SUCCESS STORY

by Patricia Hagan Kuwayama

If there is one common theme running through the story of postwar Japan's economy, it is rapid, unceasing change. Japan is dependent on the outside world for most of its raw materials (including 99 percent of its oil). It is far more vulnerable than America or most West European countries to the vicissitudes of the international marketplace. To compensate, the Japanese have made many wrenching adjustments—mostly ignored and seldom imitated in the West. Over the past 36 years, only through great adaptability and continued domestic competition has Japan been able to survive and succeed in the marketplace.

The most painful adjustment Japan had to make was to its plight after World War II. The war left Japan with about one-quarter of its capital investment destroyed, including nearly all of its shipping, one-quarter of its housing, and many factories. In 1946, industrial output stood at less than one-fifth of its 1934–36 average, and farm output was down 40 percent.

Agriculture recovered relatively quickly. Farm production reached prewar levels by 1950; but Japan's population grew by 11 percent during the same period, mainly because millions of Japanese soldiers and civilians were repatriated from overseas. So individuals still had little food to eat.

Industry was slow to recover. Crippling shortages of raw materials and bottlenecks in the production process kept Japan's factories from functioning normally until some time between 1952 and 1955, when prewar production levels were finally restored. Mass unemployment (10 million people in 1946) and a wholesale price index that rose 6,000 percent between 1945 and 1950 complete the portrait of a nation in distress.

At first, it did not appear that Japan's economy would get much help under the U.S. Occupation. The Occupation authorities, under General Douglas MacArthur, victorious commander of the Allied forces in the Pacific, had a mandate to permit a limited reconstruction of those Japanese industries that would, according to the 1945 Potsdam Declaration, "sustain her economy and permit the exaction of just reparation in kind, but not those which would enable her to re-arm for war." Under the first reparations plan, at least three-quarters of Japan's surviving shipbuilding facilities and steel mills, all of its aluminum and magnesium plants, and half of its machine-tool factories were to be dismantled and shipped to Japan's former colonies in Asia—Taiwan, Korea, the Philippines. But the Americans began to fear that Japan would become forever dependent on Washington's aid, which reached $2 billion by 1950. MacArthur's headquarters cut these plans by 90 percent. (Japan was still required to pay reparations of more than $1 billion over 20 years.)

MacArthur as Emperor

Soon after the Occupation began, the Americans set out to cleanse Japan of what they regarded as its militaristic ways. The first step was the "demystification" of the Emperor; he renounced his claim to divine descent in 1946 but remained titular head of the government. (Baron Shidehara Kijuro was named Premier in 1945, but MacArthur was the de facto head of government until 1950.) Also in 1946, the Japanese were forced to accept a new American-inspired constitution—grafted onto the 1868 Meiji Constitution as an "amendment." This instrument established parliamentary democracy on the British model and created an independent judiciary. It also limited military activity, thereby alleviating future strains on the national budget. (Japanese military spending has remained below one percent of GNP ever since.)

The Occupation also brought major social reforms. By the end of 1946, almost five million workers had joined unions, which American officials considered essential to democracy, despite the fact that many were organized by communists. Later, however, the Americans tacitly backed Tokyo's crackdowns on the unions, which had proved to be extremely militant. Also in 1946, the Diet passed a major land reform law. Japanese landlords were required to sell off about one-third of the country's farm land, most of what they owned, to their tenants. Japanese farms remained tiny—averaging about two and a half acres—but the new landowners had greater incentives to produce.

The *zaibatsu* were another target of American democratic reformers. MacArthur told the Japanese people that the zaibatsu system had "permitted the major part of the commerce and industry and natural resources of your country to be owned

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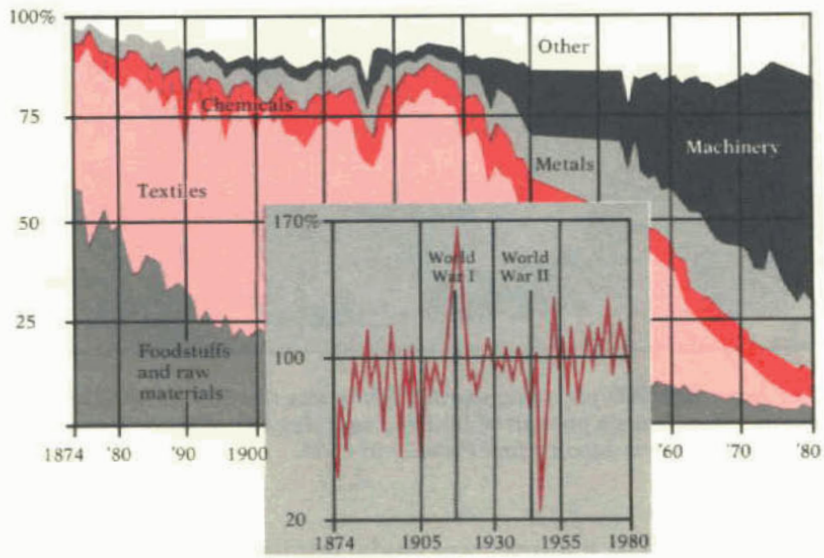
The Japanese 1000 yen note, worth slightly less than $4 at late-1981 exchange rates, bears a portrait of Itō Hirobumi. Itō, one of the original Meiji oligarchs, became Japan's first Premier in 1885.

and controlled by a minority of feudal families and exploited for their exclusive benefit." Some 1,200 zaibatsu companies were slated for dissolution; strong antitrust laws and a Fair Trade Commission to enforce them, both based on American models, were established. Finally, the Occupation authorities purged more than 200,000 leaders from positions in government, business, and other fields. But again, in practice, the program was scaled back sharply as the Americans' emphasis shifted from punishing Japan to helping it. Only 19 firms were actually dissolved. The antitrust laws remained in effect, however, and later helped to ensure the competitiveness of the domestic economy.*

The last major Occupation reform was the 1948 "Dodge Plan" for fiscal and monetary reform (named after the Detroit banker, Joseph Dodge). To curb inflation, the plan prohibited deficit spending (Japan's budget never ran in the red again until the mid-1960s); and it restored the yen as a convertible currency at a fixed rate to aid in the renewal of overseas trade. As a result of Tokyo's budget slashing, 30 percent of all government workers were laid off in 1949, and the knife cut even deeper in many large private firms, when Tokyo cut back on recovery loans to industry. As Tokyo had feared, the layoffs sparked violent labor demonstrations. No one could have known that within a year,

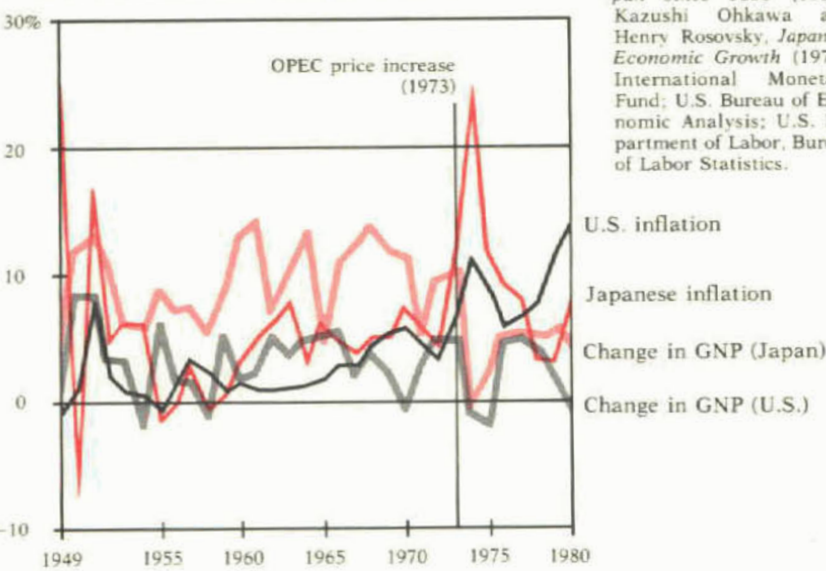
*Some of the zaibatsu family names, such as Mitsui and Mitsubishi, have reappeared as *keiretsu* (financial groups) in the postwar period. But the modern keiretsu have far less political and economic power than the old zaibatsu.

JAPAN'S CHANGING EXPORTS, 1874–1980



EXPORTS AS PERCENTAGE OF IMPORTS

INFLATION AND GNP: JAPAN AND THE U.S.



Source: Kazushi Ohkawa, *Estimates of Long Term Economic Statistics of Japan since 1868* (1967); Kazushi Ohkawa and Henry Rosovsky, *Japanese Economic Growth* (1973); International Monetary Fund; U.S. Bureau of Economic Analysis; U.S. Department of Labor, Bureau of Labor Statistics.

the economy would receive an enormous boost from the Korean War; otherwise, the Dodge Plan might easily have been a disaster.

Two American economists have described the Occupation as "one of the most ambitious attempts at social engineering the world has seen." Yet, judged in terms of its broad objectives—shifting sovereignty from the Emperor to the Japanese people and establishing institutions that would sustain that shift—the Occupation was a successful experiment. In redistributing power, thereby setting the stage for the growth of a robust, modern economy, the Occupation authorities went well beyond what could have been expected of the Japanese acting alone.

The Boom Years

During the late 1940s, however, Japan's future did not look bright. One American geographer wrote in 1949 that Japan, with its meager endowment in land and natural resources—no oil, iron ore, or copper to speak of—could never regain the relative prosperity of the 1930s except by depending indefinitely on foreign aid. To become self-supporting would, in his view, require "political, social, and economic distress and a standard of living gradually approaching the bare subsistence level." Economists tended to be less fatalistic, but all observers were in for some big surprises.

The first was the Korean War boom after June 1950, which provided a timely windfall for Japan, just as the outbreak of World War I had, 36 years before. As a supplier of trucks and equipment, a repair station for the United Nations forces, and a recreation ("R&R") area for Allied troops, Japan reaped some $800 million in foreign exchange in the first year of the conflict. Within three years, its wartime earnings exceeded all U.S. aid received since 1945. By 1952, when the Japanese-American Peace Treaty was signed, ending the Occupation, Japan had recovered from the worst effects of the Pacific War. The critical bottlenecks in industry had been eliminated, and manufacturing output had nearly quadrupled since 1946, surpassing the levels of the mid-1930s.

Yet, after the 1953 Korean Armistice, there was no reason to

Japan's exports, though considerable, amounted to only 15 percent of GNP in 1980, about half the proportion in West Germany. Yet some Japanese industries rely heavily on foreign markets to fuel expansion. Japan's vigorous growth rate has kept its workers' pay safely ahead of the relatively high inflation rate.

AUTOS: A JAPANESE RECIPE

In 1951, Tokyo decided to promote the growth of Japan's auto industry. At the time, Toyota, Nissan (maker of Datsuns), and Prince (later merged) were the nation's only established automakers. Within a decade, they were joined by six new competitors. Strong domestic rivalry, and government encouragement, were essential ingredients of success.

At first, all but two of the companies relied upon imported technology and components. By 1960, total annual production had risen to a meager 100,000 cars (about one-tenth of them for export), but most of the companies had acquired the know-how to go it alone. Tokyo's Ministry of International Trade and Industry (MITI) had erected tariff and quota barriers to shield the fledgling industry from overseas competition. During the early 1960s, MITI tried to force the seven smaller companies to merge. Three went along, but Isuzu, Mitsubishi, Fuji, and Toyo Kogyo refused. MITI made some token loans to support what were now six producers (joined by a seventh, Honda, in 1963). Then it stepped aside.

As tariffs waned, the Japanese automakers competed vigorously at home and abroad. Beginning in 1961, when most of their exports were going to Southeast Asia and Latin America, they beat Detroit's Big Three on price. They began catching up in volume, increasing production 20-fold during the 1960s and replacing West Germany as the world's No. 2 auto producer in 1970. Then, they began catching up in quality. In 1980, Japanese automakers captured 23 percent of the American market, and, with worldwide sales of 10 million cars, replaced Detroit as the world's No. 1 producer.

The Japanese companies enjoy several advantages. Productivity is high: In 1977, the average Japanese autoworker turned out 33 cars annually, while his better-paid American counterpart produced 26. Japanese managers earn between a quarter and a third of what American counterparts make. Japan's automakers have a $1,500 "sticker- price advantage" over Detroit, of which an estimated $420 is due to lower labor costs. Good management accounts for part of the remaining difference. Ironically, the Japanese acquired many of their factory techniques, such as the much-publicized "quality circles," where managers and workers meet to solve assembly line problems, from American advisers.

expect expansion to continue at the same pace. Japan had a GNP per capita of only $188 in 1952, lower than Brazil's or Malaysia's at the time. Tokyo published a five-year plan in 1956 that allowed for GNP growth of five percent annually, about half the rate of the previous decade. The next year, the estimate was moved up to a daringly optimistic 6.5 percent. Even this projection proved to be too modest. On average, real GNP grew by more than nine percent up to 1960, led by the manufacturing and mining (mostly coal) industries.

By 1970, Japan's economy was producing four times the real output it had in 1955. Measured by GNP, it had become the third largest economy in the world, behind only the United States and the Soviet Union. Because population grew by only 16 percent (to 105 million in 1970), salaries rose, and the demand for consumer goods began to build up. By the mid-1960s, there was a booming market in Japan for "luxury" goods—radios, cars, cameras—and by 1970, the Japanese were living about as well as the British. *Japan Reporting*, a government publication, summed up the mood: "Passing through the prewar and postwar periods of austerity, we longed for the splendid and rich life of Western consumers; to catch up with their life was the consensus."

One of the chief symbols of the country's new prosperity, the 130-mile-an-hour Tokyo-Ōsaka "bullet train," made its maiden voyage in 1964. Every home now had to have its "three electric treasures"—a television, a washing machine, and a refrigerator. By 1966, there was a television set in 96 percent of all Japanese homes. The next year, a nationwide poll showed that most Japanese (88 percent), like most Americans, considered themselves middle class. Japan had arrived.

Sony Makes History

"Miracle" growth brought with it major changes in the economy. Most fundamental was the continuing shift of labor from the primary industries (agriculture, fishing, and forestry) into the expanding manufacturing and service sectors. This happened much more quickly in Japan than in the West. There were even more startling changes in the make-up of Japan's output. Food products and textiles, which together comprised 37 percent of all manufacturing production in 1955, accounted for only 19 percent in 1970. Machines grew from 14 percent to 32 percent of all Japanese manufactured goods.

How can Japan's success be explained? There is no single factor that one can point to. Keen competition at home, the sacrifices of Japanese workers and industry, and Tokyo's helping hand all contributed.

Selected domestic industries were shielded from overseas competition by strict tariff and quota laws, but imports of raw materials and foreign technology were duty free. Japanese firms imported technology on a massive scale in the 1950s and '60s, particularly machinery for heavy industries such as shipbuilding (Japan was launching more ships than any other country in the world by 1960) and for the light electric industries—precision instruments, cameras, radios, stereos. Sony paid $25,000 in 1953 for a license to manufacture transistors; the rest, as they say, is history. As in the Meiji era, Tokyo was careful to limit foreign investment, preferring to acquire technology by outright purchase or through licensing agreements. Most of these deals included provisions for training and technical guidance by foreign experts, latter-day "live machines."

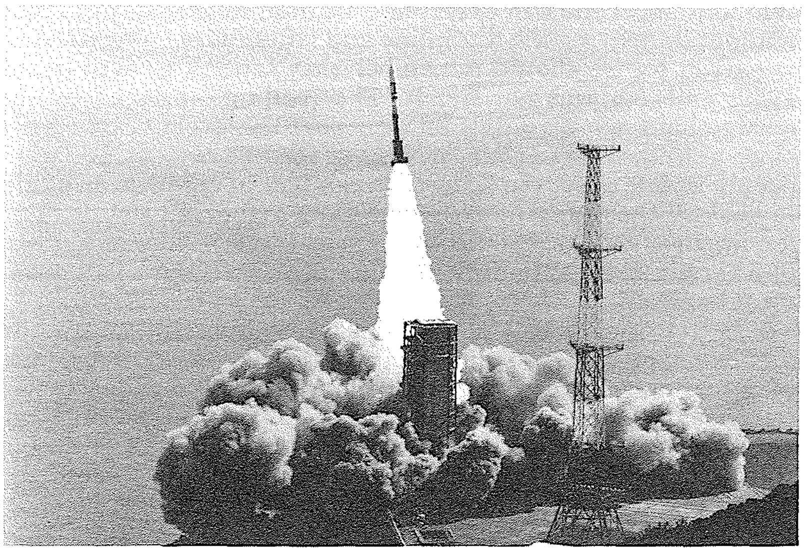
Beyond "Japan, Inc."

The new technology had a particularly strong impact because Japan was beginning with so little; there were few psychological barriers to innovation. And Japanese workers—as well educated as their European counterparts but willing to work longer hours for less pay—proved to be a far greater asset in making the new technology work than many economists had imagined. Labor cooperated with management; after the initial turmoil of the late 1940s, disruptions of production by strikes were few. (Japanese strikes, when they occur, are largely symbolic events, often lasting only one day.) And the Japanese factory worker's hourly wage averaged only 10 percent of that earned by his U.S. counterpart in 1960. (Today the hourly wage in Japan stands at about 60 percent of the U.S. level.)

Ordinary Japanese also readily deferred consumption in the interest of achieving national economic growth. Japanese workers have always been more willing than others to save. In 1958, they banked about 15 percent of their disposable income while workers in the United States, West Germany, and France were saving six to eight percent of their pay. (Today, the Japanese rate is up to about 21 percent; the U.S. rate is less than five percent.) Japanese firms also plowed a far larger share of their profits back into the business than Western companies did. All told, the Japanese reinvested close to 32 percent of their GNP between 1956 and 1960, most of it in new factories and equipment. This was—and is—a unique accomplishment for a peacetime democracy.* One result: The average Japanese factory is only 10 years old. In America, the average factory is 40 years old.

The government's contribution to Japan's economic success is difficult to quantify. Tokyo's official "plans" had few teeth

*As American "supply side" economists delight in pointing out, Japan has no capital gains tax, except on land sales; and tax rates on personal income are far less steeply progressive than those in America. Such policies are said to encourage work and saving. —ED.



Courtesy of the Institute of Space & Aeronautical Science.

The satellite Tansei III *is launched, February 1977. Japan put its first satellite into orbit in 1970. Today, the $477 million budget for Tokyo's space program is about one-tenth the size of NASA's.*

and seldom provided good forecasts, but the industries that Tokyo targeted for growth usually attracted needed private investment. The big banks supplied generous credit, partly because of official pressure and partly because Tokyo's blessing usually meant the investment would be safe and profitable.

Moreover, under the unbroken 26-year reign of the conservative Liberal Democratic Party that began in 1955, the government created an environment that was highly favorable to private business, offering financial incentives to investors and to successful exporters. First, Tokyo singled out basic industries and shielded them from import competition—steel, chemicals, shipbuilding—then the auto industry and some of the appliance industries. Today, Tokyo is promoting the growth of "knowledge businesses" such as computers and semiconductors. In favoring particular industries, the authorities seldom fell into the trap, common in the West, of trying simply to preserve jobs, a course that tends to freeze the industrial structure and thwart needed change.* Whether by luck or wisdom, the Japanese government succeeded in exerting a limited degree of guidance without destroying the discipline and stimulus of competition.

Even so, we should remember that Japan's growth in the 1950s and '60s was not steady. The "ceiling" imposed by the need to hold raw materials imports near the level of exports did close in from time to time. Whenever the balance of trade went deeply into the red, the Bank of Japan had to cut back on credit to cool off the domestic economy, thus reducing local demand for imports. The recessions that ensued were really only slowdowns. But they were difficult times, even so, and many firms went bankrupt.

By the mid-1960s, the flood of cars, trucks, cameras, radios, and heavy machinery shipped overseas had got Japan out from under its balance of payments "ceiling." Japanese industry was so efficiently turning raw material imports into finished products that the value of exports would exceed imports in all but very bad years. At first, Tokyo, basking in its new success, did not realize that it had a big problem on its hands.

Paying the Piper

Japan began racking up such huge trade surpluses with other countries—a total of $7.76 billion in 1971 alone—that it was undermining the international monetary system. (Under the system created at the 1946 Bretton Woods Conference, each nation agreed to revalue its currency if it ran consistent, large trade surpluses.) And businessmen in America and Europe clamored for new protectionist measures—the Common Market limited Japanese color television imports in the 1960s—and protested against the wall of tariffs, quotas, and other trade barriers Tokyo had quietly erected to protect its own industries.

Reluctantly, Tokyo relaxed many of its trade barriers and diverted government funding from export stimulation programs to domestic investments in housing, hospitals, and other neglected areas. But it was too little, too late. The United States alone had a $3.2 billion trade deficit with Japan in 1971. In August of that year, President Nixon announced to a surprised world that he was closing the gold window, ending the dollar's convertibility to gold. This would force countries with stronger economies, such as Japan and West Germany, to let their currencies appreciate against the dollar, which had been fixed at an

*Agriculture is a conspicuous exception. Because Tokyo protects the domestic farm sector with price supports and tariffs on food imports, the Japanese consumer pays three times as much for a pound of rice as does his American counterpart.

artificially high level. This increased the prices that American consumers would have to pay for Japanese and other foreign goods. Hence, Japan's exports to the United States, its leading trading partner, would decline.

Storm Clouds and Little Dragons

The Bank of Japan pumped new money into the Japanese economy to stimulate domestic consumption to make up for the loss of export sales. The result: 20 percent inflation. And when OPEC suddenly announced a 400 percent increase in the price of oil in October 1973, inflation shot up to 25 percent. Then the authorities clamped down on the money supply, so the shock hit hard but was over quickly. Japan's economy recovered rapidly and produced another embarrassing trade surplus by 1977. When the second OPEC "crunch" (a doubling of prices) hit in 1979, Tokyo's tight money policy proved its worth. Growth continued at about a four to six percent rate, and inflation stayed in single digits.

Compared to the rest of the world, Japan's economy performed well during the 1970s. Beneath the surface, however, there have been many painful adjustments. Higher oil prices, currency exchange rates that made Japanese goods more expensive overseas, and increasing competition from the "little dragons" of Asia—Hong Kong, South Korea, Taiwan—cut annual growth nearly in half.

Bankruptcies rose to record levels during the 1970s; twice as many firms went bankrupt in Japan in 1978 as in the United States, which has a far larger economy to begin with. Corporate profits fell more steeply in Japan after the first OPEC price shock than in either America or West Germany, and Japan's factories were operating further below capacity. The rate of productivity increase dropped off, as it did elsewhere, but Japan fell from No. 1 in this category to No. 3, behind West Germany and France.

These are among the signs that a major restructuring of the Japanese economy is underway. Manufacturing employment shrank by more than 10 percent during the last decade, with the drop in some important sectors, such as textiles and shipbuilding, reaching several times that proportion.* Government policies to finance the scrapping of obsolete equipment and to

*The total number of people employed in Japan grew only nine percent during the 1970s, largely because older workers and women left the labor force. Unemployment in late 1981 averaged two percent. One can only wonder how successfully Japan could have coped if more people had looked for jobs, as in the United States, where total employment expanded by almost 25 percent during the same decade.

retrain workers seem to have warded off the worst effects of these changes.

The question is: Will the Japanese, who have been able to make the most out of their proven ability to manage modern mass production, be able to exploit other advantages as the emphasis shifts to the services of a "postindustrial" society—banking, engineering, data processing?

Another challenge for Japan, as for its Western partners, is the aging of the work force. In Japan, this threatens the system of "permanent employment" that has served the country so well during the postwar years. Under "permanent employment," a worker is paid less than he is worth at first, and more in his last years. This provides incentives to loyalty by the employee and to investment in his training by management.

If retirement is postponed much beyond the present customary age of 55 to compensate for the shortage of younger workers, managers may have difficulty obtaining full productivity over the full span of the employee's career, eating into profits. Under the seniority pay system, Japanese companies will be paying their employees more as the average age of the work force rises, but will not enjoy a commensurate boost in output. If employers are forced to switch to a "merit pay" system, then the current pattern of labor-management accommodation will be undermined. Either way, adjustment will be difficult without the booming growth rates of the past. And if Japanese women, now 39 percent of the work force, start entering the labor market in larger numbers, as American women have done, the need for faster economic growth will be even greater.

The 1980s are proving to be a difficult decade for most industrial nations. If the Japanese people have any advantage, it is their freedom from any illusion that the future can be simply a continuation of the past—a lesson learned during the recovery from the psychological and material devastation of defeat in war. The Japanese do not assume, as do so many Americans and West Europeans, that a static industrial structure will automatically continue to provide an annual rise in living standards. The present confidence of the Japanese rests on their proven ability to adapt quickly and not to rely either on miracles or on old economic formulas to avoid painful but necessary change.