

【書 評】

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『日本の経済発展と所得分布』

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In 1955, Simon Kuznets presented a now famous conjecture: as an economy develops, income inequality would first rise before starting to fall. Cross-country testing of this inverted-U hypothesis of Kuznets is now readily undertaken as contemporary data are available for numerous countries, both developed and developing. However, intertemporal studies are much fewer for a simple reason that reliable data are scarce at the initial stage of economic development. Therefore, such a study is a significant contribution to this field, especially when the country is as important as Japan. The book under review has performed this task.

To study size distributions of income, one must turn to records of personal income tax, but in prewar Japan the national income tax was levied only on the richest who were no more than 10% of the population. Minami and his associates discovered another valuable source of tax records, *Kosūuari Zei* or the household tax, which is a tax that the Japanese government imposed on most households for their taxable income and assets (mostly real estate). (Though similar, this tax is not poll tax because the tax unit is a household including both family members and non-members as its income earners.)

The tax was started as a prefectural tax in 1878, but earlier the tax standard was arbitrary, differing by prefecture, and there was no objective taxing procedure. In 1921, the standardization was adopted and the book-keeping improved. The tax remained a prefectural tax until 1926 when it was taken over by municipalities. The tax continued until 1939 when the local taxation system was overhauled. Thus, the tax records for 1922-39 are more complete. They are the main body of data for the study under review.

The data collection was a serious practical problem because these tax records were bur-

ied in municipalities' archives as addenda to local assemblies' minutes. In 1974, the author and Professor Akira Ono who had been working on Japan's functional income distribution (cf. Ohkawa and Shinohara (1979), chap.11) sent a mail questionnaire to 646 municipal offices asking if they kept household-tax records. 381 offices responded, with 85 in the affirmative. Minami and Ono collected tax records for 210 administrative areas (16 cities, 45 towns, and 149 villages) spread all over Japan. Records were microfilmed and safedeposited with Hitotsubashi University's Statistical Documentation Center. This book reports the author's fact findings out of this mass of data.

After an introduction (Chap. 1) and the description of the statistical source (Chap. 2), the author sets out to present his statistical findings in the next 4 chapters, based on the Gini coefficient and other measures of income inequality computed for each locality. Chapter 3 gives a few case studies to make the reader familiar with the statistical material. The subsequent two chapters examine changes in the income distribution over time in urban areas (cities and towns) (Chap. 4) and in rural areas (villages) (Chap. 5). The main conclusion is that "while the urban income distribution was worsened greatly, the trend for inequality was minute in rural areas" (p. 134). In Chapter 6, urban and rural distributions are combined to give the overall trend. The author conjectures that the overall Gini coefficient rose from slightly above 0.4 (c1900) to around 0.55 (1940) (Figures 6-2). Chapter 7 turns to the postwar income distribution. The postwar economic reforms made the size distribution of income highly equal, reducing the Gini to around 0.3. Subsequently, it rose somewhat but the Gini remained stable in the range of 0.34-0.37 in 1962-90 (Table 6-4). Chapter 8 is the author's exploration on how to relate his statistical findings to the economy's socio-political impacts. Chapter 9 summarizes the book's main findings.

Needless to say, I have nothing but a high admiration for the author's painstaking work which claimed two decades of his time. It is a significant contribution to Japan's quantitative economic history. Having given my com-

pliments, I now turn to my critical review of the author's interpretations of his findings. Because of space, I limit my comments to three points.

(1) Bias in the urban sample

Cities in the sample, even the largest of them, are medium-sized (in 1920, Yokosuka (0.09 mn), Shizuoka (0.08 mn), and Kumamoto (0.07 mn)). Conspicuously absent are Tokyo (2.17 mn), Osaka (1.25 mn), Kyoto (0.62 mn), Nagoya (0.43 mn), Yokohama (0.42 mn) and other larger cities. Of city population, more than a half lived in cities with the population of 0.2 mn and over, and the percentage rose from 54% (1920) to 67% (1940). (City population itself rose from 18% (1920) to 38% (1940) of the total population.) In Japan, economic power tends to overconcentrate in Tokyo and Osaka. Income must have been more unequally distributed in large cities than in small cities. Then, the overall Gini coefficient must have been higher and risen more sharply than depicted in Figures 6-2. (This point is implicit in the statistics of war damages on high-income earners in Tokyo and Osaka (p. 118) and high remunerations of zaibatsu officers (pp. 123-124).) In other words, the prewar-postwar break may have been even more dramatic than the author's conclusion.

(2) Causes of changes in nonfarm-farm income differential (prewar)

In comparing income inequalities between the urban and rural samples, changes in the nonfarm-farm income differential (NDP per worker) becomes of critical importance. This ratio behaved just like the manufacturing/agricultural wage differential which the author studies (Figure 6-1). The ratio was at a low level of around 3 in 1913-25 except for a big bulge during World War (3.7 in 1914-17) associated with a rapid expansion of industrial employment. But the ratio started to rise from 3.0 (1926) to 4.9 (1931). The trend was then reversed and the ratio fell to 3.1 (1939).

The author (p. 137) argues that these changes in intersector income differential led to a lagged response of the number of tenant farmers' disputes which peaked in the mid-30s. He then presents a hypothesis that "the expansion of wage differential between farmers and urban workers, on the one hand,

expedited farmers' outflows to cities and, on the other hand, led to a proliferation of tenants' disputes".

My dissatisfaction is concerned with the first half of this hypothesis. To avoid an unnecessary misunderstanding (at least mine), the statement ought to have been amplified like the following. In 1914-17, the demand for industrial output expanded because the war demand of the Allied Powers. Consequently, the wage differential expanded and farmers' outflows increased sharply. With the end of the war, the wage differential returned to the earlier level with farmers' outflows slowing down. In 1926-31, the Japanese economy was more depressed (esp. in 1930-31) and industry's demand for new labor ceased. Farmer's outflows were stopped and even reversed. The wage differential therefore rose. Subsequently, the Japanese economy recovered and went into war preparations. Industry demand for new labor expanded and farmers' outflows were intensified. Consequently, the wage differential narrowed.

In short, changes in the intersector wage or income differential are a result, not a cause, of intersector labor flows. This is the point that the book should have stated more clearly. (In fact, the point was clearly noted by the author himself 30 years ago (Minami (1967)).

(3) Gini's postwar stability

Urban income became increasingly unequally distributed in the prewar period. Then, income distribution was made much more equal by the postwar economic reforms via "changes in institutional factors" which were forced on Japan (p. 156, 169). How then have these institutional factors remain powerful through the half century of the postwar period? Since the book's main interest is in prewar developments, its discussion of postwar developments is rather perfunctory (such as examining saving rates by income quintiles, p. 162).

To understand the postwar stability of the Gini, one must look at Japan's income dynamics. Households' savings go into housing (dwellings plus land) and financial network. There is a striking feature of the financial network distribution, namely, it is more equal than income distribution. For

1995 data, see Table 1. There are few reasons for this feature. One is that a large percentage of low-income households is retired households whose income is low but financial network is high on account of their past accumulation. Another is the fact that households' financial wealth does not appreciate by capital gains of assets because a substantial part of their financial assets is money (53% (1995)). This last point explains why Japan's income inequality has remained little affected by its recurrent bubbles in the postwar period.

But, by the same token, measures of income inequality within the household sector alone are not enough to represent Japan's income dynamics. Asset distributions across sectors have become increasingly unequal in Japan in the postwar period. Unless this expanded vision is taken, income inequality cannot be placed in a proper perspective. (This point is to be elaborated in Sato (1997).)

Table 1. Income (Y) and Financial Network (NFW) Distributions by Income Quintile, 1995, Percent

Income quintile	average level		shares of total	
	Y	NFW	Y	NFW
I	43	73	9	15
II	68	69	14	14
III	92	90	19	18
IV	115	101	23	20
V	182	166	36	33
Total	100	100	100	100

Source: Prime Minister's Office, *Family Saving Survey*, 1995 (1996), Table 5.

References

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