CHAPTER I

INTRODUCTION

Estimates for the Entire Country Not Applicable to Individual States.

The estimates of the national income of the American people published in the previous reports of the National Bureau of Economic Research enable us to compare the economic status of our population in the various years covered by the studies. These estimates also enable us to compare the economic position and scale of living of the American people with those of other nations, for which data are available. However, the national totals, important as they are, merely represent average conditions of a vast country composed of a great number of widely different parts. Like all averages, these figures have the defect of being representative of the whole, but not of its component parts. Totals and averages of necessity obscure and eliminate individual differences, no matter how great, in the data entering into their composition.

The great variety of climatic conditions and the differences in the distribution of natural resources, together with certain historic factors governing the distribution and the composition of the population, have caused the various sections of the United States to develop along distinctly different economic lines. The development is, of course, not yet at an end. The industrial East is gradually encroaching upon the agricultural West, and from Census to Census we can easily discern geographic changes of great economic and social significance. It is, however, safe to assume that the natural differences between the geographic units of the country will persist; and, as far as one can foresee, there will always be a dissimilarity in the type of industry and density of population among the various sections.

To what extent does income respond to the inherent differences of the various parts of the country? How do these differences affect the changing economic conditions? What is the net effect of the interaction between the various forces upon the income of the people in each section of the country in different years? It is to help answer these and similar queries that the present volume is written. This work is an extension and amplification of a preliminary report published by the National Bureau of Economic Research for the year 1919.[1]

Dissimilarity of Conditions in States.

If conditions were uniform throughout the United States, it would be a very easy matter to determine the share of each State in the total national income. Uniform conditions, of course, imply an equal distribution of natural resources, an equal accessibility to markets, and also an equal density and composition of population and the like. Knowing the income for the entire United States, the land area or the population in each State would then well serve as an index of the amount received by the inhabitants of each State.

But such conditions are far from uniform in the several parts of the United States. It is apparent that no single known factor can be used with any degree of accuracy to determine the income of the inhabitants of each State. The sources of income in each State are different and, what complicates the problem still further, the income produced in each State does not correspond to the amount received by those living within the State.

The sources of income may be grouped roughly as income from wages and salaries, income from personal entrepreneurial efforts, and income from capital and land investments. In the case of wages and salaries, the income received follows, in the main, geographic boundaries which are the same for place of production and place of domicile of the producers, for it is not common for wage earners to live in one State and work in another.[2] The individual entrepreneurs also offer no difficulty in the matter of locating their income production. Ordinarily, the person depending for his living on a small individual business enterprise, resides where his business is located. However, when we come to income from in-

[1] *Distribution of Income by States*, by O. W. Knauth.

[2] Except where a large city is located near a state boundary — New York City, for instance.

vested capital, the place of production of the income is likely not to correspond with that where the recipients reside. The bulk of industry, with the exception of agriculture, is conducted by corporations whose securities have a wide distribution. The mines in Arizona may be owned by stockholders in New York, and, hence, of the total income of the Arizona mines, only about 60 or 70 per cent is probably disbursed to the residents of the State of Arizona, i.e., the part that goes to wage and salary earners. The same is true to a lesser degree of ownership of other property. About one-third of the farm land in the country is owned by non-farmers, and it is conceivable that the owners of farm land in Iowa reside in Illinois, and the owners of land located in Illinois reside in Iowa. Evidently, to trace the income from such land among the States would be next to impossible.

The Method of Estimating Income by States.

Even if the material necessary for the computation of the income of the people of each State were as plentiful and as reliable as that entering into the computation of the national income as a whole, it would be absolutely prohibitive, from the standpoint of expense, to follow out for each State individually the detailed and exhaustive process employed in the preparation of the national totals. That enormous task would then be multiplied forty-nine times. However, the problem is rendered less formidable by the very limitation of the data which are available for individual States.

Is there not a way of utilizing the reasonably authentic national estimates, computed with minute care, in connection with the general data that can be obtained for individual States, to arrive at reliable figures showing the income of the people in each State? The method used in this report is an attempt to accomplish this end. It consists of first apportioning separately the national totals of the various component parts of the income of the American people to the several States, in accordance with carefully computed indices, and then combining the estimates for the individual items into totals representing the income of the people in each State.

The national totals employed in this volume are those computed by W. I. King, of the National Bureau of Economic Research.

Wherever it has been possible to compute independent totals by States, they have, in the final form, been adjusted to correspond with Dr. King's estimates for the entire country. Unless otherwise stated, the terms used are as defined in *Income in the United States*, Vols. I and II.

The main divisions under which the various items of income have been studied are as follows:

Wages and Salaries
Agriculture
Entrepreneurial and Property Income
Miscellaneous Incomes.

Current Income vs. Total Net Income.

As explained by Dr. King in his Preliminary Statement, the final estimates of the total income in each State are treated in this report under two heads:

A. Current Income.
B. Total Net Income.

Since no hard and fast definition of income is possible, it will prove helpful to the reader to gain a clear idea of the items of income entering into the final estimates presented in this report, which may be summed up as follows:

A. Current Income.
1. Wages and salaries
2. Interest
3. Dividends
4. Rents
5. Business profits of individuals, excluding changes in the value of inventories
6. Income from the keeping of cows, gardens, and poultry by non-farmers
7. Imputed rent of owned homes
8. Imputed interest on the value of durable consumption goods in the hands of consumers.[1]

[1] The imputed interest on durable consumption goods is omitted from most of the analytical tables dealing with current income.

B. Total Net Income.

This comprises all the items listed under *current* income and, in addition, it includes surpluses and gains on inventories accruing to individuals.

To evaluate the merits of the two concepts of income, i.e., *current* income and *total net* income, is rather difficult. As indicated in the Preliminary Statement, there can be but little doubt that the second is more accurate from an accounting standpoint, provided it were possible to compute the changes in surpluses and inventory values with precision. Unfortunately, the computation of the latter item is subject to considerable error, so that its inclusion renders the final estimates somewhat less accurate, especially when the totals are not used as absolute measures but as relatives for purposes of comparing different geographic units where inventory values present a variable not at all proportionate to the income from all other sources. Consequently, for many purposes, estimates of *current* income may be considered as superior and more reliable.

Income as a Measure of Economic Welfare.

The chief reason for studying the geographic distribution of income is to find a measure or measures of the economic well-being of the people in the different parts of the country. Income is surely a good, if not the best, indicator of economic welfare, and to know the income and the distribution of income in a given section of the country is to be able to judge the approximate position in the scale of living of the bulk of its inhabitants. One should, however, be cautious in the use of these figures. As yet, income is not open to exact mathematical measurement, and, consequently, it may cover somewhat different things in different parts of the country. Although, in the present study, care has been taken to make the data for all States comparable, there still are a number of factors that could not be adjusted to make the figures entirely uniform.

The composition of the population in the different States seriously interferes with making accurate comparisons. The section of the country with a large farm population may show a smaller per capita income than urban States. Yet, is the economic well-being of the people in the former lower than in the latter? There are a great number of things a farmer gets which cannot be measured in dollars and cents. His freedom of action, his abundance of fresh air, and his extensive space are undoubtedly worth a great deal to the farmer, but how much? The inhabitant of the large city, on the other hand, enjoys certain conveniences that the farmers and the dwellers in small cities do not have, and on which it would be impossible to place a money value. Again, the farmer's expenses for prime necessities are undoubtedly smaller than those of the resident of the city. Should we make allowance for this fact in computing his income? There is undoubtedly some merit in so doing. But there are also serious objections. It can with reason be argued that expenses and income are entirely different things; that if the farmer spends less, he also enjoys less. However that may be, it is obviously impossible to measure with accuracy the true value of the farmer's dollar as compared with that of the urban dweller.

An attempt made to measure at least partially the purchasing value of the dollar on the farm, as compared with that in the city, shows that, when adjusting merely for rent and food, the average consumer's dollar on the farm would purchase about one-third more than in the city. Using this rough estimate,[1] one would apparently have to raise the farmer's money income at least 33⅓ per cent in order to compare it with urban incomes. But even such an adjustment would be only problematic, and would fail to give the exact values.

The difficulty experienced in comparing farm incomes with city incomes presents only an extreme and clear-cut case. Similar problems are encountered in comparisons between incomes of those living in large cities and incomes of people living in small cities. The cost of living, particularly the cost of rent, is known to be higher in the larger cities, and consequently higher money incomes under those conditions may not really bring greater comfort than do lower incomes in places where the cost of necessities is not so

[1] The estimate is based on the following facts: (1) The part of the farm food supply, which is produced either on the home farm or in the locality where the farm is located, is estimated by the Department of Agriculture to be about 69 per cent of the total consumed. (2) The ratio of farm prices to city prices for food products is estimated to be 0.5. (3) The ratio of the cost of housing on the farm (as allowed in our estimates) to that in the city is estimated to be about 0.35. (4) According to a study made by the U. S. Bureau of Labor Statistics, food makes up about 38.2 per cent and housing about 18.7 per cent of the total family budget.

high. The gradation in the cost of necessities of life is very great between the smaller and larger places, and the distribution of the population living under the different economic conditions is certainly not the same in each state. Hence, any comparisons between the economic welfare of the people in the various States, as indicated by income, can, at best, be only of a very general nature.

Income Data as Applied to Marketing Problems.

Aside from being an aid in measuring the economic status of the people in the various States, the geographic distribution of income may be made to serve an important function in problems pertaining to the marketing of goods. Here, again, the figures on income must be used with great discretion. Not all the income received by the people is spent for consumption goods, and the portion so used, obviously, does not vary in exact proportion to the total income, particularly when we consider certain classes of consumption goods.

To measure the ability of the people to purchase commodities, the indices must be carefully selected to fit the special problems at hand. The needs of the investigators along this line have been given careful consideration in the preparation of this report. Not only in the final summaries and in the analytical tables, but also in the material presented in connection with the sectional estimates of income, data will be found that should prove of help in the solution of marketing problems.

Income and Taxation.

The view is widely held that, in a democratic country, good government requires that the burden of taxation be felt by all citizens, for there can be no healthy interest in government, unless the majority of the people feel that they contribute materially towards its support. However, it is also strongly contended that taxation should be graduated in accordance with the ability of the citizens to pay, and that, all things being considered, the best basis for the apportionment of taxes is income.

It often becomes necessary for a State to choose between the "pay as you go" policy and that involving the issuance of long-term bonds. Is it good policy to defray the expenses of a certain public project through added taxation, or must the payment for it be deferred to some future date and generation? How does the burden of taxation in the given State compare with that of others? To answer these and many similar questions requires a knowledge of the income of the people.

The problems of the student of taxation have, therefore, also been considered in the various phases of this report. It is hoped that the analytical tables appearing in the last chapter will prove of particular value. In these tables, an attempt has been made to view the income of the people in each state from as many angles as is compatible with reasonable accuracy.

Factors Influencing Income in Different States.

It may be helpful in the utilization of the estimates presented in this report, as it was in their construction, to have a broad perspective of the factors determining the relative size of the income of the people in different sections of the country each year. There are apparently two sets of factors at work. The first of these determines the *secular* position, so to speak, of each State in the income scale. The natural resources, the composition of the population, the advantages gained by priority of settlement and development, the strategic position with respect to shipping and marketing, the accumulation of capital in older communities — all these and similar conditions have placed the various States in positions with respect to relative income which will probably be maintained over a long period of years. The relative position of the Northern States, when compared with those of the South, is an example of the advantage gained by the former States which will probably persist. It is reasonable to believe that, for many years to come, the average normal income of the people living in New York, for instance, will be greater than that of the people living in Alabama. The factors in the second set, which are intimately tied up with the first, center around the industrial composition of the various parts of the country, and are responsible for short-time changes in the total income. Each State may be characterized by one or more industries, or groups of industries, which form the chief support of the population. Fluctuations affecting individual industries may, therefore, exert great influence upon the income in different States. Such fluctuations may, in any year, bring the average income of the people of a State, normally belonging in a higher income level, down to, or even below, the average income of the States usually characterized by low incomes. This actually happened in 1921, when the average income in States like South Dakota fell below that of the people in Louisiana, Kentucky, and other Southern States. In that year, owing to the depression in certain manufacturing industries, the income of the people of Michigan and Ohio was reduced to a greater extent than that in other States in the same general class.

The Period Covered by this Report.

No year is a *normal* year for all industries, and, consequently, conditions obtaining in any one year can hardly be accepted as being fully descriptive of the position of any State with respect to income. A picture of *normal* conditions may only be had through a study of the data for a series of years. As only three years, — 1919, 1920, and 1921, — are covered in this volume, it is necessary that the data presented be considered in the light of the peculiar conditions existing in each of the three years. Willard Thorp, in his *Business Annals*, prepared for the National Bureau of Economic Research in connection with its forthcoming analyses of business cycles, briefly characterizes these three years as follows:

"1919 — Uncertainty. Extraordinary activity begins, late spring. Business revival. Enormous output of new securities. Speculation. Money tightens. Labor troubles. Moderate crops.

"1920 — Great activity. Prices high. Money tight. Rapid decline, beginning late spring, to stagnation and unemployment. Many failures. Moderate crops.

"1921 — Deep depression. Severe unemployment. Money eases. Rapid liquidation and revival begins at mid-year. Crops short and prices low."

We see that, for the country as a whole, the period presents almost a complete economic cycle with the peak around the latter part of 1919 and the beginning of 1920, and the trough at the end of 1920 and the beginning of 1921. The above description of the three years may well serve as a background for the material developed in the coming chapters of this report.

The Presentation of the Material.

The present volume is intended to be chiefly a statistical presentation of the more salient factors pertaining to the income of the people of the United States, its sources, and geographic distribution. In view of the extent of the ground necessarily covered in a study of this kind, it is almost impossible to present all the data that went to make up the various estimates. Only the more important material has been selected for presentation, but, even in the selected material, the number of items is multiplied to such an extent by the forty-nine geographic units covered that it is obviously impracticable, in a volume of this size, to do justice to all the points of interest revealed by the data. The analytical discussion must, then, of necessity, be limited in scope; only what seem to be the more important items can be touched upon. Most of the material will consequently appear only in the form of tables, and it is left to the reader to glean from these tables the items that are of interest or use to him.