This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: The National Income and Its Purchasing Power

Volume Author/Editor: Willford Isbell King, assisted by Lillian Epstein

Volume Publisher: NBER

Volume ISBN: 0-87014-014-0

Volume URL: http://www.nber.org/books/king30-1

Publication Date: 1930

Chapter Title: IV. Industrial Origin of Total Realized Income

Chapter Author: Willford Isbell King

Chapter URL: http://www.nber.org/chapters/c6382

Chapter pages in book: (p. 73 - 106)

### CHAPTER IV

### INDUSTRIAL ORIGIN OF TOTAL REALIZED INCOME

### Imputed Income.

Estimates of the aggregate realized income of the people of the Continental United States are presented in Table VIII. One of the important columns appearing in this table bears the title "Imputed Income." This column refers to the estimated value of the services rendered to their owners by durable direct or consumers' goods. Of the fact that durable consumable commodities render services having great economic value, there can be no doubt. For example, if each of two men working in the same office has accumulated \$10,000, one man may purchase a house and the other invest in bonds and use the interest received on these bonds to pay the rent of his residence. Under these circumstances, both men have used similar amounts of accumulated funds to obtain similar services and, if the two houses are alike, there seems to be no logical reason for assuming that one man receives more income from his \$10,000 than does the other. When we save money, we have the option of investing it and using the money return to buy such services of goods as we desire, or we can use the money to purchase the goods and thus control all of their future services. The services have equal value in either case. It seems only fair, then, to include in the income of the people of the nation an item representing the value of the services of the durable consumption goods which they own. Unfortunately, the total value of the services of such goods cannot be estimated with any degree of precision, since, for the most part, no statistical data on the value of these services are available. Under the circumstances, we have been forced to adopt for many of these goods the somewhat doubtful expedient of basing the estimated value of the services upon the market value of the goods rendering the services. The procedure for such goods has been to estimate the value in the hands of consumers, applying to that market value a fixed rate of interest, namely 6 per cent. This procedure has not, however, been applied to the services of residential property. We have estimated directly the rental value of urban homes occupied by their owners. The results of these computations

#### TABLE VIII

# ESTIMATED REALIZED INCOME® OF THE PEOPLE OF THE CONTINENTAL UNITED STATES

(MILLIONS OF CURRENT DOLLARS)

	Total Includ-		F ENTRE	PERTY	1	ES <sup>e</sup>	Total Exclud-		
YEAR	ing Imput- ed Income	Imput- ed Income	Com-	Total	Wages	Salaries	Pensions, Compensations, etc.	Total	ing Imput- ed Income
1909 1910 1911 1912 1913 1914 1915 1916 1917 1918 1919 1920 1921 1922 1923	31,430 31,858 33,977 35,723 35,647 37,205 43,288 51,331 60,408 65,949 73,999 63,371 65,925	\$1,944 2,085 2,198 2,222 2,330 2,420 2,515 2,703 3,017 3,750 4,321 5,557 5,100 4,738 5,042	\$12,571 13,078 13,162 14,168 14,571 14,711 15,330 18,114 22,512 24,334 26,229 26,159 22,057 23,487 26,402	\$14,515 15,163 15,360 16,390 16,901 17,131 17,845 20,817 25,529 28,084 30,550 31,716 27,157 28,225 31,444	\$10,529 11,330 11,325 12,112 13,017 12,396 13,117 15,660 17,741 20,414 23,029 29,540 23,353 24,553 28,691	\$ 4,316 4,682 4,918 5,203 5,503 5,809 5,926 6,376 7,665 11,232 11,576 11,727 11,855 12,050 13,156	\$ 246 254 256 273 302 311 317 434 396 678 794 1,016 1,006 1,097 1,046	\$15,090 16,266 16,498 17,587 18,822 18,516 19,361 22,470 25,802 32,324 35,399 42,283 36,213 37,700 42,893	\$27,661 29.345 29.660 31,755 33,393 33,227 34,690 40,585 48,314 56,658 61,628 68,442 58,271 61,187 69,295
1924 1925 1926 1927 1928	81,931 85,548* 88,205*	5,230 5,370 5,264* 5,284* 5,300*	27,412 29,706 30,517* 31,561* 32,996*	32,642 35,076 35,781* 36,845* 38,296*	29,051 30,762 32,604* 32,884* 32,235*	14,200 15,008 15,991* 17,248* 17,823*	1,243 1,085 1,173* 1,229* 1,065*	44,493 46,855 49,767* 51,360* 51,123*	71,905 76,561 80,284* 82,921* 84,119*

a For definition of this term, see text.

appear in the third column of Table VIII. It will be seen that this item of imputed income increased from not quite two billions of dollars in 1909 to  $5\frac{1}{4}$  billions in 1927, at both dates representing approximately 6 per cent of the estimated total realized income of all the people.

<sup>1</sup>For further details concerning the mode of estimating miscellaneous and imputed income, see *Income in the United States*, Vol. II, Chapter 19. The figure here used for the rental value of homes is a *net* and not a *gross* estimate.

<sup>&</sup>lt;sup>b</sup> Includes also miscellaneous payments to non-investors, and entrepreneurial and investment income of employees.

<sup>•</sup> Excludes income derived from entrepreneurial activities or investments.

<sup>\*</sup> Preliminary estimate.

Since, as just stated, the estimates of imputed income are unavoidably based upon very scanty data and hence inspire no great degree of confidence, two totals of realized income are presented in Table VIII, the one at the left representing the total including imputed income, and the one at the right excluding imputed income.

#### Items Omitted from the Realized Income Here Recorded.

It will be remembered that neither of the totals of realized income here set forth includes any allowance for the income which might be imputed to housewives and householders for services rendered to their own families, nor do they include the value of services by individuals rendered to themselves, nor the value of goods and services received by employees in the guise of expense accounts, nor money earned through odd-job employment. The first two classes of items are so large in value that, were they included, the totals presented in Table VIII might be magnified much or little, depending upon the method of estimation used. All of these categories have been excluded because their computation is necessarily a matter of guess work. It will also be remembered that the total of realized income does not include any income arising from changes in the value of property.

### Entire Realized Income in Current Dollars.

The totals including imputed income, appearing at the left hand side of Table VIII, indicate that the realized income of the people of the United States which, in 1909, was approximately 29½ billions of dollars, had risen by 1928 to 89½ billions, slightly more than trebling. This increase, however, must not be taken too seriously, for, to a considerable extent it represents nothing more than a change in the value of the dollar.

#### Shares in the Realized Income.

It will be observed that the total realized income is made up of two parts, first, the share of entrepreneurs and other property owners, and second, the share of the employees. As indicated by the sub-titles, the share of the employees consists of wages, salaries, pensions, and compensation for injuries. As here defined, this share represents income from employment and does not include income which employees may receive as a result of entrepreneurial activities or as a return on investments. Both of the latter types of income are included as a part of the share of entrepreneurs and

other property owners. In short, the classification here adopted classifies the income and not the recipients. The share of the entrepreneurs and other property owners includes the item of imputed income previously discussed, and also a much larger item, entitled "Money and Commodity Income." Leading items comprised under the last-mentioned heading are dividends on stocks. interest on mortgages and funded debt, rents derived from real estate, royalties obtained from patents, copyrights, and the production of minerals, and miscellaneous net income accruing from ownership of property. The category "Money and Commodity Income" also includes the estimated total amount of profits withdrawn for personal use by entrepreneurs from the enterprises which they direct. Most of the income recorded in this column is received in the form of money or money equivalents, such as checks, but some is made up of commodities. For example, merchants may take from the stock in their stores goods for consumption at home. Farmers commonly derive a considerable fraction of their living from the wood, vegetables, fruits, honey, milk, butter, and meat produced on their own farms. These farm-grown products have been evaluated at the average prices prevailing on the farms of the United States at the given dates.

On account of the fact that records of entrepreneurial profits are difficult to obtain and even more difficult to apportion between savings and money withdrawn from the business, the figures showing the share of entrepreneurs and other property owners are subject to a much greater possibility of error than are those recording the total share of the employees, a share consisting of wages, salaries, pensions, and compensation for injuries.

Reference to Table VIII shows that the combined wage, salary, and pension bill of the nation is larger in every year than the share of the entrepreneurs and other property owners. The differential, which before 1917 was relatively small, has grown until, in 1927, the employees were receiving in realized income almost 40 per cent more than the entrepreneurs and other property owners. Roughly, two-thirds of the share of the employees consists of wages, while salaries account for something like one-third, pensions and compensations for injuries together forming but a relatively small item.

# Entire Realized Income in Terms of 1913 Dollars.

The data contained in Table IX are of much greater significance than are those found in Table VIII, for all values in Table IX have

#### TABLE IX

# PURCHASING POWER, IN 1913 DOLLARS, OF ESTIMATED REALIZED INCOME OF THE PEOPLE OF THE CONTINENTAL UNITED STATES

(MILLIONS OF 1913 DOLLARS)b

	Total Includ-	PROI	F ENTRE	R	SI	es <sup>e</sup>	Total Exclud-		
YEAR	ing Imput- ed Income	Im-	Money and Com- modity Income®	Total	Wages	Salaries	Pensions, Compensations, etc.	Total	ing Imput- ed Income
1909	\$31,300	\$2,079	\$13,275	\$15,354	\$11,113	\$ 4,573	\$260	\$15,946	\$29,221
1910	32,380	2,173	13,441	15,614	11,668	4,836	262	16,766	30,207
1911		2,286	13,615	15,901	11,679	5,076	264	17,019	30,634
1912 1913		2,283 2,343	14,460 14,591	16,743 16,934	12,336 13,017	5,299 5,503	278 302	17,913 18,822	32,373 33,413
1913	35,750	2,343	14,391	10,934	13,017	3,303	302	10,022	33,413
1914	35,250	2,409	14,602	17,011	12,216	5,717	306	18,238	32,841
1915	36,636	2,499	15,351	17,850	12,728	5,751	307	18,786	34,137
1916	39,559	2,563	16,783	19,346	14,081	5,742	390	20,214	36,996
1917		2,629	17,716	20,345	13,671	5,922	304	19,897	37,613
1918	40,150	2,889	16,573	19,462	13,036	7,220	433	20,688	37,261
1919	38,017	2.919	15.645	18,564	12,610	6.409	434	19,453	35,098
1920		3,225	13,963	17,188	14,194	5,703	488	20,385	34.348
1921		3,072	13,357	16,429	13,077	6,645	559	20,282	33,638
1922	40,565	2,942	14,941	17,883	14,785	7,242	655	22,682	37,623
1923	45,164	3,092	16,747	19,839	16,938	7,774	614	25,325	42,072
1924	46,758	3,181	17,309	20,490	17,148	8,389	730	26,267	43,577
1925		3,221	18,118	21,339	17.781	8,668	623	27,072	45,191
1926			18,684*	21,844*	18,729*	9,179*	669*	28,577*	47,261*
1927		3,237*	19,596*	22,833*	19,251*	10,093*	713*	30,059*	49,655*
1928			20,725*	24,055*	18,895*	10,447*	624*	29,967*	50,692*

 $<sup>^{\</sup>bullet}$  "1913 Dollars" is an abbreviation for the phrase "dollars having purchasing power equivalent to that which they had in 1913."

been reduced to terms of dollars having purchasing power equal to that which they possessed in 1913, and hence, fluctuations due to changes in the purchasing power of money have been eliminated. Including imputed income, the entire realized income of the people

b Computed from the corresponding items in Table VIII, by dividing by the appropriate price indices recorded in Table VII.

<sup>·</sup> For definition of this term, see text.

 $<sup>{</sup>f d}$  Includes also miscellaneous payments to non-investors, and entrepreneurial and investment income of employees.

<sup>•</sup> Excludes income derived from entrepreneurial activities or investments.

<sup>\*</sup> Preliminary estimate.

of the United States rose from 31 billions of constant dollars in 1909, to nearly 53 billions of the same dollars in 1927, representing an increase equal to more than two-thirds of the amount for the first date mentioned. The score of years covered by Table IX may well be divided into three parts. The first period, running from 1909 to 1916, was one of rapidly increasing income, broken only by a slight decline in 1914, doubtless caused by the business depression of that year. The second period, which includes the years 1918 to 1921, was characterized by a sharp decline in the total national income, presumably due partially to the disturbance of industry incident to its conversion from a war to a peace basis, and partially to the disrupting effect of the great price collapse of 1920 and 1921. The third period, which begins with 1922, and continues up to 1928, has witnessed a marked rise in the total income, the ascent being at a rate even more rapid than that characterizing the period 1909 to 1917; in fact, between 1921 and 1927, the purchasing power of the income of the people of the United States increased by approximately 44 per cent. It is probable that no other nation at any time in history has ever enjoyed such a marked advance in income in anything like the same space of time. In most of the older sections of the world, indeed, the attainment, even in a century, of such a proportionate increase of income would be regarded as remarkable.

## Share of Enterprise and Property Measured in 1913 Dollars.

The figures in the fifth column of Table IX show that, during the two decades covered by the investigation, the dates and general nature of the oscillations occurring in the entire realized income of entrepreneurs and other property owners corresponded closely to those in the entire realized income of all classes, but that the income of the entrepreneurs and property owners was less stable than was the income of all gainfully occupied persons. From what has just been said, it follows that the total wage and salary income of emplovees has shown much less tendency to fluctuate than has the total income of the propertied classes. Two slight declines occurred in 1914, in 1918, and in 1921, but, in no case did any decline cover a period of years in succession, as was notably true of the income of entrepreneurs and property owners during the period 1918-1921. In the case of the employees, by contrast, the period 1917 to 1922 was merely one in which the income total remained nearly stationary, undergoing nothing more than minor fluctuations.

## Share of Employees Measured in 1913 Dollars.

Salaries tend to be more stable than wages. The total purchasing power of all salaries shows no decline of any consequence, except in the years 1919 and 1920, the falling off in these years being primarily due to the disbanding of the Army, and the consequent reduction in the number of salaried workers, all soldiers having been included in the class of salaried employees. Total wages, on the other hand, when measured in dollars of constant purchasing power, register declines in 1914, 1917, 1918, 1919, and 1921, showing that wages are more susceptible than salaries to the fluctuations connected with the business cycles. The item, "Pensions, Compensations, etc." shows a definite tendency to advance to higher levels, being nearly three times as great in 1927 as in 1909. For many industries, however, data concerning this item are missing, hence the totals cannot be considered as complete.

## Proportional Shares in Realized Income.

The figures in Table IX are, of course, affected materially by the fact that this is a growing country with a rapidly increasing population. The estimates presented in Table X, however, are particularly interesting because they record the approximate relative shares of the total realized income of the people obtained respectively from various sources.

This table and Chart 6 make it clear that, while the percentage of the total realized income represented by imputed income has remained approximately constant, the fraction representing money and commodity income going to entrepreneurs and other property owners has fallen off markedly since 1917. Before that date, it tended to remain steadily in the neighborhood of  $41\frac{1}{2}$  per cent. In 1917, however, it advanced sharply to nearly 44 per cent, but it then began an abrupt decline which continued until a figure of approximately 35 per cent was reached in 1920. Since that date, the percentage has remained roughly on this level.

The wage share in the entire realized income of the nation remained in the neighborhood of 35½ per cent between 1909 and 1916. During the next three years it fell off noticeably, the decline being accounted for in part by the entrance of a considerable proportion of the wage earning male population of the country into the Army when, according to our scheme of classification, they were ranked as salaried employees rather than wage earners and their earnings were, of course, transferred to the salary category. In 1920, the

#### TABLE X

# ESTIMATED PERCENTAGES OF THE ENTIRE REALIZED INCOME OF THE PEOPLE OF THE CONTINENTAL UNITED STATES OBTAINED FROM VARIOUS SOURCES.

YEAR	All Sources			NERS <sup>b</sup>	SHARE OF EMPLOYEES				
		Im- puted Income	Money and Com- modity Income	Total	Wages	Salaries	Pensions, Compensations, etc.	Total	
1909	100.00	6.57	42.46	49.03	35.56	14.58	.83	50.97	
1910	100.00	6.63	41.61	48.24	36.05	14.90	.81	51.75	
1911 1912	100.00 100.00	6.90 6.55	41.31 41.70	48.21 48.24	35.55 35.65	15.44 15.31	.80 .80	51.79	
1912	100.00	6.52	40.79	48.24	36.44	15.31	.85	51.76 52.69	
1913	100.00	0.52	10.77	47.51	30.44	13.40	.00	32.09	
1914	100.00	6.79	41.27	48.06	34.77	16.30	. 87	51.94	
1915	100.00	6.76	41.20	47.96	35.26	15.93	. 85	52.04	
1916	100.00	6.24	41.85	48.09	36.18	14.73	1.00	51.91	
1917	100.00	5.88	43.86	49.73	34.56	14.93	.77	50.26	
1918	100.00	6.21	40.28	46.49	33.79	18.59	1.12	53.51	
1919	100.00	6.55	39.77	46.32	34.92	17.55	1.20	53.68	
1920	100.00	7.51	35.35	42.86	39.92	15.85	1.37	57.14	
1921	100.00	8.05	34.81	42.85	36.85	18.71	1.59	57.14	
1922	100.00	7.19	35.63	42.81	37.24	18.28	1.66	57.19	
1923	100.00	6.78	35.52	42.30	38.60	17.70	1.41	57.70	
4004	100 00	6 70	25 54	40.22	27 66	10.44	1 (1	F# 40	
1924	100.00 100.00	6.78 6.55	35.54 36.26	42.32 42.81	37.66 37.55	18.41 18.32	1.61 1.32	57.68 57.19	
1925 1926	100.00	6.15	35.68	42.81	38.11	18.69	1.32	58.17	
1927	100.00	5.99	35.78	41.77	37.28	19.55	1.39	58.23	
1928	100.00	5.93	36.90	42.83	36.05	19.93	1.19	57.17	

<sup>.</sup> These percentages are derived from the data in Table VIII.

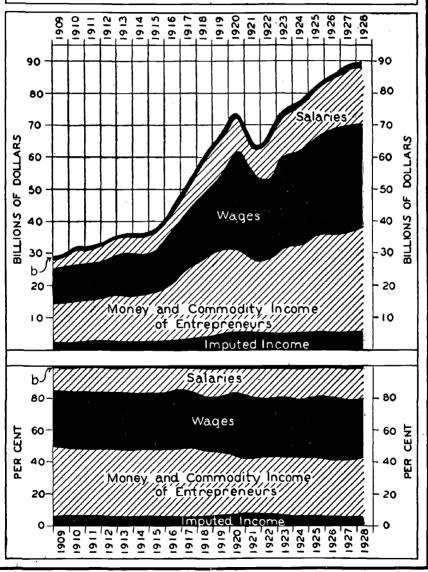
proportion of the entire realized income going to wage workers jumped to its highest point, almost reaching the 40 per cent mark, but, in 1921 it broke sharply, and since that date has remained roughly on a level, hovering between 36 and  $38\frac{1}{2}$  per cent.

The salary share has, in general, been upward throughout the two decades. A fairly steady rise marked the period 1909 to 1914. The percentage then dropped off noticeably until 1917, but rose

b Includes entrepreneurial and investment income of employees.

<sup>·</sup> Excludes entrepreneurial and investment income of employees.

# ESTIMATED REALIZED INCOME OF THE PEOPLE OF THE CONTINENTAL UNITED STATES<sup>a</sup>



For data, see Tables VIII and X.
 Pensions, compensations, etc.

sharply in 1918 because of the inclusion of the soldiers among the salaried employees. With the return of the men from the Army to civil life, the percentage declined again. Advances in wage rates during 1919 and 1920 kept the proportion falling during those two years. The fact that salaried employees generally held their positions in 1921 and 1922, while wage workers were in many cases idle, again lifted the percentages for salaried employees to a higher level during that biennium, but the return of business activity in 1923 caused the share of the salaried employees to decline somewhat. Since that date, however, their share in the realized income of the nation has been steadily on the up-grade. The net result of these changes, is that, in 1928, the salaried employees of the country received in the form of salaries approximately 20 per cent of the total realized income, as compared with only  $14\frac{1}{2}$  per cent thus received in 1909.

To a considerable extent, this increase in the fraction of the entire national income which salaried employees are able to draw, is accounted for by the fact already noted, that salaried employees have, during recent years, constituted a steadily growing percentage of the entire gainfully occupied population. As entrepreneurs have ceased functioning as directors of business enterprises and have instead become salaried employees, there has of course been a tendency for the income previously going to the entrepreneurial class to be transferred to the salaried group.

The growth in the percentages of the entire realized income represented by pensions, compensations for injuries, etc. is to some extent the result of the growing tendency of corporations to make provision for the misfortunes of employees. A considerable proportion of the increase, however, is accounted for by the fact that, since the World War, the United States Government and some of the States have been paying out very considerable amounts to those who suffered injury because of their service in the army.

Table X shows us the extent to which salaried employees participate in the entire realized income of the nation. It must be remembered, however, that salaried employees are far from constituting a homogeneous group, for, under this title, are comprised grades of workers running in rank all the way from the President of the United States to the most poorly paid typists and filing clerks. The question naturally arises, therefore, as to whether the 10 billions of dollars disbursed in the form of salaries by various employers goes, in the main, to a small number of highly paid executives, or

whether it consists primarily of payments to clerical workers. Unfortunately, data are too scanty to enable us to answer this question for the nation as a whole with any degree of confidence. As it happens, however, scattered figures are obtainable from the reports of the Bureau of the Census and the Interstate Commerce Commission, which enable us to divide the total income of six industries in certain years into the following four divisions, namely:

- 1. The share of the entrepreneurs and other property owners.
- 2. Salaries of officials and managers.
- 3. Clerical salaries.
- 4. Wages.

These figures, when converted to percentages of the entire realized income of the given industries in the given years, appear in Table This table shows us that the apportionment of the realized income differs widely in different industries. For example, in the field of manufacturing, entrepreneurs and property owners have received no more than 14 to 20 per cent of the realized income derived from the industry, whereas, in the private electric light and power industry, the same group have obtained between 53 and 58 per cent. Before 1914, the entrepreneurial and property owning interests were accustomed to obtaining about one-third of the entire realized income arising from railroading, but the percentage declined in 1919 to about 18½ per cent and continued on that level until Since the last mentioned date, their percentage has, however, been increasing. The percentage going to the owners in the telephone and street railway fields also fell off sharply between 1912 There, as in the case of railroads, the decline was preand 1922. sumably due, in the main, to the increase in operating expenses, resulting from currency inflation, while at the same time selling rates for services were fixed by law or by public regulation and hence the owners of the industry could not adjust the rates upward in a degree sufficient to offset the effect of the diminished value of the dollar.

The various industrial fields show wide differences in the respective proportions of their totals of realized income which they find it necessary to disburse to executives in the form of salaries. Both railways and street railways are apparently able to operate successfully by paying to officials and managers less than 3 per cent of their entire realized income. Electric light and power companies in 1907 paid as much as  $8\frac{1}{2}$  per cent, but this percentage has been

#### TABLE XI

# ESTIMATED APPORTIONMENT OF THE ENTIRE REALIZED INCOME RECEIVED BY INDIVIDUALS FROM CERTAIN INDUSTRIES DOMINATED BY CORPORATIONS<sup>a</sup>

				Per	CENT C	F Entir	e Real	ized In	COME			
YEAR	PROFIT	S, RENT		ENDS AN		REST ON	N SALARIES OF OFFICIALS AND MANAGERS					
CENSUS	Fac- tories <sup>b</sup>	Min- ing•	Rail- roads <sup>d</sup>	Street Rail- ways•	Private Electric Light and Powers	Tele- phones•	Fac- tories <sup>b</sup>	Min- ing•	Rail- roads <sup>d</sup>	Street Rail- ways•	Private Elec- tric Light and Power	Tele- phones
1907				44.90	57.86	33.48				2.71	8.51	Í
1909 1912	20.07	28.55	35.38 32.24	45.24	55.85	31.15	7.97	3.83	2.12 2.14	3.02	7.33	6.34
1914	20.46		32.39				8.15		2.39			
1917 1919	15.23	24.47	27.47 18.47	41.23	57.57	27.62	9.09	5.65	2.35 1.99	2.86	6.10	6.87
1921	16.64		18.63				· f		2.81			
1922 1923	14.47		19.80 18.74	29.22	52.96	22.31	f		2.88	3.07	5.62	.5.61
1925			21.08				f		2.96			

<sup>&</sup>lt;sup>a</sup> Total of four shares may equal slightly less than 100% owing to the fact that pensions, compensations for injuries, etc. are not included.

falling off until, in 1922, salaried executives and managers received but 5.6 per cent of the total realized income arising from that industry. In mining, on the other hand, between the census year of 1909 and the next census year of 1919, there was a marked increase in the proportion going to managerial employees. Presumably this represents the transfer of many mines from ownership by individual entrepreneurs to control by large corporations which were, of course, compelled to employ salaried managers to look after their property.

When it comes to clerk hire, the same wide discrepancies between different industries are noticeable. Railroads, which pay such a small proportion of their total income to officials and man-

b Based upon Census of Manufactures and reports of a large number of corporations.

Based upon Census of Mines and Quarries and reports of a large number of corporations.
 d Based upon Statistics of Railways published by the Interstate Commerce Commission. Includes switching and terminal companies.

<sup>•</sup> Based upon Census of Electrical Industries.

<sup>1</sup> Data not available.

#### TABLE XI-Continued

# ESTIMATED APPORTIONMENT OF THE ENTIRE REALIZED INCOME RECEIVED BY INDIVIDUALS FROM CERTAIN INDUSTRIES DOMINATED BY CORPORATIONS\*

YEAR			CLERICAL	SALARIE	3S				w	AGES		
CENSUS Y	Fac- tories <sup>b</sup>	Min- ingo	Rail- roads <sup>d</sup>	Street Rail- ways•	Private Electric Light and Power	Tele- phones•	Fac- tories <sup>b</sup>	Min- inge	Rail- roads <sup>d</sup>	Street Rail- ways•	Private Elec- tric Light and Power	Tele- phones <sup>e</sup>
1907				2.00	5.67	f				50.39	27.97	48.45
1909	9.00	2.30	12.29	4.10	10.63	13.43	62.30	65.33		47.64	26.19	48,01
1912			12.29	4.10	10.03	13.43			52.11	47.04	20.19	40,01
1914	10.57		14.21				59.75		49.72			
1917	i		12.52	4.60	10.80	12.45			56.43	51.31	25.53	51.18
1919	9.00	2.42	14.60		ĺ		65.67	67.46	63.98			
1921	1		17.81				62.68		59.77			İ
1922	]		18.62	6.06	14.09	14.49			57.65	61.65	27.33	55.77
1923	f		17.18		<u> </u>		66.26		60.20	]		
1925	1		17.50				64.57		57.07			

agers, make up for this saving by paying a larger proportion of their total income to clerks than do any of the other industries on the list. Furthermore, the percentage tends to increase rather than to diminish with the passage of time. This increase is accounted for, not so much by an increasing clerical salary bill as by the decline in the entrepreneurial income, a decline due to the shrinkage in profits brought about by the diminution in the value of the dollar. The reason just mentioned probably accounts, to a large extent also, for the fact that, between the years 1917 and 1922, the respective percentages of their total income paid out as clerical salaries showed an increase also in the case of street railways, private electric light and power plants, and telephone companies. Apparently, mining operations in general call for but little clerical work, for the clerks engaged in this field receive less than 2½ per cent of the total income, as contrasted with the 17 or 18 per cent of the railroad income which is paid to railroad clerks.

In manufacturing, the figures presented by the Bureau of the Census indicate that officials and managers secured about half of

the total amount disbursed in salary payments. In mining, they secured the lion's share, leaving about one-third of the total salary roll for clerical work. Railway clerks, on the other hand, received in salaries about six times as much as did railway managers and officials. In 1907, street railway clerks received in toto even less than the officials and managers, but, by 1922, their salaries totalled almost twice as much as the salaries of the men higher in rank. A corresponding change, though even more marked in degree, has occurred in the case of private electric light and power companies. In 1912, the clerical workers in telephone companies received in total salaries about double the aggregate salaries paid to officials and managers. By 1922, the ratio was approaching three to one. The figures just quoted indicate that the division of the total salary bill between managerial employees and the clerical force is dependent upon the nature of the industry and changes with the passage of time. Hence, it is difficult to make any broad generalizations concerning the normal relationship existing between these two quantities.

### Percentage of Realized Income Going to Wages.

The differences in the different industries as regards the percentages of the total realized income going to wages are not as marked as they are in the case of the percentages going to salaries. The general tendency in manufacturing appears to be to pay nearly two-thirds of the realized income to the wage earners, while the corresponding percentage in mining is a trifle higher. Before 1917, the railway wage workers secured something like half of the realized income of that industry, but, since that date, their share has tended to be nearly three-fifths. A similar increase has taken place in the case of street railways, the proportions there being roughly the same as in the case of the steam railways. Private electric light and power companies, on the other hand, are able to operate while paying only 25 to 28 per cent of their income to their wage workers. Telephone companies, like street railways, however, resemble the steam railroads in the proportions of total realized income paid out to wage workers.

## Per Capita Realized Income in Current Dollars.

Table XII, shows the results obtained when the estimated realized income received by various classes has been divided by the number of recipients of the specified type of income, thus reducing

TABLE XII

# ESTIMATED PER CAPITA RECEIPTS FOR VARIOUS CLASSES OF INDIVIDUALS

		CURRENT	Dollars			Dollars	of 1913	
V		AZED OME	î .	ANNUAL IINGS		IZED OME	AVERAGE EARN	
YEAR	Per Capita <sup>b</sup>	Per Person Gain- fully Oc- cupied	Per Salaried Em- ployee	Per Wage Worker <sup>a</sup>	Per Capita <sup>b</sup>	Per Person Gain- fully Oc- cupied	Per Salaried Em- ployee*	Per Wage Workera
1909	\$327	\$ 864	\$ 976	\$ 527	\$346	\$ 914	\$1,034	<b>\$</b> 556
1910	340	895	1,002	552	350	923	1,035	568
1911	339	892	1,022	540	351	922	1,055	557
1912	357	938	1,045	568	364	956	1,064	578
1913	368	965	1,066	594	368	966	1,066	594
1914 1915 1916 1917 1918	360 371 425 497 579	943 980 1,120 1,304 1,496	1,088 1,096 1,148 1,204 1,265	552 582 679 771 940	356 365 389 390 385	933 965 1,024 1,022 994	1,071 1,064 1,034 930 813	544 564 610 594 601
1919	628	1,637	1,453	1,029	362	944	804	563
1920	695	1,850	1,740	1,273	353	939	846	612
1921	585	1,552	1,696	983	339	899	950	550
1922	601	1,595	1,715	1,012	370	981	1,031	610
1923	667	1,763	1,831	1,150	405	1,071	1,082	679
1924 1925 1926 1927 1928	680 712 735* 748* 749*	1,789 1,869 1,920* 1,928* 1,920*	1,896 1,950 2,025* 2,084*	1,134 1,176 1,217* 1,205*	412 421 433* 448* 452*	1,084 1,104 1,132* 1,156* 1,160*	1,120 1,126 1,162* 1,220*	669 680 699* 705*

<sup>•</sup> These averages would be materially higher in bad years were they based upon the numbers actually employed rather than upon the numbers attached to industries.

all figures to a per capita basis. In the second column of Table XII is recorded the average income going in each year to each inhabitant of the United States. While this figure, being an average, cannot of course show anything about the apportionment of income among different sections of the population, the changes from year to year do, nevertheless, have some significance. Per capita realized income, for example, when measured in the dollars current at the various dates, more than doubled between 1909 and 1923, and has since been steadily increasing until, in 1928, the average per capita

b For entire population of the Continental United States.

<sup>\*</sup> Preliminary estimate.

income for all inhabitants of the United States amounted to \$749. For the typical family of five this would make an income of \$3,745. If, then, all of the income of the United States were equally divided among the inhabitants, and if this process of equal division did not reduce the productivity of the nation, (an assumption probably contrary to fact) it is clear that there would be income enough for all the families of the country to live comfortably, but that, according to American standards, none would be affluent. As a matter of fact, of course, the total realized income is far from being equally divided, some families receiving extremely large amounts and others being in poverty.

# Per Capita Realized Income of Gainfully Occupied.

The division of the total income of the country among persons classed as gainfully occupied, is shown in the third column of Table XII. In 1928, the average person working for a money return still received materially less than \$2,000 per annum. It is interesting to observe the close correspondence shown by Chart 7a between the average income per person gainfully occupied and the average salary per salaried worker. Apparently, the latter quantity normally lies about 10 per cent above the former, although the income per person gainfully occupied goes above the average salary level during the years 1917 to 1920, inclusive.

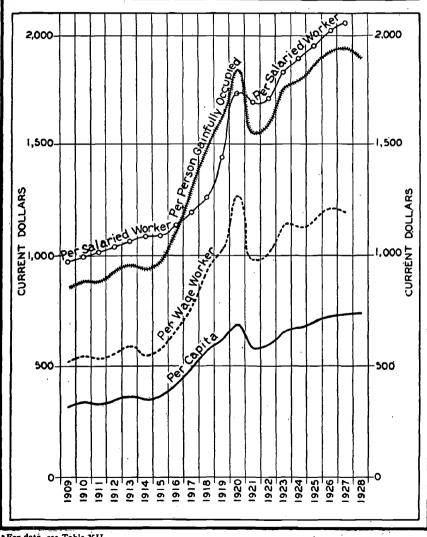
# Average Wages and Average Salaries.

The figures in the 4th and 5th columns differ from those in the two preceding columns, in that they do not deal with an apportionment of the entire realized income of the people of the nation, but represent, respectively, merely the division of the total salary bill and the total wage bill of the nation by the number of persons normally occupied as salaried employees or wage workers as the case may be. These columns indicate that, when measured in terms of gold dollars, the average salary doubled between 1909 and 1925 and is still steadily on the up-grade, while the average wages doubled between 1909 and 1923 and have likewise been climbing higher in more recent years.

## Per Capita Income in 1913 Dollars.

Owing to the fact that the value of money changed so radically during the period 1914 to 1921, the year to year comparisons shown in the first five columns of Table XII have comparatively little

# ESTIMATED PER CAPITA RECEIPTS FOR VARIOUS CLASSES OF INDIVIDUALS<sup>a</sup> (CURRENT DOLLARS)



For data, see Table XII.

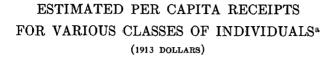
significance. One of the principal uses of the figures in those columns is to serve as a basis for deriving the results presented in the last four columns of the same table. In these latter columns, all amounts have been reduced to quantities indicating the relative amounts of consumers' goods which could have been purchased at the different dates by the average recipient of the given type of income. These figures indicate that per capita realized income, when measured in terms of constant purchasing power, had a marked upward trend between 1909 and 1916, declined between 1917 and 1921 until it was slightly lower than in 1909, and then began a sharp upward movement which continued steadily until 1928. It will be understood, of course, that, since the figures for 1926 and 1927 are merely preliminary estimates, the final computations may modify to some extent the course of the curve in the last two years recorded, though the probabilities are that the trend will not be materially altered. The course of this curve shows that the idea that the average inhabitant of the United States profited financially from the war is wholly fallacious, for not until 1922 did we begin to recover from the effects of those readjustments of industry made necessary by the war, and from the effects of currency inflation resulting from war finance here and abroad.

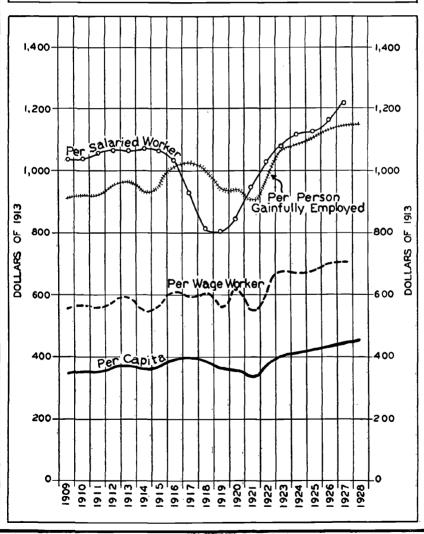
The growth in per capita income since 1921 must, however, be regarded as a remarkable phenomenon. The indications are that, in terms of immediate ability to buy goods for consumption purposes, the average American was approximately one-third better off in 1927 than he was in 1921. Under these circumstances, it is not surprising that a tremendous market has developed for furs, automobiles, radios, and other luxuries which were previously beyond the reach of the masses of the population.

The curve in Chart 7b, recording the changes in the average income per person gainfully occupied, shows approximately the same fluctuations as does the curve representing per capita income. This is true because, throughout the twenty years under consideration, the percentage of the total population classed as gainfully occupied has remained approximately constant.

## Average Wages and Average Salaries in 1913 Dollars.

Chart 7b brings out forcefully the fact that the salaried employees of the United States suffered very materially from the effects of the inflation connected with the World War. The purchasing power of average salaries began to decline in 1915, and continued to fall





<sup>·</sup> For data, see Table XII.

rapidly until 1918. The lowest point was reached in 1919. Since then, the ability of salaried employees to buy consumable commodities has risen rapidly, but it was not until 1923 that the average salaried employee in the United States was financially better off than he was in 1914. In 1927, however, his pay would buy approximately one-seventh more than it would in 1914 and more than half again as much as it would in 1919. The average annual earnings of the wage workers of the United States, when measured in terms of ability to buy consumers' goods, show fluctuations much less marked than do those of the salaried employees. The common assumption, therefore, that the position of the salaried man is relatively secure while that of the wage worker is fraught with risk, needs considerable emendation before it can be accepted. truth apparently is that the salaried employee is much less affected by the ups and downs of the business cycle than is the wage worker. The average wage worker, for example, suffered a considerable cut in purchasing power in 1914 and in 1921, while for the average salaried employees of the nation there was no tendency in either of these years toward a decline in earnings. On the other hand, salaried employees are much more exposed to the evil effects of inflation. So far as can be seen by observing the graph in Chart 7b, the earnings of the average wage worker were not adversely affected by the currency inflation of 1915 to 1920—the trend of the purchasing power of average wages being approximately horizontal, with perhaps a slight upward tendency during the entire period extending from 1909 to 1921. Salaries, however, being fixed largely by custom in terms of the money legal tender at the time, are depressed by every wave of inflation, and are later adjusted upward slowly during a period covering several years. On the other hand, it is of course true that salaried workers gain during periods of deflation, for their salaries are not immediately reduced when commodity prices fall. Since 1923, the purchasing power of the average salary has risen materially more than has the purchasing power of the average wage, the increase between 1923 and 1927 being about 12½ per cent in the case of the average salaried employee as against 4 per cent in the case of the average wage worker.

# Comparison of Salary and Wage Levels.

Table XIII presents some scattered data extracted from various reports of the Federal Government, comparing in various years average wages and average salaries as measured in terms of gold

#### TABLE XIII

### COMPARATIVE FULL-TIME ANNUAL PAY OF DIFFERENT CLASSES OF EMPLOYEES IN CERTAIN INDUSTRIES DOMINATED BY CORPORATIONS

YEAR	F	ACTORIES	j <b>b</b>		ES, QUAI OIL WE		R	AILROADS	d
CENSUS Y	AVERAGE	SALARY	AVER-	AVERAGE	SALARY	AVER-	AVERAGE	SALARY	AVER-
C <sub>E</sub>	Mana- gerial	Cleri- cal	WAGE a	Mana- gerial	Cleri- cal	WAGE	Mana- gerial	Cleri- cal	WAGE*
1909 1914 1919 1921 1923 1925 1927	\$2,060 2,346 3,513	\$ 864 1,003 1,392	\$ 518 580 1,158 1,180 1,254 1,280	\$1,649 2,685	\$ 829 1,260	\$ 552 1,321	\$2,637 2,717 3,483 4,290 4,321 4,427 4,524	\$ 776 841 1,494 1,777 1,776 1,824 1,882	\$ 674 688 1,453 1,591 1,536 1,541 1,570
YEAR	Stre	ET RAILV	VAYS <sup>6</sup>		TE ELECT		Т	ELEPHONE	Se
CENSUS ]	AVERAGE	SALARY	AVER-	AVERAGE	SALARY	AVER-	AVERAGE	SALARY	AVER-
CE	Mana- gerial	Cleri- cal	AGE WAGE <sup>a</sup>	Mana- gerial	Cleri- cal	AGE WAGE <sup>a</sup>	Mana- gerial	Cleri- cal	AGE WAGE <sup>ag</sup>
1907 1912 1917 1922	\$2,058 2,305 2,723 3,600	\$ 677 815 935 1,534	\$ 658 674 872 1,436	\$1,282 1,590 1,980 2,898	\$ 677 742 1,837 1,363	\$ 691 695 838 1,320	\$1,411 1,574 2,565	\$ 709 878 1,426	\$ 427 438 616 1,064

<sup>•</sup> The averages here given represent the pay of those who remained on the payroll continuously and were subject to average conditions of overtime or short time.

dollars. The figures in this table do not, like those which we have just been studying, represent the total wage bill in industry divided among all persons attached to the industry. They represent, instead, the total wage bill or salary bill divided by the average number of wage earners or salaried employees, as the case may be, on the payroll in the field specified. They picture, then,

b Based upon Census of Manufactures.

<sup>·</sup> Based upon Census of Mines and Quarries.

<sup>&</sup>lt;sup>d</sup> Based upon Statistics of Railways, published by the Interstate Commerce Commission. Includes switching and terminal companies.

<sup>·</sup> Based upon Census of Electrical Industries.

<sup>!</sup> Data not available.

Wages relatively low in telephone industry because women constitute unusually large proportion of workers.

#### TABLE XIV

# ENTIRE REALIZED INCOME DRAWN BY INDIVIDUALS FROM THE VARIOUS INDUSTRIES

(MILLIONS OF CURRENT DOLLARS)

Year	All Indus- tries	Agri- culture	Manu- fac- turing	Mines, Quarries and Oil Wells	Con- struc- tion	Bank- ing	Mer- can- tile	Gov- ern- ment	Un- clas- sified	Mis- cella- neous
1909 1910 1911 1912 1913	31,858 33,977	\$4,988 5,218 4,815 5,294 5,133	\$5,481 6,204 6,251 6,838 7,332	\$ 833 917 910 1,006 1,153	\$1,692 1,580 1,607 1,742 1,527	\$ 337 389 409 429 453	\$3,685 3,735 4,034 4,041 4,488	\$1,554 1,678 1,767 1,862 1,981	\$5,718 5,958 6,142 6,562 7,126	\$2,747 2,955 3,020 3,152 3,316
1914 1915 1916 1917 1918	37,205 43,288 51,331	5,081 5,488 6,631 9,188 11,205	6,914 7,362 10,260 12,477 14,794	971 983 1,457 1,810 2,034	1,412 1,394 1,516 1,206 1,207	454 463 480 509 572	4,753 4,839 5,323 6,342 6,830	2,093 2,192 2,297 3,044 6,278	7,316 7,627 7,876 8,357 7,089	3,468 3,605 3,874 4,330 5,242
1919 1920 1921 1922 1923	73,999 63,371 65,925	12,182 11,057 6,967 7,300 8,026	16,090 19,531 13,274 13,957 16,835	1,875 2,355 1,843 1,725 2,396	1,846 1,895 1,740 2,198 2,465	646 775 848 930 997	8,019 8,726 8,440 8,680 10,772	5,792	7,476 9,721 11,435 12,350 13,056	5,882 7,415 7,104 7,132 7,505
1924 1925 1926 1927 1928	81,931 85,548* 88,205*	8,325 9,089 8,214* 8,371* 8,109*	16,276 16,866	2,038 2,169	2,974 3,458	1,029 1,094 1,165	11,050 11,996 12,442* 12,754* 13,137*		15,254 16,452	7,764 7,940 8,020* 8,040*

<sup>•</sup> For definition of "entire realized income" see text. The totals in this table are the sums of the amounts received by entrepreneurs, other property owners, and employees as recorded in Tables XVII and XIX.

\* Preliminary estimate.

the comparative earnings at different dates of those employees who were not laid off at any time but who were on the payroll throughout the year, and who performed the average amount of overtime work and suffered the average loss of pay due to short time work during the periods in which they remained on the payroll.

This table shows us that the pay of the average managerial employee in the manufacturing industry equals about  $2\frac{1}{2}$  times the wages of the average clerk, while the average clerk in turn is much better paid than the average wage worker. In the mining industry, the managerial force receive on the average, twice as much per annum as do the clerical workers, but the differential in favor of clerical workers over wage workers is not great. In the

#### TABLE XIV—Continued

# ENTIRE REALIZED INCOME DRAWN BY INDIVIDUALS FROM THE VARIOUS INDUSTRIES

(MILLIONS OF CURRENT DOLLARS)

Year	All Follow- ing Fields of Trans- portation	Rail- roads <sup>b</sup>	Pull- man	Ex- press	Transportation by Water	Street Rail- ways	Private Electric Light and Power	Tele- phones	Tele- graphs
1909 1910	\$2,569 2,795	\$1,719 1,872	\$21 22	\$ 62 69	\$211 232	\$307 331	\$ 93 99	\$124 137	31 33
1911	2,902	1,936	23	60	229	349	117	152	37
1912	3.051	2,029	.23	60	241	367	126	165	40
1913		2,126	26	61	250	389	139	182	41
1914	3,186	2,061	26	57	252	411	152	188	40
1915		2,085	24	58	276	415	166	187	41
1916		2,249	26	72	339	439	182	216	51
1917		2,564	28	78	436	455	204	241	62
1918	5,156	3,457	32	97	504	489	232	266	79
1919	5,798	3,703	37	119	710	554	267	321	88
1920		4,610	44	167	896	654	323	408	113
1921	6,090	3,617	41	146	741	648	365	431	. 101
1922	5,862	3,530	37	125	555	630	413	468	104
1923	6,503	3,963	38	130	563	674	505	520	110
1924	6,531	3,836	42	124	602	674	571	569	114
1925	6,736	3,915	39	122	587	671	679	602	122
1926		4,043	42	122		· -			
1927			•	122	ŀ				
1928		1		118					

b Includes switching and terminal companies.

railroad industry, the managerial force formerly drew almost 4 times as much per capita as did the clerical force, but, by 1927, they were getting only about  $2\frac{1}{2}$  times as much. In this field, the clerical workers are, on the average, but slightly better paid than the wage workers. Managerial salaries in the street railway field average from  $2\frac{1}{2}$  to 3 times as much as clerical salaries, the latter being but slightly above the average wage rate. The managerial force in the private electric light and power industry receive, on the average, about double the pay of the clerical workers, while the clerical and wage workers are paid approximately the same rates per annum. In the telephone industry, the ratio between the pay of the average managerial employee and the pay of the

clerk is about the same as in the electric light and power field, but the clerks are much better paid than are the wage workers. The low rate for the latter class in this field is largely due to the fact that a large proportion of the wage earners are of the female sex, telephone operators being included in the wage working class.

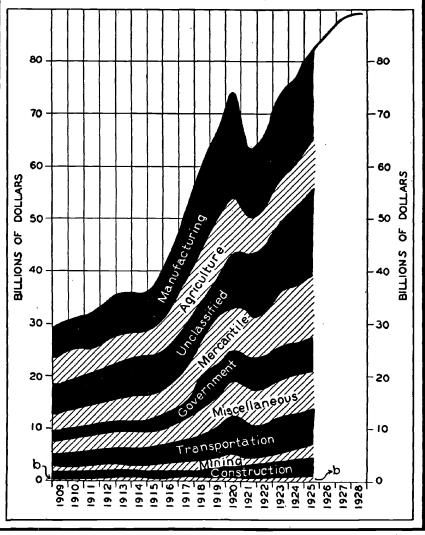
# Total Realized Income in Current Dollars Derived from Each Industry.<sup>1</sup>

Table XIV compares the importance of the industrial sources from which the inhabitants of the United States have drawn their respective incomes in each of the years from 1909 to 1925, inclusive. The data for the various industries differ materially in dependability. In general, it may be said that the estimates for agriculture, manufacturing, mines, quarries and oil wells, government, and all of the fields of transportation except transportation by water, are fairly well authenticated throughout. It will be remembered that the quantities representing entire realized income are composed of two parts, the share of entrepreneurs and other property owners, and the share of the employees. Estimates of the share of the employees are reasonably accurate for unclassified industries, and are perhaps not widely in error in the construction industry, the mercantile industry, and transportation by water, although in the lastmentioned case the accuracy of the estimate must remain considerably in doubt. The share of the entrepreneurs and other property owners is well established for the banking industry, but figures on the share of employees in that field are very meager. The estimates of the share of the entrepreneurs and other property owners in construction, the mercantile industry, transportation by water, and the unclassified industries, are based upon data which are extremely fragmentary, and this fact makes the totals for these fields subject to wide margins of error. The preliminary estimates in agriculture, the mercantile industry, and unclassified industries for 1926, 1927, and 1928 are based upon sample data only and must, therefore, be viewed with considerable suspicion. The same lack of dependability characterizes all of the estimates of miscellaneous income.

Chart 8 shows that no less than seven industrial fields contribute important fractions to the realized income of the nation. In 1909, as far as production of income was concerned, the unclassified industries ranked first, manufacturing second, and agriculture third, all being roughly of the same magnitude. In 1925

<sup>&</sup>lt;sup>1</sup>Includes imputed income which is not a product of industry.

# ENTIRE REALIZED INCOME DRAWN BY INDIVIDUALS FROM THE VARIOUS INDUSTRIES<sup>a</sup>



For data, see Table XIV.

#### TABLE XV

# PER CENT OF ENTIRE REALIZED INCOME<sup>a</sup> DRAWN BY INDIVIDUALS FROM THE VARIOUS INDUSTRIES

Year	All Indus- tries	Agri- cul- ture	Manu- fac- turing	Mines, Quarries and Oil Wells	Con- struc- tion	Bank- ing	Mer- can- tile	Gov- ern- ment	Un- clas- sified	Mis- cella- neous
1909 1910 1911 1912 1913	100.00 100.00 100.00 100.00 100.00	16.85 16.60 15.11 15.58 14.37	19.74 19.62 20.13	2.81 2.92 2.86 2.96 3.23	5.72 5.03 5.04 5.13 4.27	1.14 1.24 1.28 1.26 1.27	12.45 11.88 12.66 11.89 12.56	5.25 5.34 5.55 5.48 5.55	19.31 18.96 19.28 19.31 19.95	9.28 9.40 9.48 9.28 9.28
1914 1915 1916 1917 1918	100.00 100.00 100.00	14.25 14.75 15.32 17.90 18.55	19.79 23.70 24.31	2.72 2.64 3.37 3.53 3.37	3.96 3.75 3.50 2.35 2.00	1.27 1.24 1.11 .99	13.33 13.01 12.30 12.36 11.31	5.87 5.89 5.31 5.93 10.39	20.52 20.50 18.19 16.28 11.74	9.73 9.69 8.95 8.44 8.68
1919 1920 1921 1922 1923	100.00 100.00 100.00	18.47 14.94 10.99 11.07 10.80	26.39 20.95 21.17	2.84 3.18 2.91 2.62 3.22	2.80 2.56 2.75 3.33 3.31	.98 1.05 1.34 1.41 1.34	12.16 11.79 13.32 13.17 14.49	9.30 7.18 8.88 8.79 7.78	11.34 13.13 18.04 18.73 17.56	8.92 10.02 11.21 10.82 10.10
1924 1925 1926 1927 1928	100.00 100.00 100.00	10.79 11.09 9.60 9.49 9.27	20.59	2.64 2.65	3.86 4.22	1.33 1.34 1.36	14.33 14.64 14.54 14.46 14.69	7.64 7.48	19.78 20.08	10.07 9.69 9.37 9.11

<sup>·</sup> Calculated from figures presented in Table XIV.

unclassified industries and manufacturing competed for first place, but the mercantile industry had come up from fourth place to third, outranking agriculture to a marked degree. By this date, the value of the products of agriculture had declined until they equalled but little more than half the value of the manufacturing net output.

# Relative Ranking of Industries as Producers of Realized Income.

The relative importance of the various industries is shown much more clearly by Table XV than by Table XIV, for, in Table XV, the income derived from the various fields has been reduced to percentages of the entire realized income of the nation. The relative importance of agriculture declined slightly between 1909 and 1914, increased vigorously during the war period, declined abruptly between 1919 and 1921, and has since merely been able to

#### TABLE XV-Continued

# PER CENT OF ENTIRE REALIZED INCOME<sup>a</sup> DRAWN BY INDIVIDUALS FROM THE VARIOUS INDUSTRIES

Year	All Follow- ing Fields of Trans- portation	Rail- roads	Pull- man	Ex- press	Trans- por- tation by Water	Street Rail- ways	Private Electric Light and Power	Tele- phones	Tele- graphs
1909 1910 1911 1912 1913	8.68 8.89 9.12 8.98 8.99	5.81 5.96 6.08 5.97 5.95	.07 .07 .07 .07	.21 .22 .19 .18 .17	.71 .74 .72 .71 .70	1.04 1.05 1.10 1.08 1.09	.31 .31 .37 .37 .39	.42 .44 .48 .49	.10 .10 .12 .12 .11
1914 1915 1916 1917 1918	8.94 8.74 8.26 7.92 8.54	5.78 5.60 5.20 5.00 5.72	.07 .06 .06 .05 .05	.16 .16 .17 .15	.71 .74 .78 .85 .83	1.15 1.12 1.01 .89 .81	.43 .45 .42 .40 .38	.53 .50 .50 .47 .44	.11 .11 .12 .12 .13
1919 1920 1921 1922 1923	8.79 9.75 9.61 8.89 8.75	5.61 6.23 5.71 5.35 5.33	.06 .06 .06 .06	.18 .23 .23 .19 .17	1.08 1.21 1.17 .84 .76	.84 .88 1.02 .96 .91	.40 .44 .58 .63	.49 .55 .68 .71	.13 .15 .16 .16
1924 1925 1926 1927 1928	8.47 8.22	4.97 4.78 4.73	.05 .05 .05	.16 .15 .14 .14	.78 .72	. 87 . 82	.74 .83	.74 .73	.15

maintain itself approximately on the level reached in 1921, now producing somewhat less than 10 per cent of the income of the nation in contrast to 18½ per cent produced in 1918. This decline in the proportion of the national income going to agriculture has, of course, been responsible for the shift of workers from agriculture to other industries, a fact previously noted in this volume. The percentage of the national income derived from manufacturing remained about constant between 1909 and 1915, the share of this industry constituting throughout these years about one-fifth of the total for all industries. The relative share of manufacturing rose after 1915 until, in 1920, it constituted over one-fourth of the national income, but fell back rapidly in 1921 and since that date has remained approximately constant at a level representing slightly more than

#### TABLE XVI

# PURCHASING POWER, IN 1913 DOLLARS, OF THE ENTIRE REALIZED INCOMEO DRAWN BY INDIVIDUALS FROM THE VARIOUS INDUSTRIES

(MILLIONS OF 1913 DOLLARS)b

Year	All Indus- tries	Agri- culture	Manu- fac- turing	Mines, Quarries and Oil Wells	Con- struc- tion	Bank- ing	Mer- can- tile	Gov- ern- ment	Un- clas- sified	Mis- cella- neous
1909 1910 1911 1912 1913	32,920 34,656	\$5,139 5,239 4,948 5,376 5,133	\$5,808 6,411 6,455 6,970 7,332	\$ 882 947 940 1,026 1,153	\$1,798 1,635 1,660 1,776 1,527	402	\$3,922 3,869 4,169 4,123 4,488	\$1,645 1,732 1,824 1,896 1,981	6,157 6,341	\$2,963 3,098 3,163 3,258 3,349
1914 1915 1916 1917 1918	36,636 39,559 40,242	5,063 5,591 6,032 6,643 7,015	6,821 7,185 9,326 9,789 9,705	958 959 1,330 1,434 1,351	1,393 1,366 1,382 939 782	447 451 434 396 372	4,700 4,775 4,897 5,055 4,604	2,060 2,124 2,067 2,353 4,030	7,206 7,423 7,120 6,504 4,625	3,456 3,581 3,720 3,930 4,284
1919 1920 1921 1922 1923	37,573 36,710	6,644 5,540 4,459 4,974 5,538	9,084 9,618 7,519 8,434 10,013	1,063 1,165 1,042 1,042 1,425	1,033 932 984 1,330 1,468	359 379 477 560 591	4,667 4,432 4,859 5,337 6,530	3,423 2,607 3,161 3,480 3,416	4,190 4,770 6,440 7,458 7,749	4,281 4,583 4,333 4,411 4,574
1924 1925 1926 1927 1928	46,758 48,412 50,421* 52,892* 54,022*	5,681 5,795 5,163* 5,539* 5,456*	9,688 9,826	1,214 1,266	1,777 2,017	609 634 671	6,701 7,117 7,347* 7,666* 7,993*	3,483 3,542	9,043 9,540	4,676 4,751 4,816* 4,924*

<sup>&</sup>quot;1913 Dollars" is an abbreviation for the phrase "dollars having purchasing power equivalent to that which they had in 1913."

one-fifth of the total. Mines, quarries and oil wells have accounted throughout the period for between  $2\frac{1}{2}$  and  $3\frac{1}{2}$  per cent of the national income, the importance of this industry being greatest during the war years. Although the construction industry has recently been regarded as unusually active, our estimates indicate that a smaller proportion of the national income has been derived therefrom than was the case in the period 1909 to 1912. For this industry, the period 1917 to 1921 was one of both absolute and relative depression. The product of banking, which constituted about  $1\frac{1}{4}$  per cent of the national income in the pre-war period,

b Computed from the corresponding items in Table XIV by dividing the various sub-items for each industry by the appropriate price indices recorded in Table VII.

<sup>·</sup> For definition of this term, see text.

<sup>\*</sup> Preliminary estimate.

#### TABLE XVI-Continued

# PURCHASING POWER, IN 1913 DOLLARS, OF THE ENTIRE REALIZED INCOME DRAWN BY INDIVIDUALS FROM THE VARIOUS INDUSTRIES

(MILLIONS OF 1913 DOLLARS)b

1909         \$2,721         \$1,821         \$22         \$66         \$224         \$325         \$99         \$132           1910         2,889         1,935         23         71         240         342         102         142           1911         2,997         1,999         24         61         236         360         121         156           1912         3,111         2,068         23         61         246         374         129         168           1913         3,213         2,126         26         61         250         389         139         182           1914         3,145         2,035         25         56         248         406         150         185           1915         3,179         2,037         24         56         268         408         163         182           1916         3,251         2,045         23         65         307         402         167         195           1917         3,199         2,013         22         60         341         362         164         188           1918         3,383         2,259         21         65         398	Tele- graphs	Tele- phones	Private Electric Light and Power	Street Rail- ways	Transportation by Water	Ex- press	Pull- man		All Follow- ing Fields of Trans- portation	Year
1910         2,889         1,935         23         71         240         342         102         142           1911         2,997         1,999         24         61         236         360         121         156           1912         3,111         2,068         23         61         246         374         129         168           1913         3,213         2,126         26         61         250         389         139         182           1914         3,145         2,035         25         56         248         406         150         185           1915         3,179         2,037         24         56         268         408         163         182           1916         3,251         2,045         23         65         307         402         167         195           1917         3,199         2,013         22         60         341         362         164         188           1917         3,199         2,013         32         60         341         362         164         188           1918         3,383         2,259         21         62         328	\$33	\$132	R 00	\$325	\$224	\$66	\$22	\$1.821	\$2.721	1909
1911         2,997         1,999         24         61         236         360         121         156           1912         3,111         2,068         23         61         246         374         129         168           1913         3,213         2,126         26         61         250         389         139         182           1914         3,145         2,035         25         56         248         406         150         185           1915         3,179         2,037         24         56         268         408         163         182           1916         3,251         2,045         23         65         307         402         167         195           1917         3,199         2,013         22         60         341         362         164         188           1918         3,383         2,259         21         62         328         328         160         173           1919         3,273         2,082         21         65         398         319         159         179           1920         3,548         2,260         22         80         436	34									1910
1912         3,111         2,068         23         61         246         374         129         168           1913         3,213         2,126         26         61         250         389         139         182           1914         3,145         2,035         25         56         248         406         150         185           1915         3,179         2,037         24         56         268         408         163         182           1916         3,251         2,045         23         65         307         402         167         195           1917         3,199         2,013         22         60         341         362         164         188           1918         3,383         2,259         21         62         328         328         160         173           1919         3,273         2,082         21         65         398         319         159         179           1920         3,548         2,260         22         80         436         328         167         199           1921         3,436         2,039         23         81         415	38									
1913         3,213         2,126         26         61         250         389         139         182           1914         3,145         2,035         25         56         248         406         150         185           1915         3,179         2,037         24         56         268         408         163         182           1916         3,251         2,045         23         65         307         402         167         195           1917         3,199         2,013         22         60         341         362         164         188           1918         3,383         2,259         21         62         328         328         160         173           1919         3,273         2,082         21         65         398         319         159         179           1920         3,548         2,260         22         80         436         328         167         199           1921         3,436         2,039         23         81         415         368         211         242           1922         3,537         2,128         23         75         332	40			374			23			
1914     3,145     2,035     25     56     248     406     150     185       1915     3,179     2,037     24     56     268     408     163     182       1916     3,251     2,045     23     65     307     402     167     195       1917     3,199     2,013     22     60     341     362     164     188       1918     3,383     2,259     21     62     328     328     160     173       1919     3,273     2,082     21     65     398     319     159     179       1920     3,548     2,260     22     80     436     328     167     199       1921     3,436     2,039     23     81     415     368     211     242       1922     3,537     2,128     23     75     332     382     253     281	41	182				-61	26			
1915         3,179         2,037         24         56         268         408         163         182           1916         3,251         2,045         23         65         307         402         167         195           1917         3,199         2,013         22         60         341         362         164         188           1918         3,383         2,259         21         62         328         328         160         173           1919         3,273         2,082         21         65         398         319         159         179           1920         3,548         2,260         22         80         436         328         167         199           1921         3,436         2,039         23         81         415         368         211         242           1922         3,537         2,128         23         75         332         382         253         281	İ		1						1	
1916     3,251     2,045     23     65     307     402     167     195       1917     3,199     2,013     22     60     341     362     164     188       1918     3,383     2,259     21     62     328     328     160     173       1919     3,273     2,082     21     65     398     319     159     179       1920     3,548     2,260     22     80     436     328     167     199       1921     3,436     2,039     23     81     415     368     211     242       1922     3,537     2,128     23     75     332     382     253     281	39							2,035		
1917     3,199     2,013     22     60     341     362     164     188       1918     3,383     2,259     21     62     328     328     160     173       1919     3,273     2,082     21     65     398     319     159     179       1920     3,548     2,260     22     80     436     328     167     199       1921     3,436     2,039     23     81     415     368     211     242       1922     3,537     2,128     23     75     332     382     253     281	40					56	24	2,037		
1918     3,383     2,259     21     62     328     328     160     173       1919     3,273     2,082     21     65     398     319     159     179       1920     3,548     2,260     22     80     436     328     167     199       1921     3,436     2,039     23     81     415     368     211     242       1922     3,537     2,128     23     75     332     382     253     281	46					65	23			1916
1919 3,273 2,082 21 65 398 319 159 179 1920 3,548 2,260 22 80 436 328 167 199 1921 3,436 2,039 23 81 415 368 211 242 1922 3,537 2,128 23 75 332 382 253 281	49					60	22	2,013	3,199	
1920     3,548     2,260     22     80     436     328     167     199       1921     3,436     2,039     23     81     415     368     211     242       1922     3,537     2,128     23     75     332     382     253     281	52	173	160	328	328	62	21	2,259	3,383	1918
1920     3,548     2,260     22     80     436     328     167     199       1921     3,436     2,039     23     81     415     368     211     242       1922     3,537     2,128     23     75     332     382     253     281	50	179	150	319	398	65	21	2.082	3.273	1010
1921 3,436 2,039 23 81 415 368 211 242 1922 3,537 2,128 23 75 332 382 253 281	56						22			
1922  3,537   2,128   23   75   332   382   253   281	57						23		3,436	
1923 3.861 2.350 22 76 330 404 306 307	63						23		3,537	
	65	307	306	404	330	76	22 ′	2,350	3,861	1923
	İ	ļ 1				'			1	
1924 3,884 2,278 25 73 353 404 347 337	68	337	347	404	353	73	25	2,278	3,884	1924
1925  3,923   2,276   23   70   338   393   404   349	71	349	404	393	338		23	2,276	3,923	1925
1926     2,339   24   70			1 1			70	24	2,339	'	1926
1927     71			1 1			71				1927
1928									1	1928

<sup>4</sup> Includes switching and terminal companies.

declined to less than 1 per cent during war time, but has since risen until it now amounts to over one and one-third per cent of the total. The mercantile industry yielded approximately one-eighth of the national income between 1909 and 1922. Since then, its share has tended to approximate one-seventh of the total. The share of government accounted for between 5 and 6 per cent of all realized income during the period 1909 to 1917, jumped abruptly to 10 per cent in 1918, declined abruptly in 1920 to 7 per cent, and has since remained somewhat above that figure, showing, during the period since 1922, a slight tendency to decline. The reader should remember that the term "government," as here used, includes not

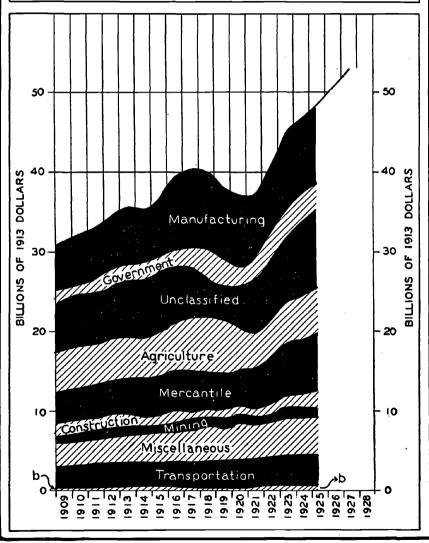
only the activities of the national government, but also those of the state, local, and municipal governments, including school districts. The income from government, as here computed, consists of wages and salaries paid to employees of the various branches of government, pensions and compensation for injuries, paid to present and past employees, and interest on the public debt paid to individuals.

Individuals tended to derive something less than one-fifth of their total income from unclassified fields during the period 1909 to 1916. With the coming on of the war, this percentage declined rapidly until, in 1919, unclassified industries produced but oneninth of the total income of the nation. After 1920, however, the percentage again rose rapidly, and, by 1925, it had reached its old level, and unclassified industries again accounted for one-fifth of the national income. Miscellaneous income, which is composed, in the main, of the estimated rent paid for leased homes not on farms and of the imputed value of the services of durable consumers' goods including the rental value of urban homes occupied by the owners has, in general, constituted from one-eleventh to one-tenth Those fields of transportation for of the income of the nation. which adequate records are available, namely those dominated by corporations, account for a slightly smaller percentage of the total income, their combined share running around one-eleventh of the aggregate. In this field, railways are dominant, about 60 per cent of the transportation income originating in this one industry. Although the most rapid growth within the transportation field has been shown by the private electric light and power industry, it still does not rank as a major industry, for, even in 1925, (the last year for which estimates are made) it did not account for 1 per cent of the nation's total income.

## The Entire Realized Income Measured in 1913 Dollars.

While Tables XIV and XV both help in making clear the relative standings of the various industries at each date, neither of these tables reveals the facts concerning the absolute growth of each industry as measured by its ability to produce income for the individuals depending upon it as a chief source of livelihood. These facts are shown in Table XVI and Charts 9, 10a, and 10b. The last two charts reveal striking differences in the stability of income derived from the various industries. Railroads, public utilities, and merchandising show a marked tendency to stability as income

# PURCHASING POWER, IN 1913 DOLLARS, OF THE ENTIRE REALIZED INCOME DRAWN BY INDIVIDUALS FROM THE VARIOUS INDUSTRIES<sup>a</sup>



For data, see Table XVI.Banking.

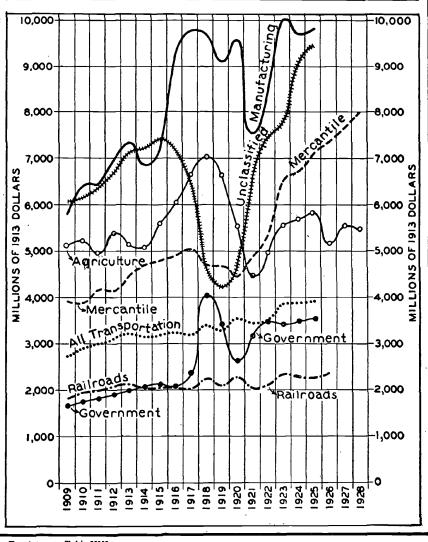
producers. Manufacturing, agriculture, government, mining, and transportation by water, all participated during the general period 1916-1920 in a great expansion of income as measured in 1913 dollars, but this expansion was offset by a great shrinkage in both the construction and unclassified fields, and a considerable depression in banking and street railways.

Every industrial field except the express business yielded to individuals more "deflated" income in 1925 than in 1909, though the gains were small in the Pullman industry. The manufacturing, unclassified, mercantile, telephone, private electric light and power, mining, and governmental industries all experienced marked growth

in income producing ability.

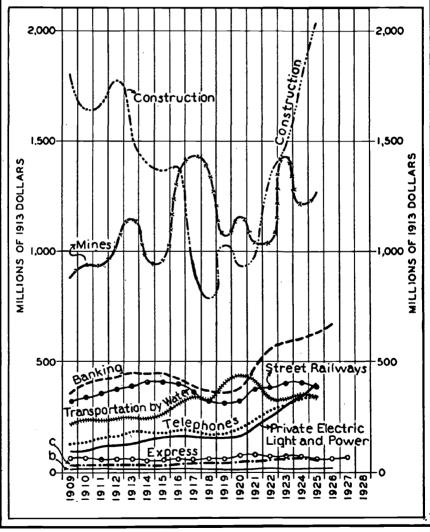
The fact should be made clear in this connection that a large yield of income does not necessarily involve an increase, and is not a necessary outcome of large physical productivity. For example, the great rise and decline in income from agriculture, occurring between 1915 and 1921, was not accompanied by any great variation in the physical productivity of agricultural operations. It was caused, instead, by the fact that, during that time, farm produce was greatly in demand, commanded an unusual price, and hence produced a large income for the person engaged in that line of work. Similarly, the depression in the street railway income which occurred between 1916 and 1920 did not signify that the street railways were carrying fewer passengers, but merely that rate regulation kept fares down while expenses rose.

# PURCHASING POWER, IN 1913 DOLLARS, OF THE ENTIRE REALIZED INCOME DRAWN BY INDIVIDUALS FROM THE VARIOUS INDUSTRIES<sup>a</sup>



<sup>•</sup> For data, see Table XVI.

PURCHASING POWER, IN 1913 DOLLARS, OF THE ENTIRE REALIZED INCOME DRAWN BY INDIVIDUALS FROM THE VARIOUS INDUSTRIES<sup>a</sup>



For data, see Table XVI. Puliman. Telegraphs.