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National Bureau of
Economic Research.
Conference on

STUDIES IN

Income and Wealth

VOLUME THREE

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(Resolution of October 25, 1926, revised February 6, 1933)

STUDIES IN

Income and Wealth

VOLUME THREE

BY THE CONFERENCE ON RESEARCH

IN NATIONAL INCOME AND WEALTH

NATIONAL BUREAU OF ECONOMIC RESEARCH

NEW YORK · 1939

Printed and bound in the United States of America
by H. Wolff, New York

PREFACE

THIS third volume of the series, *Studies in Income and Wealth,* is in significant contrast to the preceding two. Every paper in this volume is concerned with problems centering about the division of a national total—of either wealth or income—into meaningful constituents. The first three papers—by C. L. Merwin, Jr., Charles Stewart, and Enid Baird and Selma Fine—deal with the division of the total among groups of income recipients or wealth holders classified by size of income or amount of wealth owned. The fourth, by R. W. Goldsmith, is an attempt to estimate the portion of total income that is saved rather than used to purchase goods currently consumed. Clark Warburton's paper is a review of the available allocations of income by the kinds of goods and services that make up the total income stream, and a plea for better measures in this field. R. R. Nathan considers the problems involved in allocating the total income of the nation among political units, the states, and P. H. Wueller, the usefulness of such an allocation for the purpose of measuring relative capacities of the states as a guide in distributing federal grants.

The papers in *Volumes One* and *Two,* on the other hand, were devoted primarily to problems centering about the meaning and measurement of total national wealth and income. None took as its specific and main problem the allocation of a total among its constituent elements, although all the papers reiterate the need for breakdowns of the totals and clearly recognize that the possibility of evaluating the components is largely responsible for the usefulness of the estimates of the totals. But even those papers and comments that deal almost exclusively with segments of the totals—for example, the series of papers on income derived from government or the discussion of measuring inventory gains or losses—were concerned with these segments not primarily because they were important in their own right but rather because they presented baffling problems of estimation that needed to be solved to improve the adequacy of the totals.

This shift in emphasis is both understandable and desirable. The preceding volumes have by no means reconciled the divergent opinions concerning the constitution of national income, or of that as yet little quantified total, national wealth, and the probability that further discussion of these points in later volumes will be needed is fully recognized. But they have served the function of laying bare the nature of and reasons for the divergencies, of setting forth the border areas where disagreement is sharp, and of making explicit the assumptions concerning them. We can now formulate, as we could not so clearly before, three major questions about the constitution and measurement of national income on which there is a fundamental division of opinion: first, whether capital gains and losses should be included in the income total; second, whether the net value product of illegal enterprises should be included in the income total; third, how the services rendered by government should be valued.

Capital gains and losses reflect changes in the value of assets on hand at the beginning of the year that arise from unanticipated changes in their quantity or quality. Such alterations in the valuation of assets may result from price changes alone, or from actual physical changes in durable goods (for example, through fire losses) or from changes in our knowledge of them (for example, through discovery of mineral resources). Quantitatively, capital gains and losses due purely to price changes are much the most important aspect of the problem; consequently, this summary is restricted to gains and losses of this type. Divergent views as to whether they should be included in national income have probably been responsible for wider discrepancies between estimates of year-to-year variation in national income than have divergent views on any other class of items. Three positions as to the proper treatment of such capital gains and losses have been held. One position is that they should be excluded from income in both 'current' and 'constant' prices; a second, that they should be included in income in current prices but should be eliminated when income is adjusted for price changes; and the third, that income in both current and constant prices should include capital gains and losses, in whole or in part.

The disagreement with respect to income in current prices hinges on a difference of opinion as to which concept is most useful. Those who favor the exclusion of capital gains and losses think that national income in current prices will be most useful if it is a measure of the value of a flow of commodities and services rather than a measure of the flow of monetary values. They would define national income in current prices as the current value of the goods and services consumed plus the current *value of the change* in the community's stock of capital and thus would exclude both realized and unrealized capital gains and losses arising from price changes. Some of those who hold the opposing view argue, on the other hand, that national income in current prices has primarily a monetary significance—that logically it should be defined as equal to the 'values' consumed by or accrued to the credit of the individuals constituting the community. This would mean that national income would be defined as equal to the value of the goods and services consumed plus the *change in the value* of the community's stock of capital and thus would include both realized and unrealized capital gains and losses. Others support the same position for somewhat different reasons. Although granting that capital gains and losses do not add to the total value of the flow of commodities and services during a period, they maintain that such gains and losses do affect the share of the total to which component groups in the community can lay claim, and hence should be included at least when problems dealing with the distribution of national income are considered.

The practical aspect of the question, namely, whether capital gains and losses can be objectively measured, though outstandingly important, does not contribute unambiguously to a solution. Some types of capital gains and losses, such as those arising in connection with real estate and investments, are to a considerable extent separable in the accounting data used for income estimates; their inclusion in national income means adding items, the measurements of which may be inaccurate. However, other types of capital gains and losses, such as those arising in connection with inventories, are included in the raw data on which income estimates rest and can be eliminated only by subtracting estimates of them from a presumably more nearly accurate total.

The disagreement with respect to income in constant prices arises from divergent views as to the price changes for which correction should be made. One view is that 'income in constant prices' should be defined as equivalent to an index of the physical volume of commodities and services produced. This would require correction for changes in specific prices that would of necessity eliminate all capital gains and losses, at least in a closed economy. Deflation by a general price index is then merely an indirect method of approximating an index of physical volume, and any failure thereby to eliminate capital gains and losses is to be counted an error. The other view is that it is desirable to correct solely for changes in the 'general level of prices' or in 'purchasing power', but not for changes in specific prices. According to this view, deflation by a general price index yields, conceptually, the desired figure and not an approximation; failure thereby to eliminate all capital gains and losses is considered a correct and proper result. All parties to the controversy agree on the importance of measuring capital gains and losses; the division of opinion is on the advisability of including the resultant estimate in the national income total.

A second major issue in connection with the definition of total national income is whether to include the net value product of illegal enterprises. Those who would include activities such as bootlegging during the prohibition era urge as a principal reason for so doing that inclusion only of legal items would invalidate comparisons of income estimates for periods during which the legal status of any important type of activity has changed. They note also that illegal enterprises employ tangible national wealth and human labor as legal enterprises do and that the net-value-product formula is equally applicable to their accounts. Those who advocate the exclusion of the products of illegal enterprises have urged that the line between legal and illegal enterprises represents the judgment of the community as to which enterprises are economically productive and that if national income is to be defined in terms of an objective distinction between economically 'productive' enterprises and others, the legality basis is the most satisfactory one for making such a distinction. A second point made against the inclusion of illicit activity is the unreliability of the accounting data that pertain to it.

The valuation of the share of national income derived from government is a third issue on which there is fundamental disagreement. This issue can be conveniently considered in terms of the two main constituent items of the gross-value-product of government: (1) the value of services to ultimate consumers and to other enterprises and (2) the value of additions to the tangible assets of government. The treatment of the latter item is not in dispute; it is agreed that it should be valued in the same way as additions to the assets of non-government enterprises, namely, on the basis of cost, or outlays. Disagreement on the valuation of current services arises because these services are, in the main, not 'sold' on the market for a 'price' but are made available without specific payment. Yet they clearly contribute to national income.

It has been urged, on the one hand, that total tax receipts are the closest analogue to the revenue from sales of a business enterprise and that tax receipts should, therefore, be taken as representing the value of such services. On the other hand, those who object to this view would substitute an imputed value for government services. Whether tax receipts or an imputed valuation of government services is used to determine the gross-value-product of government, there is general agreement that to obtain the corresponding net value product it is necessary to subtract payments to non-government enterprises for products used in producing the current services.

Proponents of the 'tax receipts' basis argue that net income originating in the private sector of the economy is typically measured by receipts minus payments to other industries for goods currently consumed and that consistency requires that current government services be measured in similar fashion. They grant that even in dealing with the private sector of the economy there are items, other than additions to the assets of enterprises, that cannot be valued on the basis of actual receipts, notably farm products consumed on farms and net rental value of houses occupied by their owners. These, however, may be valued at prices at which comparable items are actually sold; but this method is not considered practicable for most government services because closely comparable services are rarely sold on the market.

Proponents of an imputed valuation for government services frequently rely upon an estimate of the cost of or outlays upon such services to obtain an imputed value. They urge in favor of such a procedure as a substitute for tax receipts that tax receipts are a mere money flow, the year-to-year changes which have no necessary relation to year-to-year changes in the value of government services. They further urge that if year-to-year (or month-to-month) comparisons of government net-value-product are to be made, an imputed valuation is necessary if misleading results are to be avoided.

Whichever view is accepted, there remain five important questions regarding income derived from government that have caused a good deal of discussion. The first three have to do with the distributive shares into which the net-value-product of government can be divided. (1) Are such payments as those to relief-work employees properly distributive shares or are they really to be classed with direct-relief payments as redistributions of income? (2) What part, if any, of government-interest payments belongs to the primary distribution of income, and what part represents a redistribution of income? (3) What distributive share for government, if any, corresponds to additions to or withdrawals from surplus for corporations? (4) Is it feasible and necessary definitely to apportion the value of government services as between services to other enterprises and services to ultimate consumers? One view is that such a segregation of government services is not feasible without making violent assumptions that render the resulting estimates worthless; that in most government activities, services to individuals and to business are inextricably interwoven. Against this view stands an actual statistical attempt at such a segregation and the contention that any estimate of national income necessarily implies segregation. (5) Can the net-value-product of government be determined without knowledge of the incidence of taxes? Some have contended that it is necessary to distinguish between those taxes which fall upon ultimate consumers and those taxes which come out of business profits or some other distributive share in order to estimate the net value product of government.

This summary of divergent opinions is obviously not intended to be exhaustive with respect to the considerations advanced on the three items discussed, the items on which there is disagreement, or the contents of the preceding volumes. Problems of measuring income in kind from owned consumer goods and property income derived from financial enterprises, two items of considerable quantitative importance, and the usefulness of the end products of statistical estimation have been discussed at some length by the contributors to the volumes. Similarly, the treatment and definition of such items as gifts, occupational expense, income from abroad, entrepreneurial withdrawals and 'business savings'—especially with respect to unincorporated enterprises; and the meaning and techniques of deflation have been the subject of discussion, controversy, and disagreement. Finally, there has been a divergence of opinion on the value of giving wealth inquiries a prominence more nearly equal to that given income inquiries. The most extended discussion of wealth measurement was incidentally an argument that income measurement is more worth while than wealth measurement. While on many of these points the degree of clarification achieved has been greater, on others it has been far less than on the three items just considered. The purpose here is not to present this discussion in detail but rather to delineate in broad strokes the major boundary disputes with which the preceding volumes have been largely, though by no means entirely, preoccupied.

These boundary disputes clarified, at least to the extent that the alternative boundaries are fairly clearly marked, the natural next step is a more detailed survey and study of the character of the area staked out. This study is clearly important in its own right; in addition, it is an essential step before further agreement on the exact boundaries can be expected. Differences of opinion largely center on the usefulness and feasibility of the several concepts, and such differences can be removed only by putting the concepts to a pragmatic test. Conversely, the clarification of the nature of the boundary disputes is an exceedingly helpful preliminary for a careful exploration of the territory.

The seven papers in this volume proceed to a more detailed examination of the area staked out. They deal with three types of allocation of the national total: among groups classified by size of income or wealth, among the various components of saving and expenditures, and among states. Each type of allocation is considered separately. But their ultimate usefulness will depend very largely on the extent to which they can be interrelated. Thus it is clear from Dr. Wueller's paper and the discussion to which it gave rise that income estimates by states need to be supplemented by distributions of income by size. In the National Resources Committee estimates, one aspect of which is discussed by Miss Baird and Miss Fine, a first step has been made in this direction by the preparation of income distributions for broad geographic regions. The savings estimates presented by Dr. Goldsmith are admittedly exceedingly rough, but it is evident that as more refined estimates become possible it will be desirable to break down those components that admit of it not only by geographic units but also by income class. The allocation of income among various types of consumer's goods and capital formation, discussed by Dr. Warburton, relates partly to consumers' expenditures, and to that extent can and should be cross-classified with distribution of income by size among families in different areas; and partly to investment, and to that extent should be combined with a territorial breakdown.

The discussions in this volume of the three major types of allocation of income and wealth totals carry forward the work on what has been called the second phase in the investigation of national income. However, a wide field for this type of inquiry still remains. We need additional types of breakdowns, some of which we can now list, others of a kind that problems not yet in the forefront of discussion will doubtless require. Thus for many problems, state breakdowns of national income are insufficient, as suggested in the discussion of Dr. Wueller's paper, estimates by size of community within states seem clearly called for. Dr. Warburton's paper and Dr. Copeland's comment on it emphasize the need for estimates by types of commodities and services more detailed and more adequate than any now available. Many other types of breakdowns could be noted, but those enumerated will perhaps suggest the range of the problem.

The exploration of the problems indicated raises many conceptual questions only briefly if at all touched on in the preceding volumes. The papers by Messrs. Merwin, Goldsmith, Nathan, and Wueller discuss some of these. Still others are suggested by the attempts to obtain distributions of income by size It is not clear, for example, that definitions appropriate for estimates of national income are equally appropriate for individual income. The desirability of excluding transfers, such as gifts, from national income does not necessarily imply the desirability of excluding them from individual income in constructing distributions of income by size. The situation is similar with such items as capital gains and receipts from illegal activities.

It is thus to be expected that future papers will return to conceptual problems of the sort to which the earlier volumes were so largely devoted, but with the important difference that the treatment of the constituent parts will receive far greater consideration. To many, those especially who hold an unequivocal and dogmatic view of the essential economic concepts and relations, the conceptual phases of our discussion, with the manifest divergence of opinions, may appear superfluous and confusing. To others, the empirical phases of our studies may seem additions of uncertain importance to the conceptual discussion that can formulate the issues so much more sharply and clearly than they can be measured in quantitative terms. To us, both phases seem indispensable in the development of the study of national income and wealth to a level where it will yield efficient tools for economic analysis and social planning.

With one exception, the papers in this volume were submitted to and discussed at the fourth meeting of the Conference on Research in National Income and Wealth held in April 1939 at New York City. The report by Miss Baird and Miss Fine was submitted later but was circulated for comment among the participants in the Conference prior to publication. The editing of the volume, by Milton Friedman, was reviewed by the other two members of the editorıal committee, W. W. Hewett and O. C. Stine.

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