Chapter 2
Postwar Reconstruction

Abstract
The Japanese economy was severely damaged by the World War II. Production dropped to 30% of the pre-war peak. There were three serious problems when the war ended in 1945, namely unemployment, energy shortage, and inflation. This chapter focuses on the galloping inflation and analyzes how to control it. The government invoked the Emergency Financial Measures Order and enforced the price control order in 1946. As a government officer, Dr. Shimomura was responsible for checking inflation. He thought that the measures taken in 1946 were temporal and production recovery was fundamentally necessary. It was very difficult to increase production and to curb inflation at the same time. However, the government implemented an industrial policy called the Priority Production System, which opened the route to attain both the objectives successfully. Dr. Shimomura suffered from recurrence of lung disease in 1948 during his course of service with a government organization, forcing him to take a long leave. While bedridden, he started to write a thesis and completed it in 1951; the paper was titled Economic Fluctuation and Economic Analysis. In this paper, which depicts the “Shimomura theory,” he developed the dynamics of Keynes theory and received a doctoral degree.

Keywords
Inflation • Gradual approach • Priority production system • Economic growth • Shimomura theory

In this chapter, we will focus on postwar reconstruction and analyze how the Japanese economy contained inflation, rehabilitated industrial production, restored the trade balance, and attained economic autonomy without the US aid and Korean War special procurement policies. During this period, the Japanese economy faced very difficult problems that are beyond imagination. People had sincere policy debates on how to reconstruct Japanese economy. Economic base was very weak due to the damages caused by war, and mistakes in policy were not allowed. Economic policy played a very important role in enabling the Japanese economy to establish stability and order from the postwar confusions and ruins. Economic
policy debates at that time had a very significant implication for high growth policy proposed in the 1960s.

During the reconstruction period, Dr. Shimomura took charge of the price stabilization policy of the government and worked towards formulating concrete measures for curbing inflation. In 1951, he completed a doctoral dissertation, *Economic Fluctuation and Multiplier Analysis*, in which he clarified the Shimomura theory. Dr. Shimomura applied his theory to the Japanese economy in the second half of 1950s. He successfully developed a high growth theory and proposed to the government the bold economic policy for Japan in the 1960s. The reconstruction period was a preparatory period for him to flourish as an active economist.

### 2.1 Economic Situation During the Reconstruction Period

The Japanese economy was severely damaged when the World War II ended in 1945. According to Kosai (1981), mining and industrial production in 1946 dropped to almost 30% of the prewar peak in 1934–1936 (see Table 2.1). In the first issue of *White paper on the Japanese Economy*, in 1947, Shimomura (1947, 1974) wrote a famous phrase, “a household is in the red. A firm is in the red. The government is in the red.”

Nakamura (1981) pointed out three serious problems that the Japanese economy faced—unemployment, energy shortage, and inflation.

First, unemployment became a serious issue. The standard of living of city dwellers was low and cities were crowded with job seekers. People who failed to get jobs returned to their farm villages or became black marketers. It implies that people did their best to earn a living. Therefore, the unemployment issue did not attract much attention; however, people faced discontentment. The problem of potential underemployment became apparent. Income difference of workers between large firms and small firms began to widen. The dual structure issue attracted attention of scholars and journalists. This unsatisfactory situation was

<table>
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<tr>
<th>Table 2.1 Trends of economic indicators (1934–1936 = 100)</th>
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<tbody>
<tr>
<td>1946</td>
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<tr>
<td>Real gross national product</td>
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<td>Mining and industrial production</td>
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<tr>
<td>Production of primary industry</td>
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<tr>
<td>Volume of export</td>
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<td>Volume of import</td>
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<td>Consumption level</td>
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<td>Real wage</td>
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*Note* Primary industry (agriculture, forestry, and fisheries) <sup>a</sup>1948, <sup>b</sup>1947

*Source* Kosai (1981)
systematically solved during the course of time by realizing high growth in the 1960s.

Second, there was a shortage in resources. Japan was under economic blockade of the Allied Powers. The import of raw materials and oil was severely restricted. Energy, especially oil, was limited in supply, and hence it was difficult to resume production. Instead of oil, coal became the domestic source of energy that was used to increase industrial production.

Third, the inflation started galloping, thereby causing serious problem. People held a large amount of financial assets, such as deposits and public bonds. They had accumulated these assets during the war because they could not get what they wanted. They had enough purchasing power. Pent-up demand existed among the Japanese population, however, production decreased dramatically in 1946. The supply failed to meet the demand. This resulted in a typical demand-pull inflation.

2.2 Policy for Controlling Inflation

People were suffering from discontentment and depression. Checking inflation and resuming production and economic order formed the priorities of the government. At first, the government prioritized controlling the galloping inflation. In February 1946, the government invoked the Emergency Financial Measures Order (Kinyu Kinkyu Sochirei), which required people to deposit all their cash in financial institutions and it set an upper limit on withdrawals for daily expenses by households. The Emergency Financial Measures Order was a firm resolution expressed by the government to restore monetary value and order. It was not possible to solve inflation problem only through the Emergency Financial Measures Order. However, it controlled the unlimited spread of speculative activities, and the Japanese economy could avoid hyperinflation like in the case of Germany after World War I.

Dr. Shimomura (1974) was convinced that the effect of Emergency Financial Measures Order on checking inflation could be realized by invoking the order only once. The government should not invoke the measures more than once. Therefore, in addition to the policy of freezing all deposits, another policy was the need of the hour. In March 1946, the government enforced the price control order. While deciding the price structure, it was decided to keep wages at the subsistence level of a household and official prices were determined by adding up costs. The official consumer prices were set below costs, with the result that production subsidies were necessary to compensate the loss of a firm, that is, price-difference subsidies. As a result, the real wage was determined in such a way that it was equal to the productivity at that time. However, people were not satisfied with low real wages and the standard of living, which was 30% of the prewar level. The government had to spend a variety of subsidies to maintain official prices. As a result, the fiscal balance became in the red.

Price control was to curb an increase of prices through the price-difference subsidies. Consumer prices were kept below the costs. Immediately after the war,
the main objective of the government was to increase goods and supplies, which were sold and rationed at official prices, and to eliminate the black market economy. This policy was expected to increase the incentive to maintain current nominal wage. The government aimed at normalizing the distribution mechanism to restore market order and contain inflation.

However, Dr. Shimomura (1947) had a different view. In the context of that period, he thought that, even if inflation were controlled, people would not be satisfied with a very low standard of living. He admitted that price control was a temporary measure that was aimed at gaining time. He insisted that priority should be given to policies that can bring about production recovery and as a result satisfy people to a certain extent. This initiative would render the policy for curbing inflation effective and facilitate complete containment of inflation. Until then, vicious cycle between wages and prices would persist. Shimomura expected this way.

There was another issue. Economists and scholars had a view that inflation was caused by excess demand over supply, that is, demand-pull inflation. Therefore, they thought that the price increase preceded wage increase. However, Dr. Shimomura had a different view. Due to the postwar labor reforms, labor unions had become very aggressive and demanded higher wages. Dr. Shimomura pointed at the possibility of wage increase as a cause of inflation and was very concerned with cost-push inflation. His idea of cost-push inflation was very original at that time.

Production recovery leads to an increase in real wage or standard of living, a decrease in the difference of prices between official market and black market, and a decline in the price-difference subsidy, and these factors eventually contribute toward containing inflation. In 1947 and 1948, there was an unanticipated recovery in industrial production, primarily due to the Priority Production System (Keisha Seisan Hoshiki). The Priority Production System was an industrial policy by the government, which aimed at industrial rehabilitation. This system placed highest priority on increasing the production of coal, which was the main domestic source of energy. Subsequently, the increased coal production was put into the iron and steel industry. Steel products were channeled into other basic industries, such as shipbuilding and electricity. In this manner, the Priority Production System realized an overall industry recovery.

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1When Dr. Shimomura planned economic policies, he collected statistical data fully, studied them carefully, and judged the actual economic situation. He seldom depended on a standard textbook of American Economics or the remarks of a man of authority. This partly explains why he had many serious controversies with economists and scholars.

2Three major reforms to democratize Japan were put into practice by the Allied Powers, in reality, the US forces. They were the dissolution of the Zaibatsu, land reform, and legalized labor union activities.

3The standard analysis emphasizes that the Priority Production System became the new source of inflation. A Marxian economist expresses this view; however, the researcher does not evaluate the effect of the system in increasing production.
As Dr. Shimomura pointed out, the drastic decline in production limited the effect of the Emergency Financial Measures Order and price control order on checking inflation. These measures were temporal. In order to curb inflation, it was essential to increase production. Owing to the Priority Production System, mining and industrial production rapidly increased 26% in 1947 and 32% in 1948, successively. In three years after the war, production recovered to approximately 50% of the prewar peak.

Figure 2.1 shows that the high rate of inflation showed signs of leveling off in early 1948. Particularly, there was a halt in the increase in black market prices. The ratio of black market prices to official prices was 8.3 in 1946, which declined to 5.1 in 1947, and reduced further to 2.9 in 1948. There remains a narrative that Dr. Shimomura, who was in charge of the price control policy of the Economic Stabilization Board (Keizai Antei Honbu), walked around the black markets to check the price movement and ascertain whether high rate of inflation was being controlled.4

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4The Economic Stabilization Board was founded in 1946. It exercised economic control over ministries and agencies during the reconstruction period.
2.3 From Reconstruction to High Growth

While inflation continued in the postwar Japanese economy, eventually the government took a policy to increase production and contain inflation. This policy aimed at checking inflation gradually by reviving production. The expansionary policy was in line with Dr. Shimomura’s perspective. The government policy focused on realizing equilibrium by expanding economic activity, and this was referred to as the “gradual approach.” An idea of expansionary equilibrium later developed into a high growth policy.

Contrarily, there were economists and politicians who prioritized containing inflation. In 1949–1950, very stringent deflationary policy of the Dodge Line was implemented by the Allied Powers, and inflation was abruptly brought under complete control. This policy was referred to as the “single blow stabilization,” and was likened to a “shock therapy” that emphasized contractionary equilibrium. The idea of prioritizing the containment of inflation was linked to the stable growth policy of the 1960s.

In 1951, mining and industrial production reached the prewar peak and the Japanese economy finished reconstruction. Around the mid-1950s, trade account became balanced and Japan achieved economic autonomy. A white paper, which analyzed the Japanese economy in 1955, became very famous for the phrase, “we are no longer in the postwar period.”

During the reconstruction period from 1946 to 1951, the economic growth rate per annum was as high as 13%. However, during the autonomy period, it dropped to 6% from 1952 to 1954. The mainstream economists expected that the economic growth would naturally decline with the completion of Japanese economic reconstruction. The white paper in 1955 reflected such expectation of experts.

Contrary to the prediction of the white paper and experts, the Japanese economy entered a period of dynamic high growth in the second half of the 1950s. The rate of economic growth did not decelerate, but accelerate.

During the reconstruction period, the aggregate demand exceeded aggregate supply and people suffered from inflation. However, in the mid-1950s, the aggregate supply capacity began to exceed aggregate demand due to a surge in positive investments of private firms in plant and equipment. Dr. Shimomura was the first economist who found this dynamic trend and formulated a new vision and policy of high economic growth.

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5Dr. Shimomura (1974) commented that inflation could have been contained without the Dodge Line. J. Dodge, a conservative banker in Detroit, came to Japan when inflation began to level off.
2.4 Shimomura Theory

Dr. Shimomura had sharp intuition for grasping complicated economic situations and making economic forecasts. He did not depend on fashionable theories or large-scale econometric computer models. He used his slide rule and had his own economic dynamics, which is referred to as the Shimomura theory. He had completed his theory before the commencement of high economic growth. This enabled him to forecast the approaching era with confidence.

During the immediate postwar period, Dr. Shimomura was in charge of the price control policy in the Ministry of Finance and the Economic Stabilization Board. Owing to the complex nature of the task, he experienced recurrence of lung disease and had to take a long leave to receive medical treatment. He started to write a thesis while he was bedridden. On completion of the work, the full text of the thesis appeared in the monthly research journal of the Ministry of Finance in 1951. In 1952, he published the thesis titled “Economic Fluctuation and Multiplier Analysis.” He received a doctoral degree for the paper in 1956.

In the preface of the book, Dr. Shimomura (1952) argued that the theory of Keynes was effective to solve actual problems, but that it was also necessary to develop the dynamics of the Keynes theory. Dr. Shimomura wrote as follows:

When I was a staffer at the Ministry of Finance and later a member of the Commodity Price Agency and the Economic Stabilization Board for several years after the War, the thing that helped me most in tackling my duties in analyzing actual economic trends and prescribing measures to deal with them was the theory of Keynes. At the same time, however, in the process I also became aware of the incompleteness of the theory of Keynes (Shimomura (1952), Economic Fluctuation and Multiplier Analysis).

The main features of the “Economic Fluctuation and Multiplier Analysis” are as follows:

(a) Economic fluctuation is different from economic growth. The former is caused by responsive investment and the latter is realized by autonomous investment.
(b) Profit of a firm fluctuates according to the changes in aggregate demand and aggregate supply. The investment of a firm changes in response to changes in profit. This is called as responsive investment, which causes business cycle in the macro economy. Dr. Shimomura substituted the actual data with parameters of his mathematical model and concluded that a stable investment cycle of approximately 9 years exists in the Japanese economy.
(c) Responsive investment changes as the profit changes. Through the feedback system of his model, it realizes stability of the Japanese economy. To conclude, although the capitalist economy fluctuates, it is considered stable.
(d) Autonomous investment of a firm facilitates economic growth, which is not influenced by boom and recession of the economy. An entrepreneurial risk taker carries out investment with a long run perspective. This investment concept is based on Schumpeter’s model, which embodies innovation and technological changes. In his model, autonomous investment is expressed as a function of time.
The output-capital ratio estimated by Dr. Shimomura was 1. He used 1935 data from the Cabinet Statistics Bureau and calculated the ratio of national income to industrial asset. In order to consider the potential of high growth in the 1960s, it was very important that output-capital ratio is 1.

Responsive investment leads to a stable business cycle. Dr. Shimomura’s model dynamically demonstrated that the capitalist economy was stable. He expressed confidence in the market mechanism. Innovation results in autonomous investment. Dr. Shimomura developed this idea to formulate a high growth theory, and Schumpeter completed the innovation theory to explain business cycles. Dr. Shimomura was the first economist who explicitly used autonomous investment to explain high economic growth.

He developed a dynamic Keynesian theory, following R.F. Harrod and P.A. Samuelson. However, Dr. Shimomura’s conclusion was different from Harrod’s in that the latter emphasized the instability of the capitalist economy.

Dr. Shimomura’s model, referred to as the Shimomura theory, attracted attention. He came to be known among the theoretical academicians. However, he did not seem to be interested in developing his mathematical model further. Instead, he chose a carrier as an economist who worked out solutions to actual issues concerning the economy. He was interested in economic forecasting for entrepreneurs. The Japanese economy entered a stage of high growth in the second half of the 1950s, which was a one-in-a-million event. This historical development seemed to have attracted Dr. Shimomura’s attention and interest.

2.5 Concluding Remarks

Dr. Shimomura supported the government policy, which was called as the “gradual approach,” to control inflation. This policy aimed to increase industrial production through the Priority Production System and check galloping inflation. The goal of the government was to achieve expansionary equilibrium. In addition, this expansionary policy developed into a high growth policy in the 1960s. Contrarily, other economists and politicians insisted the implementation of a stricter policy to curb demand to control inflation. Referred to as “single blow stabilization,” this policy emphasized contractionary equilibrium and was linked to stable growth policy of the 1960s.

Due to lung disease, Dr. Shimomura apparently decided to change his career from a government officer to an economist. He started to write a thesis and completed it in 1951. In his thesis, titled “Economic Fluctuation and Economic Analysis,” he developed a dynamic Keynesian theory in which he distinguished between business cycle and economic growth.

Dr. Shimomura’s mathematical model demonstrated that capitalist economy was stable due to the investment cycle. He clarified that autonomous investment in plant and equipment of a private firm was the main engine of economic growth. He
introduced Schumpeter’s innovation theory and constructed a growth model. These two aspects constituted the “Shimomura theory” and were essentially important in forming a vision, theory, and policy for high growth in Japan.

The Japanese economy entered a stage of high growth in the second half of the 1950s. He completed and published his economic growth theory to welcome the historical golden age of “Showa.” The reconstruction period after the war was a preparatory time for Dr. Shimomura to be active as an economist in the 1960s.

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