

## BOOK REVIEWS

*Patterns of Japanese Economic Development: A Quantitative Appraisal* edited by K. Ohkawa and M. Shinohara with L. Meissner, New Haven and London, Yale University Press, 1979, xiv + 411 pp.

It was in the first half of the 1950s that an ambitious project of compiling historical statistics dating back to 1868 (the year marking the Meiji Restoration) was started with an attempt to make a long-term statistical estimation on the basis of the national accounting system. This was done under the leadership of Kazushi Ohkawa and the staff members of the Economic Research Institute, Hitotsubashi University which included Miyohei Shinohara, Mataji Umemura, Kōichi Emi, and by a group of co-researchers from other organizations. A pioneering work, entitled *Growth Rate of the Japanese Economy since 1878* (1957 edition) was released by K. Ohkawa.<sup>1</sup> However, it is in the fourteen-volume LTES (*Estimates of Long-Term Economic Statistics of Japan since 1868*) edited by K. Ohkawa, M. Shinohara, and M. Umemura that the results of the project study were compiled formally.<sup>2</sup> All volumes of the LTES series, except for Vols. 2, 5, and 11, have already been published.<sup>3</sup> The most significant of these has been Vol. 1 entitled "National Income" which was released in 1974. This epochal project, which is approaching its final phase, has created incentives not only for the project staff members but also for younger researchers<sup>4</sup> to cooperatively participate in active studies of the development process of the Japanese economy. It is reasonable to claim that the project group headed by Professor Ohkawa has brought about a dramatic improvement to macroscopic and quantitative research concerning the economic development of modern Japan during the past thirty years.

This publication mainly deals with the content of the LTES and incorporates statistical findings collected after the issue of the LTES. Thus, it summarizes the essence of statistical findings on the development of the Japanese economy during the past century and provides a perspective for its future development. For the convenience of users, this publication allocates about 150 pages, about three-eighths of the entire space, to listing appendix tables which give a summary of the LTES's major statistical information. The text consists of fourteen chapters under four parts as follows.

<sup>1</sup> K. Ohkawa ed., *Nihon keizai no seichō-ritsu* [Growth rate of the Japanese economy since 1878] (Tokyo: Iwanami-shoten, 1957).

<sup>2</sup> K. Ohkawa, M. Shinohara, and M. Umemura, eds. *Estimates of Long-Term Economic Statistics of Japan since 1868* (LTES), 13 Vols. (Tokyo: Tōyō-keizai-shimpōsha, 1966-).

<sup>3</sup> A description of this publication (p. 81) stating that Vols. 11 and 14 will be forthcoming is misleading. Both these volumes were published in 1978.

<sup>4</sup> K. Ohkawa and H. Rosovsky, *Japanese Economic Growth: Trend Acceleration in the Twentieth Century* (Stanford: Stanford University Press, 1973), and K. Ohkawa and R. Minami, *Kindai Nihon no keizai hatten* [Modern Japan's economic growth] (Tokyo: Tōyō-keizai-shimpōsha, 1975).

Part 1: Overall Patterns—1. Aggregate Growth and Product Allocation, 2. Production Structure, 3. Data and Methods.

Part 2: Production and Trade—4. Agriculture, 5. Manufacturing, 6. Services, 7. Trade and Balance of Payments.

Part 3: Product Allocation—8. Consumption, 9. Capital Formation and Capital Stock, 10. Government Account.

Part 4: Factor Shares, Prices and Population—11. Factor Incomes and Shares, 12. Prices, 13. Wages, 14. Population and Labor Force.

Ohkawa and the coauthors who were engaged in the statistical compilation of the LTES summarize, in each of their cognizant chapters, fact findings available from inductive statistics and present explanations on basic data and method of statistical estimate. This publication is a useful, concise edition enriched in quality and quantity, describing the outcome of massive research for the benefit of domestic researchers as well as for overseas readers.

Succeeding paragraphs present a few comments on the contents of the LTES: first, on the viewpoint of long-term swings in the Japanese economy. As discussed in the publication coauthored by Ohkawa and Rosovsky, the former defines Japan's long-term economic development process dating back from the 1880s to date as the "trend acceleration phase," where he notes the presence of three and a half long swings: the first swing consisting of an upward period from 1887 through 1897 and a downward period from 1897 through 1904, the second swing consisting of an upward period from 1904 through 1919 and a downward period from 1919 through 1930, the third swing consisting of an upward period from 1930 through 1938 and a downward period from 1938 through 1953, while the fourth swing which passed a 1953-69 upturn period remains uncompleted. Ohkawa states that the average growth rate in each swing period traces a gradual uptrend namely, that growth accelerates as a trend.

Nevertheless, the reviewer has a slightly different idea because it seems unreasonable to classify the period of destruction in World War II and the postwar recovery period into a single category of a downturn within the third swing. In other words, it would be an oversimplification of the historical process to consider the period in which a normal economic cycle was interrupted by the reduction to ashes of about one fourth of the national wealth as one of the phases in the swing without giving any special consideration. To classify such a period as part of a long-term downward trend appears erroneous. The reviewer, however, does not intend to elaborate this point further. Rather, in this respect, it should be noted that the said long swing reveals itself in diverse phases of the economy up to and during the 1930s preceding World War II.

In other words, the long swing reflected on the GNP growth rate unveils itself in the growth rate of the manufacturing industry's output and in export-import ratios as well (pp. 113, 138). It is also interesting to note that the rate of increase in the labor force in the industrial sectors (manufacturing, mining, construction, facilitating industry, etc.) is greater than that of the service sectors during the upturn of a long swing, but smaller during the downturn (p. 131). Furthermore, similar swings are observed in such aspects as the international balance of payments and in the ratio between the manufactured goods export and manufactured goods/raw materials imports (p. 143).

Obviously, similar swings are observed in labor distribution rates (p. 209) and wage increase rates (p. 211).

Such phenomena may be indicative of the fact that Japanese economic growth has basically been propped up by exports, depending upon overseas demand. Production increase stimulated by brisk exports in turn increases manufacturing output and employment, and thereby triggers an expansion in investment and consumption, which eventually increases fiscal revenues and expenditures accordingly. However, in the event that the international balance of payments turns into a deficit in its basic trend as a result of exceeded imports over exports, the government will have no choice but to tighten its fiscal and monetary policies. The result would be stagnant investments and consumption in the private economy, a lull in the growth of production, while the excessive labor force would flow into the service sector. The indication is that the Japanese economy has basically been at the mercy of the trends of the international economy. In fact, it is this fact that this publication points out as the first conclusion of a long-term and macroscopic analysis of past developments in the economy.

The second feature lies an analysis of productivity by industrial types discussed in Chapters 2, 4, and 6. From a long-term point of view, there were substantial improvements in relative productivity in the industrial sector versus the agricultural and service sectors. According to the author, this trend was relatively moderate during the first long swing, but grew more pronounced from the turn of the twentieth century. Nevertheless, price increases in the agricultural and service sectors were mild compared with those in the manufacturing industry. As a result, their position turned out to be less competitive against the latter, but the trend was reversed again in the period subsequent to 1960. Observing this phenomenon, Ohkawa developed a concept entitled "spread effect of differential price rises at the primary production stage on other aspects of the inflationary growth of the economy" (p. 43). The faster productivity increase which is sustained triggers a relative decline in products of the modern sector and resultantly devalues capital goods. Partly due to low wages, export prices remain at the lowest level. On the other hand, prices of the traditional agricultural and service sectors respond more quickly to upward moves than manufacturing prices, causing a corresponding rise in the prices of consumption goods and in the payments for services provided. It is said that in these sectors, too, the price hike is curbed to some extent by prevailing low labor wages.

In Chapter 4, where changes of production structure over an extended period are analyzed regarding agriculture, agricultural production factors are classified in the categories of labor, land, fixed capital, and current inputs. Though the agricultural population decreased by 10 per cent between 1880 and 1920, the farmers' per-head work days increased by 45 per cent from 110 to 160 days annually thanks to the diffusion of double rice cropping and sericulture. Fixed capital, which increased sharply in the postwar period, expanded moderately in the prewar period. The input of chemical fertilizer, etc., increased at an annual rate of 7.7 per cent during the period 1900 through 1920. Throughout this period, the annual production growth rate stood at 1.6 per cent, whereof fertilizer application contributed to an increase of not more than 0.9 per cent while productivity improvement largely contributed to 0.7 per cent, nearly half as much as the total increase. In the above period except after the 1950s, it was

from 1900 through 1920 when improvement in productivity, especially that in labor productivity, was achieved. During this period, a major role was played by land improvement and advanced irrigation technology other than biological-chemical technology, such as the diffusion of fertilizer and the improvement of agricultural plants. In the previous LTES issue plus updated figures are available in the appendices of this holders in the nineteenth century, but from the beginning of the twentieth century these were replaced by government policy. Detailed studies have been conducted on each of these circumstances,<sup>5</sup> and it would be all the more significant to analyze individual events in relation to overall economic growth.

Besides the above, this publication features international data comparison, but what is deserving of the researchers' closest attention is that the original statistical figures in the previous LTES issue plus updated figures are available in the appendices of this publication. Also, what cannot be overlooked are nominal and real values in consumption expenditure and in agricultural and manufacturing output over the long term from 1880 through 1970 which are compiled in a systematic manner, though as temporary figures. Thus, this publication serves as one of the most reliable sources of information on the LTES.

This completes the outline of this publication and I would like to add some personal comments. To begin with, as to the overall LTES performance assessment, I have already made reference to it in the cited publication,<sup>6</sup> and it is suggested that the readers consult it for details. Therefore, I will restrict myself to a brief summary. The compilation of the LTES, in short, was a massive project designed to excavate and systematically integrate existing data and information for a systematic estimate of national economic accounting. However, as to statistics during the nineteenth century, especially during the 1880s through 1890s, original data are extremely scarce and it is after the beginning of the 1890s that the statistical data are systematically presented. For this reason, figures during the initial phase are not always accurate. As pointed out by K. Satō, an assumption is made that, when estimating capital stock and formation, prices per unit area of plant buildings remained unchanged during the period from 1878 through 1940, namely, the quality of buildings remained unchanged during this period. The reviewer agrees with the view that such a fact was inevitable due to the presence of data constraints. But, as to figures from 1870 through 1880, the combination of relatively reliable agricultural output statistics with external trade figures and the use of the commodity-flow method will make it possible to acquire more consistent figures on cocoons, silk, cotton, cotton textiles, etc. In other words, it is without doubt that the LTES offers the most reliable and comprehensive study of statistics from the past, but on the other hand, it is undeniable that there is a substantial need for the improvement of detail. The authors of this publication are aware of these needs

<sup>5</sup> Y. Hayami and others, *A Century of Agricultural Growth in Japan: Its Relevance to Asian Development* (Tokyo and Minneapolis: University of Tokyo Press and University of Minnesota Press, 1975).

<sup>6</sup> T. Nakamura, "Chōki tōkei no seido ni tsuite" [On the accuracy of historical statistics], *Keizai kenkyū* (Hitotsubashi University), Vol. 30, No. 1 (January 1979). Also refer to K. Satō, "Chōki keizai tōkei no hyōka to gimmi" [A user's evaluation of long-term economic statistics in Japan], *Keizai kenkyū*, Vol. 30, No. 1 (January 1979).

more keenly than others, I believe, and will make continuous improvements. The LTES information leaves room for additional clarification of historical facts by excavating other source data and improving the method of inductive statistics.

The following comments are rather optimistic as opposed to the aforementioned relatively cautious statements. The LTES analysis has so far been conducted from the somewhat subjective viewpoint of the statistical compilers. The said Ohkawa-Rosovsky and Ohkawa-Minami coeditions are those representative works. However, the latent volume of information contained in a series of LTES publications can be more than what it expresses explicitly. In other words, there is an additional possibility that hidden aspects may be unveiled with regard to past economic developments in Japan through further studies by integrating the LTES data with other data on the contemporary period in Japan. For example, an enterprising project such as the creation of a long-term quantification model during the period from 1880 through 1940 could be made available by the application of this data. Also, a significant undertaking may be to take up a contemporary issue, such as the comparison of current and past status (nineteenth century through the early twentieth century) in the developing countries. It would also be possible to reassess the validity of many established views on Japan's modern history through the operation of the LTES information. In this connection, it is of course natural that we should proceed carefully with our work giving due attention to the particularity of these data.

In conclusion, the reviewer wishes to extend his heartfelt congratulations to Professor Ohkawa and other authors of this publication on the issue of the English editions which marks one of the memorable milestones in this grand project. (Takafusa Nakamura)

*The Political Economy of Peru, 1956-78: Economic Development and the Restructuring of Capital* by E. V. K. FitzGerald, Cambridge, Cambridge University Press, 1979, xi + 360 pp.

## I

As known widely, the Peruvian military regime of 1968 carried out numerous structural reforms such as the nationalization of key industries, the land reform, and the initiation of systems of worker participation. In particular, the role played by the state in the economic sphere increased remarkably. The unique "Peruvian experiment" which was aimed at overcoming dependency and developing an independent economy received much attention both domestically and abroad. However, as pointed out by A. Lowenthal, it also cannot be negated that this "experiment" which was "neither capitalism nor communism" (*ni capitalista ni comunista*) was an "ambiguous revolution" due to the nature of its complexity. In fact, this attempt became increasingly more ambiguous and chaotic following a change in the regime of the military ruling leadership in 1975. This was due to an economic crisis which was said to have been