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### CHAPTER VII

## CHANGES IN CONCENTRATION OF INCOME

## Procedure in Estimating Distribution of Income.

The preceding analysis of the division of the total realized income of the people of the United States has been confined to a functional or industrial apportionment. Figures now available throw some light upon the relative proportions of the total income going to different strata of income recipients when the stratification is based upon the size of the total income received by the recipient.<sup>1</sup> Tables XXX to XXXIII, inclusive, analyze the facts in this respect for each of the years from 1914 to 1926, inclusive. The study is limited to these years because they are the only ones covered by the statistics of the Federal Income Tax, and it is upon these statistics that we must place our chief reliance in analyzing the gradations of income among persons having the larger incomes. Little light is thrown on the annual changes in distribution by the Statistics of Income, of the United States Bureau of Internal Revenue, because they are expressed in dollars having purchasing power differing from year to year. It is, therefore, necessary to convert all quantities to dollars of constant purchasing power. To simplify matters, the data presented in the Federal reports have all been divided by a common price index which is believed to represent approximately the average for the year relative prices of goods consumed by all consumers in the United States. This price index is as follows:

1914	1.0077	1921	1.6926
1915	1.0070	1922	1.5829
1916	1.0913	1923	1.5977
1917	1.2858	1924	1.6024
1918	1.5175	1925	1.6517
1919	1.7571	1926	1.6617
1920	1.9801		

An effort has been made to apportion among different income classes the total number of income recipients. The number of income recipients recorded in Table XXXII includes all gainfully

<sup>1</sup>Col. M. C. Rorty points out that another excellent method of comparison is to show the percentages of those gainfully employed receiving various multiples of the average income.

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### TABLE XXX

### APPROXIMATE NUMBERS OF PERSONS REPORTING TO THE FEDERAL GOVERNMENT INCOMES ABOVE THE AMOUNTS SPECIFIED AS MEASURED IN 1913 DOLLARS AND THE TOTAL INCOME OF EACH CLASS<sup>a</sup>

		INDIVIDUAL INCOME IN 1913 DOLLARS ABOVE							
\$5,000 <sup>b</sup>		\$25,000 <sup>b</sup>			\$150,000 <sup>b</sup>				
YEAR	Class Income in Current Dollars (Millions)	Num- ber of Income Recip- ients	Class Income in 1913 Dollars (Mil- lions)	Class Income in Current Dollars (Mil- lions)	Num- ber of Income Recip- ients	Class Income in 1913 Dollars (Mil- lions)	Class Income in Current Dollars (Mil- lions)	Num- ber of Income Recip- ients	Class Income in 1913 Dollars (Mil- lions)
1914 1915 1916 1917 1918	\$3,630 4,270 5,690 6,465 5,290	252,000 245,000 282,000 332,000 268,000	\$3,602 4,240 5,214 5,028 3,486	\$1,562 2,270 3,420 3,330 2,240	25,700 32,200 46,400 42,300 28,700	\$1,550 2,254 3,134 2,590 1,476	\$ 453 864 1,561 1,145 547	1,600 2,620 5,610 2,860 1,260	\$ 450 858 1,430 890 360
1919 1920 1921 1922 1923 1924	6,420 5,620 4,625 6,145 6,690 7,880 10,520	292,000 248,000 246,000 315,000 352,000 392,000	3,654 2,838 2,732 3,882 4,187 4,918 6,369	2,485 1,710 1,395 2,290 2,375 3,070 4,585	28,200 20,100 20,200 31,200 32,300 39,600 51,200	1,414 864 824 1,447 1,487 1,916 2,775	531 272 192 478 476 622 1 348	1,220 440 390 950 940 1,350 2,550	302 137 113 302 298 388 816
1926	10,660	479,000	6,415	4,565	49,700	2,747	1,348	2,350 2,450	835

Based upon Statistics of Income, published by the U.S. Bureau of Internal Revenue, and upon an average price-index series derived from Table VII.
 <sup>b</sup> The equivalents of \$5,000, \$25,000 and \$150,000 in 1926 dollars are \$8,309, \$41,543 and \$249,255 respectively.

occupied persons, plus the number of wives filing separate returns with the Federal income tax authorities. Since nearly everyone receives some slight money income, this limitation on the number of income recipients is of course an arbitrary one, but it has the advantage of yielding results satisfactorily comparable from year to year, even though the absolute amounts for any given year may be materially in error.

The figures for individual income reported to the United States Bureau of Internal Revenue have been taken as reported, no adjustments having been made except for changes in the purchasing power

#### TABLE XXXI

### APPROXIMATE NUMBERS OF PERSONS AND AMOUNTS OF INCOME INDICATED BY THE FEDERAL TAX RETURNS AS FALLING BETWEEN THE AMOUNTS SPECIFIED MEASURED IN 1913 DOLLARS<sup>6</sup>

	INDIVIDUAL INCOME IN 1913 DOLLARS							
YEAR	Under \$5,000 <sup>b</sup>		\$5,000-\$25,000 <sup>b</sup>		\$25,000-\$150,000 <sup>b</sup>		\$150,000 AND OVER <sup>b</sup>	
	Number of Income Recipients	Class Income in 1913 Dollars (Mil- lions)	Number of Income Recip- ients	Class Income in 1913 ·Dollars (Mil- lions)	Number of Income Recip- ients	Class Income in 1913 Dollars (Mil- lions)	Number of Income Recip- ients	Class Income in 1913 Dollars (Mil- lions)
1914	37,530,000	\$31,648	226,300	\$2,052	24,100	\$1,100	1,600	\$450
1915	37,711,000	32,396	212,800	1,986	29,580	1,396	2,620	858
1916	38,363,635	34,345	235,600	2,080	40,790	1,704	5,610	1,430
1917	39,061,530	35,214	289,700	2,438	39,440	1,700	2,860	890
1918	40,150,942	36,664	239,300	2,010	27,440	1,116	1,260	360
1919	40,048,534	34,363	263,800	2,240	26,980	1,112	1,220	302
1920	39,837,558	34,735	227,900	1,974	19,660	727	440	137
1921	40,662,634	33,978	225,800	1,908	19,810	711	390	113
1922	41,116,319	36,683	283,800	2,435	30,250	1,145	950	302
1923	41,974,573	40,977	319,700	2,700	31,360	1,189	940	298
1924	42,904,225	41,840	352,400	3,002	38,250	1,528	1,350	388
1925	43,499,358	42,043	413,800	3,593	48,650	1,960	2,550	816
1926	44,194,550	44,006*	429,300	3,668	47,250	1,912	2,450	835

Derived from Table XXX.

<sup>b</sup> The equivalents of \$5,000, \$25,000 and \$150,000 in 1926 dollars are \$8,309, \$41,543 and \$249,255 respectively.

\* Preliminary estimate.

of the dollar. To obtain the number of income recipients and the amount of income above the specified limits of \$5,000, \$25,000, and \$150,000, all measured in terms of 1913 purchasing power, it was necessary to plot the figures for each year in terms of 1913 dollars, to connect the plotted points by smooth curves, and then to read off from these smooth curves the numbers for the points specified. It is in this manner that the figures in Table XXX have been arrived at. Such errors as exist in the final results are believed to depend mainly upon errors in the index series used for reducing the original quantities to a constant purchasing power and upon errors

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#### TABLE XXXII

#### PERCENTAGES OF ALL INDIVIDUAL INCOME RECIPIENTS IN THE UNITED STATES REPORTING TO THE FEDERAL AUTHORITIES INCOMES BETWEEN THE LIMITS SPECIFIED<sup>a</sup>

YEAR	INCOME	PER CENTS HAVING INDIVIDUAL INCOMES IN 1913 DOLLARS					
	RECIPIENTS IN THE UNITED STATES <sup>5</sup>	Under \$5,000°	\$5,000- \$25,000°	\$25,000- \$150,000°	\$150,000 and Over°		
1914 1915 1916 1917 1918	37,782,000 37,956,000 38,645,635 39,393,530 40,418,942	99.333 99.355 99.270 99.157 99.337	0.599 0.561 0.610 0.735 0.592	0.064 0.078 0.106 0.100 0.068	0.004 0.007 0.015 0.007 0.003		
1919 1920 1921 1922 1923	40,340,534 40,085,558 40,908,634 41,431,319 42,326,573	99.276 99.381 99.399 99.240 99.168	0.654 0.569 0.552 0.685 0.755	0.067 0.049 0.048 0.073 0.074	0.003 0.001 0.001 0.002 0.002		
1924 1925 1926	43,296,225 43,964,358 44,673,550	99.095 98.942 98.928	0.814 0.941 0.961	0.088 0.111 0.106	0.002 0.003 0.006 0.005		

» Derived from Table XXXI.

<sup>b</sup> Includes gainfully occupied persons, plus the number of wives filing separate returns with the Federal Income Tax authorities.

 $^\circ$  The equivalents of \$5,000, \$25,000 and \$150,000 in 1926 dollars are \$8,309, \$41,543 and \$249,255 respectively.

in reporting by the various income tax payers, and not upon the method of interpolation used. The figures in Table XXXI are obtained from those in Table XXX merely by a process of subtraction. The significant analysis begins with Table XXXII. In this table, we find recorded for each year the proportion of the total number of income recipients having incomes between the specified limits when these incomes are measured in terms of dollars of constant purchasing power.

## Distribution of Individual Incomes Measured in 1913 Dollars.

The figures in Table XXXII indicate that, even in the present era of prosperity, only one out of 100 income recipients is fortunate enough to attain the limit of \$5,000 in terms of 1913 dollars. This amount was equal to \$8,309, measured in dollars of 1926. While an income of this size doubtless represents a high standard of comfort,

# THE NATIONAL INCOME

it can scarcely be thought of as indicating affluence. Chart 25 makes it further clear that the great bulk of the American population still consists of people who are not in a position to live lives of luxurious leisure.

At the close of the period under consideration, approximately one income recipient in a thousand could boast of an income equal to \$25,000 in 1913 purchasing power, while but one in 20,000 had an income as large as \$150,000. In numbers, then, the very opulent represent a negligible fraction of the total population, and this has been true throughout the period 1914 to 1926.

## Shifts in the Distribution of Income Recipients.

Perhaps the most interesting comparisons disclosed by Table XXXII are those showing the changes, as the years passed, in the percentages of the inhabitants falling in each class. Is it true that the rich are getting richer and the poor poorer? If so, we should find a constantly increasing percentage of income recipients falling in the lowest income class, and a constantly increasing percentage falling in the highest income class. Chart 26 shows the actual facts to have been as follows: The percentages of income recipients having incomes under \$5,000, while fluctuating somewhat, had an approximately horizontal trend between 1914 and 1921. Since that date, the trend has been steadily downward, that is the proportion of the population included in the lowest income class is growing smaller.

Examination of the two right-hand columns of Table XXXII, and of the lower two graphs in Chart 26 shows that the classes having incomes above \$25,000 increased rapidly in numbers between 1914 and 1916. This change in numbers is doubtless explained in part by the fact that business in the United States was moving from depression into prosperity, and in part by the fact that war orders from European combatants tended to give very large incomes to a limited number of Americans. With the entrance of the United States into the war in 1917, came a shrinkage in the percentages of income recipients included in the two highest income classes. This shrinkage continued rapidly until 1920, being unchecked by the boom of 1919 and 1920. Its effect was most marked in the case of the class having the highest incomes, the percentage in this class being reduced from 0.015 to 0.001 during this period; in other words, in 1921 there was only one person in the highest income class as compared to 15 in the year 1916. Since 1921, the numbers in CHART 25



• For data, see Table XXXI.

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the three higher income classes have again grown. The number receiving incomes from \$25,000 to \$150,000 doubled before 1926, while the number receiving incomes of \$150,000 and over, was multiplied by 5. The net result of the changes between 1914 and 1926 was to leave the proportion receiving incomes of more than \$150,000 approximately the same as at the beginning of the period, while the proportion of income recipients obtaining incomes of \$25,000 to \$150,000 was about half as large again in 1926 as in 1914. The number of income recipients in the group having incomes between \$5,000 and \$25,000 has fluctuated somewhat less violently than have the numbers located in the higher income classes. There was, however, an increase in number between 1914 and 1917, and a diminution between 1917 and 1921, just as was the case with the still more prosperous sections of the population. Since 1921, there has been a steady and marked increase in the proportion of all income recipients falling within this class.

The general evidence of Table XXXII indicates, then, that the lower incomes are the more stable, and that the very highest class of incomes fluctuates most of all. When the entire period is taken into consideration, the most marked increase in any of the four classes is in that comprising incomes between \$5,000 and \$25,000. There has been a tendency for those in the lowest income class to climb up into this class. There has also been some tendency for those in the \$5,000 to \$25,000 class to ascend into the higher classes, but this tendency has been much less marked. Since 1921, apparently all classes of the population have been participating in the prevailing widespread prosperity.

## The Apportionment Among Income Classes of Total Realized Income Measured in 1913 Dollars.

The figures in Table XXXII give us a good picture of the proportions of income recipients found in each of the four classes under consideration, but they tell us but little concerning the proportions of the total realized income of the nation going to the persons in each class. Is it true that, although income recipients receiving more than \$150,000 in 1913 purchasing power are few in number, they nevertheless control the lion's share of the national income, while the masses with incomes below \$5,000, on the 1913 basis, have the smaller part of the total income? Table XXXIII is designed to throw light upon this question. This table and Chart 27 show that the persons in the lowest of the four classes of income recipients

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• For data see Table XXXII.

#### TABLE XXXIII

# PERCENTAGES OF THE ENTIRE REALIZED INCOME OF ALL THE INHABITANTS OF THE UNITED STATES CONSTITUTED BY THE AMOUNTS REPORTED TO THE FEDERAL GOVERNMENT<sup>®</sup>

	REALIZED	PER CENTS INCLUDED IN INDIVIDUAL INCOMES IN 1913 DOLLARS					
YEAR ALL INHABITANTS OF THE UNITED STATES (Millions of 1913 Dollars		Under \$5,000°	\$\$5,000- \$25,000°	\$25,000- \$150,000°	\$150,000 and Over®		
1914	\$35,250	89.782	5.821	3.121	1.277		
1915	36,636	88.427	5.421	3.810	2.342		
1916	39,559	86.820	5.258	4.307	3.615		
1917	40,242	87.506	6.058	4.224	2.212		
1918	40,150	91.318	5.006	2.780	. 897		
1919	38,017	90.389	5.892	2.925	. 794		
1920	37,573	92.447	5.254	1.935	.365		
1921	36,710	92.558	5.197	1.937	. 308		
1922	40,565	90.430	6.003	2.823	.744		
1923	45,164	90.729	5.978	2.633	. 660		
1924	46,758	89.482	6.420	3.268	.830		
1925	48,412	86.844	7.422	4.049	1.686		
1926	50,421*	87.277	7.275	3.792	1.656		
		<u> </u>					

Derived from Table XXXI.

<sup>b</sup> See Table IX.

• The equivalents of \$5,000, \$25,000 and \$150,000 in 1926 dollars are \$8,309, \$41,543 and \$249,255 respectively. \* Preliminary estimate.

received, in 1926, approximately 7/8 of the entire realized income of the nation, while those having incomes of \$150,000 obtained, in the aggregate, only 1/60 of the entire realized income of the nation's If all of the income of persons having more than inhabitants. \$5,000 of 1913 purchasing power, or, in other words, \$8,309 having the value current in 1926, were distributed proportionately among the persons having less than the \$8,309 specified, the incomes of this poorer group would be increased by only 1/7; in fact this change would be less than that which was caused between 1922 and 1926 by the general increase in the productiveness of American industry.<sup>1</sup>

<sup>1</sup>If the wealthier persons were allowed to retain \$8,309 each and excess incomes only were distributed the average income in the poorest class would be increased but 1/11.





For data, see Table XXXIII.
Over \$150,000.

## Changes in Apportionment of Aggregate Income.

A year-to-year comparison of the percentages entered in Table XXXIII and Chart 27 shows that the fraction of the total income going to the poorest of the four income classes diminished between 1914 and 1916, increased between 1916 and 1921, and has since been declining.

There is a manifest tendency for the less prosperous classes of the population to receive in periods of depression a larger percentage of the total national income than that which they receive in times of marked prosperity. High incomes, also, are more responsive to the ups and downs of business than are low incomes. This phenomenon may, to a considerable extent, be explained by the fact that the lower incomes consist, in very large part, of wages and salaries, and, as we have seen, wages, in terms of dollars of constant purchasing power, form a much more stable fraction of the total realized income than do profits. The percentages of the national income going respectively to the classes having incomes of \$25,000 to \$150,000 and to those having incomes over \$150,000 fluctuated in much the same way during the period under consideration. Both percentages rose sharply from 1914 to 1916, declined from 1916 to 1921, and have since been steadily rising. The fluctuations were, however, much more severe in the case of the most opulent class than they were in those receiving the incomes next lower in size. The percentages of the entire realized income received by these two classes were both slightly larger in 1926 than they were in 1914, but were both smaller in 1926 than they were in 1915. One might conclude, therefore, that the long-time trend of these percentages tends to be approximately horizontal. On the other hand, the percentage of the entire realized income going to the class receiving between \$5,000 and \$25,000, although it fluctuated considerably during the 13 years, closed the period at a level materially higher than that which it occupied in 1914. It appears that there is some slight tendency toward a concentration both of numbers of persons and of income in the prosperous class having incomes in 1926 between \$8,309 and \$41,543, but that there is practically no tendency towards the putting of more income into the hands of the extremely opulent sections of the community.