

# Chapter 10

## Postwar Recovery, 1945-49



Tokyo destroyed by American bombing, near Shimbashi Station, after the war in 1945.



The crowd at a black market, near Osaka Station? in 1946.

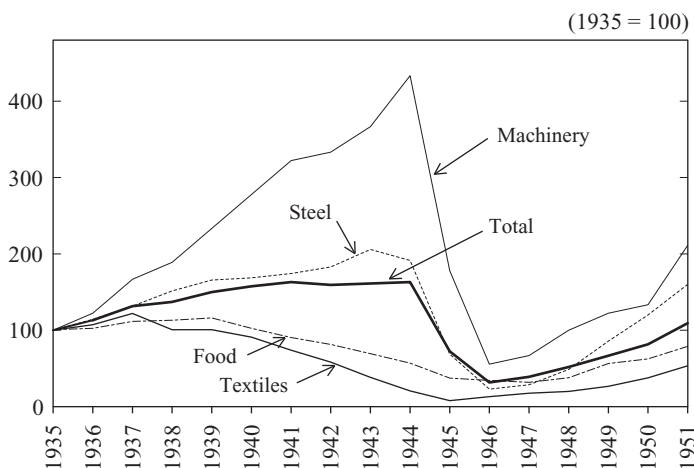
## 1. Physical war damage

After the war defeat, Japan was occupied by the allied forces. In fact, the US was the only country that ruled Japan. The occupying force was called the Supreme Commander of the Allied Powers (SCAP) or, alternatively, the General Headquarters (GHQ—this term was more popular among Japanese). The GHQ was headed by US Army General Douglas MacArthur. In contrast to Germany, the occupation of Japan was *indirect*, in the sense that the Japanese government continued to exist and function and sometimes even resisted US orders. Another feature unique to Japan was that it was occupied by one country, unlike Germany which was occupied by the US, the UK, France and the USSR. This meant that Japan could avoid the risk of being divided when the Cold War began.

The US conducted a survey on the effectiveness of military attacks against Japan during the war. There were two factors that contributed to Japan's defeat.

*Sea lane blockade*—virtually all Japanese military and commercial ships were sunk, and the country lost the means to transport energy and materials between the mainland and the colonies or occupied areas. Without inputs,

Figure 10-1 Industrial Production Index



Source: Management and Coordination Agency, *Historical Statistics of Japan*, Vol. 2, 1988.

**Table 10-1 The Loss of National Wealth Due to the Pacific War**

(In millions of yen at end-of-war prices)

Type of Physical Asset	Before War	After War	Ratio of Destruction
Total assets	253,130	188,852	25.4%
Ships	9,125	1,796	80.3%
Industrial machinery	23,346	15,352	34.2%
Structures	90,435	68,215	24.6%
Industrial materials	32,953	25,089	23.9%
Household assets	46,427	36,869	20.6%
Communications and water supply	4,156	3,497	15.9%
Electricity and gas	14,933	13,313	10.8%
Railroad and road vehicles	15,415	13,892	9.9%

Source: Economic Stabilization Board, *A Comprehensive Report on the War Damage of Japan Caused by the Pacific War*, 1949.

Note: War damage includes direct damage by bombing and shelling as well as indirect damage due to scrapping, removal and the lack of maintenance.

production came to a halt. This was the primary reason for the collapse of Japan's war economy.

*Strategic bombing (mostly in 1945)*—virtually all Japanese major cities were subject to US aerial bombing. The largest air raid was conducted in the eastern sections of Tokyo on March 10, 1945, when about 100,000 people were trapped in fire and killed within a few hours. Atomic bombs were dropped on Hiroshima (90-120,000 immediately killed) and Nagasaki (60-70,000 immediately killed). However, bombing did not reduce Japan's production capacity as much as expected, although it had a strong psychological impact.

The US report concluded that the sea lane blockade was more effective than the strategic bombing. It also argued that US bombing should have targeted railroads rather than housing.

The Japanese government also produced a report on war damage. Table 10-1 shows the proportions of physical assets lost during the war. Most of the losses were incurred toward the end of the war.

The two-thirds of machinery stock survived despite heavy air raids. The surviving factories and railroads were inoperative, however, due to the lack of energy and inputs. Immediately after the war, in 1945 and 1946, output collapsed to only 20 percent of the wartime peak, or 30 percent of the prewar peak

which was recorded between 1934 and 1936. The lack of inputs was the reason, not the lack of capacity.

## 2. Shortages and inflation

Economic planning was continued even after the war and until 1949. In a crisis situation, economic control must replace paralyzed private sector activity. As during the war, necessities continued to be rationed and the government directed production and input procurement. Prices were controlled, subsidies were provided and the economy was still tightly regulated. However, compared with wartime, controls became less effective because of the emergence of a large number of black markets.

Shortages were most severe and living standards were lowest in 1946, a year after the end of the war. As food became extremely scarce, it was feared that many people would starve to death. As soldiers and civilians returned home from war fronts and former colonies, unemployment became a serious problem. Joblessness was expected to reach 10 million. However, neither mass starvation nor massive unemployment materialized, because idle population was absorbed largely in the informal and agricultural sectors. Many urban people worked in the informal sector to survive<sup>1</sup>. These sectors provided temporary jobs and a food sharing mechanism.

Urban residents had to travel to rural villages in extremely crowded trains to exchange their remaining property, such as kimono and cloth, for food. Rationed food was too small in quantity. Everyone had to violate the law and go to the black market to survive. It is reported that Judge Yoshitada Yamaguchi of Tokyo District Court was so honest that he did not want to break the Food Control Law. He ate only rationed food and refused to take advantage of

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<sup>1</sup> The informal sector refers to the collection of jobs that are not officially registered or permitted, such as street peddlers, personal service providers and household works in contrast to legally sanctioned enterprises and cooperatives. Since it operates in a grey zone between legal and illegal, its status remains uncertain, being subject to official round-ups and confiscation and without protection of workers' rights or contract enforcement. For the same reason, there is little incentive for physical asset formation. The informal sector tends to emerge in a country in crisis or whose market economy is underdeveloped or temporarily paralyzed.



The people's economic life was hardest from late 1945 to 1946. Many urban people lost their houses and properties, even if they survived the US bombing. From upper left to lower right, (1) life in a makeshift hut; (2) eating simple food at a black market; (3) a train packed with city dwellers traveling to countryside to barter clothing for food. But if they were caught by police, purchased items would be confiscated. (4) A seller opens a straw mat to show fish in a black market.

illegal food. In October 1947, he died of starvation.

To cope with output collapse and unemployment, the Japanese government printed money to finance subsidies while imposing price controls. Clearly, this strategy could not be sustained for long. Monetization of fiscal deficits created triple-digit inflation from 1946 to 1949. Black market inflation was even higher, especially in the early period. This was the highest inflation that Japan ever experienced, before or since.

Foreign trade was strictly controlled and any transaction had to be approved by the SCAP. Private foreign trade was prohibited. For each commodity, the SCAP decided the dollar price and the yen price separately, so an implicit exchange rate existed for each item. In effect, Japan between 1945 and 1949 had a multiple exchange rate system. Exchange rates for exports (150-600 yen per dollar) were generally more depreciated than exchange rates for imports (125-250 yen per dollar).

The volume of international trade was also very limited. Apart from controlled trade, the US provided large amounts of humanitarian and economic

aid to Japan, amounting to a cumulative \$1.95 billion during 1946-50, which helped to ameliorate the shortages of food and consumer goods. It was said that the Japanese economy was barely surviving with two artificial supports, namely subsidies and US aid. These supports had to be removed as quickly as possible.

### 3. The Basic Problems of 1946

Immediately after the war defeat, two young officials organized a study group to discuss ways to rebuild the Japanese economy following the war damage. Their names were Saburo Okita and Yonosuke Goto. Actually, preparation for this had been going on toward the end of the war. Okita and Goto were electrical engineers stationed in Beijing, but they knew Japan would soon lose the war. They returned to Tokyo to organize a study group.

The first meeting of the study group was held on August 16, 1945, one day after Japan's defeat. The topic was the foreseeable impact of the Bretton Woods Agreement concluded a year earlier and the creation of the IMF and the World Bank. After that, study meetings on various topics were hosted every week with the attendance of prominent officials and academics. Okita and Goto provided a secretarial service, summarizing the key points of each discussion and drafting a report. The study was begun as a private endeavor but was later officially recognized as the Special Survey Committee of the Ministry of Foreign Affairs. The interim report was issued in late 1945 and the final draft was produced in March 1946. With minor revisions, the final report was published in September 1946.

This report, with the title "The Basic Problems of Japan's Economic Reconstruction," was an excellent example of Japanese development thinking<sup>2</sup>. It started with the analysis of external environment and internal situation. From this, an ambitious yet realistic positioning strategy was derived. Then concrete measures and action plans were contemplated. Many of the strategic orientations proposed in this report are common to Japan's development policy advice even today. For example, when Prof. Tatsuo Kaneda drafted a policy recom-

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<sup>2</sup> This report is now available in English translation—see Saburo Okita, ed, *Postwar Reconstruction of the Japanese Economy*, University of Tokyo Press, 1992.

mendation for Kyrgyzstan (Kaneda, 1992), or when Prof. Shigeru Ishikawa wrote a JICA report on Vietnam (JICA, 1995), their logical sequence was very similar to that of the Basic Problems report. The author's current research on Vietnam's industrialization in the age of globalization also follows the same sequence (Ohno and Thuong, 2005). While the targeted industries may differ from one country to another, the procedure to identify and study them remains common.

The report has 193 pages in two parts. The first part analyzes the new global situation and the historical and geographical position of the defeated Japan. War damage is carefully examined and some positive aspects are also noted. The second part contains proposals for promoting industries and targeting exports, sector by sector, with the necessary concrete policy actions. Real sector issues dominate, while monetary and fiscal problems are discussed only lightly. The key ideas in the report can be summarized as follows<sup>3</sup>:

- Japan's economic vision should be based on a deep analysis of shifting global trends.
- A comprehensive and concrete recovery strategy must be designed and implemented. It must be based on industrialization, technology improvement and a dynamic transformation of trade structure.
- Each important industry must be analyzed carefully, and realistic and concrete promotion programs must be proposed. Comparative advantages in textiles and agriculture were now lost because of the expected emergence of the rest of Asia. Japan must aim at skilled labor-intensive industries.

Many people were inspired by this report, but its recommendations were not formally adopted by the government. Indirectly, however, the idea that "limited resources must be selectively used for restarting an expansionary reproduction cycle" was put into practice via the priority production system

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<sup>3</sup> Today's readers may feel uncomfortable when they read the strong assertion in this report that the free economy was hardly recommendable as the world economy was decisively shifting toward planning. But we must recall that this was the dominant thinking dating back to the pre-war period, and planning was even inevitable in the situation of severe economic crisis. Another argument, that Japan's future depended on industrialization rather than on agriculture, trade or services, may sound obvious. But this should be construed as an opposition to the American policy at that time to completely de-industrialize Japan (see below).

**Table 10-2 Some Excerpts from the Basic Problems Report (1946)**  
(Two numbers refer to the page numbers in the Japanese original and the English translation respectively)

- The major causes for such reproduction on a regressed scale are found in the sluggish domestic production of coal and in the shortages of raw material imports. (p.63/66)
- In capitalistic free competition many Japanese industries will be overwhelmed by gigantic modern foreign industries, and Japan's industrial structure will thus be deformed. This will make it necessary to adopt State policies that will keep at least basic industries intact. (p.81/85)
- A national posture will have to be assumed in which all the people do not seek an affluent consumer life but are content with minimum standards of living, consume conservatively, and increase savings—thereby contriving to recover economic power and not seeking financial assistance from the outside world for consumption purposes. (p.85/88)
- A comprehensive and specific year-to-year reconstruction program will have to be formulated in order to revive the Japanese economy from the extreme destitution in which it finds itself now. The waste of economic power that would result from allowing laissez-faire play to market forces will not be permitted in order that all the meager economic power remaining may be concentrated in a direction toward reproduction on an enlarged scale and that the process of reconstruction may be expedited. (p.92/94)
- The principal role in Japan's economic reconstruction will have to be played by manufacturing... Therefore when the Japanese political and economic systems have been democratized and their aggressive character wiped out, the nation's heavy industries should be allowed to grow to a considerable extent... As Japanese heavy industries are certain to be subjected to international competition in the future on the one hand, and because the benefit of adequate governmental protection as experienced in the past will become difficult to obtain on the other hand, they will have to cultivate—through the rationalization of management and the elevation of technological levels—the ability to withstand the competition from foreign goods in terms of production costs as well. (pp.111-112/114)

directed by Prof. Hiromi Arisawa, one of the members of the study group (see below).

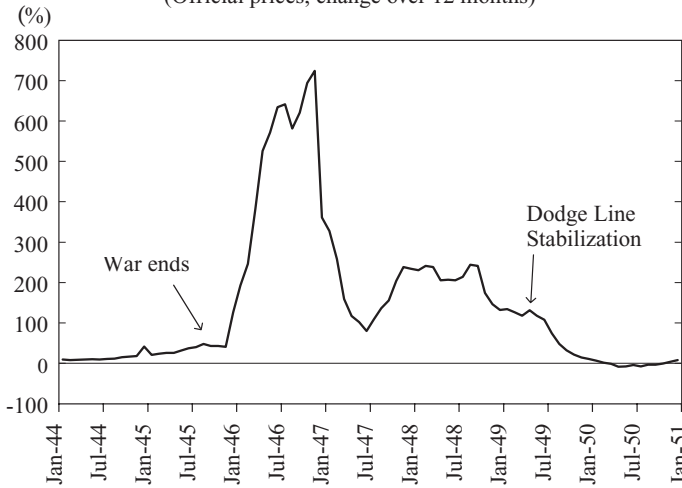
## 4. How to stop inflation

After inflation peaked in 1946, it persisted at triple digit level until 1949. Its cause was clear: monetization of the fiscal deficit. The fiscal deficit in turn was generated by the following two policies.

- *Subsidies*—subsidies were mainly directed at intermediate inputs, such as coal, steel, copper, and fertilizer, but some were targeted at consumer goods, especially food. More precisely, price controls were imposed, and



Figure 10-2 Retail Price Inflation in Tokyo  
(Official prices, change over 12 months)



Source: Management and Coordination Agency, *Historical Statistics of Japan*, Vol. 4, 1988.

the government provided production subsidies (literally called “compensation for price gaps”) in order to cover the losses incurred by private producers.

- *Recovery Financial Fund (fukkin) loans*—the targets of these loans were designated priority industries, in particular the coal industry. Policy loans were provided by the Ministry of Finance to these industries. Government bonds (fukkin bonds) were issued to finance these loans. Most of these bonds were directly purchased by the Bank of Japan, which increased the money supply.

Economists still debate the merits and demerits of these policies. From the viewpoint of stopping inflation, they were clearly undesirable and had to be terminated as soon as possible. But from the viewpoint of real sector recovery, a delicate balance had to be struck between fighting inflation and sustaining output. Cutting these subsidies and loans immediately might have killed all remaining industrial activities.

The first attempt to stop the inflation was the deposit blockade of 1946. The government suddenly announced that (i) everyone now had an upper limit of 500 yen per month for the withdrawal of bank deposits; and (ii) existing

paper notes would be annulled unless they were deposited at the bank. Thus, people were forced to keep their money at the bank while inflation continued. This reduced the money supply to one-third and slowed inflation temporarily. But people naturally felt deceived by the government and the credibility of its monetary policy was lost. Soon, inflation accelerated again.

After the failure of the deposit blockade, different approaches to disinflation were proposed and hotly debated. Contested ideas were as follows:

- (1) *Accepting inflation*: in July 1946, Finance Minister Tanzan Ishibashi stated that a budget deficit and high inflation were acceptable as long as they prevented further output collapse and unemployment. He said that the present inflation in Japan was caused by supply shortages and not by excess demand. Thus, price stability called for supporting producers and workers. A sound budget in such a situation meant accepting a fiscal deficit.
- (2) *Shock approach*: in January 1948, Kihachiro Kimura, a socialist Member of Parliament, argued the opposite. He said that price stability was the precondition for output recovery. As long as inflation continued, people would hoard goods in anticipation of higher prices. This would reduce supply and raise prices even more. A bold anti-inflation policy was necessary to stop this vicious circle. The US government in Washington also shared this view.
- (3) *Gradualism*: the Economic Stabilization Board, as well as General MacArthur of the SCAP, feared that big-bang stabilization would devastate Japanese industries and lead to social crisis. They hoped to lower inflation step by step using subsidies, fukkin loans and US aid, while reducing these support measures over time.
- (4) *Conditional shock approach*: Prof. Hiromi Arisawa of Tokyo University recognized that an anti-inflation policy would reduce output temporarily. But he also knew that inflation had to be eliminated to end speculation and hoarding. He argued that *output must be raised by the planning method to 60 percent of the prewar level, then a strong anti-inflation package should be adopted*. Output would probably fall back to about 30 percent of the prewar level following this shock, but people could somehow endure this level, which actually prevailed in 1946. If

the anti-inflation policy was implemented too soon, without such initial output recovery, the shock would be too severe.

The policy which was actually adopted turned out to be close to what Prof. Arisawa proposed.

## **5. Priority production system, 1947-48**

The priority production system (PPS) refers to a policy of concentrating scarce resources in a few strategically important industries to jump-start a recovery (though it is called a “system,” it is actually a policy). It is a type of economic planning. Recovery of a few key industries is expected to have positive spillover effects on the entire economy.

Prof. Arisawa was a member of the personal advisory group of Prime Minister Shigeru Yoshida. In July 1946, General MacArthur told Yoshida that he would allow Japan to import a small number of goods<sup>4</sup>. Yoshida ordered bureaucrats to prepare a wish list for imports, but the list they produced was too long. Yoshida asked his advisors to shorten the list. The following five items finally remained: steel, coal (anthracite), heavy oil, rubber, and buses.

MacArthur did not want to let Japan import heavy oil since it was in short supply globally. But Prof. Arisawa urged Prime Minister Yoshida to renegotiate with the Americans, saying that if Japan was permitted to import heavy oil, the Japanese government would promise to produce 30 million tons of coal. Heavy oil was an input to steel production, and steel was needed to rehabilitate coal mines. For Japan, coal was the only energy source which was domestically available. If enough coal was produced, the surplus could be distributed as an energy input to other industries.

MacArthur agreed to let Japan import heavy oil under this promise. Prof. Arisawa, who proposed the idea, became the chairman of the subcommit-

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<sup>4</sup> During the war, the Japanese government guaranteed compensation for any losses incurred by individuals or firms engaged in military production. In July 1946, the GHQ ordered to cancel this guarantee which drove a large number of firms into bankruptcy and default. Prime Minister Yoshida appealed to General MacArthur on the difficulties caused by this decision, to which MacArthur responded by allowing Japan to import certain products to ameliorate the situation.

tee responsible for producing 30 million tons of coal. In parallel, the Ministry of Commerce and Industry was also contemplating a similar plan. Prof. Arisawa's method was meticulous. He summoned the general directors and chief engineers of all coal mines in Japan to gather information. Based on actual coal deposits, veins, extraction speed, working hours and so on, he calculated the supply capacity. On the demand side, he estimated the possible coal use by the SCAP, power companies, railroads, and industries.

"Dig 30 million tons of coal" became a sort of national campaign. The Minister of Commerce and Industry visited the Joban Mine to cheer workers. In the streets of large cities, the daily output of coal was posted. The evening radio program sent words of thanks to hard-working coal miners all over Japan. The government secured inputs for coal mines using subsidies and fukkin loans, and provided special housing for coal miners. Although the actual delivery of imported heavy oil was delayed, the production goal was more or less realized. Domestic coal production in 1947 was 29.32 million tons. The output of key industries other than coal fell slightly short of targets in 1947. But the priority production system was continued in 1948 and most targets were achieved in that year. The economy began to rebound in 1947. But inflation was still high.

## 6. US policy in occupied Japan

Japan was under US occupation from 1945 to 1951. During this period, US policy on occupied Japan shifted significantly.

At first, the objective of occupation was the *demilitarization* of Japan. The US wanted to cripple the Japanese economy so that it would never be able to produce military goods again. No heavy industry was to be allowed. Remaining machines were to be stripped and shipped to the rest of Asia as reparations in kind. However, these policies were not actually implemented. The SCAP also introduced democracy, since the lack of democracy, such as business monopolies, lack of workers' rights and exploited peasants, was considered to be behind Japan's military expansion. The following three democratic reforms were executed by the order of the SCAP:

- *Zaibatsu breakup*—big businesses were accused of helping militarism

during the war. Group companies were broken up into separate entities. But this policy was later reversed and a new type of industrial group, called *keiretsu*, emerged<sup>5</sup>.

- **New labor laws**—the new laws guaranteed workers' rights on organizing labor unions, collective bargaining and basic working conditions.
- **Land reform**—all farmland of absentee landlords and holdings above certain limits were confiscated and sold to actual tillers. The sales price was low and high inflation quickly depreciated its real value. This increased the land ownership of farmers significantly, which was good from the viewpoint of equity and political feasibility, but land was now divided into too many small plots to conduct efficient farming, which was undesirable from the viewpoint of improving productivity. Family farming on a small scale has become the dominant trait of Japanese agriculture ever since.

In addition, a new constitution was drafted and implemented under pressure from the SCAP on May 3, 1947. The Japanese government now celebrates this day as a national holiday. Compared with the Meiji Constitution of 1889, the following features are noteworthy:

- Sovereignty rests with people.
- The emperor is a symbol of Japan with no political functions.
- Renunciation of war and non-possession of military forces (Article 9).
- Guarantee of basic human rights.
- Separation of power among legislative, administrative and judicial branches.

Article 9 is unique to Japan and has caused many heated arguments ever since. The full text of Article 9 runs as follows:

Aspiring sincerely to an international peace based on justice and order, the Japanese people forever renounce war as a sovereign right of the nation and

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<sup>5</sup> *Zaibatsu* is a group of large companies operating in many sectors that are owned by one holding company dominated by an influential family. *Keiretsu* is a looser collection of companies without a holding company at the top, whose member companies are related to each other through cooperation in finance and technology, mutual share holding, personnel rotation and the like. A pyramidal subcontracting structure in the automobile and motorcycle industries is also called a system of *keiretsu* companies.

the threat or use of force as means of settling international disputes.

In order to accomplish the aim of the preceding paragraph, land, sea, and air forces, as well as other war potential, will never be maintained. The right of belligerency of the state will not be recognized.

Although the possession of armed forces is explicitly prohibited by the constitution, Japan now actually has the Self-Defense Force. Hardliners want to revise Article 9 so that Japan can own a full military force without an acrobatic interpretation of the Constitution. Others want to keep Article 9 and abolish the Self-Defense Force.

But around 1947, US occupation policy shifted dramatically because of the start of the Cold War. Now the US wanted to strengthen Japan as a capitalist ally and an anti-communist base. Besides that, economic aid to Japan was becoming too burdensome for US taxpayers. Remilitarization and the economic recovery of Japan, including the rebuilding of heavy industries, were promoted. Socialist and labor movements were discouraged.

In addition, a policy gap existed within the US government. Washington demanded free markets and big-bang macroeconomic stabilization as soon as possible, but General MacArthur and his SCAP staff in Tokyo, who were called “New Dealers”—a group of people who supported official intervention at the time of the Great Depression in the 1930s—preferred gradualism with appropriate state roles.

## 7. Dodge Line stabilization of 1949

But this debate within the US government was ended when Washington sent Joseph Dodge to Tokyo in early 1949. Dodge was the president of Detroit Bank and a strong believer in the free economy. He ordered the following austerity measures to terminate inflation. His policy package was called the “Dodge Line.”

- Stop fuckin loans.
- Abolish all subsidies and raise utility charges.
- Strengthen taxation and cut expenditure.
- Have a “super-balanced budget”—the primary balance should be zero, which means the entire budget should be in surplus.

- Unify multiple exchange rates at 360 yen to the dollar.

In addition, Prof. C.S. Shoup, an American fiscal expert, was also sent to Japan to introduce a new tax system. His advice was adopted in 1950 and became the basis of Japanese taxation in the postwar period. It was a system with a heavy reliance on direct taxes, especially income and corporate taxes, which became a key feature of the Japanese tax system for a long time to follow. Japan had no broad-based indirect tax, such as VAT or general consumption tax, until 1989.

The Dodge Line stabilization was very successful in stopping inflation. But as feared, the shock on economic activity was severe and people expected a serious recession. Indeed, output soon began to decline. The Bank of Japan tried to supply liquidity against the order of Dodge. Prof. Arisawa felt that stabilization measures were adopted too soon; he thought that Dodge should have waited another year.

We do not know how serious this recession would have been, because another big event intervened. As the Japanese economy started to shrink, the Korean War (1950-53) broke out. Whatever the political implications of this war might have been, its impact on the Japanese economy was positive. The US forces used Japan as a supply base and procured great amounts of military and civilian goods. For Japanese industries, this was tantamount to a sharp increase in external demand, as in the export boom experienced during WW1. The recession ended quickly and the Japanese economy began to grow. Minor inflation also returned, but price stability was restored when the Korean War ended.

The Dodge Line stabilization also had important systemic implications. The Japanese economy had been a planned one since 1937 and economic control continued during the postwar recovery period. The achievement of price stability and the abolition of price controls and subsidies finally allowed Japan to return to a freer economy. Now the national economy could be deregulated and the role of government could be reduced. However, this did not mean a *completely* free economy; many elements of official intervention remained even after the end of planning.

Joseph Dodge is sometimes appreciated for ending inflation and restoring economic freedom, and sometimes criticized for implementing a

shock therapy (although its undesirable effect was cancelled by the Korean War). It is likely that most Japanese thank him rather than blame him.



## Hiromi Arisawa and Saburo Okita discuss postwar recovery

Below is the excerpt from a dialogue which took place between these two gentlemen in 1986 (quoted from Arisawa, 1989, pp.33-34). Both of them were deeply involved in the postwar recovery policies.



Hiromi Arisawa (1896-1988)



Saburo Okita (1914-1993)

**OKITA:** What was your opinion on the nationalization of the coal industry [proposed around 1946-47]?

**ARISAWA:** As for me, I never thought of nationalizing it.

**OKITA:** Wasn't it at the time of Minister of Commerce and Industry Chosaburo Mizutani? A law on the nationalization of coal mines was proposed.

**ARISAWA:** I never thought of nationalization. As a matter of fact, Japanese coal mines were already operating under government's directives. In other words, coal mines were virtually under state control. Germany nationalized coal production, and I discussed the matter extensively in many articles. But I had no intention of nationalizing our coal mines. Of course, if some unexpected situation arose, nationalization would have been an option. But what was the point in nationalizing only coal?

**OKITA:** Around that time, there was a debate over the so-called *Chukan Antei Ron* [intermediate stabilization, which means gradual disinflation] between you and Mr. Kimura, the socialist Member of Parliament. Your idea was to stop inflation after the government permitted the output to recover to a certain level relative to the prewar size. But Mr. Kimura regarded disinflation as the prerequisite for output recovery. That was the key point in the debate. You wrote in an article that the two views differed in the prioritization of policies. It certainly was a big difference, from the viewpoint of your "economics of transition."

**ARISAWA:** Regarding the disinflation policy, my view at that time was to adopt the priority production system first to let the production recover to 60 percent of the prewar level, then stop the inflation by bold measures. If the big-bang disinflation were introduced before output recovery, it would have plunged the Japanese economy into a tremendous confusion, so it should not have been done. In either case, inflation stabilization would cause the output to decline. The crucial point was how deep this decline would be. Bold stabilization measures were unavoidable, but the timing must be chosen wisely, at a time when the priority production system proceeded further and the output reached 60 percent of the prewar level.

My view was that bold stabilization would surely cause the output to decline. Under the worst scenario, the output might even decline to a half. I insisted on the recovery to 60 percent of the prewar level, because if you had that level, the subsequent output decline would take it to the 30 percent of the prewar level. Since output actually fell to that level immediately after the war and people could somehow survive, to me that was the minimum acceptable level.

Before Mr. Dodge arrived in Japan, I went to see Mr. Fein, financial advisor of the GHQ's Economic and Science Bureau. His position was that Japan needed a big-bang anti-inflation program. I told him that it was too early to implement it. He tried to persuade me into early stabilization, but I never relented. The logic I have just explained was behind my insistence.

# Chapter 11

## The High Growth Era



The special train carrying new high school graduates to big cities in 1964 – These youths were called "golden eggs."

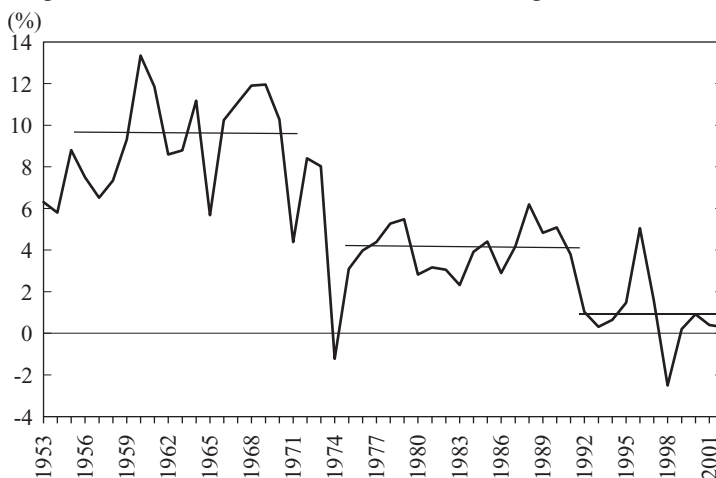
After the recovery period of 1945-49 and the Korean War from 1950 to 1953, the Japanese economy entered into a period of high growth. From the mid-1950s to the early 1970s, average real growth was approximately 10 percent. This very high and sustained growth transformed the Japanese economy and society significantly. By around 1970, Japan overtook West Germany and became the second largest economy in the capitalist world, as measured by GNP, after the US. Japan's catching-up process with the West was finally over. There are many issues to be discussed for this very interesting period. This chapter will discuss the following five topics: "rationalization" drive, macro-economic management, industrial policy, global re-integration, and social change.

## 1. Rationalization

During the preceding period of 1945-49, when economic planning was still in place and Japan was virtually a closed economy, the principal policy objective was a *quantitative* recovery. The recovery policy was pursued at any cost, ignoring efficiency. Subsidies, fukkin loans and US aid were provided.

But in the early 1950s, after the Dodge Line stabilization, the Japan-

Figure 11-1 Real GNP Growth since the High Growth Era



Source: Cabinet office, *Annual Report on National Accounts*, various issues.

ese economy entered another phase. The new situation can be described as follows.

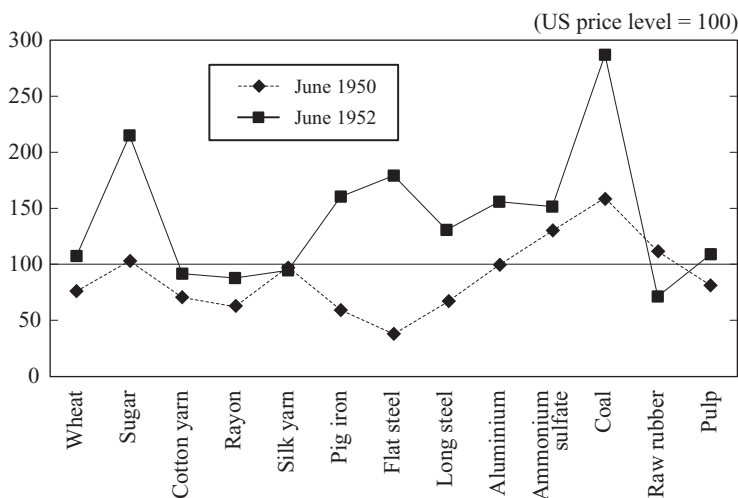
- Controls and subsidies were abolished and the market mechanism was largely restored.
- Private international trade began. However, this was not yet free trade; past legacies such as exchange control, import protection, foreign currency surrender requirement and administrative guidance were still in place.
- There was global inflation associated with the Korean War. But Japanese inflation was higher than the world average: between 1949 and 1951, Japanese wholesale prices rose 64 percent and consumer prices rose 8.5 percent. During the same period, wholesale price inflation in the US and the UK was 16.1 percent and 11.1 percent, respectively.
- A new fixed exchange rate of 360 yen to the dollar was established in 1949. This level was considered appropriate initially, but due to the Korean War inflation, the yen became overvalued.
- Japan regained political independence with the signing of the San Francisco Peace Treaty in 1951, and US economic assistance ended. At the same time, the Japan-US Security Treaty was concluded in 1951 (renewed in 1960), and Japan became a US ally in the Cold War.
- Japan had only small international reserves amounting to \$567 million at the end of 1950.

Under these new circumstances, Japanese industries had to strive for efficiency and competitiveness. The days of economic planning and physical expansion were over, and the challenge for cost reduction and higher quality began.

Before the outbreak of the Korean War in June 1950, Japanese industrial costs were roughly in line with those in the US. But by 1953, most of Japanese industrial inputs had become more expensive than those in the US. In particular, coal and steel were among the most expensive. These were precisely the two products targeted by the Priority Production System in 1947-48! The so-called “problem of high prices of coal and steel” reduced the competitiveness of all other industries that used them as inputs.

To cope with overvaluation and the loss of competitiveness, three

Figure 11-2 Japanese Industrial Prices Relative to US Prices



Source: Kosai, 1995, p.56.

policy options were theoretically possible: (i) yen devaluation; (ii) deflation through macroeconomic austerity; and (iii) productivity improvement. Japan chose the third option. The option (ii) was also partly adopted through a relatively tight macroeconomic policy stance, but option (i) was not even considered. Japan had just overcome the postwar crisis, unified exchange rates in 1949, and regained political independence in 1951. Under the Bretton Woods fixed exchange rate system, Japan felt that it was unacceptable, politically and diplomatically, to revise the newly installed exchange parity so soon.

*Gorika*, or rationalization, means improving productivity through investment in new technology and machinery and reorganizing production and management. This became a national economic goal in the early 1950s. During the Korean War, many companies enjoyed the US military procurement boom and accumulated profits. These profits were the main financial source for introducing new technology and machinery. However, labor unions often opposed rationalization because they thought this slogan was used as an excuse for laying off workers and imposing hard working conditions.

Some industries succeeded in rationalization but others failed and declined. Between coal and steel, the former industry was a loser and the latter was a winner. Both contributed to a rise in overall productivity—the coal indus-

try by disappearing and the steel industry by becoming more competitive. The coal industry was especially hard hit because the world energy source shifted dramatically from coal to oil, which was cheaper. Unlike coal, Japan had to import 90 percent of its oil because the domestic supply was severely limited (Japan's dependency on imported oil rose subsequently to as high as 99.7 percent).

The policy stance of the government was also crucial in industrial rationalization. In 1953-54, as imports surged and Korean War military procurement ended, Japan faced a balance-of-payments crisis. The Bank of Japan raised interest rates and the budget and the fiscal investment and loan program (FILP)<sup>1</sup> were tightened. The intention of the policy makers was to lower inflation to near zero (finally!) and encourage industries to reduce costs further. This policy was quite different from the one adopted after the WW1 boom in the 1920s. At that time, the main objective was to rescue weak companies and banks. By contrast, in the 1950s, they were asked to become more efficient or exit. It may be argued that, when an artificial boom ends and the business condition worsens, austerity measures are needed to prepare for the next period of sustained high growth.

Another important fact is that new instruments of industrial policy were created during the early 1950s. To replace the price controls, subsidies and fukkin loans of the early recovery period, the following new policy tools were introduced:

- Foreign exchange budget
- Capital control, including control of technology imports
- Preferential tax treatment for specific industries
- Creation of the Japan Development Bank and other policy banks
- A number of laws for promoting enterprise rationalization

Equipped with these policy tools, the Japanese government was now

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<sup>1</sup> The fiscal investment and loan program (FILP) was a system in which funds from postal savings and pension contributions were mobilized to conduct investment and loans having public nature through state institutions and credit mechanism. It was a system unique to Japan and featured the size as large as about the half of the general budget and close coordination with the general budget in planning procedure and complementarity.

## The two major events in 1960



The Miike miners, their families, and sympathizers fought hard against "capitalists" but they lost.



Protestation against the government over the renewal of the Japan-US Security Treaty.

ready to assist industries.

The year 1960 was a dividing year in postwar Japan. In that year, the labor dispute at Miike Coal Mine, located in Kyushu and operated by the Mitsui Group, came to a climax. The management of the mine announced a selective laying-off of workers, especially labor union leaders, to carry out rationalization. Coal miners protested and occupied the company's hopper facilities. This was considered an ultimate fight between all capitalists and all workers in Japan, but eventually the miners lost. Another big event in 1960 was a renewal of the Japan-US Security Treaty. The Kishi Cabinet of *Jiminto*, or the Liberal



Democratic Party (LDP), tried to force it through the parliament despite nationwide protests. A huge demonstration was staged which surrounded the parliament building and one female student was killed. But the treaty was renewed and the government subsequently resigned for causing the mess. With these two events, the days of direct confrontation in ideology and politics were over. The new LDP government, led by Prime Minister Hayato Ikeda, refocused national attention from politics to economics by proposing the “Income Doubling Plan.” He proposed to double Japan’s GNP in ten years, which required an average growth of 7.2 percent annually. Japan actually grew faster than this and Ikeda’s goal was achieved within six to seven years, much sooner than expected. Political radicalism was gradually replaced by a more cooperative management-labor relationship. There were some remnants of student and left-wing groups calling for violent revolution into the early 1970s, but they lost the support of the general public.

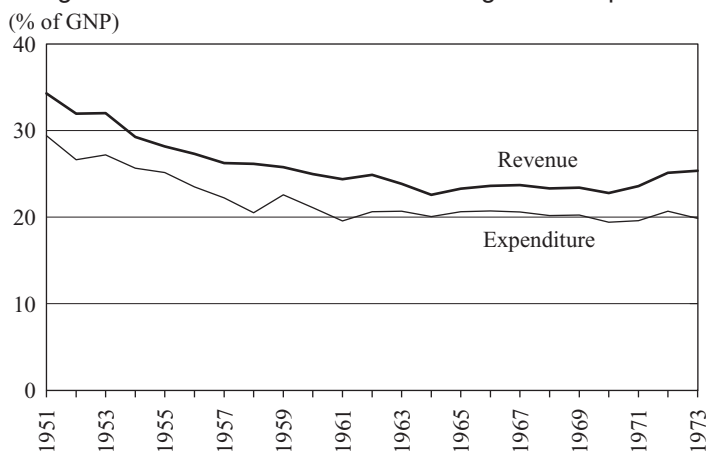
## **2. Macroeconomic management**

During the 1950s and 60s, macroeconomic management had the following features.

The budget was generally sound and in surplus. In addition, the size of government relative to GNP gradually declined, especially during the 1950s. Monetization of fiscal deficits was prohibited. In fact, no government bonds were issued in postwar Japan until 1965. For this reason, there exists no statistics on government bonds or their interest rates prior to that time.

On the monetary side, the fixed exchange rate of 360 yen to the dollar was maintained from 1949 to 1971. The Bretton Woods system permitted occasional realignments of the exchange parity when “fundamental disequilibria” emerged, but Japan never considered changing its parity. Some people argue that the yen became gradually undervalued in real terms, because Japanese productivity growth was higher—and thus its costs became lower—compared with the rest of the industrial world. But this conclusion is debatable (McKinnon and Ohno, 1997). Japanese wages and prices were rising at speeds consistent with Japanese productivity increases, and there is no decisive evidence of a tendency for the yen’s undervaluation. This is quite in line with what we expect in a

Figure 11-3 Central Government Budget and Expenditure



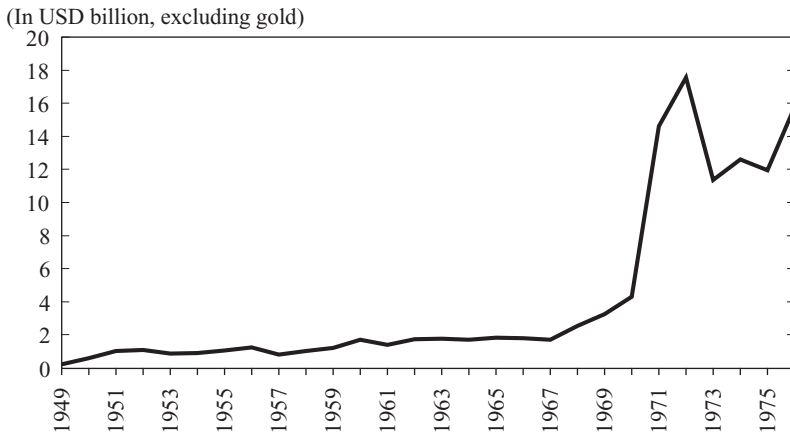
Source: Management and Coordination Agency, *Historical Statistics of Japan*, Vol. 3, 1988.

world of fixed exchange rates. A young country with unstoppable dynamism in industrialization naturally expands its global market share. Exchange rate adjustments can hardly reverse this power shift since it comes from a structural change in the real economy. The governments of more mature economies that demand the currency revaluation of such a country may only be fooling themselves and evading the true question. This can be said about postwar Japan as well as today's China.

A fixed exchange rate constrains the monetary policy. In other words, when the exchange rate is fixed, the monetary policy is no longer an independent variable that can be determined by the monetary authorities, since the central bank is required to use the monetary policy to maintain the exchange rate at the committed level. This is called the “endogeneity” of the monetary policy under a fixed exchange rate. Once the yen/dollar exchange rate was fixed, the Bank of Japan had to continuously adjust its monetary policy to keep it fixed. In Japan, this policy constraint was imposed specifically as follows.

Since there was no free capital movement at that time, a balance-of-payments deficit basically meant a trade deficit. When the domestic economy overheated and imports surged, the Bank of Japan tightened money by raising short-term interest rates and through “window guidance” (telling commercial

Figure 11-4 International Reserves



Source: International Monetary Fund, *International Financial Statistics*, various issues.

banks to reduce new loans). Since Japanese firms depended heavily on bank loans, this had an immediate effect of curtailing investment. As the economy cooled down, the balance-of-payments pressure eased. Every time the economy grew too strongly, the Bank of Japan had to adopt this policy. This was called the “the ceiling of the balance of payments” or “stop-go policy.” This was practiced until the mid-1960s.

To cope with the balance-of-payments pressure under a fixed exchange rate system, West Germany frequently intervened in the foreign exchange market and also adjusted the Deutsche Mark occasionally. Since there was always an upward pressure on the DM, adjustments were always in the upward direction. In contrast, Japan chose macroeconomic austerity (tight money) as a tool for balance-of-payments adjustment. Thus West Germany accumulated international reserves while Japanese reserves remained small and stable until the mid-1960s (since then, however, the Bank of Japan has intervened aggressively and rapidly accumulated dollar assets).

Under this monetary regime, Japanese wholesale prices were virtually constant. From 1951 to 1971, the wholesale price index rose at an annual rate of 0.7 percent. This remarkable price stability was also experienced in the US and West Germany. Indeed, the early postwar period of the 1950s and 60s was a period of historically unprecedented global price stability. Japan “imported”

this global price stability in tradable goods by maintaining a fixed exchange rate. The consumer price index rose slightly faster, at an annual 4.4 percent. In those days, this phenomenon, called “creeping inflation,” was considered a macroeconomic problem<sup>2</sup>. During the same period, nominal wages rose 10.2 percent, nominal GDP rose 14.5 percent, and M1 rose 15.9 percent (all in annual average increases). Meanwhile, real GDP rose by an average of 9.4 percent per year during 1951-71.

Japan joined the World Bank in 1952 and began to borrow from it in the following year. It soon became the World Bank’s second largest borrower after India. Japan continued to borrow from the World Bank until 1969. All World Bank loans to Japan were used for building industrial infrastructure such as power plants, highways and the Shinkansen (bullet trains). Unlike today’s ODA trends, no part of them was directed toward education, healthcare, rural development or other social-sector programs. World Bank loans were made through the Japan Development Bank, which were then on-lent to the proposed industrial projects. This procedure was called the “two-step loans.” It is noteworthy that World Bank loans financed less than 1 percent of total domestic investment. Japan financed its vigorous investment in this period almost entirely through domestic savings. There was virtually no receipt of FDI, let alone portfolio investment, from abroad. But Japanese firms were extremely active in importing technology, and the government strongly supported it.

### 3. MITI and industrial policy

The Ministry of International Trade and Industry (MITI) was created in 1949 by merging the Ministry of Trade and Industry, the Coal Agency, and the International Trade Agency. Later, in 2001, MITI was renamed to the Min-

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<sup>2</sup> It should be noted, however, that differential inflation across different goods and services does not necessarily imply economic disequilibrium. If wage rates and other factor prices are assumed to be equalized across all industries, industries with higher productivity growth can achieve faster price reduction relative to industries with low productivity growth. The fact that Japanese consumer prices rose faster than its wholesale prices reflects higher productivity growth in the industries heavily represented in the former (machinery, automobile, electronics, etc) than the industries included in the latter (food, housing, services, etc). This argument is formally presented in the Balassa-Samuelson Theorem in international economics.

istry of Economy, Trade, and Industry (METI).

During the mid 1950s to the early 1970s, MITI played a role in Japanese industrialization, but economists still debate its importance. Was high growth achieved *because of* MITI or *despite* it? Some affirm that MITI's policies were crucial, while others argue that they were a negative factor overpowered by private dynamism. Still others say that MITI's role was insignificant or neutral. Some industries succeeded without official promotion (consumer electronics, cameras, motorbikes, pianos, watches, calculators, etc). Other industries failed even with official support (coal, aluminum refining, nuclear fusion, main-frame computers, etc). As for the automobile industry, there were both rejection and acceptance of official intervention. MITI tried to merge automobile companies prior to trade liberalization because domestic producers were considered too small and numerous to compete effectively with the American giants. But automobile companies refused MITI's initiative, remained separate, and did very well subsequently (see the box on Honda at the end of this chapter). However, it should also be recalled that the automobile industry was protected with high tariffs in its early stage of development.

There are also econometric studies on the effectiveness of MITI policies, but the results remain inconclusive and depend on the data and the researcher. Some studies examined whether targeted industries on average achieved higher growth than those without support. But partly because some industries received support for downsizing, and partly because underlying growth rates differed across industries, such a test is not a fair evaluation. Using econometrics to evaluate industrial policy is extremely difficult due to the impossibility of constructing a convincing "counter-factual" (how Japanese industries would have developed had MITI not intervened). The contention of this book is that private dynamism was primary but policy also played a useful role in Japan. This conclusion also applies to earlier industrialization in the Meiji period.

Unlike Japan's unvarying vision on the importance of industrialization and the role of government, the development policy of the World Bank has oscillated greatly. In the early postwar period, World Bank loans were provided primarily for industrial development. In the 1970s, social sector programs were introduced to gradually replace industrial projects. Throughout the 1980s, the

World Bank consistently denied the effectiveness of selective industrial policy, in which the government targeted and supported certain industries. This free-market ideology was strongly influenced by the so-called neoclassical development economics. However, World Bank programs began to regain balance in the 1990s. Its *East Asian Miracle* report (1993) admitted that selective industrial policy sometimes worked in the past, though only for Japan, Taiwan and Korea. The 1997 *World Development Report* further recognized the possibility of selective industrial policy for countries with strong institutions (meanwhile, countries with weak institutions were advised to strengthen them first). In the following several years, the concern of the World Bank shifted significantly from economic development to poverty reduction. But since around 2002, it has begun to refocus on industrial promotion and infrastructure development as a source of growth.

Industrial promotion measures adopted by the Japanese government were no different from those widely practiced elsewhere in the world: preferential taxes, subsidies, low-interest policy loans, R&D assistance, SME promotion, entry restriction, coordination of output, investment and exports, building infrastructure, and the like. While the list of measures was similar, it can be said that MITI implemented them far more effectively than other countries. In addition, MITI had a set of softer instruments for sharing information and organizing actions among various stakeholders including: (i) creation of visions and targets, (ii) *shingikai* (deliberation councils), (iii) close links with business associations, (iv) administrative guidance, and (v) human networks through personnel rotation and *amakudari* (assumption of high posts in private firms under MITI's influence after early retirement)<sup>3</sup>.

It is often said that MITI chose target industries by the *income elasticity criterion* and the *productivity criterion*. In other words, industries whose global demand was expected to grow strongly and whose productivity was expected to rise quickly were selected for promotion. But this explanation is a bit too simple and obvious. Certainly, most countries would like to do this if it

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<sup>3</sup> For more on these policy measures, see Johnson (1982), Itoh et al (1988), Okimoto (1991), and Komiya et al (1988). As for regulation on FDI firms such as local contents requirement, technical transfer and export-import balance requirement, Japan did not have to consider them since its growth was not dependent on the attraction of FDI.

were possible. The real question was how MITI did this successfully—how industrial selection was made and how wrong decisions were avoided in practice. We must ask concretely how needed information was collected, how demand, productivity and the state of competition were forecasted, and how the potential of each company and industry was evaluated. In choosing industries, MITI did not rely on existing formulas or econometric models as the main source of information. What is perhaps most amazing is the fact that crucial information and correct intuition naturally emerged in MITI's daily contacts with the private sector.

There are other theoretically interesting issues concerning the industrialization in the 1950s and 60s. Let us discuss two of them.

*Excess competition*—one of the most important reasons for official intervention throughout the prewar and postwar period was excess competition. At the time of economic recession, the Japanese government frequently required industries to agree on output cartels, scrap and consolidate excess capacity, and accept corporate mergers. In addition, it often resorted to export quota allocation to forestall the accusation of “torrential exports” by its trading partners. Liberal economists contend that excess competition is a term in contradiction, and its validity highly doubtful (Komiya et al, 1988, pp.10-11). But other economists accept the possibility of excess competition to the serious damage of national welfare if certain conditions are present, such as shortages of information, violation of intellectual property rights, increasing returns to scale (the so-called scale merit), and the fallacy of composition in sales promotion (Murakami, 1984). For example, prewar recessions were often aggravated by the collective behavior of producers which expanded sales to compensate for reduced prices, which further accelerated price declines. In industries which can achieve cost reduction in proportion to the size of capital equipment, overcapacity becomes the norm as every producer rushes to invest. In developing countries where copied products circulate freely, producers with high technology and strict observance of laws are the first to be eliminated, a situation which can hardly be called desirable from the viewpoint of sound industrial development.

*Infant industry promotion*—this is a classical theory of industrialization first

proposed in the 19th century. In a nutshell, it says that burgeoning industries with initial high cost should be temporarily protected by tariffs if they can reduce cost as time passes and experience is accumulated. There are also well-known caveats for this argument, such as the condition that later profits, properly discounted, should exceed initial protection cost. Again, the existence of increasing returns or the so-called *learning effect* is the key determinant of the validity of infant industry promotion. Neoclassical economists contend that, while this theory is beautiful on paper, actual governments seriously lack the ability to choose the right industries or resist political pressure. If implemented, this policy will only lead to the permanent protection of hopeless industries at a huge cost to the national economy. This type of counter-argument is called the *political economy of protection*. But can we assume that all governments are stupid and incapable? In East Asia where industrialization is proceeding in certain recognizable order and pattern, is it really true that latecomers like Vietnam and Myanmar have nothing to learn from the experiences of Thailand and Malaysia in choosing industries and formulating policies?<sup>4</sup>

Quite a few Western economists believe that these ideas are already discredited and outdated in the age of global mega competition and free capital mobility. They flatly reject their value as policy advice to the developing world. However, most Japanese development economists do not agree with this view. According to them, these old arguments contain an element of truth and can be resurrected and applied even today provided that proper modifications are made to reflect the current situation.

## 4. Reintegration into the global economy

Table 11-1 illustrates the main steps which Japan took to re-integrate

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<sup>4</sup> It should be noted, however, that developing countries today are required to be integrated into the global free trade system in their early stages of development through WTO and FTAs. This situation of lost tariff rights is similar to what Japan had to cope with during the Meiji period. We must fully recognize the fact that latecomer countries today have little freedom in tariff policy necessary for the execution of infant industry promotion.



Table 11-1 The Road to Global Economic Re-integration

1951	US occupation ends; political independence restored
1952	Japan becomes a member of the IMF and the World Bank
1955	Japan joins GATT; however, many countries refused to grant full trade rights to Japan and trade discrimination against Japan continued
1956	Japan joins the United Nations
1964	Japan joins the OECD; IMF Article 8 status attained (no exchange restriction on current-account transactions); the Tokyo Olympics held (hosting the Olympic games often accelerates growth and boosts national pride)
Late 1960s	Tariff reductions implemented

itself into the global economy.

The market mechanism was restored by the Dodge Line stabilization in 1949, but this did not mean a completely free economy. On the contrary, many policy measures continued to regulate the markets. One of them was import protection. Japan's trade barriers had been high during the 1920s and 30s, and with the intervening period of trade interruption during the war and US occupation, tariff protection continued into the 1950s and 60s. However, the Japanese government was determined to lower tariffs in an effort to rejoin the world economy and implement the GATT Kennedy Round which required comprehensive tariff reduction by all member countries. Transition to a more liberal trade system was also necessitated for political and diplomatic reasons.

Japan's trade liberalization in the 1960s had the following salient features: (i) it was executed gradually and in a well-planned manner; (ii) tariff reduction was closely linked with industrial promotion measures to strengthen competitiveness; and (iii) the government used international commitments to avoid domestic political capture. Removal of import barriers was carried out under the very strong "ownership" (policy autonomy) of the Japanese government in close consultation with the business community. Since trade liberalization schedules were pre-committed and considered non-negotiable, producers concentrated their efforts on improving efficiency rather than lobbying for the extension of protection. Official support was provided according to actual performance, such as export volume, rather than political connection. Domestic firms competed fiercely with each other, but the competition was coordinated by the government so as to prevent the dropping-out or bankruptcy of any firm.

Thus, competition and cooperation coexisted in a situation described as “compartmentalized competition” by Yasusuke Murakami (1984).

The process of trade liberalization in postwar Japan was ideal in the sense that it was wisely used for obliging domestic industries to become more competitive. But its successful execution required a very high institutional capacity. For most developing countries, this is not an easy task.

While trade barriers were gradually reduced, capital control was not abolished during the high growth period. It was removed step by step from the 1970s onwards. The most important step in liberalizing capital transactions was the Foreign Exchange Law of 1980, which belongs to a much later period than the one we are discussing.

## 5. Social transformation

Economists still argue about the true cause of high growth in the 1950s and the 60s. Some say that vigorous investment was the key. Others assert that it was export-driven. Some Keynesian economists, like Hiroshi Yoshikawa (1997), believe that the most important force was robust consumption. However, it is very difficult to single out one factor as the *only* cause, since all variables were interrelated.

At any rate, the consumption boom was certainly a very prominent feature of the high growth era, whether it was the cause or the effect. In the late 1950s, all consumers wanted to purchase washing machines, refrigerators, and black-and-white TVs—these were called “three divine devices.” In the 1960s, color TVs, cars, and “coolers” (air conditioners) attracted everyone’s attention—they were called “three C’s.” As markets and production scale expanded, costs and prices declined, which in turn further stimulated demand. The mass production system also generated a white-collar middle-class who purchased these goods. This virtuous circle continued until the early 1970s.

Before the high growth era, the basic lifestyle of the Japanese people in terms of food, clothing, and housing changed very slowly. Before WW2, most people generally ate Japanese food such as rice, miso soup, pickled vegetables, fish, natto beans, and sake, and wore Japanese kimono, *geta* (wooden sandals) and *zori* (a kind of sandals), and lived in wooden houses divided by

Table 11-2 Four Major Pollution Lawsuits of Postwar Japan

	Cause and Symptoms	Accused Enterprise(s)	Final Ruling
<b>Minamata Disease</b> (Minamata City, Kumamoto Prefecture)	First reported in 1956. Water contaminated by organic mercury caused numbness, speech disturbances, narrowing of field of vision, mental disorders, loss of muscle coordination and other neurological disturbances.	Chisso Corporation	The plaintiff won in March 1973
<b>Itai-itai Disease</b> (Jintsu River, Toyama Prefecture)	First reported in 1955. Water pollution by cadmium caused severe pain. "Itai-itai" means "it hurts, it hurts."	Mitsui Kinzoku (Mitsui Mining and Smelting Company)	The plaintiff won in August 1972
<b>Niigata Minamata Disease</b> (Agano River, Niigata Prefecture)	First reported in 1965. Water pollution by organic mercury; same disturbances as Minamata Disease.	Showa Denko	The plaintiff won in September 1971
<b>Yokkaichi Asthma</b> (Yokkaichi City, Mie Prefecture)	Petrochemical complexes which started operations in the late 1950s caused air pollution by SOx and other substances. Major symptoms included sore throats, coughing, respiratory organ troubles, vertigo, nervous diseases, and eye irritation.	Mitsubishi Petrochemicals, Showa Yokkaichi Sekiyu, and four other companies	The plaintiff won in August 1972

paper sliding doors. People slept on tatami mats with futon. But all this changed dramatically during the 1960s. Bread, coffee and western food became common. Very few people now wear kimono today except on New Year Holiday and other special occasions. Concrete and steel-built apartments with blinds and curtains became popular. Urbanization progressed. Big families were replaced by nuclear families. Individualism began to replace group orientation. Among all periods in Japanese history, perhaps the high growth era brought the greatest changes in lifestyle.

For a long time, the labor surplus persisted and wages remained depressed in the Japanese economy. But high growth brought a critical change. Around 1960, the labor surplus turned into a labor shortage. The so-called "turning point" was finally reached as in the Arthur Lewis model<sup>5</sup>. Special

<sup>5</sup> The Lewis model divides the economy into the traditional sector (engaged in agriculture) and the modern sector (engaged in urban industries). It is a development model that postulates labor migration from rural areas to cities as the modern sector expands and absorbs more labor. When this process progresses sufficiently, a new phase, called the *turning point*, is reached in which rural surplus labor disappears and wage increase is required in order to employ more workers.

trains were prepared to transport fresh graduates from middle and high schools in rural areas to big cities as new workers. As the labor market tightened, these young workers were highly demanded by industries as “golden eggs.”

During the high growth period, environmental destruction caused by rapid industrialization became intolerable. Water and air quality deteriorated. A people’s grass-roots movement rose against commercial irresponsibility and official negligence, culminating in four principal lawsuits against public hazards as shown in Table 11-2. All of these lawsuits ended with the victory of the plaintiff consisting of affected residents.

In the political sphere, two conservative parties merged to become the Liberal Democratic Party (LDP) in 1955, which has dominated Japanese politics ever since. The LDP lost the prime minister’s seat from 1993 to 1996, but subsequently regained it. This political situation, with the powerful and conservative LDP and weak opposition parties, has been called the “1955 Regime.” In many senses, the LDP is much like the Seiyukai Party in the prewar period. Its support base is rural. The LDP distributes public money for rural investment and farm subsidies. With the coming of Prime Minister Kakuei Tanaka (in office during 1972-74), the LDP’s ruling style characterized by rural money politics for winning votes became firmly established, and it still continues today. Many LDP politicians want to continue building Shinkansen (bullet trains) routes and highways despite the severe budget crisis.

In comparison with prewar politics punctuated by dramatic power shifts and frequent crises, the postwar political structure in general and the 1955 Regime in particular have been highly static (Banno, 2004). The absence of an opposition party with sufficient capability to run a government, such as the Minsei Party in the prewar period, partly explains this. In a situation where no serious political competition existed, the LDP delegated national security issues to the maintenance of good relationship with the United States and the assurance of the US military umbrella, and confined domestic political agenda to such socio-economic issues as growth, trade negotiations, environmental protection and social security. This led to the political regime in which serious debates and power shifts rarely occurred. Recent political events suggest that 21st century Japan may move gradually toward the two-party system, but its realization is far from certain.

## Soichiro Honda: A Postwar Business Hero

Postwar Japan produced many business heroes. Among them, Soichiro Honda (founder of Honda Motor Company), Konosuke Matsushita (founder of Matsushita Electric Industrial Company, with brand names *National* and *Panasonic*) and Masaru Ibuka and Akio Morita (founders of Sony) are particularly famous. They were all engineer-type inventors, who began in a tiny factory with a great vision and desire to produce new and better products to conquer the Japanese—and world—market. They encountered a number of failures and hardships but persevered until great success was reached. They were driven by the unquenchable *monozukuri* (making things) spirit, not by high salaries, quarterly profits or balance sheets. After building a business empire, each of them became interested in the non-business world, including education, culture, the environment and economic diplomacy.

Soichiro Honda was a son of a blacksmith in Shizuoka. When he was a boy, he learned the techniques of bellowing, using furnaces, and casting from his father. From early on, he was crazy about mechanics. When his father opened a bicycle shop, Soichiro helped him as a repairman.

After finishing secondary school, Soichiro worked for an automobile repair company. After six years, he was promoted to head the company's Hamamatsu branch when he was twenty-one. He was not satisfied with just repairing automobiles, so he started to experiment to create new parts.



Soichiro Honda (1906-1991)

In those days, virtually all cars were imported, and domestic production of parts was an important goal for the industry. Soichiro tried to produce piston rings, a crucial engine part, by himself but it was not easy. After realizing that experience must be supplemented by theory, he studied metallurgical and mechanical engineering at Hamamatsu Technical School.

After the war defeat, Soichiro established a new company to produce motorbikes which later became *Honda Giken Kogyo* (Honda Motor Company). Honda's first motorbikes, the Dream (146cc) and the Cub (50cc), were big hits. Around 1954, Honda faced a crisis due to fierce competition and technical problems with its products, but the crisis was overcome by the efforts of Takeo Fujisawa, the competent

marketing manager.

Soichiro wanted to enter—and win—the Tourist Trophy (TT), an international motorbike race in Britain. He created a special team to manufacture a powerful motorbike for this race. In 1959, Honda first participated in the TT; and in 1961, Honda achieved complete victory by winning 1st to 5th prizes in both 125cc and 250cc classes. At the same time, Honda introduced the Super Cub, a popular 50cc motorbike with an efficient engine. It became an even bigger hit with consumers.

In the 1960s, Honda began to produce automobiles. This move was accelerated by the MITI's plan to consolidate Japanese auto makers to compete with America. If this policy was implemented, newcomers like Honda would be excluded, so Honda rushed to enter this market. The first popular small car, the N360, sold well but was later criticized as defective.

In 1970, a tough environmental law was enacted in the United States requiring automobiles to drastically reduce emissions. Honda became the first auto maker in the world to clear this standard in 1972 with its newly invented CVCC engine. This proved that Honda had the highest technology in automobiles as well as in motorbikes. It also stimulated the other Japanese auto manufacturers to produce fuel-efficient, low-emission cars.

Let us quote some words of Soichiro Honda.

"The presidents of this company have all been unruly and unpredictable, including myself." "So all of you must work very hard to support the company." (addressing to the company staff at Honda's 35th Anniversary, 1983)

"All presidents raised issues with me. A president who doesn't do that is useless." (recalling the time when Presidents Kume and Kawamoto both advocated a water-cooled system when Soichiro insisted on an air-cooled system, in developing the CVCC engine)

"Don't be a victim of the company. You must work in order to enjoy your own life." (to new recruits)

"Everyone dreams and hopes for a success. I believe a success comes only 1 percent of the time, supported by the 99 percent of failures. The final success is attained by challenging the new world with a pioneer spirit and after the repeated use of failures, reflection and courage." (at the time of receiving an Honorary Doctor's Degree from the Michigan Institute of Technology, 1974)

"It's OK. Your greasy hand is good. I very much like the smell of grease." (when a worker tried to shake hands with Soichiro and, realizing his greasy hand, quickly withdrew it)

Sources: Miyamoto, 1999; Honda Soichiro Study Group, eds, *The Anaclets of Honda Soichiro*, Shogakukan, 1998.