

Increasing Interest Shown in National Bureau's Work

INCREASING interest in impartial investigations of economic, social, and industrial problems is indicated by the continued growth of the list of subscribers and financial supporters of the National Bureau of Economic Research, Inc. In addition to those thanked in previous issues of the News-Bulletin, the Bureau makes grateful acknowledgement to the following:

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First of Migration Studies Is Approaching Completion

DR. Harry Jerome's investigation of "Migration and the Business Cycle" is rapidly approaching completion. This study, which is the first of a series by the National Bureau of Economic Research on the relation of immigration to the supply of labor, analyzes the association between cyclical and seasonal fluctuations in employment and in immigration and emigration.

The measures of employment utilized will be explained, including the method used in constructing an index of factory employment by months for the quarter century from 1890 to 1914. Sections will deal with immigration and business cycles prior to 1890; with The Pre-War Quarter Century: 1890-1914; and with The War and Post-War Period. A comparison of cyclical fluctuations of immigration and emigration, classified by occupation, race, and country of origin, will be presented.

The influence of economic conditions in other countries upon cyclical fluctuations in immigration to the United States will be analyzed.

Another feature will be a synthesis of the available data upon seasonal fluctuations in employment in important industries and a comparison of these with seasonal fluctuations in immigration and emigration.

Receives Honorary Degree

Mr. Dwight W. Morrow, director at large of the National Bureau of Economic Research, received the honorary degree of Doctor of Laws at the 178th commencement exercises at Princeton, June 16.

Publications of the National Bureau of Economic Research

THE GROWTH OF AMERICAN TRADE UNIONS, 1880-1923
Results of a comprehensive investigation of trade union membership year by year; its fluctuations with the business cycle; effects of World War conditions; women in trade unions. Contains also a detailed analysis of the total working population. Size 9 by 6 inches, 170 pages, illustrated with 27 tables, 16 charts, and indexed. Bound in cloth. \$3 postpaid.

EMPLOYMENT HOURS AND EARNINGS IN PROSPERITY AND DEPRESSION
Results of an inquiry conducted by the National Bureau of Economic Research, with the help of the U. S. Bureau of Markets and Crop Estimates and the Bureau of the Census, for the President's Conference on Unemployment. Designed to meet the special needs of all persons interested in the study of labor conditions. Gives full details of investigation summarized in *Business Cycles and Unemployment* to which it is companion volume. Size 9 by 6 inches, 147 pages, illustrated with 75 tables, 11 charts, and indexed. Bound in cloth. \$3.10 postpaid. (Second printing.)

BUSINESS CYCLES AND UNEMPLOYMENT
Results of an investigation made for the President's Conference on Unemployment. By the staff of the Bureau with 16 collaborators. Twenty-one topics covered. This report summarizes the known facts of unemployment and describes the various methods suggested to control the business cycle and alleviate cyclical unemployment. Size 9 by 6 inches, 405 pages, with 56 tables, 56 charts, and indexed. Bound in cloth. \$4.10 postpaid.

INCOME IN THE UNITED STATES
Volume I. A summary of an investigation of the Amount and Distribution of Income in the United States, 1909-1919, intended for readers who are primarily interested in the results. Size 7 1/2 by 5 1/4 inches, 152 pages, with preface, 29 tables, 31 charts and indexed. Bound in cloth. \$1.58 postpaid. (Fourth printing.)

Volume II. A report giving in full the methods and estimates on which the results shown in Volume I are based. Size 9 1/4 by 6 1/4 inches, 440 pages, 222 tables, 35 charts and indexed. Bound in cloth. \$5.15 postpaid. (Out of print.)

DISTRIBUTION OF INCOME BY STATES IN 1919
A study of the share of each state in the national income with a special analysis of the amount and relative importance of farmers' income. Size 9 1/4 by 6 1/4 inches, 32 pages, with preface and 9 tables. Bound in cloth. \$1.30 postpaid. (Third printing.)

Copies of available reports may be obtained upon application accompanied by remittance to

NATIONAL BUREAU OF ECONOMIC RESEARCH, INC.
474 West 24th Street, New York

Surveying Hungarian Finances

Professor Allyn Young, director at large of the National Bureau of Economic Research, has been asked by Jeremiah Smith, Jr., Commissioner General (of the League of Nations) for Hungary, to make a survey of Hungarian finances, and is spending the month of August in Budapest for that purpose.

Commencement Speaker

Mr. George E. Roberts, Treasurer of the National Bureau of Economic Research, made the commencement address June 16th at Stevens Institute of Technology.

Conducts Round Table

Dr. Edwin F. Gay, Director of Research of the National Bureau of Economic Research, is conducting the Round Table at the Institute of Politics in Williamstown, Mass., dealing with "The Economic Recovery of Europe since the War."

An Organization for Impartial Investigation

NEWS-BULLETIN

of the

National Bureau of Economic Research, Inc.

To Find Facts Divested of Propaganda

Steady Gain Shown in American Buying Power

Current Income, However, Is Subject to Big Variations

1921 Total Given as \$62,736,000,000

Rise From \$67,254,000,000 in 1919 to \$74,158,000,000 in 1920 Is Followed by Sharp Drop

THE total "current income" of the American people rose from \$67,254,000,000 in 1919 to \$74,158,000,000 in 1920 and declined to \$62,736,000,000 in 1921, according to advance figures taken today from a report soon to be issued by the National Bureau of Economic Research, 474 West 24th Street, New York.

This report, to be entitled *Income in the Various States—Its Sources and Distribution in 1919, 1920 and 1921*, will summarize the results of an exhaustive investigation upon which Dr. Willford I. King, Mr. Maurice Leven, and a corps of assistants, under the general direction of Dr. Edwin F. Gay and Dr. Wesley C. Mitchell as Co-Directors of Research of the National Bureau of Economic Research, have been engaged since the summer of 1922.

National Total Drops Sharply

The transition from the inflation period of 1920 to the depression year of 1921 is marked by the sharp drop of eleven and one-half billion dollars in the nominal total national income. That this was the greatest fluctuation recorded in the Bureau's Income studies is shown by a comparison of these recent years with figures running back to 1909* which are as follows:

Year	Millions of Dollars	Year	Millions of Dollars
1909	\$27,100	1916	39,200
1910	28,400	1917	48,500
1911	29,000	1918	56,000
1912	30,600	1919	67,254
1913	32,000	1920	74,158
1914	31,600	1921	62,736
1915	32,700		

* Figures for 1909 to 1918 inclusive, based upon data given in Volume I of *Income in the United States*, computed by subtracting in each year, the "business savings" from the total national income, which gives the series above connecting with "current income," as presented in the forthcoming report, *Income in the Various States, 1919, 1920 and 1921*.

Purchasing Power Analyzed

"The price changes during the more recent years of this period have been so violent that comparisons of money values for different years tell practically nothing about the variations that have occurred either in the physical volume of business or in the quantity of goods that the income will buy," says a statement issued by the Bureau supplementing the advance figures.

"It has been necessary, therefore, to convert many items into figures representing values in money of constant purchasing power. For this purpose, prices of the year 1913 have been commonly taken as standard. Five indices of prices were used by the Bureau for this purpose.

"The results indicate that while the income in current dollars fluctuated widely in 1919, 1920 and 1921, the actual purchasing power has varied but slightly and for the thirteen years under review, the real income of the people has shown a practically continuous upward trend."

The figures showing income in terms of purchasing

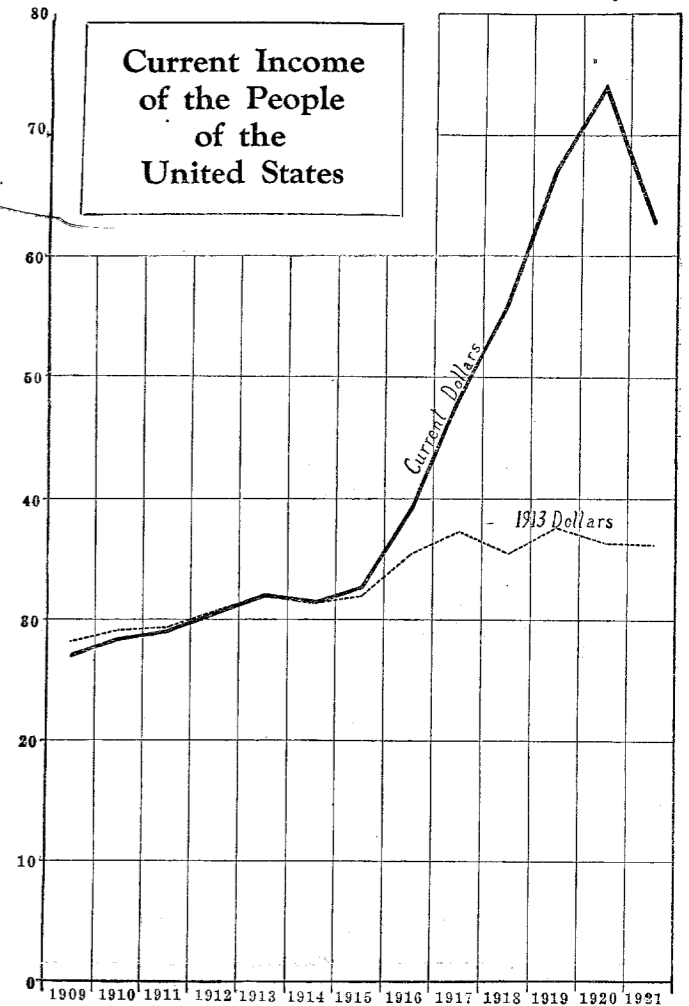


Chart showing Total Current Income of the American People expressed in billions of current dollars (heavy line) and purchasing power of this income in billions of dollars of 1913 value (dotted line), as estimated by National Bureau of Economic Research, Inc.

power, as computed by the National Bureau of Economic Research, are as follows:

Year	Income in terms of 1913 Dollars (000,000 omitted)
1909	28.2
1910	29.1
1911	29.3
1912	30.8
1913	32.0
1914	31.3
1915	32.0
1916	35.5
1917	37.3
1918	35.5
1919	37.6
1920	36.3
1921	36.2

Please turn the page

NATIONAL BUREAU OF ECONOMIC RESEARCH, INC.

THE National Bureau of Economic Research, Incorporated, was organized in 1920 in response to a growing demand for exact and impartial determinations of the facts bearing upon economic, social, and industrial problems.

The Bureau seeks not merely to determine facts, but to determine them under such auspices as shall make its findings carry conviction to Liberals and Conservatives alike. It deals only with topics of national importance which are susceptible of quantitative treatment.

By issuing its findings in the form of fact reports, entirely divorced from propaganda, the Bureau hopes to aid all thoughtful men, however divergent their views of public policy, to base their discussions upon objective knowledge as distinguished from subjective opinion.

No report of the Research staff may be published without the approval of the Board of Directors. Rigid provisions guard the Bureau from becoming a source of profit to its members, directors or officers, and from becoming an agency for propaganda.

The Bureau assumes no obligation to present or future contributors, except to determine and publish facts.

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In order to measure the changes in the economic welfare of the people of the United States (insofar as income figures are an indication), the National Bureau of Economic Research undertook to compare the variations in the National Income, from year to year, with the variations in the total number sharing this income indirectly and also with the number of persons classed as "gainfully employed."

To do this, the National Bureau of Economic Research was obliged to make independent investigations of population growth for the years not covered by the Census, and to estimate for each year the numbers classed as employers, wage earners, salaried and persons in business on their own account—all defined by the Census as "gainfully occupied."

"Average Income" Doubled

The results revealed that during the thirteen years under review, the hypothetical "average person" had more than doubled the number of dollars constituting his current income, and that even when this income was reduced to dollars of 1913 purchasing power, his economic position had been considerably improved, although in relatively much less degree. Measured in current dollars, per capita income rose from \$299 in 1909 to a peak of \$697 in 1920 and even in 1921 stood at \$579. The purchasing power of this per capita income in terms of 1913 dollars was represented by \$312 in 1909, rose to \$361 in 1917 and closed the period at \$334 in 1921.

The figures for per capita income in current dollars and in terms of 1913 dollars follow:

Year	Per Capita (Current Dollars)	Per Capita (1913 Dollars)
1909	299	312
1910	307	315
1911	309	312
1912	321	323
1913	329	329
1914	320	316
1915	326	319
1916	385	349
1917	470	361
1918	537	340
1919	640	358
1920	697	341
1921	579	334

Persistent Improvement Shown

The average nominal incomes of the "gainfully occupied" also virtually doubled during the thirteen years' period. Changes in the purchasing power of this income, however, were much smaller in extent, but nevertheless the average in recent years has been considerably higher than in the earlier ones, indicating a persistent increase in the economic welfare of the nation's money makers.

The average income of the person gainfully occupied, as shown in current dollars, and the improvement in his economic status as shown by purchasing power in terms of 1913 dollars is given in the following table:

Year	Income Per Person Gainfully Occupied (Current Dollars)	Income Per Person Gainfully Occupied (1913 Dollars)
1909	791	823
1910	809	829
1911	812	821
1912	844	850
1913	864	864
1914	836	828
1915	861	843
1916	1014	919
1917	1232	947
1918	1386	879
1919	1669	934
1920	1851	907
1921	1537	887

Millions Pay No Income Tax

That 34 million persons engaged in "gainful occupations" do not report taxable income and do not pay income tax is shown by a comparison of the figures of the National Bureau of Economic Research with those

of the Internal Revenue office. The figures beginning with 1916, the first year of the income tax, are as follows:

Year	*Number of Returns Filed (thousands)	*Total Net Income Reported (millions)	†Total Gain- fully Occupied (thousands)	†Total Cur- rent Income (millions)
1916	437	\$6,298	38,101	\$39,200
1917	3,472	13,652	38,681	48,500
1918	4,425	15,924	39,981	56,000
1919	5,332	19,859	40,282	67,254
1920	7,259	23,735	40,008	74,158
1921	6,662	19,577	40,819	62,736

* Treasury Report

† National Bureau of Economic Research.

Statistical Methods Improved

Those who have read *Income in the United States*¹ will wish to know in what way the methods there described have been modified in the forthcoming report *Income in the Various States, 1919, 1920 and 1921*.

These changes may be grouped under main heads, as follows:

1. Reclassification of the gainfully employed.
2. Separation of salaried employees from wage workers and of salaries from wages.
3. Segregation of the mercantile industry from the unclassified group.
4. Merging of the miscellaneous hand trades with the unclassified group.
5. Inclusion of income received from foreign sources and deduction of income paid to foreigners.
6. Adoption of a uniform practice of using as a divisor in all cases index numbers of the prices of consumption goods.
7. Substitution for business savings of changes in the command over consumption goods given to individuals by variations in their wealth.

Income Distributed by States

To determine the share of each state in the national income a number of factors had to be taken into consideration. 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. To Mr. Maurice Leven was assigned the task of overcoming these obstacles and how they were surmounted is described in detail in the second section of the report.

Among the subjects covered in this report are the following, selected from the table of contents:

Importance of Wages and Salaries in the National Income; Manufactures; Fluctuations in Total Payrolls and Composition of Industries; Yearly Index for Each State of Total Manufacturing Payrolls; Power Laundries; Distribution of Manufacturing Activities; Mines, Quarries, and Oil Wells; Geographic Distribution of Farm Wages; Method of Estimating; Salaries of Farm Managers.

Index of the Volume of Construction by States; Index for the Apportionment of Wages and Salaries by States in the Construction Industry; Estimated Income from Wages and Salaries in the Construction Industry.

Males and Females in Industry; Ratio of Average Earning of Males to Average Earnings of Females; Wages in Manufacturing, Agriculture, Mining, Power Laundries, Building Trades; Salaries of Teachers Compared with Salaries of Clergymen; Union Wages; Summary.

Total Wages and Salaries of Employees in Trade, Transportation, and Miscellaneous Industries in 1919; Total Wages and Salaries in Trade, Transportation, and Miscellaneous Industries in 1920 and 1921. Average Earnings of Employees.

Farm Crops; Price Changes and Agricultural Income; Farm Income from the Sale of Land for Urban Use.

Farm Expenses; Cost of Outside Labor and Material for Agricultural Buildings; Interest Paid Out on Farmers' Loans; Business Taxes in Agriculture.

Changes in Value of Agricultural Inventories; Total Agricultural Income of Entrepreneurs and Property Holders; Share of Farmers of Different States in Total Agricultural Income.

Entrepreneurial and Property Income; Dividends; Business Operated by Individuals; Unreported Incomes of Entrepreneurs; Income Received by Individuals in Form of Interest; Rent; Gains or Losses on Inventories; Total Entrepreneurial and Property Income; Comparison of Geographical Distributions of Total Entrepreneurial and Property Income and Total Income from Wages and Salaries; Miscellaneous Incomes.

Distribution of Total Net Income; Adjustment for Purchasing Value; Net Total Income from All Sources on a Per Capita Basis; Share of Farm Population in Total Net Income; Distribution of Current Income; Total Current Income by States; Per Capita Current Income of Entire Population; Per Capita Current Income of Non-farm Population; Per

¹ Published by the National Bureau of Economic Research, 1922; Vol II, Part I.

Capita Income of Farm Population; Current Income Per Farmer; Share of Farm Population in Current Income of Each State; The Income of the Bulk of the People; Distribution of Income by Specified Income Classes by Geographic Divisions; Per Capita Current Income of the 95 Per Cent Included in the Lower Income Classes.

The new report will form a volume of approximately 330 pages, 6 by 9 inches in size, illustrated with numerous charts and tables and will be thoroughly indexed.

Begins Study of Relation of Prices to Economic Activity

THE National Bureau of Economic Research has begun a series of studies designed to answer some of the pressing questions concerning the relation of prices to economic activity which have come to the fore as a result of the price revolution of the last ten years. This work will be in charge of Professor Frederick C. Mills, under the general supervision of Dr. Edwin F. Gay and Dr. Wesley C. Mitchell, co-directors of research.

Currently published index numbers of prices represent attempts to measure changes in average prices, or in the general level of prices. Such index numbers give no indication of changes in the relationship of individual prices, or groups of prices, and afford no information as to shifts taking place within the system of prices. But these internal movements, which often seriously distort established price relations through the precipitate movement of some prices and the lagging of others, are of primary concern to the business man and to the community of consumers.

Cause of Great Depression

The great agricultural depression of 1921 and 1922 was not due to the fall in general prices, but to the fact that the prices of agricultural commodities fell more rapidly and to lower levels than did the prices of the articles the farmers bought. This is merely a single example of the disturbances which are constantly occurring as a result of changing price relations and which may impair the purchasing power of large economic groups.

The National Bureau will try to measure these internal disturbances, and determine the relation of such disturbances to business and economic conditions.

One phase of this general study is of particular importance in relation to business activity and the business cycle. Regularity in the production and marketing of goods, as well as steadiness in the receipt of money incomes and the conversion of money into "real" incomes, all depend upon the maintenance of orderly margins between the prices of different goods. But such differentials are affected by the irregularities of price change. Undue expansion of profit margins in the production and distribution of goods may lead to excessive stimulation of production and trade, with unfortunate consequences for producers and consumers.

Detailed Knowledge Is Sought

On the other hand, unequal price movements may lessen or wipe out such profit margins, and the even flow of goods from producer to consumer may be blocked as a result. Detailed knowledge of these differentials and of their relations to economic processes is to be sought by the investigators of the Bureau.

It is probable that certain new measures of business conditions, supplementing existing price index numbers, will be developed as outgrowths of these studies by the National Bureau of Economic Research.

Contributors Receive Publications

Persons who wish to receive early copies of all the future publications of the Bureau may enroll as contributing subscribers, paying a minimum of \$25 a year. In addition to receiving the publications, the contributing subscribers will be kept in touch with the work of the Bureau as it progresses. Subscribers enrolling during August will receive a complimentary copy of *Income in the Various States*, as well as all other reports to be issued during a full year from date of subscription.