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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. ${ }^{1}$ 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

[^0]
## 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 ${ }^{\text {a }}$

| $\begin{aligned} & \text { 皆 } \end{aligned}$ | individual income in 1913 dollars above |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$5,000 ${ }^{\text {b }}$ |  |  | \$25,000 ${ }^{\text {b }}$ |  |  | \$150,000 ${ }^{\text {b }}$ |  |  |
|  | Class Income in Current Dollars (Millions) | Num- ber of Income Recip- ients | Class <br> Income <br> in <br> 1913 <br> Dollars <br> (Mil- <br> lions) | $\begin{array}{\|c} \text { Class } \\ \text { Income } \\ \text { in } \\ \text { Current } \\ \text { Dollars } \\ \text { (Mil- } \\ \text { lions) } \end{array}$ | Num- ber of Income Recip- ients | Class <br> Income <br> in <br> 1913 <br> Dollars <br> (Dil- <br> lions) |  | Number of Income Recipients |  |
| 1914 | \$3,630 | 252,000 | \$3,602 | \$1,562 | 25,700 | \$1,550 | \$ 453 | 1,600 | \$ 450 |
| 1915 | 4,270 | 245,000 | 4,240 | 2,270 | 32,200 | 2,254 | 864 | 2,620 | 858 |
| 1916 | 5,690 | 282,000 | 5,214 | 3,420 | 46,400 | 3,134 | 1,561 | 5,610 | 1,430 |
| 1917 | 6,465 | 332,000 | 5,028 | 3,330 | 42,300 | 2,590 | 1,145 | 2,860 | 890 |
| 1918 | 5,290 | 268,000 | 3,486 | 2,240 | 28,700 | 1,476 | 547 | 1,260 | 360 |
| 1919 | 6,420 | 292,000 | 3,654 | 2,485 | 28,200 | 1,414 | 531 | 1,220 | 302 |
| 1920 | 5,620 | 248,000 | 2,838 | 1,710 | 20,100 | 864 | 272 | 440 | 137 |
| 1921 | 4,625 | 246,000 | 2,732 | 1,395 | 20,200 | 824 | 192 | 390 | 113 |
| 1922 | 6,145 | 315,000 | 3,882 | 2,290 | 31,200 | 1,447 | 478 | 950 | 302 |
| 1923 | 6,690 | 352,000 | 4,187 | 2,375 | 32,300 | 1,487 | 476 | 940 | 298 |
| 1924 | 7,880 | 392,000 | 4,918 | 3,070 | 39,600 | 1,916 | 622 | 1,350 | 388 |
| 1925 | 10,520 | 465,000 | 6,369 | 4,585 | 51,200 | 2,776 | 1,348 | 2,550 | 816 |
| 1926 | 10,660 | 479,000 | 6,415 | 4,565 | 49,700 | 2,747 | 1,388 | 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.
b 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 ${ }^{\text {a }}$

| year | INDIVIDUAL INCOME IN 1913 DOLLARS |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under \$5,000 ${ }^{\text {b }}$ |  | \$5,000-\$25,000 ${ }^{\text {b }}$ |  | \$25,000-\$150,000 ${ }^{\text {b }}$ |  | $\begin{gathered} \$ 150,000 \text { aND } \\ \text { OVER }^{\text {b }} \end{gathered}$ |  |
|  |  | Class |  | Class |  | Class |  | Class |
|  | Number | $\begin{aligned} & \text { Income } \\ & \text { in } \end{aligned}$ | $\begin{gathered} \text { Number } \\ \text { of } \end{gathered}$ | Income in | Number of | Income in | Number of | $\begin{aligned} & \text { Income } \\ & \text { in } \end{aligned}$ |
|  | of Income | 1913 | Income | 1913 | Income | 1913 | Income | 1913 |
|  | Recipients | Dollars | Recip- | - Dollars | Recip- | Dollars | Recip- | Dollars |
|  | Recipients | (Mil- | ients | (Mil- | ients | (Mil- | ients | (Mil- |
|  |  | lions) |  | lions) |  | lions) |  | 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 | 1,430 890 |
| 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 |

[^1]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

TABLE XXXII
PERCENTAGES OF ALL INDIVIDUAL INCOME RECIPIENTS IN THE UNITED STATES
REPORTING TO THE FEDERAL AUTHORITIES INCOMES BETWEEN THE LIMITS SPECIFIED*

| year | INCOMERECIPIENTSIN THEUNITED STATESb | PER CENTS Having individual incomes in 1913 dollars |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Under } \\ & \$ 5,000^{\circ} \end{aligned}$ | $\begin{aligned} & \$ 5,000- \\ & \$ 25,000^{\circ} \end{aligned}$ | $\begin{array}{r} \$ 25,000- \\ \$ 150,000^{\circ} \end{array}$ | $\begin{aligned} & \$ 150,000 \\ & \text { and Over } \end{aligned}$ |
| 1914 | 37,782,000 | 99.333 | 0.599 | 0.064 | 0.004 |
| 1915 | 37,956,000 | 99.355 | 0.561 | 0.078 | 0.007 |
| 1916 | 38,645,635 | 99.270 | 0.610 | 0.106 | 0.015 |
| 1917 | 39,393,530 | 99.157 | 0.735 | 0.100 | 0.007 |
| 1918 | 40,418,942 | 99.337 | 0.592 | 0.068 | 0.003 |
| 1919 | 40,340,534 | 99.276 | 0.654 | 0.067 | 0.003 |
| 1920 | 40,085,558 | 99.381 | 0.569 | 0.049 | 0.001 |
| 1921 | 40,908,634 | 99.399 | 0.552 | 0.048 | 0.001 |
| 1922 | 41,431,319 | 99.240 | 0.685 | 0.073 | 0.002 |
| 1923 | 42,326,573 | 99.168 | 0.755 | 0.074 | 0.002 |
| 1924 | 43,296,225 | 99.095 | 0.814 | 0.088 | 0.003 |
| 1925 | 43,964,358 | 98.942 | 0.941 | 0.111 | 0.006 |
| 1926 | 44,673,550 | 98.928 | 0.961 | 0.106 | 0.005 |

a Derived from Table XXXI.
b Includes gainfully occupied persons, plus the number of wives filing separate returns with the Federal Income Tax authorities.

- 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,
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


- For data, see Table XXXI.
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 $19{ }^{3} 3$ 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

CHART 26

PERCENTAGES OF INDIVIDUAL INCOME RECIPIENTS INCLUDED BETWEEN FIXED INCOME LIMITS ${ }^{\text {a }}$

\$25.000-\$150,000 DOLLARS OF 1913
OVER $\$ 150,000$ DOLLARS OF 1913 $\$ 41.543-\$ 249.255$ DOLLARS OF 1926

OVER $\$ 249,255$ DOLLARS OF 1926



- 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 ${ }^{\wedge}$

| YEAR | REALIZEDINCOME OFALLINHABITANTSOF THEUNITED STATES(Millions of1913 Dollars) | PER CENTS INCLUDED IN INDIVIDUAL INCOMES IN 1913 DOLLARS |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Under } \\ & \$ 5,000^{\mathrm{c}} \end{aligned}$ | $\begin{aligned} & \$ 5,000- \\ & \$ 25,000^{\circ} \end{aligned}$ | $\begin{aligned} & \$ 25,000- \\ & \$ 150,000^{\circ} \end{aligned}$ | $\begin{aligned} & \$ 150,000 \\ & \text { and Over } \end{aligned}$ |
| 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 |

- Derived from Table XXXI.
${ }^{b}$ 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 inhabitants. If all of the income of persons having more than $\$ 5,000$ 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. ${ }^{1}$

[^2]
## RELATIVE PROPORTIONS OF THE

REALIZED INCOME OF ALL THE PEOPLE RECEIVED BY PERSONS
HAVING INCOMES OF THE CLASSES SPECIFIEDa


- 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.


[^0]:    ${ }^{1}$ 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.

[^1]:    - Derived from Table XXX.
    b The equivalents of $\$ 5,000, \$ 25,000$ and $\$ 150,000$ in 1926 dollars are $\$ 8,309, \$ 41,543$ and $\$ 249,255$ respectively.
    * Preliminary estimate.

[^2]:    'If the wealthier persons were allowed to retain $\$ 8,309$ each and excess incomesonly were distributed the average income in the poorest class would be increased but $1 / 11$.

