4-27-1973

Japan's Economic Success Following Her World War II Defeat

Karen E. Davidock

Adviser: Donald J. Hunter
JAPAN'S ECONOMIC SUCCESS
FOLLOWING HER WORLD WAR II DEFEAT

Departmental Honors
Department of Economics
Ursinus College

Karen E. Davidock
April 27, 1973
JAPAN'S ECONOMIC SUCCESS
FOLLOWING HER WORLD WAR II DEFEAT

World War II destroyed the Japanese Empire and put Japan under foreign occupation for nearly seven years. This was followed, however, by a rapid economic recovery and now, scarcely twenty-eight years later, Japan is one of the leading industrial nations of the world. In a few short decades she has moved from a physically and economically devastated nation to the world's third largest producer of goods and services. Japan's extraordinary reach for economic ascendency has captured the attention of the world. For some people the center of interest lies in the miraculous economic growth rate. For others, particularly in the developing countries, the interest lies in the factors of Japan's economic growth. For those in the developed countries, the concern is with Japan's economic planning, and in the future economic, political, and military balance. Still, many people question whether Japan can survive economic growth, and if she does, when will it end?

The pages that follow seek to look at these and other areas of interest in Japan's economic growth, starting with a general summary of her rate of economic growth since World War II.

THE RATE OF ECONOMIC GROWTH SINCE WORLD WAR II

The war left Japan in ruins. She was economically completely exhausted, a quarter of her material wealth was destroyed, and her GNP at the end of the war was only half of the pre-war peak. By April of 1949, the preliminary task of restoring production and productive efficiency had only begun.
Inflation was a serious handicap to recovery. Japan, after the war, experienced excessive domestic demand along with large budget deficits which together resulted in steep price increases. The post-war domestic demand that accompanied inflation made the maintenance of an appropriate flow of exports difficult, for output that might have been available for export was otherwise absorbed and prices were pushed to non-competitive levels. Inflationary pressure also stimulated imports, including imports of goods which were not necessary for essential consumption and investment.

Japan's exports increased rapidly in 1951, but suffered a setback in 1952 and for the year as a whole their total value declined. Dollar exports (exports to the United States and Canada) tended to increase, but sterling exports (exports to the United Kingdom, New Zealand, Australia and the Union of South Africa) declined. Although imports remained high with a general tendency to increase, Japan was not in balance of payments difficulties in 1952. Her dollar position also remained favorable through abnormally large "invisible" receipts from U.S. expenditures and the U.N. armed forces.

The rapid rise of industrial production and consumption raised imports in 1953 so that by the first quarter of 1954 they were more than 25% greater than a year earlier. The rapid advances in productivity were made possible by the reconstruction of the Japanese economy. However, the expansion of exports was hampered by inflationary pressures operative since 1950 and by restrictions on imports from Japan, which made it difficult for Japan to earn the means to pay for the food and raw materials necessary for industrial recovery. An increased import surplus thus
developed due to restrictions other countries placed on Japanese exports (see graph in appendix). Even when some of these restrictions were removed late in 1953, exports failed to recover to any substantial extent.4

Lack of control of inflation in Japan and the continuance of import controls elsewhere made Japan extremely dependent on the United States Government expenditures associated with the Korean War to help restore equilibrium in her balance of payments situation.5 Japan had to face the certain prospect that receipts from expenditures by U.S. Armed Forces would decline sharply. Therefore at the end of 1953, strong monetary action was initiated in the hope of curbing inflation. The growth of the money supply was checked, loans by the Bank of Japan fell substantially, the fall in foreign exchange reserves was checked, and there was a recovery of confidence in the currency.6

As the result of the contractive monetary policy, the increase in Japanese industrial production in 1954 (7%) was considerably smaller than the increase (22%) from 1952 to 1953.7 This temporary slackness in domestic output along with a decline in domestic consumption produced a sharp reduction of imports.

At the same time, the value of exports rose by almost one-third due to lower restrictions on Japanese exports, her rising competitive power, the increasing availability of exportable goods and the restoration of pre-war commercial connections. Exports to the United States expanded by 22% despite the U.S. recession, exports to the sterling area increased by about 55%, and shipments to Latin America nearly doubled.8
The increase in exports cut the Japanese trade deficit by more than half, to $420 million, and the balance of payments moved from an overall deficit of almost $200 million in 1953 to a surplus of $100 million in 1954.\(^9\) Disinflation played a definite role in the rectification of the balance of payments.

Japan realized a balance of payments surplus in 1955 but under the strain of intense industrial expansion and a revival of domestic demand, the surplus dwindled in the course of 1956 and was followed by a deficit in early 1957.\(^{10}\)

<table>
<thead>
<tr>
<th>in millions of U.S. dollars</th>
<th>Balance of Payments</th>
<th>Trade Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1954</td>
<td>127</td>
<td>-420</td>
</tr>
<tr>
<td>1955</td>
<td>379</td>
<td>-460</td>
</tr>
<tr>
<td>1956</td>
<td>168</td>
<td>-729</td>
</tr>
<tr>
<td>1957</td>
<td>-678</td>
<td>-1426</td>
</tr>
</tbody>
</table>

There was a major investment boom in Japan in 1956 stimulated by a rise in both foreign and domestic demand. Manufacturing production increased by 16% compared with a 9% increase in 1955; national income in 1956 increased approximately 10% in real terms;\(^{12}\) and exports increased by 20%.\(^{13}\) The rapid increase in output was made possible because of an ample unemployed labor supply and the existence of surplus capacity in many industries.

The acceleration in Japan's economic activity caused a sharp increase in the imports of raw materials and fuels. The total value of
imports rose by 30% compared with a rise of only 3% from 1954 to 1955.

The biggest increase in exports in 1956 was in the export of ships. As world demand rose and shipyards elsewhere faced rising costs and lengthening delivery periods, Japan became the world's largest shipbuilder, output in 1956 being three times that in 1955. Most other exports also increased substantially, but there was some falling off in exports of metals, owing to the pressure of domestic requirements. In certain cases, Japan found it necessary to limit her exports, either to prevent the accumulation of illiquid credit balances or to forestall protective action by the importing country.

Japan showed the largest proportionate increase in exports of manufactures, followed by Germany, Italy, Belgium, and Sweden. On the other hand, the shares of the United Kingdom and the United States diminished. The following chart illustrates the extent to which relative movements in export prices were correlated with differences in the expansion of the volume of exports over the period 1953-1956.

Percent Changes from 1953 to 1956 in Volume and Unit Value of Manufactured Exports of Major Industrial Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Volume</th>
<th>Unit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>+122</td>
<td>-6</td>
</tr>
<tr>
<td>Germany, Federal Republic of</td>
<td>+ 70</td>
<td>+2</td>
</tr>
<tr>
<td>Italy</td>
<td>+ 59</td>
<td>-2</td>
</tr>
<tr>
<td>Belgium-Luxembourg</td>
<td>+ 48</td>
<td>-3</td>
</tr>
<tr>
<td>Sweden</td>
<td>+ 45</td>
<td>+1</td>
</tr>
<tr>
<td>Netherlands</td>
<td>+ 31</td>
<td>-1</td>
</tr>
<tr>
<td>Switzerland</td>
<td>+ 26</td>
<td>-4</td>
</tr>
<tr>
<td>France</td>
<td>+ 21</td>
<td>+1</td>
</tr>
<tr>
<td>United States</td>
<td>+ 20</td>
<td>+5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>+ 19</td>
<td>+5</td>
</tr>
</tbody>
</table>
The competitive position of Japan was strengthened by the short delivery dates which Japanese exporters could offer. Discrimination formerly practiced against Japanese goods in various parts of the world had decreased, and the quality of supplies readily available for export improved with the progress of Japan's industrialization.

Strains on domestic resources began to appear in early 1957 in the form of a decline in foreign exchange reserves and a further rise in consumer prices. With the declared objective of pruning excess investment demand, the Bank of Japan raised the interest rate from 7.3% to 8.4%.17

The investment boom in Japan continued into 1957 and caused an even sharper deterioration in Japan's balance of payments than in 1956. There was an increase of almost 60% in private expenditure on durable equipment and inventory accumulation during 1956, and this situation continued unabated into 1957.18 While world industrial production grew by only 2.3% from 1956 to 1957, Japan's output expanded by 17% over the same period.19

Accompanying the investment boom and the increased manufacturing output were increasing strains on steel, transport, and generating capacity, and the liberalization of imports, particularly of raw materials. This led to an acceleration in the growth of imports. Imports of particular importance were metals and ores, fuels and machinery, and textile materials. The volume of imports rose almost three times as fast (by 28%, compared with 10%) between the second half of 1956 and the first half of 1957 as between the two halves of 1956.20
While the growth of imports accelerated rapidly, the volume of exports declined slightly, and the balance of payments surplus fell from $120 million to $48 million between the two halves of 1956, and in the first half of 1957, there was a deficit of $514 million. To help improve the balance of payments, a matter which is of considerable importance for a country so dependent as Japan on international trade and therefore on conditions abroad, Japan intensified her restrictions on imports by 1 - postponing investment and other expenditure, 2 - restricting credit facilities for imports, 3 - increasing advance deposit requirements for imports, and 4 - cutting the exchange allocation for cotton and wool imports.

As demand receded, inventories of finished goods accumulated. Manufacturing output declined. The volume of imports fell. The volume of exports was some 11\% higher, so that the ratio of exports to output, which had fallen sharply in the first half of the year, was by the end of the year again about the same as it had been a year before.

"The fact that Japanese exports rose less from 1956 to 1957 than from 1955 to 1956 seems to have been due less to pressure of internal demand than to the quite exceptional increase in exports of ships from 1955 to 1956, which could not be repeated in 1957. Although the expansion of textile exports to the United States and certain other markets was still hampered by the restrictions imposed by the Japanese authorities to forestall protective action by those countries, total textile exports increased nearly as rapidly as from 1955 to 1956." The table on the following page gives some indication of the relative export competitiveness of various industrial countries. Exports from
Japan, Germany, and Italy continued to grow three times as fast as those from the other leading exporters of manufactures, and accounted for nearly half of the growth of world trade in manufactures from 1956 to 1957. The availability of ample capacity and manpower was an important factor fostering this growth. The slackening in the rate of expansion of Japanese manufactured exports was confined to ships, exports of which had tripled from 1955 to 1956.  

<table>
<thead>
<tr>
<th>(percentage increase or decrease from previous year)</th>
<th>Production</th>
<th>Imports</th>
<th>Mfg. Exports</th>
<th>Export Unit Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>22 17</td>
<td>27 23</td>
<td>20 13</td>
<td>4 3</td>
</tr>
<tr>
<td>France</td>
<td>12 9</td>
<td>15 6</td>
<td>-6 13</td>
<td>4 1</td>
</tr>
<tr>
<td>Italy</td>
<td>8 8</td>
<td>13 11</td>
<td>18 17</td>
<td>1 1</td>
</tr>
<tr>
<td>Germany, Fed Rep of</td>
<td>8 6</td>
<td>12 12</td>
<td>17 16</td>
<td>3 2</td>
</tr>
<tr>
<td>Austria</td>
<td>4 6</td>
<td>7 14</td>
<td>18 16</td>
<td>3 —</td>
</tr>
<tr>
<td>Sweden</td>
<td>3 4</td>
<td>6 7</td>
<td>13 11</td>
<td>3 3</td>
</tr>
<tr>
<td>Switzerland</td>
<td>... ...</td>
<td>15 6</td>
<td>11 6</td>
<td>— 2</td>
</tr>
<tr>
<td>Norway</td>
<td>4 3</td>
<td>8 -1</td>
<td>17 1</td>
<td>13 11</td>
</tr>
<tr>
<td>Netherlands</td>
<td>4 2</td>
<td>13 5</td>
<td>2 4</td>
<td>2 5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>-1 2</td>
<td>-1 4</td>
<td>6 2</td>
<td>4 3</td>
</tr>
<tr>
<td>Belgium-Luxembourg</td>
<td>6 —</td>
<td>11 2</td>
<td>13 -3</td>
<td>2 4</td>
</tr>
<tr>
<td>United States</td>
<td>3 —</td>
<td>9 2</td>
<td>11 9</td>
<td>6 4</td>
</tr>
<tr>
<td>Total</td>
<td>4 2.5</td>
<td>9 7</td>
<td>10 9</td>
<td>4 3</td>
</tr>
</tbody>
</table>

The restrictive budgetary and credit measures taken in May 1957 to check the investment boom and remedy the deterioration in the balance of payments were successful in achieving their aim. By the second quarter of 1958, there was a net accumulation of inventories; private fixed capital investment had declined; private consumption continued to rise; and wholesale prices were down by 9% from the preceding year. Import payments, which had been very high in 1957, fell in 1958 by some 29%, the volume of imports declining by 19% and import prices by 13%.
However, the volume of imports in 1958 was still slightly greater than in 1956. The largest declines in volume from 1957 to 1958 were in textile materials, coal, and metallic ores due to the decrease in economic activity.27

With the reduction in both the volume and the unit value of imports, Japan's balance of payments improved in 1958 as she also improved her competitive position in the world markets for manufactures. With the improvement in the payments position, most of the measures designed specifically to tighten import financing in 1957 were withdrawn; the discount rate was lowered; and tax exemption limits for incomes from exports were liberalized to encourage exports.28

The value of exports, which had risen at an average rate of 25% per annum from 1953 to 1956 and by 14% from 1956 to 1957, was practically the same in 1958 as in 1957 due to the effects of a post-war recession in the United States and the industrial countries. Although the volume of Japanese exports rose by 7%, export prices fell by a similar percentage. Textile exports, in fact, fell by 10% in value.29

Japan's manufacturing output, which had increased between 1955 and 1957 at an annual rate of over 20%, fell by 5% during the recession.30 However, Japan showed signs of renewed expansion of economic activity toward the end of 1958 and her exports continued to increase though at a reduced rate.

In both Europe and Japan, the continued rise in production was largely attributable to increases in productivity resulting from substantial investments in previous years. It was accompanied by a further decline in unemployment. The ensuing rise in private consumption not
only supported the expansion, but also further stimulated private
investment in plant and equipment. Intensified international competition
and productivity gains contributed to keeping prices relatively stable.

Japan in 1960 with its high rate of industrial growth should have
been in a strong balance of payments position but, like most manufacturing
countries except for Germany, France and the United States, the deterioration
in the balance of trade caused a decline in the current account surplus.
Japan's imports increased by 25% in 1960 stimulated by rising domestic
activity and the liberalization of trade (Under a program adopted in
June 1960, liberalization of imports was to be extended within three
years to 80% of imports31), while exports rose only by 17%.32 The
slower growth of exports reflected the fact that exports to the United
States rose by only 5%.33

Initially the United States led the other industrial countries in
the economic expansion that followed the 1957 - 1958 recession. However,
after mid-1959, the rise in economic activity became more vigorous in
Europe and Japan, and early in 1960 the expansion was halted in the
United States, whereas it continued in most of the other industrial
countries. These different cyclical developments in various countries
were reflected in the divergent rates of growth of production in Europe
and Japan, on the one hand, and in North America (the United States and
Canada) on the other.34

During the course of 1962, economic activity continued to expand in
most industrial countries. However, in Japan there were minor decreases
in activity in the course of the year, in part responding to policies
directed toward strengthening the balance of payments and also to curbing
the excessive expansion in the domestic economy. These stabilization measures introduced in the autumn of 1961 caused a lessening in private fixed investment and a decrease in inventory accumulation which in turn caused a slackening of growth in Japan in 1962. On the other hand, these measures caused exports to increase markedly in 1962, and the growth in private consumption lost little momentum since the rise in wages was substantial for the whole year.

The deficit in Japan's balance of payments was brought on by an excessively high rate of economic expansion combined with the effects on exports of the 1960 recession in the United States. The predominant factor that changed the trade balance from a deficit of $558 million in 1961 to a surplus of $402 million in 1962 was the expansion of exports by 16% following an increase of only 5% from 1960 to 1961.

Exports of Manufactured Goods, 1959-1962

<table>
<thead>
<tr>
<th>Value f.o.b. (billion U.S. dollars)</th>
<th>Percentage Change from Preceding Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1959</td>
<td>3.04</td>
</tr>
</tbody>
</table>

The renewed sharp rise in exports was stimulated in large part not only by the recovery of economic activity in the United States, but also by reduced discrimination against Japanese exports in Europe. Japan's exports to the United States rose 32% from 1961 to 1962 after a marked decline from 1960 to 1961. Imports from the United States decreased by considerably more than the decline in Japan's total imports which were 5% lower than in 1961, after rising by more than 25% from 1960 to
1961. The United States, as Japan's principal trading partner, felt the main impact of the reduction in that country's imports.

<table>
<thead>
<tr>
<th>Value (billion U.S. dollars)</th>
<th>Percentage Change from Preceding Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1961</td>
</tr>
<tr>
<td>Exports to U.S. from other countries</td>
<td>4.9</td>
</tr>
<tr>
<td>Exports to Japan</td>
<td></td>
</tr>
<tr>
<td>Exports from U.S.</td>
<td>1.4</td>
</tr>
<tr>
<td>Exports from other countries</td>
<td>0.4</td>
</tr>
<tr>
<td>Total</td>
<td>1.8</td>
</tr>
</tbody>
</table>

This was the third time within ten years that Japanese authorities demonstrated their ability to correct a balance of payments deficit by moderating the expansion of production and stepping up efforts toward export promotion. Their success in adjusting the balance of payments was particularly notable in view of the fact that neither exports nor imports account for more than 10% of Japan's gross national product. The adjustment in 1962 was all the more remarkable because it occurred in the face of a continued liberalization of trade by Japan.

The balance of payments remained strong through 1962 but in 1963, Japan again faced a balance of payments deficit due to the very rapid expansion in domestic demand that had taken place through 1963. Authorities were quick to restrain the boom and adjust the deficit in the early stages of trouble. Restrictive monetary policies were introduced which markedly slowed the rate of increase in imports. A rapid rise in exports, supported both by strong international demand and by
the high degree of competitiveness of Japanese industry, helped to smooth the adjustment. During 1964, the balance of payments recovered while economic growth was moderated, but was not interrupted, as it had been in 1958 and 1962. By the end of the year, the Japanese authorities began to relax their policies of economic restraint.40

Exports continued to expand steadily throughout 1964, totaling about \( \frac{3}{4} \) more than in 1963 while imports were only 13% higher for the year as a whole. Important export gains, as indicated in the following table,41 included increases in exports to the United Kingdom of over 25% and to the United States of 23%. This resulted in a swing in the trade balance from a deficit in 1963 to a substantial surplus in 1964.

<table>
<thead>
<tr>
<th>Year</th>
<th>United Kingdom</th>
<th>Other EFTA Countries</th>
<th>EEC Countries</th>
<th>United States</th>
<th>Japan</th>
<th>All Manufacturing Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>—</td>
<td>1,360</td>
<td>2,500</td>
<td>1,100</td>
<td>140</td>
<td>5,020</td>
</tr>
<tr>
<td>1964</td>
<td>—</td>
<td>1,490</td>
<td>2,750</td>
<td>1,270</td>
<td>140</td>
<td>5,270</td>
</tr>
<tr>
<td>1963</td>
<td>1,200</td>
<td>1,700</td>
<td>1,070</td>
<td>720</td>
<td>160</td>
<td>7,330</td>
</tr>
<tr>
<td>1964</td>
<td>1,530</td>
<td>2,020</td>
<td>1,380</td>
<td>1,300</td>
<td>160</td>
<td>8,310</td>
</tr>
<tr>
<td>1963</td>
<td>1,960</td>
<td>5,720</td>
<td>15,700</td>
<td>2,560</td>
<td>360</td>
<td>26,400</td>
</tr>
<tr>
<td>1964</td>
<td>2,280</td>
<td>6,780</td>
<td>18,360</td>
<td>2,240</td>
<td>360</td>
<td>30,200</td>
</tr>
<tr>
<td>1963</td>
<td>1,170</td>
<td>860</td>
<td>3,970</td>
<td>—</td>
<td>1,710</td>
<td>8,380</td>
</tr>
<tr>
<td>1964</td>
<td>1,470</td>
<td>960</td>
<td>4,560</td>
<td>—</td>
<td>1,910</td>
<td>9,480</td>
</tr>
<tr>
<td>1963</td>
<td>1,200</td>
<td>120</td>
<td>330</td>
<td>1,520</td>
<td>—</td>
<td>2,130</td>
</tr>
<tr>
<td>1964</td>
<td>200</td>
<td>280</td>
<td>370</td>
<td>1,870</td>
<td>—</td>
<td>2,630</td>
</tr>
<tr>
<td>1963</td>
<td>4,580</td>
<td>9,750</td>
<td>26,110</td>
<td>5,820</td>
<td>2,800</td>
<td>49,260</td>
</tr>
<tr>
<td>1964</td>
<td>5,480</td>
<td>10,970</td>
<td>29,990</td>
<td>6,890</td>
<td>2,580</td>
<td>55,870</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage increase, 1963 to 1964</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
</tr>
<tr>
<td>Other EFTA countries</td>
</tr>
<tr>
<td>EEC countries</td>
</tr>
<tr>
<td>United States</td>
</tr>
<tr>
<td>Japan</td>
</tr>
<tr>
<td>All manufacturing countries</td>
</tr>
<tr>
<td>—</td>
</tr>
<tr>
<td>19.6</td>
</tr>
<tr>
<td>15.1</td>
</tr>
<tr>
<td>25.4</td>
</tr>
<tr>
<td>26.9</td>
</tr>
<tr>
<td>19.4</td>
</tr>
</tbody>
</table>

Source: International Monetary Fund and International Bank for Reconstruction and Development, Direction of Trade. Details of rounding, if figures shown may not add to totals. Estimates of military exports. Figures in last column include estimate of U.S. special category exports, which cannot be allocated between countries shown in the table. Calculated from unrounded figures.
Balance of payments deficits in Japan tend to vary inversely with her rate of economic growth and her success in reconciling full employment with cost and price stability. Since Japan had enjoyed high levels of employment, a further substantial rise in output was largely dependent on gains in productivity if prices were to remain stable. In 1963 Japan's output had been greater than in any other industrial country. However, the rate of advance decelerated during 1964 as the result of measures mainly directed toward protecting the balance of payments and curbing the upward pressure on wages and prices. This slowdown is illustrated in the following graph.42

Selected Areas and Countries: Industrial Production, Seasonally Adjusted, 1962- April 1966

(1958 = 100)
However, Japanese authorities in 1964 faced with an improved balance of payments position based on rising exports, improvement in demand conditions in the home and export markets, and increasing competitiveness of export prices, turned to more expansionary policies in order to impart a new impetus to economic expansion in the domestic economy.

Monetary policy was directed toward reviving economic activity. The reserve requirements for bank deposits were cut in half and the Bank of Japan lowered its discount rate from 6.57% to 5.48%. Fiscal policy was also used fairly actively to assist the recovery. In July the Government expanded its program to include public works expenditures, reduced interest rates on investment loans, lower taxes, and various measures for expanding exports. In fact, total average government investment from 1962-1965 amounted to 36% of GNP, the largest for any country.

These measures to reactivate the economy did not take hold until late in 1965 when production finally began to rise again. Japan still had a significant margin of unutilized economic capacity at the beginning of 1966 and therefore, policies of expansion were continued throughout the year. Fiscal policy was used to stimulate private consumption, and monetary policy was kept relatively easy. The index of industrial production, which had remained static in 1965, advanced by 20% during 1966.

While Japan addressed herself to stimulation of economic activity, the United States and most other industrial countries were forced to moderate demand expansion and decelerate economic activity because increasing strains on resources were causing inflationary prices and balance of
payments disequilibrium. These pressures had been brought on by the exceptionally strong expansion of their markets from mid-1965 to mid-1966, during which time Japan benefited from her high dependence on the U.S. market. Japanese exports to the United States increased by 35% while U.S. exports to Japan increased by only 1%. And total Japanese imports increased by only 1.6%.

There is quite a close relation between increases in industrial output and increases in the value of imports. As the following table:

```
<table>
<thead>
<tr>
<th>Country</th>
<th>1964-65</th>
<th>Growth of industrial output</th>
<th>Relative growth of imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Industrial Countries</td>
<td>5.2</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>Countries of Above-Average Growth in Output from 1964 to 1966</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>8</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>7</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>6</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>6</td>
<td>-1</td>
<td></td>
</tr>
<tr>
<td>Countries of Average or Below-Average Growth in Output from 1964 to 1966</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>5</td>
<td>-2</td>
<td></td>
</tr>
<tr>
<td>Austria</td>
<td>4</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>4</td>
<td>-3</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>4</td>
<td>-2</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>3</td>
<td>-1</td>
<td></td>
</tr>
<tr>
<td>Belgium-Luxembourg</td>
<td>2</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
```

```
<table>
<thead>
<tr>
<th>Country</th>
<th>1965-66</th>
<th>Growth of industrial output</th>
<th>Relative growth of imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Industrial Countries</td>
<td>5.6</td>
<td>5.1</td>
<td></td>
</tr>
<tr>
<td>Countries of Above-Average Growth in Output from 1965 to 1966</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>12</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>11</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>9</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>7</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Countries of Below-Average Growth in Output from 1965 to 1966</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Belgium-Luxembourg</td>
<td>2</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>
```

```
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>17</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>12</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td>9</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>7</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>6</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Countries of Below-Average Growth in Output from 1965 to 1966</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Norway</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Switzerland</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Belgium-Luxembourg</td>
<td>8</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
```

indicates, the growth of output, and of imports relative to it was high in the United States and Canada as had been the case in 1964-1965. However in Japan, where government authorities were seeking increased industrial production, generally elastic supply conditions appear to have moderated the growth of imports relative to output, offsetting the effect of any build up in inventories of imported raw materials and semi-manufactures which may have increased her rate of expansion. The growth of imports in Japan did not increase until 1965-1966 when the measures designed to activate the economy finally took hold.

The economy continued to expand through 1966-1967 and was a major exception to the general economic deceleration in the rest of the industrial world due to strains on available resources. Japan still had significant margins of unutilized economic capacity and her growth supported a further rapid increase in imports throughout 1967. However, the strong rising trends of production and imports were interrupted in 1968 under the impact of policies of restraint adopted by the Japanese authorities.  

![Graph showing imports and production in Japan from 1964 to 1969](image-url)
The continued rapid growth of the Japanese economy during 1967, while many of her major trading partners' economies were faltering, led to the disappearance of the current account surplus, which had reached $1.4 billion in 1966. This development prompted Japan to join the United States, Canada, and the United Kingdom who were all in phases of restraint with the objective of holding down the expansion of aggregate demand within the limits of productive capacity and reducing the pressure on domestic resources. 52

To counter her emerging balance of payments difficulties, Japan switched from an expansionary to a contractionary fiscal and monetary policy. The Bank of Japan raised the discount rate from 5.48% to 6.21%, 53 the Government deferred 7% of budgeted investment outlays, 54 and domestic credit in general was tightened. The tightening of credit conditions in Japan pulled in funds from the rest of the world, particularly from countries of Europe in balance of payments surplus. 55 The desired result was that Japanese enterprises switched to foreign financing, borrowing almost $1 billion in short-term funds largely from U.S. banks and on the Euro-dollar market. 56 This inflow of capital made Japan's over-all payments position close to balance in 1967 as in 1966.

Although world trade slowed down considerably in 1966 due to the easing of demand conditions in Europe and North America, it increased approximately 12% from 1967 to 1968, the highest rate of growth on record. 57 The broad expansion of world trade was accompanied by extraordinarily large changes in trade balances of some major industrial countries.

A sharp fall of $3.3 billion in the U.S. trade surplus reflected an increase of almost 25% (compared to 7% for 1966-67) in the growth of
Japan's export market. Strong demand developments in the United States gave strong impetus to the Japanese trade position and provided an

**Trade Balances of the United States and Japan**

(in billions of U.S. dollars)

![Graph showing trade balances of the United States and Japan from 1959 to 1969.](image)

important stimulus to Japan's economic growth throughout 1968. Although a sharp break in import expansion occurred in the first half of 1968, reflecting the impact of the restrictive financial policies, Japan recorded economic growth of 14\% for 1968, compared with 13\% for 1967.59

The high rate of growth in 1968 was accompanied by a large surplus on current account, which was only partially offset by a net capital outflow. Japan's over-all payments balance, which had been small in recent prior years, expanded to a record surplus of $1.2 billion in 1968, against a $130 million deficit in the previous financial year.60
The combination of a marked strengthening of the external position and a pronounced increase in the current account with such an extremely rapid pace of growth was unusual and reflected several important factors. One of them was the prevalence of strong demand elsewhere in the world, particularly in the United States, which is an important market for Japanese exports. In part, too, the buoyancy of exports reflected some reorientation of Japanese producers toward foreign sales during late 1967 and early 1968, when financial restraint in Japan dampened domestic demand. The resultant shift in the demand pattern was instrumental not only in causing a turnaround in the current account position but also in providing stimulus for the upswing of Japanese economic activity.

Another factor contributing to the strength of the current account was the rapid growth in the productive capacity of Japan's exporting and import-competing industries in the period since the 1965 recession. Real output in Japan rose at an average annual rate of more than 13% per annum in the period from 1967 to 1969, higher than that in the United States or the United Kingdom. That expansion of productive capacity, along with very rapid productivity gains, helped to keep Japanese export prices relatively stable and contributed greatly to the improvement of Japan's competitive position in international markets.

In the two years to mid-1969, Japanese economic expansion proceeded without endangering domestic stability. However, in the course of 1969, price advances began to accelerate and policies were shifted in order to control the rapid rise in demand before inflationary expectations became deep rooted. With that purpose in mind, the authorities introduced in September 1969, a set of monetary measures including increases
in the official discount rate and related interest rates, increases in reserve requirements for commercial banks, and a strengthening of guidelines for both bank borrowings from the Bank of Japan and the lending policies of the commercial banks.

While this recent emergence of stronger pressures on costs and prices in Japan did not immediately diminish the competitive advantage that she had gained in earlier years due to the acceleration of price advances in other countries, it appeared to arrest any further widening of that advantage.62

\[ (1963 = 100) \]

Unit Labor Costs in Manufacturing

Export Unit Values of Manufactured Goods

The association of a strong current account position and pressure on resources made it difficult for Japanese authorities to reconcile their domestic and external objectives of policy. With respect to the balance of payments, policies designed to encourage a net outflow of both long-term and short-term capital had been followed. Especially with regard to short-term capital, a substantial outflow was recorded for 1969, owing in part to a decrease in foreign borrowing. The reduction in foreign borrowing reflected special monetary measures taken by the authorities as well as relatively low interest rates in Japan in comparison with those in other countries.
However, following the adoption of restrictive monetary policies in the fall of 1969 and the consequent growing shortage of domestic liquidity, short-term foreign borrowing stopped declining. In the early part of 1970, while export credit continued to expand, the inflow of foreign credit to finance imports increased markedly, reflecting a strong expansion of imports during the period. In June 1970, the authorities introduced new measures to provide special funds to finance imports with a view to preventing a further increase in foreign borrowing and keeping the increase in foreign exchange reserves at a moderate pace.

Although the restrictive monetary policy adopted by the authorities in the fall of 1969 was meant to control the rapid rise in demand and prices, it also caused the end of the economic boom that had commenced late in 1965. The slowdown in the rate of output growth came in 1970 when real GNP expanded by only 11% in comparison with advances of 12 to 14% in the previous three years. Although Japan's rate of real output growth declined through 1969 and 1970, this deceleration was less pronounced than in the United States and did not dip below the average for the 1960s.
In response to the slowdown, the Bank of Japan in late 1970 lowered the discount rate from 6.25% to 5.25% to reduce the rate of inflow of funds and ended its guidance over commercial bank lending. On the fiscal side, the Japanese Government increased its expenditures in hopes of stimulating the economy and in hopes of replacing foreign financing of imports with domestic financing.

The effects of the economic slowdown were felt in the foreign trade sector through an increase in Japanese imports and also through export price increases. Although Japan's trade surplus continued to increase, it was increasing at a decreasing rate. The increase in exports was only 7.4% over 1969 as compared with 10.4% over 1968 when the upsurge in world trade was dominated by a steep rise of Japanese imports into the United States. Thereafter the primary impetus to the growth of world trade emanated from European and Japanese import demand.

Japan's unit labor costs increased fairly sharply during 1970 but not enough to close the significant gap that had opened up from 1966 through 1969 between the Japanese trend and the generally rising trend of competitors' costs. Japanese export prices, unlike those of most industrial countries, apparently rose faster than manufacturers' unit costs in 1970, but the Japanese competitive position was little affected, owing to the almost parallel movement of other countries' export prices.

The continuation of large surpluses in Japan's balance of payments was a prominent feature of the international payments situation. During 1968 and 1969, the Japanese current account balance had strengthened in contrast to the weakening that had occurred in past periods of rapid economic growth and the overall balance of payments had recorded substantial
surpluses. A somewhat larger surplus was realized in 1970, when the current account surplus again exceeded $2 billion and the net capital outflow declined. Further overall surpluses, on a much higher scale, accrued during the first six months of 1971, partly because of the sharp slowdown in import growth associated with the sluggishness of the domestic economy.68

As a result, in June 1971, the Japanese Cabinet decided to broaden and intensify efforts to achieve a better external and internal equilibrium by means of an eight-point program. It included "tariff reductions, acceleration of import liberalization, gradual abolition of tax concessions to exporters, removal of the limit on outward direct investments, promotion of development aid, and the flexible operation of fiscal and monetary policies so as to remove the effects of slack domestic demand on the trade surplus."69

The government tried to stimulate the domestic economy in hopes of ending the year and a half recession—an unusually long one for Japan. The government also tried to encourage imports of goods and exports of capital to help ease her huge trade surplus. (Current estimate: about $5 billion at an annual rate.70) That, of course, is the principal reason why Japan revalued the yen upward 16.88% in December 1971. In theory, faster domestic growth should also curb exports, but that won't necessarily happen.

Since Japan’s exceedingly large trade surplus has imposed considerable strains on the world economic system, particularly on the United States, it will be beneficial to take a closer look at Japanese foreign trade.
Japan has become a favorite target of those Americans who choose to look beyond U.S. borders to place blame for our problems in world trade. They prefer to regard Japan as a villain rather than simply ambitious; as a super exporter rather than a great consumer; and as a potential destroyer of U.S. industry rather than a great potential market.

Harold B. Scott, assistant secretary of commerce for domestic and international business, commented, "There is a tendency to pick on Japan as a whipping boy [since] Japan has merely exploited with greater success than anyone else our growing vulnerability."^71

One factor—productivity—accounts for much of Japan's ability to exploit U.S. vulnerability. In 1970 alone, exports from Japan to the United States rose by 20%.^72 Japanese productivity increases are by far the largest in the world, whereas the United States is improving its productivity more slowly than any other industrial nation. The following graph^73 illustrates this fact.

Annual Change (%)
Labor productivity is the single most important reason for Japanese success. Cited Japanese productivity gains were

9.5% annually for 1956-1960
7.7% annually for 1961-1965
14.7% annually for 1966-1970

However, when we look at Japan in reality it has two economies—a very advanced large-scale production economy and a relatively backward economy of small-scale production and retail shops. So that labor productivity increases were considerably higher than 14.7% among the modern plants.

On the other hand, productivity in the United States increased at an annual rate of little more than 2% through the 1960s—and less than 2% a year through the second half of that decade. The graph on the following page illustrates Japan's remarkable growth of industrial output as compared to that of the United States.

Fueling Japan's productivity growth and her trade policy has been the world's highest level of investment in new plant and equipment. Japanese investment through the '60s was about 33% of GNP with the U.S. rate of 16% among the lowest for industrial countries. In commenting on U.S. investment with regard to obsolescence of plant and equipment, Mr. Peter G. Peterson, the former Executive Director of the Council on International Economic Policy, stated:

We found in our work last year that the age of United States' industrial plant and equipment was roughly twice that of some of our major competitors. There is evidence that nearly 70% of Japan's machine tools are less than 10 years old. Only 35% of ours are less than 10 years old. And Japan's rate of investment has been twice ours for the period 1968-70.

This difference in investment levels is partly a result of another difference. In Japan, industry, labor, and government have a strong
Industrial Production
Index: 1958 = 100

(1st qtr.)
sense of national purpose and are united in a drive for common goals; whereas, in the United States, adversary relationships dominate interaction among the three sectors.

This same attitude carries over into labor in the way Japanese workers do their jobs. Labor welcomes increasingly automated equipment. In fact, Japanese workers are dismayed by the resistance of U.S. workers to automation. The Japanese regard more efficient tools merely as a way to increase production, decrease costs, and thereby increase sales. They see restrictive work rules, long strikes, and workers doing less than they are capable of doing as detrimental to their companies. And they are guided by the long-term view that what is detrimental to the company eventually will be detrimental to the worker. Contributing to this labor atmosphere is the fact that regular wages represent only about half of total pay—the rest coming in the form of semi-annual bonuses. "Nothing must interfere with the bonus."79

Levels of individual productiveness that result from this spirit contribute about as much as the high levels of investment to Japan's high rates of productivity increases—and to Japan's great success in the world market.

This success has resulted in several misconceptions about the Japanese. One of these is that Japan's industry is strongly directed toward flooding the rest of the world, particularly the United States, with transistor radios, small cars, and a variety of other products.

Quick appraisals of Japanese export increases might lead to this conclusion, but the hard figures refute it. Armin Meyer, former Ambassador to Japan, said: "A review of Japan's performance during the
last decade leads to the conclusion that, rather than being export-led, its economic expansion has been based primarily upon intensive domestic investment in plant and equipment which created a rapidly expanding domestic market.\textsuperscript{80} Japan's exports and imports as percentages of GNP, which approached the $200 billion mark for 1970,\textsuperscript{81} are quite low——one of Japan's strengths is its low reliance on foreign trade. For Japan exports represent about 9% of GNP, compared with 15 to 33% for the United Kingdom, West Germany, the Netherlands, and Sweden.\textsuperscript{82}

During the extended investment boom in Japan, plant and equipment investment in manufacturing accounted for up to 65% and occasionally more of total private investment. Now this ratio has declined to 50%, and no Japanese economist in government or out of it presently expects this ratio of 50-50 to change much over the next several years. If these forecasts are confirmed, a somewhat slower rate of economic growth can be expected which would cause a decline in the ratio of exports to GNP. The annual rate of increase of exports could settle within a range of 10 to 15%, compared to 17.1% for the 1960s as a whole and the 22.8% from 1968 to 1970.\textsuperscript{83} Although the statistics indicate that Japan is not the export-dominated nation it's often thought to be, the Japanese export/GNP ratio is more than double that of the United States.\textsuperscript{84} The largest single item giving Japan a trade surplus with the United States last year was automobile exports.\textsuperscript{85} As a result, the United States now takes one-third of Japan's exports of autos, one-half of its radio and electronic-calculator exports, and almost all of its color TV exports.\textsuperscript{86}
While U.S. exports to Japan increased more than three-fold, American imports from Japan during the 1960s increased at an even greater rate.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Two-way Trade</td>
<td>$2.6</td>
<td>$4.5</td>
<td>$6.0</td>
<td>$10.5</td>
<td>306%</td>
</tr>
<tr>
<td>U.S. Exports to Japan</td>
<td>1.4</td>
<td>2.1</td>
<td>3.0</td>
<td>4.7</td>
<td>222</td>
</tr>
<tr>
<td>U.S. Imports from Japan</td>
<td>1.1</td>
<td>2.4</td>
<td>3.0</td>
<td>5.9</td>
<td>412</td>
</tr>
</tbody>
</table>

As a result, the balance of trade, heavily in the U.S. favor during the 1950s first dwindled, and then turned in 1964. Since then, Japan's trade surplus has mounted almost every year. Our imports from Japan exceeded American exports to that country by over $3 billion in 1971.87 Japan's import-export ratio is somewhat distorted by Japanese affiliates of U.S. companies which have made a sort of capital flight getting rid of U.S. labor which priced itself far beyond the justifiable level. These affiliates are selling $4 billion of their products in Japan each year. A large proportion of that amount might have been imported from the United States if U.S. companies had not had operations in Japan. Figures also add that exports to the United States from the foreign subsidiaries of U.S. firms rose at an annual rate of 21% during the five years ended with 1968.88

And so Japan continues to flood the world with exports of low price and high quality, earning itself the grudging admiration of competitors but also upsetting world markets and aggravating the U.S. balance of payments. The following section of this paper seeks to look at the factors that have put Japan ahead in the great race for economic growth.
THE MAIN FACTORS IN JAPAN'S ECONOMIC GROWTH

The factors that produced or spurred Japan's economic growth are numerous, very complicated in their operation, and not yet fully agreed upon by economists. In addition, often the favorable factors of growth have to be operating in appropriate combinations before they can produce favorable results. All the same, a study of the remarkable Japanese economic success story must contribute to understanding some key factors in economic growth.

Putting Available Resources to Work

Even as late as 1949, E. A. Ackerman, an economic geographer on the staff of the American occupation authorities wrote:

In the light of an analysis of its resources, the Japan of the next three decades appears to have one of two aspects if its population continues to grow to 100 million or more:

1. It may have a standard of living equivalent to that of 1930-34 if foreign financial assistance is continued indefinitely.

2. It may be "self-supporting", but with internal political, economic and social distress, and a standard of living gradually approaching the bare subsistence level.89

Twenty years later, supporting a population just over 100 million, Japan's GNP has become the second largest in the non-Communist world.

Geographers have usually turned the fact that Japan is extremely short of raw materials into a disadvantage. The Japanese have turned this lack of domestic sources to their advantage, because Japanese industry is not compelled to buy expensive and/or inferior domestic materials but can buy from the cheapest source in the whole world.

Another Japanese limitation is an extreme shortage of land, especially flat land. As a result, heavy industry often had to be
located over reclaimed sea area. This location of industry, plus the fact that the vast majority of raw materials are imported have been turned to an advantage by building specialized giant ships (which reduce the cost of transport) and by unloading coal and iron ore directly from the ships into the blast furnaces (which reduces handling costs).

The Importance of Structural Change in the Economy

Although the Japanese "economic miracle" has been produced partly by the mass of Japanese workers learning to do their jobs better, the biggest source of growth has been in a continuing, conscious, and deliberate structural change of the economy. In other words, factors of production have been moved out of unprofitable and unpromising industries into industries that promised greater returns.

In Japan, agriculture was for a long time the very basis of growth and the source of resources for growth in other sectors. Then structural change was aimed at labor intensive industries—which was sound because the country had plenty of labor—and there came the development of light consumer-goods industries, especially textiles, to be followed by a stress on simpler heavy industries. In the present stage, aimed at skilled labor and labor intensive industries, entry has been made into the most sophisticated modern gadget industries and the chemical industry.

It is obvious that shifting millions of workers in the post-war period from low-wage (and in Japan unprofitable) agriculture, or from small retailer and small manufacturer sectors into high wage modern
profitable industries, produced large increases of GNP without the necessity for working harder, or without people necessarily working with any greater originality or intelligence. This fact, however, should not be allowed to minimize Japan's extraordinary achievement. Having a large inefficient sector in the economy is not a sufficient condition for economic growth. The crux of the problem lies in the fact that the larger the inefficient sector in the economy, the greater the inertia of that economy, and the harder the task of performing the structural shift.

The Role of Education

After World War II, Japan single-mindedly adopted the principle: "Economic Growth First". The mobilization of the national effort for development was aided by the early and rapid introduction of universal education.

Before the 20th century began, literacy in Japan was almost 100%. Japan was, in fact, among the pioneers of universal compulsory education. In order to use the schools to breed patriotic citizens, the Government assumed a monopoly over textbook manufacture in 1903. The result was an almost total uniformity of education experience in the first six school years of the life of every Japanese child. This homogeneity of popular intellectual culture preserved and strengthened Japanese nationalism to such an extent, that the Westernization of Japanese intellectual and cultural life in the post-war period had the paradoxical effect of heightening the Japanese' sense of their separateness.
Education is highly prized in Japan, and Japanese parents are prepared to make great financial sacrifices to obtain admission to a university for their children. A university degree is now essential for most white-collar jobs, and it is not uncommon for factory foremen to have university degrees.

The Importance of Exports and the Flow of Foreign Exchange

The development of a backward country requires a substantial flow of foreign exchange for the purchase of foreign capital equipment and expertise which cannot be obtained at home. This means that unless there is a possibility of substantial foreign borrowing and aid, the developing country must develop a healthy and lively export industry. With the development of export trade, much of the increased output of the rapidly developing country will be sold abroad and will act as a growth stimulant in the backward economy. If, however, they must be sold as consumer goods in the domestic market, this implies that all, or almost all, of the income is consumed at home, and saving and investment will be low. This would undermine the whole basis of development. If, on the other hand, saving is maintained at a high level, if there is no attempt to consume the bulk of the increase in output, and the increased output is not sold abroad, this would constitute a serious drag on growth and activity.

There is an additional reason why a healthy and growing export market is vital for development. A small domestic market in an underdeveloped country does not allow the development of large scale production with its important economies of scale. But if the developing country can find a substantial market abroad either because of sheer
luck or through its own efforts to create an export industry, it cannot help growing. For any single country the world market is so large that it will take increasing quantities of output without the necessity of lowering price.

The Role of Foreign Capital

Japan, in spite of her meager natural endowment, has been quite fortunate in respect to foreign trade and foreign exchange availability although she has borrowed very little and permitted very little foreign investment at home. To this day she retains a very strong disinclination to let in foreign investment, in spite of the equally strong present diplomatic pressure by the United States to allow more foreign capital investment in Japan. In fact, one can say that the Japanese economic growth miracle has been performed virtually without foreign capital. The main reasons for this are very strong Japanese nationalism and fear of foreign economic and political domination.

Active Policy of Importing Foreign Know-How

Since World War II, mainly during the period of the American occupation, Japan has received some direct private investment in modern industries—quantitatively unimportant, but very important qualitatively because it was the vehicle of spreading know-how and modern technology. "Since 1949, when the Government introduced a system for assisting introduction of foreign know-how and until the beginning of 1969, Japanese industry signed 9,856 contracts with the advanced countries" for the purchase of foreign technology in a vast range of industries, such as petro-chemicals, synthetic resins,
synthetic fibers, electronics, atomic energy, automation technology, motor cars, and many others.

Japan A Creditor Country Again

In recent years Japan has emerged from the status of a net debtor country into being a net creditor. From now on Japan's creditor status will grow steadily, barring any really extraordinary developments in the world. This will be so for three separate reasons:

1) First, owing to the remarkable competitiveness of Japanese products in the world markets (evidence of the undervaluation of the yen), the Japanese share of world trade is growing very fast, and her balance of payments is very healthy. As a result, the Japanese Government will very likely easily give approvals for investment abroad and may even encourage it in order to disarm international pressures on Japan for liberalization of import barriers and/or for further upward revaluation of the yen because large overseas investment will tend to prevent foreign currency reserves from growing excessively.

2) The second reason why Japan is likely to increase her foreign investment abroad is rapid growth from now on of the motive—domestic know-how. Export of capital usually has as a vehicle and as an engine some form of superior know-how.

3) Another reason lies in the fact that such foreign investment confers several indirect benefits on Japan or Japanese firms, apart from the obvious direct benefit in the form of a dividend. Japanese foreign investment, like any investment abroad, can have the following indirect effects:

a) Investment made for the purpose of utilizing local (foreign) resources may increase exports of Japanese capital equipment and parts for the finished product, especially where under-developed countries are involved.

b) Industrial investment made abroad under the protective trade barriers of the country in question may be an effective means of beating competition of other countries in that market.

c) Some investments abroad are made to facilitate marketing, such as distribution agencies and servicing or repair agencies.
d) Because Japanese industry and government are very conscious of their dependence on foreign supplies of essential raw materials, they have developed a remarkable policy of investing in foreign extractive industries. By offering different supplier countries long-term contracts and by putting some capital into the extraction venture the Japanese stimulate price undercutting and competition among the supplying countries and stimulate an increase in the world capacity of the particular mining industries. This must bring down the prices of the raw materials—which is to the advantage of Japan—it improves her terms of trade.93

The fact that Japanese investment policy is designed both to protect sources of supply and to expand export markets for Japanese products is reflected in the variety of her investments. To obtain access to import sources, Japan has invested in "forest land in Alaska, oil-drilling sites in Saudi Arabia, copper mines in Canada, Peru, and the Philippines, iron ore sites in Malaysia and Chile and coal mines in Australia."94 To guard against the threat of restrictions on Japanese exports, Japan has established "manufacturing plants in low-wage countries, such as auto-assembly plants in Thailand, Mexico, and Brazil and textile mills in Korea, Taiwan, Thailand, Malaysia, Singapore, and Brazil."95 In fact, Japan now records the world's highest level of investment in new plant and equipment.

The Importance of Silk

Silk, which dominated Japan's trade in the pre-World War II period, was a good foreign exchange earner for Japan since European silk production was greatly reduced by silkworm disease. After World War II, when nylon was developed, Japan was already geared for the development of textile manufacturing. Few other countries with low wage labor were technologically geared to create effective competition.96
The Industrial Stagnation in Asia

Japanese trade also benefited from the under-developed conditions in most of the poorer countries of Asia. If these countries had not been in such a low stage of technological development, they would have been pushing their own exports, similar to those of Japan, and would have seriously cut in on Japan's growing trade surplus.

Undervaluation of the Yen

Following World War II, Japan had the advantage of undervaluation of the yen which gave a stimulus to exports (made them less expensive in foreign markets) and thereby to domestic expansion, directly and indirectly. Usually, a surplus in the balance of payments created by an undervaluation of the currency creates domestic inflationary pressures. However, as long as there is some unemployed manpower to absorb, and wage rates are held down by some means or other, and consumption is held down by social forces or fiscal policies as the total of incomes goes up, the undervaluation of the currency can be maintained. In such a case the increases in export receipts can be used for importing producer goods for increased investment instead of resulting in increased wage rates.

Japan has been able to maintain an undervaluation of her currency in the post-war period, because much of the present exports are not labor intensive but capital intensive and come from industries with large economies of scale and fast technological progress. Consequently, the inflationary pressures that appeared in the mid-sixties did not affect the export prices. However, since the spring of 1969 a sharp
rise of prices and wages has caused export prices to increase (see graph p. 21). This was the first time since World War II that restrictive policies had to be taken for purely domestic considerations.

Capital Formation

Economic progress is closely connected with the rate of capital formation. In Japan, the rate of capital formation has been high because the incentives to invest in newly-produced capital assets have been sustained at a high level. Since World War, everything has been subordinated to economic growth. Not many developing countries pursue the objective of economic growth with the same devotion and single-mindedness. In that single-mindedness, the economic drive of the national leadership has been met by the fullest cooperation of the whole population. It is only since the Social and Economic Development Plan 1967-1971, that public amenities, distribution of incomes, welfare effects of public finance, etc. are receiving some attention.

U.S.-Japan Security Treaty

Another reason why Japan has been able to single-mindedly pursue the objective of economic growth is that she has not had to devote her resources to the maintenance of a large Japanese armed forces. Under the American military and political umbrella, Japan has managed to take a great leap forward into world economic leadership, while being content to look like a political nonentity. The peace treaty is saving Japan very large sums of money every year in defense expenditures, and in this atomic age she is defended even better than if she relied solely on her own expensive forces. In addition, although she is an ally of
the United States, she has been exempted from all the burdens of the involvement in the Korean and Vietnam wars.

High Saving Ratio

Since Japan has raised herself by her own boot-straps, it is clear that the Japanese have made a tremendous saving effort. They provided out of their unconsumed, often meager, incomes, all the resources needed for the development of the country. The Japanese were able to save a great deal when they were very poor, and now that they are becoming prosperous they are saving a higher percentage of income than any other nation. The average rate of saving reached a level in excess of 30% in 1960\(^98\). In the sixties, gross savings in Japan rose to nearly 40% of GNP, of which 50% was by companies, 30% personal, and 20% by the government.\(^99\) This fact is sometimes explained by an adjective: the Japanese are very thrifty. Furthermore, the Japanese are frugal.

Factors inducing the Japanese to save so much are

--an inadequate social security system.
--consumption lag in a rapidly growing economy.
--the housing shortage and absolute shortage of housing land.
--the wage system with a substantial bonus payment once or twice a year, which is likely to be saved since it comes at the end of the period.
--an increasing share of property income accruing to the higher income group which has a higher saving ratio.

One could add to this the under-developed state of consumer credit, and the increasing stress put on university education in the post-war
period, which has been forcing parents to save more and more for the high educational costs.

The Government-Business Relationship

Japan's unparalleled rate of economic growth has been facilitated by an almost unique relationship between business and government in that country. The business community has a high respect for the intelligence, education, and general expertise of the Japanese Economic Planning Agency personnel. Thus, advice coming from the national plan adopted by the government commands respect and attention, though not necessarily compliance by the business community. Generally, where the plan coincides with private interest it will be followed, but if it goes against private interest it may be ignored unless the business community is very public-spirited. It is a fact that the Japanese business community, like the average Japanese, is extremely conscious of its obligations to the country, so that it will often follow a course of action that would not maximize private gain, but there are limits to this. The important fact is that, on the whole, the Japanese plans prescribe a course of action for the business world that is in their long-run interest.

It is a striking feature of the Japanese economy that the export surplus has increased rapidly while domestic demand has also grown substantially. Indeed there is some controversy about the matter, and the following section of this paper seeks to investigate the importance of the export market versus the importance of the domestic market.
EXPORT-OR DOMESTIC-ORIENTED ECONOMIC GROWTH

Japan is still the only developed nation in Asia possessed of one of the largest and fastest growing economies in the world. This extraordinary record was dramatized when in 1968 Japan moved ahead of West Germany into third place in the international growth league, with a gross national product (at current prices) of $142 billion. 100 Only the United States, and the Soviet Union now produce a greater value of goods and services than Japan. In 1970, Japan's GNP, which grew to nearly $200 billion, was still about one-fifth that of the United States and something less than a half as large as the Soviet Union's. But in terms of rate of growth, Japan forged ahead in striking fashion during the 1960s, outranking any other major industrial nation as indicated by the following table: 101

<table>
<thead>
<tr>
<th></th>
<th>GNP at Constant Prices</th>
<th>Average Annual Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1950-60</td>
<td>1960-70</td>
</tr>
<tr>
<td>Japan</td>
<td>9.1%</td>
<td>11.3%</td>
</tr>
<tr>
<td>West Germany</td>
<td>7.9%</td>
<td>4.7%</td>
</tr>
<tr>
<td>France</td>
<td>4.5%</td>
<td>5.6%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2.8%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Italy</td>
<td>5.6%</td>
<td>5.7%</td>
</tr>
<tr>
<td>United States</td>
<td>3.2%</td>
<td>4.2%</td>
</tr>
</tbody>
</table>

While exports have contributed to Japan's economic growth, substantially so in some instances, their importance has often been over-emphasized in this connection. Indeed, Japan's dependence on exports, while greater than in the case of the United States, is a good deal less than that of many other nations as indicated in the table on the following page. 102
Exports, 1969

<table>
<thead>
<tr>
<th></th>
<th>Value ($ billion)</th>
<th>As % of GNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>$37.4</td>
<td>4.0%</td>
</tr>
<tr>
<td>Japan</td>
<td>16.0</td>
<td>9.6</td>
</tr>
<tr>
<td>France</td>
<td>15.0</td>
<td>11.5</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>17.5</td>
<td>16.0</td>
</tr>
<tr>
<td>West Germany</td>
<td>29.1</td>
<td>19.2</td>
</tr>
<tr>
<td>Canada</td>
<td>14.3</td>
<td>19.8</td>
</tr>
<tr>
<td>Belgium</td>
<td>10.0</td>
<td>44.1</td>
</tr>
</tbody>
</table>

It is quite obvious that fast economic growth goes together with a lively export performance; however, the opposing school of thought must also be given some attention. W. W. Lockwood, author of the book, *The Economic Development of Japan: Growth and Structural Change*, concludes that although "...the fortunes of the export trade made the difference between prosperity and depression in Japan... it was in the domestic market that was 'the chief stimulus to growth'." He points out that Japan was dependent on export markets before World War II, but since World War II her growth has been fed by the emergence of a mass consumption society in Japan.

The Japanese have always had a sense of national community because they tended to remain isolated from Western contacts; and the Westernization of Japanese intellectual and cultural life had the paradoxical effect of heightening the Japanese sense of their separateness. Their increased contact with things foreign served to enhance their awareness of their nationality.

The assimilation of Western material culture has followed a similar pattern. The label 'Western' is still firmly attached to most importations. Houses have rooms and 'Western' rooms; one wears a kimono or 'Western' clothes; one has rice with one's meals or eats 'Western'...
food. "This persistence of valued traditional elements helped to foster national consciousness in two senses: by serving as symbols of pride in national traditions, and by keeping alive a sense of alienness even of fully assimilated Western importations." 104

Around 1960, the awareness began to spread among the Japanese that their economy was expanding at a faster rate than that of any other industrial country. Favorable foreign appraisals of Japan's economic performance were given prominent attention and have provided the basis for a new sense of national pride—in the superior ingenuity and dynamism of Japanese businessmen, in the success of Government planning, and in the energy and skill of Japanese workers. It also provided a new objective: to keep Japan ahead in the growth-rate stakes; to produce more and more transistorized television sets and racing motorbikes to evoke the admiration of the outside world.

This sense of nationalism has produced a mass consumption society in Japan. Paradoxically, a nation of unparalleled savers has also become one with a high propensity to consume. The Japanese speak of a "consumption revolution." The three C's—color TV, air conditioner, and car have become the goal of almost every Japanese family. 105

Although in income per capita Japan ranks only fifteenth among the nations of the world (U.S. $1,887 in the Japanese Fiscal Year ending 31 March 1970) 106 she is in some ways extremely modern. Indeed she is almost completely up-to-date in the ownership of all new industrial gadgets as the table 107 on the following page indicates. By 1970, more than 90% of households in Japan owned at least one TV set, washing machine, and refrigerator, 108 and as of December 1972, three-fifths of
Japanese households now own a color TV. The acquisition of these and other consumer durables accelerated rapidly during the 1960s and brought on the "consumption revolution."

To investigate whether Japan's economic growth has been based on a growing export surplus or on private domestic consumption, I collected United Nations' data over the period 1953-1968 in the areas of Gross National Product, Exports, and Private Consumption Expenditures. While primarily interested in these areas, I also collected data over the same period on Imports and Gross Domestic Fixed Capital Formation since these areas are also of vital interest in examining Japan's economic growth.

The data and the graphs made from them follow on the succeeding pages. Each graph follows the same basic exponential curve, and in each case the upsurge occurs during the 1960s.
<table>
<thead>
<tr>
<th>Year</th>
<th>Expenditure on Gross National Product (thousand million yen)</th>
<th>Exports of Goods and Services</th>
<th>Imports of Goods and Services</th>
<th>Private Consumption Expenditure</th>
<th>Gross Domestic Fixed Capital Formation (at current market prices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1953</td>
<td>7055</td>
<td>724</td>
<td>849</td>
<td>4665</td>
<td>1549</td>
</tr>
<tr>
<td>1955</td>
<td>8624</td>
<td>921</td>
<td>872</td>
<td>5529</td>
<td>1704</td>
</tr>
<tr>
<td>1958</td>
<td>11522</td>
<td>1270</td>
<td>1104</td>
<td>7057</td>
<td>2940</td>
</tr>
<tr>
<td>1960</td>
<td>15499</td>
<td>1715</td>
<td>1638</td>
<td>8823</td>
<td>4682</td>
</tr>
<tr>
<td>1961</td>
<td>19125</td>
<td>1795</td>
<td>2096</td>
<td>10106</td>
<td>6370</td>
</tr>
<tr>
<td>1962</td>
<td>21199</td>
<td>2070</td>
<td>2027</td>
<td>1146</td>
<td>7136</td>
</tr>
<tr>
<td>1963</td>
<td>24464</td>
<td>2270</td>
<td>2461</td>
<td>13768</td>
<td>7875</td>
</tr>
<tr>
<td>1964</td>
<td>28838</td>
<td>2802</td>
<td>2851</td>
<td>15945</td>
<td>9404</td>
</tr>
<tr>
<td>1965</td>
<td>31787</td>
<td>3452</td>
<td>2987</td>
<td>17929</td>
<td>9767</td>
</tr>
<tr>
<td>1966</td>
<td>36544</td>
<td>4033</td>
<td>3435</td>
<td>20335</td>
<td>11344</td>
</tr>
<tr>
<td>1967</td>
<td>43095</td>
<td>4315</td>
<td>4213</td>
<td>23117</td>
<td>13965</td>
</tr>
<tr>
<td>1968</td>
<td>51077</td>
<td>5353</td>
<td>4763</td>
<td>26682</td>
<td>17242</td>
</tr>
</tbody>
</table>
GNP (thousand million yen)
Exports (thousand million yen)
Imports (thousand million yen)
Gross Domestic Fixed Capital Formation

(thousand million yen)
Procedure: Next, I set up four correlations to test whether—

(1) there is a statistically significant correlation between the amount of GNP and expanding exports,

(2) there is a statistically significant correlation between the amount of GNP and private consumption expenditures,

(3) there is a statistically significant correlation between the amount of GNP and expanding imports,

(4) there is a statistically significant correlation between the amount of GNP and gross domestic fixed capital formation.

Calculations (in ten thousand million yen):

(1) where $X = \text{GNP}$, and $Y = \text{Exports}$

\[
\begin{align*}
\bar{X} &= 2490.3333 \\
\bar{Y} &= 256 \\
\sum X^2 &= 95,550,946 \\
\sum Y^2 &= 1,018,928 \\
\sum XY &= 9,853,322 \\
n &= 12 \\
r &= .9939
\end{align*}
\]

(2) where $X = \text{GNP}$, and $Y = \text{Private Consumption Expenditure}$

\[
\begin{align*}
\bar{X} &= 2490.3333 \\
\bar{Y} &= 1381,0833 \\
\sum X^2 &= 95,550,946 \\
\sum Y^2 &= 28,458,731 \\
\sum XY &= 52,105,012 \\
n &= 12 \\
r &= .9985
\end{align*}
\]
(3) where $X = \text{GNP}$, and $Y = \text{Imports}$

\[
\begin{align*}
\bar{X} &= 2490.3333 \\
\sum x^2 &= 95,550,946 \\
\sum xy &= 9,225,982 \\
r &= .9972
\end{align*}
\]

\[
\begin{align*}
\bar{Y} &= 244,1833 \\
\sum y^2 &= 892,562 \\
n &= 12
\end{align*}
\]

(4) where $X = \text{GNP}$, and $Y = \text{Gross Domestic Fixed Capital Formation}$

\[
\begin{align*}
\bar{X} &= 2490.3333 \\
\sum x^2 &= 95,550,946 \\
\sum xy &= 30,761,508 \\
r &= .9968
\end{align*}
\]

\[
\begin{align*}
\bar{Y} &= 783,166/ \\
\sum y^2 &= 9,942,764 \\
n &= 12
\end{align*}
\]
Private Consumption Expenditures (thousand million yen)
Conclusion

My findings could not be more obvious. In each case I found a nearly perfect correlation between the two parameters I tested. My findings seem as improbable as Japan's fantastic rate of economic growth, but perhaps these correlations can help explain this phenomenal growth.

My study basically shows that exports, imports, consumption, and investment have kept pace with each other to provide both the fuel and the spark to ignite the fuel in the engine of economic growth. As with all correlations, statistics will never answer the question of which way the causal relationship goes. Do high exports promote high economic growth rates or the other way around, or do they promote each other, or are they both independent of each other but promoted by a third factor such as private consumption. Or does high private consumption promote high economic growth rates or the other way around, or do they promote each other, or are they both independent of each other but promoted by other factors such as expanding imports and increasing capital investment?

Let us suppose that in fact the fast economic growth was export-led or export-oriented. Does it not follow that the very fast economic growth of the Japanese economy produced by that export explosion having produced large domestic income and therefore purchasing power, would ultimately have to make the newly domestic market the main source of effective demand?

In any case, the Japanese economic growth, however led, was successful, and has moved Japan into a new era of international relations.
NEW ERA OF INTERNATIONAL RELATIONS

It used to be that the Japanese looked upon the United States as a big brother—someone who watched over them. We are the ones who occupied Japan at the end of World War II and helped set her on her feet again. And we are the ones who for the past twenty-eight years have provided this country with a protective shield—the so-called "nuclear umbrella"—which has enabled her to devote herself to economic buildup.

However, Japan's security has attained a stage in this new era where it depends more on the power of its industry and continued availability of its technical and trading genius than it does on an American atomic umbrella or potential Japanese army. Japan's GNP today is such that Japanese businessmen are rapidly taking over markets in a way the generals who preached a greater East Asia co-prosperity sphere never imagined.

The United States recreated Japan in its own image, but sooner or later everyone knew she would have to break away. Many Japanese feel the time has finally come. Says one American official: "They are not yet ready to pull away from us completely, but the old passive reliance is surely going. They are looking for a new direction, and a far more active image than they've had in recent years."

It is just such an image that Kakuei Tanaka offered Japan, when eight months ago he became Japan's Prime Minister. At 54, the stocky, muscular, gravel-voiced Tanaka is the youngest man to rule Japan in the post-war era. Besides, unlike his predecessors, who were university-trained, polished diplomats, Mr. Tanaka has had only a grade-school
education, and though he's more American in behavior and outlook than any previous Premier of Japan, he's his own man.

He is frank to admit that the Japanese were stunned by the Nixon shocks of 1971—the 10% import surcharge on Japanese products and the radical change in American policy toward China, a change made without first notifying the Japanese. However, he expects Japan to maintain friendly relations with the United States, but no longer as the obedient, unquestioning follower it once was. Japan and the United States are entering a new relationship, one in which they are in many ways equal partners.

Hawaii Summit Talks

This new status that Japan has achieved was particularly evident at the August 1972 Hawaii summit talks between President Nixon and the Japanese Prime Minister. The summit produced a short-term $1.1 billion agreement to ease America's acute trade imbalance. The emergency pact will put a dent in the current $3.8 billion annual deficit the United States runs up in trade with Japan. Nixon said his government will urge U.S. firms to expand the volume of exports through increased productivity and improved market research to Japan. And Tanaka said the government of Japan intends to reduce the imbalance to a more manageable size within a reasonable period of time.  

Key elements of the trade package worked out between the two countries were

--Japanese airline companies will purchase, with the aid of the Tanaka government, $320 million worth of aircraft, including
wide-bodied "airbuses" during the next 20 months.

--Japanese power companies will purchase during an unspecified future period $320 million in "uranium enrichment services" from the United States.

--Japan will buy $20 million in helicopters and aviation-related facilities "subject to budgetary appropriation."

--Japanese purchases of agricultural, forestry and fishery products during the year ending March 31 (1973) will increase about $390 million, and in addition, "It is expected that there will be about $50 million in special grains of purchases on the basis of reasonable prices."

The document also contained one surprise—an agreement that the governments would use their best efforts to establish at any early date a joint working group to study the feasibility of a joint venture for construction in the United States of a gaseous diffusion enrichment facility. This facility, which the statement said would involve total investment of about $1 billion, would be used to produce enriched uranium for peaceful uses such as nuclear power plants. The United States has long sought to capitalize on its technological edge in this field.

On the trade question, Nixon and Tanaka agreed it would be most valuable to hold future meetings at a high level to review evolving economic relationships. And, the leaders said, they intend to hold a meeting of the joint U.S.-Japanese trade committee sometime in 1973.
Bending Japan’s Trade Barriers

Nevertheless, the prospect for any quick surge of U.S. exports to Japan remains dim. Japanese businessmen have long held the flow of foreign consumer goods into their country to a trickle, while pumping ever more of their own products into world markets—particularly the United States. The Japanese eagerly buy American industrial raw materials—coal, steel scrap, and lumber—but the obstacles they put in the way of foreign manufactured and consumer goods are still high.

For example, due to the presence of outsized Japanese taxes based on a product’s cost, a set of golf clubs that sells for $200 in the U.S. can go for as high as $500 in Japan; a pair of shoes that can be bought in America for $48 costs Japanese consumers $110.116

Some of these hurdles can, and no doubt will, be lowered or removed as a result of further trade talks; the Japanese seem to realize that their import practices must be liberalized if they are to avoid more protectionist retaliation against their own goods abroad. However, Japan is not an easy market. The Japanese internal distribution system is a maze of middlemen, each taking his cut and pushing import prices much higher than expected—and this, probably the most formidable of the obstacles, cannot be lowered by diplomatic negotiations.

Japanese-Chinese Relations

Another move agreed upon at the Hawaii summit talks was the decision that Japan and the U.S. each go their own way in improving relations with the People’s Republic of China, with no effect on the U.S.-Japanese mutual security treaty, a key element in the U.S.-Asian
policy (especially concerning the U.S. commitment to Taiwan). This decision was made in view of the formal announcement on August 13, 1972, that Tanaka had succeeded in having himself invited to Peking with the assumption that the proposed visit would normalize Japanese-Communist Chinese relations.

The agreement by Peking and Tokyo to end their seventy-eight years of hostility opened a new era of hope for a more peaceful, prosperous, and stable Asia. Tanaka said that normal relations are only the first step, and that he will try his best to continue the trend of rapprochement and attempt to capture for Japan the vast Chinese market for Nipponese products and technological know-how. By establishing normal relations with China, Japan has given herself maneuvering room as a new balance of political power emerges in Asia—a balance she now holds. Adding this credit to her endless list of accomplishments, she has achieved in only a few short decades what has taken centuries to develop in the West—the creation of a modern nation, with a modern industrial structure, and modern political institutions. The question that Japan now faces to answer is, "Can she survive economic growth?"
CAN JAPAN SURVIVE ECONOMIC GROWTH

As a country with perhaps the world's highest and most sustained rate of economic growth, Japan is a fascinating study not only of rapid industrialization but also of the environmental disruption that results when modernization comes too fast and haphazardly. In Japan, superexponential growth has so befouled the air and water that pollution has directly caused outbreaks of serious disease and death. In fact, to the visiting ecologist, Japan suggests what might happen the day before the earth poisons itself to death. It almost seems as if the Japanese had agreed to conduct a laboratory experiment to demonstrate the kinds of ecological horrors man is capable of inflicting upon himself without having to go to war.

The underlying factors are not much different from those in other industrialized countries like the United States and the Soviet Union. It is just that they have all exploded so much faster and with a much greater intensity in the crowded Japanese islands. After World War II the glorification of an ever larger GNP formed the basis of a new materialism, which became a sacred obligation for all Japanese governments, businesses and trade unions. Anyone who mentioned the undesirable by-products of rapid economic growth was treated as a heretic. Consequently everything possible was done to make conditions easy for the manufacturers. Few dared question the wisdom of discharging untreated waste into the nearest water body or untreated smoke into the atmosphere. This silence was maintained by union leaders as well as most of the country's radicals; except for a few isolated voices, no one protested. An insistence on treatment of the various effluents would have necessitated
expenditures on treatment equipment that in turn would have given rise to higher operating costs. Obviously this would have meant higher prices for Japanese goods, and ultimately fewer sales and lower industrial growth and GNP.

The reluctance to divert funds from production to conservation is explanation enough for a certain degree of pollution, but the situation was made worse by the type of technology the Japanese chose to adopt for their industrial expansion. For the most part, they simply copied American industrial methods. This meant that methods originally designed for use in a country that stretched from the Atlantic to the Pacific with lots of air and water to use as sewage receptacles were adopted for an area a fraction of the size. Moreover the Japanese diet was much more dependent on water as a source of fish and as an input in the irrigation of rice; consequently discharged wastes built up much more rapidly in the food chain.

The rapid industrialization was accompanied by a similar rapid urbanization. The rural population, which constituted 48% of the population in 1930, fell to 20% in 1970. The rest of the population has crowded into the cities, bringing additional wastes. Moreover as the national and personal wealth of the country has grown, consumption has increased at an even faster rate. This means not only more solid and liquid wastes waiting for disposal but also an increase in congestion and combustion—inevitable by-products resulting from the increase of automobiles from twenty-three thousand cars in 1947 to two million in 1970. Moreover even though Japanese cars intended for the American market had been equipped with exhaust controls for some time,
no such equipment was required on Japanese cars produced for the
domestic market until late 1970.

It was not until 1970 that the Japanese government agreed to con­
front the problem of pollution. By that time, the immense industrial
and population concentrations had aggravated air and water pollution
to such an extent that there was, and still is, an urgent need to
increase the amount of investments in such urban projects as sewage
systems, housing waste disposal, and road construction. However, the
existing industrial zones have already run out of space for new plants,
forcing industries to seek and develop large tracts of land in locations
far removed from the cities and towns. This will drastically increase
the financial burden on industry and on the Government.

Now, however, the Government is in the process of switching its
domestic policies from economic growth to those centered around improv­
ing the welfare and environment of the people—by increasing consumer
spending, by cutting pollution, and by building the homes, roads,
schools, hospitals and other public facilities that were shoved aside
during the initial industrialization drive.

Kakuei Tanaka, Japan's pragmatic premier, plans to remodel his
entire nation. "He talks of creating a hundred new cities, each of
250,000 population, and constructing a thousand new dams, mechanizing
agriculture, and building a vast communications system." According
to the premier, his basic priority is to accelerate Japan's internal
development. He claims that this year's budget of $48 billion allotted
more than 60% to this program which he calls equivalent to Franklin
Roosevelt's New Deal except that this "grand design" was not inspired by economic depression. Within two years, the shift of national funds to domestic requirements and regularization of commercial and monetary relationships can, he believes, improve Japanese living standards while simultaneously bringing about Japan's second economic miracle. (The first supposedly came to an end two years ago last summer when the industrialization boom of the 1960s ended.)

The second economic miracle will not be as splashy as the first one was, though. Real national production soared at a 12-to-13 percent a year pace in the late 1960s. The forecast for the years ahead is a more modest, but by Western standards still startling, 9 percent a year increase.

When will it end?

Osamu Shimomura, the economist who devised the 1960 "income-doubling" plan that started the first miracle, says he believes it will be another 10 years before Japan has a relatively mature economy.

Saburo Okita, president of the prestigious Japan Economic Research Center, agrees. He predicts that the growth rate will slow to 9 percent in the rest of the 1970s from a surprising 10 percent for 1972 and that it will slow again to 6 percent in the 1980s. Considering that the United States by way of contrast, considers that it is doing well if it can grow at an average rate of 4 1/2 percent a year, it seems certain that Japan will become the Country of the Century.
## Recent Accelerated Pace of Export Trade

![Diagram showing export and import trends](chart.png)

### Table A.6. Exports of market economies, by country group, 1961-1971 (Percentage)

<table>
<thead>
<tr>
<th>Country group</th>
<th>Quantum</th>
<th>Value f.o.b. in dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average annual</td>
<td>Change from</td>
</tr>
<tr>
<td></td>
<td>rate of change,</td>
<td>preceding year</td>
</tr>
<tr>
<td>Total</td>
<td>8.0</td>
<td>9.0 5.9</td>
</tr>
<tr>
<td>Developed market economies</td>
<td>8.4</td>
<td>9.2 6.0</td>
</tr>
<tr>
<td>North America</td>
<td>6.5</td>
<td>7.9 0.6</td>
</tr>
<tr>
<td>Europe</td>
<td>8.7</td>
<td>8.5 6.9</td>
</tr>
<tr>
<td>EEC</td>
<td>10.0</td>
<td>10.5 6.8</td>
</tr>
<tr>
<td>EFTA</td>
<td>6.3</td>
<td>5.3 4.2</td>
</tr>
<tr>
<td>Japan</td>
<td>16.3</td>
<td>14.0 19.7</td>
</tr>
<tr>
<td>Southern hemisphere</td>
<td>6.6</td>
<td>9.0 6.1</td>
</tr>
</tbody>
</table>
'You make me feel at home'

NIXON and TANAKA at the Hawaii summit talks.
Footnotes


5 Ibid., p. 50.


7 Ibid., p. 41.

8 Ibid., p. 42.

9 Ibid., p. 41.


11 Based on data from International Monetary Fund. International Financial Statistics.


13 Ibid., p. 25.

14 Ibid., p. 55.

15 Ibid., p. 54.

16 Ibid., p. 21.

17 Ibid., p. 91.

19 Ibid., p. 36.

20 Ibid., p. 100.

21 Ibid., p. 100.

22 Ibid., p. 53.

23 Ibid., p. 101.


26 Ibid., p. 39.


28 Ibid., p. 99.

29 Ibid., p. 98.

30 Ibid., p. 98.


32 Ibid., p. 54.

33 Ibid., p. 54.

34 Ibid., p. 48.


36 Ibid., p. 86.

37 Ibid., p. 142.

38 Ibid., p. 86.


41 Ibid., p. 55.


43 Ibid., p. 70.

44 Ibid., p. 72.


46 Ibid., p. 58.

47 Ibid., p. 6.


50 International Monetary Fund. Annual Report of the Executive Directors for the Fiscal Year ended April 30, 1967. p. 84.


53 Ibid., p. 49.

54 Ibid., p. 48.

55 Ibid., p. 54.

56 Ibid., p. 38.


Ibid., p. 74.

Ibid., p. 56.

Ibid., p. 92.

Ibid., p. 56.

Ibid., p. 8.

Ibid., p. 64.

Ibid., p. 54.

Ibid., p. 93.


"Are We Seeing Japan All Wrong?" Industry Week, February 28, 1972, p. 26.


"Are We Seeing Japan All Wrong?" p. 26.

Ibid., p. 27.


"Are We Seeing Japan All Wrong?" p. 27.
Peter G. Peterson, former Executive Director of the Council on International Economic Policy, speech on February 9, 1972.

"Are We Seeing Japan All Wrong?" p. 28.

Ibid., p. 28.

"Surface Calm." p. 33.

"Are We Seeing Japan All Wrong?" p. 28.


"Are We Seeing Japan All Wrong?" p. 28.


"Are We Seeing Japan All Wrong?" p. 28.


Bieda, p. 20.


Bieda, p. 50.

Bieda, pp. 33-34.

Ma, p. 131.

Ma, p. 131.

Bieda, p. 38.


Ibid., p. 15.

Kaplan, p. 2.

Kaplan, p. 3.

Kaplan, p. 3.

Bieda, p. 29.


Kaplan, p. 4.

Kaplan, p. 3.

Bieda, p. 2.

Kaplan, p. 4.


Ibid., p. 1, col. 7.

Ibid., p. 2, col. 2.


"Japan Premier Sees New Ties with China." The Morning Call, July 20, 1972, p. 18, col. 3.

119 Ibid., p. 22.


121 Sulzberger, p. 18, col. 4.


123 Slevin, p. 19, col. 5.

124 Ma, p. 127.

Bibliography

"Are We Seeing Japan All Wrong?" Industry Week, February 28, 1972, pp. 26-32.


"Inflation in Western Europe and Japan." reprinted from Federal Reserve Bulletin, October 1970.

International Monetary Fund. Annual Reports of the Executive Directors for the Fiscal Years 1946-1971. Washington, D.C.


