

Some Thoughts on Mr. Oshima's Benchmark for 1881

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The early years after the Restoration—until about 1890—were a revolutionary and turbulent period for Japan. Establishing a modern form of government in a few short years while aiming at a complete revision of civil administration would have been a staggering task under any circumstances. Additional difficulties in the form of civil disorders which at times developed into full-fledged civil wars made the task of the early Meiji leaders truly Herculean. These circumstances are, of course, reflected in the available statistical data, and consequently attempts at computing national-aggregate measures for this period of Japanese economic history have always presented enormous difficulties. One cannot hope for highly accurate results, but only for intelligent, plausible, and well-documented guesses. Despite these obstacles, it would be wrong to ignore the economic events of these years. Japanese industrialization made its greatest strides only in the 20th century, but the early years of Meiji are the Genesis of what was to follow and must be the necessary anchor mark for the rates of growth which, as yet, have not been calculated with sufficient exactness.

The most recent contribution in this macro-economic exploration of the beginnings of Japanese economic development has been made by Dr. Harry Oshima, and the editors of *Keizai Kenkyu* have asked me to make a few brief comments. Because Dr. Oshima is the foreign scholar most familiar with Japanese statistics and national income accounting, his very suggestive article deserves close attention. I think that the approach he indicates is very promising, and most of my remarks relate only to minor problems and to me, at any rate, interesting side-issues. There are three facets of the Oshima Benchmark for 1881 which I would like to discuss: firstly, the estimate of income originating in Japan in 1881; secondly, the treatment of the Government sector; and lastly,

the figures of capital formation.

Dr. Oshima's national income figure for 1881 is only partially new, because Prof. Ohkawa's data for Agriculture and Fisheries are accepted with only very minor modifications. These "borrowed" figures account for over 55% of the final total¹⁾. The new part hinges on the reliability of labor force and wage statistics gathered from a variety of sources. Both of these series make rather shaky pillars, but it seems to me that the overall paucity of sources fully justifies their use. However, my doubts remain strong particularly in the case of the wage figures. Aside from the numerous objections which the author himself recognizes, the chances are that the fragmentary reported wages are somewhat untypical and too high. The feeling is that mainly the salaries of skilled workers (or more higher-class workers) were recorded, leading to an upward bias in the result. These considerations may in part explain the large gap between the Ohkawa and Oshima estimates which come out most clearly when one examines the *per capita* figures. Dr. Oshima's non-agricultural *per capita* income is three times the size of agricultural, and that seems like a very large difference. Prof. Ohkawa's ratio of 2:1 appears more believable.

Dr. Oshima does not explain why he selected the year 1881 for constructing his benchmark. Most probably he wanted to choose the earliest possible year after the Restoration for which sufficient data were available. A close look at his table of the

1) Incidentally, the acceptance of the Ohkawa figures for Agriculture and Fisheries would seem to contradict the opening sentence of Dr. Oshima's essay where he states that "national income totals for the early years of modern Japan are obtained as extrapolations of benchmarks around 1920." While this is, broadly speaking, true for secondary and tertiary industries, it is not the case for primary industry where key production series are used.

Consolidated Government Account shows, however, that gaps in the data are still serious. Thus, for example, item 7(c) is almost certainly too large, and item 9 must involve some double counting. The trouble here lies in the fact that before 1890 information about Government expenditures are inexact and at times confusing. Dr. Oshima states in his explanation of 7(c) that *eizen-hi* comprises building and repairs, and perhaps also some minor repairs and maintenance. My experience with post-1890 data makes me quite sure that *eizen-hi* includes many unjustified overhead expenses as well as other items that should not be classified as capital goods at all. In 1890 (Meiji 23) there becomes available the most useful source for analyzing Government budgets, namely *Kakusho Sainyu Saishitsu Kessan Sho* (Statement of Accounts of Revenues and Expenditures by Ministries) which gives a detailed breakdown of expenditures by sub-items. This source shows that *eizen-hi* as reported in other standard sources is usually overvalued by some 30%. In addition, *Kessan* permits the close analysis of Central Government subsidies, the great majority of which have to be eliminated because they re-appear as Local Government expenditures. It is true, as Dr. Oshima points out, that certain subsidy items are merely intra-governmental transfers. Usually this took the form of a transfer from the General to the Special Account, as when the Ministry of Education made available funds to Tokyo University for building purposes.

All of the above cannot possibly be interpreted as a criticism of Dr. Oshima's work. I raise these issues only to show that his method may be strengthened when it is applied to later years. Benchmarks are needed for selected years until 1925 when the first tolerably accurate Government computations are available, and as the sources im-

prove the benchmarks can be made firmer.

I am somewhat skeptical about Dr. Oshima's admittedly tentative capital formation figure, because the entire private investment sector is the result of an untestable assumption. The need for making hopeful assumptions when basic data are missing is obvious, but it seems to me that the hypotheses can be refined and tested, allowing a more realistic approximation of private investment. No one has as yet developed long-term capital formation series for Japan, although such work is in progress. In my opinion, the most sensible method is to divide capital formation into rather narrow components which can then be dealt with separately, as *e. g.* urban construction or producers durable equipment by major industries. For the years before 1900 data are very scarce, and many simplifying and causal assumptions are needed, such as, for example, those linking population growth and housing. When the job is finished and one desires to check results with Dr. Oshima's benchmark, an investigator could be in the unenviable position of being able to compare only assumptions—not a very solid proof of validity. After all, benchmarks are developed mainly to check long time-series, and they must be sufficiently good to enable us to make a pretty solid judgement. Perhaps rough commodity flow series will give the necessary answers in this field.

By way of conclusion let me join Dr. Oshima's plea for a further study of his method. It looks very fine, but should be applied to more years before a final verdict can be rendered. I hope that this method will also be instrumental in the initiation of a badly needed research job: the serious study of long-term Japanese population and wage movements. Economic historians, national income specialists, and statisticians, would be most grateful.