Even with the problems I have mentioned, this book still remains a highly valuable work on the political system of the Mobutu regime's Second Republic (1965–90). Zaire is now caught up in the flow of democratization and its own harsh realities. To perceive the direction that the country is henceforth going to take, it is essential that scholars study the political system under Mobutu's Second Republic. Schatzberg's work is a significant contribution to this study. As the author continues his research on Zaire, I hope to see further elaboration of the conceptual framework he has laid out in this book. (Shin'ichi Takeuchi)

Lectures on Developing Economies: Japan's Experience and Its Relevance by Kazushi Ohkawa and Hirohisa Kohama, Tokyo, University of Tokyo Press, 1989, xv+324 pp.

This book, originally written as lectures for economic development training courses run by the International Development Center of Japan (IDCJ), aims at analyzing the major problems facing developing countries and at showing what lessons can be learned from the Japanese experience of development over the last hundred years.

The authors approach development from two directions: First an attempt, much along the lines of "A Century of Japanese Economic Growth" (1965)¹ which Professor Ohkawa coauthored with Professor Henry Rosovsky, is made to examine the process of Japanese economic development by a phase analysis, and to compare and contrast the Japanese experience with that of the present-day developing countries. The second approach is concerned with the analysis of some of the major determinants of development. These include capital, technology, human resources, and the role of government.

In the phase analysis, two major phases of the Japanese economic development over a century are demarcated. The first phase extending from 1868 to 1919, is divided into two subphases: with the turn of the century as the dividing point. The second phase, covering the period between 1920 and 1975 (by which year, the authors feel, Japan had become a developed country) is identified as the "semi-industrialized" phase. The second phase is also divided into two subphases: 1960 is taken as the dividing line.

According to the authors, in the first phase the traditional sector played an important role in the initiation of modern industrialization by providing additional resources through the export of traditional products such as silk cocoons, tea, and agricultural products, produced by small farmers operating within the framework of existing land-tenure relationships. The traditional sector developed through the backlog of technology and innovations originally introduced into the Tokugawa Japan. In the second subphase, light industrialization such as cotton textiles provided the basis for primary export promotion. By this time, the growth potential of traditional agriculture had reached a plateau requiring modernization of agriculture. This process was accelerated by the decline in the number of workers engaged in agriculture during the second

<sup>&</sup>lt;sup>1</sup> Kazushi Ohkawa and Henry Rosovsky, "A Century of Japanese Economic Growth," in *The State and Economic Enterprise in Japan*, ed. W. W. Lockwood (Princeton: Princeton University Press, 1965).

subphase. The authors suggest that there was a moderate increase in capital accumulation in the sectors related to direct production, although considerable investments went into the infrastructure. In their view, Rostow's hypothesis of "take-off" through investment acceleration, is not particularly relevant to Japan's experience during the first phase. However, the period included technological changes, particularly in the cotton textile industry, which required the assimilation of more borrowed technology than in the case of the silk industry. The authors assign much importance to the upgrading of the country's "social capability," which they define as the improvement of the quality of human resources as well as the creation of an appropriate institutional and organizational framework conducive to development. In their schema, upgrading the "social capability" plays a key role in the demarcation of phases.

The second phase of development is characterized by the emergence of secondary import substitution, entailing the substitution of imports of durable producer and consumer goods by domestic production, while export-promoting industries continued to play a significant role in the earning of foreign exchange, without which the importsubstituting activities could not have been sustained. This became all the more important when the export-promoting industries such as the cotton textile industry had to use more capital-intensive technology to retain their comparative advantages in the world market. In Japan, the mechanization of both the cotton spinning and weaving industries occurred concurrently with the rise in import substitution of heavy industry goods. To the authors, an outward-looking policy is essential to promote exports but it should be combined with an inward-looking policy aimed at import-substituting investment as well. The development of the latter is vital to counteract the investment-led import of capital goods and the resulting imbalances in international payments. It is only after the secondary import substitution is successful that the final phase of secondary export promotion, involving the export of capital and intermediate and durable consumer goods can be attained. However, the major criteria for the selective import substitution ought to include policy on productivity, prices, and wages. The authors do not support the increase of output prices or lowering of input prices by policy interventions such as direct control of wages or the manipulation of exchange rates. But they do, on the basis of the Japanese historical experience, support government intervention in initiating public investment in sectors requiring lumpy investment (as in the case of the Yawata steel plant), in providing leadership for achieving technological advances (as the Japanese government did in the case of the machine industry, railways, and factories producing military hardware). In Japan, these industries were the leading users of imported modern technology. The government, through its inspection system, also contributed to the upgrading of the quality of the goods produced. The role of the government was also crucial in the shipbuilding industry, because the private sector could not cope on its own with the technological advances of its competitors. Contrary to the present-day conventional wisdom which does not expect the government to go beyond the facilitating role, the authors stress the role of government (especially in the chapter on industrial policy) in helping the country attain a smooth transition from one phase to another.

The authors point out that it is not necessary for every country to go through all the phases in the same sequence as suggested by their model based on the Japanese experience. Nor do they imply that a particular stage must cover a certain specified time span. They agree that for some countries, particularly those with a colonial experience, the significance of the traditional sector may be irrelevant, presumably because this sector is often undermined by the colonial policy. Similarly, in countries with abundant

natural resources, the phase of primary export promotion by light manufacture may not be required.

Professors Ohkawa and Kohama also feel that such present-day developing countries as Korea and Taiwan may be able to telescope the entire process because the postwar international environment in terms of trade, foreign investment, and transfer of technology is more favorable to them than was the case with Japan during the interwar years. On the other hand, the authors concede that in some developing countries the process of secondary import substitution can be delayed as a result of rapid population growth, or as a result of increasing trade protectionism inhibiting the export expansion of developing countries.

In the second part of the book, the authors discuss some of the major factors and activities determining the pace of economic development such as capital investment, technology and human resources, and industrial policy. The chapter on capital investment discusses the importance of total capital investment, the need for efficiency in capital use, and the complementarity between public and private investment. They note with some concern that, although investment has increased significantly in many present-day developing countries, their incremental capital/output ratio (ICOR) has also risen considerably. This is almost inevitable in the early stages of development due to the lumpiness of investment in the infrastructure such as waterways, irrigation-drainage facilities, railroads, etc. Yet it is important for the developing countries to increase the efficiency of their capital use. Regarding the role of public investment, the authors stress the complementarity between public and private investment, and provide some examples of the leadership of the public sector in Japan in the chapter on industrial policy which we will analyze later. In their view, however, the role of public investment becomes much more important in the downswing (defined as the slowdown in the rate of growth) than it is when rapid growth is taking place. They lament that the lack of research in the cyclical aspect of development prevents judgment on the precise nature of complementarity between public and private investment in developing countries.

In the chapter on technology borrowing and human resources, the authors reiterate that the upgrading of the human resources is an important aspect of the process of industrialization. To them, one of the main constraints on technology transfer is the lack of human capability, including technical, managerial, and entrepreneurial expertise. Human capability, at least in the early stages of development, ought not to be measured solely by the level of formal education; it must also include the technical expertise available among farmers and artisans, which facilitates the adaptation and dissemination of borrowed technology. Commenting on Japan, they suggest that although the government's educational policy exerted a remarkable influence on human resource improvement, yet during the first phase, the Japanese government could not produce a manpower of scfficiently high capability to meet the increased demands for skilled manpower by the private sector. Nor is there any evidence that the Japanese educational policy emphasized the importance of technical and engineering education in the first phase. According to the authors, appropriate organizations and institutions, particularly at the local levels, are as important as technical education in the borrowing and dissemination of foreign advanced technology.

The next chapter is devoted to the industrial policy. It describes in detail the role of the Japanese government's industrial policy over the last century. Although implemented largely as "trial and error," the authors stress that the government did spearhead industrialization by pioneering new undertakings in direct production activities, with emphasis placed on "heavy" industries, opening of new coal mines and establish-

ment of iron foundries, shipyards, and machine shops. The government also set up "pilot plants" to manufacture cement, paper, and glass and assisted the light industries by directly importing machines and employing foreign technical experts to modernize raw silk reeling and cotton spinning. They conclude that the real objective of the government's industrial promotion policy during the Meiji era was to achieve a rapid import substitution. Even during the phase of secondary import substitution, the government played a leading role in shaping the industrial transformation required for military mobilization.

After the Second World War, the Japanese government's policies geared toward the protection of domestic industries from foreign competition through direct controls, tariffs, quotas, and restrictions on the inflow of foreign investment as well as several measures of export promotion contributed to the shift of the country to the phase of secondary export substitution. The authors emphasize that the government had a firmly established target of catching up with the advanced countries in selected sectors within a certain period of time. With this end in view, the government made widespread use of "administrative guidance" in orienting the industrial structure, technology, and organization in the desired direction. The licensing and control of technology imports was a major instrument of the industrial policy, during the 1950s and 1960s, while the promotion of the development of indigenous technology became the core of the industrial policy subsequently. They, however, note that in some sectors such as transport and electricity, which experienced a rapid productivity increase, the role of the government policies was rather limited. Similarly, for many prosperous industries such as those involved in the manufacture of bicycles, optical goods, and motorcycles, the government's direct support was virtually nonexistent.

The authors also emphasize the necessary role the government has to play in shifting the economy from one phase to another in any latecomer developing economy. The scope of such official intervention has to go much beyond the facilitating role. Nevertheless, they admit that no "ideal" pattern exists a priori and the scope of industrial policy in a country may vary according to the initial conditions, its stage of development, and its "social capabilities."

In the final chapter devoted to export promotion the authors refute the hypothesis of export-led growth in Japan. To them, exports may have played an important role but the contribution of the domestic demand should not be underestimated. In their judgment, technical progress was the most important factor in the rapid economic growth, particularly after the Second World War. This resulted from the severe competition among the Japanese oligopolies, operating in a highly protected market. But they admit that the very success of the export promotion policy has created problems of international trade imbalance. To the authors, this phenomenon represents a postdevelopment phase which is beyond the scope of the book. Yet, in view of the topical nature of the subject, they do have something to say. They feel that the increase in import promotion (i.e., the opening of the country to foreign goods and services) must be gradual. But they stress that the policy and institutional restraints on imports must eventually be abolished in order to enable the market mechanism to operate more efficiently, particularly through changes in exchange rates. Since exports have remained more or less unchanged as a proportion of the GDP even though the yen has appreciated significantly, private enterprises should bring about technological and organizational changes, particularly in the nonmanufacturing sectors, in order to enhance their productivity. This would bring the Japanese domestic price structure in line with the international prices. This, to the authors, seems to be the next most important challenge for the industrial policy of Japan.

On the whole, the book is full of insight, which one would expect from someone (the senior author) who has taught and carried out research while experiencing the Japanese economic development first hand, over more than sixty years. Written for a classroom situation, the book is full of statistics, concepts, and symbols (though relatively simple ones) which makes it difficult to read. But it is analytical, not prescriptive, and does not contain dogmatic assertions unlike many recent books on economic development. This book is a major contribution to development thinking and ought to be taken seriously both by development theorists and practitioners. The book will prove extremely useful also to those who wish to learn from the Japanese experience. (Radha Sinha)