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Is Japan Really an Outlier?

Japan Is Different; All Countries Are Different

It is evident that Japan has many distinctive characteristics that make it different from other countries. Among some Japanese scholars, *nihonjinron* is a branch of study that examines Japanese attributes and celebrates Japan's presumed uniqueness. Elsewhere, the feeling is widespread that, especially in the spheres of economics and government, Japan's style of capitalism differs—certainly from the American variety and, less assertively, from the economies of other developed nations.

The assertion of significant differences between American and Japanese economic behavior, focusing on business-government links, is a foundation of revisionist writers on the Japanese economy. In 1986, for example, financial writer Karel van Wolferen described as a fiction "the premise maintained by the United States and Europe that Japan belongs with them in that loose category known as capitalist free-market economies."[1] James Fallows, in a widely cited 1989 article in *The Atlantic Monthly*, underscored his assertion of differentness by noting that proponents of *nihonjinron* agreed with foreign critics of Japanese economic policy "that the institutions and values of modern Japan are highly unusual."[2]

It does not require a great deal of research to discern that Japan differs from the United States and from other advanced nations operating according to capitalist norms. Indeed, most countries are quite different from each other. An American visitor to Canada, the closest nation to the United States in most dimensions of comparison, quickly recognizes different institutions, politics, values, business behavior, and government-economic relations.

The economic effects of the U.S.-Canada border and its proxy for other differences was the subject of a study published in the *American Economic Review*. These two countries were chosen for several reasons: trade between them is relatively free, they share a very long border with few natural barriers, the majority of Americans and Canadians speak English, and the two countries have similar cultural and political traditions. These conditions suggested fewer cross-border restrictions between the United States and Canada than would be found in most other similar cases.

Examining the border's effect on the prices of similar goods, the authors found that the cost of moving products between the United States and Canada was equivalent to adding transportation expenses of a distance between 1,780 and 75,000 miles. They concluded that, "despite the relative openness of the U.S.-Canadian border, the markets are still segmented."[3]

The presence of economically significant variations between countries as close as the United States and Canada suggests the need for caution when drawing conclusions about differences between other nations. That countries differ is obvious. What is less obvious is the extent to which the economics and the government-business relations of Japan differ, over what dimensions, and compared to whom.

Hints in Some Studies

Several researchers have compiled data on a large number of countries across many dimensions of economic and government behavior. For example, economists studying development recently have come to focus on institutions and governance as important preconditions for growth. They have collected measures of the quality of government and the nature of government-economic relations to support this research.

One such study by economist Paolo Mauro generated data for 68 countries on legal systems, bureaucracy and red tape, and corruption.

Surveys probed investors' assessments of conditions in the relevant country. Indices for the three variables were defined as follows:

- Legal System and Judiciary: Efficiency and integrity of the legal environment as it affects business, particularly that of foreign firms.
- Bureaucracy and Red Tape: The regulatory environment foreign firms face when they seek approvals and permits and the degree to which it represents an obstacle to their operations.
- Corruption: The degree to which business transactions involve corruption or questionable payments.[4]

The three separate indices were averaged to produce a "bureaucratic efficiency" index. According to this ranking, Switzerland, Singapore, and New Zealand held the top three positions; the United States ranked fifth. Japan was in 13th place, sandwiched between Hong Kong and Belgium. In terms of bureaucratic efficiency, Japan was not very different from other advanced industrial nations. The countries at the bottom of the surveyed 68 were Indonesia, Iran, Haiti, and Zaire.

One of the first conclusions apparent from this preliminary examination is that when comparisons are broadened to include a range of nations at various stages of economic and institutional development, Japan falls within the general experience of rich countries. This effect becomes even more obvious when the sample of countries is enlarged and the number of variables is increased.

Take, for example, a regularly updated index representing "economic freedom" for 103 countries compiled by the Fraser Institute, a Canadian economic think tank. In *Economic Freedom of the World*, 1975-95, the information was organized within 17 subindices grouped in four sections: money and inflation, government operations and regulation, government expropriation and discriminatory taxation, and restraints on international exchange. The average overall ranking placed the United States in third place behind Hong Kong and New Zealand and ahead of Switzerland and the United Kingdom. Japan ranked ninth, between Australia and the Netherlands. The last three places belonged to Zaire, Iran, and Somalia. Once again, according to the Fraser Institute report, Japan's brand of capitalism is not all that different from that of other advanced nations.[5]

However, to say that Japan is not all that different begs the question of significance among differences. Moreover, the use of averages and indices may mask meaningful variations at a more detailed level. In addition, several statistical questions intrude into the discussion. For example, many of the variables mentioned above are highly correlated among

themselves; should we adjust for the, perhaps, obvious notion that an efficient judicial system and low degree of corruption seem to go together. In other words, is there a dependence among the various measures that may exaggerate the apparent closeness of advanced countries? These issues will be addressed below.

Is Japan an Outlier?

To assess whether Japan really is an outlier, eleven separate studies were reviewed. They included information on forty six individual variables covering forty six to one hundred fifty countries. (The sources and data descriptions are presented in the appendix to this chapter.) The analytical problem is to find a way of dealing with scores of variables in a way that helps to answer the questions of "how close" or "how far." The results of the various studies referred to above could be biased by a statistical artifact that exaggerates the similarities between Japan and the United States. The indices are averages of separate subindices. For example, ten main variables are averaged to come up with a summary index of economic freedom. Moreover, each of the ten variables were, themselves, averages of two or more underlying variables that were normalized and averaged to produce the subindex. For example, a variable labeled "taxation" was produced from the average and marginal tax rates on both corporate and personal incomes. Thus, the averaging process could be homogenizing underlying differences.

To illustrate this problem, consider two variables, the ratio of government expenditures to GDP and the marginal tax rate, from the Fraser Institute's data used to compile its measure of economic freedom. Since the ratio of government expenditures to GDP in Japan is relatively small, it warrants a relatively high index value of eight, whereas high marginal tax rates generate an index value of two. The United States is just the reverse, with values of three and seven. Although transpacific differences across these variables are relatively large, their average values are the same. (The average of the two variables for Japan's is five, the same as the U.S. average.)

One way to deal with this problem is to calculate a multidimensional distance among variables for each pair of countries. Such an indicator makes use of the Pythagorean theorem that the distance between two points is the square root of the sum of the squares of the distances measured along each of the separate dimensions.[6] This so-called Euclidean

distance can be used to measure any number of dimensions or variables. The Euclidean distance between the two variables in the above example is 7.07 (the square root of fifty), whereas the simple average of the two variables shows the countries to be the same.

Euclidean distances from the United States were calculated in this way across all seventeen of the Fraser Institute economic freedom variables based on standardized variables with means of zero and a standard deviation of one. The results for the closest countries to the United States are shown in table 15.1. The top ten on the list, in addition to the United States, includes the United Kingdom and four other closely associated countries—as colonies or as a former part of the United Kingdom. Japan falls between Canada and Ireland on the list. The results of the same exercise also are given for Japan as the point from which distance is measured. In this case, the United States is the nearest to Japan, followed by Australia.

Table 15.1: Distances of Nearest Fifteen Countries from the United States and Japan Based on Seventeen Economic Freedom Variables

Rank	Country	Distance from United States	Country	Distance from Japan
1	United States	0.00	Japan	0.00
2	New Zealand	1.49	United States	3.24
3	United Kingdom	1.80	Australia	3.36
4	Australia	2.04	Spain	3.38
5	Switzerland	2.79	Korea	3.55
6	Canada	2.93	Ireland	3.58
7	Japan	3.24	New Zealand	3.69
8	Ireland	3.24	Netherlands	3.78
9	Panama	3.34	France	3.81
10	Germany	3.43	United Kingdom	3.83
11	Costa Rica	3.46	Canada	3.91
12	France	3.50	Belgium	4.13
13	Spain	3.58	Switzerland	4.16
14	Denmark	3.74	Italy	4.20
15	Taiwan	3.79	Finland	4.26

Source: James D. Gwartney, *Economic Freedom of the World, 1975-95* (Vancouver, British Columbia: Fraser Institute), 1996.

In addition to considering each of the studies separately, it is possible to combine them for a more comprehensive view. As samples were

combined, however, unmatched data across them caused the number of observations to fall. For example, one study may have data on Malawi but not on Yemen, while another has Yemen but not Malawi. In such an instance, neither country would appear in the joined sample. All forty six variables extracted from the eleven studies were used to define distances among countries, although comprehensive data were available for just the twenty five nations (see table 15.2). Again, the United States is followed by the United Kingdom, Canada, Australia, and Japan. Other Northern European countries trail in close order. The same pattern is repeated when distances are measured from Japan.

Table 15.2: Distances from the United States and Japan Based on Forty Six Variables from Eleven Studies

Rank	Country	Distance from United States	Country	Distance from Japan
1	United States	0	Japan	0
2	United Kingdom	3.88	United Kingdom	4.86
3	Canada	4.04	Canada	5.16
4	Australia	4.39	Spain	5.3
5	Japan	5.51	Australia	5.32
6	France	6.26	United States	5.51
7	Finland	6.68	France	5.61
8	Sweden	6.88	Finland	6.10
9	Netherlands	6.90	Netherlands	6.18
10	Spain	7.20	Chile	6.26
11	Norway	7.24	South Korea	6.55
12	Austria	7.46	Austria	6.59
13	Chile	7.64	Norway	6.96
14	Malaysia	8.18	Sweden	7.08
15	Singapore	8.61	Malaysia	7.25
16	South Korea	9.07	Singapore	7.71
17	Israel	9.21	Israel	8.54
18	Greece	10.38	Thailand	8.66
19	Thailand	10.77	Greece	8.78
20	Turkey	11.48	Turkey	9.68
21	Philippines	11.59	Philippines	10.26
22	Brazil	12.20	India	11.08
23	India	13.2	Venezuela	11.20
24	Venezuela	13.22	Brazil	11.36
25	Indonesia	13.58	Indonesia	11.68

A potential criticism of the above distance measures is that many of the variables are correlated with each other. Rather than forty six different dimensions, the tables could be reporting the same ones several times, thereby biasing the results. To take account of this possibility, a so-called principle components analysis was performed on the set of original variables using the technique of factor analysis. This statistical process combines the variables into a smaller set on the basis of the linear relationships among the original variables. The smaller number of factors are calculated so as to be statistically independent, or uncorrelated, with each other. Because of the missing data problem noted above, not all the variables could be included in the factor analysis. Dropping the six variables with the fewest number of observations allowed the analysis to proceed among the remaining forty variables. A total of eight factors were extracted; the four most important were selected for calculating distance measures among the countries.[7] The main results of the distance measures based on the four factors are shown in table 15.3. Once again, the same patterns are observed as in the other tests. Japan ranks among the Anglo-Saxon economies in terms of its distance from the United States, and the same group of countries are closest to Japan.

Table 15.3: Distances of Nearest Ten Countries from the United States and Japan Based on Four Factors and Forty Variables

Rank	Country	Distance from United States	Country	Distance from Japan
1	United States	0.00	Japan	0.00
2	New Zealand	0.38	United Kingdom	0.43
3	Australia	0.81	Canada	0.61
4	Switzerland	0.95	Ireland	0.62
5	United Kingdom	1.08	Taiwan	0.98
6	Japan	1.38	Australia	0.98
7	Canada	1.48	New Zealand	1.29
8	Chile	1.79	Malaysia	1.34
9	Norway	1.86	Switzerland	1.34
10	Denmark	1.90	United States	1.38

Factor analysis can be revealing when it uncovers patterns among the variables that have an intuitive interpretation. Sometimes a poetic imagination is helpful in revealing the patterns, but for the four factors calculated above, a fairly straightforward structure is apparent. The first factor, accounting for 40 percent of the variance among the variables,

was heavily loaded with variables associated with efficient and competent government. Such variables as low red tape, efficient legal system, rule of law, absence of corruption, guarantees of property rights, and a high level of democracy were important. Other contributory variables in this factor were associated with minimal levels of government intervention in the economy in areas such as regulatory barriers to business and wage and price controls. The second factor loaded heavily on a few variables dealing with small government: low taxes and government spending. The third most important factor was influenced mainly by open trade and foreign capital flows. The fourth factor was related to market price-setting mechanisms: unregulated credit markets, creditor rights, few price controls, and low inflation.

Interestingly, the first factor (related to good governance and limited regulation) highlights one area that some critics of Japan assert characterizes that country—excessive economic regulation. However, when compared across many countries and over several different dimensions of economic behavior, Japan does not seem to be strikingly out of line with the experience of other advanced countries. On just this one factor, the United States is in second position, between New Zealand and Switzerland. Japan falls a bit further down between Finland and France in twelfth place. Its relative position reflects some common intuitions, but it is not notably out of place among the advanced economies.

One additional test perhaps can reveal more of the underlying structure among the countries and variables. The techniques so far have required that many observations be dropped from the statistical analysis because of missing data. In the next test, U.S. data are correlated with the same variables of each of the other countries. The correlation coefficient then becomes the measure of the closeness of each country to the United States. The defect of this measure is that the correlation may be based on different sets of variables; however, the countries nearest the United States, according to this measure, include data for most variables. In order to retain statistical significance, at least twenty variables were required for the analysis.

Table 15.4, shows the fifteen countries nearest and furthest from the United States in terms of correlations. Correlations tell the same story as distances and factors. Japan falls just after the Anglo Saxon countries in its closeness to the United States. The bottom countries on the list also tell a revealing story. When people say that the Japanese economy and government are different, they appear to have forgotten such countries with ineffective governments, planned economies, or nonmarket systems as Haiti, Syria, Tanzania, or Russia.

Table 15.4: Correlations between the United States and 102 Countries: Fifteen Most Positive and Fifteen Most Negative Correlations

Rank	Country	Correlation	Number of Variables
1	United States	1.00	46
2	New Zealand	0.90	40
3	United Kingdom	0.88	46
4	Canada	0.87	46
5	Australia	0.84	46
6	Switzerland	0.76	40
7	Japan	0.76	46
8	Denmark	0.75	40
9	Ireland	0.72	40
10	Germany	0.69	45
11	France	0.68	46
12	Netherlands	0.66	46
13	Taiwan	0.66	40
14	Hong Kong	0.64	45
15	Finland	0.64	46
88	Nicaragua	-0.55	34
89	Egypt	-0.55	46
90	Venezuela	-0.56	46
91	Nepal	-0.57	23
92	Congo	-0.58	27
93	Algeria	-0.62	35
94	Chad	-0.63	26
95	Burundi	-0.64	23
96	Tanzania	-0.66	28
97	Syria	-0.71	27
98	Haiti	-0.73	27
99	Russia	-0.76	21
100	Zaire	-0.77	28
101	Iran	-0.82	27
102	Somalia	-0.85	20

The United States and Japan Really Are Different, Aren't They?

Why is the widespread view that Japan is "different" not supported by the data? In fact, for a handful of variables, such as marginal tax rates and the ratio of government expenditures to GDP, the U.S.-Japan gap is not insignificant. However, these variables are not what most people usually mean when they refer to differences.

What about, for example, foreign direct investment? The flow of FDI into Japan has been only a few percent of the investment into the United States or Europe. On a scale of one to five, with one being the least restrictive, the Heritage Foundation's index of economic freedom rated Japan a three and gave the United States a grade of two. Hong Kong, Singapore, and Israel, among others, got perfect scores of one. Concerning Japan, the study's authors noted: "The close relationship between government and businesses, however, continues to impede foreign investment because some businesses and government agencies collude to make it too costly."[8] This evaluation, together with other considerations, yields a grade for Japan that is lower than the one for the United States but higher than that for many other countries.

Turning to an evaluation of governmental variables, Raymond Gastil, one of the first political scientists to attempt a systematic survey of political rights, devised a scale of one to seven to measure political and civil liberties, with one signifying the highest degree of freedom.[9] His measure of democracy gave the United States a one and Japan a two. This assessment can be compared with the seven assigned Laos or the six for the Ivory Coast.

A point to draw from these examples is that the world of economic-government behavior is rather broad. What may look like deviant behavior when viewed from a limited perspective is seen to be less extreme when the bands of possibilities are widened.

In a simple two-way U.S.-Japan comparison across the forty six variables analyzed here, the values for the two countries were equal in seventeen instances, Japan came out "better" or less regulated and more free on seven, and the U.S. figure was better for twenty two indicators. In this matchup, American actions are more market-friendly on almost half the measures, while Japan outranks the United States across only 15 percent of the indices. This finding is consistent with the widespread notion that America's market is more open than Japan's and that government in the United States is less intrusive.

Other measures of economic activity could be chosen that would emphasize the differences between the United States and Japan. For example, two components of the subindices of the World Bank property

market data consider residential mobility and housing floor space per person. Residential mobility—defined as the percentage of all households that moved during the past year—can be considered an indicator of the range of choices available to people. High mobility is a sign that people are able to move easily in response to changes in circumstances. According to this measure, Americans have by far the greatest mobility with 26.5 percent of all households moving in any one year. Relocations in Japan are less than a third as frequent at 7.1 percent, which puts Japan at the median level of the forty seven countries in the sample.

The same pattern appears with regard to residential floor area per person. The United States is in first place with a figure of 739.5 square feet per person—50 percent greater than number-two Norway and more than four times larger than Japan's 170.1 square feet. The Japanese figure, though, is slightly above the median of 155 square feet per person. In both examples, the differences among countries are large and in the expected direction, but it is the United States that falls outside the range of global experience.

Differences in the expected direction, actively sought, are not hard to find. For example, studies of individualism versus collective values and behavior find that American behavior is solidly individualistic and that the United States is, in fact, an outlier, even with respect to other similarly inclined societies. The same results put Japan, as expected, squarely in the middle of collectivist societies. However, various studies indicate that "as countries like Japan become more affluent, they also tend to become more individualistic."[10]

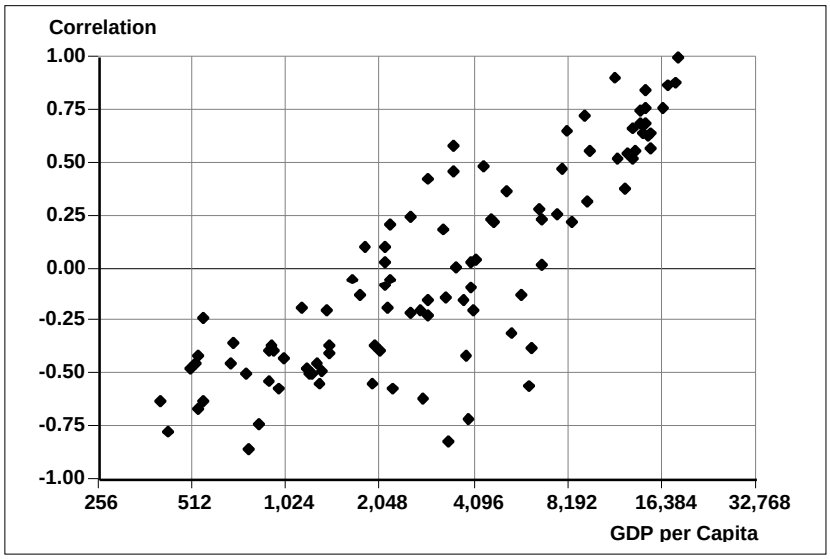
When a wider variety of phenomena is considered, the possibilities for variations in behavior are amplified. However, we will have to await those studies that systematically examine a greater number of micro-level performance indicators to determine whether Japan continues to be situated as close American values as it is in the present review of the evidence.

The Convergence Hypothesis

The ordering of the countries in the tables suggests that the distance measures may be associated with a country's affluence. This speculation is borne out by comparing a country's real GDP per capita with the distance from the United States, calculated by any of the methods discussed above. Such a plot is shown in figure 15.1 for the one hundred countries

having both a correlation as reported in table 15.5 and an estimate of real GDP per capita (plotted on a logarithmic scale in the figure). The correlation of 0.84 indicates that the relationship is far from random. Furthermore, Japan's point is quite close to the line, meaning that its behavior is more or less what would be expected, given its income level.

Figure 15.1: Correlations with United States and One Hundred Countries in Relation to Real 1985 GDP per Capita



What accounts for the relative similarity of economic institutions among more affluent countries? The weight of the data suggests that Japan fits in the cluster of nations usually considered to subscribe to Anglo-Saxon capitalist norms. Far from being an outlier or significantly different, Japan comes as close to the behavior patterns and the experience of the United States, Canada, and the United Kingdom as any other country in the sample of observations considered here. However, the data point to something deeper. If a country wants to get rich, it should mimic the institutions and behavior of affluent economies. Within fairly narrow limits, per capita income seems to be strongly related to these institutional variables.

This deductive conclusion is illustrated by figure 1.1 in the first chapter, which plots annual GDP growth rates averaged over ten-year periods as a function of real GDP per capita. The important point for pre-

sent purposes is that the variability of income growth among the richest countries is quite low. One could infer from this observation that the institutions of rich countries produce consistent long-term growth. The gains from imitation and catching up have been left behind, and the contributions from rapid rates of investment also largely have been exhausted. What seems to occur is that wealthier nations develop roughly equivalent institutions to achieve roughly the same results. In other words, countries are rich because they have adopted institutions that work and that are broadly similar. Clearly, Japan is not an outlier in this process.

A substantial body of literature examines the existence and the possible causes of institutional convergence. One school of thought contends that advanced industrial countries tend toward common ways of organizing economic life. This so-called convergence hypothesis is described by Suzanne Berger as follows:

> In this view, competition, imitation, diffusion of best practice, trade, and capital mobility naturally operate to produce convergence across nations in the structures of production and in the relations among economy, society, and the state. Variations may be found from country to country because of different historical legacies. But such distinctions fade over time.[11]

The convergence hypothesis is not without critics. One common theme is the resilience of diverse national systems and modes of capitalism. Detailed comparisons, for example, between labor relations in France and Germany, banking relations in Germany and the United States, and production methods in Japan and the United States support the national diversity argument.

However, in just the few years since the publication of the book from which these observations were taken, economic and political forces have broken down many of the resilient modes of behavior in both Germany and Japan that were touted in the book to support nonconvergence. In particular, the opening of financial markets—in Japan through deregulation and in Germany through the impact of the European Union—appears to be shifting business attitudes toward considerations of profitability and away from relational transactions and the nurturing of an array of company stakeholders; in other words, the differences among these diverse modes of capitalism seem to be growing narrower.

Convergence Is Not Inevitable

Despite the apparent coming together of economic behavior across nations, such movement is not inevitable. A review of the convergence of income and productivity concludes:

> Statistical evidence does not confirm any general and secular trend toward economic convergence in productivity and standards of living. Such convergence is restricted to the small club of nations that have been able to invest sufficiently in productive investment, infrastructure, and education. ... Even within developed or rich countries, the long-run evolutions of Great Britain and Argentina remind us that decline is always a possibility and that convergence is never automatic, but is associated with the choice and implementation of an adequate strategy, given a changing international regime and radical changes in technologies.[12]

Nor does convergence occur in a single direction. The United States is an implicit object of comparison. But, for example, in terms of production methods and manufacturing organization, the greater movement over the past twenty five years has been that of the United States in the direction of Japan.

Convergence certainly is not automatic for Japan, even though its main lines of economic development have brought it closer to the Anglo-Saxon model. Whether it can continue to evolve in a more market-oriented direction is a political issue that will be fought out in coming years. Thus, the question of whether the differences between Japan and the United States will diminish further must remain unanswered. However, it appears that the divergence is not as great as first (and even later) impressions might suggest.

Appendix: Data Sources and Definitions

Raymond Gastil, *Freedom in the World: Political Rights and Civil Liberties, 1986-1987* (New York: Greenwood Press, 1987). Data available from the World Bank, <www.worldbank.org/research/growth/ddeale.htm> (June 24, 2000).

One variable for 148 countries:

Measure of democracy.

James D. Gwartney, *Economic Freedom of the World, 1975-95* (Vancouver, British Columbia: Fraser Institute), 1996.

Seventeen variables for 103 countries:

Average annual growth rate of money supply during the last five years minus potential growth rate of GDP.

Standard deviation of annual inflation rate during the last five years.

Freedom of citizens to own a foreign bank account domestically.

Freedom of citizens to maintain a bank account abroad.

Government general consumption expenditures as a percent of gross domestic product.

Role and presence of government-operated enterprises.

Price controls, or the extent that businesses are free to set their own prices.

Freedom of private businesses and cooperatives to compete in markets.

Equality of citizens under the law and access of citizens to a nondiscriminatory judiciary.

Freedom from government regulations and policies that cause negative interest rates.

Government transfers and subsidies as a percent of GDP.

Top marginal tax rate and income at which it applies.

Use of conscripts to obtain military personnel.

Taxes on international trade as a percent of imports plus exports.

Difference between official exchange rate and black market rate.

Actual size of trade sector compared with expected size based on econometric estimates.

Restrictions on freedom of citizens to engage in capital transactions with foreigners.

Kim Holmes, Bryan Johnson, and Melanie Kirkpatrick eds., *1997 Index of Economic Freedom* (Washington, D.C.: Heritage Foundation, 1997).

Ten variables for 150 countries:

Trade policy: average tariff rates and nontariff trade barriers.

Taxation: average and marginal corporate and individual tax rates.

Government intervention in the economy: government consumption as a percent of GDP, plus the extent of government-owned enterprises.

Monetary policy: inflation rate.

Capital flows and foreign investment policy: restrictions on and treatment of foreign investors.

Banking: openness, regulation of and restrictions on banking system to compete and provide services.

Wage and price controls: degree to which markets or government sets wages and prices, including minimum wages and utility pricing.

Property rights: degree to which private property is a guaranteed right, including the probability of expropriation and the adequacy of courts and the legal system to protect private property.

Regulation: ease or difficulty in opening a business and keeping it open, including production limits, quotas and corruption.

Black market: existence and size of black markets, smuggling and illegal workers.

Institute for Management Development, *World Competitiveness Yearbook 1998* (Lausanne, Switzerland: Institute for Management Development, 1998).

One variable for forty six countries:

Competitiveness index based on domestic economy, internationalization, government, finance, infrastructure, management, science, and people.

Philip Keefer and Stephen Knack, "Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures," *Economics and Politics* 7, no. 3,(November 1995). Data available from the World Bank, <www.worldbank.org/research/growth/ddeale.htm> (June 24, 2000).

One variable for 115 countries averaged for 1982 to 1995:

Corruption: likelihood that high government officials will demand special payments and that illegal payments are generally expected throughout lower levels of government in the allocation of import and export licenses, foreign exchange, tax assessments, and credit.

Paolo Mauro, "Corruption and Growth," *Quarterly Journal of Economics* 110, no. 3 (August 1995).

Three variables for sixty eight countries:

Legal system and judiciary: efficiency and integrity of legal environment as it affects business, particularly foreign firms.

Bureaucracy and red tape: regulatory environment foreign firms must face when seeking approvals and permits and degree to which it represents an obstacle to business.

Corruption: degree to which business transactions involve corruption or questionable payments.

Schlomo Angel and Stephen K. Mayo, *Enabling Policies and Their Effects on Housing Sector Performance: A Global Comparison* (Habitat II Conference) (Istanbul, Turkey: June 1996).

Six variables for fifty two countries obtained from World Bank, *Global Survey of Housing Indicators of 1990* (unpublished):

Property rights index: compiled from items on restrictions on land and housing transactions, squatting, and land registration.

Housing finance regime: level of development of institutional and regulatory environment of housing finance system.

Housing subsidies index: involvement of public sector in demand or supply subsidies.

Property infrastructure index: government spending on roads, water, sewers, drainage, and electricity, plus such other indicators as commute time and housing affordability.

Regulatory regime index: measures impact of land-use flexibility, zoning, and building code regulations as well as bureaucratic flexibility and efficiency.

Industrial organization index: includes monopolization index of construction industry, restrictions on obtaining building materials and skilled worker availability.

Political Risks Services, Inc., *International Country Risk Guide* (Syracuse, N.Y.: various years). Data available from the World Bank, <www.worldbank.org/research/growth/ddeale.htm> (June 24, 2000).

One variable for eighty one countries:

Rule of law.

Transparency International, *1998 Corruption Perception Index* (Berlin: Transparency International, 1998).

One variable for eighty five countries compiled by combining data from at least three and up to seven international surveys:

Corruption perception index: relates to perceptions of degree of corruption as seen by business people, risk analysts and general public.

World Bank, *World Development Report 1998/99*, (Washington: World Bank, 1999), 181.

Three variables for forty nine countries, 1995-1996:

Creditor' rights: based on automatic stay on assets of distressed company, continuance of management, and priority of secured creditors.

Shareholders' rights: based on five indicators of shareholders' ability to protect value of their assets.

Enforcement: based on an assessment of the law and order tradition in the country and on the ability of government to unilaterally modify a contract.

World Economic Forum, *Global Competitiveness Report 1998 (Geneva: World Economic Forum, 1999).*

Two variables for fifty three countries:

Competitiveness index: compiled from eight subindices on openness, government, finance, infrastructure, technology, management, labor, and institutions.

Executive opinion survey: survey measures opinions of leading business executives about country in which they operate concerning the country's competitiveness and comparative strengths and weaknesses. More than three thousand executives in fifty three countries responded.

Notes

1. Karel G. van Wolferen, "The Japan Problem," *Foreign Affairs* 65, no. 2 (Spring 1986): 292.

2. James Fallows, "Containing Japan," *The Atlantic Monthly* (May 1989): 48.

3. Charles Engel and John Rogers, "How Wide is the Border?" *American Economic Review* 86, no. 5 (December 1996): 1123.

4. Paolo Mauro, "Corruption and Growth," *Quarterly Journal of Economics* 110, no. 3 (August 1995): 684.

5. James D. Gwartney, *Economic Freedom of the World, 1975-95* (Vancouver, British Columbia: Fraser Institute, 1996).

6. If X_i represents the value of variable i for country X, and Y_i is the value of variable i for country Y, then the Euclidean distance between X and Y across all variables is: $[\sum_i (X_i-Y_i)^2]^{0.5}$.

7. All eight factors explained 80 percent of the variance among the variables. The top four factors explained 66 percent.

8. Kim Holmes, Bryan Johnson, and Melanie Kirkpatrick eds., *1997 Index of Economic Freedom* (Washington, D.C.: Heritage Foundation, 1997), *255.*

9. Raymond Gastil, *Freedom in the World: Political Rights and Civil Liberties, 1986-1987* (New York: Greenwood Press, 1987).

10. Daniel Goleman, "The Group and the Self: New Focus on a Cultural Rift, "*New York Times*, December 25, 1990.

11. Suzanne Berger, "Introduction," in *National Diversity and Global Capitalism*, eds. Suzanne Berger and Ronald Dore (Ithaca, N.Y.: Cornell University Press, 1996), 1.

12. Robert Boyer, "The Convergence Hypothesis Revisited: Globalization but Still the Century of Nations?," in Berger and Dore, *National Diversity and Global Capitalism*, 57-58.