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National Income and Its Composition, 1919-1938

by Simon Kuznets

assisted by Lillian Epstein

and Elizabeth Jenks

VOLUME I

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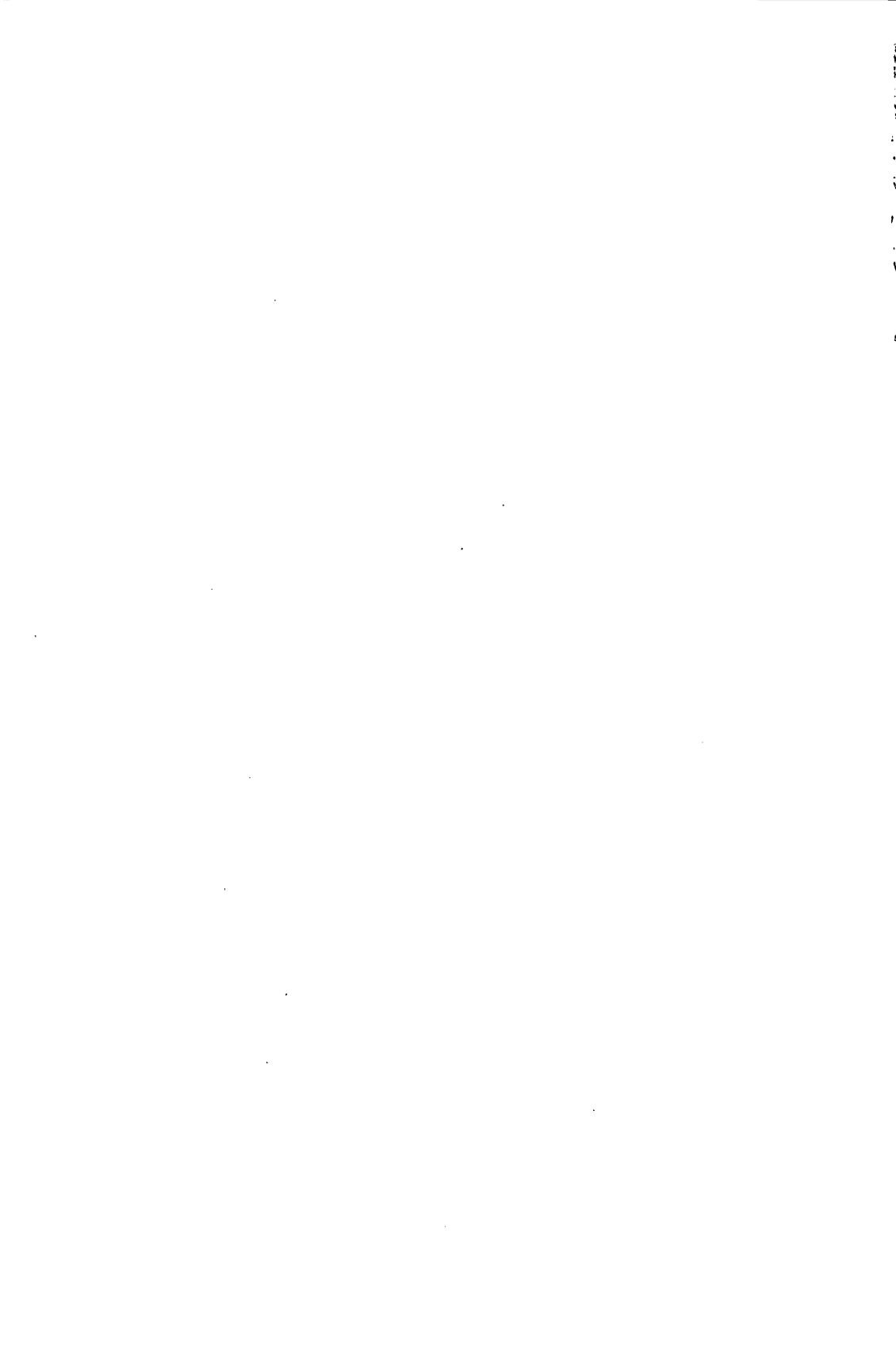
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Preface

IN RECENT years national income has been widely used to gauge the performance of the country's economic system. Statesmen and economists, politicians and journalists, reformers and cranks, defenders of group interests and advocates of special policies—in short, nearly everyone concerned with the workings of the economy—have at one time or another cited the billion dollar figures to proper or improper ends. They have been used to measure changes in the economy's total accomplishment in relation to factors observers select as strategic; to serve as a quantitative framework within which to judge policies proposed or opposed; to diagnose progress or retrogression; to claim credit or cast blame.

Such bandying about of national income estimates is to be expected in a society interested in the material results of man's activity. Nor is it surprising that national income figures have become more prominent in public discussion in recent years, if only because more trustworthy estimates have been prepared at more frequent intervals. Not the least of other reasons is the pronounced disturbance in the country's economic life caused by wars and the recent great depression and the consequent need for public action in the light of as much economic intelligence as can be mustered.

Their comprehensive character and quantitative definiteness make national income estimates useful as a standard by

which to judge economic processes or policies. Yet several vital aspects of the estimates frequently tend to be overlooked in popular discussion. The natural desire to have a single measure and to read an unequivocal meaning into it often leads to the treatment of national income as the uniquely objective measure of economic achievement rather than as an appraisal based upon criteria that may differ from country to country, group to group, and time to time. A national total facilitates the ascription of independent significance to that vague entity called the national economy and may induce neglect of the patent fact that this entity comprises millions of individuals and firms, and scores of industries, economic groups, and regions whose efforts add up to the national income total. Interest in changes in national income during the current short run pushes into the background the longer term movements and cyclical fluctuations to which the economy has been subject in the observable past, cognizance of which would enable the observer to distinguish persistent from transient changes. Finally, the quantitative definiteness of the estimates makes it easy to forget their dependence upon imperfect data and the consequently wide margins of possible error to which both totals and components are liable.

The main objective of the investigation summarized in this report was to arrive at annual estimates of national income for this country since the 1914-18 war. It was carried out in awareness of the matters just mentioned: that national income is an appraisal based upon criteria that help to differentiate economic and productive activities from others; that segregation of significant components is essential; that analysis of the longer term movements and cyclical fluctuations in national income and its components is desirable; and that because the estimates depend upon necessarily incomplete data a detailed description of sources and methods is indispensable.

The same considerations led us to do more in this report than present estimates of totals or even of their numerous

components. In Chapter 1 we discuss at length the problems involved in defining national income; in Chapter 2, the difficulties inherent in the proper delimitation of significant components; and in Chapter 3 we sketch the bases of the estimates and of the limitations arising from lacunae in the data. Part Two analyzes both longer term changes and fluctuations during business cycles. Part Three explains the derivation of the estimates, their margins of error, and how and why they differ from other estimates. Part Four presents in detail the estimates by industries and types of income, describing the sources and methods used in deriving each total. Part Five assembles some supplementary data outside the scope of the basic totals and components, yet deemed of interest.

Naturally the detail with which these various phases of national income could be discussed and measured was predetermined by the data and the practical exigencies of completing a task with the resources at hand. Consideration of other definitions to which the choice of different criteria of national income gives rise could not be implemented with corresponding estimates. Distributions by significant components had to be restricted to those by industrial source, type of income, and such categories of final use as the capital formation study had established. Analysis of temporal changes in the totals and in their components was handicapped by their annual form and because there are estimates for only two decades (for some estimates, for three). The description of technical features, comparisons with other estimates, and the evaluation of the margins of error, while fairly detailed, are not complete. It would be almost impossible to examine all the feasible methods, push the comparisons to the point of accounting for all the differences, or refine the evaluation of the margins of error beyond the crude measures of informed opinion here ventured. Similarly, the tables and notes in Part Four and the supplementary data in Part Five are not exhaustive. But such limitations are unavoidable. Statistical measures and analysis are always conditioned by the stock of data and the-

oretical tools which, at any given time, falls short of an easily conceived perfectionist ideal.

A critical and patient reader will become aware of the defects in the estimates and in their analysis as he reads; the less critical and impatient will have to take the conclusions and this warning on faith. Both may wonder whether our treatment of one aspect of national income may not negate or render superfluous our analysis of other aspects. For example, in demonstrating that, in all cases including the present, national income is essentially an appraisal concept we concluded that it inevitably reflects the judgment of society at large as to what economic production is, a judgment that admits of several variants even for a given society at a given time. Why analyze temporal changes or worry about the quantitative accuracy of estimates so dependent upon debatable criteria of social judgment? Why, in view of the approximate character and the wide margin of error, go to the trouble of analyzing the estimates in terms of long time movements and cyclical fluctuations and treat them as if they were records of carefully organized and controlled observations?

Such doubts would be justified were the penumbra of conceptual and statistical vagueness not dispelled by delimiting the scope of the estimates and by taking into account the influence of possible errors. Once we have reviewed the various definitions of national income in the light of the criteria that underlie them and chosen one or a group of related criteria, there is no reason why we should not scrutinize and try to interpret the changes in the totals based on them. Obviously, one concept or group of concepts of national income is chosen because changes in the totals estimated on that basis facilitate understanding of economic reality; if the choice is valid, analysis of the results is called for. Likewise, even though our estimates cannot be precise, we should still try to analyze temporal changes. Only by so doing can we probe

the limitations of the estimates and single out their substantive indications.

Our estimates, being for a definite period, may well require reinterpretation when the period is viewed as one panel of a much longer historical canvas. They are also bound to become obsolete as times and criteria of social valuation change, new components emerge, and experience and perspective widen. Indeed, the author cannot but hope that this study and whatever questions it raises may in themselves contribute to improvements in data and analysis that will render it obsolete.

An investigation such as this could not be carried out unless the author had the constant and expert help of people familiar with the sources and procedures. I have been fortunate in being assisted throughout the study by Lillian Epstein and Elizabeth Jenks who have shouldered the burden of assembling the data, making the computations, checking the results and their interpretation in the text, and putting the manuscript through its various versions. Miss Epstein is also responsible for the preparation of the detailed notes in Part Four, which required meticulous care.

The preliminary versions were read by the advisory committee of the National Bureau's research staff. I have especially profited from the comments by Milton Friedman, and received several useful suggestions from Solomon Fabricant. Wesley C. Mitchell contributed greatly to the improvement of Chapter 1 and upon his recommendation, a separate chapter dealing, among other topics, with business savings, was added. Of the Directors of the National Bureau I am indebted for valuable comments to George O. May, W. Leonard Crum, C. Reinold Noyes, and Harold M. Groves. Albert G. Hart of Iowa State College, Raymond Goldsmith of the Securities and Exchange Commission, and John L. Martin, formerly of the Department of Commerce, also made constructive criticisms.

In the preparation of the estimates the National Income

Unit of the United States Department of Commerce has been our generous ally. The discussions at the meetings of the Conference on Research in Income and Wealth served to clarify some of the theoretical issues and supplied some relevant statistical measures beyond the scope of our own investigations. The final manuscript has been patiently edited by Martha Anderson.

To all these individuals and organizations I am sincerely grateful.

Simon Kuznets

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