JAPAN
AND THE
UNITED STATES
Challenges and Opportunities

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INTRODUCTION

Japan's impressive economic growth since World War II has had two important consequences. First, growth has lifted the Japanese people from poverty to affluence in a single generation. With real growth averaging 9.5% annually between 1949 and 1973, the Japanese economy became the world's third largest. Even though real growth since the oil crisis in 1973 has averaged only 3.0% annually, Japan's 1978 GNP was $1,100 billion; per capita income, $9,483; and exports, $96 billion.

The second, and less widely recognized, consequence has been some structural rigidity. Many of the sources of rapid growth are now so firmly rooted that they have become
sources of inflexibility and international friction in the different economic environment of the 1970s. Analyses of Japan’s postwar growth are many, and a full one will not be repeated here. However, certain key variables will be reviewed because their changes explain Japan’s present condition and indicate its future prospects. By highlighting these structural issues and the policy reactions they require, the direction and magnitude of various changes become clearer, and related policy considerations can be examined. This is the purpose of the historical perspective outlined in the next few pages and examined more thoroughly in the first two sections. Specifically, we shall consider how Japan’s remarkable progress occurred; where the economy is now; the outlook for rapid growth in the future; the likely evolution of Japan’s economic structure; and how its economy will affect and interact with the rest of the world.

**Success and Its Legacy**

Soon after World War II the Japanese government embarked on a growth strategy that concentrated on renewed and rapid industrialization in the private sector. A very high investment rate (averaging 28.2% of GNP between 1949 and 1973) combined with the high savings of individuals, businesses, and even government to permit both high economic growth and wholesale and export price stability. Continued high investment rates were then encouraged by the resulting increased productivity and greater price competitiveness brought about by investment for growing domestic and world markets. Investment was also fostered by Japan’s labor structure, the availability of cheap bank financing, and a generally benevolent government attitude toward an economy focused on business expansion. Expansion was helped by growing personal consumption levels and the Ministry of
Finance’s conservative fiscal policies whereby adequate resources were available for the private sector. These internal factors combined with expanding and liberalized world trade to develop a business-investment-led economy. Capacity expanded in anticipation of demand and in turn contributed to that demand, helping to justify the investments. In effect, public and private growth strategies evolved which systematically became self-fulfilling.

High growth rates, rising investment levels, increased wages, incomes and consumption, and expanding exports led to rapid shifts in industrial structure which emphasized capital intensive and higher technology industries. The relative importance of light industries in total product and in exports declined remarkably, while that of heavy industries rose. This shift in competitiveness and industrial structure is illustrated by the steel industry and its synergism with a Japanese-induced revolution in ocean transportation.

Steel has been the key industry upon which Japan built its postwar development. In 1949, the industry was not particularly efficient, and access to raw materials was a serious problem. By 1958 it was exporting, and since the late 1960s it has accounted for about 50% of world trade in steel. The industry has been assisted in this remarkable development by easy access to debt capital, major technological changes, and a willingness to invest in bigger and bigger furnaces. The readiness to invest has been due to that fact that construction and material costs of larger furnaces (related to surface area) have not risen as rapidly as the greater production volume (related to cubic area) made possible, so that bigger plants have always been more cost efficient. Today Japan has 37 basic oxygen furnaces of over 2,000 cubic meters capacity, whereas the United States has only five. At the same time, expanded capacity created demand for more raw materials and
bigger ships to carry them. Ships are subject to the same cost/volume relationship as blast furnaces. As bigger ships were built, raw material carrying costs dropped dramatically, making Japanese port-based steel more competitive due both to cheaper inputs and to lower export costs. This then created more demand for steel and for ships. More and bigger ships created a greater demand for steel, and cheaper steel lowered ship costs and thus transportation costs. Therefore, the two industries interacted dynamically to raise demand for each other's output and to make each other increasingly competitive. Automobiles and specialized ship carriers have added to this overall effect, and steel, ships and autos together accounted for 39% of Japanese exports in 1976.8

The net result of this and similar industrial developments has been rapid but somewhat imbalanced industrial and GNP growth. Pollution levels increased, and the government sector remained relatively small (less than 20% of GNP until 1971). Social welfare programs and public investments have been inadequate. Although by 1971 Japan had caught up with the Western industrialized countries in GNP, industrial structure, and per capita income, it remained weak in social services, infrastructure, and quality of life. This situation led to rising dissatisfactions that are clearly indicated in various public opinion surveys and in the gradual success of opposition parties (as a group) at the polls.

In the 1970s, however, domestic and international demand for the output of Japan's major industries, particularly heavy industries like steel, shipbuilding, and chemicals began leveling off. This natural maturation of demand has been hastened in turn by the yen appreciation since 1971, the oil crisis, the 1973-74 inflation, the 1974-75 recession, and the current stagnation. These special events have combined with normal slowing at this stage of industrial development to dampen
business expectations and shift Japan from an investment-led economy to a demand-led one. Businessmen are no longer investing in anticipation of demand, except in a few high-growth, knowledge-intensive industries that are not capital-using.

The industrial structure, though, remains concentrated in industries like steel, chemicals, shipbuilding, nonferrous metals, machinery, automobiles, and power. These industries have to invest if the private sector is to use the high savings still generated by business and by individuals (well over 20% of disposable income is still saved). Yet, as noted above, heavy industry is now waiting for demand to materialize before investing. Thus, if savings are not to be deflationary, the government, through its own investment and consumption, must become the main generator of recovery and continued economic growth.

The government can either act to lower the aggregate savings rate by increasing its own current consumption, by transferring resources to those with high propensities to consume, and by decreasing the uncertainties that contribute to a high savings rate. Or it can act to increase total gross investment by spending more on infrastructure development. Due to the large imbalances of Japan's rapid postwar development, both infrastructure investment and social services are needed and appropriate.

However, the government's past policy of keeping the public sector small and of favoring private business and industrial development is limiting how fast it can expand its direct contribution to the economy. In fact, public debt at the end of FY 1977 was up 103% in only a two-year period.6 This was a creditable job of deficit spending and debt financing, but it was insufficient to take up the total slack between savings and private investment. Further, the government has a limited
number of personnel who can generate and monitor new projects, whether for domestic infrastructure or foreign aid, and it is reluctant to introduce new expenditure programs which may reduce future fiscal flexibility. These constraints are particularly important as the current fiscal program is focused more on spurring public works and investment than on attempts to decrease savings. Yet both approaches are needed. In fact, excess savings are currently being transferred abroad via a large export surplus and the accumulation of excess foreign exchange reserves. This hardly benefits the Japanese people's standard of living.

While the government is struggling with this dilemma, the built-in efficiency of Japan's heavy industry prolongs Japanese export competitiveness across a narrow product range. Even with textiles and ship exports hurt seriously by world stagnation, shifting comparative advantage, and yen appreciation, exports grew 20% in 1977 and 22% in 1978 (in dollar terms), based mostly on autos and precision machinery. The development of new industries would broaden the export base, but this has been frustrated by the greater competitiveness of foreign producers in new knowledge-intensive industries, by a stronger yen that makes catching up difficult, and by Japan's liberalized foreign investment policies in these industries.

At the same time, Japan's export concentration in basic industries, where other countries' unemployment is currently high, is creating major international tensions and pressures for protectionism. Orderly marketing arrangements are a possible solution, but these decrease potential business investment, thus exacerbating Japan's recovery problem and increasing the requirement for greater government expenditures. Such agreements also will increase the need to redirect heavy industrial firms' growth. Such an economic restructuring, however, will take at least four or five more years, particularly with slower
growth. Will other countries be willing to wait this long for Japan to become a locomotive economy again and to reduce competitive trade pressures? The forces at work forming Japan's long-run industrial and economic evolution seem clear enough and will be discussed in more detail. But major domestic and international economic policy difficulties will emerge as Japan tries to alleviate its immediate and near-term internal tensions successfully enough to allow sensible longer-term restructuring.

We now turn to a consideration of some of the key mechanisms of the postwar period, the persistence or dilution of which will bear heavily on the nation's economic future.

Japan's Postwar Industrial Growth Strategy

Emergence of the Postwar Industrial Growth Strategy

Japan's economy was shattered by the Second World War, but the worst time came in the immediate postwar period with famine, dislocations caused by destruction of productive capacity, and the return of troops and emigrants. Moreover, Occupation authorities soon began an economic deconcentration program, disbanding large industrial groups, retiring prominent businessmen, and encouraging labor unions. The economy languished, and even in 1949 industrial output was still only three-quarters of the mid-1930s level.

The cold war radically altered this situation. U.S. authorities felt that a strong Japan was needed to defend against communism in East Asia, particularly after the Communist victory in China. The vision of an agricultural Japan, founded on the fear of resurgent militarism, gave way to a vision of an industrial Japan, and the Korean War provided a vital spur to Japan's industrial demand. U.S. military procurements were
almost two-thirds of total exports by 1953, while the share of agriculture in total output fell to 16% from 23% in 1949. And the boom continued after the armistice, due to the pent-up domestic demand for all goods, the need to rebuild industrial plant, and the willingness of the United States to absorb increasing manufactured exports. Further, GATT, the Bretton Woods Agreement, and the Marshall Plan had created the basis for an expanding world economy—one particularly favorable to trade.

There were, however, important constraints. Capital and foreign exchange were scarce, and industrial funds were mostly debt. Priorities had to be set. During the Korean War, over 80% of new funds came from private financial institutions, which in turn relied on rediscounting with the Bank of Japan. Strict foreign exchange controls were established to discourage non-essential imports. These exchange constraints remained until the late 1960s, as foreign exchange reserves typically covered only three months’ imports. The power, fertilizer, shipping, coal, and steel industries were favored in the allocation of credit and foreign exchange. As an overall development strategy evolved, new industries were substituted or added, such as automobiles, chemicals and petrochemicals. These infant industries were also favored by such tax benefits as rapid depreciation and special reserves that promoted growth, investment, and improved competitiveness. Tariff restrictions and restraints on foreign investment were also part of this overall industrial promotion.

The international political situation and Japan’s industrial potential combined with the basic constraints to put the economy on a new course. This course was set by policy planners, who established three basic goals: (1) dynamically efficient capital allocation to foster growth and to relieve long-run capital scarcity, (2) increased industrialization and inter-

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national competitiveness, and (3) preservation of foreign exchange reserves. At times, these goals were bound to conflict; initially, promoting industrialization and capital growth would require substantial imports of both raw materials and advanced machinery.

The challenge of the 1950s was to create a policy that could achieve all goals. In the long run, though, efficient industrialization would achieve greater growth and greater export competitiveness, thus eliminating the exchange constraint. Efficient capital allocation through the financial and fiscal system to high-growth industries attracted labor and other resources, though the government sector tended to get short-changed by resulting under-budgeting and tax reductions. What in effect occurred was the evolution of a dynamic self-reinforcing system that promoted rapid growth and survival of the most efficient and competitive. Rationalization was encouraged by restrained application of anti-trust laws, and government-sponsored mergers.

*Fostering Investment: Government Policy, Industry's Financial Structure, and Capital Scarcity*

The guidelines for industrial development were the industrial plans of the Ministry of International Trade and Industry (MITI), particularly its Heavy Industry Bureau. Planning was on an industry basis, after continuous consultation with the companies involved. Investment allocation for plant and equipment among producers was the objective in strategic or key industries. Allocations within established industries were most often based on a firm's past share of the market. But the plans were not legally binding, and businessmen had every incentive to invest more, particularly in new high-growth industries where gaining a larger market share would both improve com-
petitive position and help gain a better position in the next plan. Also, MITI and business did not always agree on how much investment was appropriate. Thus, competition developed among producers over who could invest the most. This process was encouraged by readily available bank financing and a tax structure that gave favorable treatment to interest costs, depreciation, and investment reserves, thus lowering capital costs. In addition, experience showed that new investment resulted in improved productivity, allowing greater price competitiveness and expanded demand, justifying the investment.

The government could control investment and credit rationing via monetary policy, providing an essential policy tool to restrain excessive growth. As bank loans were the prime source of funds for new investment, any rediscount tightening by the Bank of Japan had great impact on the ability of banks to lend, and thus on investment. In this way, the Bank of Japan discount rate became the symbol of the government’s investment expansion policies. In turn, the Ministry of Finance (MOF) allocated loan limits among the major city banks, so-called “window guidance,” according to what it considered appropriate expansion, and according to bank size. When foreign exchange reserves were adequate, the discount rate was lowered and banks allowed to expand loans. Business in turn invested aggressively. When reserves started to dwindle, the Bank of Japan (a creature of the MOF) raised the discount rate and enforced window guidance, so credit became scarce. Investment then cooled momentarily while exchange reserves rose to a safe level. Then the process was repeated. Thus, credit scarcity was the pressure point through which the government attempted to guide economic and industrial progress with an eye to the balance-of-payments constraint. But this reliance on monetary policy was only
successful because business investment was the engine of growth and because there were intense competitive pressures on firms to operate at high capacity in order to cover high fixed costs, interest, and wages, and to invest for future market-share and productivity increases.

Given competition, capital scarcity, and periodic credit squeezes, many firms needed a loan source they could depend on when money was tight. In time, guaranteed availability became more important than price. Thus it was natural for firms to attach themselves to certain banks that in turn became the financial hubs for groups of companies. The main banks were more than lenders, however, since they provided investment opportunity information, coordinated group activities, and helped negotiate with MITI and MOF on expansion plans. They thus reduced business risk by providing credit and information to their client firms. As the economy boomed, these banks became more important. They provided about a third of the new industrial funds in the mid-1950s, 45% in 1965, and over 50% in 1971, while the stock market’s share declined from around 15% to 5% over the same period.9 (Most of the remainder came from smaller financial institutions and government banks.) The result for most firms was increasing leverage, particularly for capital-intensive heavy industry, the banks themselves, and trading companies. Long-term debt as a percentage of net worth for the 500 leading firms grew from 35% in the first half of 1954 to 98% in the first half of 1970 in an environment of high growth and large capital requirements.10 As already noted, this leverage made the system quite responsive to monetary policy. Firms became more dependent on their banks and banks more dependent on the MOF and the Bank of Japan. Interest rate fluctuations bore directly on costs. In addition to capital available from the Bank of Japan, funds were supplied to banks from declining
industries like agriculture, fishing, textiles, and handicrafts, whose expansion needs were minimal, as well as from high personal savings and fiscal surpluses. Tight fiscal policy made monetary policy more effective by denying any fiscal expenditure cushion when money was scarce.

With private investment the growth engine during this period, a concomitant was a small government sector. Total government expenditures averaged slightly under 20% of GNP during the era of high growth. The government was a net saver in most years, both undershooting expenditures and collecting more taxes than anticipated. Among general account expenditures, public works increased in share, along with social security payments (though social security was still not a significant percentage of GNP), while the percentage for defense declined. Special accounts, e.g., post office, railways, hospitals, telephone and telegraph, were budgeted for an amount usually 75%-100% greater than the total general account, but undershooting expenditure was prominent here as well. With small budgets, even smaller actual expenditures, and frequent surpluses, government debt was negligible. Small amounts were floated for specific purposes, but in 1970 total debt outstanding was less than 9% of GNP, and less than a year’s tax receipts.

Investment, Structural Evolution, and Savings

Investment was the main force behind Japan’s growth in the postwar period. In 1953 gross fixed capital formation was already over 20% of GNP, rising to 30% by 1960 and 35% by 1970. Between one-half and two-thirds of this was plant and equipment investment, with the rest as private dwellings, government investment, and inventories. By industry, invest-
ment was heavily concentrated in iron and steel, chemicals, and machinery—not a surprise given their capital intensity. Investment in turn translated quickly into income multiplier effects for the economy, even before the impact of price cuts based on increased productivity.

Given high growth and high investment rates, factor proportions changed significantly over the period, favoring capital intensity. Initially, such capital intensity may not have seemed appropriate, given Japan’s relative labor abundance. But firms realized that their competitive position depended on the incorporation of new technology through investment to avoid rising labor costs. This was especially true for large firms facing the permanent employment system, in which workers are hired directly from school for life, and in which wages rise on the basis of seniority. Hence, factor proportions in actuality developed to fit the dynamic conditions of an expanding market.

The product mix within and between industries shifted toward products with higher value added. In 1950, metals, machinery, and chemicals accounted for about 40% of value added in manufacturing; the figure rose to 60% in 1960 and 62% in 1970. The competitive process reinforced this evolution. Increased capital availability, declining capital costs, and increasing wage rates all combined with government policies and incentives and with rising domestic demand to stimulate a shift toward higher-technology, capital-intensive products with more value added and more processing per unit of output. At the same time, however, productivity increases brought about by capital investment and technical progress combined with pressures to gain a larger share of the market to push for lower value added (and hence lower prices) on particular established products. This freed resources to move to new product lines. Moreover, additional productivity gains
have usually been more available in technologically more advanced products with higher value added per unit, a fact which reinforced the cycle. Thus, there occurred together a decrease in value added per unit in specific products and an overall shift to products with higher value added per unit, which, on balance, resulted in higher value added per unit of output for industry as a whole.

In the aggregate, these trends had three important implications. First, export competitiveness grew, particularly in the capital-intensive industries. Second, effective tariff protection on domestic value added rose sharply, especially as most raw materials came in at little or no duty. And third, on goods exported the value added per unit rose relative to the imported raw material input. All this, combined with a favorable shift in the terms of trade and a higher proportion of exports in raw-material-intensive industries, meant a narrowing trade deficit and finally a growing surplus.

Since investment in technologically superior plant (particularly in heavy industry) was the basis for structural shift, economies of scale played an important role. This required larger and larger projects so that average firm size also grew. While firms of over 1,000 employees had a slightly declining share of total employment, they had an increasing share of output, due to large productivity increases relative to the rest of the economy. The persistence of small firms (less than 300 employees) seems concentrated in the nonmanufacturing industries or as subcontractors in those manufacturing sectors where average firm size is large. Concomitant with this change has been the large firms’ increasingly dominant share of exports, particularly in fields like steel, transportation equipment, electrical machinery, and chemicals.

But investment alone was not sufficient to cause high growth with relative price stability. Savings were needed as
well, and in this Japan was fortunate. The population-age structure in the early postwar period was concentrated in young-adult and lower-middle-age brackets, which favored savings for big-ticket consumption items and housing. Lack of pensions or social security also encouraged saving for retirement. The bonus system was an additional savings impetus since workers typically receive extra large paychecks twice a year, in June and December. While normal household expenditures have been tied to base income, bonus income has been saved and used for long-term purchases, e.g., houses, cars, or TVs. Moreover, between closing the books and paying bonuses (typically three months), firms have had the use of bonus wages, thus reducing working capital requirements.

Depreciation allowances were an important and growing source of gross savings for the economy. Starting at only 5% of GNP in 1949, depreciation grew to 10% of GNP in 1960 and 13.5% in 1970. Household savings stabilized at about 12% of GNP in 1960, and government savings ran between 5% and 8%.15

The financial system itself both impelled and made productive use of rising savings rates, as private banks aggressively gathered savings from the public, particularly at bonus time. These funds were then lent to growing businesses which needed to finance further development. The government's postal savings system was also a major collector of small deposits, the proceeds of which were held by the Trust Funds Bureau of the MOF. These funds were invested in national bonds, special bank debentures, local government securities, and other securities that were used to finance public works or were lent to firms in priority industries.
Virtuous Cycles

The postwar growth and investment orientation gave rise to two important virtuous cycles. The first was productivity growth leading to price stability (or even price declines), improved competitiveness, expanded domestic and international markets, more profits, more investment, even higher productivity, and so on. By the 1960s, productivity in manufacturing as measured by output per man-day was growing an average of 10% per year, and some years saw it rise by over 15%. In contrast, real wages rose less quickly (though not slowly) at 5.4% per year. In no year did real wages rise faster than productivity, thus leaving a substantial surplus for businesses to invest or pass along in lower prices. These effects are reflected in the wholesale price index. The aggregate index was quite stable, with rates of increase often less than 1% per year. The aggregate index, however, understates a key phenomenon: growing industries like machinery, iron and steel, and chemicals showed actual price declines in most years, while more labor-intensive industries, not able to invest massively in new equipment to improve productivity, raised prices. The contrast between wholesale and consumer prices corroborates the point. Consumer prices, in which the services and direct labor content is higher than in wholesale prices, rose an average of 5.5% per year in the 1960s once the labor market began to tighten. Conversely, the export price index, which became more heavily weighted with goods like steel, chemicals, machinery, electronics, and automobiles, showed even greater stability than wholesale prices and sometimes even declined, indicating both the importance of investment, productivity, and price competitiveness in certain
industries and the differences in product-weighting between particular indices and markets.  

The second major virtuous cycle involved wages, income, and consumption. Although productivity gains were higher, real wage increases of 5.4% per year are quite high by most standards. Given the large wage-earning work force, the resulting personal income gains were also large. The net effect was a consumption boom that went from one durable good to the next. In urban households the saturation ratio for radios, sewing machines, and bicycles passed 50% before 1955 and for television sets by 1960. By 1965, the 50% mark was passed for cameras, washing machines, and refrigerators, and by 1970 for vacuum cleaners, while passenger cars and color televisions passed 20%. The consumption boom fed on itself, creating new industries which invested rapidly and paid higher wages, creating more demand for new products and industries. But the Japanese did not spend too fast; despite the large growth in consumption, incremental savings rates averaged about 20% during the high-growth era.

Export Growth and the Balance-of-Payments Constraint

Exports were an important source and support to growth in the postwar era. In volume terms, export markets provided the sales prospects to justify continued large capital equipment expenditures once an industry was established domestically. Firms expanded into foreign markets and increased their competitiveness through additional investment, higher productivity, and more sales, which at the same time lowered domestic prices and bolstered demand at home. Export dynamics thus represented a logical extension of domestic competition. As domestic markets developed first, Japan's shifting industrial structure translated with some lag into a
shifting export structure. This phenomenon is sometimes called product cycle evolution. For example, steel exports (and steel prices were stable or declining during the period) rose only 50% between 1955 and 1960, but grew 230% in the next five years, and another 120% by 1970. Ships followed a similar pattern, as did television, automobiles, and other products. Each industry increased both its own share of total exports and the proportion of exports in its own total output (see Table 1). Product specialization, too, was often an important characteristic of these exports, as exporters concentrated on specific market segments where competitors were weak and they were strong, e.g., small cars, small-screen TVs, tankers, and so on. But in basic commodities like steel, Japanese firms were more competitive across the board. As a result of industry's structural change, exports came increasingly from large firms as the plants necessary to produce the new products efficiently and competitively grew so large that smaller firms were not competitive even domestically, much less internationally. The top 200 manufacturing firms accounted for over 50% of exports in the 1960s.

The import structure evolved in tandem with that of industry and exports (see Table 2). As international competitiveness rose in more products, fewer finished and semifinished imports were needed. Raw materials and fuel took their place. Metal ores, for example, rose from 7.5% of imports in 1955 to 15% in 1960, while mineral fuels jumped from 12% to 17% in the same years. As a result the share of manufactured imports provided by industrial countries declined. However, as Japan became more competitive in capital- and technology-intensive industries, it became less competitive in labor-intensive commodities. Exports of textiles and handicrafts fell and, later, imports from the LDCs rose, though often produced by firms using Japanese equipment and often with some Japanese investment. These trade trends combined
### TABLE 1

**Japanese Exports: Commodity Composition, and By Destination**  
(In US$ millions, and percentage)

<table>
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<tr>
<th></th>
<th>1955</th>
<th></th>
<th>1960</th>
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<td></td>
<td>US$ mil.</td>
<td>%</td>
<td>US$ mil.</td>
<td>%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>2,011</td>
<td>100</td>
<td>4,055</td>
<td>100</td>
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<tr>
<td><strong>Commodity Composition</strong></td>
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<tr>
<td>Food</td>
<td>126</td>
<td>6.3</td>
<td>256</td>
<td>6.3</td>
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<tr>
<td>Textiles</td>
<td>749</td>
<td>37.2</td>
<td>1,223</td>
<td>30.4</td>
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<tr>
<td>Chemicals</td>
<td>103</td>
<td>5.1</td>
<td>181</td>
<td>4.5</td>
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<tr>
<td>Metals</td>
<td>387</td>
<td>19.2</td>
<td>568</td>
<td>14.0</td>
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<tr>
<td>Iron &amp; steel</td>
<td>259</td>
<td>12.9</td>
<td>388</td>
<td>9.6</td>
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<tr>
<td>Machinery</td>
<td>249</td>
<td>12.4</td>
<td>1,035</td>
<td>25.5</td>
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<tr>
<td>Motor vehicles</td>
<td>6</td>
<td>0.3</td>
<td>78</td>
<td>5.8</td>
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<tr>
<td>Scientific &amp; optical</td>
<td>—</td>
<td>—</td>
<td>92</td>
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<td>TV</td>
<td>—</td>
<td>—</td>
<td>3</td>
<td>0.1</td>
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<td>Vessels</td>
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<td>Other</td>
<td>397</td>
<td>17.7</td>
<td>792</td>
<td>19.5</td>
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<tr>
<td><strong>By Destination</strong></td>
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<tr>
<td>Asia</td>
<td>841</td>
<td>41.8</td>
<td>1,458</td>
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<td>Europe</td>
<td>207</td>
<td>10.3</td>
<td>538</td>
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<tr>
<td>North America</td>
<td>539</td>
<td>26.8</td>
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<td>456</td>
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<td>Communist Bloc</td>
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<td>1.8</td>
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<td>Southeast Asia</td>
<td>727</td>
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<td>1,307</td>
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<td>Middle East</td>
<td>105</td>
<td>5.2</td>
<td>178</td>
<td>4.4</td>
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**Sources:**
to increase the concentration of Japanese exports in a few selected capital-intensive industries. Japan has virtually no agricultural and raw materials exports, and few very high

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<td>19,318</td>
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<td>55,733</td>
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<tr>
<td>344</td>
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technology exports. Imports have been composed mostly of raw materials, foodstuffs, and fuels, with a few labor-intensive goods from LDCs and some very high technology commodities from the United States and Europe.
JAPAN AND THE UNITED STATES

These evolutionary trends finally lifted the balance-of-payments constraint on growth. With higher aggregate domestic value added, higher value added per unit of output, and higher productivity in industry, the import content of exports declined, and the value added to raw materials processed and exported increased, yielding improved foreign exchange earnings. Exports exceeded imports (c.i.f.) for the first time in 1965, symbolizing this major change in postwar economic history. These developments continued through the late 1960s and Japan achieved larger and larger trade surpluses. At the same time, the concentration of Japan’s growing export competitiveness in a few basic industries combined with an expanding trade surplus and few manufactured imports to sow the seeds of serious tensions between Japan on the one hand and the United States and Europeans on the other.

Emerging Problems of Growth

Growth skewed toward plant and equipment investment has created problems. By the late 1960s some external effects began to emerge as serious causes of concern, and public opinion started to rethink the desirability of continued high growth. The nation’s industry was packed between Tokyo and Osaka, aggravating pollution and population density. Several cases of deleterious effluents ignored by polluters became widely publicized. The urbanized and now more affluent population also became conscious of insufficient social facilities such as parks, roads, sewers, and highways. In 1971, Tokyo had only 1.15 square meters of park area per capita, compared with New York’s 19 or Munich’s 20. Only 25% of the total roads were paved versus 80% in the U.S. Only 17%

[106]
of the houses had indoor flush toilets, and garbage disposal wars between prefectures were common.

Unfulfilled welfare, medical, and social security needs were another problem. The percentage of population over retirement age (55) reached 15% in 1970, while urbanization and rising land prices reinforced the trend to smaller houses and nuclear families, making the inadequate pension systems a greater burden on the aged. The situation was particularly difficult for those who had relied on savings accounts or postal savings as a cushion, since consumer price inflation had eroded their value.

Furthermore, housing was insufficient. The Japanese had less than one room per capita in 1968, versus one-and-a-half in the United States, and Japanese rooms were smaller to boot. In addition, housing was difficult to get, as land costs had risen so rapidly. The price index of urban residential land rose an average of 17.7% per year between 1955 and 1970. If time deposits, the main money source for home-building, are deflated by this, the real ability to purchase land barely increased over the entire period despite the rapid rise in real wages. Moreover, when housing was available, it was increasingly far from work, markedly lengthening commuting times.

Nor were the adverse externalities of growth solely domestic. As already noted, bilateral trade surpluses and tensions with the United States increased in the late 1960s. The United States was the chief export market on which many Japanese firms had based investment plans, while raw materials came increasingly from others. Some U.S. industries—particularly steel, textiles and electronics—began to ask for protection, citing Japanese firms as the source of injury. The result was orderly marketing agreements in which Japanese producers agreed to limit shipments for a specified period. These
## JAPAN AND THE UNITED STATES

### TABLE 2

*Japanese Imports: Commodity Composition, and By Origin*
(In US$ millions, and percentage)

<table>
<thead>
<tr>
<th>Commodity Composition</th>
<th>1955 US$ mil.</th>
<th>%</th>
<th>1960 US$ mil.</th>
<th>%</th>
</tr>
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*Sources:

agreements were not always costly to Japanese producers as a whole, since, for example, exports to the United States were only about 4% of output for Japan’s textile and apparel industries in the early 1970s. Nor were they always helpful to the U.S. industry, since, for example, textile imports from Japan were only 1.2% of U.S. textile production in the same..."
JAPAN'S ECONOMIC STRATEGY AND PROSPECTS

period. But the textile issue was the first major expression of bitterness over the bilateral imbalance, and was later followed by disputes over steel. At the same time, it should be

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recognized that for particular U.S. market outlets and commodities within certain industries, the share of Japanese products was relatively large and important to certain Japanese producers. Thus, orderly marketing arrangements were not easily negotiated or enforced on the Japanese side. Further, many U.S. industries were not aided at all, and some, such as ballbearings, suffered greatly.

The U.S. response to this imbalance on a policy level was
the so-called Nixon shock forcing both yen revaluation and a simultaneous devaluation of the dollar, a net 17% appreciation of the yen. U.S. authorities hoped that this revaluation would slow the growth of Japanese exports to the United States through the price mechanism, but this did not occur. Japan’s exports to the United States rose 18% in 1972. Psychologically, however, the Nixon shock was a jolt to Japan which, when combined with the subsequent oil crisis, led to a re-evaluation of policies involving trade, growth, and investment, their roles in the economy, and their effects on other countries.

Thus, after two decades of successful growth, there emerged both internal and external imbalances that required new plans and a new economic strategy. What had occurred during the 1949-71 period was the development of an economic system dedicated to the competitive growth of private manufacturing, particularly in heavy industry and by large internationally competitive firms. All elements of the economy played their mutually supportive and interactive roles, leading to an efficient re-allocation of resources from low- to high-growth industries. But like any successful system, the Japanese economy has developed a strong inertia and an internal logic that are difficult to alter even after various shocks. Yet in the last few years Japan has experienced major changes in basic economic parameters which have brought a transition period. One can already see slower growth rates, lower investment levels, different fiscal and monetary policies, more Japanese foreign investment, yen revaluations, declining business confidence, increased international tensions, and emerging popular dissatisfaction. Still, many characteristics of the high-growth era continue, such as generally high financial leverage, business’s export orientation, export concentration, price competitiveness, the employment system, the cooperative government-business-labor relationship, the push into new
technologies, and the import structure's emphasis on fuel and raw materials. The interplays between these changing and unchanging factors began to develop more quickly after 1971 and continue to the present. Their examination in the current context is thus critical to developing an outlook for Japan's economic future.

THE RECENT AND CURRENT ECONOMIC ENVIRONMENT

A Turning Point

Several events and emerging trends in the early 1970s proved conclusively that the postwar era, as Japan had known it, was over. These were the appreciation of the yen, the maturation of several important industries, potential scarcities of energy and raw materials, the shift in national economic priorities, and the impact of a prolonged recession.

Pressure on the yen became quite strong in the summer of 1971, but the Bank of Japan defended the long-standing ¥360/US$ rate by buying dollars. However, this intervention was not sufficient, and the yen broke away from the rate in September. Even the setting of the Smithsonian rate of ¥308/US$ did not remove all pressure, and when the Smithsonian agreement collapsed in February 1973, the yen rose again. The Bank could not resist market forces, and the yen averaged ¥265/US$ from March through October of 1973.\textsuperscript{37}

The government's attitude toward a stronger yen was not implacable resistance. Despite attempts by the Bank of Japan to postpone and smooth appreciation, the government generally realized a stronger yen was inevitable. Rather than try to suppress the rate, the government adopted adjustment policies to aid marginal exporters and those exporters who had
already accumulated long-term dollar assets, both having been harmed by appreciation. Ship-builders and major equipment suppliers were permitted to borrow dollars and convert them prior to major currency moves. The government also began dismantling exchange controls, liberalizing access to capital markets, and encouraging Japanese investment abroad. Because the yen rise came when demand and profits were generally good, business was able to absorb much of appreciation's effects, and the possible disruptions from a 35% appreciation in two years were largely offset by strong demand. Further, as most exports are by large firms rather than small, the impact fell most heavily on those best able to adapt.

Nevertheless, yen appreciation did hasten the natural decline of simple labor-intensive industries such as handicrafts, textiles, and apparel. Imports of such products from LDCs increased correspondingly, often based on Japanese investments. At the same time, many of Japan's basic growth industries, such as steel, chemicals, shipbuilding, machinery, electronics, and automobiles, were experiencing maturing demand. Existing plant and equipment seemed adequate. As saturation ratios for appliances passed higher levels, industries had to be content with replacement demand or try to find new products. This situation in turn encouraged all industries to rationalize, and also encouraged large, internationally competitive firms to export more and/or invest abroad. In the long run this reaction promoted larger trade surpluses.

Pressure on the yen was largely relieved by the rise in raw materials prices, starting late in 1972 and culminating in the oil crisis in the fall of 1973. During the postwar era, Japan had been able to buy all the raw materials it needed from the cheapest sources. But raw materials prices began to rise in late 1972, signaling shortages and potential supply problems. Great
fears of vulnerability hit when President Nixon embargoed soybean exports, allegedly to counter inflationary speculation. Raw materials inflation and shortages then spilled over into consumer goods, with shortages of paper products, detergent, and other items. Japan was now a very large economy, both affecting and affected by the world market.

Japan became an active foreign investor in the early 1970s, as economic incentives changed and foreign exchange laws were liberalized. Foreign investment both provided an important outlet for foreign exchange accumulated from trade, and dovetailed with needs for secure supplies of raw materials, for market access in case of trade restrictions, for easier industrial siting, and for cheaper labor for declining domestic industries. Thus corporate incentives and strategies corresponded with national objectives. Long-term capital outflow rose to $1,591 million in 1970, hit $4,487 million in 1972, then more than doubled to $9,750 million in 1973.\(^{28}\) Of the total, direct investment was a small part (20% in 1973) while the bulk was acquisition of equity and debt instruments. But these data somewhat understate the impact of direct investment, due to the leverage involved. In the United States, for example, Japanese direct investment accounts for only about 3% of the equity, but over 22% of the assets of foreign-owned companies. By sector, investments in manufacturing industries took about half the total by 1973, with banking, insurance, and commerce together taking about a quarter. By region, investments in Asia took the largest share in 1973, with North America not far behind, and Latin America a close third. But the oil crisis dramatically reduced pressure to invest abroad, left a large deficit in Japan’s current account in 1974, and dampened discussion of Tokyo becoming a major international money center. In effect, foreign investment policies were actually just another instrument of the MOF’s foreign exchange adjust-
ment policy. Thus by 1974 there was some divergence between government policies and the long-term strategies of major Japanese corporations.

Political debate in the early 1970s centered on shifts in national priorities. People worried not about how to grow, but about how to live better, given a largely mature industrial structure without a mature public sector. Pollution was a major scandal, and auto emission standards were adopted that were both stronger than U.S. standards and postponed less often. Pollution standards for plants became so strict that, by 1976, 20% of steel industry investment went for pollution abatement equipment. Health care and care for the elderly were also major issues, along with expenditures for parks, roads, and sewers. Recent discussions on how to spend reflationary funds focus primarily on public works projects, reflecting the new priorities.

The final indicator of a changed economic environment was the 1974-75 recession. Other postwar recessions had simply reduced the rate of growth, but this recession saw decline in real output, and it continued for well over a year and a half. It was also accompanied by severe inflation, record high interest rates, and little plant and equipment investment despite various countercyclical policies. Late 1973 was the turning point from boom to bust. The raw materials and product shortages spawned very large investments in plant and equipment in 1973, but when OPEC announced its oil price hikes, business expectations shifted 180 degrees. By mid-1974, industrial production was below 1973 levels, and unemployment was rising. But with wholesale prices rising 23% and consumer prices 22% in 1974, the government's chief policy goal was not maintaining demand but containing inflation.

Interest rates were raised, with the discount rate going from 5.5% in June 1973 to 9.0% in December of that year. Through
this and other restrictive measures, the year-to-year growth of
money supply (M1, i.e., currency in circulation and demand
deposits) was brought down from 30% in June 1973 to 10% in
September 1974. In contrast to other recessions, when
monetary restraint was used to suppress real investment and
reduce trade deficits, this recession saw monetary policy used
to fight inflation, as done in other countries. This was a totally
new kind of recession for Japan, not induced by monetary
policy and the balance-of-payments constraint. Moreover,
endogenous demand for plant and equipment investment was
not ready to bring a new round of expansion, and massive fiscal
expansion would be required to generate demand growth.

From an Investment-Led Economy to a Demand-Led Economy

Investment’s failure to bounce back has been the dis-
tinguishing characteristic of the post-oil-crisis economy. Pri-
vate nondwelling capital formation fell 11% in real terms in
1974, and a further 13% in 1975 (see Table 3). The reasons
include uncertainty over the existence of markets for output of
new capacity, domestic inflation, recession, and slow growth
abroad. Meanwhile, personal savings are rising, due to similar
uncertainties, creating a further deflationary impact.

It is not clear when Japan’s adjustments will be complete or
when the various changes in the world economy brought by
the oil crisis will subside. But until the outlook is clearer,
businessmen will proceed cautiously and will not invest in
anticipation of demand, especially since many companies
continue to carry high inventories.

With continuing weak investment, GNP growth depends
on consumption, government expenditures, and international
payments surplus. Consumption growth has been moderate,
averaging 3.8% in 1976 and 1977. Wage increases have slightly outpaced inflation, leaving some increases in real income to underpin demand. However, uncertainty suppresses consumption as well as investment since households save more, regardless of inflation. With unemployment and bankruptcies continuing, it will be difficult to induce consumers to save less. This leads to a vicious cycle of tepid real consumption depressing markets and keeping production flat, which in turn holds down income, further lowering consumption. Some change in savings behavior is necessary before consumption can be a greater source of growth. Logically, Japan appears to be in a liquidity trap where additions to income are saved, and money is not borrowed despite lower interest rates. Indeed, Japan seems to be switching from a classical to a Keynesian style economy.

Government expenditures have been a major source of new

<table>
<thead>
<tr>
<th>TABLE 3</th>
<th>Japanese GNP Growth 1974-1977 (Real; in percent)</th>
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<tr>
<td>Government Consumption</td>
<td>4.4</td>
</tr>
<tr>
<td>Government Investment</td>
<td>−6.7</td>
</tr>
<tr>
<td>Private Plant and Equipment Investment</td>
<td>−10.8</td>
</tr>
<tr>
<td>Private Housing</td>
<td>−12.8</td>
</tr>
<tr>
<td>Exports</td>
<td>21.3</td>
</tr>
<tr>
<td>Imports</td>
<td>12.4</td>
</tr>
<tr>
<td>GNP</td>
<td>−1.3</td>
</tr>
</tbody>
</table>


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demand since the oil crisis. While real GNP fell 1.3% in 1974, 
real government consumption expenditures rose 4.4% and in 
1975, 7.4%. In 1975 government capital outlays also began to 
bolster growth, with real expenditures rising 11.5%.28 Gov-
ernment investment has continued growing and has apparently 
become the preferred means to support demand, partly 
because the government’s special budget accounts, under 
which many such expenditures are made, can finance part of 
the increase themselves. Supplementary budgets have also been 
an expansionary tool, though they often appear more potent 
than they are. Large portions of the supplementary packages 
are not direct expenditures, but rather monies made available 
for loans to small business, etc., so their economic impact has 
lagged considerably. Further, the MOF has tried to follow a 
“rule” that no more than 30% of general account expenditures 
can be supported by government bonds in any one year. 
Opposition to this, an artifact of the 1930s, has been rising in 
all sectors, but fiscal conservatives have not yet abandoned it 
even though it has absolutely no analytical foundation or 
justification. In short, the Japanese government is at war with 
its own expenditure policy; it knows it must spend vig-
iously to really support the economy, but it also tends to 
continue the fiscal conservatism so successful in the high-
growth era. The current consensus seems to be that deficits are 
acceptable if money is used for specific public works projects 
of demonstrated benefit. The government is not yet willing to 
use deficits to finance short-term public service jobs, substantial 
income support programs, or transfer payments programs, 
such as improved or expanded social security, unemployment 
benefits, and medical care. Meanwhile exports continued to 
expand the most rapidly while excess savings de facto ended up 
as an excess investment in foreign exchange reserves by the 
Bank of Japan. However, the increased money supply thus

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made available was merely absorbed by the system and did not result in investment growth.

International Tensions

Increased rancor over international economic issues involving Japan has been common in the 1970s. U.S. criticism has focused on Japan’s dependence on export markets for continued growth, without reciprocally providing a market for manufactured goods from the United States and other industrialized nations. Japan’s export dependence is often minimized as being a small percentage of GNP, but this misses the point; exports are almost exclusively manufactures (about 96%) and represent 30% or more of production for certain key industries like steel, shipbuilding, and automobiles. Indeed, exports in the high-growth era may have grown only slightly faster than GNP, but from 1974 to 1977 exports grew four times faster. Still, the rancor and tensions are not due so much to the aggregate export level but rather to export concentration in a few products. Theoretically, comparative advantage dictates that nations should specialize, but adjustment costs—of employment particularly—have been high in recipient countries as comparative advantage shifted to Japan. Moreover, factor endowments dictate that raw materials be the largest part of Japanese imports (only 20% are manufactures), so Japan’s trade structure naturally leads to specific adjustment problems and bilateral imbalances. Trade imbalances have become political problems chiefly due to unemployment, as highly unionized basic industries in the United States and Europe have lost markets at home and in third countries.

Japan’s preferred approach to solving such problems has been to establish trade cartels, voluntary quotas, orderly
marketing agreements, etc. There is little worry over potential losses to oligopoly, since recession cartels have been long accepted as appropriate to tide industries over short-term difficulties. The U.S. approach is different, concentrating on price effects through exchange rate adjustments, primarily to shrink the total bilateral imbalance. U.S. policy though has been implemented with little concern for the broad effects yen appreciation has on Japan, and this has raised frustration with the United States. Nor has the United States assessed the long-term competitive implications of increased rationalization by Japanese firms in key industries, or of foreign investment by such firms. Appreciation eliminates marginal producers, thus increasing the market share and long-run competitiveness of leading producers and exporters. Further, investments in the United States and elsewhere will be leveraged, using parent company guarantees. Thus such investments will reduce capital costs while geographically diversifying trade competitiveness and sales—in effect multilateralizing the competitive issue.

The 1977-78 steel controversy provides an excellent case in point. Japan’s steel industry has long recognized the U.S. steel industry’s import problem. Beginning in the 1960s, as weak steel demand and strikes squeezed U.S. firms’ profits and product availability, U.S. domestic prices were raised. U.S. buyers began substituting imports for American steel, further pinching profits and raising dumping protests. In response, the Japanese negotiated an orderly marketing agreement from 1969 to 1974. The 1977-78 crisis has been similar, but has been exacerbated by weak domestic demand in Japan and Europe. This increased pressures to export to a reflated U.S. economy. The Japanese response to protests was the same as in 1969, the suggestion of voluntary restraints; but the U.S. government preferred to encourage anti-dumping suits.
However, when the highly restrictive implications of fully enforcing U.S. trade laws became clear, a reference or trigger price mechanism for steel imports was proposed. Though there has been expanded demand for U.S.-produced steel, it is still not clear this mechanism will solve the problem. The U.S. industry’s profits may not rise sufficiently nor steel markets expand enough to justify needed investment in more modern plant and equipment. Neither will a reference price give the consumer the benefits of more efficient steel production through lower prices or promote efficiency at home. Meanwhile, obvious dumping by European firms has combined with yen appreciation to reduce Japanese sales in the United States anyway.

The American attitude toward solving trade problems has concentrated on finding the right mechanism (e.g., orderly marketing agreements, dumping law enforcement, or reference prices) and then has trusted the mechanism to create the “right” solution. There is no awareness that U.S. trade policy must be formed in the context of an overall industrial policy: e.g., what kind of steel industry does the United States want, and how should trade policy be formulated to foster this goal? The issue is how best to make U.S. industry more competitive and productive at home and abroad. Promoting competitiveness, investment, and productivity in key industries is the most constructive way to promote exports, reduce imports, improve employment, and strengthen the dollar. Although the United States is bad enough in this regard, Europeans seem even more phobic and unresponsive to Japanese trade competition, blatantly restricting access to their markets.

Until recently, Japan has not worried about the overall size of the trade surplus, rather viewing it as the natural outgrowth of a successful industrial policy. This is understandable, given the traditional balance-of-payments constraint and apparent
willingness to finance the surplus by accepting increased reserves, thus transferring some excess savings abroad. But the record surpluses of 1977 and 1978 have again afforded critics a powerful argument that the yen has been undervalued, and several sharp appreciations have shocked the economy, though the net effect of appreciation is still unclear. Some will certainly gain from appreciation. Import-intensive firms and industries with relatively low domestic value added may actually gain over the long run through lower input costs and a consequent ability to cut prices. But less import-intensive firms and industries, such as autos and computers, will have to improve non-price competitiveness and production efficiency. Further, as already noted, the impact is not uniform among firms or industries, but rather hurts primarily the marginal firms in weak industries. But as no one really knows the long-run aggregate price elasticity of exports vs. imports, the overall net effect of appreciation on the trade surplus remains to be seen.

In 1978 despite substantial revaluation (¥240 to ¥189), export volume was down only 3%-5% while the value of exports was up 22%, indicating rather inelastic demand. When one further allows for the tendency for export adjustment to lag considerably behind exchange-rate changes, the probable trend appears to be a relatively constant export volume but a rising export value and continued trade surplus. Micro-economic pressures on leading firms to maintain at least current operating volumes also support this conclusion.

Still, appreciation has set off another vicious cycle in the economy. Profits have been reduced when general demand is already weak, which in turn further depresses plant and equipment investment, drives down bonuses, affects wage increases, and lowers government tax receipts. This chain reaction intensifies debate on how much the government can
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afford to support the economy, while increasing the need for such support. In 1978, profits started to rise again. But for heavy and traditional industries, this primarily reflects declining interest rates, lower depreciation allowances, and foreign exchange gains on dollar debt. As such, they indicate no real change in final product or investment demand, thus continuing the government's dilemma. Responding to appreciation, the government has implemented a plan of emergency imports, lowered tariffs, and enlarged some agricultural import quotas, while fiscal expansion is being pursued through public works and housing programs. But thus far, primarily due to MOF resistance, these measures are insufficient. Also, many impediments to imports remain out of reach of government policy, such as the complex distribution system with its frequent high markups on imports and substantial financing requirements. Yet there are areas of guidance amenable to change, such as for high technology industries (which still strongly promote local licensing and inputs), or restraints on foreign banks from entering consumer finance and rediscounting with the Bank of Japan (which restricts their ability to help finance imports through the distribution system). Given these many complexities, the U.S. bilateral imbalance will not shrink quickly.

Though trade relations with advanced countries are experiencing difficulties, those with Southeast Asia are going rather well. Japan continues to be a supplier of high-grade machinery, plant, and basic fabricated materials to Southeast Asia, as well as an important investor and aid source. Japan is committed to financing major development projects in the ASEAN nations. Relations with Australia have been somewhat bumpy, but Japanese investment in resource development there over the next few years is potentially great, depending on continued Japanese liquidity and world raw materials demand.

Trade with Communist nations will also provide an impor-
tant opportunity for Japan. The long-term trade pact with China, signed early in 1978, outlines substantial provision of industrial plant and technology by Japan to China in return for raw materials. The problems with China trade for Japan are basically two: the quality of raw materials used as payments, and financing. China needs Japanese products quickly; however, the value of Chinese oil, a major part of the trade potential between the two countries, is reduced by its high paraffin content. China is not expected to be able to earn enough foreign exchange from other exports in the next few years to be able to pay for what it wants from Japan now. Thus, if trade is to expand, the Japanese will have to give credit to China to finance shipments. There is little doubt among Japanese that China will be able to pay off eventually, but it may be a long wait.

Trade with the Soviet Union will also bring Japan opportunities. Siberian development—which is essential to the Soviets if they are to earn the foreign exchange they need—will require substantial quantities of heavy industrial products that are too costly to ship from the western republics. Japanese suppliers are the logical answer. Oil exploration off Sakhalin has shown promising signs as well, and this could be used as partial payment for Japanese shipments to Siberia. Furthermore, assuming some Soviet success in exporting, Japan is a prime candidate to provide consumer goods to the Soviet Union should Soviet authorities allow more leeway for satisfaction of consumer demand. Moreover, the Soviets appear increasingly eager for trade with Japan, as seen in the unexpected concessions given in the Russo-Japanese fishing agreement of 1978. Of course, the difficulties are at least as great as the potential. The U.S. alliance with Japan and the continued stationing of U.S. troops in Japan cannot but give the Soviets second thoughts about Japan's intentions, just as
the U.S.S.R.'s military buildup in East Asia gives the Japanese pause. Also, continuation of the Sino-Soviet dispute will require of Japan a great sense of balance in determining the appropriate levels of participation in Siberian development.

A final consideration in Japan's current international economic relations is pressure to be a locomotive economy for the world as a whole. Considering the basic import structure, prospects appear dim relative to other developed nations. Reflation and revaluation will chiefly affect imports of raw materials or simple manufactured goods from LDCs. To reduce U.S. and European bilateral surpluses, tariffs must come down and various administrative trade impediments must be eased. Equally important, foreign firms must commit themselves to selling in Japan. Many Japanese are critical of what they feel is a lazy attitude toward their market. Many foreign firms expect to make profits too quickly without adapting policies or products to local conditions. Too many U.S. firms also separate the world into domestic and international operations only, treating all foreign markets equally and feeling all should be responsive to U.S. marketing and organizational methods. The Japanese government has made efforts to spread information on how to sell in Japan, but U.S. and European governments have not been particularly helpful to their corporations. Yet this cannot be the whole story, given the government's reluctance to truly liberalize incoming investment and imports. Administrative guidance still restricts foreign competition when it is really competitive, e.g., the Dow case.36 Nor can the laziness of the majority explain the frustrations of those who have made or are willing to make a commitment to the Japanese market over a period of years, often successfully. Both sides must improve if Japan is again to have a locomotive rather than a deflationary impact on the world economy.
Continuing versus Non-continuing Elements of Competitive Growth

Japan clearly entered a transitional stage after 1971, and many aspects of the previous high-growth stage changed. Yen appreciation, maturing demand, depressed investment, changing social attitudes, and external pressures have continued. Nevertheless, the trade surplus has grown, overcoming even the quintupling of fuel and energy costs, and basic industries have improved competitiveness and comparative advantage since 1973. This is due to the continuation of many basic corporate attitudes, behavior patterns, and incentives formed during the high-growth era. While firms generally no longer invest in anticipation of demand, they are still investing and modernizing relative to foreign competition, and Japan will maintain technological advances and productivity gains relative to that competition. Japanese have also adopted very long-term strategies to begin to produce higher value-added products, including plant and equipment exports related to foreign aid investment. Lower technology goods will be produced in and exported from Japanese-built plants abroad. Lower capital costs, the permanent employment system, and the compulsion for full capacity operation all contribute to this trend to keep improving. As Japan moves into the next decade, therefore, the large corporation will remain on the cutting edge of Japan's economic evolution and international competitiveness. It is the exploration of some of these trends, including new industry development, Japanese multinational corporations, existing industry's technological and product innovations, evolving trade patterns, foreign investment, and an expanded government sector, to which we now turn.

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JAPAN’S ECONOMIC PROSPECTS 1978-1985

The need for further structural change in Japan has been recognized throughout the 1970s, but specific events—raw materials shortages, capacity constraints, the oil crisis, recession, high inflation, the Lockheed scandal—have sometimes diverted attention from the basic issues. Now, however, these events have either faded or have merged with older, continuing problems. Outstanding questions are: How will Japan’s economic structure evolve to relieve the payments surplus, rising unemployment, excess savings, slower growth, and inadequate social capital? Will corporations adapt to growth not skewed toward investment in capital equipment? Will financial institutions adjust to a borrower’s market? Will labor develop new skills needed for new industries, yet preserve the permanent employment system within the larger firms where it predominates? Can international problems be solved with a minimum of rancor, while gains from trade, technological progress, economies of scale, and the international division of labor continue?

MITI’s Vision

A revised view of the long-range evolution of Japan’s industrial structure was published by MITI in 1971, with a fundamental revision in 1975. The latest view outlines both generally and specifically which industries and which products MITI feels will lead the next stage of development, and the country’s basic goals are redefined. Previously, emphasis was on industrial development, investment, exports, and aggregate

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income. Now, emphasis has shifted to surety of raw materials supply, better housing, better medical care, more social capital, and less pollution. Therefore inputs are to shift from basic industries that are raw material intensive, such as steel and chemicals, to high technology industries where design and research are a larger share of value added. So-called “knowledge-intensive” industries will develop to replace Japan’s present leading industries. Marketable goods’ share of output will fall as public and semipublic sectors such as public housing grow. Given decreased production of low-technology and labor-intensive goods, imports of these items will rise, reducing raw materials imports and decreasing exports of certain manufactured goods. Thus, the economy will become more knowledge intensive and information oriented as the proportion of value added contributed by technology rises.

This scenario implies low growth or even decline for the basic industries and corporations that underpinned postwar development. Steel, chemicals, petrochemicals, aluminum, nonferrous metals, and low-grade machinery all face mature demand, difficult plant siting, pollution control problems, and shifting comparative advantage. Foreign investment is of course one outlet, as new plants can be located abroad, closer to growing markets, with extra capacity used to supply Japan’s incremental needs. In aluminum, for example, high energy usage and exhaustion of Japan’s hydroelectric potential will force rationalization and major investment abroad, as Mitsui has already done with Amax in the United States. MITI foresees 49% of Japan’s aluminum needs imported by 1985. Basic industries tend to be energy and petroleum intensive, so that shifting abroad will also help ease the nation’s precarious energy situation.

Prospective growth industries include high grade general and electric machinery, transportation equipment, precision
machinery, prefabricated housing, plants, and engineering. With labor costs rising, capital and technology substitution will become increasingly necessary across a broad range of industries. New machinery will have to be developed to prevent wage-cost inflation and to preserve competitiveness. Greater research and development related to these new industries will itself create demand for scientific instruments and computing equipment. Among the many new products forecast will be anti-pollution equipment, industrial robots, biomechanic sensors, large-output lasers, Chinese-character recognition equipment, seabed development machinery, and automobile anti-skid systems.

The plan is logical, but there is some question as to where the new knowledge will come from and how it will be developed. Japan is certainly capable of research and development (R & D), particularly in process engineering, but the firms best able to produce new techniques are in established industries. Many new products which MITI envisions have never been produced before, even abroad, so that much basic research will be needed along with innovation and adaptations to production processes. This would be a new technological thrust for Japan. Further, given past experience, Western innovators are less likely to sell technology to potential Japanese competitors. Indeed, many like IBM and Texas Instruments are successfully competing in Japan. Therefore the most likely source for Japan's new knowledge-intensive products, particularly in the three-to-five-year range, is not from new industry but rather from an upgrading of existing basic industries. Steel companies and similar firms will export plant, equipment, engineering, and pollution control devices, while improving technology and upgrading domestic products. These firms have the cash and incentives to do this, and can thus both maintain competitive positions and raise employment and wages. In addition, many are already at the technological
JAPAN’S ECONOMIC STRATEGY AND PROSPECTS

frontier in their industries and are quite competitive. There is no need to catch up, as the very high technology industries must do. Moreover, upgrading basic industry will not be competitively frustrated by yen appreciation or the liberalization of imports and investment. Thus intra-industry knowledge-intensive development is a more likely scenario than MITI's projected inter-industry evolution, and in fact corresponds to the countervision proposed by Keidanren (the Federation of Economic Organizations). 38

And there are other problems with the MITI plan. First, the government's influence on industrial development has fallen, due to high bank and firm liquidity. Banks no longer rely so heavily on the Bank of Japan for credit, so this critical pressure point is gone. Further, R & D is too risky to make bank financing appropriate, which further lowers the government's ability to influence industrial development except via direct subsidies. Another problem is how research benefits will be shared. The scientific and engineering talent available in private firms may not be made available to competitors or to the public. But if technology is spread among too many producers, no one may become truly competitive, a common liability of publicly sponsored research made available to all. Finally, bureaucratic responsibilities for many new products like medical equipment, for housing, time-sharing, and transportation are not lodged in MITI but in other ministries, making coordinated development plans difficult to construct and implement, compared to the past.

Fiscal Policy and the Government’s Expanding Economic Role

Even if the MITI plan is not completely accurate on the form of evolution of the industrial structure, employment upgrading will occur to justify higher wages and living
standards. Similarly, on a sectoral basis MITI properly emphasizes greater investment in social overhead capital and higher government expenditures as essential to a successful structural evolution. This is readily apparent with the economy facing recession and continued high savings. But it is also a logical development, given Japan’s transition from a classical to a Keynesian economy, and the public sector deficiencies generated by imbalanced postwar growth. Some changes have been made, but more remains to be done. While budget increases were about 17\% and 20\% in FY 1977 and FY 1978, respectively,\textsuperscript{39} the economy still needs additional stimulus. With proposed public works projects of ¥240 trillion over a decade, plus the needed overhauling and funding of larger national health and unemployment insurance schemes, annual expenditures of at least ¥39-40 trillion (1978 yen) will be required. But at most ¥23.5 trillion in revenues is available, even including possible extra crude oil levies and public monopoly profits, leaving a deficit financing gap of over 40\%, far higher than MOF conservatives will accept.

Since a cabinet reorganization was necessary to get a budget for FY 1978 of ¥34.3 trillion with an actual debt ratio of 37\%, prospects do not appear bright for quickly bringing expenditures to a level needed for real economic restructuring. The persistent conservatism of the MOF, despite continuous pummeling by all economic sectors, particularly MITI and business, is the major stumbling block. The nature of Japanese decision-making supports the MOF position, since lack of a consensus forces default in MOF’s favor. Still, the slimmness of the LDP’s majority plus continued pressures on the yen will aid the pro-reflation forces. Momentum in this conflict is growing, and the expansionists seem to be winning the battles, e.g., larger rather than smaller supplementary budgets and breaking the 30\% debt ceiling for the FY 1978 budget. Still,
expenditures are not at the required levels, and two or three more years may be needed before the final, full consensus emerges. Therefore, the FY 1979 budget deficit should continue at about a 35% to 40% debt-ratio level. Correspondingly, Japan’s growth prospects, with little or no growth in export volume anticipated, should then be in the range of 5.5%.

Even without MOF opposition, project lead-times would delay increases in expenditure. There is a large backlog of projects, but most are small scale and local. Such projects do help employment, particularly where small industry has been hurt, but major national projects are also needed to redress structural imbalance. Extension of high-speed rail lines and major highways are two areas often cited, but both are affected by land costs and sunshine rights, as is infrastructure for new residential areas. Thus, some land-use planning or even land price “guidance” may be necessary to avoid speculation, as occurred in 1973-74, and to allow stable and appropriate long-term land-use decisions. Housing projects face a similar dilemma, whether sponsored directly or via government or government-stimulated expenditures. In short, the structural evolution foreseen by MITI based on social capital spending does not appear likely to be in full swing before the end of 1979, though the commitment, once made, should last well into the 1980s.

Capital Surplus and Corporate Strategy

Even with successful government stimulus, average real growth per year until 1980 is not likely to exceed 5.5%, and after that for the next few years probably will not exceed 6.5%. However, savings are expected to continue at high
high levels. Thus, given lower capital requirements in a lower-growth economy, the savings surplus might continue for some time. Over the long term the propensity to save may well be lowered by an aging population structure, changing attitudes, higher unemployment benefits, more available housing, and improved social security. On the other hand, profits and continued high depreciation in efficient basic industries, which are planning little new domestic investment, will add to net savings, offsetting some of the above effects. The results will be continued high liquidity and low domestic interest rates.

Excess savings will bring major changes in the country’s financial structure, particularly given past assumptions of capital scarcity. Competition among financial institutions for good credits will be fierce, which could either accentuate traditional group relationships or detract from group solidarity. Confusion over main bank relationships may result and lead to more and larger bankruptcies. The large, international city banks will then feel more pressure to work with clients abroad and on foreign projects. But as smaller banks cannot do this, some consolidation in banking is likely, and the MOF is encouraging such thinking. There will also be diversification of services and roles, such as bank activity in underwriting and direct sales of government bonds to the public.

The effects on firms will be equally pronounced, and probably beneficial. Rollovers will be easier as banks seek to maintain loan volume and relationships. (Some banks are now refusing repayments.) Current high raw-materials inventories and future reserves will be easier for firms to finance. Lower capital costs will help offset higher wages and other cost pressures, thereby maintaining price competitiveness, particularly in mature capital-intensive heavy industries. Finally, greater cash flows and the logic of corporate growth will push investment overseas, shifting savings to countries where higher
returns are available. This trend dovetails with pressures on financial institutions, the need to upgrade employment, and the excess of savings over domestic investment demand.

Japanese corporate strategies will be formed in this context. Basically, firms will continue to grow and compete, if not domestically then overseas, both to keep workers employed and to keep their financial conditions sound. Yen appreciation will promote industrial rationalization, with marginal firms in the least competitive industries suffering most. Their markets, particularly export markets, will be absorbed by larger firms, thus improving the latter’s competitive position and putting further pressure on the yen. This situation also coincides with overseas investment strategies, domestic intra-industry development, and R & D activities. The long-term result will be emergence of profitable, strong, and highly competitive Japanese multinational corporations. This could accentuate and complicate existing trade tensions and problems if Japanese multinationals either export from the LDCs or establish competitive operations in the United States and in European Common Market countries, using low-cost debt capital from Japanese banks, trading companies, and/or corporate parents. Market access would remain while the competitive strength of Japan’s basic industries and corporations improves.

Raw materials access, improved value added, and lower labor costs can all be achieved in these ways. However, multinationalization will present new problems for the Japanese managers in negotiation, project finance, communication with personnel, and political relations with local governments, which many firms still have shown difficulty solving. But in the past, business pressures and realities have proved effective spurs, and it would be short-sighted to assume the likelihood of retreat or failure. Yet, more participation by the government and large corporations in international forums and negotiations

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will be essential to contain possible frictions resulting from the rapid rise of the worldwide activities of Japanese multinationals.

Population and Energy

Two other elements will be important in Japan's economic future. The first is population dynamics; the second is energy. Some commentators worry that the labor force that was young and saving in the 1950s is now aging and retiring. In firms with a strict seniority wage system, this might imply a higher wage bill with no necessary net increase of productivity, though this situation can be largely offset by lower annual raises or smaller bonuses, such as actually occurred in 1977 and 1978. The lower savings rates of older people could imply less money available for financing the investment needed to offset rising wage costs, though again the economy is currently suffering from too much savings. Moreover, these critics claim that general aging implies fewer manual workers available for basic industries and hence cost-push pressures that could lower world competitiveness. Trends in education that emphasize university as the only route to success also have deepened the supply problem of manual labor. Some commentators thus feel that aging in itself will also bring an actual decline in productivity. On the fiscal side, more retirements just when demands are rising for improved social security will certainly impose a burden on the public treasury at precisely the time when the MOF is trying to hold down expenditures, thus increasing existing budgetary conflicts.

These points may seem threatening at first glance, but in the context of the structural evolution of the economy it appears that population dynamics should in fact improve the

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nation’s economic health. First, the lower savings rates implied by an aging population are really no threat at all; indeed, as previously noted, one of Japan’s worst current problems is the deflation due to excess savings. To the extent that aging of the population lowers savings it will also contribute to economic balance. Second, the industries hit hardest by higher wage bills from aging labor forces tend to be those industries that are themselves older and either have lost or are rapidly losing comparative advantage. Higher wage costs in old industries provide only another incentive to develop new industries or upgrade existing ones, just as the MITI plan advocates. Third, the shortage of manual workers or excess of university graduates means increased availability of the very type of workers needed for knowledge-intensive industry. Such an abundance of workers for knowledge-intensive industries will of course lower the cost burden of developing such industries. At the same time, as a disproportionate number of older and retiring people are in agriculture and distribution, this trend will help to rationalize these sectors and raise imports. Of course, the social adjustment costs to the new population structure will be substantial. But it is more rational and beneficial to adjust and use some of the surplus of the more productive evolving industries to pay for the adjustment than to resist them, sacrificing both output and improved overall employment in a futile effort to preserve old, uncompetitive industries.

Energy too is one of Japan’s most serious economic issues. Japan currently relies on foreign sources for virtually all its energy, and the bulk of this comes from the Middle East. In the five-to-ten-year range, there is no way to correct the overall dependence on foreign sources. Thus Japan’s medium-term energy strategy is to diversify sources of fossil fuels. Through such diversification the consequences of disruption in
any one area, e.g., another OPEC embargo or a disaster in the Straits of Malacca, would be minimized. Oil from China, offshore wells in the Yellow and China Seas, and off Sakhalin, along with natural gas from Siberia and the western continental shelf of Australia, and coal from the United States and Australia are prime possibilities for diversification. Developing these fossil fuel resources is not only essential for reducing excessive dependence on a few sources, but also desirable as an outlet for excessive domestic savings and as an opportunity for capital outflow, and to generate more imports to offset trade surpluses.

Japan's longer run (1985-2025) energy future is inescapably nuclear. Diversified dependence may be better than concentrated dependence, but only nuclear power will afford Japan a measure of independence. Japan has made much progress in developing nuclear plant technology, and Hitachi has even signed an agreement with General Electric to exchange (not just obtain) reactor technology.

Even in nuclear energy Japan faces severe constraints. Capacity utilization rates of current reactors in Japan—as elsewhere—are abysmal, and expanded R & D is needed to correct this. But the worst problems are political. The United States has placed strict conditions on Japanese use and disposal of enriched uranium and the technology it has provided. World agreements on nuclear trade and waste disposal are not likely to be susceptible to much influence by Japan. Ironically, research in Japan aimed at improving nuclear technology is not always welcomed since it further complicates proliferation processing, and waste disposal. But the rest of the world must realize that Japan has no choice but to obtain and use improved light water and breeder technology. If its legitimate needs are not accommodated within international accords, then Japan will be forced to develop nuclear capabilities outside their
provisions. Avoiding the political instability inherent in such an unfortunate turn of events is worth much to the rest of the world, and concessions to Japan in nuclear agreements, particularly from the United States will be essential in securing Japan’s cooperation.

*International Issues and the “Balance of Payments Problem”*

Japan faces some of its most troublesome problems internationally not only because of the consensus decision-making process, but also because of the power and logic of its competitive development. Japanese trade in particular faces two short-term issues. The first is the need for policy coordination with other governments, in which economic policy targets are taken seriously and are fulfilled as the quid pro quo for the similar efforts of others. Domestic goals and political constituencies may have to be sacrificed in this regard, and problems abroad must be anticipated before they reach crisis proportions. The second short-term problem will be disorderly markets brought about by competition in excess of what foreign economies can adapt to at normal speeds. Disorderly markets—in currencies, manufactured goods, or commodities—interfere with the ability to make efficient decisions on long-run resource allocation and depress business expectations through uncertainty. Japan is too big an economy to discount any longer its significant impact on the rest of the world.

At the same time, policy coordination and controlling market excesses both require a firm grasp on long-run economic trends and issues. The most important of these is a concept of dynamic, competitive economic evolution. While Japan has a relatively firm idea of how its economy should
evolve, many other nations, particularly the United States, do not. This presents Japan with a dilemma. Should Japan frustrate its own efficient and logical development because of poor U.S. or E.E.C. competitive responses? Or should Japan proceed despite the risk of increased political and economic tensions? Japan will have to create a framework for deciding when and where adjustments are needed. When nations and large corporations choose a development course over time, long-term comparative advantage changes worldwide. Therefore, given Japan’s economic size and the growing importance of Japanese multinationals, the consequences of its emerging economic structure are much larger than is generally appreciated for world economic relations and for trade patterns.

These long-term dynamics are often discussed in terms of the world’s balance-of-payments structure, but in fact the “balance of payments” issue is many issues interwoven. Unemployment, union power, political leverage, consumer protection, inflation, factor endowments, technological capacities, and many other considerations combine to create a global, evolving structure of multilateral relationships. Wise policy on all sides requires a proper assessment of these complexities.

For example, a major current policy problem is the effect of Japanese exports on U.S. unemployment. According to one U.S. viewpoint, Japan is making products Americans could make—even if somewhat less efficiently—and thus is creating U.S. unemployment. The most virulent critics are well-organized, politically powerful unions with Congressional leverage. The struggle for jobs has, in effect, politicized the bilateral trade issue. Nevertheless, real adjustment burdens should not be taken lightly, and Japan needs to recognize this more and more. It needs to understand the real costs to a country of underutilized social infrastructure resulting from plant closings or regional decline. Japan’s eagerness to con-
clude orderly marketing agreements indicates some understanding of the problems involved, but its reluctance to reflate the economy shows the need for additional thought. On the other hand, the United States needs foreign products to increase its domestic growth potential through cheaper inputs, industrial rationalization, and efficient resource allocation. Foreign products help protect domestic consumer interests by providing higher living standards at lower prices. However, consumer groups are usually less well organized and more dispersed than unions or business. Plant closings that affect particular locations are highly visible and political events. The same situation exists in Japan in products such as beef, silk, textiles, and handicrafts, so perhaps Japan can now empathize more with foreign policy-makers.

Japanese imports are the other side of the trade coin. The United States and the E.E.C. might be less upset if they appeared to have easy access to Japanese markets. Japan has been widely criticized for protecting its market through administrative guidance, tariffs, and quotas, all abetted by a complex distribution system which seems especially difficult for foreigners to penetrate. Japan did restrict imports in the initial postwar period to protect its weak industrial base. Now, however, it is the competitive power of Japanese industries combined with some residual protectionist attitudes and a lack of real commitment by foreigners which exclude foreign manufactures. A common indicator of this lack of access is manufactured imports' low proportion of total imports relative to other industrial countries. But here it is important to remember Japan’s factor endowments, for, unlike the United States, Japan has virtually no domestic oil, iron ore, natural gas, uranium, and so on, and agricultural land is sparse. Thus, even if Japan had an industrial output structure identical to that of the United States, raw materials would have to be a higher
proportion of imports. Nevertheless, more can and should be
done to promote manufactured and other imports.

For Japan the agricultural import issue is similar to the U.S.
unemployment/import issue. A powerful lobby with votes
essential to the ruling party is skewing policy to its advantage,
but to the detriment of foreign suppliers and domestic
consumers. More is at issue, however, than just beef and citrus
fruit; rather, the LDP perceives its very life is at stake if major
rural constituencies so essential to its political base are
sacrificed. If the government fosters beef and citrus imports at
the expense of the farmers, it sees the political consequences as
dire. Similarly, the rice market is heavily protected through a
price support system, and a setback for any rural constituency
is an implicit threat to the price system for rice, and hence to
virtually every farmer. An income subsidy might replace
quotas and the price supports, but the LDP feels it simply
cannot afford an erosion of the rural vote. Over the next ten
years, though, this problem will ease as many farmers retire or
find non-farm jobs. Further, as pointed out by Professor Curtis
in Chapter 2, the actual political impact of changes in
agricultural policy are not likely to be nearly as significant as
the LDP suggests.

As for manufactured imports, an important aspect is that the
high technology manufactures Japan could import from the
United States and the E.E.C. to reduce bilateral imbalances are
precisely those MITI’s industrial plan wants to encourage. On
balance, the government thus far has decided that smooth
external relations are worth some sacrifice, but there remains
significant resistance to full reliance on international specialization and comparative advantage in these industries. Imports
and investments have been liberalized for these products, with
some research subsidies granted as a palliative to domestic
producers. Yet, as noted above, this approach is not likely to
result in the quick, effective, internationally competitive development of these industries in Japan, given the strength of foreign competition and continued yen appreciation.

Japan's trade surpluses are often cited as "the problem" in economic relations, but in fact are a proxy for the other issues discussed above. As long as Japan finances the imbalance through absorption of reserves, savings are transferred overseas at no cost to foreigners. Indeed, this would be beneficial if foreign countries were operating close to full employment. One aspect of the surplus that does cause difficulties, however, is its impact on exchange markets. The exchange rate is a potent lever to force policy change and stimulus, but, as such, should be used with great caution, and only to smooth temporary disequilibria to prevent the mis-allocation of resources usually generated by disorderly markets. It is not a substitute or cure for basic structural difficulties. Still, with a probable two-year lag for the real impact of changes in government expenditure patterns to take hold, given the trade surplus, more pressure on the yen is likely into 1979 with the consequences examined above.

The increasing complexity and multilateralization of international economic problems will require more negotiation among all parties. Japan's success in such cooperative agreements will in turn be affected by foreign conceptions about Japan's economy and about what is "fair." New rules to guide the adjustment of payments imbalances seem necessary since the current imbalances of both Japan and the United States are built into their economic structures which exchange rate adjustments are not sufficient to handle alone. A classical or neo-classical prescription would emphasize raising or lowering the level of domestic activity to correct imbalances through higher or lower imports and exports. But this approach ignores important political constraints. Furthermore, the product
composition of trade tends to be stable in the short to medium term, so that even strong stimulus would not necessarily move the balance of payments, particularly bilateral balances, toward equilibrium. The persistent inflation even in a recessionary environment also constrains the effectiveness of the classical and neo-classical payments adjustment policies.

Exchange rate adjustment as a way of changing major imbalances also leaves much to be desired. Not only do its rapid and fluctuating redistributive effects and its disruption of price allocative mechanism cause serious problems, but exchange rates as an adjustment mechanism presuppose a high degree of price elasticity of demand as well as quick and easy entry for new producers. In a world where products are often specialized and complex, where exchange adjustments tend to reflect past competitive differences, and where there is pressure on producers to modernize and maintain sales levels, these two suppositions are in serious question. Moreover, exchange rate changes can stimulate inflation in the devaluing country, particularly if the degree of concentration among producers is high enough to allow domestic price hikes in sympathy with now more expensive foreign products, and particularly if the domestic producers were initially higher cost. This has actually happened in the United States, e.g., in steel and autos.

The real solution to structural problems in the balance of payments seems to be rather a redirection of growth toward different sectors, and a reconstruction of domestic tax, fiscal, and credit incentives structures in such a way as to promote greater balance. In Japan's case this means larger growth for the government sector and domestic consumption sector at the expense of the export sector. This meshes well with the MITI and Keidanren plans as well as with the general tenor of the consensus that seems to be emerging in favor of more public
works, expanded welfare and income support, and more housing. Indeed, the capacity of these plans to bring payments adjustment is one of their most compelling, if least recognized, attractions.

But more straightforward trade policies are needed too, such as quota relaxations and tariff cuts. Japan must recognize that despite recent liberalization, foreign firms have been denied access to its markets for many years, while Japanese firms gained experience and organization in foreign markets, particularly in the United States. In addition, Japan is an extremely difficult and complex place to operate due to linguistic, cultural, and regulatory differences. Training people to work there takes time and local assistance. From this perspective it is reasonable for Japan to help foreign firms with the difficulties of selling in Japan, perhaps to the extent of compensatory advantages in terms of credit, taxes, training, and information. Japan cannot afford the tensions and disruptions that will result from continued large surpluses during the ten years or more that foreign firms will need to develop the necessary experience and organization to sell in Japan in quantity.

At the same time the United States too must shift its economic structure to bring about a payments adjustment. The U.S. government should offer improved assistance and incentives to export. Rather than viewing such programs as “windfalls” for business, it should see the benefits to the U.S. economy of greater productivity, more employment, and a stronger dollar. After all, it was from similar policies of export encouragement that Japan benefited so greatly in the postwar period. However, export policy is far from the whole answer. The entire microeconomic framework in the United States must be rationalized to improve competitiveness not only in export markets but at home as well. Japan’s sales in the United

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States are concentrated in products that U.S. makers actually pioneered, but which, through a combination of poor investment plans, excessive wage hikes, excess government regulation, sleepy marketing, and other factors have been lost to more dynamic rivals. The U.S. trade problem is more an import problem than an export problem. If the United States cannot compete effectively with Japan in the U.S. market, how can it do so in third countries or in Japan itself?

The United States now needs substantial investment incentives so that competitive advantage can be maintained in very high technology industries, such as computers and nuclear equipment, and recouped in basic industries where its worldwide market share has fallen. Firms should be also given compensation for the burden that environmental and other regulations place on them. The strictness of regulations is another matter; no rational observer is against clean air and safe jobs. But the public must bear its share of these costs of regulation one way or another. Currently the public’s share is paid through unemployment and higher prices springing from cost-push inflation induced by regulation and mandated expenditures. Safety and environmental investments now amount to more than 10% of total U.S. investment, but are disproportionately concentrated in a few industries, particularly power, energy, and basic commodities.\footnote{41} This regulation-induced inflation robs U.S. industry of competitiveness and give markets to foreign producers, and the effects are greatest in those industries generally feeling the direct cost impact. Further, such structural inflation induces U.S. monetary authorities to raise interest rates, choking off the very investment that could improve competitiveness. It would be much more rational—and much less costly—for the public to pay its share of regulation costs in the form of offset payments through tax, fiscal and credit policies to the regulated; output woul
then not be lost to inflation and foreign competition. Such offsets would also be fairer, since the current unemployment induced through the regulatory mechanism is not spread evenly across the economy, so that some people pay grievously while others not at all. All benefit from the externalities of a cleaner and safer environment, and thus it is only fair that these charges be made against general revenues.

The basic idea of the offset-payment approach is to move the supply curve for U.S. goods and services to the right by lowering the cost of supply per unit. For the individual firm, lowering investment costs through tax, credit, and fiscal incentives does this directly, as would any offsets to regulatory costs. Indirectly, greater investment stimulates productivity increases and R & D, which further lower costs. Lower costs lead to more competitive prices, improved market share, more investment, etc. This is the same beneficial cycle seen in Japan. Japan now has pollution and safety standards at least as stringent as those of the United States, but they are offset by low cost loans from the Japan Development Bank, by rapid depreciation, and even by expensing of such investments. Thus the anti-competitive effect to the individual firm is minimized. The correlation of this offset-payments structure with Japan’s continued international competitiveness, price stability, and low user cost of capital is not accidental.

An appropriate list of policies for the United States to help break into this virtuous cycle would include the following: incentives for modernization; more, and more rapid depreciation allowances; expensing of safety and environmental and other mandated investments; elimination of double taxation on dividends from common stock; deductibility of interest on preferred stock to strengthen balance sheets; continuation of Domestic International Sales Corporations; and tax relief for U.S. citizens working overseas. A reduction in corporate taxes
or an increase in the investment tax credit would not be as beneficial since this would favor mostly those high technology or service industries which have already been most successful in competing, due to their low capital requirements, their ability to expense R & D investments, and their dependence on deductible labor inputs. The United States must allow basic industry to recapture some of the capital taxed away under the current tax/inflation structure. This recapture could and probably should be tied to increased investment and price stability. The cost to the economy even in the short run would be small as greater competitiveness, increased employment, greater business confidence, and, therefore, greater investment raise the level of economic activity and government revenues, and hence offset any initial revenue reduction. But longer-term positive results of greater price stability, higher growth, greater competitiveness, a stronger dollar, and a reduced budget deficit would be enormous. Like Japan, the United States must begin to think of the economy in dynamic and evolutionary terms.

There are other areas where some restructuring would help the U.S. balance of payments. Anti-trust policy is in need of both clarification and rationalization. Currently, U.S. firms are uncertain of how government will react to rationalizations or overseas cooperation. Often cases brought by the government seem more anti-business than anti-trust and focus on business success rather than on collusion, e.g., IBM or Kodak. This is not true in Japan. Anti-trust policy has in many ways denied economies of scale to U.S. firms and has harmed international competitiveness. In addition, labor should be given some incentives to contain wage demands, e.g., automatic dismissal of dumping suits in industries where wage hikes have chronically exceeded productivity gains. And finally, the United States must develop and implement a comprehensive, cohesive
nd expanded energy policy, including a larger R & D effort which will make use of our indigenous energy resources.

The real contribution of the United States toward adjustment of the world balance-of-payments system will come only through changes in these areas. The necessary policies are basically domestic in nature and are closely interrelated as over costs and increased investment and productivity can result in lower prices, more moderate wage demands, greater competitiveness, and a better ability to pay for and conserve energy through modernization. It is ironic that they should have to be advocated as part of an intelligent balance-of-payments policy. But in fact the U.S. balance of payments will largely take care of itself once rational microeconomic policies are adopted at home. Indeed, what Japanese want most from the United States is not a verbal commitment to free trade but an improvement in the underlying efficiency of the U.S. economy so that foreign competition is no longer a threat, but merely a challenge.

Summary and Conclusions

Japan's growth strategy for the 1949-71 period, concentration in basic industries, was a great success. The major problems of the 1950s—capital scarcity, low income, and the balance-of-payments constraint—were solved, as the industrial structure was transformed by strong private investment and consumption demand, combined with progressive government policies. It was an appropriate strategy for an expanding world economy. Plant and equipment investment was strong throughout the period, even during "recessions" when growth fell as "low" as 6%. Export growth and competitiveness were also major factors; export markets provided justification for
additional plant and equipment investment once domestic demand was basically satisfied. Concomitantly, fiscal policy was conservative. By 1971, though, major economic imbalances had surfaced; poor social security and welfare systems, pollution, lack of social overhead capital, raw material shortages, and increasing trade surpluses were exacerbated by widening bilateral imbalances and maturing domestic and international demand across a broad range of basic industries. Just as the economy was coming to grips with these problems, several shocks accentuated the change in Japan’s economic situation—currency fluctuations, raw materials and food shortages, the oil crisis, and recession. Though to some degree these events directed attention away from the fundamental evolution, on the whole they prodded rethinking and reformulation of national goals. The government and business community are still struggling to work out a consensus and implement it.

Japan’s policy formulation and implementation problems in the 1979-85 period will be complex. Economic fundamentals have changed; unlimited exports of certain products cannot continue; anticipatory plant and equipment investment has been curtailed; and fiscal conservatism is increasingly costly in terms of unused capacity. But on top of these problems, the political structure that allowed high growth is changing. Agriculture’s political strength is harming other sectors, and, as the agricultural labor force is rapidly aging, the basic coalition of agriculture and business underlying LDP rule is under strain. Moreover, international cooperation is becoming more difficult, as transnational interest groups are at times in conflict with national policies, and as more government agencies are involved in economic planning and policy. This will increase adjustment difficulties and the need for multiple solutions. Yet, Mr. Ohira is known as a consensus-builder, which would indicate that the basic economic fundamentals will play a large
role in determining policy, and hence that achieving a consensus will be difficult. Recent events have not changed the problems of inadequate private investment demand, lack of real export growth, and needed structural readjustments. All will continue to put policy pressures on the new cabinet.

Nevertheless, certain economic and political continuities will help Japan. Capital costs remain low and industrial productivity extremely high relative to competitors, so that the differential with other major producers in basic industries will continue for some time. In fact, as many foreign producers fail to invest and their equipment becomes increasingly antique, the relative gap may grow. This will contribute to continued domestic and export price stability in Japan. Nor have the basic drives for corporate survival and improvement abated; while many massive new plants in basic industries are unlikely, existing facilities will be upgraded through introduction of labor-saving machinery, robots, and new designs, while new facilities will be built abroad. Labor market conditions and the permanent employment system should continue, keeping workers receptive to various improvements. All this, of course, assumes a stable world geopolitical situation, especially in East Asia, facilitating a strong, prosperous, but non-military Japan. Further, society’s basic cohesiveness will not change, and political continuity is likely eventually to achieve consensus on the economic scenarios outlined above.

However, the changes are important. Japan is now an economic superpower with major multinational corporations and responsibilities to promote world equilibrium and development without unnecessary tensions. The world is less open to Japanese growth based on exports while more eager for Japanese investment and development aid. At the same time that capital flows out, Japan’s capital-output ratio will rise as technology is developed and as more investments are non-
productive. This process will lower growth. New mechanisms will have to be developed for economic planning and guidance, and a major change is needed in government attitudes toward spending for structural change, demand management, and import stimulation.

Japan was astute between 1949 and 1971, but still lucky. Diligence, effort, and wisdom were important, but a stable world environment was certainly a major factor supporting the various forces that dovetailed so systematically. And there were also special boosts from the Korean and Vietnam wars. The mutually self-supporting system developed during the period sustained Japan through the oil crisis and subsequent recession, so that the nation at present stands in a relatively strong economic position. But Japan’s high productivity cushion grows less comfortable as others drift toward protectionism and as domestic demand deteriorates. Continued economic and political stability are still essential to further development. A concerted effort by all, including an effort by the United States to rationalize its economy, will be needed for Japan to maintain appropriate growth, both for its own sake and for that of a more harmonious, efficient, and prosperous world.

Notes

JAPAN'S ECONOMIC STRATEGY AND PROSPECTS


3. BOJ Annual.


5. BOJ Annual.

6. BOJ Monthly.


8. PMO.

9. BOJ Annual.


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13. Ibid.

14. PMO.

15. BOJ Annual.

16. Calculated from BOJ Annual.

17. BOJ Annual.


19. BOJ Annual.

20. President Directory.

21. BOJ Annual.


23. PMO.

24. BOJ Annual.


26. BOJ Annual.

27. International Monetary Fund, International Financial Statistics various issues; hereafter cited as IFS.

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30. IFS.

31. IFS.

32. BOJ Monthly.

33. BOJ Annual.

34. President Directory.

35. BOJ Annual.

36. In the early 1970s Dow applied to MITI for a large investment (about 25% of contemporary Japanese capacity) in the caustic soda business, a fully liberalized industry. Dow’s membrane process was both more efficient and more sound environmentally than the Japanese industry’s mercury process. Due to Japan’s increasingly stringent pollution controls, the caustic soda industry was under some pressure to change and modernize, but Dow refused to license its technology for sound competitive reasons. As a result, the industry became concerned about potential real competitive difficulties and put pressure on MITI and local governments to resist Dow’s entry. After several years of protracted negotiations, Dow’s application was approved. But given the adjustments U.S. industries have had to make to Japanese competition, the Dow case left U.S. businessmen and policy-makers justifiably irritated.

37. See Industrial Structural Council (advisory body to MITI), “International Trade and Industrial Policy for the 1970s,” May,
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39. BOJ Annual and newspaper releases.
