31
32	Argentina	44.4	New Zealand	44.7	Peru	45.4	Venezuela	45.4	Greece	47.6	Brazil	50.5	32
33	Saudi Arabia	44.2	Spain	44.5	Egypt	45.1	Iran	45.4	Spain	47.1	Israel	49.0	33
34	Poland	42.6	Venezuela	43.8	Malaysia	44.5	South Africa	45.2	Italy	46.1	Ireland	45.2	34
35	Venezuela	42.4	Argentina	43.5	Poland	43.5	Peru	44.8	India	44.6	Colombia	45.0	35
36	Mexico	41.9	Philippines	43.4	Mexico	43.2	Philippines	44.0	Pakistan	44.4	Peru	43.7	36
37	Chile	41.8	Thailand	43.4	Greece	42.1	Argentina	43.7	Hungary	42.4	South Korea	43.0	37
38	Brazil	41.7	Chile	43.0	Indonesia	41.4	Mexico	42.0	Colombia	41.1	Malaysia	42.1	38
39	Philippines	40.6	Mexico	42.8	Venezuela	40.3	Spain	40.5	Iran	39.2	Thailand	37.5	39
40	China	39.9	Peru	42.3	South Africa	39.7	Egypt	40.5	Israel	39.0	Taiwan	37.5	40
41	Indonesia	39.4	Iran	42.3	Argentina	39.4	Portugal	39.9	Turkey	37.1	Philippines	35.4	41
42	Thailand	39.2	Pakistan	42.0	Israel	37.4	Brazil	39.7	Egypt	36.0	China	35.4	42
43	Turkey	37.9	Colombia	41.8	Saudi Arabia	36.7	Colombia	39.4	Peru	32.1	India	34.1	43
44	Peru	37.8	Turkey	41.6	Brazil	36.3	Singapore	39.2	Saudi Arabia	32.0	Egypt	30.1	44
45	Iran	37.6	China	41.2	India	35.7	China	39.0	Mexico	28.6	Pakistan	20.9	45
46	Egypt	36.9	India	41.2	Pakistan	35.1	India	38.8	Poland	27.5	Iran	20.8	46
47	India	36.8	Vietnam	41.2	Chile	34.9	Thailand	38.5	Hong Kong	27.5	Vietnam	20.8	47
48	Vietnam	36.6	Poland	41.2	Colombia	34.7	Indonesia	37.3	Vietnam	27.5	Poland	20.8	48
49	Colombia	35.5	Czech Rep.	41.2	Turkey	33.9	Pakistan	37.3	Czech Rep.	27.5	Czech Rep.	20.8	49
50	Pakistan	31.8	Russia	41.2	Vietnam	33.9	Turkey	37.3	Russia	27.5	Russia	20.8	50

Appendix Table 2-2 Rankings for 1990

	Overall	Internationalization	Enterprises	Education	Finance	Government	Science and technology	Infrastructure	IT	
1	United States 70.1	United States 83.8	Germany 67.3	New Zealand 67.8	Singapore 71.6	Singapore 60.0	United States 71.3	Singapore 83.4	United States 75.7	1
2	Singapore 64.8	Hong Kong 81.3	Singapore 67.2	Norway 66.6	Hong Kong 68.9	United Kingdom 59.0	Japan 68.2	Norway 70.9	Sweden 67.2	2
3	Hong Kong 63.1	Singapore 74.3	Ireland 66.6	Canada 66.2	South Africa 67.5	Sweden 58.6	Germany 66.2	Hong Kong 67.2	Australia 66.3	3
4	United Kingdom 62.9	United Kingdom 67.9	Belgium 66.5	United States 64.8	Malaysia 64.4	Norway 58.5	United Kingdom 63.7	New Zealand 61.2	Denmark 65.4	4
5	Germany 62.8	Germany 65.3	Netherlands 64.6	Russia 63.0	United Kingdom 63.7	Denmark 58.5	France 63.0	Switzerland 60.9	Norway 65.3	5
6	Norway 62.5	Netherlands 64.4	United States 63.3	Japan 61.2	Japan 62.7	Germany 58.2	Switzerland 61.9	Ireland 60.6	Canada 64.5	6
7	Switzerland 62.1	Belgium 60.5	Switzerland 62.8	Argentina 60.8	Switzerland 61.3	New Zealand 58.2	Canada 61.8	Taiwan 59.8	Finland 63.0	7
8	Netherlands 61.6	France 57.9	Hong Kong 62.6	Sweden 60.5	Saudi Arabia 60.2	Finland 58.0	Sweden 61.2	Netherlands 59.0	Switzerland 62.6	8
9	Japan 61.5	Japan 56.9	Canada 61.8	South Korea 60.0	South Korea 57.6	France 58.0	Netherlands 59.8	Sweden 58.9	United Kingdom 61.4	9
10	Sweden 61.1	Ireland 56.6	Japan 61.4	Israel 59.7	United States 57.3	Ireland 57.9	Russia 59.6	Denmark 58.0	Netherlands 60.5	10
11	Canada 61.0	Canada 56.5	Sweden 59.9	Switzerland 59.4	Canada 57.1	Hong Kong 57.2	Italy 59.4	Belgium 57.6	Germany 59.5	11
12	France 59.7	Switzerland 55.8	France 59.9	Finland 59.3	Australia 56.0	Netherlands 57.1	Australia 58.1	United States 57.3	France 58.8	12
13	Belgium 59.4	Italy 52.9	United Kingdom 59.4	Poland 58.4	Finland 55.9	Japan 57.0	Belgium 57.5	United Kingdom 56.8	New Zealand 58.2	13
14	Denmark 58.7	Malaysia 52.1	Austria 58.9	Denmark 57.9	Norway 55.8	Belgium 56.6	Finland 56.8	Israel 56.6	Belgium 58.1	14
15	Ireland 57.9	Sweden 51.3	Norway 58.3	Australia 57.3	France 55.5	Spain 56.1	Denmark 56.7	Finland 56.7	Japan 56.3	15
16	Finland 57.7	Taiwan 49.4	Denmark 57.7	Saudi Arabia 57.1	New Zealand 55.3	United States 55.9	Austria 56.4	France 55.2	Austria 56.2	16
17	Australia 57.5	Australia 48.6	Italy 56.5	Czech Rep. 57.0	Thailand 55.1	Australia 55.9	Taiwan 56.0	Germany 55.1	Hong Kong 55.2	17
18	New Zealand 57.2	Norway 48.1	Finland 55.2	Germany 56.0	Netherlands 54.6	Austria 55.7	Norway 56.0	Austria 55.1	Ireland 55.0	18
19	Austria 55.0	Spain 47.5	Australia 54.4	Hungary 54.8	Indonesia 54.4	Israel 55.5	Israel 55.1	Greece 53.5	Singapore 54.7	19
20	Israel 53.9	Austria 47.0	Israel 54.3	France 53.8	Taiwan 54.1	Czech Rep. 54.9	Hungary 54.2	Italy 53.1	Israel 54.2	20
21	Italy 53.3	New Zealand 47.0	Spain 52.5	Netherlands 53.5	Denmark 54.0	Portugal 54.9	Czech Rep. 53.2	Czech Rep. 52.1	Italy 52.5	21
22	Taiwan 53.3	Saudi Arabia 46.9	Malaysia 50.4	Belgium 52.9	Germany 53.2	Italy 54.8	Spain 53.0	Japan 51.9	South Korea 50.6	22
23	South Korea 51.3	Denmark 46.4	Taiwan 49.9	Austria 52.5	Sweden 52.0	Hungary 54.3	South Korea 52.1	Australia 50.9	Greece 50.4	23
24	Spain 51.0	Saudi Arabia 46.1	Saudi Arabia 48.8	Greece 52.3	Chile 51.3	Canada 54.2	New Zealand 52.0	South Korea 50.6	Taiwan 50.3	24
25	Russia 49.5	Israel 45.6	New Zealand 48.6	United Kingdom 52.2	Ireland 50.0	South Africa 53.8	Ireland 50.8	Spain 50.2	Spain 49.7	25
26	Czech Rep. 48.8	Portugal 45.5	South Korea 47.5	Taiwan 52.0	Austria 49.5	Poland 53.7	Poland 50.4	Malaysia 50.2	Portugal 47.7	26
27	Saudi Arabia 47.6	Iran 45.5	Iran 47.3	Hong Kong 50.8	Spain 49.2	Indonesia 53.3	South Africa 50.4	Portugal 49.8	Czech Rep. 44.0	27
28	South Africa 47.5	Indonesia 45.4	Thailand 46.2	Ireland 50.8	China 49.0	Switzerland 52.9	Mexico 48.5	Canada 49.3	Saudi Arabia 43.2	28
29	Malaysia 47.1	Thailand 45.4	Chile 45.3	Chile 47.1	Belgium 48.3	Venezuela 52.6	Argentina 48.2	Poland 46.5	Russia 42.6	29
30	Greece 46.9	Chile 45.2	Portugal 45.0	Spain 46.9	Turkey 47.7	Russia 52.6	Greece 47.0	Russia 46.3	Turkey 42.4	30
31	Hungary 45.4	Finland 45.1	Venezuela 45.0	Philippines 46.5	Philippines 46.1	Mexico 51.9	Singapore 45.9	Saudi Arabia 46.1	Hungary 42.2	31
32	Portugal 45.1	Brazil 45.1	Czech Rep. 44.5	Malaysia 44.9	Mexico 45.6	Turkey 51.2	Brazil 44.6	Egypt 45.4	Malaysia 41.9	32
33	Poland 44.6	Czech Rep. 45.0	Mexico 42.9	Peru 44.4	Italy 44.8	Argentina 50.4	China 44.5	Thailand 44.6	Argentina 41.8	33
34	Mexico 43.6	Venezuela 44.3	Greece 42.5	Italy 44.1	Pakistan 43.3	Taiwan 50.0	India 44.3	South Africa 44.6	South Africa 41.8	34
35	Chile 43.3	Vietnam 44.2	Philippines 41.9	Mexico 43.9	Israel 42.2	Greece 49.8	Portugal 43.8	Turkey 43.4	Poland 41.7	35
36	Argentina 42.9	Russia 44.0	Russia 41.9	Thailand 42.8	Colombia 42.0	Chile 47.9	Hong Kong 43.7	Hungary 42.0	Venezuela 41.7	36
37	Thailand 42.1	Egypt 44.0	South Africa 41.4	South Africa 42.3	Argentina 41.8	South Korea 47.5	Venezuela 41.5	China 41.8	Chile 41.6	37
38	Venezuela 41.7	Mexico 43.9	Indonesia 41.2	Turkey 40.0	Czech Rep. 41.8	Brazil 46.7	Chile 40.1	Iran 41.5	Mexico 41.2	38
39	Turkey 41.5	China 43.6	Hungary 41.1	Venezuela 39.9	Vietnam 41.8	Saudi Arabia 46.3	Saudi Arabia 39.8	Mexico 41.4	Colombia 41.1	39
40	Indonesia 41.2	Greece 43.5	Poland 40.5	China 38.6	Venezuela 41.2	Malaysia 45.2	Philippines 39.8	Indonesia 41.1	Brazil 40.7	40
41	China 39.7	Philippines 43.5	Vietnam 40.1	Vietnam 38.4	Portugal 41.2	Iran 42.2	Egypt 39.6	Chile 40.3	Peru 39.9	41
42	Brazil 39.5	Hungary 43.0	Egypt 40.1	Iran 38.3	India 41.0	Colombia 41.1	Turkey 38.9	Venezuela 39.3	Iran 39.9	42
43	Philippines 38.8	Iran 42.6	Turkey 40.0	Singapore 38.0	Brazil 40.0	Egypt 40.5	Peru 38.3	India 38.9	Thailand 39.8	43
44	Egypt 38.2	Poland 42.4	Brazil 39.5	Portugal 37.9	Hungary 39.9	Thailand 40.4	Indonesia 37.5	Philippines 38.5	Egypt 39.6	44
45	Iran 36.9	Turkey 42.2	China 39.2	Egypt 37.9	Greece 39.5	China 39.3	Colombia 37.1	Pakistan 38.5	Philippines 39.3	45
46	Colombia 36.4	Colombia 41.8	Colombia 37.8	Brazil 37.2	Peru 36.8	Philippines 33.3	Iran 37.0	Argentina 37.9	Pakistan 39.0	46
47	Peru 34.5	Pakistan 41.8	Pakistan 37.2	Colombia 36.8	Egypt 34.4	Peru 27.5	Thailand 36.3	Brazil 37.5	Indonesia 39.0	47
48	India 33.9	Argentina 41.5	Peru 34.9	India 33.1	Poland 31.1	India 25.4	Malaysia 35.6	Peru 37.2	China 38.9	48
49	Vietnam 32.5	Peru 41.0	Argentina 34.9	Indonesia 32.5	Iran 22.1	Vietnam 20.4	Pakistan 32.0	Colombia 34.2	India 38.9	49
50	Pakistan 31.6	India 40.4	India 33.2	Pakistan 29.9	Russia 29.9	Pakistan 18.9	Vietnam 31.1	Vietnam 32.5	Vietnam 38.7	50

Appendix Table 2-3 Rankings for 2000

	Overall	Internationalization	Enterprises	Education	Finance	Government	Science and technology	Infrastructure	IT										
1	United States	69.4	Hong Kong	88.6	Ireland	72.1	Norway	68.4	Hong Kong	84.7	Finland	61.0	United States	71.0	Singapore	97.0	United States	71.8	1
2	Hong Kong	68.6	United States	84.3	Germany	67.6	New Zealand	67.5	Switzerland	76.5	Singapore	60.8	Japan	68.2	Hong Kong	77.1	Norway	66.4	2
3	Singapore	67.5	Singapore	70.3	Belgium	65.1	United States	65.7	Finland	68.1	Norway	60.1	Germany	65.2	Norway	63.2	Sweden	66.1	3
4	Switzerland	63.5	United Kingdom	63.8	Japan	63.7	South Korea	63.2	Singapore	65.5	Ireland	60.0	United Kingdom	62.6	New Zealand	61.8	Finland	63.2	4
5	Norway	61.8	Germany	63.2	Singapore	63.7	Sweden	63.1	United Kingdom	63.4	United Kingdom	59.5	France	62.6	Taiwan	58.5	Denmark	63.2	5
6	Sweden	61.4	Netherlands	60.8	United States	63.5	Canada	62.1	Netherlands	62.1	Sweden	59.5	Canada	61.8	Ireland	57.8	Switzerland	62.2	6
7	United Kingdom	61.1	Belgium	60.6	Netherlands	63.3	Denmark	61.5	South Africa	60.4	Germany	59.4	Switzerland	61.3	Switzerland	57.6	Netherlands	61.5	7
8	Netherlands	61.1	Ireland	59.0	Canada	62.4	Finland	61.1	Norway	60.4	Denmark	58.8	Sweden	61.3	Belgium	57.5	Hong Kong	61.3	8
9	Finland	60.7	Malaysia	56.9	Switzerland	61.2	Australia	58.6	United States	59.2	Switzerland	58.1	Taiwan	60.1	Netherlands	55.7	Canada	60.8	9
10	Germany	60.7	France	55.9	Hong Kong	61.2	Israel	58.6	Sweden	58.7	United States	57.8	Netherlands	59.3	Denmark	54.0	Australia	60.6	10
11	Canada	59.6	Canada	54.8	France	60.1	Poland	58.5	Canada	55.9	Saudi Arabia	57.4	South Korea	57.9	Finland	53.8	Singapore	60.0	11
12	Ireland	59.4	Switzerland	53.6	Sweden	59.7	Japan	58.3	Malaysia	55.8	Italy	57.4	Italy	57.9	Sweden	53.7	United Kingdom	58.9	12
13	Belgium	58.2	Sweden	50.6	Austria	59.3	Russia	58.1	Australia	54.8	Spain	57.4	Australia	57.9	United States	53.7	Japan	58.5	13
14	Denmark	58.0	Japan	50.5	France	59.3	Switzerland	56.9	France	54.1	Israel	57.2	Finland	57.7	Israel	53.6	Taiwan	58.2	14
15	Japan	58.0	China	50.3	Finland	57.0	Hong Kong	55.1	Ireland	53.6	Portugal	57.1	Belgium	57.3	United Kingdom	52.3	New Zealand	58.0	15
16	France	57.5	Italy	50.0	Italy	56.7	Greece	54.0	Denmark	51.7	Belgium	57.1	Austria	56.8	France	52.3	Germany	57.8	16
17	Australia	56.1	Hungary	49.7	Norway	56.5	Germany	53.9	Chile	51.5	Netherlands	56.7	Russia	56.8	Austria	52.1	Austria	57.6	17
18	New Zealand	55.7	Spain	49.6	Denmark	56.2	United Kingdom	53.7	Spain	51.2	Canada	56.6	Denmark	56.7	Germany	52.0	South Korea	55.9	18
19	Austria	54.2	Czech Rep.	48.7	Australia	55.7	France	53.7	Taiwan	50.1	France	56.4	Norway	55.5	Spain	51.7	Ireland	55.4	19
20	Israel	54.0	Denmark	48.7	Spain	55.5	Taiwan	53.3	New Zealand	49.9	Greece	55.1	Israel	55.0	Greece	51.0	Belgium	55.4	20
21	Italy	53.6	Taiwan	48.6	Israel	52.1	Austria	53.3	Germany	49.6	New Zealand	54.7	Spain	53.5	Italy	50.9	Israel	54.9	21
22	Taiwan	53.4	Thailand	47.7	Malaysia	50.1	Czech Rep.	53.0	South Korea	49.2	Indonesia	54.5	Singapore	51.8	Australia	50.2	Italy	54.1	22
23	South Korea	53.1	South Korea	47.4	New Zealand	48.6	Saudi Arabia	53.0	Japan	48.9	Austria	54.3	New Zealand	51.7	Portugal	50.1	France	53.7	23
24	Spain	52.6	Austria	47.1	Taiwan	48.6	Netherlands	52.1	Israel	48.9	Russia	54.3	Hungary	51.5	Japan	50.0	Portugal	51.9	24
25	Greece	48.5	Vietnam	46.8	South Korea	48.3	Argentina	51.7	Belgium	48.3	Poland	54.2	Ireland	51.1	South Korea	50.0	Spain	50.2	25
26	Czech Rep.	48.5	Finland	46.6	Greece	47.5	Hungary	51.5	Italy	47.9	Hong Kong	54.1	Czech Rep.	51.1	Malaysia	50.0	Greece	49.3	26
27	Malaysia	48.0	Mexico	46.5	Thailand	46.7	Belgium	51.5	China	47.7	Australia	54.0	South Africa	50.7	Czech Rep.	49.2	Czech Rep.	47.6	27
28	Portugal	46.9	Australia	46.4	Portugal	45.5	Malaysia	51.1	Thailand	47.5	Czech Rep.	52.8	Poland	48.4	Thailand	48.7	Hungary	46.7	28
29	Hungary	46.6	Philippines	45.7	Iran	45.2	Ireland	50.8	Philippines	47.1	South Africa	52.1	Argentina	47.2	Canada	46.8	Chile	44.5	29
30	Russia	46.5	Indonesia	45.6	Mexico	44.7	Spain	48.0	Argentina	46.7	Japan	51.7	China	46.3	Russia	45.8	Malaysia	44.3	30
31	Poland	46.5	Norway	45.6	Czech Rep.	44.7	Chile	47.9	Portugal	46.6	Hungary	51.3	Greece	46.3	Poland	45.6	Poland	43.3	31
32	South Africa	46.2	Chile	45.4	Hungary	44.3	Peru	47.9	Austria	44.9	Mexico	50.6	Mexico	46.1	Egypt	45.6	Turkey	42.4	32
33	Saudi Arabia	44.6	Israel	45.2	Philippines	43.7	Singapore	47.8	Greece	44.6	Argentina	49.1	Brazil	46.1	Saudi Arabia	45.0	Argentina	42.1	33
34	Argentina	43.5	Portugal	45.2	Saudi Arabia	43.5	Italy	47.7	Vietnam	44.5	South Korea	48.0	Portugal	44.0	Chile	44.7	South Africa	41.1	34
35	Chile	43.1	New Zealand	45.1	Turkey	42.9	Thailand	46.3	Poland	44.4	Brazil	47.9	Hong Kong	43.6	Indonesia	43.6	Brazil	40.7	35
36	Mexico	43.0	South Africa	44.9	Russia	42.2	Philippines	44.9	Czech Rep.	44.1	Turkey	47.9	India	43.4	South Africa	43.5	Venezuela	40.6	36
37	China	42.8	Russia	44.5	Vietnam	42.0	South Africa	44.5	Saudi Arabia	43.8	China	46.7	Philippines	43.1	China	43.2	Mexico	40.1	37
38	Thailand	42.4	Saudi Arabia	43.8	Chile	41.6	Mexico	43.2	Colombia	43.5	Taiwan	43.6	Venezuela	42.0	Argentina	43.0	Russia	40.0	38
39	Brazil	40.0	Poland	43.6	Indonesia	41.4	Egypt	40.7	Peru	43.4	Venezuela	41.6	Chile	40.3	Hungary	42.8	Peru	39.7	39
40	Turkey	39.5	Brazil	42.9	China	41.1	Venezuela	40.5	Brazil	42.8	Malaysia	41.1	Saudi Arabia	40.1	Mexico	42.4	Colombia	39.6	40
41	Philippines	39.3	Turkey	42.7	Brazil	41.0	China	40.4	Mexico	41.3	Peru	40.4	Egypt	39.4	Philippines	41.3	Saudi Arabia	39.4	41
42	Indonesia	39.1	Greece	42.5	Poland	40.9	Portugal	38.9	India	41.0	Chile	39.5	Malaysia	39.0	Iran	41.2	Iran	39.1	42
43	Venezuela	38.5	Venezuela	42.4	South Africa	40.1	Colombia	38.0	Turkey	40.5	Colombia	39.3	Indonesia	37.9	Vietnam	41.2	Thailand	38.8	43
44	Peru	38.3	Argentina	41.9	Venezuela	39.4	Iran	36.3	Hungary	40.3	Thailand	38.8	Turkey	37.9	Peru	41.2	China	38.7	44
45	Colombia	36.8	Egypt	41.5	Colombia	37.0	Turkey	35.9	Pakistan	40.0	Iran	37.3	Thailand	36.8	Turkey	40.7	Philippines	38.3	45
46	Egypt	36.0	Colombia	41.4	Argentina	36.9	Vietnam	34.0	Egypt	39.3	Pakistan	39.0	Peru	36.6	Venezuela	40.3	Egypt	38.0	46
47	Iran	36.0	Peru	41.0	India	36.2	Brazil	33.7	Venezuela	38.2	Vietnam	30.3	Colombia	36.6	India	39.3	Indonesia	37.2	47
48	Vietnam	35.4	India	41.0	Egypt	36.0	Indonesia	32.6	Russia	37.4	Egypt	28.7	Iran	34.7	Brazil	39.3	Vietnam	37.1	48
49	India	33.2	Pakistan	40.6	Peru	34.4	India	32.2	Indonesia	36.8	Philippines	26.4	Pakistan	31.2	Pakistan	39.2	India	37.0	49
50	Pakistan	31.5	Iran	40.6	Pakistan	34.0	Pakistan	25.1	Iran	33.1	India	19.5	Vietnam	29.0	Colombia	38.5	Pakistan	36.8	50

Appendix Table 2-4 Rankings for 2005

	Overall	Internationalization	Enterprises	Education	Finance	Government	Science and technology	Infrastructure	IT	
1	Hong Kong 71.3	Hong Kong 85.6	Ireland 72.6	Norway 68.0	Hong Kong 93.3	Singapore 59.3	United States 71.2	Singapore 95.4	United States 67.6	1
2	Singapore 68.7	United States 83.1	Germany 68.3	New Zealand 66.8	Switzerland 68.5	Spain 59.3	Japan 68.2	Hong Kong 80.0	Sweden 65.9	2
3	United States 67.7	Singapore 74.8	Belgium 65.7	Sweden 66.6	Singapore 68.4	Finland 59.0	Germany 64.9	Ireland 62.8	Denmark 64.3	3
4	Switzerland 62.7	Japan 64.4	Japan 64.3	United States 64.9	South Africa 63.4	Denmark 62.4	United Kingdom 62.4	New Zealand 62.2	South Korea 64.1	4
5	Sweden 61.0	United Kingdom 64.1	Netherlands 63.4	South Korea 63.4	Malaysia 62.1	Ireland 58.5	France 62.3	Norway 59.4	Switzerland 63.7	5
6	Germany 60.6	Belgium 62.2	Singapore 63.2	Switzerland 62.3	United Kingdom 60.5	Belgium 58.3	Canada 61.6	Taiwan 57.8	Netherlands 63.1	6
7	United Kingdom 60.5	Netherlands 60.4	United States 62.8	Denmark 61.3	Australia 57.4	Portugal 58.2	Taiwan 61.2	Belgium 56.6	Hong Kong 61.0	7
8	Netherlands 60.3	France 57.3	Hong Kong 62.3	Canada 60.5	Finland 56.6	Austria 57.6	Sweden 60.9	Netherlands 56.1	Canada 61.0	8
9	Canada 59.8	Ireland 56.9	Canada 61.4	Finland 60.3	Chile 56.5	Sweden 57.5	Switzerland 60.8	Switzerland 54.0	Australia 60.2	9
10	Ireland 58.9	Malaysia 55.3	Switzerland 61.1	Poland 59.2	United States 55.8	Germany 57.3	South Korea 59.4	Finland 53.3	Taiwan 60.1	10
11	Belgium 58.6	Switzerland 55.1	Austria 60.1	Japan 58.4	Canada 55.7	New Zealand 57.3	Netherlands 59.0	Denmark 53.0	Norway 59.7	11
12	Denmark 58.2	China 54.4	France 59.8	Australia 58.3	Sweden 55.7	Italy 57.2	Finland 58.7	Israel 52.8	Singapore 59.7	12
13	Finland 58.0	Canada 54.0	Sweden 59.6	Russia 58.2	Netherlands 55.7	Norway 56.6	Australia 57.6	United States 52.6	Finland 59.7	13
14	Norway 57.9	Sweden 51.3	United Kingdom 58.5	Israel 58.1	Taiwan 54.6	Hong Kong 56.3	Belgium 57.1	Malaysia 52.5	United Kingdom 58.9	14
15	Japan 57.9	Italy 50.1	Denmark 56.7	Greece 54.4	Israel 54.0	United Kingdom 56.2	Italy 57.0	Australia 52.3	Austria 58.6	15
16	France 57.4	Spain 50.0	Finland 56.7	United Kingdom 54.4	Spain 53.0	Canada 56.0	Denmark 56.9	Spain 52.3	New Zealand 58.3	16
17	Australia 56.7	Japan 49.9	Italy 56.4	Germany 53.8	Denmark 52.5	France 56.0	Austria 56.7	Germany 52.3	Japan 57.6	17
18	New Zealand 56.1	Hungary 48.7	Norway 56.3	Saudi Arabia 53.4	France 52.4	Switzerland 55.6	Russia 55.6	United Kingdom 52.3	Germany 57.3	18
19	South Korea 55.4	Taiwan 48.4	Spain 55.5	France 53.1	Ireland 51.9	Greece 55.6	Israel 55.2	Austria 52.1	Israel 57.0	19
20	Austria 55.3	Austria 48.4	Australia 55.0	Malaysia 52.6	South Korea 51.6	Israel 55.4	Norway 55.2	Sweden 51.8	Belgium 55.2	20
21	Taiwan 54.8	Czech Rep. 48.1	Israel 51.6	Czech Rep. 52.5	Thailand 51.5	Australia 55.1	Singapore 53.5	Canada 51.7	France 54.4	21
22	Israel 54.6	Denmark 47.9	Malaysia 49.5	Netherlands 52.3	New Zealand 51.3	South Africa 55.0	Spain 53.2	France 51.6	Italy 53.3	22
23	Spain 53.6	Thailand 47.5	Taiwan 48.6	Austria 52.1	Norway 50.2	United States 54.7	New Zealand 51.7	Greece 51.4	Ireland 52.5	23
24	Italy 53.1	Vietnam 47.5	New Zealand 47.6	Hong Kong 51.8	Saudi Arabia 50.0	Netherlands 54.7	Ireland 51.2	Italy 50.7	Spain 52.5	24
25	Malaysia 49.5	South Korea 46.5	Iran 47.3	Belgium 51.6	Germany 48.1	Saudi Arabia 54.6	Hong Kong 50.9	South Korea 50.6	Czech Rep. 51.0	25
26	Czech Rep. 48.2	Mexico 46.5	South Korea 47.2	Argentina 51.3	Belgium 48.0	Poland 54.5	Hungary 50.6	Portugal 50.2	Portugal 49.8	26
27	Greece 48.1	Finland 46.3	Thailand 46.8	Taiwan 50.9	Japan 47.4	Brazil 52.6	Czech Rep. 49.6	Japan 49.5	Hungary 49.7	27
28	Hungary 47.5	Australia 46.2	Greece 46.5	Hungary 50.8	Russia 47.4	Japan 52.5	China 47.9	Czech Rep. 49.3	Greece 47.9	28
29	Russia 47.1	Chile 46.0	Hungary 45.1	Ireland 50.0	Austria 46.8	Indonesia 52.4	Poland 47.1	Thailand 48.9	Chile 45.9	29
30	Portugal 46.4	Portugal 45.7	Portugal 45.0	Chile 48.2	China 46.5	Mexico 51.4	Argentina 46.4	Poland 45.5	Malaysia 44.9	30
31	Poland 46.1	Norway 45.0	Czech Rep. 44.6	Singapore 47.9	Italy 46.3	Argentina 51.3	South Africa 46.1	Saudi Arabia 45.0	Poland 44.9	31
32	South Africa 45.7	Israel 45.0	Mexico 43.7	Italy 47.5	Portugal 45.2	Hungary 50.8	Greece 45.9	Egypt 44.9	Russia 42.0	32
33	Saudi Arabia 44.9	Philippines 44.6	Saudi Arabia 43.7	Spain 47.5	Greece 44.9	South Korea 50.3	Mexico 45.6	Chile 44.9	Brazil 41.7	33
34	Chile 44.5	New Zealand 44.6	China 43.2	South Africa 45.3	Hungary 44.9	Russia 49.8	Brazil 45.6	Russia 44.9	Turkey 41.6	34
35	China 44.2	Russia 44.4	Vietnam 43.1	Philippines 45.0	Poland 44.7	Czech Rep. 49.2	India 44.1	South Africa 43.6	Argentina 41.3	35
36	Thailand 43.7	Indonesia 43.5	Turkey 43.1	Peru 44.2	Vietnam 44.7	China 48.7	Portugal 44.0	Hungary 43.4	Venezuela 41.3	36
37	Mexico 42.7	Saudi Arabia 43.5	Philippines 43.1	Thailand 43.8	Peru 44.5	Taiwan 47.5	Philippines 43.4	China 43.2	Saudi Arabia 41.2	37
38	Argentina 41.7	Brazil 43.4	Chile 42.5	Mexico 43.8	India 44.4	Colombia 47.0	Malaysia 41.7	Indonesia 42.8	Mexico 41.0	38
39	Brazil 40.5	South Africa 43.3	Brazil 42.2	Venezuela 42.6	Czech Rep. 44.0	Venezuela 47.0	Venezuela 41.6	Iran 42.7	China 39.4	39
40	Venezuela 39.7	Poland 43.1	Russia 40.4	Egypt 41.0	Pakistan 43.0	Peru 45.8	Chile 40.3	Mexico 41.9	Thailand 39.3	40
41	Philippines 38.5	Venezuela 43.0	South Africa 40.1	China 40.9	Colombia 41.2	Thailand 43.2	Thailand 40.1	Peru 41.6	Colombia 39.3	41
42	Peru 38.0	Turkey 42.7	Argentina 39.5	Colombia 39.0	Philippines 41.0	Chile 41.6	Turkey 38.8	Turkey 41.3	South Africa 39.2	42
43	Turkey 37.9	Argentina 42.7	Indonesia 39.5	Portugal 38.8	Venezuela 40.7	Malaysia 40.4	Egypt 38.8	Vietnam 41.2	Peru 37.9	43
44	Colombia 37.5	Greece 41.9	Venezuela 38.6	Turkey 37.9	Mexico 39.5	Pakistan 39.3	Saudi Arabia 38.4	Argentina 40.9	Philippines 37.8	44
45	Indonesia 37.5	Colombia 41.8	Poland 38.3	Iran 37.6	Iran 39.5	Pakistan 37.6	Peru 35.8	Philippines 39.6	Iran 37.8	45
46	India 35.1	India 41.3	Colombia 37.3	Brazil 35.0	Brazil 39.2	Philippines 30.3	Indonesia 35.6	Colombia 39.6	Egypt 36.9	46
47	Vietnam 34.9	Iran 41.3	Egypt 36.4	Vietnam 34.7	Indonesia 38.5	India 30.3	Colombia 35.4	Pakistan 39.4	Vietnam 36.4	47
48	Egypt 34.8	Peru 40.9	India 35.9	Turkey 32.9	Turkey 37.8	Egypt 26.3	Iran 34.9	India 39.4	Indonesia 36.1	48
49	Iran 34.2	Pakistan 40.8	Pakistan 35.3	Indonesia 32.5	Egypt 35.9	Vietnam 26.1	Pakistan 30.8	Brazil 39.3	India 35.2	49
50	Pakistan 32.1	Egypt 40.6	Peru 34.5	Pakistan 22.5	Argentina 33.6	Iran 13.8	Vietnam 29.1	Venezuela 39.3	Pakistan 34.6	50

Appendix Table 2-5 Rankings for 2006

	Overall	Internationalization	Enterprises	Education	Finance	Government	Science and technology	Infrastructure	IT	
1	Hong Kong 74.6	Hong Kong 88.8	Singapore 77.2	Norway 68.5	Hong Kong 95.6	Norway 60.2	United States 71.5	Singapore 99.2	United States 68.5	1
2	Singapore 71.6	United States 81.3	Hong Kong 71.8	Sweden 67.5	Singapore 67.3	Singapore 59.7	Japan 68.7	Hong Kong 79.7	Sweden 64.4	2
3	United States 68.3	Singapore 73.6	Ireland 70.0	United States 65.8	Switzerland 66.1	Denmark 59.7	Germany 65.2	Ireland 62.7	Denmark 63.9	3
4	Switzerland 60.5	United Kingdom 65.3	United States 67.9	New Zealand 63.7	South Africa 64.0	Spain 58.2	United Kingdom 62.7	Norway 58.4	Netherlands 63.4	4
5	Belgium 60.1	Germany 63.6	Japan 65.9	South Korea 63.0	Belgium 61.6	Finland 57.8	France 62.5	New Zealand 57.4	Switzerland 62.8	5
6	Netherlands 60.0	Netherlands 62.3	Germany 64.5	Denmark 60.9	Saudi Arabia 59.4	Sweden 57.8	Canada 61.8	Taiwan 57.3	South Korea 62.1	6
7	United Kingdom 59.8	Belgium 59.3	Belgium 63.6	Finland 60.4	Malaysia 58.6	Ireland 57.5	Taiwan 61.1	Belgium 56.7	Australia 61.4	7
8	Sweden 59.7	France 58.3	Netherlands 60.3	Canada 59.9	United Kingdom 57.8	Hong Kong 57.1	Sweden 61.0	Netherlands 55.9	Canada 60.4	8
9	Germany 59.5	Ireland 56.6	Switzerland 58.3	Russia 59.2	Australia 56.2	Belgium 56.8	Switzerland 60.9	Denmark 53.9	Finland 60.3	9
10	Canada 58.6	Switzerland 54.4	Canada 57.8	Poland 59.2	Chile 56.0	Germany 56.3	South Korea 59.6	United States 52.9	Hong Kong 60.3	10
11	Ireland 58.3	Canada 53.4	France 57.0	Japan 58.5	Sweden 54.7	United Kingdom 56.3	Finland 58.9	Finland 52.9	Singapore 60.2	11
12	Japan 57.8	Malaysia 52.7	Sweden 57.0	Israel 58.4	Netherlands 54.6	Austria 56.1	Netherlands 58.6	Malaysia 52.7	Israel 59.9	12
13	Denmark 57.7	China 52.4	Austria 56.9	Australia 57.8	Israel 54.5	Australia 57.7	Australia 55.5	Israel 52.1	Taiwan 59.9	13
14	Norway 57.7	Spain 51.5	United Kingdom 55.4	Switzerland 57.7	Canada 54.3	France 55.4	Belgium 57.2	Switzerland 52.1	United Kingdom 59.4	14
15	France 57.3	Sweden 50.8	Finland 55.2	Hong Kong 55.4	Finland 54.0	New Zealand 55.3	Italy 57.2	Germany 52.1	Austria 58.7	15
16	Finland 57.1	Italy 50.7	Norway 54.6	Taiwan 54.5	Spain 52.6	Italy 55.2	Denmark 56.9	United Kingdom 52.0	Norway 58.2	16
17	Australia 56.2	Japan 50.1	Denmark 54.6	Germany 54.0	United States 52.6	Netherlands 55.2	Austria 56.5	Austria 51.8	France 57.1	17
18	Israel 54.8	Taiwan 49.3	Australia 54.1	Hungary 53.8	Taiwan 52.4	Portugal 55.2	Russia 55.7	Canada 51.6	Japan 56.4	18
19	South Korea 54.3	Czech Rep. 48.7	Italy 53.8	Saudi Arabia 53.7	France 51.7	Canada 55.2	Norway 55.0	Spain 51.6	Germany 56.2	19
20	Taiwan 54.3	Hungary 48.4	Spain 52.5	United Kingdom 53.3	Ireland 51.4	Czech Rep. 54.7	Israel 55.0	South Korea 51.2	Belgium 56.0	20
21	Austria 54.2	Denmark 48.0	Malaysia 51.9	Malaysia 53.0	Denmark 50.8	Greece 54.5	Singapore 53.6	France 51.1	New Zealand 55.8	21
22	New Zealand 53.8	Vietnam 47.9	Israel 51.3	Czech Rep. 53.0	Russia 50.4	Switzerland 54.1	Spain 53.1	Greece 50.9	Spain 53.0	22
23	Spain 53.1	Thailand 47.7	Iran 48.4	Belgium 52.8	South Korea 50.4	Israel 50.4	New Zealand 51.9	Italy 50.5	Italy 52.7	23
24	Italy 52.8	Austria 47.5	New Zealand 47.8	France 52.7	New Zealand 49.8	Chile 53.8	Ireland 51.0	Portugal 49.8	Portugal 52.6	24
25	Malaysia 51.0	South Korea 47.1	Taiwan 47.5	Greece 52.4	Norway 49.6	Poland 53.7	Hong Kong 50.5	Australia 49.7	Ireland 52.4	25
26	Czech Rep. 49.4	Australia 46.9	Greece 46.6	Netherlands 52.2	Portugal 49.3	Saudi Arabia 50.2	Hungary 50.2	Czech Rep. 49.3	Czech Rep. 50.5	26
27	Russia 47.8	Mexico 46.4	Thailand 46.4	Austria 51.5	Thailand 48.4	United States 53.3	Czech Rep. 50.0	Japan 49.2	Hungary 49.8	27
28	Greece 47.6	Finland 46.1	Czech Rep. 45.3	Argentina 50.5	Italy 47.3	Malaysia 53.2	China 47.7	Thailand 48.7	Greece 47.1	28
29	Hungary 47.6	Portugal 45.5	South Korea 45.1	Ireland 50.0	Greece 47.2	Argentina 52.6	Poland 46.9	Sweden 48.6	Poland 46.4	29
30	Poland 46.9	Norway 45.5	Hungary 45.0	Italy 49.9	Germany 46.8	Japan 52.3	South Africa 46.7	China 47.2	Chile 45.8	30
31	Portugal 46.9	Russia 45.4	Vietnam 44.8	Spain 48.0	Japan 46.5	Indonesia 52.0	Argentina 45.8	Saudi Arabia 46.3	Malaysia 45.3	31
32	Saudi Arabia 45.9	Israel 45.2	Portugal 44.2	Chile 47.8	Austria 46.5	South Africa 51.8	Greece 45.2	Poland 45.7	Russia 43.2	32
33	Chile 45.9	Chile 45.0	Brazil 43.4	Singapore 46.1	Czech Rep. 45.5	Brazil 51.6	Mexico 45.0	Egypt 45.4	Argentina 42.9	33
34	South Africa 45.3	Poland 44.6	Philippines 42.8	South Africa 44.8	Poland 45.0	Mexico 50.4	Brazil 44.8	Chile 45.1	Turkey 41.7	34
35	China 43.5	Philippines 44.3	Saudi Arabia 42.7	Thailand 44.8	India 44.5	Russia 49.8	Portugal 44.2	Russia 45.0	Venezuela 41.2	35
36	Thailand 43.2	New Zealand 43.9	Chile 42.4	Philippines 44.6	Hungary 44.5	Hungary 49.6	Philippines 43.8	Hungary 43.7	Saudi Arabia 41.1	36
37	Argentina 42.3	Brazil 43.6	Turkey 42.4	Mexico 44.4	Vietnam 43.4	South Korea 48.7	India 43.5	Iran 43.3	Mexico 40.8	37
38	Mexico 41.8	Saudi Arabia 43.5	Mexico 41.8	Peru 44.1	Iran 43.2	China 48.2	Malaysia 41.2	South Africa 43.2	Brazil 40.8	38
39	Brazil 40.5	Venezuela 43.3	Argentina 41.3	Venezuela 41.9	China 42.6	Colombia 46.7	Venezuela 41.2	Indonesia 43.1	China 39.9	39
40	Venezuela 39.7	South Africa 43.2	Venezuela 40.8	China 40.8	Peru 42.4	Peru 46.3	Chile 40.1	Mexico 42.1	South Africa 39.7	40
41	Peru 38.6	Turkey 43.1	Poland 40.8	Portugal 39.4	Venezuela 41.0	Venezuela 45.4	Thailand 38.9	Peru 42.0	Colombia 39.7	41
42	Philippines 38.3	Argentina 42.9	China 40.4	Egypt 39.4	Colombia 41.0	Thailand 44.7	Egypt 38.6	Turkey 42.0	Peru 38.5	42
43	Colombia 37.8	Egypt 42.3	South Africa 39.8	Colombia 38.9	Pakistan 41.0	Taiwan 43.8	Turkey 38.2	Argentina 41.9	Iran 38.2	43
44	Turkey 37.7	Greece 42.1	Russia 39.6	Iran 38.4	Philippines 40.7	Turkey 37.3	Saudi Arabia 37.4	Vietnam 41.5	Thailand 37.9	44
45	Indonesia 36.9	Indonesia 42.0	Colombia 39.0	Turkey 36.8	Brazil 40.5	Pakistan 36.6	Iran 36.8	Philippines 41.1	Vietnam 36.8	45
46	Vietnam 35.9	Iran 41.6	Indonesia 38.9	Brazil 34.9	Indonesia 38.7	India 34.2	Peru 36.3	Pakistan 40.3	Philippines 36.4	46
47	India 35.8	India 41.6	Egypt 38.8	Vietnam 34.1	Turkey 38.6	Philippines 30.5	Colombia 36.1	Brazil 40.0	Egypt 36.2	47
48	Egypt 35.2	Colombia 41.5	Peru 38.0	India 33.2	Mexico 37.7	Vietnam 28.1	Indonesia 35.8	Colombia 39.9	Indonesia 35.4	48
49	Iran 34.9	Peru 40.8	India 37.8	Indonesia 32.1	Egypt 37.2	Egypt 25.9	Vietnam 31.5	India 39.9	India 34.3	49
50	Pakistan 31.5	Pakistan 39.9	Pakistan 36.6	Pakistan 22.2	Argentina 34.1	Iran 8.2	Pakistan 30.3	Venezuela 39.7	Pakistan 34.1	50

Appendix Table 2-6 Rankings for 2007

	Overall	Internationalization	Enterprises	Education	Finance	Government	Science and technology	Infrastructure	IT	
1	Hong Kong 74.4	Hong Kong 88.2	Singapore 79.4	Norway 68.0	Hong Kong 96.8	Saudi Arabia 66.6	United States 70.9	Singapore 95.5	Sweden 63.8	1
2	Singapore 70.7	United States 81.1	Hong Kong 72.1	Sweden 67.0	Singapore 67.7	Norway 66.3	Japan 68.5	Hong Kong 80.1	Netherlands 63.5	2
3	United States 65.3	Singapore 74.2	Ireland 70.5	United States 65.5	Switzerland 67.2	Singapore 59.0	Germany 65.0	Ireland 65.7	Switzerland 62.9	3
4	United Kingdom 60.5	Belgium 64.7	Japan 65.2	New Zealand 64.6	Saudi Arabia 66.5	Finland 58.5	United Kingdom 62.5	Taiwan 59.9	Israel 61.7	4
5	Switzerland 60.4	Germany 64.1	Germany 64.1	South Korea 63.4	South Africa 64.8	Sweden 57.9	France 62.3	New Zealand 58.6	Canada 61.6	5
6	Netherlands 60.4	United Kingdom 63.5	Belgium 63.8	Finland 61.8	United Kingdom 57.6	Denmark 57.7	Taiwan 62.1	Norway 57.9	United Kingdom 61.6	6
7	Germany 59.8	Netherlands 62.1	United Kingdom 60.7	Denmark 60.9	Malaysia 55.8	Spain 57.4	Canada 61.6	Belgium 56.5	Denmark 61.5	7
8	Sweden 59.4	France 58.7	Netherlands 60.6	Canada 59.8	Israel 55.6	Ireland 57.0	Sweden 60.8	Netherlands 56.3	United States 61.4	8
9	Norway 59.3	Switzerland 53.8	United States 59.6	Russia 59.1	Canada 54.9	New Zealand 56.7	Switzerland 60.6	Denmark 55.9	Norway 61.2	9
10	Belgium 59.0	Ireland 53.6	Switzerland 58.5	Poland 59.0	Netherlands 54.7	Netherlands 56.5	South Korea 59.8	United States 54.0	South Korea 61.0	10
11	Canada 59.0	China 53.4	Canada 57.7	Japan 58.4	Chile 54.7	Belgium 56.4	Finland 58.8	Finland 53.1	Taiwan 60.8	11
12	Ireland 58.6	Canada 53.2	Sweden 57.1	Switzerland 57.7	Sweden 54.4	Hong Kong 56.3	Netherlands 58.5	Malaysia 52.6	Hong Kong 60.6	12
13	Japan 57.7	Malaysia 52.5	Austria 57.0	Israel 57.5	Australia 54.4	Chile 55.9	Australia 57.8	Israel 52.4	Germany 59.1	13
14	Denmark 57.7	Spain 51.3	France 56.7	Australia 57.1	Finland 54.2	Austria 55.3	Italy 57.1	United Kingdom 52.3	Austria 58.0	14
15	France 57.2	Sweden 50.4	Finland 55.3	Saudi Arabia 55.8	Taiwan 53.2	Canada 55.1	Denmark 56.9	Germany 52.1	Japan 58.0	15
16	Finland 57.2	Italy 50.1	Denmark 55.0	Hungary 55.0	Russia 52.8	Germany 55.1	Belgium 56.8	Austria 52.1	France 57.8	16
17	Taiwan 55.3	Japan 49.9	Norway 54.6	Taiwan 54.2	South Korea 52.3	France 54.7	Austria 56.5	Switzerland 51.9	Finland 57.5	17
18	Israel 55.2	Taiwan 48.9	Australia 54.1	Hong Kong 54.1	United States 51.7	United Kingdom 54.7	Russia 55.6	Canada 51.9	Australia 56.9	18
19	Australia 54.8	Denmark 48.7	Italy 53.4	Czech Rep. 54.0	Spain 51.6	Czech Rep. 54.3	Israel 55.1	Spain 51.8	Belgium 56.3	19
20	South Korea 54.8	Thailand 48.2	Spain 52.3	Germany 53.9	Denmark 50.9	Italy 54.3	Norway 55.0	South Korea 51.6	New Zealand 55.6	20
21	New Zealand 54.4	Hungary 48.0	Malaysia 52.0	France 53.1	Ireland 50.2	Poland 54.0	Singapore 54.0	France 51.3	Italy 55.4	21
22	Austria 54.1	Czech Rep. 47.9	Israel 51.4	Greece 53.0	France 50.2	Australia 53.9	Spain 53.2	Greece 50.9	Spain 55.0	22
23	Spain 53.2	Vietnam 47.6	Iran 48.6	United Kingdom 52.8	Norway 49.9	Israel 49.9	New Zealand 52.4	Italy 50.8	Singapore 54.8	23
24	Italy 53.2	Austria 47.1	Taiwan 48.3	Belgium 52.7	Belgium 48.8	Greece 53.3	Ireland 51.2	Australia 50.1	Ireland 54.2	24
25	Russia 49.8	South Korea 46.8	New Zealand 47.8	Malaysia 52.4	Thailand 48.7	Switzerland 53.2	Hong Kong 50.7	Portugal 50.0	Portugal 52.9	25
26	Malaysia 49.6	Russia 46.6	Greece 46.6	Netherlands 52.3	New Zealand 48.7	Portugal 52.9	Hungary 50.2	Czech Rep. 49.6	Hungary 50.3	26
27	Saudi Arabia 49.4	Mexico 46.4	Thailand 45.5	Austria 50.9	Portugal 48.2	Russia 52.3	Czech Rep. 50.0	Japan 49.2	Czech Rep. 49.8	27
28	Czech Rep. 49.3	Norway 45.8	Vietnam 45.2	Italy 50.8	Greece 47.3	United States 52.2	China 48.6	Thailand 48.4	Russia 48.9	28
29	Hungary 48.1	Finland 45.8	Czech Rep. 45.1	Ireland 50.1	Austria 47.2	Hungary 51.8	Poland 47.1	Sweden 47.4	Poland 48.2	29
30	Greece 47.7	Australia 45.8	Hungary 45.1	Argentina 49.6	Italy 46.8	Colombia 51.2	South Africa 46.8	China 47.2	Greece 47.9	30
31	Poland 47.2	Chile 45.7	South Korea 44.8	Spain 47.8	Germany 46.4	South Africa 51.1	Argentina 45.9	Russia 45.7	Chile 46.8	31
32	Portugal 46.3	Israel 45.3	Portugal 43.8	Chile 46.7	Japan 45.5	Japan 51.0	Greece 45.4	Poland 45.4	Malaysia 45.0	32
33	Chile 46.0	Portugal 44.7	Saudi Arabia 43.2	Singapore 46.4	Czech Rep. 45.5	South Korea 50.2	Brazil 45.2	Egypt 45.1	Turkey 44.8	33
34	South Africa 45.0	Poland 44.5	Turkey 43.2	Thailand 44.9	India 45.4	Brazil 49.8	Mexico 45.2	Saudi Arabia 45.0	Argentina 43.8	34
35	China 43.5	Saudi Arabia 44.2	Brazil 43.2	Mexico 44.8	Poland 45.2	Indonesia 49.7	Portugal 44.5	Chile 44.0	Saudi Arabia 43.0	35
36	Thailand 43.1	South Africa 43.8	Chile 42.9	South Africa 44.6	Hungary 44.6	Mexico 49.6	India 44.1	South Africa 43.4	Venezuela 42.4	36
37	Argentina 42.0	Philippines 43.8	Philippines 42.6	Philippines 44.3	Vietnam 43.2	Argentina 49.4	Malaysia 41.9	Indonesia 43.4	Brazil 41.3	37
38	Mexico 41.4	Brazil 43.7	Mexico 43.2	Peru 43.2	Colombia 42.9	Malaysia 46.4	Venezuela 41.4	Hungary 43.4	Colombia 41.1	38
39	Brazil 40.1	New Zealand 43.6	Argentina 41.1	Venezuela 41.5	China 42.6	Thailand 45.9	Chile 40.5	Iran 43.0	China 40.5	39
40	Turkey 39.7	Turkey 43.3	Venezuela 41.1	China 40.9	Iran 42.3	Peru 45.7	Iran 39.8	Mexico 42.4	Peru 39.0	40
41	Venezuela 39.7	Venezuela 43.1	Poland 40.5	Egypt 39.7	Pakistan 42.0	China 45.5	Thailand 39.5	Peru 41.7	Iran 38.6	41
42	Colombia 38.8	Egypt 42.7	China 40.4	Portugal 39.4	Egypt 41.6	Venezuela 45.5	Egypt 38.9	Turkey 41.5	Mexico 38.4	42
43	Peru 38.3	Argentina 42.4	South Africa 39.7	Colombia 38.9	Peru 41.5	Turkey 45.2	Turkey 38.7	Vietnam 41.5	South Africa 38.4	43
44	Iran 37.2	Indonesia 42.4	Russia 39.5	Iran 38.3	Venezuela 40.9	Taiwan 44.5	Saudi Arabia 37.9	Philippines 41.1	Thailand 37.0	44
45	Indonesia 36.3	Iran 41.9	Indonesia 39.0	Turkey 37.7	Philippines 40.6	India 30.8	Indonesia 37.3	Argentina 41.0	Vietnam 35.5	45
46	Philippines 35.7	Colombia 41.9	Egypt 38.9	Brazil 34.8	Brazil 40.3	Pakistan 28.6	Peru 36.6	Pakistan 40.0	Philippines 34.5	46
47	India 34.8	Greece 41.8	Colombia 38.9	Vietnam 34.5	Turkey 39.3	Philippines 27.0	Colombia 36.4	Colombia 39.1	Egypt 34.0	47
48	Egypt 34.7	India 41.6	Peru 38.1	India 33.0	Indonesia 38.2	Vietnam 24.3	Philippines 35.0	Brazil 39.1	Indonesia 32.9	48
49	Vietnam 34.5	Peru 41.0	India 37.6	Indonesia 31.5	Mexico 38.1	Iran 24.3	Pakistan 30.8	Venezuela 38.7	India 32.8	49
50	Pakistan 30.0	Pakistan 40.2	Pakistan 36.4	Pakistan 22.7	Argentina 35.9	Egypt 21.5	Vietnam 29.0	India 38.3	Pakistan 32.1	50

Appendix Table 2-7 Rankings for 2008

	Overall	Internationalization	Enterprises	Education	Finance	Government	Science and technology	Infrastructure	IT										
1	Hong Kong	76.0	Hong Kong	90.6	Singapore	78.8	Norway	67.8	Hong Kong	####	Saudi Arabia	67.5	United States	70.7	Singapore	99.9	Sweden	64.0	1
2	Singapore	71.2	United States	80.1	Hong Kong	71.7	Sweden	67.7	Switzerland	64.9	Norway	66.5	Japan	68.4	Hong Kong	80.0	Netherlands	63.8	2
3	United States	66.9	Singapore	73.0	Ireland	71.0	United States	65.9	Saudi Arabia	63.7	Singapore	60.1	Germany	64.8	Ireland	64.9	Switzerland	63.1	3
4	Germany	60.3	Germany	64.6	United States	68.0	New Zealand	65.6	South Africa	62.3	Denmark	59.0	United Kingdom	62.3	New Zealand	59.0	United Kingdom	62.0	4
5	Netherlands	59.9	United Kingdom	64.2	Japan	65.3	South Korea	65.4	Singapore	60.8	Finland	58.3	France	62.2	Norway	57.2	South Korea	61.6	5
6	Sweden	59.8	Belgium	63.9	Germany	63.8	Denmark	65.2	Russia	55.5	Hong Kong	57.5	Taiwan	62.0	Belgium	56.8	United States	61.1	6
7	Switzerland	59.8	Netherlands	60.7	Belgium	62.8	Greece	61.2	United Kingdom	55.3	Ireland	57.4	Canada	61.7	Netherlands	56.4	Denmark	61.0	7
8	United Kingdom	59.3	France	58.3	Netherlands	59.9	Hungary	60.6	Israel	54.4	Chile	57.1	Sweden	60.9	Taiwan	55.9	Germany	60.8	8
9	Norway	58.9	China	54.1	Sweden	57.7	Poland	60.2	Sweden	54.1	Sweden	57.1	South Korea	60.3	United States	53.1	Canada	60.7	9
10	Belgium	58.7	Switzerland	53.7	Switzerland	57.5	Finland	60.2	Malaysia	53.9	Spain	57.0	Switzerland	60.3	Malaysia	52.8	Hong Kong	60.5	10
11	Ireland	58.5	Canada	52.7	Canada	57.0	Czech Rep.	58.7	Australia	53.0	Netherlands	56.2	Finland	58.6	Finland	52.6	Norway	60.2	11
12	Japan	58.1	Ireland	51.8	Austria	57.0	Canada	58.4	Finland	52.5	New Zealand	56.1	Netherlands	58.1	Germany	52.2	Israel	60.2	12
13	Canada	58.0	Malaysia	51.8	Finland	56.4	Taiwan	58.4	Taiwan	52.3	Belgium	56.0	Australia	57.9	Israel	51.8	Taiwan	60.2	13
14	Denmark	57.4	Spain	51.5	France	56.2	Switzerland	57.8	Netherlands	52.1	Turkey	55.5	Italy	57.0	United Kingdom	51.6	Singapore	58.3	14
15	France	57.0	Sweden	50.5	United Kingdom	55.8	Japan	57.4	Canada	51.9	Germany	55.0	Denmark	56.7	Spain	51.5	Finland	57.6	15
16	Finland	56.8	Italy	50.5	Denmark	55.1	Russia	56.0	Chile	51.8	Austria	54.9	Austria	56.7	Austria	51.3	France	57.4	16
17	Taiwan	55.1	Japan	49.7	Norway	54.3	Australia	55.7	Spain	51.4	France	54.5	Belgium	56.6	Canada	51.2	Australia	57.2	17
18	South Korea	54.9	Taiwan	49.3	Australia	54.1	Israel	55.1	France	50.5	Canada	54.4	Russia	55.3	France	50.9	Japan	57.0	18
19	Australia	54.6	Hungary	49.0	Italy	52.9	Saudi Arabia	52.6	South Korea	50.5	United Kingdom	54.2	Israel	54.9	South Korea	50.8	Austria	56.2	19
20	Israel	54.1	Denmark	48.6	Spain	52.2	Belgium	51.1	United States	50.5	Australia	54.2	Norway	54.9	Switzerland	50.6	Italy	55.5	20
21	New Zealand	53.8	Czech Rep.	48.1	Malaysia	50.3	France	51.1	Denmark	50.3	Italy	53.8	Singapore	54.2	Italy	50.4	Ireland	55.2	21
22	Austria	53.4	Thailand	47.7	Israel	50.3	Netherlands	50.9	Ireland	49.9	Israel	53.5	Spain	53.4	Greece	50.0	Belgium	54.7	22
23	Spain	53.1	South Korea	47.4	Iran	49.7	Germany	50.8	Norway	49.9	Portugal	53.5	New Zealand	52.2	Australia	49.8	Spain	54.3	23
24	Italy	53.0	Russia	47.3	Taiwan	47.9	Hong Kong	50.7	Belgium	49.4	Japan	53.4	Hong Kong	51.4	Denmark	49.7	New Zealand	53.7	24
25	Czech Rep.	50.0	Austria	47.2	New Zealand	47.3	Argentina	50.3	Portugal	48.4	Czech Rep.	53.3	Ireland	51.0	Portugal	49.1	Portugal	51.5	25
26	Greece	49.1	Vietnam	47.1	Greece	46.8	Italy	50.2	Thailand	47.8	Greece	53.1	Czech Rep.	50.8	Czech Rep.	49.1	Greece	50.8	26
27	Hungary	49.1	Mexico	46.4	Thailand	46.2	United Kingdom	50.1	Austria	47.8	Switzerland	52.9	Hungary	50.0	Japan	49.1	Poland	50.5	27
28	Malaysia	48.5	Australia	45.9	Hungary	45.9	Malaysia	49.7	Peru	47.7	Poland	52.7	China	48.8	Sweden	48.6	Czech Rep.	50.4	28
29	Saudi Arabia	48.3	Finland	45.8	South Korea	45.1	Ireland	48.0	New Zealand	47.6	United States	52.4	Poland	46.8	Thailand	48.3	Hungary	50.2	29
30	Russia	48.2	Norway	45.7	Czech Rep.	44.8	Chile	47.9	Greece	47.5	Hungary	50.6	South Africa	46.4	China	47.3	Chile	46.5	30
31	Poland	47.6	Poland	45.2	Vietnam	44.7	Spain	47.2	India	47.1	Russia	50.5	Argentina	45.8	Chile	45.9	Turkey	45.7	31
32	Chile	46.2	Israel	45.0	Portugal	43.5	Austria	47.0	Germany	46.9	South Africa	50.5	Brazil	45.8	Russia	45.8	Argentina	45.6	32
33	Portugal	45.8	Portugal	44.9	Saudi Arabia	43.5	Mexico	45.2	China	46.6	Brazil	50.3	Mexico	45.3	Poland	45.6	Malaysia	44.3	33
34	China	44.0	Chile	44.8	Chile	43.0	Venezuela	44.7	Italy	46.3	South Korea	49.7	Greece	45.3	Egypt	44.8	Brazil	44.0	34
35	South Africa	44.0	Saudi Arabia	44.7	Brazil	42.9	Thailand	44.5	Japan	46.1	Indonesia	49.2	Portugal	44.3	Saudi Arabia	44.5	Venezuela	43.7	35
36	Thailand	43.3	South Africa	44.1	Turkey	42.7	South Africa	44.5	Poland	45.9	Mexico	49.1	India	44.2	South Africa	44.3	Colombia	43.1	36
37	Argentina	42.9	Turkey	43.6	Argentina	41.8	Singapore	42.6	Czech Rep.	45.9	Argentina	48.9	Malaysia	43.5	Indonesia	44.1	Russia	42.9	37
38	Mexico	42.6	New Zealand	43.5	Mexico	41.7	Peru	42.6	Hungary	45.2	Thailand	47.5	Chile	42.0	Hungary	44.1	Saudi Arabia	42.7	38
39	Turkey	41.9	Brazil	43.4	Philippines	41.6	China	42.2	Colombia	45.0	Malaysia	46.2	Venezuela	41.0	Iran	43.2	Mexico	42.2	39
40	Brazil	41.2	Philippines	43.4	China	41.0	Philippines	41.3	Vietnam	44.5	China	45.8	Iran	39.5	Peru	42.7	Peru	42.3	40
41	Peru	38.9	India	43.1	Venezuela	40.8	Iran	40.0	Iran	43.7	Peru	45.3	Turkey	39.4	Turkey	42.6	Thailand	39.3	41
42	Venezuela	38.7	Indonesia	42.6	Poland	40.7	Colombia	39.0	Brazil	42.6	Venezuela	45.0	Thailand	39.1	Mexico	42.3	Iran	38.9	42
43	Iran	37.4	Egypt	42.5	South Africa	40.3	Portugal	38.1	Egypt	42.5	Taiwan	44.7	Egypt	38.8	Vietnam	42.2	China	38.3	43
44	Egypt	36.7	Venezuela	42.4	Russia	39.5	Turkey	37.9	Philippines	42.5	Egypt	39.1	Saudi Arabia	37.6	Argentina	42.1	Vietnam	37.1	44
45	Colombia	36.6	Iran	42.3	Colombia	39.1	Egypt	37.6	Pakistan	42.1	Colombia	31.5	Indonesia	36.9	Philippines	41.5	South Africa	35.8	45
46	Indonesia	36.2	Argentina	42.1	Egypt	38.8	Vietnam	35.3	Mexico	42.0	India	30.7	Colombia	36.4	Pakistan	41.1	Egypt	34.4	46
47	India	35.0	Colombia	42.0	Indonesia	38.6	Brazil	34.8	Turkey	42.0	Pakistan	27.9	Peru	36.2	Colombia	40.5	Philippines	33.5	47
48	Vietnam	34.5	Greece	41.7	Peru	38.5	India	34.0	Indonesia	41.1	Vietnam	24.0	Philippines	34.7	Brazil	40.4	Indonesia	31.2	48
49	Philippines	34.2	Peru	41.2	India	38.3	Indonesia	31.4	Argentina	39.4	Philippines	24.0	Pakistan	30.4	Venezuela	40.3	Pakistan	30.8	49
50	Pakistan	30.5	Pakistan	40.4	Pakistan	37.1	Pakistan	29.3	Venezuela	30.0	Iran	22.5	Vietnam	28.5	India	39.9	India	30.8	50