

ADDITIONS TO LIST OF CONTRIBUTORS

A number of communications approving the Bureau's plan to build up a broad list of contributing subscribers have been received since the issue of the last News-Bulletin. A wide variety of occupations and interests is reflected in the list of subscribers enrolled during December and January. The Bureau makes grateful acknowledgment to the following:

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NEWS-BULLETIN

National Bureau of Economic Research, Inc.

To Find Facts
Divested of
Propaganda

No. 4

474 WEST 24TH STREET, NEW YORK CITY

March 1, 1923

Population of United States Passes 110,000,000 Mark

Estimates for Half Years from 1920 to January 1, 1923, Show an Accelerated Growth

THE population of the Continental United States has passed the 110,000,000 mark according to figures compiled by the National Bureau of Economic Research. The total announced for January 1, 1923, is 110,100,000, a gain of approximately four and one-half millions since the last government Census.

Estimates for the half years since the Census, have been made by Willford I. King as a part of the Bureau's continuing investigation into the amount and distribution of income in the United States. These figures show that since January 1, 1921, the rate of increase in population has been accelerated noticeably, the present rate approaching that of pre-war years.

Reduction in Death Rate

This more rapid gain in population, according to Dr. King has been brought about partly by increase in net immigration, but has been decidedly reinforced by a reduction in the death rate. At the present rate of growth, the population at the 1930 Census will reach 120,000,000.

The estimates by half years are as follows:

Year	Date	Population
1920	Jan. 1	105,710,620*
	July 1	106,381,000†
1921	Jan. 1	106,821,000†
	July 1	107,785,000‡
1922	Jan. 1	108,522,000§
	July 1	109,184,000§
1923	Jan. 1	110,100,000§

It is probable that the revisions to be made in all estimates except that for January 1, 1923, will be relatively slight, but this figure may be changed materially when fuller data on births, deaths, and immigration are received.

It is impossible to calculate, with precision, the population of the country at any given date, the reason being that in many of the States, births and deaths are not reported, and even in the registration area, a very considerable number of deaths and still more births appear to escape being recorded. There are presumably, also, minor errors in the statistics of immigration.

Because of the difficulties involved, the Census Bureau has made its estimates of the population for the inter-

* Census figures.
† Final estimate by The National Bureau of Economic Research.
‡ Preliminary estimate.

censal years on the simple assumption that the rate of growth is the same as in the preceding decade. The official process, which is termed a straight line extrapolation, has mainly its simplicity to commend it, for, when applied, errors of considerable size gradually accumulate as changing conditions affect population growth. For example, the official method showed a population for January 1, 1920, nearly two millions greater than that given by the actual Census count on that date.

New Method Relatively Simple

The method of procedure devised by the National Bureau of Economic Research to correct this difficulty is relatively simple. The numbers of births and deaths have been estimated for each half year and the increase of population due to excess of births over deaths has been calculated. This amount has been corrected by adding the excess of immigration over emigration for each half year. As a test, the population for June 30, 1910, has been estimated from a smooth curve, and figures have then been built up for each half year until the Census of 1920. The estimate thus arrived at for January 1, 1920, is in error by approximately half a million, or only one-fourth of the corresponding error resulting from the official method of estimate.

The figures presented in the foregoing table are derived by following the procedure just described, the adjustments to care for inadequate reporting of births and deaths being the same as those found necessary to offset this error in the last decade.

TWO ADDITIONS TO STAFF OF BUREAU ARE ANNOUNCED

DR. LEO WOLMAN, Lecturer at the New School for Social Research, and Mr. Willard Thorpe, recently instructor in Amherst College, have joined the research staff of the National Bureau of Economic Research.

Dr. Wolman hopes, before the year is out, to have completed three investigations dealing with certain connections between business cycles and labor problems.

Mr. Thorpe will have charge of the compilation of economic statistics for a treatise which Dr. Wesley C. Mitchel, Director of Research, is planning. This new work, while similar in general idea and scope to the volume which he published ten years ago under the title, "Business Cycles," will be adapted to the needs of business men as well as to those of students.

NATIONAL BUREAU OF ECONOMIC RESEARCH, Inc.

The National Bureau of Economic Research, Inc., was incorporated in 1920 for the purpose of making impartial investigations in the field of economic, social and industrial science. The Bureau deals only with topics of national importance, regarding which quantitative analysis is feasible.

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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OFFICERS ARE RE-ELECTED AT ANNUAL MEETING OF BUREAU

THE present officers of the Bureau, headed by John P. Frey of Cincinnati, Chairman of the Board of Directors, and Malcolm C. Rorty of New York, President, were unanimously re-elected at the annual meeting held at the Bureau's headquarters, 474 West 24th Street, New York City, February 5, 1923.

Dr. Lee Galloway, Vice-President of the Ronald Press, New York, was confirmed as successor to J. M. Larkin, Director-by-appointment from the National Personnel Association.

The program of scientific work upon which the staff will be engaged in 1923 and 1924, was explained by the Director of Research, and will be given in detail in later issues of the News-Bulletin.

The financial requirements for 1923 are somewhat more than \$60,000, of which \$30,000 will be supplied by the Carnegie Corporation provided the Bureau obtains an equal amount from other contributors. This

generous offer of the Carnegie Corporation, it is hoped, will be of particular interest to present contributing subscribers who will have the pleasure of knowing that their contributions as well as those of others hereafter received, will be of double value in support of the Bureau's activities.

A list of subscriptions received since the last issue of the News-Bulletin is given in another column.

DR. KNAUTH TO CONTINUE AS RECORDING SECRETARY

DR. OSWALD W. KNAUTH, who had a large part in preparing Volumes I and II on the National Income and is the author of *Distribution of Income by States*, has been made a member of the Executive Staff of R. H. Macy and Company, of New York.

Dr. Knauth, although no longer on the Research Staff, will, as Recording Secretary, continue to serve the Bureau as an officer.

FORCES BEHIND UNEMPLOYMENT PORTRAYED

Changes in Numbers of Employees, Hours of Work and Earnings in Cycle are Analyzed

A VIVID picture of the workings of the forces which give rise to unemployment is presented in the second volume of the report growing out of the Bureau's recent investigation for President Harding's Conference on Unemployment. This volume which is entitled "Employment, Hours and Earnings in Prosperity and Depression" has just been sent to the printer and will be issued soon after its companion volume "Business Cycles and Unemployment" which is now coming off the press.

"Employment Hours and Earnings in Prosperity and Depression" is designed to meet the special needs of all persons interested in the study of labor conditions. While there has been no lack of information concerning conditions in selected industries or occupations, never before has a serious attempt been made to portray both the absolute and relative states of employments in all the great industrial fields. This volume makes it possible to compare the earnings of the miner with those of the factory hand or of the salesman in the mercantile establishment. Not only does it present the average pay per hour of employees, but it also gives the number of hours that they worked per week and how they fared as to employment when the last depression came upon them.

Farm Labor Recognized

A feature of the report is the recognition given to the importance in the nation's economic life of its 2,000,000 hired workers on farms. Here is presented the first study of the distribution of agricultural laborers and "hired girls" according to their hours and earnings in different sections of the United States.

The figures presented were obtained from those qualified to report—namely the employers of the United States. The great corporation and farmer employing but a single hired man have both lent effective aid in helping the Bureau picture the business cycle as it really exists. The Bureau of the Census, the Department of Agriculture and the Bureau of Railway Economics also gave liberal assistance.

The book describes in a concise but lucid manner, why the changes of the business cycle give rise to unemployment, thus clearing up one of the most commonly misunderstood phases of our economic life. It also brings out the strikingly different ways in which these forces played upon different industries.

It is believed that readers will find this second part of the report a valuable companion piece to the first and larger volume which represents the combined efforts of a score of able students of the subject to discover a method of alleviating the evil effects which have heretofore resulted from the business cycle, for all of these remedial measures must necessarily be based upon facts and it is in the second volume that the underlying factual basis is thoroughly established.

Missing Information Supplied

In planning its survey of cyclical Unemployment, the National Bureau of Economic Research found that nobody knew within a million or more, how many men are thrown

out of work in the United States by business depression. So the Bureau planned a survey of the number of persons at work each quarter from 1920 to March, 1922.

Outlining the procedure followed, Dr. Wesley C. Mitchell, Director of Research, who planned and edited the whole report, said:

"Dr. King took charge of this work, devised a set of questionnaires and secured the cooperation of three departments of the federal government, numerous commercial organizations and many private individuals. The result was a collection of data which enabled him to estimate the falling off in the number of employees, the changes in time worked, and in earnings from the peak of the boom to the trough of the depression with a closer approach to accuracy than had ever been reached before.

"The leading results of this study were incorporated in a brief chapter of the report on Business Cycles and Unemployment but the detailed figures seem so valuable that we think they should be given to the public. When we have our next cyclical depression it will be of great help to know in what industries, what classes of establishments within each industry, and what parts of the country the evil is likely to be most serious."

These two volumes will be uniform in size (6 x 9 inches) illustrated with tables and charts, well bound in blue cloth and stamped in gold letters.

List of Bureau's Reports

With the addition of these two, the list of official reports published under the auspices of the National Bureau of Economic Research, is increased to five. The other reports are as follows:

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 7½ by 5¼ inches, 152 pages, with preface, 29 tables, 31 charts and index. Bound in blue cloth with gold letters \$1.58 postpaid.

Income in the United States, Volume II. A volume giving in full the methods and estimates on which the results shown in the first volume are based. In addition it goes into many details concerning particular industries. It consists of three parts: (1) Estimate by sources of production; (2) Estimate by incomes received; (3) Personal distribution of income in the United States. Size 9¼ by 6¼ inches, 440 pages, 242 tables, 35 charts and index. Bound in blue cloth with gold letters \$5.15 postpaid.

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 9¼ by 6¼ inches, 32 pages, with preface and 9 tables. Bound in blue cloth with gold letters \$1.30 postpaid.

Persons who wish to receive early copies of all the publications of the Bureau as issued 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.