## NOTES AND MEMORANDA

## A CORRECTION: JAPAN IS DIFFERENT

## BY RAYMOND GOLDSMITH

In the first footnote to a short paper written early in 1972 though published in this journal only in 1975,<sup>1</sup> I apologized for having made the estimates, as this should have been done by a Japanese colleague, and expressed the hope that Japanese statisticians would do better. Both the apology and the hope have proven to be well-founded. As a result of the publication of the 1970 National Wealth Survey,<sup>2</sup> which provides information on reproducible tangible assets, and of the work of two research organizations specializing in the valuation of land, we are now able to make more reliable and more detailed estimates of the national wealth of Japan than was possible in 1972. The new data, in particular, show that the earlier estimates very seriously understated the value of land in the postwar period, and indicate that the ratio of the value of land to that of reproducible tangible wealth, as well as to that of national product and of financial assets, is entirely different in Japan from what it is in other developed countries.

In the last few years two estimates of the value of land in Japan have become available which provide information not only for the national totals, but also comparable data for the main types of land and for each of the 46 prefectures or for groups of them. The first of these estimates, prepared by the Nikko Research Center, is available for the years 1970 through 1973,<sup>3</sup> while the other, by the Japanese Real Estate Finance Institute, provides information for 1972 to 1974.<sup>4</sup> The estimates are quite close for the two overlapping years, the first being about seven percent higher than the second.<sup>5</sup> They are compatible with a third estimate that can be derived for residential land by multiplying average prices by the appropriate area.<sup>6</sup> Thus there does no longer seem to be any justification for

<sup>1</sup>R. W. Goldsmith, "A Synthetic Estimate of the National Wealth of Japan 1885–1973." *Review of Income and Wealth*, Series 21 (1975), pp. 125-151.

<sup>2</sup>Economic Planning Agency, 1970 National Wealth Survey of Japan, Vol. 1 Summary Report, 1975.

<sup>3</sup>Shihon ritoku nikansuru suikei chosa (Statistics of Capital Gains), 1974. This is the estimate cited for January 1973 by E. Mills and K. Ohta in H. Patrick and H. Rosovsky, eds., Asia's New Giant, 1976, p. 698.

<sup>4</sup>Wagakuni ni okeru tochisokagaku to fudosantorihikigaku no suisan nitsuite (An Estimate of Land Values and of Transactions in Real Estate), 1976.

<sup>5</sup>The differences are larger for the four types of land being distinguished. The largest and most important of these concern the value of agricultural land where the Nikko estimate is fully 70 percent above that of the Japanese Real Estate Finance Institute. This is offset by much lower estimates for two relatively unimportant types, viz. forests and mountains and unclarified land; and by a slightly lower estimate of the largest component of residential and other non-agricultural land. The year-to-year movements of the two estimates are, however, very similar.

<sup>6</sup>An estimate of the value of residential land of 158 trillion yen can be obtained by multiplying an average price of 35,100 yen per m<sup>2</sup> in mid-1975 (used in an unpublished memorandum of Mr. Matsura of the Economic Planning Agency) with a residential area of about 4,500 km<sup>2</sup> (extrapolated on basis of figures for 1971 and 1973 in K. Ohata, *Japanese Urbanization and Urban Problems: Some Recent Developments*, unpublished Japanese Economic Research Center Conference Paper, March 1976). This compares with an estimate of the Japan Real Estate Finance Institute of 169 trillion yen for the end of 1974.

doubting the level of Japanese land prices and values that is indicated by these estimates, extraordinarily high as they are both in absolute terms and in relation to reproducible tangible assets, to financial assets and to national product. One must then also accept the fact that the postwar census type estimates of land values cannot easily be reconciled with prewar figures of the same type and price indices for different types of land, whether or not adjusted for the changes in the relevant areas.

Corrections are much less important for reproducible fixed tangible assets and are limited to the years 1965, 1970 and 1973 as those for 1955 and 1960 were taken from the official national wealth surveys for these two years. They will, therefore, not be discussed in detail. No check by data that have become available since the article was written is feasible for the estimates of reproducible assets for 1965. The estimates for 1970, derived by extrapolation of the official data for 1960 or 1965, came reasonably close to the figures of the 1970 national wealth survey for the aggregate of reproducible national wealth. This, however, is the result of a serious overestimate (by about one-fourth) of tangible fixed assets, which was partly offset by substantial underestimates of inventories, and of consumer durables. The estimates for 1973 are also somewhat above figures that extrapolate the results of the 1970 survey on the basis of the official national accounts figures for net capital formation and the relevant deflators. All these differences are largely due to the fact that the national wealth survey figures are not obtained by the perpetual inventory method but are based on a stratified fairly large sample of units in the different sectors and subsectors and to the complex method of reducing gross to net values of reproducible tangible assets which is applied by the survey statistician.

Using the figures of the 1970 National Wealth Survey for reproducible assets (excluding non-durable consumer goods) of 143 trillion yen and for net foreign assets (1.7 trillion yen) and the Nikko estimates for land (245 trillion yen) we obtain an estimate for total national wealth at the end of 1970 of 390 trillion yen, 60 percent above the earlier estimate of 243 trillion yen. If this estimate is accepted the value of land is equal to 63 percent of national wealth and to over 170 percent of the value of reproducible tangible assets, ratios much higher than those found in other developed countries, not only at the present time but at any time throughout the past century. Similarly the new estimate puts national wealth at 5.2 times gross national product, again a ratio well above that for other developed countries. Finally use of this estimate results in a financial interrelations ratio (financial assets: national wealth) for 1970 of about 0.70 which puts Japan at the lower end of the range for developed countries notwithstanding a fully developed financial superstructure which, with a value of 3.6, is quite large in relation to national product.

Preliminary estimates for 1975 suggest that the ratios of land values to those of reproducible tangible assets and to national product have declined slightly. Land prices according to the indices of the Japan Real Estate Institute<sup>7</sup> and of the

<sup>&</sup>lt;sup>7</sup>The Bank of Japan, *Economic Statistics Annual*, 1974, 283; *Japanese Statistical Yearbook*, 1975. 121, 137, and information kindly supplied by Japanese Real Estate Research Institute, Tokyo.

new National Land Agency<sup>8</sup> fell for the first time in 1974 and showed little change in 1975 after continuing their rapid rise through 1973. The value of land at the end of 1975 then probably was approximately 75 percent above that of 1970. The value of reproducible assets, however, increased more rapidly as net capital formation continued at a high level while the prices of investment goods advanced by over 50 percent. As a result the value of the net stock of reproducible assets appears to have increased by more than 150 percent in this five year period. The value of financial assets rose by about 125 percent according to the flow-of-funds statistics of the Bank of Japan. These rough estimates indicate a value of national wealth at the end of 1975 of slightly above 800 trillion yen, of which land constituted slightly more than one-half compared to more than three-fifths five years earlier. The ratio of national wealth to gross national product at the end of 1975 was in the order of 5.3, slightly above that of 1970, though the land-national product ratio declined from about 3.3 to 2.8. The financial interrelations ratio, finally, advanced a few points to nearly 0.75. Thus the value of land remained extraordinarily high, and only slightly less so than in 1970, still producing a land-national wealth ratio and a wealth-national product ratio much higher than in other developed countries, and a relatively low financial interrelations ratio as well as a very low ratio of rents to land value.

The figures thus clearly indicate that where land values and their relations to other relevant macro-economic magnitudes are involved Japan is indeed different, and apparently has been so for the last one to two decades. It now remains to explain the reasons for these differences as well as their effects, particularly on the operation of the Japanese financial system, more comprehensively than appears to have been done so far.

In view of the magnitude of the revisions made necessary by the superior data that have become available in the last few years, in particular for the value of land, the estimates for the postwar period in the article of 1975 should be disregarded. I hope to present revised estimates utilizing the newer data in a study of the financial development of Japan on which I am now engaged.

<sup>8</sup>National Land Agency, Land Appraisal Committee, *Chika-koji* (Disclosure of Land Prices) 1975, 399.