National Income of India: Trends and Structure. By M. Mukherjee. (Calcutta: Statistical Publishing Society, 1969. P. xxix + 521. \$12.50).

This book could not have been written two decades ago. On the eve of India's formulation of the First Five Year Plan in 1950, statistical abstracts relating to India were available for a period extending back more than one hundred years. These volumes, issued annually, contain masses of statistical information about many variables. Although they were put together with considerable effort and diligence, they did not permit very much, if anything, to be said about the performance of the Indian economy over the years covered. This is because they lacked information about crucial economic variables such as employment, output, investment, and savings. Since there are few other sources for such information which can be utilized, the task of ascertaining trends for the crucial variables in Indian economic development is rendered almost impossible. Some individuals had attempted estimates of the level and composition of income and employment for particular years over the course of the last one hundred years. Most of these estimates were nothing more than guesses. Moreover, any attempt at comparison of any two estimates is useless because of differences in concepts. measurements, and theoretical judgements employed by the individual estimators. And in most cases, they generally failed to specify their sources and their methods of calculation.

Nevertheless, there is a need for more precise and reliable factual information if one is to have a better understanding of India's economic past. This is because a better knowledge of the past is essential for the analysis of India's present economic conditions and for the formulation of development plans for the future. This reviewer carried out one such exercise by reconstructing the statistical foundations of India's economic history. (See this *Review*, September, 1969).

A major attempt is presented in the book under review. The chapters and appendices of Part I deal with conceptual and methodological problems as well as estimates of India's national income over the one hundred years preceding Independence. The results of Mukherjee's exercise, as they relate to the period 1860–1950, are fundamentally unsatisfactory. This is because in this part of his book he attempted nothing more than a patchup job on the available estimates of national and per capita income. Inasmuch as there are serious doubts about the validity of concepts, the accuracy of measurements, and the character of judgement employed by the original estimators on whose work Mukherjee bases his own calculations, the usefulness from the results of such an exercise may be slim indeed. Since this part of the book forms only about one-fifth of the whole, the general merit of this volume is not greatly diminished thereby.

Approximately four-fifths of the book is devoted to the period since 1950. Part II is concerned with the examination of the national income and its components in both current and constant prices. Part III deals with the distribution of national income by factor shares and by type of organization. This section of the book also examines trends in investment and savings and consumption expenditures. Each chapter is followed by one or more appendices which either deal with the subject matter in more detail or present information not elaborated in the preceding chapter. The appendices deal with such subjects as flow of funds accounts for India, estimates of tangible wealth in India, and national income and allied aggregates by States. The usefulness of this book on India's national income statistics cannot be overstated. As far as I am aware, this is the only work which deals comprehensively with these statistics for the years since Independence. The amount of labor involved in producing such a volume is unquestionably immense, and Mukherjee was fortunate in having the assistance and collaboration of his colleagues at the Indian Statistical Institute. He has been the primary guiding spirit, in various official capacities, in the development of statistical series for the Indian economy in the post-Independence period. The outcome is a superb job,

only slightly marred by misprints (and there are some in addition to those noted on the errata sheet).

The achievement of this work can be indicated as follows. On the eve of India's attempts at deliberate development, there was little idea as to the magnitudes of the variables with which planners could work. Little was known about the level and composition of national income and employment. Nor was there much information about the investment levels or rates of saving. Thus, little was known about any of the variables in the economy which are essential in the formulation of a viable and internally consistent development plan. Without such information, it is virtually impossible to set attainable plan objectives, except of a very general sort. Consequently, it is not possible to estimate with any degree of accuracy the capital, labor, and other input requirements for the fulfillment of plan objectives. Indeed, one of the major reasons for the modest goals and achievements of the First Five Year Plan was precisely the lack of statistical information about the Indian economy. Mukherjee's book points up the problems faced by the estimators at that stage. He discusses virtually all efforts made to gather and collate national income statistics, the shortcoming of these efforts. and the ways in which subsequent refinements and corrections were made. Not only did the estimators have to contend with the lack of statistical series to use as a guide: they also had to make adjustments for the fact that they were preparing estimates for an underdeveloped and largely unorganized economy while the concepts had been formulated in developed economies with organized activities. Thus, the task facing the estimators was formidable indeed. This volume bears witness to the fact that the task was accomplished with distinction.

This is as complete a volume of India's national income statistics as, I venture to guess, one is ever likely to find. Virtually all available estimates of whatever nature are carefully examined and critically evaluated. The need for reliable and detailed information about economic conditions in India can hardly be exaggerated. This volume meets this need admirably and is an indispensable source for anyone seriously interested in the problems of Indian economic development.

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