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PROSPECTS FOR THE JAPANESE ECONOMY: LOOKING BEYOND THE NEXT QUARTER

Arthur J. Alexander

Considering time horizons beyond the next quarter or even the coming 12 months, Japan's economy is likely to do well enough, averaging growth in the range of 1 percent to 2 percent a year. Expansion at the higher rate would be an indicator of dynamism, while growth around the lower number would signal stagnation. An economic collapse is just as unlikely as a return to the "miracle" years of the 1960s.

Such projections rest on three empirical observations. First, the variability in growth for rich nations is low, with the average yearly expansion under 2 percent. The track record for economies with a per capita gross domestic product greater than $10,000 in terms of 1985 purchasing power parity runs from 0.2 percent a year to 3.8 percent over 10-year periods. Second, Japan's institutions and practices are those of a rich country. Its economy operates in ways that are close to Anglo-American norms, which are correlated with high levels of per capita GDP. Third, in terms of resource reallocation across industries, Japan has adapted to shocks and changes in economic life at least as well as the United States. In other words, its economy is not trapped in an obsolete structure.

A satisfactory economic prognosis for Japan is not automatic, however. The difference between the higher and the lower ends of the range of growth estimates is the difference between success and failure — in political as well as in economic terms. If Japan desires to achieve the upper reaches, it will have to deregulate markets and open up the economy at a faster rate than the very real regulatory reform that already has occurred. Prolonging restructuring to accommodate what are perceived to be socially required practices could delay the benefits of these initiatives to the disadvantage of all participants.

Japan As OK

An early 1992 *JEI Report* attempted to project the broad lines of Japan's economic development. The start of a new century is a good time to return to that genre of "economic science fiction." The conclusions drawn almost 10 years ago do not look too inaccurate today, although in retrospect, some of the details behind them clearly were flawed. The 1992 report found that:

> Many of the characteristics that have qualified Japan's economic performance as an economic miracle are now in the midst of a transformation that is moving Japan from its outlier position among advanced economies to a more regular member of the league. … Because of the structural changes now occurring, a new phase of even slower growth over the next decade or more is highly likely. … In terms of economic growth rates, investment, productivity and capital flows to the world, Japan is becoming a "regular" country, not quite the economic or financial superpower proclaimed by those who were dazzled by the fireworks of the late 1980s.

In fact, Japan's economy barely eked out an annual per capita gain of 1 percent in real terms during the 1990s. In contrast, the inflation-adjusted rise in the 1980s averaged 3.5 percent a year. The "miracle" years of the 1960s produced growth rates close to the double-digit range. In 1950, Japan's economy ranked seventh in the world on the basis of absolute gross domestic product and 34th in terms of personal income measured by per capita real GDP. Subsequent development transformed Japan into the world's second-largest economy and placed it among the leaders in output per person.

Given such a dramatic transfiguration in the second half of the 20th century, what are the country's economic prospects for the next decade or the one after that? The answers start from the reality that Japan is a developed, rich country that possesses the habits, institutions, rules of conduct and politics of a successful nation. Put another way, its economy works.

In 1979, Harvard University professor Ezra Vogel wrote one of the most popular foreign books ever published in Japan — *Japan as Number One: Lessons for Americans*. Some 15 years later, recognizing the many problems then besetting the Japanese economy as well as the move by the People's Republic of China into second place in terms of aggregate output, the Japan Economic Institute published *Japan As Number Three*.

[1]Arthur J. Alexander, "Japan's Economy: A Transformation?" *JEI Report* No. 11A, March 20, 1992, pp. 1 and 10.

[2] Rankings from the Penn World Tables, described in Robert Summers and Alan Heston, "The Penn World Tables (Mark 5): An Expanded Set of International Comparisons, 1950-1988," *Quarterly Journal of Economics,* May 1991, pp. 327-368.

[3]Ezra Vogel, *Japan as Number One: Lessons for Americans* (Cambridge, Massachusetts: Harvard University Press, 1979).

[4]Arthur J. Alexander, "Japan As Number Three: Long-Term Productivity And Growth Problems In The Economy," *JEI Report* No. 17A, April 29, 1994.

Japan Economic Institute

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Now, considering the economy's prospects for the next decade or two, perhaps a fitting epigram is "Japan as OK."

Japan will not collapse like Rwanda or Haiti; rich countries do not do that. At the same time, it will not expand at the strong rate that it managed in the 1960s; rich countries do not behave that way, either. Instead, long-run real per capita growth will average around 1 percent to 2 percent a year. The higher number, sustained over decades, would qualify as a miracle for a country like Japan. It would mean a doubling of output per person every 35 years, or each generation. Growth at the lower end of the range could cause troubles — political if not economic — because, under these circumstances, encouraging productive change by paying off economic losers would be difficult. Nevertheless, for a rich nation, 1 percent average annual growth is not a disaster, even if it is somewhat short of dynamic and even if it does mean a gradual slippage in Japan's relative international ranking.

These predictions are based on three empirical observations noted in earlier JEI publications: the relationship between growth and income levels, the similarity of Japan's institutions and government-economy links to those of the United States and other rich countries, and the relative adaptability of the economy to change. This trio of observations does not follow from theory; instead, it is based on a recognition of patterns.

Low Growth Variability Among Rich Countries

The first such regularity comes from observations collected by the Center for International Comparisons at the University of Pennsylvania and reported in the Penn World Tables, a compilation of national economic accounts for 152 countries over 40 years. Expenditures are denominated in a common currency so that real quantity comparisons can be made, both between countries and over time.

The relationship between growth and income is depicted in Figure 1. For clarity, only those 1,700 observations where real incomes were above $2,000 per person are shown; the 50 percent of the data that fell below this cutoff is ignored. Dropping half the observations at the lower end does not change the qualitative picture in the slightest. Decade-long time frames were used to reduce the effects of such short-term fluctuations as the business cycle. Start-of-period GDP was employed to clarify that relationship. At the end of a period, quickly expanding economies might be expected to have higher incomes than their slower growing counterparts precisely because of the growth experience. The reverse would be true for laggards. Using income levels at the beginning of each 10-year period eliminates such biases.[5]

Several conclusions can be drawn. First, high-speed growth occurs only among less-affluent countries, which are clustered at the left side of the figure. However, being poor is no guarantee of a strong economic performance. Every collapsing country with negative growth was also a low-income nation.

The conclusion germane to this discussion, though, is that among richer countries, growth rates converge. The variance declines as per capita GDP increases. A common observation is that divergence falls across a wide variety of phenomena as the unit of observation expands in size. For example, the variability of growth among large firms is less than for small ones. The reason for this regularity is that bigger units often can be thought of as incorporating many smaller ones, whose individual experiences average out, thereby reducing variability. However, the relationship revealed in Figure 1 is not like that. The focus is per capita output, not total output. There is no reason to expect variability to fall as relative income increases. In fact, per capita GDP has close to a zero correlation with such measures of size as population and aggregate GDP. Rephrased, the low variability in growth among rich countries is not a statement about size but about success.

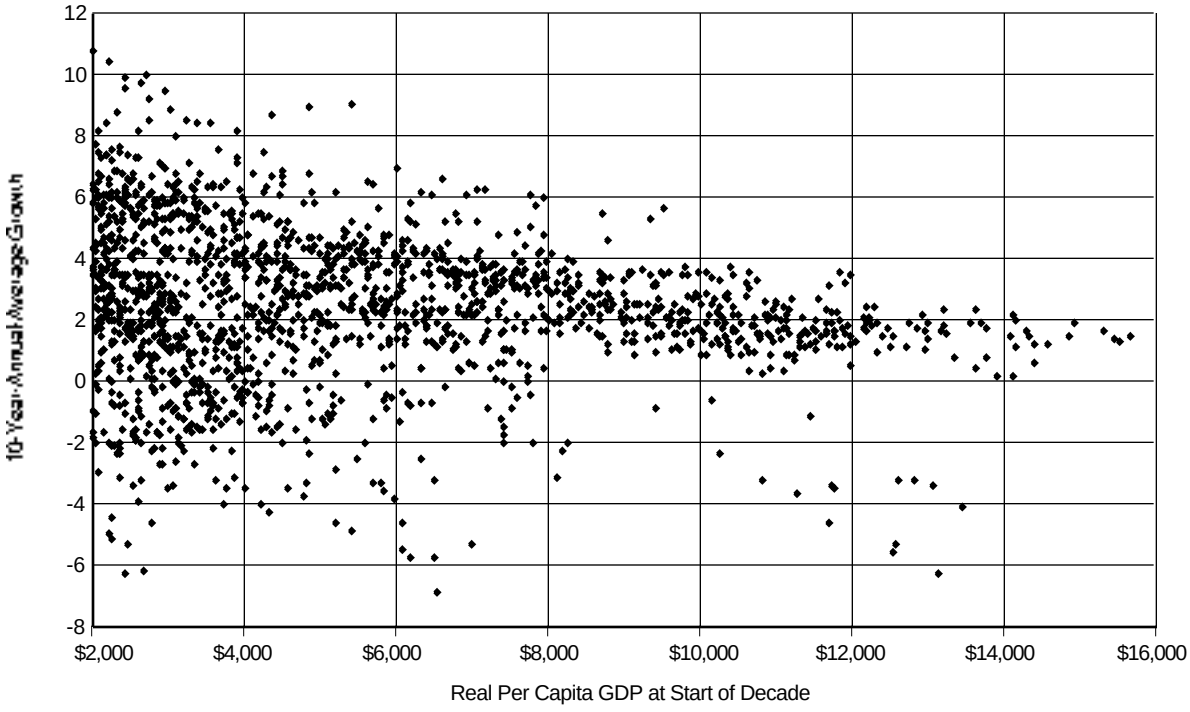
For the 19 economies that had attained a real per capita output greater than $10,000 in 1985 dollars, the annual expansion rate over 10-year periods averaged 1.75 percent, with a range between 0.2 percent and 3.7 percent.[6] New

[5]In fact, for a high-income sample above $10,000 in per capita GDP, the correlation of the growth rate and per capita real GDP is positive when end-of-period GDP is used and negative when beginning values are applied.

[6]These summary statistics exclude the oil-rich countries of Bahrain, Kuwait, Saudi Arabia, and Trinidad and Tobago.

Figure 1: Average Annual 10-Year Growth Rates and Real Per Capita GDP, 1960-92

(1985 dollars at purchasing power parity)



Source: Penn World Table 5.6. Available at http://pwt.econ.upenn.edu/.

Zealand's stagnation during the 1980s put it at the low end. Japan itself generated the high figure the year it entered the leagues of countries above the cutoff of $10,000 in per capita GDP. Its postwar history followed the pattern of other rich countries, with the economy sliding steadily down the growth curve until it fell below the average in the 1990s.

Although scatter plots like Figure 1 do not determine destiny, such observations do show the typical historical experience. From that perspective, Japan is not likely to fall apart — or to grow much above 2 percent a year for extended periods.

Japanese Institutions Are Similar To Those Of Anglo-American Economies

The second set of observations evolves from comparisons of Japan and other countries. The assertion of significant differences between American and Japanese economic behavior, focusing on business-government links, was a foundation for the revisionist authors who gained prominence in the late 1980s and early 1990s. In 1986, for example, financial writer Karel van Wolferen described as a fiction "the premise maintained by the United States and European countries that Japan belongs with them in that loose category known as capitalist free-market economies."[7]

It does not require a great deal of research to discern that Japan differs from the United States and similar nations that operate according to capitalist norms. Indeed, most countries are quite different from each other. 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 the divergences between other nations. That countries differ is obvious. What is less evident is, first, the extent to which Japan's economy and its government-business relationship are distinct and, second, the basis for comparison.

[7]Karel van Wolferen, "The Japan Problem," *Foreign Affairs*, LXV, No. 2, Spring 1986, p. 292.

Consider, for example, the index representing "economic freedom" in 103 countries compiled by the Fraser Institute, a Canadian think tank. *Economic Freedom of the World, 1975-95* organizes the information within 17 subindices grouped in four sections: money and inflation, government operations and regulation, government expropriation and discriminatory taxation, and restraints on international exchanges.[8] The overall ranking placed the United States in third place behind Hong Kong and New Zealand but 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. According to the Fraser Institute's report, Japan's brand of capitalism is not all that different from what other advanced nations practice.

To assess the degree of differences or similarities between Japan and other countries, 11 separate studies that included information on 46 individual variables covering 46 to 150 countries were reviewed (see Appendix). The analytical problem is to find a way to deal with scores of variables in order to answer the questions: How different? How close? How far?

One approach involves calculating 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. This so-called Euclidean distance can be used to measure any number of dimensions or variables. Because the variables were measured in different units, a problem is created when diverse scales tilt the results in one direction or another. This issue is resolved by basing the analysis on standardized variables with a mean of 0 and a standard deviation of 1.

The data from the separate studies were blended to produce a comprehensive view. As samples were combined, however, a number of observations were eliminated because they contained unmatched information. For example, one study may include Malawi but not Yemen, while another has Yemen but not Malawi. In such an instance, neither country would appear in the joined sample. Because of this problem, when all 46 variables from the 11 studies were used to define distances among countries, comprehensive data were available for just 25 nations.

As shown in Table 1, the United States is followed by the United Kingdom, Canada, Australia and Japan. Other Northern European countries trail in close order. A similar pattern is apparent when distances are measured from Japan.

A potential criticism of such a measure is that many of the variables are correlated with each other. Rather than taking into account 46 different dimensions, the distance estimates essentially may reflect the same indicator repeated several times, thereby biasing the results. For example, should an adjustment be made for the notion, obvious perhaps, that an efficient judicial system and a low degree of corruption seem to go together?

To take account of correlations among variables, a so-called principal components analysis was performed on the set of original variables using the technique of factor analysis. This statistical process combines the variables into smaller sets on the basis of their linear relationships. These factors were calculated so as to be uncorrelated, or statistically independent of each other.

Because of the missing data problem, not all the variables could be included in the factor analysis. Excluding the six that had the fewest number of observations allowed the analysis to proceed among the other 40 variables. Eight factors were extracted. The four most important were selected to measure the differences between countries. The results were the same patterns observed in the other tests. Japan ranks up with Anglo-Saxon economies in terms of its distance from the United States, and the same group of countries is closest to Japan (see Table 2).

Factor analysis can be instructive when it uncovers patterns that have an intuitive interpretation. Sometimes, a poetic imagination is helpful in revealing connections. However, for the four factors calculated here, a fairly straightforward structure is apparent. The first one, accounting for 40 percent of the variance

[8]James D. Gwartney, Robert Lawson and Walter Block, *Economic Freedom of the World, 1975-95* (Vancouver, British Columbia: Fraser Institute, 1996).

Table 1: **Distances from the United States and Japan Based on 46 Variables from 11 Studies**

Rank	Country	Distance from United States	Country	Distance from Japan
1	United States	0.00	Japan	0.00
2	United Kingdom	3.88	United Kingdom	4.86
3	Canada	4.04	Canada	5.16
4	Australia	4.39	Spain	5.30
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	13.20	Venezuela	11.20
24	Venezuela	13.22	Brazil	11.36
25	Indonesia	13.58	Indonesia	11.68

Source: Japan Economic Institute

Table 2: **Distances of 10 Nearest Countries from the United States and Japan Based on Four Factors and 40 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

Source: Japan Economic Institute

among the variables, was loaded with variables related to efficient and competent government. Such characteristics as limited red tape, the presence of an efficient legal system, the observance of the rule of law, the absence of corruption, guarantees of property rights and a high level of democracy were important. Other variables contributing to this factor were linked to minimal levels of government intervention in the economy in such areas as regulatory barriers to business or wage and price controls.

The second factor was strongly weighted by variables dealing with small government — in other words, low taxes and limited government spending. The third most important factor was influenced mainly by open trade and foreign capital flows. The fourth one revolved around price-setting mechanisms: unregulated credit markets, creditor rights, few price controls and low inflation.

Interestingly, the first factor, which relates to good governance and limited regulation, highlights one area where some critics assert Japan stands out — 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 other advanced countries. On this factor, the United States is in second position, between New Zealand and Switzerland. Japan is a bit further down the ranking in 12th place, between Finland and France. Its relative standing reflects some common intuitions, but Japan is not notably out of place among advanced economies.

The techniques discussed so far have required that many observations be excluded from the statistical analysis because of missing data. In the next test, information for the United States was correlated with the same variables for each of the other covered countries. The correlation coefficient then became the measure of the closeness of each nation to the United States. The drawback of this approach is that the correlations 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 20 variables were required for further analysis.

Table 3 shows the 15 countries both nearest and furthest from the United States in terms of these correlations. They tell the same story as above. Japan comes after Anglo-Saxon countries and Switzerland in terms of its closeness to the United States. The most negative correlations also are instructive. When people say that the Japanese economy and government are different, they appear to forget countries with ineffective governments, planned economies or nonmarket

Table 3: **Countries with the Most Positive and the Most Negative Correlations with the United States**

Rank	Country	Correlation	Number of Variables
	Most Positive		
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
	Most Negative		
102	Somalia	-0.85	20
101	Iran	-0.82	27
100	Zaire	-0.77	28
99	Russia	-0.76	21
98	Haiti	-0.73	27
97	Syria	-0.71	27
96	Tanzania	-0.66	28
95	Burundi	-0.64	23
94	Chad	-0.63	26
93	Algeria	-0.62	35
92	Congo	-0.58	27
91	Nepal	-0.57	23
90	Venezuela	-0.56	46
89	Egypt	-0.55	46
88	Nicaragua	-0.55	34

Source: Japan Economic Institute

systems — Haiti, Syria, Tanzania or Russia, for example.

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 public 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, government variables? Raymond Gastil, one of the first political scientists to attempt a systematic survey of political rights, devised a scale to measure political and civil liberties, with 1 signifying the highest degree of freedom and 7 the least. His measure of democracy gave the United States a 1 and Japan a 2. These assessments can be compared with the 7 assigned Laos or the 6 for the Ivory Coast.[9]

One point to draw from these examples is that the spectrum of economic-government behavior is rather broad. What may look like divergent actions when viewed from a limited perspective can become less extreme when the range of possibilities is widened.

In a simple two-way U.S.-Japan comparison across the 46 included variables, the values for the two countries were equal in 17 instances, Japan came out "better" or less regulated and more free on seven, and the U.S. position was higher on 22. In this matchup, American actions were more market-friendly on almost half the measures, while Japan outranked the United States on only 15 percent of the indicators. This finding is consistent with the widespread notion that America's markets are more open than Japan's and that in the United States, government is less intrusive.

The ordering of the countries in the three tables suggests that the distance measures may be associated with a nation's affluence. This speculation is borne out by comparing a country's real per capita GDP with its distance from the United States, calculated by any of the methods discussed. Such a plot is shown in Figure 2 for the 100 countries for which both a correlation with the United States as reported in Table 3 and an estimate of real per capita GDP (plotted on a logarithmic scale) were available. The correlation of 0.84 indicates that the distance-income relationship is not 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.

What accounts for the relative similarity of economic institutions among more affluent countries? The data point to something revealing. A country that wants to get rich should mimic the institutions and the behavior of rich economies. Within fairly narrow limits, per capita income seems to be strongly related to these institutional variables.

This deductive conclusion is consistent with the patterns revealed by Figure 1. One could infer from both Figure 1 and Figure 2 that the institutions of rich countries produce consistent long-term growth. In these economies, 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 approximately the same results. In other words, countries are rich because their institutions, which are broadly similar, work. Clearly, Japan is not an outlier in this process.

Adaptability Of The Japanese Economy

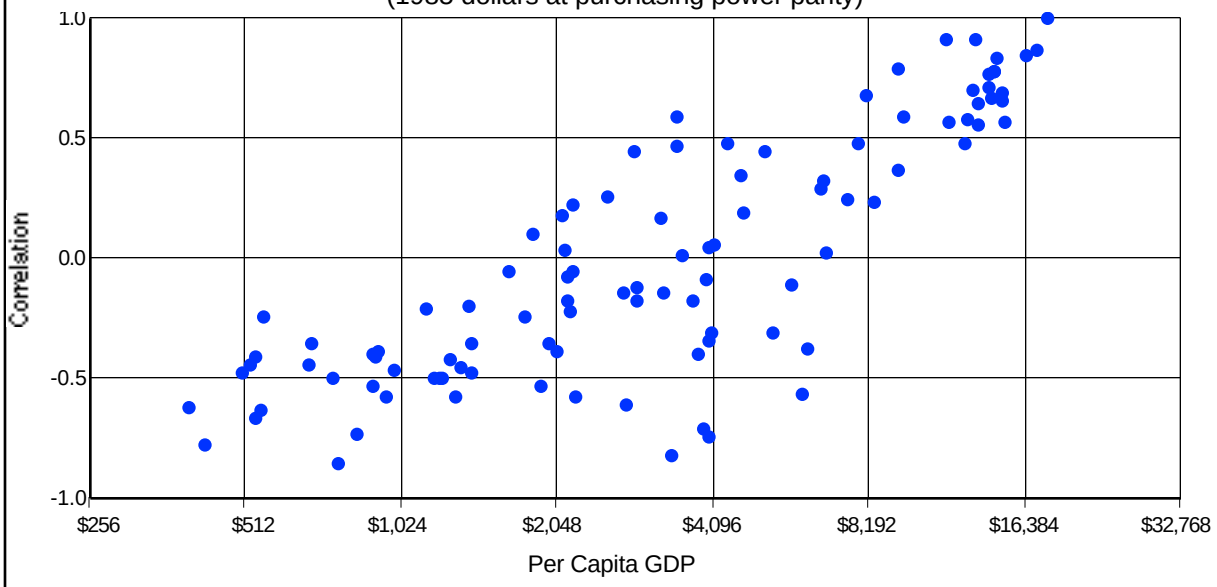
A common myth about Japan is that its labor force is immobile and its industry inert. The assertion that its economy is less dynamic than America's appears on the surface to be indisputable. Bogged down by slow growth or outright recession for virtually all of the 1990s, the Japanese economy frequently is characterized as mature, if not downright feeble. The United States, in contrast, has been lauded for its vigorous "New Economy" based on next-generation technologies and innovation.[10] Japan more often than not is criticized — appropriately — for overregulation and collusive behavior, two of the factors holding back needed productivity gains. However, it has undergone structural changes that are at least of the same magnitude as those navigated by the United States. A seemingly

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

[10] See Douglas Ostrom, "Prospects For A 'New Economy' In Japan," *JEI Report* No. 32A, August 18, 2000.

Figure 2: Correlations between the United States and 100 Countries for 20 to 46 Variables versus Per Capita GDP

(1985 dollars at purchasing power parity)



Source: Japan Economic Institute

moribund Japan is as adaptive in several dimensions as the assertedly ever-youthful United States.

Economic flexibility requires, among other things, structural adaptation to technical change and to the shifting demands caused by rising income levels, demographic transitions and evolving tastes. One measure of structural transformation adds up the year-to-year changes in industry-specific shares of employment or GDP.[11] However, this yardstick is sensitive to the level of detail in the data used to measure an economy's structure. Narrower categories could produce a larger indication of movement simply because a specific action would be more likely to cross industry lines. Therefore, in making comparisons, it is important to use similar numbers of categories and industry definitions.

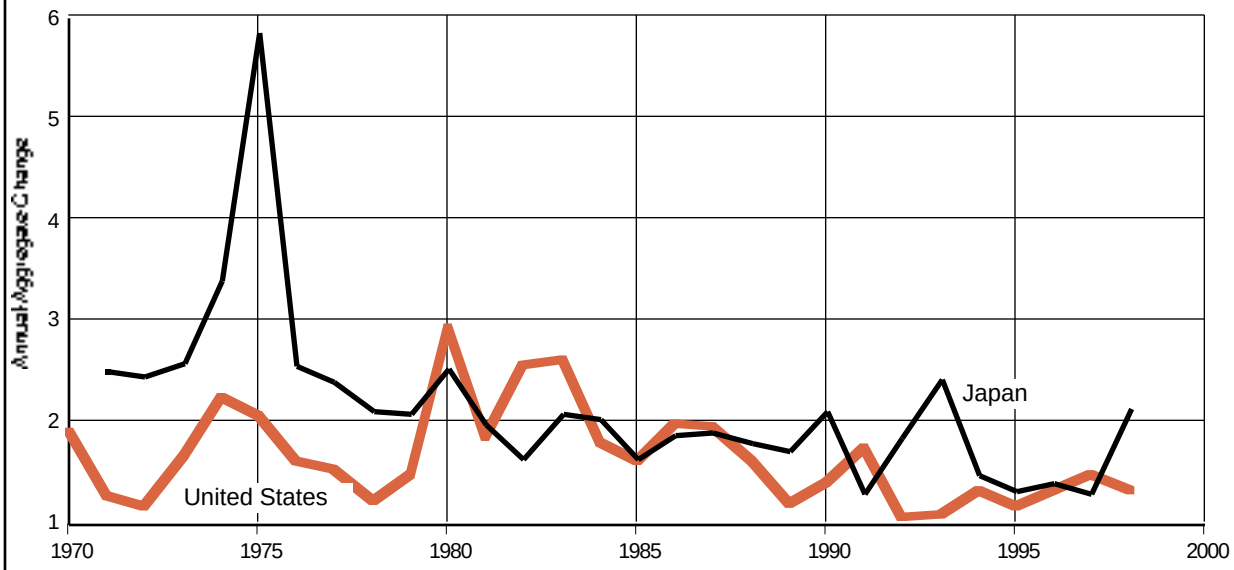
The Department of Commerce publishes statistics on employment and GDP originating in 65 industries. With only 40 industry categories, Japan's GDP data are not as detailed. In order to make country-to-country comparisons, the U.S. information was aggregated into 40 industries based on the Japanese definitions. Figure 3 compares structural change in Japan and the United States based on GDP originating in the 40 comparable industries.

Except for a spike in 1975, which reflected the recession induced by the first oil shock, changes in Japan paralleled the American experience. From 1980 on, in fact, the two curves are virtually indistinguishable. Moreover, there was no indication in the 1990s of any acceleration that might support conjectures about the arrival of a New Economy in America. Accordingly, those who believe that the economy of the United States is more dynamic than Japan's will have to look elsewhere for confirmation.

They will not find it in the employment data, however. Employment curves for the two economies are shown in Figure 4. Japan's employment statistics are broken down into 25 industries; the U.S. figures were reaggregated into the same number of categories. The employment curves lie even closer together than do the GDP curves; the difference in their average values amounts to less than 0.1 percentage point. For both

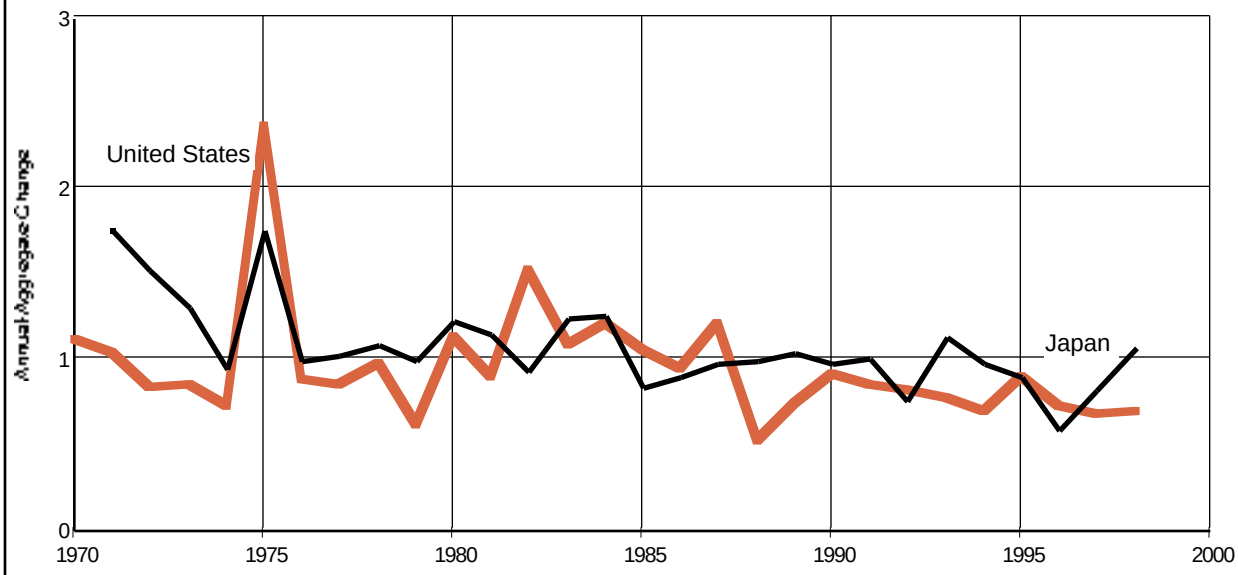
[11] This measure of structural change, S(t) at time period t for employment aggregated over the entire economy, is: $S(t) = 100/2 * \sum\{|(E_i(t)/E(t)) - (E_i(t-1)/E(t-1))|\}$, where S(t) is the sum of the absolute percentage changes in employment across all industries between time period t-1 and t, E_i is employment in industry i, and E is total economywide employment. The summation of absolute changes is taken across all industries for t and is divided by 2 to eliminate double-counting.

Figure 3: Shifts in GDP Across 40 Industries in Japan and the United States, 1970-98



Source: Japan Economic Institute

Figure 4: Shifts in Employment Across 25 Industries in Japan and the United States, 1970-98



Source: Japan Economic Institute

countries, the spike in 1975 reflected the response to the 1973-74 surge in international oil prices.

These findings not only are quite striking but surprising as well. They indicate broad similarities in the aggregate pattern of structural change in Japan and the United States. Both economies responded to the immediate postwar environment with a considerable reshuffling of people and production resources and then adapted to the flux of economic life with the same magnitude of adjustment.

A look behind the overall pattern, however, reveals important differences between the two economies. Across the 40 similarly defined industries, the correlation between changes in GDP in Japan and in the United States over the 1970-98 period is 0.55, signifying only a loose relationship between the gainers and the losers in

each economy. The biggest outliers in this comparison include finance and health services, the GDP shares of which grew by 4 points and 2.6 points, respectively, in the United States but rose by only 0.7 and 0.6 point in Japan between 1970 and 1998.

Construction, an industry that is a noted beneficiary of political favors in Japan, jumped by 2 points of GDP over the 1970-98 time frame while falling 0.7 percent in the United States. The GDP share of real estate in Japan vaulted by an astonishing 5.2 percent against a more modest U.S. rise of 0.9 percent. The aggregate spurt in Japan in 1975 was due mainly to an increase in construction activity as the government resorted to greater public works spending to pull the economy out of its first postwar recession. The small 1993 upturn reflected gains in construction and personal services that more than offset losses in machinery production, wholesale trade and finance. The run-up in 1998 also was associated with construction activity; this time, however, it was in a negative direction as government stimulus programs came to an end. The spikes are indicative of Tokyo's view of public works as a major tool of fiscal policy.

In other industries, the movements were more alike. If the four industries with the greatest differences are dropped from the sample, the correlation between GDP ups and downs on the two sides of the Pacific rises to 0.80, suggesting that in most industries, Japan and the United States experienced fairly similar structural changes over the past three decades or so.

Perhaps the presumed greater dynamic quality of the American economy can be explained — despite its nonappearance in these calculations — by the argument that the industrial classifications used in the analysis are too broad to capture the mutations that occur. Alternatively, differences in dynamism may exist among firms rather than among industries.

Retailing, for example, is one of the more innovative industries in this country. The shifting ranking of companies by sales is one proxy for the industry's continuous transformation. The ranks of the top 10 U.S. retailers exhibited high turnover between 1983 and 1998 (see Table 4). Four different operators occupied the first three spots, and four of 1983's top 10 did not exist 15 years later. During the corresponding time in Japan, all but one of the same companies stayed in the top 10, and only minor shifts occurred within the standings.

Change Japan-Style

History suggests that rich countries grow within fairly well-defined limits. In order to attain a high level of income in the first place, nations must have in place sets of institutions and practices that allow markets to work effectively within an appropriate government-established infrastructure. Just such a framework has allowed Japan's economy to adapt to an always-shifting pattern of forces. However, the preservation of these achievements is not automatic. It requires constant struggle on both the political and the economic front. This fight can continue for many years before effective policies are put forward and implemented by bold governments in the face of considerable opposition.

That Japan's economy is in the midst of major changes can be demonstrated any number of ways. For example, Nikko Securities Co., Ltd. estimated that mergers and acquisitions among domestic companies numbered 770 last year. In 1990, the figure was 341 and in 1986 only 68. Foreign concerns buying domestic firms totaled 154 in 1999 compared with just one in 1987. Similarly, KPMG LLP calculated that the amount of foreign money going into Japanese acquisitions reached almost $16 billion last year, up by a factor of 10 from 1995.

Deregulation in industries as diverse as finance and air transport is producing fairly quick movement toward markets that are as free and open as America's. Nevertheless, how this process has unfolded has implications for the future. Take air travel, for instance. Fares and passenger traffic indicate that deregulation has not occurred just on paper.[12] Prices and volumes have behaved as would have been expected under a liberalized regime. Deregulation, however, has had a distinctive Japanese cast.

After watching the United States liberalize its airline industry in the 1970s, Ministry of

[12] Arthur J. Alexander, "Japan's Aviation Industry: Deregulation Advances On Broad Front," *JEI Report* No. 21A, May 26, 2000.

Table 4: **Top Retailers in Japan and the United States, 1983 and 1998**

Japan			United States		
Company	Rank 1998	Rank 1983	Company	Rank 1998	Rank 1983
Daiei, Inc.	1	1	Wal-Mart Stores, Inc.	1	17
Ito-Yokado Co., Ltd.	2	2	Sears, Roebuck & Co.	2	1
Jusco Co., Ltd.	3	4	Kmart Corp.	3	2
Mycal Corp.	4	5	Dayton Hudson Corp.	4	12
Takashimaya Co., Ltd.	5	7	J.C. Penney Co., Inc.	5	5
Seiyu, Ltd.	6	3	The Home Depot, Inc.	6	-
Uny Co., Ltd.	7	10	The Kroger Co.	7	4
Mitsukoshi, Ltd.	8	6	Safeway Inc.	8	3
Seibu Department Stores, Ltd.	9	9	Costco Wholesale Corp.	9	-
Marui Co., Ltd.	10	13	American Stores Co.	10	9

Source: McKinsey Global Institute, *Why the Japanese Economy Is Not Growing: Micro Barriers to Productivity Growth* (Washington, D.C.: July 2000), Chapter 4, "Retailing," Exhibit 7.

Transport officials put deregulation on their agenda in 1980. However, given the Japanese penchant for predictability and MOT's desire to give airlines time to adjust to the new regulatory environment, decisionmakers planned to phase in the changes over decades. In fact, though, a combination of technology plus foreign and domestic pressures compressed the timetable to 20 years.

A search for consensus meant that it took more than a quarter-century to get near the time when a much-needed second runway will be available at Narita International Airport. Regulators also avoided a direct confrontation with the nation's go-slow air traffic controllers, but over a decade or two, they were able to increase flight frequencies substantially at major airports. At Narita, for example, they rose from about 12 takeoffs and landings per hour in 1985 to 26 in 1999. This demonstration of patience is a far cry from then-President Ronald Reagan's 1981 firing of air traffic controllers to break a strike. Moreover, Japan's three major airlines are getting their costs down, although the process may seem protracted to some Americans. The slowness of All Nippon Airways Co., Ltd. in reducing its bloated payroll is a reminder that lifetime employment is difficult for corporate Japan to abandon despite economic pressures from all sides to cut costs.

In short, deregulation is occurring — but it is definitely a Japan-style process. Manifest fairness, time to adapt, reluctance to engage in confrontation and difficulty in abandoning employees and others in long-term relations are all attributes of regulatory reform, as the air transport example demonstrates.

However, managing change in such a civilized manner may not always be possible, especially if the lineup of economic and political forces becomes less favorable. In addition, in the time that it takes to open up markets Japan-style, the world moves on. Japanese airlines are struggling to lower costs and increase efficiency almost a quarter-century after their American counterparts faced the same challenges. In the meantime, U.S. carriers have adopted new business approaches that leave the Japanese industry at a disadvantage. In the future, it may not be sufficient to deregulate according to a schedule set in Tokyo that fits Japanese sensibilities.

Japan's Economic Prospects

In the long run, whether a developed nation grows at 1 percent a year or 2 percent does make a difference. The higher number suggests a vigorous economy; the lower one indicates stagnation. A GDP that expands 2 percent annually doubles income in 35 years; at 1 percent, it takes 70 years. The costs of a "graying" society are tolerable at the stronger rate but an enormous burden at the scaled-back one. Slow growth itself is an impediment to beneficial changes. For example,

deregulatory initiatives that cause employment losses while generating greater efficiencies are less likely to be implemented when fewer new jobs are being created.

As was observed in 1992,[13] sharply higher productivity is the way out of the slow-growth trap. Unfortunately, the intense competition that seems to stimulate firms to create new efficiencies is lacking in many areas of Japan's economy. The McKinsey Global Institute, the research arm of management consultant McKinsey & Co., Inc., estimates that Japanese manufacturers that compete internationally are 20 percent more productive than their U.S. counterparts. Manufacturing and services firms that are domestically oriented are only 63 percent as efficient. Economywide, capital in Japan is 39 percent less productive than it is here; the gap for labor is 31 percent. Despite higher Japanese numbers for capital and labor per capita, output per person is 23 percent lower than in the United States.[14]

At the risk of repetition, raising productivity is the key to a faster-expanding Japan. Other advanced countries have demonstrated the possibilities. In air transport, for example, numerous business models already tested by the world's airlines are available for consideration. The same is true in many other industries.

If from its present position 33 percent behind the United States, Japan were to catch up over the next 20 years in terms of current productivity, it would add 2 percent a year to its GDP growth rate. Moreover, if Japan could get back on its long-term convergence track with other advanced nations, the addition to growth would be even greater. The World Bank estimates that Japan's 1998 per capita output ranked 14th globally. Moving up to the seventh place held by Singapore would add 15 percent to Japan's per capita GDP.

These examples are intended to demonstrate the utter feasibility of accelerated GDP gains in Japan. One factor holding up the necessary moves is the myth of stability. The belief that change is both unprecedented and unwelcome is widespread. Among other data series, though, employment figures indicate that the job situation is not as static as conventional thinking and lifetime employment norms suggest. Although the economy's slowdown in the 1990s produced a good deal of political dither and muddle, most of the people who lost their jobs managed to find new ones.

Remarkably, the Japanese media has paid little attention to all the structural changes actually occurring, which are highlighted by the disappearance of some 86,000 manufacturing establishments between 1991 and 1996 and the accompanying net loss of more than 1.2 million jobs. These and other indicators of the economy's flexibility apparently also have not been recognized by the public. Even people who have been forced to change jobs seem to believe that their personal history is atypical of the more general experience.

The notion that people do not move from job to job in Japan and that the country's industries and companies are static is belied by the evidence. More importantly, such thinking restricts policy choices. The myth of a rigid economy could, in fact, be the biggest barrier to political efforts to deregulate the economy and open it up to achieve greater competitiveness and higher productivity. Since this belief is so widely held, it may be some time before the reality of Japan's economic adaptability reaches the level of popular acceptance needed to free the political will to proceed vigorously with restructuring.

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[13] Alexander (1992), *op. cit.*

[14] McKinsey Global Institute, *Why the Japanese Economy Is Not Growing: Micro Barriers to Productivity Growth* (Washington, D.C.: July 2000), Executive Summary, Exhibits 2 and 3. Available at http://mgi.mckinsey.com/mgi/japanese.asp.

APPENDIX

Data Sources and Definitions

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

Data on 148 countries.

Variables

1. Measure of democracy.

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

Data on 103 countries.

Variables

1. Average annual growth rate of money supply during the last five years minus potential growth rate of GDP.
2. Standard deviation of annual inflation rate during the last five years.
3. Freedom of citizens to own a foreign bank account domestically.
4. Freedom of citizens to maintain a bank account abroad.
5. Government general consumption expenditures as a share of gross domestic product.
6. Role and presence of government-operated enterprises.
7. Price controls or the extent to which businesses are free to set their own prices.
8. Freedom of private businesses and cooperatives to compete in markets.
9. Equality of citizens under the law and access of citizens to a nondiscriminatory judiciary.
10. Freedom from government regulations and policies that cause negative interest rates.
11. Government transfers and subsidies as a share of GDP.
12. Top marginal tax rate and income at which it applies.
13. Use of conscripts to obtain military personnel.
14. Taxes on trade as a share of imports plus exports.
15. Difference between official exchange rate and black market rate.
16. Actual size of trade sector compared with expected size based on econometric estimates.
17. 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).

Data on 150 countries.

Variables

1. Trade policy: average tariff rates and nontariff trade barriers.
2. Taxation: average and marginal corporate and individual tax rates.
3. Government intervention in the economy: government consumption as a share of GDP, plus the extent of government-owned enterprises.
4. Monetary policy: inflation rate.
5. Capital flows and foreign investment policy: restrictions on and treatment of foreign investors.
6. Banking: openness and regulation of and restrictions on banking system to compete and provide services.
7. Wage and price controls: degree to which markets or government sets wages and prices, including

minimum wages and utility pricing.
8. 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.
9. Regulation: ease or difficulty in opening a business and keeping it open, including production limits, quotas and corruption.
10. Black market: existence and size of black markets, smuggling and illegal workers.

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

Data on 46 countries.

Variables
1. 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*, VII, No. 3, November 1995. Data available from the World Bank (June 24, 2000) at http://www.worldbank.org/research/growth/ddeale.htm.

Data on 115 countries averaged for 1982 to 1995.

Variables
1. 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*, CX, No. 3, August 1995.

Data on 68 countries.

Variables
1. Legal system and judiciary: efficiency and integrity of legal environment as it affects business, particularly foreign firms.
2. Bureaucracy and red tape: regulatory environment that foreign firms face when seeking approvals and permits and degree to which it represents an obstacle to business.
3. 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).

Data on 52 countries obtained from World Bank, *Global Survey of Housing Indicators of 1990* (unpublished).

Variables
1. Property rights index: compiled from items on restrictions on land and housing transactions, squatting and land registration.
2. Housing finance regime: level of development of institutional and regulatory environment of housing finance system.
3. Housing subsidies index: involvement of public sector in demand or supply subsidies.

4. Property infrastructure index: government spending on roads, water, sewers, drainage and electricity, plus such other indicators as commute time and housing affordability.
5. Regulatory regime index: measures impact of land-use flexibility, zoning and building code regulations as well as bureaucratic flexibility and efficiency.
6. Industrial organization index: includes monopolization index for construction industry, restrictions on obtaining building materials and skilled worker availability.

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

Data on 81 countries.

Variables
1. Rule of law.

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

Data on 85 countries compiled by combining data from at least three and up to seven international surveys.

Variables
1. 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, D.C.: 1999).

Data on 49 countries for 1995 and 1996.

Variables
1. Creditor' rights: based on automatic stay on assets of distressed company, continuance of management and priority of secured creditors.
2. Shareholders' rights: based on five indicators of shareholders' ability to protect the value of their assets.
3. 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, Switzerland: 1999).

Data on 53 countries.

Variables
1. Competitiveness index: compiled from eight subindices on openness, government, finance, infrastructure, technology, management, labor and institutions.
2. Executive opinion survey: measured opinions of leading business executives about country in which they operate concerning the country's competitiveness and comparative strengths and weaknesses. More than 3,000 executives in 53 countries responded.

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