making up but 8½ per cent of the total population. There has been a steady growth in each class with the exception of the entrepreneurs. It is probable that corporate growth has prevented the number of independent busi-

ness men from increasing in numbers.

The gainfully occupied constitute about 38 per cent of

The gainfully occupied constitute about 38 per cent of the population, the remaining 62 per cent being almost equally divided between children and adults. The proportion of the population gainfully occupied increased noticeably during the War period but had returned by 1924 to approximately the same percentage as that prevailing in 1909.

# Study of Immigration and Labor Supply is Under Way

HE survey undertaken by the National Bureau of Economic Research to determine the extent to which labor-saving machinery may be counted upon to offset any tendency of restricted immigration to check production is getting under way. In this survey which is being conducted by Dr. Harry Jerome under the general supervision of Dr. Edwin F. Gay and Dr. Wesley C. Mitchell, directors of research, the Bureau is analyzing the effect of immigration restriction upon the supply of labor in the several industries and is giving particular attention to the processes in which relatively unskilled labor is engaged and to the experience with mechanical equipment for performing the work ordinarily carried on by such labor.

#### Performance of Labor-Saving Equipment

An effort is being made to obtain as complete a record as possible of the experience of manufacturers, contractors, and others with labor-saving devices. The evidence obtained from users will be tested and verified by special studies made by the Bureau and supplemented by an analysis of the economic factors determining the rapidity with which labor-saving devices are introduced.

"Helpful cooperation is being received from individual manufacturers and from national and local associations," said Dr. Jerome, in reporting on the progress of this work. "In some instances local manufacturers' or employers' associations have given material assistance by submitting to their membership an inquiry schedule designed to ascertain the extent to which labor-saving devices are used in the industries of the given community and to furnish other quantitative facts necessary for the analysis of the economic aspects of this problem.

#### Important Industries To Be Studied

"With the aid of those who are in intimate touch with conditions in the particular industries, special inquiry schedules are being formulated for each of the important industries using immigrant labor, with the object of determining what labor-saving devices are used or available for the given industry, and obtaining other facts which will aid in estimating the extent to which such shortage of labor as may arise from restricted immigration will be ameliorated by an extended use of labor-saving equipment.

"The full success of this survey rests to a large extent upon the continued hearty cooperation of the industries and individual employers who are in a position to furnish the necessary fact basis for the analysis and to whom the results of the survey should be of particular interest. Correspondence is invited from manufacturers and users of labor-saving devices and from other persons who may be interested in this study."

#### 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.

## Publications of the National Bureau of Economic Research

#### 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 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 9½ by 6½ 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 9½ by 6½ inches, 32 pages, with preface and 9 tables. Bound in cloth. \$1.30 postpaid. (Third 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.

# 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.)

# 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.

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 An Organization for Impartial Investigation

# **NEWS-BULLETIN**

National Bureau of Economic Research, Inc.

To Find Facts
Divested of
Propaganda

NATIONAL BUREAU OF ECONOMIC PESSEARCH, Inc. 1819 Broadway NEW YORK CITY

Vo. 12

474 WEST 24th STREET, NEW YORK CITY

April 20, 1925

# Population of United States Rises to 114,311,000

## Gain of 1,627,000 Recorded Since January 1, 1924 is Below Average of Last Five Years

Our population growth is slowing up.

Both the birth rate and the death rate are falling, though the latter is falling faster.

Immigration accounted for only one-fifth of our population increase in 1924.

Thirty-eight persons out of every hundred are engaged in some occupation for a direct money return.

These are some of the interesting features of a statement issued today by the National Bureau of Economic Research, accompanying an announcement that the Bureau estimates the population of the continental United States to have been 114,311,000 on January 1, 1925.

THE population of the continental United States reached a new high total of 114,311,000 on January 1, 1925, according to estimates authorized by the Executive Committee of the National Bureau of Economic Research, Inc., and announced today at the Bureau's offices, 474 West 24th Street, New York City. This compares with the Bureau's estimate of 112,684,000 on January 1, 1924 and the census count of 105,711,000 in 1920.

The estimated gain during the year 1924 was 1,627,000 which is approximately 100,000 less than the average gain for the last five years. The year of greatest gain since 1920 was 1923 when the population grew by 1,996,000. In a sixteen year period the year of greatest gain was 1909 when 2,173,000 were added.

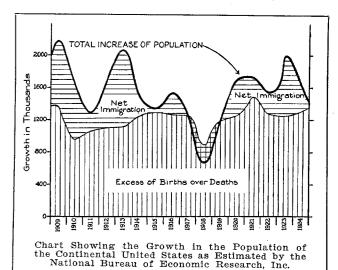
#### How Population Increases

The natural increase of population through excess of births over deaths was four times the amount added by net immigration in 1924, the Bureau's figures show.

In 1924 net immigration was 315,000 while births are estimated at 2,645,000 and deaths at 1,333,000.

Since 1911, the number of deaths has tended to remain constant, while births have increased by nearly 11 per cent and the population has grown by some 21 per cent.

Of the total population, 38 out of every hundred per-



sons are engaged in some gainful occupation, that is working for a direct money income.

This study of population growth was made by Dr. Willford I. King, of the Bureau's Research Staff, as a part of the Bureau's general and continuing investigation of Income in the United States and its changes from year to year.

#### Growth by Years Shown

The estimated increase in population in each year since January 1, 1909, is as follows:

Year	Number	Per Cent
1909	2,173,000	2.43
1910	1,635,000	1.79
1911	1,293,000	1.39
1912	1,686,000	1.78
1913	2,069,000	2.15
1914	1,497,000	1.52
1915	1,345,000	1.35
1916	1,535,000	1.52
1917	1,262,000	1.23
1918	672,000	0.65
1919	1,187,000	1.14
1920	1,701,000	1.61
1921	1,723,000	1.60
1922	1,553,000	1.42
1923	1,996,000	1.42
1924	1.627.000	
	1,027,000	1.44
tal for 16 years	24.954.000	
erage for 16 years	1,560,000	1.55a

a) Equals average of per cents in above column.

The greatest percentage growth, according to the foregoing figures, took place in 1909 and the smallest in 1918, a year of War and of influenza epidemic. The year 1923 shows one of the peaks of the period while 1924 is slightly below the average, the change from 1923 being due to the falling off in immigration.

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 hardlesses. trial problems.

trial proviems.

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.

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 dis-

tinguished 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.

#### OFFICERS

MALCOLM C. RORTY, Chairman of the Board JOHN P. FREY, President GEORGE C. MAY, Vice-President GEORGE E. ROBERTS, Treasurer EDWIN F. GAY
W. C. MITCHELL
Directors of Research
OSWALD W. KNAUTH, Recording Secretary GUSTAV R. STAHL, Executive Secretary

#### DIRECTORS AT LARGE:

THOMAS S. ADAMS
Professor of Political Economy, Yale University JOHN R. COMMONS
Professor of Political Economy, University of Wisconsin JOHN P. FREY
Editor, International Molders' Journal, Cincinnati, Ohio EDWIN F. GAY
Professor of Economic History, Harvard University
HARRY W. LAIDLER
Director, The League for Industrial Democracy GEORGE O. MAY Senior Partner, Price, Waterhouse and Company, N. Y. ELWOOD MEAD

Commissioner of Reclamation, Washington, D. C. WESLEY C. MITCHELL Professor of Economics, Columbia University

DWIGHT W. MORROW

Member of firm of J. P. Morgan and Company, New York GEORGE SOULE Director, The Labor Bureau, Inc.

> ALLYN A. YOUNG
> Professor of Economics, Harvard University DIRECTORS BY APPOINTMENT:

N. I. STONE General Manager, Hickey-Freeman Company, Rochester, N. Y.

HUGH FRAYNE
American Federation of Labor DAVID FRIDAY
American Economic Association WALTER R. INGALLS LEE GALLOWAY

American Management Association GEORGE E. ROBERTS MALCOLM C. RORTY American Statistical Association A. W. SHAW
Periodical Publishers' Association GRAY SILVER
American Farm Bureau Federation

#### RESEARCH STAFF

EDWIN F. GAY
WILLFORD I. KING FREDERICK R. MACAULAY
HARRY JEROME
WILLARD THORP

### Migration and Births and Deaths Compared

April 20, 1925

In the following table the total net immigration, births and deaths, are compared by years:

Date	Amount of Net Immigration	Births	Deaths
	(Thousands)	(Thousands)	(Thousands)
1909	806	2,673	1.306
1910		2,340	1,382
1911		2,389	1,328
1912		2,428	1,320
1913	2 2 7	2,478	1,361
1914		2,587	1,337
1915	58	2,634	1,347
1916		2,675	1,415
1917	9	2,707	1.454
1918	—214	2,727	1,841
1919	— 13	2,552	1,352
1920	446	2,645	1,390
1921	231	2,748	1,256
1922	278	2,567	1,292
1923	747	2.606a	1,357b
1924	315	2,645a	1,333b
Total for 16 years .	5,624	41,401	22.071
Average for 16 years	s 351	2,588	1,379
Texas 1 1 4 5	2015		<del></del> .
Total last 5 years.	2,017	13,211	6,628
Average last 5 years	3 403	2,642	1,326

a) Rough estimate.b) Preliminary estimate.

## Immigration Figures Drop

The foregoing figures show that the immigration of 1923 was more than twice the 351,000 average for the 16 year peniod and nearly double the average immigration of the last 5 years which amounted to 403,000 per year. The 1924 figure, on the other hand, is below average, although still higher than the immigration of 1921 or 1922, despite the increased stringency of the immigration restricions.

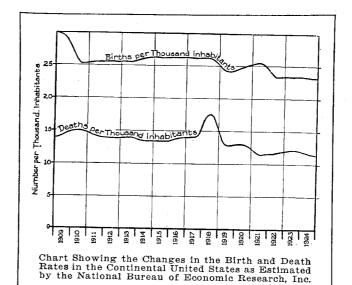
The Census Bureau has not completed its records of births and deaths in the registration area for years later than 1922, hence the estimates for more recent periods are much less reliable than are those for dates up to the first of January, 1923. The estimates made by Dr. King of the National Bureau of Economic Research, and recorded in the foregoing table indicate that, during the 16 years, there occurred in the United States over 41 million births and approximately 22 million deaths. It appears, therefore, that the gain in population from excess of births over deaths was something over 19 millions, or more than three times the increase in population due to immigration. The chief cause of increase in population in the United States, therefore, is not migration but rather the fact that more people are born than die.

## Ratio of Births to Deaths

The number of births since 1909 has been a little less than double the number of deaths but the figures indicate that, during the last five years, the ratio of births to deaths has almost reached 2 to 1. This ratio has changed materially since 1911, a year in which both birth and death rates were about normal. In that year, the number of births was apparently some 2,389,000, while the number of deaths was about 1,328,000. In 1924, thirteen years later, the number of births appears to have increased by more than a quarter of a million, while the number of deaths was approximately unchanged.

Since 1911, the number of deaths has tended to remain constant, while binths have increased by nearly 11 per cent and the population has grown by some 21 per cent. The death rate, in other words, has fallen faster than the birth rate.

The death rate has been persistently low during the last decade except in the last half of 1918, the first half



of 1919, and the first half of 1920, in which periods the severe epidemic of influenza levied a heavy toll.

#### Cause of Rapid Gain

This low death rate has been responsible to no small degree for our rapid gain in population. These facts are brought out more clearly by the following table. The reader is warned that the figures are only estimates, but it is believed that the trends in the birth and death rates are portrayed with a fair degree of accuracy.

Both appear to be moving downward at a rather rapid rate, though their courses are marked by occasional interruptions.

Year	Population July 1 (1,000)	Births (1,000)	Deaths (1,000)	Births per 1,000 Population	Deaths per 1,000 Population
1909	90,508	2,673	1,306	29.5	14.4
1910	92,422	2,340	1.382	25.3	15.0
1911	93,837	2,389	1,328	25.5	14.2
1912	95,249	2,428	1,320	25.5	13.9
1913	97,111	2,478	1,361	25.5	14.0
1914	98,974	2,587	1,337	26.1	13.5
1915	100,390	2,634	1,347	26.2	13.4
1916	101,787	2,675	1,415	26.3	13.9
1917	103,234	2,707	1,454	26.2	14.1
1918	104,377	2,727	1,841	26.1	17.6
1919	105,007	2,552	1,352	24.3	12.9
1920	106,422	2,645	1,390	24.9	13.1
1921	108,370	2,748	1,256	25.4	11.6
1922	109,742	2,567	1,292	23.4	11.8
1923	111,469a	2,606a	1,357a	23.4a	12.2a
1924	113,454a	2,645a	1,333a	23.3a	11.7a

a) Preliminary estimates.

#### Population by Years Given

The estimated population of the continental United States at the beginning of each year follows. The fact should be noted that the estimates for periods beginning with 1924 are preliminary only.

		January 1
1909	• • • • • • • • • • • • • • • • • • • •	89,357,000
1910		91,530,000
1911	************************	93,165,000
1912	******	94,458,000
1913	******	96,144,000
1914	*******	98,213,000
1915	***************************************	99,710,000
1916	***************************************	101.055.000
	***************************************	101,000,000

1917		102,590,000
1918	• • • • • • • • • • • • • • • • • • • •	103,852,000
1919	• • • • • • • • • • • • • • • • • • • •	104,524,000
1920 1921	•••••	105,711,000
1921	•••••	107,412,000
1922		109,135,000
1924		110,688,000 112,684,000
1925		114,311,000
	· · · · · · · · · · · · · · · · · · ·	************

a) Preliminary estimate.

#### Occupation Status Revealed

In response to numerous requests for up-to-date estimates of the total number of persons engaged in gainful occupations, the foregoing population figures have been segregated in the following table into four divisions as follows: (a) Children under 15 years of age not gainfully occupied; (b) Adults over 15 years of age not gainfully employed, that is, not working for a direct money return; (c) Employees; (d) Entrepreneurs. In this connection, the term entrepreneurs is used to cover not only employers but every person in business on his own account.

			Adults not		
	Population	Children	Gainfully		Entre-
Year	July 1	Under 15	Occupied	Employees	preneurs
	(1,000)	(1,000)	(1,000)	(1,000)	(1,000)
1909	 90,508	29,069	27,184	24,422	9,833
1910	 92,422	29,553	27,769	25,226	9.874
1911	 93,837	29,869	28,268	25,794	9,906
1912	 95,249	30,252	28,760	26,310	9,927
1913	 97,111	30,719	29,364	27,078	9,950
1914	 98,974	31,236	29,956	27,806	9,976
1915	 100,390	32,126	30,308	27,962	9,994
1916	 101,787	32,272	30,877	28,629	10,009
1917	 103,234	32,750	31,111	29,379	9,994
1918	 104,377	33,245	30,749	30,586	9,797
1919	 105,007	33,449	31,276	30,530	9,752
1920	 106,422	33,833	32,581	29,959	10,049
1921	 108,370	34,333	33,218	30,740	10,079
1922	 109,742	34,687	33,725	31,307	10,023
1923	 111,469a	34,895a	34,379	32,510a	9,685a
1924	 113,454a	35,122a	35,109	33,566a	9,657a
		•	•	,	,,,,,,,

a) Preliminary estimate.

#### Three Divisions Almost Equal in Size

The fact is that children, women and others not working for a direct cash return, and employees constitute almost equal sized sections of the population. Entrepreneurs are the least numerous of the classes mentioned

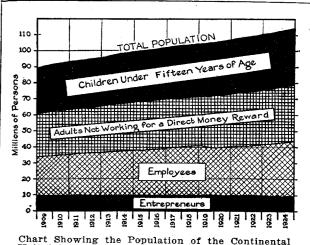


Chart Showing the Population of the Continental United States Classified by the National Bureau of Economic Research, Inc., According to Occupational Status.