

An Organization
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Investigation

NEWS-BULLETIN

National Bureau of Economic Research, Inc.

To Find Facts
Divested of
Propaganda

No. 34

51 MADISON AVENUE (MADISON SQUARE) NEW YORK CITY

November 8, 1929

Reports of the National Bureau of Economic Research

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to the decline in the value of the dollar, this ninety-nine per cent of income recipients included all persons receiving \$7,270 or less. Since 1919, the changes in the limit dividing Class IV from Class III have been only moderate in size, though there has been a distinct upward shift in the last two years covered. The general tendency has been for Class III to include those having incomes roughly between \$7,000 and \$35,000. Class II covers a range of income running roughly from \$35,000 to an upper limit somewhere between \$100,000 and \$200,000. Class I obviously includes those incomes above the last of the limits mentioned.

Table III shows us the absolute amount of income received by each of these four classes in each year, and also the percentage of the total realized income of the nation obtained by each class. Chart I sets forth in graphic form the figures presented in Table III. A glance at the left-hand diagram in Chart I makes it clear that the great bulk of the income of the people of the United States is received by Class IV.

Lowest Group Gains

We shall next consider the changes in the distribution that took place between 1916 and 1926. The diagram on the right hand side of Chart I shows that, between 1916 and 1921, the lowest income group was gaining at the expense of the higher income classes. Since 1921, the reverse process has been taking place, a larger proportion of the realized income of the nation being concentrated in the hands of the two higher income classes. At the close of the period, however, the large group of low incomes in Class IV was still in relatively a more advantageous position, as far as income is concerned, than it was in 1916. Class III lost ground between 1916 and 1921, but has since gained relatively to the other classes. However, the changes have not been violent, and the final position of Class III in 1926 was not materially different from what it was in 1916.†

Unfortunately, we cannot be certain whether conditions in 1916 were or were not reasonably typical of pre-War years. It is, of course, a well-known fact that many persons profited greatly in 1916 from operations connected with the war in Europe. The extent to which such war profits affected the concentration of income in this country must remain a matter of conjecture, but their influence was presumably of considerable consequence in increasing above normal the proportion of income going to Class II and Class I.

Purchasing Power Considered

These changes in the proportion of income going to the various classes are of great interest. Perhaps of even greater significance are the changes in the absolute amount of income. These changes are recorded in Table IV and illustrated in Chart 2. This chart shows that, during the decade under consideration, the per capita income of each class, when measured in current dollars, rose somewhat, but when each dollar is reduced to the purchasing power which it had in 1913,* the figures show very different results. We see, for example, from the right hand half of Chart 2, that the per capita income of every class declined rather steadily between 1916 and 1921, but that the lowest income class suffered relatively little, while the highest per capita incomes were reduced by more than 70 per cent during these five years. The members of Class II lost more than half of their per capita income and those of Class III suffered a decline of one-third.

Since 1921, all classes have gained materially, Class III fared best of all. At the close of the period, however, Classes I and II were both materially worse off as far as income is concerned than they were in 1916, while Classes III and IV had improved their relative position. Clearly then, the decade has witnessed a diffusion of income, though, since 1921, the tendency has been in the direction of concentration.

*This reduction was accomplished in each case by dividing the figure as expressed in current dollars by an index representing the calculated change in the price of a basketful of consumers' goods representing the average annual consumption of all families in the class in question.

†Colonel Malcolm C. Rorty says in this connection:—"Periods of rising real income (in 1913 dollars) for the lower 90% of the income recipients are apt to be periods when the percentage of the total national income received by the upper 1% is increasing. This is a natural consequence of business prosperity which tends to increase both dividend payments and real wages, but the former more than the latter up to a certain point—after which, I believe, there usually comes a contrary trend, with real wages increasing more rapidly than profits, and then finally a business depression."

Shifts In Income Concentration

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THE decade beginning in 1916 witnessed a diffusion of income, although, since 1921, the tendency has been in the direction of concentration, says Dr. Willford I. King of the National Bureau of Economic Research, Inc., in a statement summarizing some of the results of an investigation made under the general direction of Drs. Edwin F. Gay and Wesley C. Mitchell, Directors of Research, and approved for publication in the News Bulletin today by the National Bureau's Executive Committee.

The text of Dr. King's statement follows: The distribution of the income of the people of the United States was well shown for 1918 by Dr. Frederick R. Macaulay's study of the facts, a study appearing in the Bureau's publication *Income in the United States*. Since that date, however, the total income of the nation has grown very rapidly.

Have all classes participated in this increased prosperity or has there been an increasing disparity between the higher and lower income groups?

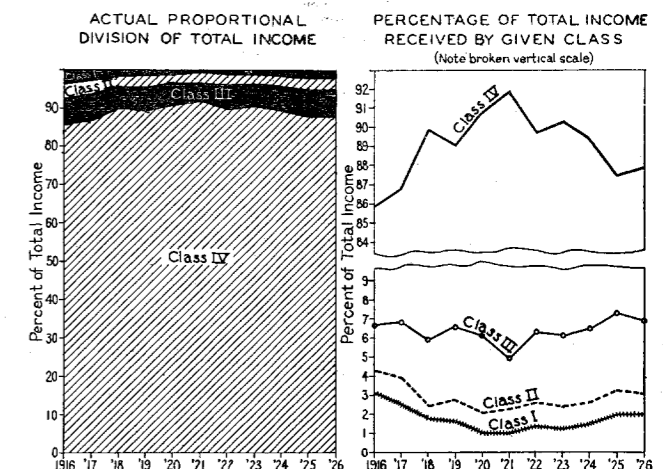
Has the lion's share of the new income gone to the rich, or, on the other hand, is income now more equally distributed than in the past?

New Figures Studied

It is not possible, with the data now available, to answer precisely the questions just propounded. Recently, however, the National Bureau of Economic Research has completed a revision of its income estimates covering the years 1909 to 1925, inclusive, and preliminary estimates of the entire realized income of the people of the United States have been made for the years 1926 and 1927. The United States Bureau of Internal Revenue has now published annual reports for the years 1916 to 1926, inclusive, in each volume giving a classified list of income tax payers and the amounts of income reported by them.

With the records available of total realized income and of the income reported to the Federal taxing authorities

Chart I—Per Cent of Total Realized Income of the People of the United States Reported as Received by Classes Representing Fixed Proportions of All Income Recipients.



for each of the income classes for each of the 11 years, this appears to be an opportune time to examine income distribution in the United States and the changes occurring therein.

Before we can say anything about the distribution of income, it is necessary to say what we mean by income, and among whom the income is distributed.

Reader is Warned

The figures of the National Bureau of Economic Research, which we are about to analyze, deal with "realized income" only, leaving out of consideration all income a-

Table I—Number of Income Recipients falling into each of Four Categories based upon size of income.

Calendar Year	All Classes	Class IV	Class III	Class II	Class I
		The 99% of Income Recipients Having the Lowest Income	The Richest 1% of Income Recipients Excluding Classes I and II	The Richest 1/10 of 1% of Income Recipients Excluding Class I	The Richest 1/100 of 1% of Income Recipients
1916	38,645,635	38,259,179	347,810	34,781	3,865
1917	39,393,530	38,999,595	354,541	35,455	3,939
1918	40,418,942	40,014,753	363,770	36,377	4,042
1919	40,340,534	39,937,129	363,064	36,307	4,034
1920	40,085,558	39,684,702	360,770	36,077	4,009
1921	40,908,634	40,499,548	368,177	36,818	4,091
1922	41,431,319	41,017,006	372,882	37,288	4,143
1923	42,326,573	41,903,308	380,938	38,094	4,233
1924	43,296,225	42,863,263	389,666	38,966	4,330
1925	43,964,358	43,524,714	395,680	39,568	4,396
1926	44,673,550	44,226,814	402,062	40,207	4,467

Table II—Income Limits of the Four Classes into which the Income Receiving Population has been divided.

Calendar Year	INCOME LIMITS BETWEEN WHICH RECIPIENTS ARE CLASSED AS			
	Class IV	Class III	Class II	Class I
	The 99% of Income Recipients Having the Lowest Incomes	The Richest 1% of Income Recipients Excluding Classes I and II	The Richest 1/10 of 1% of Income Recipients Excluding Class I	The Richest 1/100 of 1% of Income Recipients
1916	Under \$4,050	\$4,050-\$33,100	\$33,100-\$198,000	Over \$198,000
1917	5,800	5,800-34,750	34,750-162,000	162,000
1918	6,050	6,050-29,300	29,300-125,000	125,000
1919	7,270	7,270-36,000	36,000-137,500	137,500
1920	7,380	7,380-37,250	37,250-115,000	115,000
1921	7,350	7,350-27,000	27,000-83,000	83,000
1922	6,750	6,750-33,000	33,000-120,000	120,000
1923	7,000	7,000-34,300	34,300-124,000	124,000
1924	7,520	7,520-38,000	38,000-136,500	136,500
1925	8,570	8,570-44,800	44,800-185,000	185,000
1926	8,700	8,700-43,750	43,750-183,000	183,000

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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.

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ing from changes in property values or from sales of property. The income figures reported to the United States Bureau of Internal Revenue are not exactly comparable with those calculated by the National Bureau of Economic Research, for the former include a certain amount of income obtained as a result of property transfers. However, this forms so small a fraction of the total that, for practical purposes, it may be disregarded.

The term "realized income," as used by the National Bureau of Economic Research, includes dividends, interest, rent, wages, salaries, pensions, compensation for injuries, and profits withdrawn from their own businesses by private entrepreneurs. In addition to the sums just specified, an allowance is made for the value of income imputed to the service of durable direct or consumers' goods on hand, as for example the rental value of houses occupied by their owners, and automobiles used for pleasure. It will be observed that all of the items of income entered in the category "realized income" consist of income received by individuals.

What it Means to the Individual

In a broad way, realized income may be thought of as the amount of income available to the individual upon which he and his dependents subsist. The figures presented by the National Bureau of Economic Research, do not, however, include all of the items that some would advocate including under the concept "realized income." Three types of income have been omitted because it appears to be next to impossible to make even an approximate estimate of their value. They are:

(1) Income received by employees in the form of traveling expenses and the like; (2) Income obtained by working at odd jobs; and (3) The value of unpaid services rendered by individuals to themselves and to their families. Were these three items included, the total of realized income of the people of the United States would be radically increased, but no one can say by approximately how much.

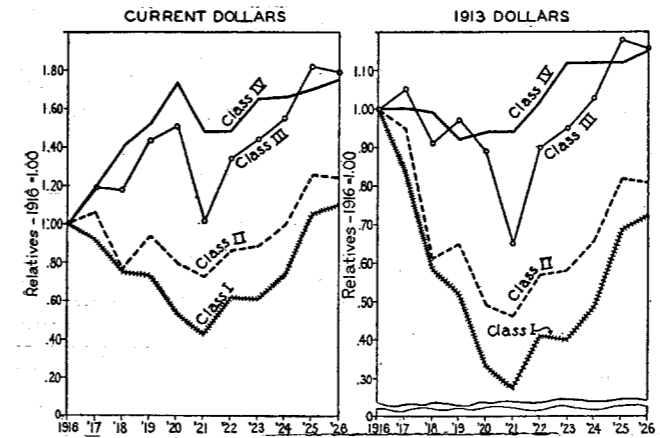
For the purpose of the present study, it is assumed that the entire realized income of the people of the United States is distributed, in the first instance, among those reported as gainfully occupied—in other words, as habitually working for a money return, together with the small number of married women who file separate income tax returns.†

Table III—Amounts and Percentages of the Total Realized Income of the People of the United States reported as received by classes representing fixed proportions of all Income Recipients.

Calendar Year	Entire Realized Income of the People of the United States	Class IV The 99% of Income Recipients Having the Lowest Incomes	Class III The Richest 1% of Income Recipients Excluding Classes I and II	Class II The Richest 1/10 of Income Recipients Excluding Class I	Class I The Richest 1/100 of Income Recipients
1916	\$43,288	\$37,168	\$2,885	\$1,862	\$1,373
1917	51,331	44,531	3,500	2,006	1,294
1918	60,408	54,268	3,570	1,491	1,079
1919	65,949	58,729	4,340	1,820	1,060
1920	73,999	67,159	4,530	1,547	763
1921	63,371	58,191	3,130	1,430	620
1922	65,925	59,125	4,175	1,715	910
1923	74,337	67,077	4,540	1,806	914
1924	77,135	68,935	5,000	2,065	1,135
1925	81,931	71,621	5,985	2,670	1,655
1926	85,548*	75,148*	5,975	2,675	1,750
1916	100.00	85.86	6.66	4.30	3.17
1917	100.00	86.75	6.82	3.91	2.52
1918	100.00	89.84	5.91	2.47	1.79
1919	100.00	89.05	6.58	2.76	1.61
1920	100.00	90.76	6.12	2.09	1.03
1921	100.00	91.83	4.94	2.26	.98
1922	100.00	89.69	6.33	2.60	1.38
1923	100.00	90.23	6.11	2.43	1.23
1924	100.00	89.37	6.48	2.68	1.47
1925	100.00	87.42	7.30	3.26	2.02
1926	100.00	87.84*	6.98*	3.13*	2.05*

*Preliminary estimate.
†There is no way of separating from the gainfully occupied the smaller number of idle people who live on income from property.

Chart 2—Relative Changes in the Per Capita Incomes of Each of Four Classes of Income Recipients.



Use of Tax Reports Discussed

The use of the income tax reports as a basis of measuring the absolute distribution of income in the United States is open to criticism. The net income reported to the Federal authorities omits a very considerable fraction of the actual net income of individuals. For example, interest on government bonds is exempt from taxes and therefore has not been reported by the tax payers. It is well-known that there is a large amount of evasion and avoidance. Obviously the amounts of net income reported to the United States Bureau of Internal Revenue by individuals are, on the average, materially less than the net incomes actually received by those individuals. The influence of under-reporting is of course to make it appear that the income tax payers receive a smaller proportion of the national income than is actually the case. There are, however, certain offsetting features. It will be remembered that the income, as reported to the Federal authorities, includes profits arising from the sale of property and a certain part of these profits has arisen through increases in the value of property, and hence do not legitimately fall under the title "realized income." It will also be remembered that we have excluded several important items from the incomes of all persons. Were we to include traveling expenses, returns from odd jobs and casual employment and the value of household services by members of families, the national income totals would doubtless be increased to a noticeable extent.

Gradations of Income

In measuring gradations of income, it is possible to classify in many different ways the recipients of income. They might be divided into categories on the basis of the absolute amount of income received in each year. While this is a perfectly logical method of attack, the classification here adopted is on a different basis. The total number of income recipients has been divided into four classes, each class containing in all years the same percentage of the total number of income recipients.

The first three classes are made up entirely of persons reporting their incomes to the United States Bureau of Internal Revenue. Since but a limited number of persons have incomes large enough to justify the making of such returns, these three classes contain a relatively small proportion of all income recipients. The number of persons in the fourth class is arrived at by subtracting the sum of the number in the first three classes from the estimated total number of income recipients. The income of the various classes is estimated by a similar procedure.

Divided Into Four Groups

The titles chosen by the respective classes and the definition of these titles follow:

- Class I consists of the richest one-hundredth of one per cent of all income recipients. Table I

shows us that about 4,000 persons are here entered.

- Under Class II are placed the richest one-tenth of one per cent of the population, excluding the richest one-hundredth of one per cent who have already been entered in Class I.
- Class III includes the richest one per cent of the population, but excludes Classes I and II.
- In Class IV are placed the remaining ninety-nine per cent of all the forty odd million income recipients in the United States. The reason that the last mentioned class is not subdivided is that in certain years the income tax has not gone down to incomes low enough to make it possible to ascertain the distribution for more than the one per cent reported as most prosperous.

These categories are obviously arbitrary, but they will perhaps serve as well as any other, to represent income distribution as it actually exists and the changes that have recently occurred therein.

Changes from Year to Year

Table II shows us that the demarcations between these four classes have changed from year to year. One reason for this shifting is that changes have taken place in the purchasing power of the dollar. Even had the dollar remained constant in value, the limits would nevertheless have varied because of the variations occurring in the incomes of the respective groups.

Table II reveals that, in 1916, Class IV included those having incomes under \$4,050 but by 1919, owing mainly

Table IV—Per Capita Income in each of Four Classes of Income Recipients.

Calendar Year	CURRENT DOLLARS				1913 DOLLARS			
	Class IV	Class III	Class II	Class I	Class IV a	Class III b	Class II c	Class I c
1916	\$ 971	\$8,295	\$53,535	\$355,239	\$887	\$7,796	\$50,315	\$333,871
1917	1,142	9,872	56,579	328,510	888	8,216	47,908	278,163
1918	1,356	9,814	40,987	266,947	880	7,091	30,451	198,326
1919	1,471	11,954	50,128	262,766	818	7,551	32,936	172,645
1920	1,692	12,556	42,881	190,322	832	6,954	24,658	109,443
1921	1,437	8,501	38,840	151,552	835	5,078	23,299	90,913
1922	1,441	11,197	45,993	219,648	906	7,027	28,603	136,597
1923	1,601	11,918	47,409	215,923	990	7,419	29,355	133,698
1924	1,608	12,832	52,995	262,125	991	7,998	32,957	163,013
1925	1,646	15,126	67,479	376,479	992	9,229	41,121	229,420
1926	1,699*	14,861	66,531	391,762	1,019*	9,073	40,617	239,171

Calendar Year	CURRENT DOLLARS				1913 DOLLARS			
	Class IV	Class III	Class II	Class I	Class IV	Class III	Class II	Class I
1916	1.00d	1.00d	1.00d	1.00d	1.00d	1.00d	1.00d	1.00d
1917	1.18	1.19	1.06	.92	1.00	1.05	.95	.83
1918	1.40	1.18	.77	.75	.99	.91	.61	.59
1919	1.52	1.44	.94	.74	.92	.97	.65	.52
1920	1.74	1.51	.80	.54	.94	.89	.49	.33
1921	1.48	1.02	.73	.43	.94	.65	.46	.27
1922	1.48	1.35	.86	.62	1.02	.90	.57	.41
1923	1.65	1.44	.89	.61	1.12	.95	.58	.40
1924	1.66	1.55	.99	.74	1.12	1.03	.66	.49
1925	1.70	1.82	1.26	1.06	1.12	1.18	.82	.69
1926	1.75*	1.79	1.24	1.10	1.15*	1.16	.81	.72

a. Amount in current dollars divided by weighted average of indices for urban employees, farmers, farm laborers, and \$5000 class.
b. Amount in current dollars divided by index for \$5000-\$25,000 class.
c. Amount in current dollars divided by index for \$25,000 class.
d. The year 1916 may not be typical. It is used as a base merely because it happens to be the first year for which data are available.
* Preliminary estimate.