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CHAPTER XII

THE NATIONAL INCOME AND ITS DISTRIBUTION¹

BY MORRIS A. COPELAND

I. THE NATIONAL TOTALS

Estimates of the national income are useful for many purposes, but they need to be used with care, both because they are not perfectly accurate, and because the term "national income" has several different meanings. The present estimate of the income of the people of the United States may be in error by as much as 5 per cent; in some years the error may be slightly more than that. The constituent streams that combine to make the national income are known less accurately than the total.

The sense in which the national income will be chiefly considered here has been called "total realized income." This includes (1) all pay rolls (including value of board and lodging furnished), (2) pensions, benefits, and compensation for accidents received by employees and ex-employees, (3) net rent (including both cash and payments in kind, less maintenance and depreciation), royalties, interest, and dividends received by individuals, (4) profits withdrawn from businesses by individual enterprisers, (5) the net rental value of owned homes and imputed interest on investment in other durable consumption goods, (6) the value of certain commodities produced by families for their own consumption. It does not include paper profits, profits from the sale of capital assets, or the value of housewives' services. In 1928, the total realized income probably reached the stupendous total of about 89 billion dollars or about \$745 per capita.

The reason for excluding profits from the sale of capital assets and such paper profits as additions to corporate surplus and changes in value of real estate is that these items depend upon arbitrary accounting methods or are subject to fluctuations with business optimism and pessimism. Logically they should be included, but practically their inclusion may give rise to year-to-year changes in national income which do not correspond to any changes in the production of goods and services

¹The author desires to make full acknowledgment to Dr. Willford I. King, of the National Bureau of Economic Research, upon whose estimates of national income and related items this study is based. Where other sources have been employed they have been so noted.

or the capacity of our resources to produce them.* A rough estimate indicates that the inclusion of these items would increase the national income for 1925 from 82 to 85 or 86 billions,² but in some years it is probable that total accrued income (i.e. realized income plus these profit items) has been less than total realized income. The value of housewives' services has not been included in any of the estimates because of the difficulties of determining a satisfactory basis of valuation.

Another important meaning for the term "national income" is total income received in money. This excludes items (5) and (6) and also compensation for labor or leased property received in kind. Total money income in 1925 amounted to about 74 billions.

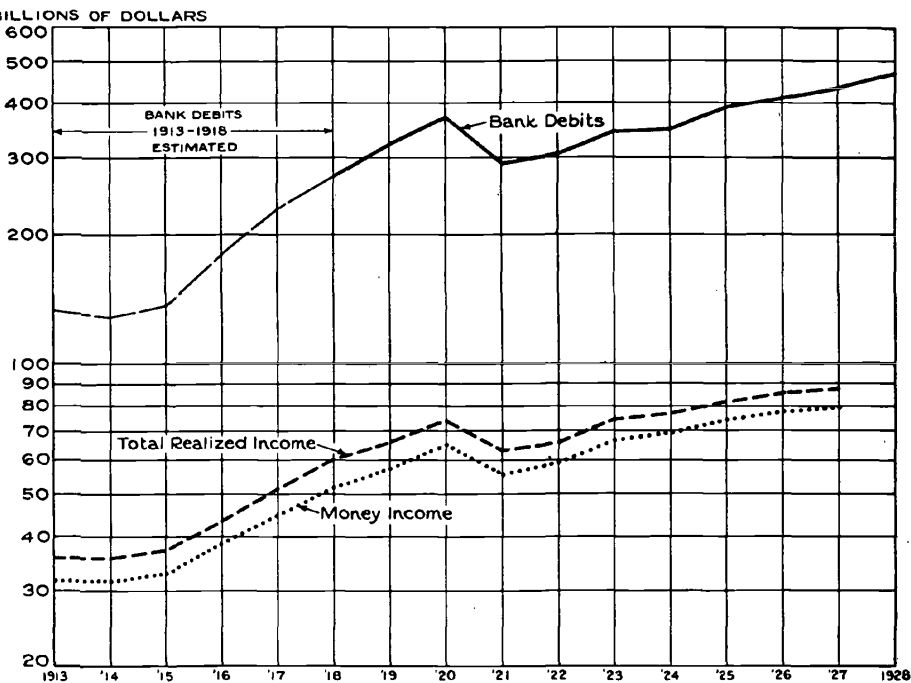
In none of these three senses does national income measure the welfare of the population. Only income actually consumed should be included for this purpose. In years of great depression and depreciation in values, such consumed income may conceivably be greater than total accrued

* Additions to corporate surplus should be added to "total realized capital." The surplus thus set aside is a very definite and permanent addition to the income of property owners. The relative share of the property-income group and the wage-earning and salaried group in the product of industry from year to year cannot be adequately determined when these additions to surplus are not included. I am not convinced that the reasons set forth above are sufficient to justify the exclusion of these figures.—Note by H. W. Laidler, Director.

I do not agree with the treatment of corporate surplus. It should be included in realized income. I do agree with exclusion of profits from sale of capital assets and exclusion of changes in value of real estate. "Logically" these should be excluded, whereas Mr. Copeland says logically they should be included. On the contrary, corporate surplus should logically be included and practically it should be estimated, like other estimates. He omits it apparently because it fluctuates, and might be a deduction instead of an addition. This reason is inconsistent. Other quantities might be excluded on this ground. By taking one year, 1925, he should treat that year on its own showing, and let other years go off on their own showing. This addition of corporate surplus would make considerable difference in many parts of his treatment, especially in comparing corporate income which he hereby minimizes, with other incomes not minimized.—Note by John R. Commons, Director.

² Total accrued income was estimated from the realized income total for 1925 by adding estimates of business savings and gain in value of real estate held by individuals. The estimates of change in urban real estate values are King's. King also has estimates of corporate and individual profits in the merchandizing and unclassified groups and of total profits in construction and banking. These, and his estimates of profits withdrawn, yield estimates of business savings for these three groups. Corporate business savings in manufacturing, mining, and the transportation and public utility group were estimated by assuming that they bore the same ratio to cash dividends in the income tax returns. For mining and manufacturing, individual business savings (or withdrawals of surplus) were estimated on the assumption that the ratios to profits withdrawn were the same as for corporations. Changes in the value of agricultural real estate, including improvements, were estimated by nine regions from the 1920 census values and the value indexes, for March 1, of the Bureau of Agricultural Economics, United States Department of Agriculture, *Circular* No. 15, October, 1927

CHART 1.—TOTAL REALIZED INCOME, INCOME DISBURSED IN MONEY AND BANK DEBITS TO INDIVIDUAL ACCOUNTS (WITH BANK CLEARINGS SPLICED AT 1919), UNITED STATES OUTSIDE NEW YORK CITY, 1913 TO 1927



income, although ordinarily it is substantially less than the latter. For 1925 it may be set down roughly at 74 to 75 billions, that is, about one-sixth of total accrued income was "saved."³ There are still other meanings for national income, some of which will be noted shortly.

The total realized income of the United States and the total income disbursed in money⁴ are shown in Chart 1 and also in Table 1. The

³ Consumed income was estimated by deducting from accrued income an estimate of savings in 1925, made by J. S. Taylor, of the Department of Commerce, revised in the light of the 1925 tax returns, and with a correction in the capital flotations item to allow for stock dividends.

⁴ Money income was estimated by deducting from total realized income (1) value of farm produce consumed by farm population, (2) profits from cow keeping in towns, (3) profits from urban poultry and gardens, (4) rental value of urban homes, (5) rental value of owned farm homes, (6) imputed interest on other durable consumption goods, (7) payments in kind to Army and Navy. Item (1) was a two-year moving average of Bureau of Agricultural Economics' estimate, 1919-1928. To estimate other years, farm population was multiplied by an index of farm prices (1927 *Agricultural Year Book*, p. 1149), and the ratio of the resulting series to value of produce consumed 1919-1927 was calculated. The average of these ratios was assumed to be the ratio for the earlier years. Item (7) was assumed to be the same proportion of total Army and Navy pay in 1926-27 as in 1925.

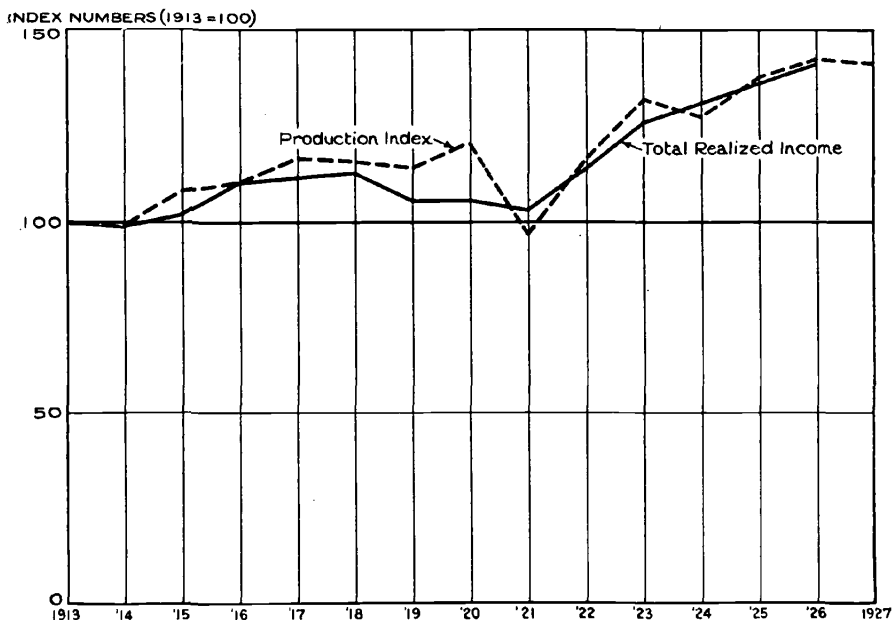
prosperity of the past few years is shown in the rapid growth of national income since 1921. There is only a slight check in the growth of income in 1924. The year 1927 also shows a slowing down in the rate of growth. As a basis of comparison for the income estimates, an estimate of total debits to individual accounts in commercial and savings banks in the United States outside New York City⁵ is shown also, together with data for bank clearings spliced on to debits in 1919. One might expect the cyclical fluctuations of money income to be more marked than those of total income, but the difference between the two series in this respect is small. Both rise to a sharp peak in 1920, and fall in 1921 below the 1919 level. Neither series shows more than a slight check in 1924. One interesting feature of the relation between these two series is that the income disbursed in money forms a gradually increasing percentage of total realized income—88.2 per cent at the beginning of the period and 91.1 per cent at the end. In other words, an increasing proportion of economic activity is passing through the market place. It should be noted, however, that the important item, value of housewives' services, is not included in the total, so that the picture is incomplete. The increase shown is largely because of the increasing proportion of all homes that are rented and so receive an annual market valuation.

The volume of bank debits outside New York is nearly five times the national income. The debits-clearings curve is distinctly more sensitive to business depressions in 1914, 1921, and 1924, and the upward swings from 1914 to 1920 and 1921 to 1927 are steeper. There is, indeed, a general resemblance between the movements of debits (and clearings) and total income disbursed in money, but not anything approaching a precise agreement. Debits represent chiefly settlements by check, and partly because of the large volume of check payments connected with speculative transactions, partly because collections are slower at some times than at others, and partly because commodities change hands more frequently at some times than at others, debits fluctuate quite differently from national income. But whatever their disagreements, the trends since 1921 are strikingly alike; both income and debits have shown a most remarkable growth in the past seven years. The national income increased by about three-eighths from 1921 to 1927, as against a little over 100 per cent from 1914 to 1920, and in 1927 it was about one-sixth greater than in the high year 1920.

During this period there have been tremendous changes in prices. How far do these fluctuations of national income represent changes in the physical volume of flow of goods and services? How far do they reflect changes in prices and in the amount of goods which a given sum of money will buy? We may, following King's method, correct each of the constituent income streams that go to make up the national income

⁵ *Journal of the American Statistical Association*, September, 1928, p. 301.

CHART 2.—TOTAL REALIZED INCOME IN DEFLATED DOLLARS RELATIVE TO 1913 AS 100 PER CENT, AND AN INDEX OF COMMODITY PRODUCTION (1913—100 PER CENT), UNITED STATES, 1913 TO 1927



for changes in the prices of goods purchased by the recipients of that income stream, so that instead of the number of dollars received, say in 1920, the figure for 1920 will be the number of dollars, at 1925 prices, that would be required to purchase the same bill of goods the actual 1920 income would purchase for the recipients. In this way we may correct the total realized income, and express it in dollars of 1925 purchasing power to the income recipients.⁶ Thus, in a sense, income expressed in 1925 dollars represents the physical volume of flow of goods and services. Chart 2 compares the total realized income, so corrected, with an index of commodity production.⁷ The two series, expressed as

⁶ King's indexes were converted to 1925 as 100, and each income stream was divided by the index representing cost of living to the income recipient. The basic indexes represent living costs for: (1) farmers, (2) farm employees, (3) urban employees, (4) those spending \$5,000 on consumption goods in 1919, (5) those spending \$25,000 on consumption goods in 1919.

⁷ The index of the physical volume of commodities produced was prepared jointly by Dr. Woodlief Thomas and the writer. The annual indexes of the *Review of Economic Statistics* for crops and animal husbandry, indexes of mineral and manufacturing production constructed from annual data by Dr. Thomas, and the Department of Commerce estimate of total lumber cut, were combined by the aggregative method. Three overlapping sets of indexes were computed: (1) 1909-1919 on the basis of 1909 aggregate values, (2) 1909-1927 on the basis of 1919 aggregate values, and (3) 1918-1927 on the basis of 1925 aggregate values. In each case the value aggregates are for value added by the industry. The three overlapping sets of indexes were combined in such a way as to approximate Fisher's ideal formula with 1919 as the base year.

relatives to 1913 as 100 per cent, are close together at the end of the period, but certainly they behave very differently between 1914 and 1925. Commodity production shows a rapid growth in 1917 and 1920, a sharp drop in 1921, and a distinct fall in 1924. "Deflated" income shows declines in 1914 and 1921, but none in 1924.⁸

Whatever the qualifications that are required in interpreting "deflated income," it seems clear that there has been a real and considerable gain in national income every year since 1921, quite apart from any changes in prices.

Any estimate of income measured in "corrected dollars" is likely to give rise to misleading interpretations. None the less, we may risk a further estimate of this sort. Has the national income increased per capita, changes in prices being allowed for? Table 1, column (6), shows per capita realized income, in dollars of 1925 purchasing power to the recipients. There is a decline in 1914, and a peak in 1916-17, followed by a decline to 1921. The recovery in 1922 brings per capita income back to the prewar level, and since then there has been a steady gain. Per capita realized income is not a satisfactory measure of consumers' welfare, though it gives some indication of what might be done with the productive power of our present economic system, were it not for voluntary and involuntary savings. It is difficult, with present data, to estimate consumed income per capita, but we are probably justified in inferring from the fluctuations of realized income that consumed income per capita also increased during the war, then declined (not necessarily as sharply as total realized income), has been showing a marked yearly increase now for several years past, and was considerably higher in 1927 than during the war.

Conditions in different countries are so dissimilar that international comparisons are fraught with danger. And the United Kingdom alone

⁸ Because production indexes corrected for price changes have been used to estimate the national income, the striking differences between these two series are significant. For one thing, it should be borne in mind that commodity production does not include all production. Indeed, only a little more than one-third of our national income is disbursed by enterprises engaged in commodity production in agriculture, mineral extractive industries, and manufacturing. It is not surprising, since goods can be stored more easily than services, that commodity production should fluctuate more widely than service production. Another possible explanation of the differences between the two series lies in the process of "deflating" the income. The prices used in converting income to "1925 dollars" were for consumption goods used by the income recipients, not prices or costs for the producing enterprises. Deflation is a process that requires cautious use. The method of deflation employed by King, which we have just discussed, is probably the most generally useful type for correcting the national income, but it is not well adapted to the particular purpose of comparing income with output. And it is possible, even for general purposes, that some of the years are overcorrected. For example, both 1919 and 1920 have probably been made too low, relatively to 1918, by the deflation.

TABLE 1.—TOTAL REALIZED INCOME OF THE UNITED STATES COMPARED TO CERTAIN RELATED SERIES, 1913 TO 1927

Year	(1)	(2)	(3)	(4)	(5)		(6)	(7)	(8)
	Total realized income	Money income	Bank clearings (U. S. outside New York City)	Bank debits (U. S. outside New York City)	Realized income in 1925 dollars		Production index (1913 = 100 per cent)	Ratio of money to total income (per cent)	
					Total	Per capita			
	Billions of dollars								
1913.....	35.7	31.5	75.4	...	60.3	\$621	100	88.2	
1914.....	35.6	31.3	72.2	...	59.5	601	99	87.9	
1915.....	37.2	32.8	77.3	...	61.7	615	108	88.2	
1916.....	43.3	38.5	102.2	...	66.7	655	111	89.0	
1917.....	51.3	44.9	129.5	...	67.7	656	117	87.4	
1918.....	60.4	51.9	153.8	...	67.9	651	116	85.9	
1919.....	65.9	57.2	181.9	322	64.2	611	114	86.7	
1920.....	74.0	65.5	209.0	370	63.9	600	121	88.5	
1921.....	63.4	55.8	161.9	293	62.4	576	97	88.0	
1922.....	65.9	59.0	...	305	68.6	625	117	89.6	
1923.....	74.3	67.1	...	344	75.7	679	132	90.2	
1924.....	77.1	69.6	...	348	79.1	697	127	90.3	
1925.....	81.9	74.3	...	391	81.9	712	137	90.6	
1926.....	^a 85.7	^a 77.9	...	411	^a 85.3	^a 733	142	90.8	
1927.....	^a 87.5	^a 79.7	...	431	.....	.....	141	91.1
1928.....	^a 89.0	^a 81.0	...	468	.....	.....	...	.....

^a Preliminary estimates.—The preliminary estimates for 1926–1928 in this and the following tables were prepared, so far as possible, on a basis to make them comparable with King's estimates for preceding years. The general procedure was to select some standard series which could be taken as a yearly index for the years 1925, 1926, 1927 and 1928 of each item or group of items to be estimated, and, with King's 1925 estimate as a base, to estimate the other two years. Income tax data were available for estimating income in 1926 but not in 1927 and 1928. The estimates for 1926 are therefore distinctly more reliable than those for 1927 and 1928.

^b No estimate.

among the great European powers affords a satisfactory postwar estimate to make comparison possible. The attempt at such a comparison raises two further questions regarding the meaning of national income: (1) Is interest on the war debt properly a part of national income? (2) Are we speaking of income received in the country, or income produced in the country?

Stamp has argued that interest on internal national war debts should be excluded in reckoning national income:

Suppose that we had not elected to tax ourselves severely during the war, but had borrowed a very much larger sum, then the interest to be paid on the debt to-day would be very much greater. Are we to assume, therefore, that the "invisible income" that we shall each receive in future years, in the way of services in conquering the Germans many years ago, would have been greater than it is under present actual conditions?⁹

⁹ Sir Josiah Stamp, *Current Problems in Government and Finance*, London, 1925, p. 138.

In other words, to include interest on war debts is to include an item the size of which depends upon a past policy of government finance—an item which might have been a great deal larger without producing any material increase in present flow of goods and services. The point is a disputed one, and it is by no means clear that the entire interest on the national debt is, as Stamp seems to imply, a mere transfer from one individual to another, being precisely offset by tax payments and so not properly included in the consolidated national income total. But it will probably improve the comparability of the income totals for the two countries, if we eliminate interest on the national debt. We shall call the balance "accrued social income."

With regard to the second question, it seems obvious that both income received and income produced are of interest. Table 2 sets forth a comparison of the national income of the United Kingdom and the United States. The English estimates are those of Bowley and Stamp. The American figures, for gross accrued income received, represent King's estimates of realized income plus a crude allowance for the profit items, added in order to make the totals comparable with those for the United

TABLE 2.—NATIONAL INCOME OF THE UNITED STATES AND THE UNITED KINGDOM COMPARED, 1914 AND 1924

Item	United Kingdom ^a		United States	
	1914	1924	1914	1924
Gross income produced at home (billions of dollars)	9.7	17.7	37.2	79.4
Interest on national debt (billions of dollars)	.1	1.2	.0	.9
Accrued social income produced at home (billions of dollars)	9.6	16.5	37.2	78.5
Net received from abroad (billions of dollars)	+ 1.1	.7	-.1	.6
Accrued social income received, (billions of dollars)	-10.7	17.2	37.1	79.1
Accrued social income received per capita (dollars)	248	384	375	697

^a The income estimates for the United Kingdom are from Bowley and Stamp, *The National Income, 1924*, Oxford, 1927, especially pp. 45 and 46. "Accrued social income" includes pensions (Bowley and Stamp have excluded this item). The 1914 figures were estimated by multiplying the 1911 data by 2,250 divided by 2,090 (see Stamp, *Current Problems in Finance and Government*, p. 291). The conversions to dollars were made at the average daily rate for cable exchange. In making allowances for the exclusion of southern Ireland in 1914, it was assumed that this section received none of the income from foreign investments and 4 per cent of other income. The deduction for net interest received from abroad by the United States includes interest received by the Federal Government, banks, and insurance companies, and is therefore larger than the item in the miscellaneous income statement. For the estimates of accrued and saved income for the United States, see footnote 2, p. 758.

Kingdom. The total accrued social income of the United States is apparently about four and one-half times that of the United Kingdom for 1924. Making allowance for price changes, our national income has increased about one-third in the decade, while, according to the estimates of Bowley and Stamp (whose method of deflation is not entirely

comparable to King's), the income of the United Kingdom was approximately the same in 1924 as in 1911, and so possibly a trifle smaller than in 1914. According to Bowley and Stamp, the deflated total accrued social income of the United Kingdom per capita declined 5 to 10 per cent in this 13-year interval, while the deflated per capita income of the United States shows an increase of about one-seventh in the decade 1914-1924. The English estimates indicate that about one-eighth of the total social income was "saved" in 1924, as against nearly one-sixth in 1911. According to J. S. Taylor's estimate of savings in this country, the proportion was about one-tenth in 1924 (a mild depression year), and one-sixth in 1925. About three-fourths of 1 per cent of our income came from abroad in 1924, while 4 per cent of the income of the United Kingdom came from outside, and an even larger percentage before the war. In using these comparisons, it should be remembered that the year 1914 was one of depression in this country, and partly so in England. In 1924 there was a mild depression in the United States, while in England there was a slight lessening of a prolonged depression. But in spite of these and other qualifications,¹⁰ it seems clear that the average individual is considerably better off in this country than in England, and that the difference to-day is distinctly greater than before the war.

For further light upon recent changes in the national income, we may turn to a consideration of the major income streams of which it consists. First of all, we may analyze the national income on a functional basis into wages, salaries, and pensions; rent, interest, and dividends; and profits withdrawn by individual enterprisers. It may be broken up also among the principal disbursing industry groups, agriculture, construction, mineral extractive industries, manufacturing, public utilities, merchandising, commercial and savings banks, all branches of government, and unclassified enterprises and occupations. The national income was estimated by adding together wages, salaries, etc., for each of these groups, so that it is fairly easy to obtain estimates for each of these streams of income. But when we come to assign the national income to different parts of the country, we encounter a great many difficulties. And the attempt to determine how the national income is distributed among the higher and lower income classes will prove even less satisfactory, but some light can be shed upon this problem. We shall consider these four types of income distribution in order.

¹⁰ Especially in comparing the absolute amounts of the national totals or per capita incomes, a number of qualifications are necessary. Price differences between countries are more difficult to allow for than price differences between two dates for the same country, but the allowance would presumably make the showing appreciably less favorable to the United States. A factor suggesting an opposite correction is that nearly 23 per cent of all English females were gainfully employed in 1921, as against 16½ per cent of American females in 1920; a smaller proportion of women's services are priced in this country.

It has already been noted that the total realized income of the United States is known more accurately than are many of the income streams that make it up, for it is improbable that all the errors of estimate for the constituents are in the same direction. In dealing with the constituent income streams, then, we shall do well to remember that we are on less secure ground. There is one redeeming feature. An estimate, say, of mining wages, may be wrong in absolute amount, and still the year-to-year percentage changes in the estimate may be approximately correct. Again, we may not have an accurate estimate of total pay rolls, but if the ratio of estimated pay roll to all income shows a decrease between 1923 and 1925, that decrease may still be a correct portrayal of events. Since the basis of estimate from year to year is similar, it is likely to lead to similar errors in each year. Our information about year-to-year fluctuations in income streams, then, is more reliable than our information about the absolute amounts of those streams.¹¹

II. THE SHARES OF LABOR AND PROPERTY

The bulk of the national income falls into two chief classes, income going to labor and income going to property holders. But there is an important part of the national income which the available data do not permit us to apportion between these classes with any great confidence. Profits withdrawn by individual business enterprisers represents a mixture of labor income and income from property. Labor income of employees may be subdivided into wages; salaries; and pensions, benefits, and compensation for accidents. Property income includes rents and royalties, interest, and dividends. Table 3 shows total realized income for 1925 and 1913, and total money income for 1925 apportioned to these classes.

It appears that employees received about 57 per cent of realized income and 63 per cent of money income in 1925, and that their share in the national dividend has increased over the prewar figure. About two-thirds of the employees' share goes to wage workers. The chief gain as against prewar proportions has, however, come in the field of the salaried employees, which, according to King's classification, includes all of govern-

¹¹ A general word of caution should perhaps be entered at this point regarding the interpretation of year to-year variations in many of the income streams. One would expect that the variable income streams, particularly, would fluctuate up and down with the ups and downs of business conditions. But to find that a given income stream does fluctuate as one expects it to, is not always precisely an empirical verification of one's hypothesis. This hypothesis may have been used in making the estimate. For example, there are no satisfactory annual data on pay rolls in merchandising, and the pay roll estimates depend on estimates of number of employees on the pay roll. In making this estimate, a fluctuation with business conditions was assumed. In certain other lines, manufacturing and railroads, for example, there are annual pay roll figures, and the fluctuations of these income streams are not due to the method of estimate.

TABLE 3.—DISTRIBUTION OF TOTAL REALIZED INCOME OF THE UNITED STATES IN 1925 AND 1913 AMONG VARIOUS LABOR AND PROPERTY GROUPS^a

Item	(1)	(2)	(3)	(4)	(5)	(6)
	Total realized income		Money income, 1925	Total realized income		Money income, 1925
	1925	1913		1925	1913	
	Billions of dollars			Per cent		
1. Wages.....	30.8	13.0	30.8	38	37	42
2. Salaries.....	15.0	5.5	14.9	18	15	20
3. Pensions, benefits, and compensations	1.1	.3	1.1	1	1	1
4. Total share of employees.....	46.8	18.8	46.8	57	53	63
5. Rents and royalties.....	10.6	5.2	5.8	13	15	8
6. Interest.....	3.9	1.5	3.9	5	4	5
7. Dividends.....	4.1	2.2	4.1	5	6	6
8. Property income.....	18.6	8.9	13.8	23	25	19
9. Entrepreneurial profits withdrawn.....	16.4	8.0	13.7	20	22	18
10. Total realized income.....	81.8	35.7	74.3	100	100	100

^a On the extent to which the omission of additions to corporate surplus, etc. understates the share of property, see Table 4, note a.

ment and banking. The growth of pay rolls in these two lines has been extremely rapid, but the increase of salaries in the public utility, merchandising, and unclassified groups of industries has been large also.¹²

With the increasing importance of labor and of plant and equipment, financed by the issue of securities as the country has developed industrially, rents became a smaller proportion of the national income in 1925 than they were in 1913. While there have been definite declines in the importance of the interest item in several of the industry groups, this item has shown a great increase in the case of the government group (an increase measured in per cent of the total national income) nearly equal

¹² The chief differences between total realized income and income disbursed in money are brought out in Table 3. Item 5 includes the most important noncash items, net rental value of owned homes and "interest" on the value of other consumers' durable goods. No attempt has been made to exclude agricultural "share rents" in estimating money rents, although this would have been desirable, if the basic data had permitted it. Item 9 includes profits withdrawn by farmers in the form of agricultural produce consumed, and urban garden produce and "profits" from cow and poultry keeping. The only important nonmoney employees' labor income included in these estimates are those for food and board of the Army and Navy and of agricultural employees. In calculating money wage income, only the former of these two has been deducted from total disbursed income, the entire amount of agricultural produce consumed by the farm population being deducted from farmers' profits because of the difficulty of apportioning it between farmers and employees.

to the net increase of the interest percentage of total national income for all groups combined. The decline in the proportion of total realized income going to stockholders is fairly evenly distributed among the different types of enterprise. In the case of profits withdrawn by individual enterprisers, the decline in relative importance is partly owing to the shift from the individual to the corporate form of organization, but the chief decline is in agriculture, where this factor is not of consequence.

Considerable interest attaches to determining the proportion of total realized income which goes to labor and that which goes to property. If we attempt to estimate the amount of labor income included in profits withdrawn by individual enterprisers, on the assumption that the average enterpriser in each of the nine industry groups (except the unclassified) receives for his services the same annual income as the average wage earner in that group, and that in the unclassified group, where lawyers, doctors, and stockbrokers are among the most important types of enterprisers, the average enterpriser's labor income equals the average salary, the figure for enterprisers' labor income in 1925 is well over nine and a half billion dollars. No satisfactory basis for a direct estimate of enterprisers' property income is available. As a rough check upon the estimate of total property income which the nine and a half billion estimate leaves, we may note that in 1922 the corresponding estimate would mean a total realized property income of over 21 billion dollars, or about 6 per cent on 353 billion dollars of national wealth.¹³

But this comparison is not especially useful as a check on the estimate of enterprisers' property income. Moreover, the check of the total property income estimate is subject to the qualification that realized property income is not the same as accrued property income. About all that can be said is that the property income estimate is of an order of magnitude which shows no striking disagreement with the estimate of wealth.

If we take enterprisers' labor income at nine and a half billion dollars in 1925, all labor income represents nearly 69 per cent of total realized income, and property income represents about 31 per cent.

Another figure of general interest is the proportion of what has been called "earned income" to the total. "Earned income" includes employees' labor income and enterprisers' profits. In both the United Kingdom and the United States in 1924, "earned income" was about three-fourths of the total "social accrued income."¹⁴ In both countries the proportion is larger in 1924 than before the war, the proportion for the United Kingdom in 1911 being about two-thirds, and for the United States in 1914 about 73 per cent, as against 76 per cent in 1924.

¹³ As estimated by the Federal Trade Commission, *Sen. Doc. No. 126, 69th Cong., 1st Sess. p. 50.*

¹⁴ As defined in footnote to Table 2.

If we examine the year-to-year changes in the distribution of total realized income (Table 4), it appears that the gain in the employees' share came largely in 1919 and 1920, and that the chief change after that was a slight rise in 1923, followed by a dip in 1925. The preliminary estimates for 1926 and 1927 do not substantiate the contention that the share of employees in the national income has been declining. This share has been practically constant since 1920. The share of property—rent, interest, and dividends—reaches its peak in 1921 and 1922, during the postwar depression period. There has been no significant variation since 1923. The share of individual enterprisers rose during the war, declined sharply in 1920 and 1921, and has since then increased slightly, but is still below the prewar figure.

TABLE 4.—THE PROPORTIONS OF LABOR AND PROPERTY AND ENTERPRISERS' INCOME,^a AND THE RELATION BETWEEN CORPORATE DIVIDENDS AND NONAGRICULTURAL WAGE PAYMENTS, UNITED STATES, 1913-14 AND 1918-1926

Year	(1)	(2)	(3)	(4)	(5)	(6)
	Total share of employees	Rent, interest, dividends	Profits withdrawn	Corporation dividends on common stock	Nonagricultural wage payments	Ratio of dividends to wages (per cent)
	Per cent of total realized income			1913 = 100 per cent		
1913.....	53	25	22	100	100	13
1914.....	52	25	23	93	95	13
1918.....	54	22	24	172	157	15
1919.....	54	22	24	155	176	12
1920.....	57	22	21	143	228	8
1921.....	57	25	18	136	179	10
1922.....	57	24	19	124	190	9
1923.....	58	23	19	164	224	10
1924.....	58	23	19	176	227	10
1925.....	57	23	20	205	241	11
1926.....	^b 59	^b 23	^b 19	^b 230	^b 255	^b 12
1927.....	^b 59	...	...	....	^b 258	....

^a A rough idea of the effect of using realized income instead of accrued social income in analyzing distribution may be gained from the following estimates. Accrued social income includes additions to surplus and certain real estate appreciation, and excludes interest on the Federal debt.

	1914	1924	1925
	Per cent	Per cent	Per cent
Proportion of accrued social income going to			
Employees.....	50	56	56
Enterprisers and property.....	50	44	44

^b Preliminary.

The changes in the share of employees are largely accounted for by changes in the two chief constituent industry groups, manufacturing and the unclassified enterprises and occupations, labor income of which represents over one-half of total labor income. The proportion of realized income included in the unclassified pay rolls was less than half the prewar figure in 1918 and has increased since, reinforcing the increase in manufacturing in 1920 and offsetting the 1921 decline.

The fluctuations in the share going to employees show little correspondence with the ups and downs of business. If money incomes of employees are compared with total money income, it appears that the share of employees rises in the depression period of 1921 and 1922. But this is, in part at least, a result of differing fluctuations in different industry groups. Agriculture, for example, has a large proportion of property and enterprisers' income, and the total realized income of agriculture drops sharply in these years. It may be well, therefore, to compare money wages outside of agriculture (salaries being excluded as being a more stable form of income) with corporate cash dividends paid to individuals. Dividends appear, on the whole, to be about as stable a form of income as wages. Columns (4) and (5) of Table 4 show total cash dividends paid to individuals on common stock, and total money wages (except in agriculture) relative to 1913, and column (6) gives the ratio of dividends to wages. The greater drop of wages in 1921 is reflected in the increase of the ratio of dividends to wages. In 1922-23, however, estimated dividends to individuals show a continued decline, while wages do not. Of course, stockholders' accrued income (that is, cash dividends plus additions to, or minus withdrawals from, the stockholders' equity) drops sharply in 1921 (by about 90 per cent, according to the income tax returns), even if their cash dividend income shows only a slight decline.

But percentage shares in the national dividend are perhaps less important from the point of view of the employee than his average annual labor income. Table 5 shows the changes in wages and in salaries per employee attached to industry, that is, total wages or salaries, divided by the total number of wage or salary workers, including those who may be temporarily out of employment. In order to facilitate comparison, wages and salaries are expressed as percentages of the 1913 figures, and the changes are shown both for actual dollars and for dollars corrected for changes in the workers' costs of living.¹⁵ It appears that real annual wages per employee (that is, wages corrected for price changes) were about the same in 1918 and 1920 as in 1913, that they declined appreciably in 1919 and more sharply in 1921, and have risen considerably since, though there was a setback in 1924. Real annual salaries per employee, on the other hand, were considerably lower in

¹⁵ See Chap. IX, Price Movements, p. 604; Chap. VI, Labor, pp. 430-445.

TABLE 5.—AVERAGE ANNUAL COMPENSATION OF WAGE EMPLOYEES, SALARIED EMPLOYEES, AND ALL EMPLOYEES, RELATIVE TO 1913 AS 100 PER CENT, AND NUMBER OF EMPLOYEES, UNITED STATES, 1913-14 AND 1918-1926

Year	Average annual wages per wage employee		Average annual salary per salaried employee		Average labor income per employee		Number of wage workers	Number of salaried employees
	Current dollars	1925 dollars	Current dollars	1925 dollars	Current dollars	1925 dollars		
	Relative to 1913 as 100 per cent								Millions of persons
1913.....	100	100	100	100	100	100	21.9	5.2
1914.....	93	92	102	101	96	94	22.5	5.3
1918.....	158	101	119	76	152	97	21.7	8.9
1919.....	173	95	136	75	168	92	22.4	8.0
1920.....	214	103	163	79	203	98	23.2	6.7
1921.....	165	93	159	89	169	95	23.8	7.0
1922.....	170	103	161	97	173	104	24.3	7.0
1923.....	194	114	172	102	192	113	24.9	7.2
1924.....	191	113	178	105	193	114	25.6	7.5
1925.....	198	115	183	106	199	115	26.2	7.7
1926.....	*201	*118	*190	*109	*205	*119	26.8	7.9
1927.....	*203	*119	*196	*114	*208	*122	27.3	8.3

* Preliminary.

1918 than in 1913, declined still further in 1919, and have risen every year since, not even excepting 1921. Since 1923 they have apparently been above the prewar level. The decline in real wages in 1919, and to some extent also the decline in real salaries in 1918 and 1919, were owing to price changes, but the latter was due in part also to the temporary war-time increase in the number of Government employees receiving low salaries. As we should expect, wages are evidently more responsive to price changes and business conditions than salaries. On the whole, real wages have risen considerably more than real salaries in the interval from 1913 to 1926, 18 per cent as compared to 9 per cent, and even since 1922 real wages have gained 15 per cent as against a gain of 11 per cent for real salaries. The number of salary workers has, however, grown more rapidly from 1913 to 1926 than the number of wage workers, according to King's estimate.

It may be interesting as a comment on the development of the wage system to note whether the proportion of total money income derived from pensions, benefits, and compensation for accidents is changing. The estimates for this item are not very complete, but, so far as the available evidence goes, there is no very appreciable trend in the proportion of money income taking this form. Both in 1913 and in 1925 it was slightly less than 1 per cent.

We have considered the changes in the proportion of total disbursed income going to property. This income consists of three principal parts—rent, interest, and dividends. While rent accounts for a gradually decreasing proportion of the income in this period, the proportion going to interest, after a slight drop in 1917 and 1918, rises with the increase in Government financing and remains above the prewar figure (Table 6). These two income streams are alike in being a larger proportion of total income in years of poor business. Dividends, on the other hand, represent a slightly larger proportion of total income in 1921 than in adjoining years, and a slightly smaller proportion in 1914 and 1924. The proportion shows a downward trend to 1919–1922, and an upward trend since, but the 1926 percentage is still considerably below that of 1913.

TABLE 6.—RENTS AND ROYALTIES, INTEREST, AND DIVIDENDS EXPRESSED AS PERCENTAGES OF TOTAL REALIZED INCOME; THE RELATION OF FIXED TO TOTAL MONEY INCOME; RETURN TO RAILROAD BONDHOLDERS CORRECTED FOR PRICE CHANGES; AND THE RELATION OF DIVIDENDS AND PROFITS WITHDRAWN TO INTEREST PAYMENTS BY DOMESTIC BUSINESSES, UNITED STATES, 1913–14 AND 1918–1926

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Rents	Interest	Dividends	Fixed money incomes (billions of dollars)	Ratio of fixed money income to total money income (per cent)	Railroad bond yields corrected for price changes* (per cent)	Dividends on common stock	Interest payments by domestic business	Ratio of dividends etc., to interest
	Per cent of total disbursed income						Billions of 1925 dollars		
1913.....	14.5	4.1	6.1	10.1	32.1	^b 1.3	2.7	2.2	1.2
1914.....	15.0	4.2	5.8	10.6	33.9	^b 3.3	2.5	2.3	1.1
1918.....	12.5	3.6	5.9	16.7	32.2	-10.6	3.3	1.9	1.7
1919.....	12.7	4.3	4.9	18.6	32.5	- 8.8	2.6	1.8	1.5
1920.....	13.8	4.0	4.2	20.2	30.8	1.7	2.1	1.7	1.3
1921.....	15.7	4.8	4.7	20.7	37.1	16.2	2.2	2.0	1.1
1922.....	14.7	5.4	4.0	21.7	36.8	4.6	2.1	2.2	0.95
1923.....	13.4	4.9	4.5	22.8	34.0	4.2	2.7	2.3	1.2
1924.....	13.4	4.8	4.5	24.3	34.9	4.6	2.9	2.4	1.2
1925.....	13.0	4.7	5.1	25.3	34.1	2.3	3.3	2.5	1.4
1926.....	^c 13.2	^c 4.9	^c 5.3	^c 26.5	^c 34.1	6.4	...	2.7	...

* Data for funded debt beginning of year and interest paid on that during the year (fiscal years prior to 1916) for Class I roads (excluding nonoperating subsidiaries) were from the Interstate Commerce Commission. These were deflated by King's indexes to give: (1) deflated value of debt at beginning of year, (2) same deflated by index for end of year, (3) deflated interest paid. (1) minus (2) plus (3) equals annual return on investment. This divided by (1) equals rate of return.

^b Year ended June 30.

^c Preliminary.

It would be desirable if we could compare the year-to-year changes in the percentage of return on investment. For rents, dividends, and profits, no satisfactory data are available to make possible such a comparison, but for one important group of interest payments such a comparison may be made, namely, interest on railroad bonds. There are dangers in attempting to make corrections for price changes, but failure to make such correction is certainly worse. Table 6 shows the rate of return to investors in the bonds of Class I railroads (nonoperating subsidiaries excluded) upon the par value of their investment at the beginning of the year. The return is made up of interest received and of the change in the purchasing power of the par value of the bonds to the income recipients. Table 6 shows clearly that, when price changes are allowed for, this type of investment yields anything but a stable return. The year-to-year changes in the deflation index (cost of living of the higher income classes) may be open to question, but it is beyond dispute that there were losses in the years of rapidly rising living costs, and that bondholders who invested before the rise have fared badly, while those who invested at the peak of living costs profited considerably by the subsequent decline. Table 6 also shows the ratio of dividends paid on common stock to all interest payments other than payments by government or by foreigners, when both are corrected for price changes. The high figures in 1918-1920 and the low figures in 1921 and 1922 suggest that, when price changes are taken into account, common stock may be a more stable type of investment than bonds and mortgages in a period of widespread and violent price changes.

A grouping of income streams which is less familiar than the classification into wages, salaries, interest, etc., but of great significance for national prosperity is shown in Table 6. The more important "fixed money income" streams are assembled—disbursements to individuals which business enterprises cannot easily adjust to changes in volume of business: money salaries, pensions, and benefits;¹⁶ rents (excepting rents and royalties in mining); and interest (short-term interest should logically be excluded, but it did not seem worth while to attempt this exclusion). Column (5), Table 6, gives the ratio of this stream of fixed incomes to total money income. Two things stand out clearly: the ratio of fixed to total money income is highest in depression years, 1914, 1921, 1922, and 1924, and the ratio has an upward trend. In interpreting these movements, it is well to bear in mind several qualifications. The distinction between wages and salaries is not precisely a distinction between fixed and variable incomes, and none of the other constituent streams of our national income falls wholly in one of these two classes. Furthermore, an increasing proportion of corporate dividends might properly be regarded as forming a fixed income stream. And there are

¹⁶ Total salaries and pensions and benefits less Army and Navy pay in kind.

changes in the wage system in certain fields which might require a similar qualification with respect to wages; for example, the development of some types of unemployment insurance. If these factors are taken into account, the upward trend of fixed income is probably underestimated. From the point of view of the individual enterprise, the disbursement of a large proportion of fixed incomes is a disadvantage in meeting the cyclical fluctuations of business. From the point of view of a national economy, it is an advantage. The increase in proportion of fixed incomes is a factor making for increased stability of business.

III. THE PROSPERITY OF VARIOUS INDUSTRY GROUPS

The analysis of the national income into the shares contributed by the major industrial groups and types of industrial organization is important because it summarizes the chief changes that have been taking place in the structure of industry and at the same time throws light on some of the factors which have been responsible for these changes. Moreover, because the estimates of national income have been made by adding together these shares, it helps to make clear precisely what is included in the national income, and what reliance may be placed upon each constituent estimate in the light of the peculiar difficulties which have been encountered in making it.

Let us consider first the amounts of total income realized from each industry group in 1913, 1925, and 1926, 1913 being taken as representative of prewar conditions. These amounts and the percentages of total realized income coming from each industry group are shown in Table 7. The most important shifts among the industry groups which this table shows are the declining importance of agriculture and the increasing importance of government and of merchandising. The proportion of income from agriculture has decreased 3 per cent in the 13-year period under review. In interpreting these changes it is important to recognize that a change in percentage of income disbursed by a group may mean a change in the relative importance of the physical volume of its output. It may also mean a change in the remuneration which a given physical volume commands, relative to that in other lines. Furthermore a change in relative remuneration may represent either a change in economic efficiency or a change in relative bargaining power. This decline in agriculture is probably partly a matter of change in relative remuneration. But it is to be expected that the relative importance of this industry, measured in physical units of output, should decrease as the country becomes more highly industrialized. The increase in the percentage of income disbursed by government is doubtless partly a war phenomenon, interest payments by the Federal Government having been multiplied more than thirtyfold. But there has certainly been a great increase in the peace-time activity of government also.

TABLE 7.—AMOUNT AND PERCENTAGE OF TOTAL REALIZED INCOME DERIVED FROM EACH INDUSTRY GROUP,^a UNITED STATES, 1913, 1925, AND 1926

	1913		1925		1926	
	Billions of dollars	Per cent	Billions of dollars	Per cent	Billions of dollars	Per cent
1. Agriculture.....	5.0	14	8.9	11	8.9	10
2. Mines, quarries, etc.....	1.2	3	2.2	3	2.5	3
3. Manufacturing.....	7.3	21	16.9	21	17.8	21
4. Construction.....	1.5	4	3.5	4	3.5	4
5. Transportation and public utilities.....	3.2	9	6.7	8	7.3	8
6. Commercial and savings banks.....	.5	1	1.1	1	1.2	1
7. Merchandising.....	4.5	13	12.0	15	2.5	15
8. Governments.....	2.0	6	6.1	7	6.6	8
9. Unclassified industries and occupations ^b	7.1	20	16.4	20	17.3	20
10. Miscellaneous income ^b	3.4	9	8.1	10	8.2	10
11. Total realized income.....	35.7	100	81.9	100	85.7	100

^a Preliminary estimate.

^b Group 10 includes nonmoney income from nonfarm cows, poultry, and gardens, and interest on value of durable consumers' goods, net rentals for owned and leased homes, and net income from foreign investments. Group 9 includes income from all business enterprises, institutions, and gainful occupations not included in the first eight groups. For further information on the make-up of each group, see text.

The proportion of total governmental realized income disbursed by state and local governments was not much smaller in 1926 than in 1913, 61 per cent as against 66 per cent in the earlier year. It is difficult to be certain how far the increase in proportion of total income realized from retail and wholesale enterprises is a matter of physical volume and how far of relative remuneration. There is no satisfactory direct measure of the volume of goods marketed by wholesalers and retailers, but the fact that the percentage of income realized from the transportation group and also from the three groups, agriculture, mining, and manufacturing, has declined, lends color to the belief that merchandising is commanding a larger remuneration relative to other lines for handling a given physical volume of goods. The fact that the proportion of income realized from the construction industry shows no appreciable change between 1913 and 1925 appears to corroborate the contention advanced elsewhere¹⁷ that the amount of construction in recent years may not have been so abnormally large as some have supposed.

A word may be said about the other years which do not appear in Table 7 (see Table 38, page 839). While they do not give reason to alter materially the statements regarding the trends of changes made above, they show certain interesting fluctuations. In 1918, when Government war-time activity was at its height, over 10 per cent of the national

¹⁷ See Chap. III, Construction, p. 219.

income was derived from government. The government's percentage was also high in 1921-22, when it was 9 per cent. In 1919, the unclassified industries accounted for only 11.3 per cent of the national income, as compared to 20 per cent in 1926. In 1920, the percentage for manufacturing was high; it was $26\frac{1}{2}$ per cent, while that for merchandising was only 11.8 per cent. But these fluctuations were largely the result of war and postwar temporary conditions.

Table 8 shows the amount and proportion of income disbursed by corporate enterprises. As might be expected, there is an increase in the importance of this type of organization, as an income-disbursing agency, between 1913 and 1925. But the increase is not a striking one and the

TABLE 8.—TOTAL INCOME DISBURSED BY CORPORATIONS, BY CORPORATIONS AND GOVERNMENT, AND TOTAL INCOME DISBURSED IN MONEY IN THE UNITED STATES IN 1913, 1925, AND SEVERAL INTERVENING YEARS

	(1)	(2)	(3)	(4)	(5)	(6)
	1913	1914	1919	1921	1923	1925
1. Total income disbursed by corporations ^a (billions of dollars).....	13.0	12.4	25.2	23.6	28.9	31.1
2. Total income disbursed by corporations and government (billions of dollars).....	15.0	14.5	31.3	29.3	34.6	37.2
3. Total money income (billions of dollars).....	31.5	31.3	57.2	55.8	67.1	74.3
4. Per cent of total money income disbursed by corporations.....	41.3	39.6	44.0	42.4	43.0	41.9
5. Per cent of total money income disbursed by corporations and government.....	47.5	46.3	54.7	52.5	51.6	50.2

^a These estimates of total income realized by United States corporations were made by industry groups and by types of income. King has estimates of interest and dividends of corporations. No estimate of dividends or interest from foreign corporations is included in the totals given in Table 8.

For manufacturing in 1919 and 1914, and for mining in 1919, the census affords a basis of estimate of pay roll, the number of employees in each type of establishment, for both corporations and all establishments, and the total wages for each type of establishment. It was assumed that the ratio of corporate to all wages for each type of establishment was the same as that of the number of corporate to all employees, and that the ratio of corporate to all wages in each of these two industry groups was the same as the ratio of corporate to all pay rolls (including pensions, etc.). Other years were estimated by assuming that the proportion of noncorporate pay rolls varied in proportion to the changes in the ratio of noncorporate to total value of product (mining) or noncorporate to total operating expenses (manufacturing). The merchandising and construction pay rolls were prorated on gross revenue from sales. All compensation of employees in the banking and transportation and public utility groups was arbitrarily assumed to be corporate. Since again the unclassified group is the most unsatisfactory, it seemed the best available expedient to prorate pay roll on King's estimate of profits, a procedure which presumably gives too small a figure, but one with an approximately correct trend.

Rents were apportioned between corporate and other enterprises on the basis of value of products for mining, merchandising, and manufacturing, and profits for the unclassified group.

decline in proportionate importance after 1919 is greater than the net increase for the entire period. Paradoxical as it may seem, the corporate form of organization has disbursed a steadily increasing proportion of income in the several industry groups taken one by one, and yet appears

to have disbursed a smaller proportion of total income in 1925 than in 1919. The explanation appears to lie chiefly in manufacturing pay rolls. The pay rolls of manufacturing corporations, which make up about three-sevenths of the total income disbursed by corporations, have grown during these six years, but not as rapidly as total disbursed money income. We have already seen that the proportion of all realized income derived from the manufacturing group declined some 6.5 per cent in this six-year period, and it is not surprising that manufacturing corporation pay rolls have also failed to grow as rapidly as total income disbursed in money. If we eliminate this one item, the ratio of the remaining streams disbursed by corporations to total income disbursed in money increases from 22.7 per cent in 1919 to 23.4 per cent in 1925.

Corporate enterprises and government together accounted for about 47.5 per cent of the total income disbursed in money in 1913 and for almost 55 per cent in 1919, but by 1925 the percentage had declined again to about 50 per cent.

Table 9 shows the percentage of employees' income coming from each industry group, and average remuneration per employee by groups. Manufacturing accounts for about 30 per cent of all employees' labor income, and the unclassified occupations for nearly 25 per cent. These groups, together with merchandising, public utilities, and government, pay out nearly eight-ninths of all compensation paid to employees. On the average, banks appear to have the highest paid employees, with government and the construction industry next, and agriculture at the bottom of the list.

TABLE 9.—PER CENT DISTRIBUTION OF VARIOUS TYPES OF INCOME AND AVERAGE ANNUAL LABOR INCOME PER EMPLOYEE, BY INDUSTRY GROUPS, UNITED STATES, 1925

	(1)	(2)	(3)	(4)	(5)	(6)
	Share of employees	Average income per employee	Rents and royalties	Interest	Dividends	Individual profits withdrawn
	<i>Per cent</i>		<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>	<i>Per cent</i>
1. Agriculture.....	2.7	\$537	11.4	6.0	0.0	37.9
2. Mining.....	3.3	1,318	2.4	1.8	6.5	.1
3. Manufacturing.....	30.5	1,362	1.9	7.0	46.4	1.1
4. Construction.....	5.4	1,574	0.0	.8	1.7	5.0
5. Transportation and public utilities.....	10.9	1,554	.2	23.2	16.8	.....
6. Banking.....	1.3	2,179	0.0	8.5	4.1	^a
7. Merchandising.....	12.0	1,315	6.9	9.7	10.7	29.2
8. Government.....	11.0	1,585	0.0	25.4	0.0	0.0
9. Unclassified industries.....	22.9	1,408	7.2	6.7	13.8	25.1
10. Miscellaneous income.....	0.0	.....	70.0	^b 10.9	^b	1.5
11. All groups combined.....	100.0	1,384	100.0	100.0	100.0	100.0

^a Included with dividends.

^b Dividends on foreign stocks included in miscellaneous interest.

It also appears from Table 9 that over two-thirds of the rents in 1925 (including here imputed interest on consumption goods) fall in the group of miscellaneous incomes, chiefly rental value of urban homes, and that agriculture, merchandising, and the unclassified industries account for all but 4.5 per cent of the rest. The government and the public utility groups disbursed nearly half of all the 1925 interest payments, and nearly 30 per cent of the total comes from banking and trade, and from abroad. About 7 per cent comes from domestic manufacturing and about 6 per cent from agriculture. Of dividends in 1925, nearly one-half come from the manufacturing group, and about one-sixth from public utilities, while merchandising and the unclassified industries account for over 10 per cent each. Individual profits withdrawn are concentrated in three groups, agriculture, trade, and the unclassified industries.

A rough idea of the relative profitableness of the several industry groups may be gained from the corporation income tax returns. Table 10 shows (1) the capital, surplus, and undivided profits or book value of stockholders' equity for each group as of the close of the year 1926;¹⁸ (2) the cash dividends paid; (3) the net profits after paying the tax; and (4) the ratio of profits to the book value of the stockholders' equity.¹⁹

Mining is distinctly the least profitable of the industry groups according to this showing, and construction the most profitable; but this and other comparisons, so far as the mining industry is concerned, may be vitiated by the different accounting for income tax returns in mining. It seems probable that the rate of return in mining is actually much higher than it appears.*

¹⁸ Includes all fiscal years ended between July 1, 1926 and June 30, 1927.

¹⁹ Among the qualifications to be considered in interpreting these figures may be noted the following: (a) The methods of valuing assets and determining such items as depreciation expenses are not uniform. This qualification is particularly important in the case of mining, where depletion changes and valuation of reserves may be quite arbitrarily determined. (b) The classifications are not precisely the same as King's, and the "all other" class has not been included with the unclassified groups, as it includes a considerable proportion of inactive concerns. (c) The income tax data classify a corporation according to the predominant character of its business; for example, the United States Steel Corporation, if it renders one return, would be classed as "manufacturing," although it is also engaged in mining and transportation. Consolidated returns are permitted for combinations. (d) Only about 79 per cent of all reporting corporations furnished balance sheets, though for the most part of it was the smaller corporations and corporations showing a deficit that failed to file balance sheets. Balance sheets were filed by 97 per cent of corporations reporting a net income of over \$10,000. (e) Sales prices of a mining corporation to a financially interested or parent company (and consequently its revenues) may be arbitrarily determined.

* In my opinion, the *Statistics of Income* published by the Bureau of Internal Revenue afford no indication of the profits of the mining and quarrying industries, for

TABLE 10.—RETURN TO STOCKHOLDERS ON INVESTMENT. UNITED STATES CORPORATION INCOME TAX RETURNS, 1926

	(1)	(2)	(3)	(4)
	Capital stock, surplus, and undivided profits as of end of year	Cash dividends	Profits after tax	Ratio of profits to capital investment
	Billions of dollars	Millions of dollars		Per cent
1. Unclassified group.....	\$16.9	\$678	\$986	5.8
2. Mining.....	8.3	403	305	3.7
3. Manufacturing.....	46.2	2,544	3,640	7.9
4. Construction.....	1.0	55	105	11.0
5. Transportation and public utilities.....	26.5	1,277	1,849	7.0
6. Banking.....	\$8.2	\$458	\$638	7.8
7. Trade.....	12.1	525	761	6.3
8. All others (including inactive corporations).....	.1	5	-3	-2.7
9. All corporations.....	119.3	5,945	8,281	6.9

* The book value of the stockholders' equity as of June 30, 1927, for the banking groups is from the report of the Comptroller of the Currency. Profits are estimated for all banks as yielding the same rate of return on the stockholders' equity as for national banks. Dividends are estimated to bear the same ratio to profits for all banks as for national banks. The unclassified group represents the items listed in the tax returns as agriculture, public service, and finance less these banking group estimates.

Table 10 refers only to corporations. Table 11 shows the number of individual income tax returns reporting profits and the amount of reported profits in 1925.²⁰ The highest reported profits per return were in mining, three reasons, which are noted by Mr. Copeland but not in my judgment sufficiently stressed; they are:

1. The practice of permitting consolidated returns and classifying them according to the character of the principal business.
2. The fact that the profits are arrived at after deducting statutory deductions for depletion, which to a large extent do not represent any actual cost incurred; for 1925, the total allowances under this heading were nearly 50 per cent greater than the reported net profits in the mining and quarrying group.
3. The practice, among certain classes of mining corporations, of transferring mine products to stockholders at cost, or other figures below fair value.

I think there is good reason to suppose that, making due allowance for these three items, the profits of the industry for the year 1925 were 100 per cent or more in excess of the figures quoted from *Statistics of Income*. I do not believe any satisfactory conclusions can be predicated upon statistics subject to so wide a margin of error.—Note by George O. May, Director.

²⁰ Profits here include labor income, and no satisfactory way of measuring rate of return is available. The estimated number of enterprisers in each group is shown, and the average reported profit per return. Less than half of all enterprisers in manufacturing are apparently reporting, and only a negligible proportion of farmers' incomes fall above the reporting limit. An unknown number of enterprisers in column (3), which is based on King's estimates, should be transferred from Item 7 to Item 5 in order to make King's classification comparable with the tax returns, for King does not include taxicabs and trucking under Item 5.

with banking and the unclassified group next, and agriculture at the bottom of the list. But these figures speak only for the most profitable portion of each group.

TABLE 11.—INDIVIDUAL ENTERPRISER'S BUSINESS PROFITS REPORTED IN INCOME TAX RETURNS, AND NUMBER OF REPORTING AND OF ALL ENTERPRISERS, UNITED STATES, 1925

Group	(1)	(2)	(3)	(4)
	Business profits (millions of dollars)	Number of enterprisers		Average profit per reporting enterpriser
		Reporting	Total	
		Thousands of persons		
1. Agriculture.....	250	83	6,317	\$3,010
2. Mining, quarrying, etc.....	25	5	17	5,520
3. Manufacturing.....	268	69	150	3,900
4. Construction.....	247	60	185	4,080
5. Transportation and public utilities.....	84	27	28	3,170
6. Trade.....	1,217	367	1,484	3,320
7. Unclassified and banking groups.....	1,598	368	1,827	4,330
8. All enterprisers.....	3,689	979	9,997	3,790

According to economic theory, our industrial system, which has no general manager to dictate how much of each commodity or service shall be produced each year, or how much of our available human or material resources shall be devoted to each form of production, is nicely articulated through a scheme of pecuniary incentives. Prices and profits exercise a guidance over production and the apportionment of resources. If too much of any commodity is being produced, prices and profits will fall, production will be curtailed, and resources will be withdrawn from this type of production for want of attractive remuneration. If too little is being produced, prices and profits will rise, and the increased remuneration of resources devoted to this kind of production will attract new employees and new capital, and output will increase. There are many qualifications to be put upon this theory, and it is not to be expected that the response to the guidance of price and profit will take place without lag. In particular, it should be noted that in lines where overhead costs are high, low profits or even losses are not necessarily incentives to withdraw from the industry. Withdrawal may be an even more poorly paying proposition.

As we examine each of the great industry groups of our economic system, it will be interesting to inquire how sure and prompt appears the responsiveness to the guidance of price and profit. We shall, of course, be dealing with broad averages, and these may conceal a responsiveness of our economic system which a more detailed analysis would bring to light. Moreover, the accuracy of the income estimates and of

other statistical measures is probably not sufficient to yield more than crude results. Finally, in such economic changes as the growth of government enterprise, other than pecuniary considerations may be the determining factor.

Another hypothesis on which recent changes in our national income streams may throw some light is the productivity theory of the distribution of income. According to one formulation of this theory, the income realized from (or more strictly accruing from) any industry group, measured in dollars of constant purchasing power to the income recipients, might be expected to vary with the physical volume of its output of commodities or services. It will be worth while to test this hypothesis also, but again it will be a test which is subject to the qualification that our statistical measurements are not sufficiently accurate to yield more than crude results. And perhaps it should be added that the hypothesis is usually so qualified as to recognize that technological change may be a disturbing factor.

Agriculture.—The items which go to make up the total income disbursed by agriculture can best be seen by considering the following consolidated statement of income, in millions of dollars, for agriculture for the year ended June 30, 1927:

1. Revenue from sale of farm products.....	9,537	
2. Farm value of farm products consumed by farm population.....	2,590	
		<hr/>
3. Gross value of agricultural production.....		12,127
4. Payments made to other industry groups.....		3,697
		<hr/>
5. Net current income realized from agriculture before deducting real estate depreciation.....		8,430
6. Rental value to owners of farm houses.....		161
		<hr/>
7. Total income realized from agriculture and farm houses before deducting real estate depreciation.....		8,591
8. Loss from change in property value (real estate and improvements)		2,160
		<hr/>
9. Net income account of farms.....		6,431
10. Wages and salaries (including value of board, etc.).....	1,291	
11. Rents paid to individuals (including other farmers).....	1,428	
12. Interest paid to individuals (including other farmers).....	260	
		<hr/>
13. Total expenses paid to individuals.....		2,979
		<hr/>
14. Net profit to owners.....		3,452
15. Interest on market value of owners' equity at 4½ per cent.....	1,759	
16. Labor income of independent enterprisers (owners and tenants at \$540 a year, average annual wage per wage employee).....	3,410	
		<hr/>
17. "Normal profit" for year.....		5,169
		<hr/>
18. Deficit in actual profit.....		1,717

NOTE.—Items 1 and 2 and the data for most of the other items are from *Crops and Markets* for July, 1928. Item 4 is the Bureau of Agricultural Economics estimate for operating costs plus 30 per cent of taxes, plus two-thirds of estimated interest paid. (The proportions follow King's estimates.) Item 6 is King's 1925 estimate. Item 8 was estimated by regions from 1925 census values and value indexes in Department of Agriculture *Circular* No. 15, October, 1927. Item 10 is the Bureau wage estimate, plus King's estimate of salaries (average for 1924 and 1925). Item 11 is the Bureau estimate for rent paid. Item 12 is one-half interest as above. Item 15 is the Bureau estimate less item 6. The number of entrepreneurs for item 16 is King's estimate.

Items 1 and 3 do not include for the most part the value of crops fed to livestock, since this part of agricultural production represents raw material for further production by the industry. Item 4 includes interest paid to banks and merchants; expenses for manufactured feed; business taxes; fertilizer expense; repairs and replacements for implements, automobiles, and buildings; cost of supplies; and some purchases of agricultural products from other farms. In agriculture and in each of the other industry groups, so far as practicable, the effort has been made to classify expenses as (a) those paid to other industry groups and (b) those paid to individuals. Disbursed income includes only those expenses paid to individuals plus cash dividends and other profits withdrawn by individuals.²¹ To include expenses paid to other industry groups would involve double counting. As practically all of agriculture is organized on an individual basis, additions to surplus are not easily distinguished from new investment. All profits are treated as withdrawn, and the whole net value produced by agriculture (before deducting depreciation of real estate plus rental value of owner-occupied houses) is considered as realized income.²² Items 2 and 6 necessarily involve somewhat arbitrary valuations. Consequently, item 7, total income realized from agriculture, in spite of the wealth of statistics on this industry, is at best a good guess. Even wages and salaries, which are, as in most other groups, the most accurately estimated items, include value of board, etc., received in kind, at a more or less arbitrary figure.

In spite of all possible errors, the showing can hardly be a favorable one in 1926-27, and the deficit in most of the immediately preceding

²¹ This statement requires some qualification as applied to certain industry groups having interest and dividend income, but it holds as applied to the consolidated statement for all groups combined. In the groups where corporate enterprise is important, interest and dividends paid by one group to another have been deducted from the gross interest and dividends paid by the group receiving these intercorporate payments, rather than from the gross interest and dividends of the group paying them.

²² Most of the items in this estimate are subject to a considerable margin of possible error. It is an extremely complicated problem to determine what proportion of gross agricultural produce—corn for example—is consumed by the industry itself as raw material for hog or other production. And the attempt to determine the amount of payments to other industry groups is equally difficult.

years was undoubtedly greater. If no allowance were made for loss on real estate values due to market changes, the deficit for 1926-27 would be converted into a surplus, but the estimated "normal" remuneration to independent farm operators for their services (at the same rate as for agricultural wage labor) and the 6 per cent return on value of owned investment are modest allowances. In spite of continued agricultural deficits, the census shows an increase in value of farm buildings between 1920 and 1925 of over 2 per cent and a decline in the number of independent farm operators of less than 1 per cent,²³ while crop acreage, according to the Department of Agriculture, shows no material change. The census value of implements and machinery does, however, show a sharp decline of 25 per cent, which is certainly not primarily a price decline; and the number of independent farm operators who are owners decreased 1.5 per cent, while tenant farmers increased during this five-year period. On the other hand, in spite of the agricultural deficits in recent years, production was probably larger in the period from 1923 to 1927, if animal products as well as crops are included, than before or during the war, except for 1915. An analysis of these various changes, by states and by types of farming, would undoubtedly show a greater responsiveness of economic activity to farming deficits, but on the whole it seems clear that agriculture responds slowly and imperfectly to the guidance which price and profit are supposed to exercise over economic activity. In part, no doubt, this is because overhead costs are heavy and capital assets cannot easily be converted to nonagricultural employment. In part also, technological changes have been responsible for increased production in spite of deficits.

Table 12 shows further facts about agriculture. As might be expected, the proportion of total disbursed income going to individual capitalists as rent and interest (column (1)) fluctuates inversely with the prosperity of the industry. This item shows no upward trend, although there has been an increase in farm tenancy since 1910. Indeed, the amount of these rent and interest payments actually declined from about \$1,596,000,000 in 1920 to \$1,386,000,000 in 1923, thus decreasing some of the fixed charges in this overcapitalized industry.

The fact that, except during the war period, production has apparently increased more rapidly than total income realized from agriculture, corrected for changes in value of the dollar to income recipients, suggests that the decline in the proportion of total national income disbursed by agriculture is partly the result of a decreased relative remuneration per unit of output.²⁴ How far this is due to increased efficiency, how far

²³ This decline might be slightly larger, if recreational farming could be excluded. Similarly, the increase in building values may be partly suburban. The Dakotas, Indiana, and a number of southern states showed declines in building values, while states with large urban centers showed increases.

²⁴ Column (6) divided by column (7) may be said to afford a crude index of relative remuneration per unit of output.

TABLE 12.—ANALYSIS OF AGRICULTURAL REALIZED INCOME IN THE UNITED STATES, 1913 AND 1914, AND 1918 TO 1927

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Income from agriculture going to—		Average annual earnings per wage worker		Number of wage workers (agriculture)	Total realized income in 1913 dollars (agriculture)	Index of agricultural production ^a	Money income disbursed by agriculture	Total money income disbursed in United States	Per capita current income of farm population ^b	Per capita income of United States
	Borrowed capital	Hired labor	Nonagricultural industries	Agriculture							
	Per cent of realized agricultural income	Relative to 1913 = 100								Current dollars	
1913.....	17.8	15.1	100	100	100	100	100	100	100	143	368
1914.....	18.4	14.9	92	98	99	99	111	97	99	141	360
1918.....	11.8	10.8	159	155	101	137	112	233	165	328	579
1919.....	12.6	12.2	173	185	104	129	114	258	181	356	628
1920.....	14.4	15.0	214	213	101	108	123	254	208	319	695
1921.....	22.1	20.2	164	180	100	87	103	137	177	196	585
1922.....	19.1	16.5	170	160	96	97	114	155	187	212	601
1923.....	17.3	15.3	193	167	95	108	117	175	213	239	667
1924.....	17.2	14.8	190	168	95	111	115	182	221	251	680
1925.....	16.0	13.8	197	172	95	113	118	203	236	281	712
1926.....	^c 17.7	^c 14.4	^c 204	175	96	...	121	^c 199	^c 247	...	736
1927.....	^c 17.5	^c 14.2	^c 201	174	95	...	^c 122	^c 196	^c 253	...	742

^a See p. 759, footnote 5. The crops and animal products indexes were combined as then indicated on the basis of value added in process.

^b Current income of farm population is wages and salaries in agriculture, plus "current income of farmers" (King). It includes property incomes of farmers from investments in agriculture and other lines. Farm population for noncensus years is estimated by linear interpolation.

^c Preliminary estimate.

to decreased bargaining power, it is difficult to say. If the relation between these two series be accepted as a crude test of the productivity theory, it is clear that production and remuneration do not vary closely together, though the dependence of agriculture on weather and other uncontrolled conditions is a disturbing factor, and it may be doubted whether the series are sufficiently accurate to offer any satisfactory conclusions. Another interesting feature of the table is that money income disbursed by agriculture appears to vary far more closely with general business conditions, as reflected in total national income disbursed in money, than it does with agricultural production.

Columns (3) and (4) show that agricultural wage earners have probably received a steadier income than those attached to other industries,²⁵ but on the whole their wages have risen less as compared to the prewar figure. The decline in number of wage earners since 1919 suggests a greater mobility of labor than of capital in this industry.

One of the best measures of changes in the general welfare of the population is the average current income per capita. Current income includes wages, salaries, profits, income from investments both in agriculture and other lines, and rental value of homes to owners and tenants.²⁶ While not as well off in 1925 as in 1918 and 1919, even when price changes are allowed for, the average member of the farm community has apparently improved his condition as compared to 1913. An average of \$281 a year compares unfavorably with \$712, the average per capita for the entire country, but the unfavorableness of the comparison is, at least in part, apparent only. Living costs, especially rent and food, are higher in the city. While these averages include rental value of owned homes and value of agricultural produce consumed at home, the value of the housewife's services are not included, and allowance must be made for the greater extent to which such services have been replaced in the city by services that must be paid for in money. If we compare the 1925 averages with those of 1913,²⁷ it appears that the per capita current income of the farm population has increased 96 per cent, while that of the entire population (*i.e.*, realized income) has increased 94 per cent.²⁸

This unexpectedly favorable showing for agriculture may be partly due to errors of estimate. We have already noted that earnings of agricultural wage workers have lagged behind those of other wage earners.

²⁵ As here used, the expression "employees attached to an industry" means those actually employed plus those unemployed who look chiefly to that industry for employment.

²⁶ No estimate for income from trucking and other nonagricultural work is included, but some of the included wage income goes to persons not a part of the farm population.

²⁷ See Table 12, columns (10) and (11).

²⁸ Using King's deflation indexes, the showing in 1925 is even more favorable, 24 per cent for the farm population as compared to 14 per cent for the entire United States.

Moreover, the proportion of gross value of agricultural output paid to other industries is, according to the estimates, about the same in 1925 as in 1913 (consolidated statement of income for agriculture, page 781, item 4 divided by item 3). But farm population actually decreased about 10 per cent during this period, so that it represented only 24 per cent of the total population in 1925 as against 32 per cent in 1913. The corresponding decline in realized income was from 14 to 11 per cent. In section IV we shall see that in some parts of the country the change in agricultural per capita income, even between 1920 and 1925, is more favorable than that for the rest of the population.

Mining, Quarrying, and Oil and Gas Wells.—King's method of estimating income disbursed by other industries than agriculture is illustrated by the case of the mining, quarrying, and oil and gas well group. Dividends and profits withdrawn (and additions to surplus) are estimated independently of the value of products sold to other industry groups and to individuals. The item, expenses paid to other industry groups, is simply the difference between item 1 and item 3. The reliability of the item "added to surplus," which has been estimated on the basis of income tax returns to complete the income statement, is doubtful at best. In the case of the mining industry (where it is a minus quantity), the opportunities for accounting jugglery are peculiarly great. Item 3, total income produced by the industry, represents total realized income minus the doubtful item 11, withdrawn from surplus. Except for 1919, where the census forms a fairly secure basis of estimate, the pay roll figures are less dependable than for manufacturing or railroad transportation. Rents and royalties are the most doubtful items in noncensus years. The chief problem in the case of interest and dividends, in this and the other corporate industry groups, arises from the necessity of eliminating intercompany payments. The following is a consolidated statement of the income (in millions of dollars) for mining, quarrying, and oil and gas wells, 1925:

1. Estimated value of products.....	3,893
2. Expenses paid to other than individuals.....	1,783
3. Total income realized from industry less withdrawal of surplus...	2,110
4. Wages.....	1,389
5. Salaries.....	169
6. Rent and royalties paid to individuals.....	255
7. Interest paid to individuals.....	70
8. Total expenses paid to individuals.....	1,883
9. Profits.....	227
10. Cash dividends (and estimated disbursements to individual proprietors).....	285
11. Withdrawn from surplus.....	58

NOTE.—Item 1 is based on 1919 Census and Bureau of Mines annual data, and item 11 on income tax data; other items follow King. It is possible that more accurate data would turn the last item into an "addition to surplus." At all events, the relations between items 4 to 8 and item 10 (which make up realized income) do not depend upon the doubtful income tax data.

While the condition of the mining industry has not been so deplorable as that of agriculture, it was not a very profitable undertaking in 1925 and was distinctly less so in the four preceding years.²⁹ The bituminous coal industry, which is one of the chief constituents of this group, is probably the most like agriculture in its failure to respond closely to the guidance of price and profit.

A rough idea of the make-up of this group may be gained from Table 13. Except for the pay roll figures, the data are from the capital stock and corporation income tax returns for 1925, during which year corporations disbursed over 94 per cent of the income for this group. As already noted, vagaries of accounting practice (for example, in the valuation of

TABLE 13.—MINING PAY ROLLS AND RETURN TO STOCKHOLDERS OF MINING CORPORATIONS, UNITED STATES, 1925^a

Industry	(1)	(2)	(3)	(4)	(5)
	Stockholders' approximate equity in tangible assets as of end of year	Reported net income less tax and reported deficits	Rate of return (per cent)	Ratio of number of balance sheets filed to number of income statements (per cent)	Mining pay roll (millions of dollars)
	Millions of dollars				
Coal.....	2,444	-28.	-1	101	1,205
Metal.....	1,378	22	2	67	.....
Oil, gas, and nonmetal....	2,160	177	8	84	.....
Quarrying.....	271	27	10	86	.....
All other.....	1,372	-10	-1	60	593
All mining industries.....	7,625	188	2.5	78	1,798

^a Stockholders' equity in tangible assets for the several mining groups is cash, accounts and notes receivable, inventory, real estate, buildings, and machinery, less accounts and notes payable, bonded debt, and mortgages. These balance sheet items are from the capital stock tax returns. Each corporation was required to file a separate capital stock return, whereas, in the case of the income tax, consolidated returns are permitted. Column (2) is based on corporation income tax data. Columns (2) and (5) are not directly comparable. Column (2) is considerably less than reported net profits (see Table 14), which is not available for the subgroups.

²⁹ Mining corporations follow the practice of paying out considerably more in dividends than they earn in book profits as reported to the Bureau of Internal Revenue, this withdrawal of capital presumably representing, in a rough way, depletion of reserves. Possibly this practice serves to mislead investors, and possibly the unprofitableness is a matter of book-keeping valuations or nominal sales prices by subsidiaries of vertically integrated holding companies. At all events, this unprofitableness of the industry does not appear to have discouraged production, which has shown a sure but unsteady growth. (See Tables 14 and 29.)

reserves) are responsible to an unknown degree for the showing with regard to profits. The table strongly suggests that coal mining, which is distinctly the most important constituent industry, has been much less profitable than the average, while oil and gas and quarrying corporations have been doing fairly well, but different rates of return are partly owing to the varying proportion of income statements for which balance sheets are available.

One further feature of the mining income statement deserves a word of comment. The proportion of total pay roll going to salaries is only 9 per cent, whereas in manufacturing it was over 22 per cent in 1925. In part at least, this reflects an industrial organization in which the individual worker receives less in the way of supervision, and the rôle of management plays a relatively smaller part, than in other forms of corporate enterprise.

Several important phases of the development of the mining industries are shown in Table 14. A large proportion of the disbursed income goes to employees, slightly larger now than before the war. This proportion is smaller for mining than for manufacturing, 75 per cent as compared to 85 per cent for the latter. On the other hand, the return to hired capital (rent and interest) is larger than in manufacturing and even than in transportation, the percentage for the transportation group being only 13.3 in 1925. The importance of this item is interesting because of the high risks in this industry, as is also the fact that both royalties and interest on loans (which are largely short term) vary from year to year with the conditions of the industry. While the average annual earnings per wage employee attached to the industry also fluctuate considerably from year to year, mining wage employees in recent years, according to King's estimate, have been better off in comparison to prewar conditions than have those in all nonagricultural industries, in spite of considerable unemployment. This improvement has not attracted employees into the industry, the estimated number showing no material change in 1926 from the prewar figure. But averages are likely to be misleading. Earnings in certain portions of the bituminous coal industry have not been such in the last few years as to attract new workers.

The growth of mineral production in relation to profits has been noted. It is interesting to compare the growth of production with total income realized from the industry, corrected for changes in value of the dollar to the income recipients. The year-to-year changes here show a much closer correspondence than in the case of agriculture, but the trends show a wide divergence. Production has apparently grown much more rapidly than deflated income. This suggests that here also the decline in proportion of the total national income disbursed by this industry, as compared to 1913, is partly a matter of money remuneration per unit

TABLE 14.—ANALYSIS OF INCOME REALIZED FROM THE MINERAL EXTRACTIVE INDUSTRIES,^a UNITED STATES, 1913-1914 AND 1918-1927

Year	Wages and salaries	Rent and interest	Cash dividends and profits withdrawn	Average annual wage per wage employee		Number of wage workers in the mineral extractive industries (thousands of persons)	Mineral extractive industries, total realized income in 1913 dollars	Production index ^b	Corporate profit after deducting income tax (mines, quarries, and wells) (millions of dollars) ^c
				Mining	Nonagricultural industries				
				Per cent of total income realized from mineral extractive industries						Relative to 1913 = 100		Relative to 1913 = 100
1913.....	69.6	10.6	19.8	100	100	100	100	100	...
1914.....	71.7	11.5	16.8	87	92	98	85	94	...
1918.....	67.7	13.4	18.9	175	159	96	117	123	...
1919.....	75.5	12.7	11.8	177	173	97	92	109	...
1920.....	78.5	14.8	6.7	227	214	100	101	124	...
1921.....	76.7	12.7	10.6	167	164	101	90	102	...
1922.....	76.2	15.2	8.6	151	170	102	90	110	70
1923.....	76.4	13.7	9.9	218	193	104	124	151	9
1924.....	74.1	14.8	11.1	185	190	98	105	143	41
1925.....	71.8	15.0	13.2	194	197	97	110	150	266
1926.....	^d 71.6	^d 14.4	^d 14.0	^d 205	^d 204	105	...	161	305
1927.....	....	....	.. .	^d 188	^d 201	106	...	165	...

^a For qualifications on the validity of data from income tax returns, see note 19, p. 778. ^b See footnote 7, p. 761. ^c Corporation income tax returns. Preliminary estimate.

of output. These results diverge from what the productivity theory, as formulated above, might lead one to expect, but technological change and discovery in this field have been disturbing factors.

Manufacturing.—From the point of view of volume of realized income, manufacturing is the most important of the nine industry groups, and, apart from the unclassified industries, the most complex. About half of the revenues which it collects from other groups it pays out to these groups again as expenses. Of the total realized income (item 3 minus item 15) labor received nearly 85 per cent in 1925. Salaries were 22.6 per cent of total pay roll, indicating a large attention to managerial activities. The preponderant importance of the corporate form of organization is evidenced by the profits items, as is also its more conservative management as compared with mining. The following is a consolidated statement of manufacturing income (in millions of dollars) for 1925:

1. Revenue from sales to others than manufacturing enterprises...		36,347
2. Expenses and dividends paid to other industry groups.....		18,215
3. Net value produced by manufacturing (total realized income plus additions to surplus).....		18,132
4. Wages.....	10,898	
5. Salaries.....	3,180	
6. Pensions, benefits, and compensation for accidents.....	206	
7. Rents and royalties.....	205	
8. Interest paid to individuals.....	271	
9. Total expenses paid to individuals.....		14,760
10. Net profits credited to individual stockholders and enterprisers.		3,372
11. Corporation cash dividends to individuals.....	1,958	
12. Individual profits withdrawn.....	146	
13. Total dividends and profits disbursed to individuals.....		2,104
14. Corporate savings.....	1,178	
15. Individual savings.....	90	
16. Total added to surplus.....		1,268

Note.—Item 1 was estimated by adding to the census "value added in manufacturing" the value of minerals (mining statement), agricultural products sold (Bureau of Agricultural Economics), value of imports of crude materials and foodstuffs and semimanufactured goods, and deducting the values of the chief raw products exported without manufacturing. Items 14 and 15 are from income tax data; other items are based on King's estimates.

In view of the wide differences among the types of enterprise which make up this group, some analysis of the chief constituent classes seems desirable before considering the changes which manufacturing income as a whole has undergone in the last few years. A rough attempt to apportion manufacturing disbursed income in 1925 among 11 classes of establishments is shown in Table 15. Much the largest group is that of metals

TABLE 15.—MANUFACTURING INDUSTRIES IN THE UNITED STATES: 1925 REALIZED INCOME, 1926 RETURN ON STOCKHOLDERS' EQUITY, AND GROWTH IN VALUE ADDED 1919-1925, BY GROUPS OF MANUFACTURING INDUSTRIES*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	1925					1926					
	Pay rolls and pensions	Rents and royalties	Interest	Dividends and profits withdrawn	Total realized income	Value added in manufacturing (relative to 1919 = 100)	Stockholders equity as of end of year	Cash dividends	Profits after deducting tax	Per cent of total number of income statements with tabulated balance sheets	Ratio of profits to stockholders' equity (per cent)
Millions of dollars						Millions of dollars					
1. Food products, beverages, tobacco.....	1,213	38	59	308	1,618	103	6,058	327	482	87	8.0
2. Textiles and textile products.....	2,215	40	34	196	2,485	98	4,397	185	99	94	2.3
3. Leather and leather products.....	477	4	6	42	529	84	868	33	40	96	4.6
4. Rubber and rubber products.....	256	6	12	12	286	102	853	41	44	86	5.2
5. Lumber and lumber products.....	1,305	9	23	121	1,458	112	2,710	124	95	91	3.5
6. Paper, paper products, and pulp goods.....	352	5	10	67	434	117	1,444	56	101	95	7.0
7. Printing and publishing.....	733	38	8	97	876	162	1,509	122	177	88	11.7
8. Chemicals and allied products.....	678	18	38	352	1,086	120	9,090	545	824	88	9.1
9. Stone, clay, and glass.....	625	2	6	84	717	151	1,682	102	156	91	9.3
10. Metal and metal products.....	4,851	27	69	735	5,682	115	15,654	890	1,472	92	9.4
11. Other manufactures.....	1,579	18	6	90	1,693	91	2,009	119	150	88	7.6
12. Total manufactures.....	14,284	205	271	2,104	16,864	111	46,274	2,544	3,643	90	7.9

* In attempting to apportion the estimate of income in manufacturing to the chief constituent groups of industries (columns (1) to (5)), census data were used in the case of pay rolls and pensions, and rent; and income tax data in the case of interest and dividends. As a more detailed classification is available in the case of the census, the income tax classification was used. The census data were grouped as follows: 1, Food and tobacco manufactures; 2, textiles and their products; 3, leather and its products; 4, rubber and its products; 5, lumber and wood products, except pulp goods; 6, pulp goods, paper, and paper products; 7, printing and engraving; 8, chemicals; 9, stone, clay, and glass manufactures; 10, iron and steel, other metals, machinery, motor vehicles and their bodies, and locomotives; 11, other transportation equipment, musical instruments, railroad repairs, and miscellaneous manufactures. Following the income tax classification, ship construction was omitted, although it is included with manufactures in King's estimates; but this is a small item, less than one-half of 1 per cent of all value added in manufacturing. The census data so grouped are only roughly comparable with the income tax data, since the former refer to separate "establishments," while in the latter a highly integrated corporation as a whole is put into the class in which the bulk of its output falls. Moreover, the income tax returns refer to corporations only, while the census includes all types of enterprise.

The procedure followed was to prorate King's estimates for pay roll, rent, interest, etc. on appropriate data. Pay roll was prorated on the census data for wages. Factory rent in 1919 for each of the 11 groups was estimated from rents for those constituent industries having a value-product (that is, value added by manufacture) of over \$100,000,000, the unassigned portion of total rent being distributed on the basis of value added. Value added in 1925 and 1919 was then used to estimate 1925 factory rent by groups, and King's estimate of total rent was prorated on these estimates. Interest was prorated on the income tax item interest paid, less interest on Government bonds received. Profits withdrawn was prorated on cash dividends less dividends received.

Column (6) is based on the census, and columns (7) to (11) are from the corporation income tax returns.

For qualifications on the validity of data from income tax returns, see note 19.

and their products. This group includes, in addition to raw and semi-finished metal products, machinery, motor vehicles, and locomotives. The textile and textile product industries disburse nearly half as much income as the metals group, while food, beverages, and tobacco manufactures, and lumber and wood products manufactures make up two groups, each about one-third the size of the metal industries. It is to be expected that the miscellaneous group of "all other manufactures" should rank highest in the proportion of income disbursed to labor, and lowest in that disbursed to capital, for it includes many small-scale enterprises which do not make use of elaborate plant and equipment. The leather, lumber, rubber, and textile industries also show a large ratio of pay roll to total income. The chemicals group is at the other extreme, petroleum refining and gas plants, with their heavy capital investment, being the two largest constituents of this group. The food, beverages, and tobacco group also shows a relatively high proportionate return to capital. The highest proportionate return to hired capital (that is, ratio of rent and interest to total realized income) are in the rubber and food industries, the former actually showing a larger return to hired than to owned capital. Accounting practices are far from uniform in this field, and any attempt to compare rates of profit is necessarily hazardous. But some of the vagaries of individual accounting are moderated by assembling figures for a large number of enterprises, and such a comparison for corporations is offered for what it may be worth. Printing and publishing have apparently been the most profitable, and their value product has grown the most rapidly, while the textile industries were least profitable in 1926, according to this showing, and their value product declined between 1919 and 1925.

Although manufacturing is commonly thought of as a type of business involving heavy capital investment, it is evident that property receives only a small proportion of total realized income. The share of hired labor has been over 80 per cent since the war. It showed a sharp drop in 1921, then rose again in 1922 to 86 per cent, and has since declined, except for 1924, but is still distinctly above the prewar level. Labor evidently bore more than a proportionate burden in the depression of 1921, but certainly did not do so in the 1924 decline. The increase in the share of hired labor over the prewar figure is at least partly accounted for by the increase in average annual earnings of wage workers, which doubled in 12 years. But annual earnings have risen since 1922, while labor's share has fallen. This paradox is hardly resolved by noting the movement of prices. Manufactures' sale prices for many products declined after 1923. All these circumstances point to an increase in the efficiency of management and improvement in processes of production during the last few years. The return to borrowed capital represents a small and declining proportion of total realized income, though there

TABLE 16.—ANALYSIS OF INCOME REALIZED FROM MANUFACTURING INDUSTRIES, BY TYPES OF INCOME RECIPIENT, UNITED STATES, 1913-14 AND 1918-1927

Year	Share of employees	Rents, royalties, interest	Dividends and profits withdrawn	Average annual wage per wage employee		Manufacturing production index ^a	Total manufacturing realized income (1913 dollars)	Manufacturing corporate profits after deducting tax (millions of dollars) ^b
				Manu- facturing	Nonagri- cultural industries			
				Per cent of total realized income					Relative to 1913 = 100
1913.....	80	4	16	100	100	100	100	.....
1914.....	79	5	16	90	92	92	93	.....
1918.....	83	2	15	168	159	119	132	.....
1919.....	85	2	13	180	173	116	124	.....
1920.....	88	2	10	235	214	120	131	.....
1921.....	84	3	13	149	164	92	103	.....
1922.....	86	3	11	167	170	120	115	2,528
1923.....	85	3	12	200	193	141	137	3,419
1924.....	86	3	11	193	190	132	132	2,649
1925.....	85	3	12	200	197	148	134	3,640
1926.....	^c 84	^c 3	^c 13	^c 206	^c 204	154	...	.....
1927.....	...	...	...	^c 203	^c 201	151	...	.....

^a See footnote 7, p. 761.

^b Corporation income tax returns.

^c Preliminary estimate.

are temporary rises in bad years, 1914, 1921, and 1924. The war time increase of prices no doubt is partly responsible for this decline, which is chiefly in the interest payments going to bondholders—a fixed return that has not increased at the pace set by the other income-producing shares. The recent growth in the proportion of income disbursed to stockholders is a further evidence of improved efficiency, but it has not yet brought this share back to the prewar figure. There was a setback in 1924, but the growth of dividends, and of profits as shown by the income tax returns, does not confirm the theory that prosperity has been profitless.

Average annual wages per wage employee have kept close pace with annual wages of all nonagricultural wage workers, so far as their general trend is concerned, but they have fluctuated more widely. The 100 per cent rise above the prewar figure represents a distinct increase in the purchasing power of labor income, but security against year-to-year fluctuations has certainly not been achieved.

A comparison of the year-to-year movements of the physical volume of manufacturing production with those of total disbursed income, measured in dollars of constant purchasing power to the recipients, shows

a fairly close agreement on the whole. The dip in the income index in 1919 is greater than that in the production index, while the 1922 rise in the latter is considerably greater, and so also is the dip of production in 1924. The longer-time movements do not agree so well. Deflated income rises more steeply to the 1918 peak, and from 1923 to 1925 it is only slightly above the war-time level, while production is distinctly higher. The rapid growth of output after 1921 seems a fairly convincing confirmation of the view that there has been a great improvement in efficiency, and suggests that while manufacturing accounts for about the same proportion of our national income in 1925 as in 1913, its importance in terms of physical output has increased relative to other industries, while its relative remuneration per unit of product has declined.

Construction.—The construction industry occupies an intermediate position between mining and manufacturing on the one hand and agriculture on the other, in that between one-half and two-thirds of the value of its output is produced by individual enterprises and other noncorporate forms of organization. As data for estimating both wages and profits withdrawn by individual enterprisers are not very satisfactory, the estimate is probably less accurate than that for agriculture. The return to borrowed capital is an extremely small part of total realized income in this industry—less than 1 per cent (except in the depression year 1921). This is presumably associated with the fact that the investment in fixed property for this industry is smaller than its current assets. The following is a consolidated statement of construction income (in millions of dollars) for 1925:

1. Corporate revenues.....	2,306	
2. Individual revenues.....	4,670	
3. Gross value of construction work.....		6,976
4. Expenses paid to other industry groups.....		3,408
5. Net value product of construction (realized income plus additions to surplus).....		3,568
6. Wages.....	2,251	
7. Salaries.....	289	
8. Interest (other than that paid to banks).....	30	
9. Total expenses paid to individuals.....		2,570
10. Profits.....		998
11. Cash dividends.....	70	
12. Enterprisers' profits withdrawn.....	819	
13. Total profits withdrawn.....		889
14. Business savings (added to surplus).....		109

NOTE:—Data furnished by Willford I. King.

While salaries were only 11.4 per cent of total pay roll in 1925, a figure but slightly larger than for mining, it must be remembered that a large part of the reward for supervisory services is included in individual enterprisers' profits. This labor income element in individual profits also accounts for the fact that individual profits withdrawn are more than 10 times corporate cash dividends, although corporate enterprises did half as much business as the other types of enterprise.

The proportion of total realized income going to employees varies from year to year in a somewhat irregular manner, and shows a slight downward trend. The 1925 figure, 84.7 per cent, is somewhat smaller than the corresponding percentage for manufacturing, but a fairer comparison would again involve allowance for enterprisers' labor income. This would bring the proportion of labor to total realized income up to over 92 per cent, if we assume that the cash return to individual capital corresponding to corporate dividends bears the same ratio to value of construction by noncorporate enterprise as dividends bear to value of corporate construction. Labor income is probably a more important item in construction than in any of the other important industry groups, except perhaps the unclassified industries.

The average annual labor income per wage employee attached to the industry has risen more rapidly than has that for all nonagricultural industries, according to King's estimates. The fluctuations in wage income correspond on the whole with those of the volume of construction business, which was small during the World War and showed a rapid recovery from the postwar depression. The number of employees has varied in response to the fluctuations of wage income, but, according to King, the postwar increase in number of employees³⁰ still leaves a smaller number attached to the industry in 1927 than in 1913. This suggests, among other things, more regular employment and the resort to machine methods, but the estimates of pay rolls and number of employees may well be seriously in error. If the dependent estimates of average annual wages are to be relied upon, wage labor income has risen somewhat less rapidly than union labor costs per hour and both have outstripped the costs of materials since 1921.

Apparently the construction industry has been more profitable in the last few years than the average for all industries, if the income tax figures for corporations are to be depended upon as an index.³¹ As already noted, the capital investment figures are incomplete, and they may be less complete for this industry than for others, but the indications are that construction has been fairly profitable.

³⁰ In this connection it should be borne in mind that the basic data for estimating pay rolls and number of employees (and consequently average annual wages) are far from satisfactory, so that these estimates are subject to the possibility of appreciable error.

³¹ See Table 10.

TABLE 17.—ANALYSIS OF INCOME REALIZED FROM THE CONSTRUCTION INDUSTRIES, UNITED STATES 1913-14, AND 1918-1927

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Total pay roll	Interest	Dividends and profits withdrawn	Average annual wages per wage employee		Union wages per hour in building trades ^a	Number of wage employees, construction	Index of wholesale prices of building materials ^a	Index of physical volume of construction (1919 = 100) ^b	Total realized income in 1913 dollars, construction (1913 = 100)	Corporation profits after deducting tax, construction (millions of dollars) ^c
				Construction	Nonagricultural industries						
	Per cent of total realized income, construction			Relative to 1913 = 100							
1913.....	76.8	.8	22.4	100	100	100	100	100	...	100	...
1914.....	62.0	1.3	36.7	71	92	102	100	93	...	91	...
1918.....	83.1	.6	16.3	160	159	126	53	174	...	51	...
1919.....	78.7	.6	20.7	169	173	145	72	204	100	68	...
1920.....	76.4	.8	22.8	216	214	197	57	264	80	61	...
1921.....	75.7	1.4	22.9	194	164	200	57	172	85	64	...
1922.....	76.6	.9	22.5	195	170	187	73	169	120	87	37
1923.....	76.3	.9	22.8	206	193	207	78	192	121	96	67
1924.....	70.5	.8	28.7	216	190	224	82	181	129	116	84
1925.....	73.4	.9	25.7	219	197	233	98	179	159	132	107
1926.....	^d 75.4	^d .8	^d 23.8	^d 229	^d 204	248	97	176	158	...	105
1927.....	^d 73.8	^d .7	^d 25.5	^d 235	^d 201	253	95	164	158	...	...

^a United States Bureau of Labor Statistics.

^b Columns (6) and (8) expressed as relatives to 1923 were combined with weights of 6 and 4, respectively, to give an index of building costs. The dollar volume of construction was deflated by this index. Deflated dollar volume, volume of floor space in construction contracts (Dodge), and an index of physical volume of building materials produced, constructed by the writer, expressed as relatives to 1923 were combined with weights of 50, 25, and 25, respectively, to make the index of the physical volume of construction.

^c Corporation Income Tax Returns.

^d Preliminary estimate.

No index of physical volume of construction is satisfactory. The composite index here offered shows a fairly close agreement in year-to-year changes with the total disbursed income measured in dollars of constant purchasing power to the income recipients. But if the physical volume index is to be relied upon, realized income measured in these corrected dollars has risen more rapidly than physical output. Probably this means, in part at least, an increase in the equipment of buildings with modern conveniences not represented in the physical volume index. In part also, it may be a reflection of the strong bargaining position which this industry occupies in our economic organization. The increase in wage rates and the high returns are consistent with such an hypothesis.

Privately Operated Transportation, Communication, and Electric Power Industries.—This group does not include the production and distribution of gas, which is included in mining and manufacturing, nor utility enterprises operated by the government. And a number of other privately operated utilities are treated in the unclassified group—pipe lines, water works, local carting and storage, and taxicabs. Yearly data for steam railroad transportation and for telephones and telegraphs are such as to make possible fairly accurate estimates of realized income for these industries. Census data at five-year intervals are available for street and electric railways, and for electric power. Except for the decennial census, the information about water transportation is about as unsatisfactory as that for merchandising and the unclassified industries discussed below.

The income statement shows a relatively small proportion of the total revenue for this group paid out to other groups. The proportion of total pay roll going to salaries is high as compared to other groups, 30 per cent in 1925, indicating the importance of managerial and technical labor and the keeping of records. The large return to borrowed capital is also characteristic of this group, dividends and additions to surplus being not much greater than rent and interest. The policy with regard to cash dividends is evidently conservative, if 1925 is at all typical. The following is a consolidated statement of income for the transportation and utilities group (in millions of dollars) for 1925:

1. Revenues.....	11,601
2. Expenses and dividends paid to other industry groups.....	4,526
3. Net value produced by industry group (realized income plus addition to surplus).....	7,075
4. Wages.....	3,545
5. Salaries.....	1,482
6. Pensions.....	66
7. Rent paid to individuals.....	18
8. Interest paid to individuals.....	897
9. Total expenses paid to individuals.....	6,008
10. Net profits for group credited to individuals.....	1,067
11. Net cash dividends paid and profits withdrawn by individual enterprisers.....	709
12. Added to surplus.....	358

Note.—Item 1 represents railroad, express, and net Pullman revenues; telegraph and telephone revenues estimated from Interstate Commerce Commission reports of revenues for 1922 and 1925, and 1922 census figures; electric power revenues estimated from revenues of companies reported in the *Electrical World*, 1922 and 1925, and 1922 census; water transportation revenues estimated from King's estimate of pay roll and the 1923 Federal Trade Commission estimates of revenues. Item 12 is based on income tax returns; other items are based on King's data.

Before proceeding to an analysis of the recent changes in the income streams for this group, it may be well to survey the realized income of the different constituent industries for 1925. It appears from Table 18 that steam railroads account for over 55 per cent of the total realized income and of wages and interest. The large figure for dividends of electric light and power companies suggests a less conservative policy for this rapidly expanding industry than that followed by other utilities. Water transportation is next to steam railroads in importance, though the incomes from power and street railways and telephones are nearly as large. The chief peculiarities of these industries are the large proportion of disbursed income going to labor in the case of water transportation, the express business, and the Pullman Co., and the large proportion going to capital in the case of electric power. The table also shows the rate of earnings on the book value of stockholders' equity for several of the groups, but it may be doubted whether book valuation is a reliable basis on which to calculate percentage of earnings, except in the case of the railroads.

The proportion of total realized income going to labor is lower for the transportation and utilities group of industries than for manufacturing or mining, on account of the large investment of capital. Property received about one-third of the total realized income in 1913, and a quarter in 1925. It is interesting to note, however, that if we prorate the deficit

TABLE 18.—INCOME REALIZED FROM SEVERAL PRIVATELY OPERATED TRANSPORTATION AND PUBLIC UTILITY INDUSTRIES IN THE UNITED STATES IN 1925, AND RETURN ON STOCKHOLDERS' EQUITY, 1926

(In millions of dollars)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Total share of employees	Rents and royalties	Interest	Dividends	Total realized income	Book value of stockholders' equity, Jan. 1, 1926	Profits, 1926	Ratio of profit to stock (per cent)
1. Steam railway companies	3,076	0	539	287	3,902	\$11,503	\$809	7.0
2. Pullman company	34	0	0	5	39	\$168	\$14	8.5
3. Express companies	116	3	0	1	120	\$38	\$2	5.8
4. Telegraph companies	99	5	3	15	122	\$395	\$15	3.8
5. Telephone companies	452	7	50	88	597	\$1,209	\$155	12.8
6. Electric light and power companies	275	0	166	238	679			
7. Street and electric railways	475	3	128	65	671			
8. Water carriers	566	0	11	10	587			
9. Total	\$5,093	\$18	\$897	709	\$6,717			

* Class I steam railways.

° Pullman Co. profits for fiscal year ended July 31, 1926, book values as of July 31, 1925, annual reports.

° American Railway Express Co., annual reports.

d Western Union Telegraph Co., annual reports.

* American Telephone & Telegraph Co., annual reports.

/ Cf. income statement for transportation and utilities group, items 4 plus 5 plus 6; 7; 8; 3 minus 12.

Data are furnished by Willford I. King.

for agriculture as between estimated normal return to the independent enterpriser's labor and that to his capital, the proportion of net realized income of agriculture going to property is nearly 36 per cent in 1926—a larger figure even than that for the public utility group. The increase in proportion of labor income for the public utility group to nearly 83 per cent in 1920 and its decline since, and the converse changes in proportion of property income, reflects the more rapid rise of wages than of rates before 1921, and their subsequent more prompt and rapid decline. Table 19 shows the proportion of labor to total income for the whole utility group, and indexes of hourly wages and transportation rates for steam railroads. Hourly wages probably fluctuate less widely with changes in business conditions than wages per unit of performance. The railroad transportation rate index here shown is subject to the limitation that it makes no allowance for changes in composition of traffic as between those kinds bearing high, and those bearing low, rates. The continued decline in proportion of disbursed income going to labor in the last few years may be due to an increase in operating efficiency and to additional investment. As might be expected, during a régime of rising prices, the proportion of return to borrowed capital declines until

1920. The rise in this proportion from 1920 to 1922 is partly due to the decline in income disbursed to labor, but interest-bearing obligations have shown growth throughout the entire period.

TABLE 19.—ANALYSIS OF INCOME REALIZED FROM PUBLIC UTILITY ENTERPRISES, BY TYPES OF INCOME RECIPIENT, UNITED STATES, 1913-14, AND 1918-1927

Year	Total share of employees	Rents, royalties, and interest	Dividends and profits withdrawn	Average annual wages per wage employee		Number of wage employees, utilities	Steam railways	
				Utilities	Nonagricultural industries		Average wages per hour (1916 = 100)	Rate index (1913 = 100) ^a
				Per cent of total income realized from utilities					Relative to 1913 = 100
1913.....	67	19	14	100	100	100	...	100
1914.....	66	19	15	95	92	101	...	101
1916.....	.....	.....	.....	.....	.....	...	100	101
1918.....	77	13	10	180	159	105	162	124
1919.....	79	12	9	189	173	112	200	143
1920.....	83	10	7	236	214	119	239	154
1921.....	80	13	7	184	164	117	236	182
1922.....	78	14	8	174	170	116	217	171
1923.....	79	13	8	197	193	117	215	161
1924.....	77	14	9	192	190	116	220	162
1925.....	75	14	11	205	197	110	223	160
1926.....	^b 73	^b 14	^b 13	^b 211	^b 204	111	223	158
1927.....	.....	.....	.....	^b 212	^b 201	110	227	...

^a See Table 20, footnote a.

^b Preliminary estimate.

The average annual labor income per wage employee attached to this group of industries rose more rapidly up to 1920 and then declined further than the annual wages of all nonagricultural wage employees, so that since 1921 the net increase over 1913 has been only slightly greater in the utility group than in other lines. The declines in depression years are only slightly less marked than for all nonagricultural wage workers, 1924 showing a definite setback in the upward movement since 1921. The fact that annual labor income in the utility group apparently rose from 1921 to 1923, while wage rates in the railroad industry declined, suggests a fuller employment of labor. Conversely, the declines in 1921 and 1924 appear to be declines largely in employment, and labor was presumably less fully employed in 1925 than in the peak year 1920. The number of wage employees attached to the industry fluctuates somewhat similarly to average annual earnings, except that it has declined considerably since 1923. The growth in annual earnings and decline in

number of employees in these last few years may mean a change in type of employee.

No satisfactory general index of production for this group of utility industries has been constructed, but we may compare realized income of two subgroups, measured in dollars of constant purchasing power to the recipients, with the production indexes for these two subgroups. Columns (1) and (2) of Table 20 show these data for steam railroads. It is to be expected that the physical volume of traffic should rise more rapidly

TABLE 20.—RAILROAD AND ELECTRIC POWER VOLUME OF SERVICE AND DEFLATED INCOME; AND RETURN TO RAILROAD STOCKHOLDERS, UNITED STATES, 1913-14, AND 1918-1927

Year	(1)	(2)	(3)	(4)	(5)	(6) (7)	
	Total income realized from railroads (1913 dollars)	Index of railway traffic ^a	Capital stock and surplus of Class I railroads as of Jan. 1	Net income of Class I railroads ^b	Return on book value of stockholders' equity, Class I (per cent) 4 ÷ 3	Electric power companies	
						Total realized income (1913 dollars)	Production index ^c
	Relative to 1913 = 100		Millions of dollars			Relative to 1912 = 100	
1912.....	.....	96	.....	.....	.....	100	100
1913.....	100	100	.....	486	.....	108	...
1914.....	96	95	8,728	351	4.0	116	...
1917.....	.....	.....	.....	.....	.....	127	220
1918.....	106	127	9,949	287	2.9	124	...
1919.....	98	116	10,643	448	4.2	123	...
1920.....	106	129	10,013	431	4.3	129	315
1921.....	96	98	10,228	314	3.1	164	295
1922.....	100	105	10,341	370	3.6	196	348
1923.....	110	126	10,370	555	5.4	225	407
1924.....	107	118	10,716	558	5.2	278	435
1925.....	107	124	11,141	701	6.3	303	487
1926.....	.....	131	11,503	809	7.0	...	553
1927.....	.....	125	11,921	.....	.....	...	...

^a This index of physical volume of railroad traffic was compiled from three Interstate Commerce Commission series: (1) originating tons of revenue freight; (2) ton-miles of revenue freight; (3) passenger-miles. Weights of 4, 4, and 2, respectively, were applied to the figures expressed as relatives to 1919. The railroad rate index represents operating revenues divided by the traffic index, and expressed as relatives to 1913 as 100 per cent. The index of average hourly compensation of railroad employees is from Interstate Commerce Commission figures.

^b Columns (3) and (4) are from the Interstate Commerce Commission. Nonoperating subsidiaries are excluded. The available data on income and stockholders' equity are only approximately comparable, partly because the balance sheets are only for concerns in operation at the end of the year and partly because of lack of uniformity in methods of handling depreciation.

^c Represents kilowatt-hours produced according to the censuses for 1912, 1917, and 1922. Other years are by interpolation on data from the Geological Survey, published in the *Survey of Current Business*.

^d Fiscal year ending June 30.

than deflated income during the war years. The discrepancy decreases after 1920, but traffic continues on a higher level than income, relative to the prewar figure. The yearly fluctuations agree fairly well except for 1925. The increased return on investment (column 5) and the declining or constant rates (Table 19) suggest a considerable improvement in operating efficiency, as well as in volume of traffic.

Columns (6) and (7) of Table 20 show deflated realized income for the electric power industry, and kilowatt hours produced by central stations. In this rapidly developing industry, output has increased considerably faster than realized income.

Banking.—The banking group includes only those enterprises doing a commercial or savings bank business. Revenue and expense statements are available yearly for national banks, and balance sheets for all banks, which afford a better basis for estimating realized income than is available for any of the other nine industry groups. The least reliable income item for this group is "interest paid to individuals," since it is difficult to separate this from interest paid to other industry groups. Banks follow a conservative practice with respect to the payment of dividends, so that the total income is considerably larger than disbursed income, some 16 per cent larger in 1925. The following is a consolidated income statement (in millions of dollars) for banking for the year 1925:

1. Interest on earning assets and miscellaneous income (includes some interbank interest on deposits).....	3,074
2. Interest, etc., and dividends paid to other industry groups.....	1,690
3. Net value product of industry (realized income plus additions to surplus).....	1,384
4. Total pay roll.....	596
5. Interest paid to individuals on savings accounts.....	329
6. Total expenses paid to individuals.....	925
7. Net profit to individual stockholders.....	459
8. Cash dividends paid to individuals.....	170
9. Added to surplus.....	289

NOTE.—Based on King except for items 1 and 9 which were estimated by following his methods.

The percentage of estimated total realized income paid to labor shows an increase in the war period, a falling off in 1922, followed by a gradual and partial recovery. The 1922 decline was relative only, for even pay roll increased as against 1921; both pay roll and average annual earnings have grown steadily since 1914. The growth of average annual earnings for this group outstrips that of all the others. It began with a modest figure, \$925, but in 1926 was nearly \$2,250 per annum, according to King's estimates.³²

³² Data for estimating number of employees are not very satisfactory.

TABLE 21.—ANALYSIS OF INCOME REALIZED FROM THE BANKING GROUP, UNITED STATES, 1913-14 AND 1918-1927

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	Salaries	Interest	Dividends	Average salary per salaried employee		Number of employees, banking	Total realized income in 1913 dollars, banking	Stockholders' equity as on July 1 ^a	Profits	Dividends	Ratio of profits to stockholders' equity (per cent) ^a
	Per cent of total income realized from banking			Banking	All industries				For year beginning July 1 ^a		
	Relative to 1913 = 100							Millions of dollars			
1913.....	35	38	27	100	100	100	100	.....	...	...	...
1914.....	36	39	25	99	102	103	99	2,046	127	114	6.2
1918.....	50	35	15	157	119	111	82	2,258	240	136	10.5
1919.....	56	33.5	10.5	187	136	120	79	2,357	282	148	12.0
1920.....	55	31	14	203	163	131	84	2,618	216	158	8.3
1921.....	57	26	17	214	159	140	105	2,795	184	166	6.6
1922.....	53	28	19	215	161	143	126	2,848	204	179	7.2
1923.....	53	29	18	218	172	151	131	2,876	196	164	6.8
1924.....	54	30	16	226	178	153	135	2,917	224	165	7.7
1925.....	54	30	16	236	183	157	140	2,970	249	174	8.4
1926.....	^b 54	^b 30	^b 16	^b 242	^b 190	163	...	3,090	252	181	8.2
1927.....	^b 55	^b 30	^b 15	^b 244	...	166	...	3,239	...	...	...

^a Columns (8) to (11) are from the *Report of the Comptroller of the Currency.*

^b Preliminary estimate.

There is no satisfactory index of the physical volume of production of banking services. The estimated number of employees may give some indication of this growth, though the estimate does not rest on a secure basis, and in so far as efficiency of bank operation has increased, it would suggest a smaller increase in services than has actually taken place. For the year-to-year changes it is probably a more satisfactory measure, though even here it is far from what might be desired. Certainly number of employees varies in little relation to the amount of realized income, measured in dollars of constant purchasing power to the recipients during the war, when the latter actually declined. Since 1920 they have risen together.

While the proportion of disbursed income going to stockholders in dividends falls off in 1914 and 1924, it actually increases in 1921 and 1922. With the rapid increase in salaries, the ratio of dividends to total income in 1925 is smaller than before the war. For national banks we have a complete and fairly satisfactory record not only of dividends but of the amount and rate of profits. The failure of dividends to drop in 1921 and 1922, when profits declined sharply, is striking evidence of the extent to which dividends have become a fixed charge upon this industry. The fiscal year 1924 appears to mark the inauguration of a more conservative policy with respect to dividends than that which had been inherited from the exceedingly profitable postwar years. The rate per cent of profit upon the book value of the stockholders' equity at the beginning of the fiscal year reached its peak in the fiscal year 1920, dropped sharply to about 6.5 per cent in the year ended June, 1922, and has since suffered declines from an upward trend in 1924 and 1927. For a public service industry, the accounts of which are carefully regulated, banking appears to be fairly profitable.

Wholesale and Retail Trade.—The approximate relations among the various income streams for merchandising in 1925 are shown in the income statement for this group of enterprises. A large proportion of total revenue from sales is paid to other industry groups; for the wholesale trade alone the proportion would be much higher. The doubtful item, additions to surplus, is small, so that practically the whole value product of the group represents realized income. Pay roll is slightly less than half of this total, while dividends and profits withdrawn are over 40 per cent of realized income. The large item, profits withdrawn by individual enterprisers, includes labor income to an extent not accurately determinable. The size of this item indicates the predominance of individual enterprise in this field. None of the items in this statement rests on a very secure basis, except perhaps corporate dividends. The following is a consolidated income statement (in millions of dollars) for mercantile enterprises in the year 1925:

1. Gross revenue from sales (retailers only).....	53,487
2. Expenses (cost of goods sold, etc.) and dividends paid to other industry groups.....	41,115
3. Net value product of industry group (realized income plus additions to surplus).....	12,372
4. Wages.....	4,358
5. Salaries.....	1,292
6. Rent paid to individuals.....	735
7. Interest paid to individuals.....	374
8. Total expenses paid to individuals.....	6,759
9. Net profit credit to individuals.....	5,613
10. Cash dividends to individuals.....	440
11. Individual profits withdrawn.....	4,798
12. Total withdrawals.....	5,238
13. Added to surplus.....	375

NOTE.—Data furnished by Willford I. King.

No separate estimate of total income disbursed by wholesalers and retailers is available for 1925. In 1923, according to the Federal Trade Commission, retailers produced \$6,100,000,000 of accrued income as against \$2,500,000,000 produced by wholesalers.³³ Total sales in 1925 were \$23,400,000,000 for wholesalers, according to King, and \$53,500,000,000 for retailers. Practically 60 per cent of the wholesale sales were estimated to be by corporations as against 67 per cent of the sales in the retail trade.

Table 22 shows that the share of disbursed income going to employees has been gradually increasing, though since the 1922 peak it has fallen off slightly. One factor making for this increase has been the integration of industry; individual enterprises have given place to hired employees. In 1913, corporate sales were only one-fourth of the total, while in 1925 they were over one-third. This increase has been most rapid in retailing, where labor is a more important factor. In 1913, corporate sales represented 30 per cent of the wholesale business and only 20 per cent of the retail business, according to King's estimates. The decline in the proportion of realized income going to labor since 1922, while average annual wages were rising, is reminiscent of a similar situation in manufacturing. In absolute amount, both the share of employees and that of borrowed capital increased during these years, but dividends and profits withdrawn have increased more rapidly. In some lines the margin between wholesale and retail prices has widened, but the rapid growth of profits (which on the whole have expanded along with dividends and individual with-

³³ Sen. Doc. No. 126, 69th Cong., 1st Sess., pp. 320, 324.

TABLE 22.—ANALYSIS OF INCOME REALIZED FROM WHOLESALE AND RETAIL TRADE, UNITED STATES, 1913-14 AND 1918-1926

Year	Share of employees	Rents, royalties, interest	Dividends and profits withdrawn	Average wages per wage employee		Number of wage employees, merchandizing	Total realized income in 1913 dollars, merchandizing	Deflated index of retail trade ^a	Mercantile corporation profits after deducting tax (millions of dollars) ^b
				Merchandizing	Non-agricultural industries				
				Relative to 1913 = 100					
1913.....	43	10	47	100	100	100	100	100	...
1914.....	44	10	46	105	92	103	105	97	...
1918.....	44	10	47	143	159	109	102	90	...
1919.....	43	9	48	167	173	112	104	96	...
1920.....	48	8	44	195	214	117	99	96	...
1921.....	49	10	41	186	164	118	108	102	...
1922.....	51	10	39	176	170	133	119	115	629
1923.....	49	9	42	186	193	153	146	127	854
1924.....	48	9	43	195	190	149	149	132	725
1925.....	47	9	44	195	197	155	158	139	900
1926.....	49	10	41	208	204	159	...	...	761
1927.....	...	...	...	202	201	167	...	...	...

^a Deflated index of retail trade is the writer's index (see *Harvard Business Review*, January, 1929) deflated by the United States Bureau of Labor Statistics index of living costs, rent excluded.

^b Corporation income tax returns.

^c Preliminary estimate.

drawals) must be due in part to a more rapid turnover of capital and the increased efficiency of distribution.

Perhaps the chief fact of interest about average annual wages per wage worker in this industry is its stability, if King's estimates may be relied upon. Annual wages for merchandising rose more slowly during the war than in other lines, but declined only slightly in 1921 and 1922, and have since increased steadily. The net increase over prewar is about the same as in all nonagricultural employments, according to King.

No satisfactory index of the physical volume of goods handled by middlemen is available. If retail trade, corrected for price changes, is to be relied upon as a rough upper limit index of such goods handled (and the physical volume of business handled by the wholesaler has almost certainly grown less rapidly than that of the retailer), realized income of middlemen, measured in dollars of constant purchasing power to their recipients, has increased more rapidly. This tends to confirm the suggestion already made that the increased proportion of total national income disbursed by this industry group represents an increased remuneration per unit of goods handled; for which increase a partial explanation may be found in the increase in hand-to-mouth, small-order buying by retailers.

Federal, State, and Local Governments, and Government Enterprises.

While data for estimating income from governmental activities are far from satisfactory, these estimates are probably more reliable for year-to-year comparisons than those for any other industries except manufacturing, banking, and railroad transportation. In the statement, item 1 is simply a crude estimate to show the order of magnitude of all government revenues; item 5 includes interest on war loans. No item is included in these estimates for profit or loss in government enterprises; the total realized income is simply salaries plus pensions, etc., plus interest paid to individuals. The following is a consolidated income statement in millions of dollars for governments, 1925:

1. Approximate total revenues.....	11,130
2. Paid to other industry groups.....	5,000
<hr/>	
3. Salaries.....	4,338
4. Pensions, benefits, and compensation for injuries.....	813
5. Interest paid to individuals.....	979
<hr/>	
6. Total realized income disbursed by industry group.....	6,130

NOTE.—Data furnished by Willford I. King, except for item 1.

As might be expected, the proportion of realized income going to labor, past and present, is high for this industry group, 81.1 per cent as compared to 84.7 per cent for manufacturing. And Table 23 shows that it was considerably higher before the war than it is to-day, the decline being accounted for by the increase in the Federal interest-bearing debt. During the war, payments to labor increased rapidly, bringing the proportion of total realized income going to labor up to over 90 per cent. While payments to present employees are classed as salaries, because the labor contract is of a relatively long duration, it is probably better to compare the trend with urban wages. The average annual salary to government employees rose steadily, even during the depression years, but had not caught up to average annual nonagricultural wage income until 1926. The number of employees reached a minimum after the war peak in 1922 and has grown without setback since. The proportion of all income disbursed by municipal and other local governments naturally declined during the war but has increased since 1918, so that the proportions were not far from the same in 1925 as in 1913 for the several types of government organizations.

While government realized income per capita, in dollars of constant purchasing power to the income recipients, has fluctuated since the war, it was nearly as high in 1926 as in 1919 and shows an upward trend since 1920, which is likely to continue. Table 23A shows the distribution of income in 1925, by types of income and by divisions of government, and the Federal and local income in 1913. In 1925, interest comes to 21 per

TABLE 23.—ANALYSIS OF INCOME REALIZED FROM FEDERAL, STATE, AND LOCAL GOVERNMENTS, UNITED STATES, 1913-14 AND 1918-1927

Year	Salaries	Interest	Average annual labor income per—		Federal dis-bursed income	City, village, and school district dis-bursed income	State and county dis-bursed income	Number of government employ-ees	Government realized income per capita (in 1913 dollars)
	Per cent of total income realized from government		Government em- ployee	Wage employe in non- agricultural industries					
			Relative to 1913 = 100						
1913.....	89	11	100	100	34	53	13	100	20
1914.....	89	11	103	92	33	54	13	104	21
1918.....	91	9	122	159	72	23	5	277	39
1919.....	83	17	134	173	67	27	6	215	33
1920.....	80	20	156	214	55	37	8	145	24
1921.....	81	19	168	164	50	40	10	143	29
1922.....	80	20	174	170	46	43	11	139	32
1923.....	81	19	179	193	43	46	11	140	31
1924.....	83	17	183	190	39	48	13	142	31
1925.....	84	16	191	197	39	49	12	146	31
1926.....	*85	*15	*206	*204	..	..	..	148	..
1927.....	*86	*14	*214	*201	..	..	..	150	..

* Preliminary estimate.

TABLE 23A.—DISTRIBUTION OF INCOME FROM GOVERNMENT BY DIVISION OF GOVERNMENT AND TYPES OF INCOME, 1913 AND 1925

(In millions of dollars)

Item	1913		1925			
	Federal Government	Cities, villages, and school districts	Federal Government	State governments	Counties	Cities, villages, and school districts
Pay roll.....	474	868	1,287	257	229	2,565
Pension.....	173	10	584	93	78	58
Interest.....	17	175	499	51	19	410
Total.....	664	1,053	2,370	401	326	3,033

cent of income realized from Federal Government. While city and other local governments devote a small sum annually to pensions and benefits, there has been a considerable increase in this item. The pension item for the Federal Government refers exclusively to the Army and Navy and

Veterans' Bureau. While Federal Government interest and pre-war pensions have been on the decline since 1922, pay roll is on the increase and all items for the other divisions of government have shown a consistent growth since 1913.

Unclassified Enterprises and Occupations.—All business enterprises, institutions, and "gainful" occupations, not classified with any of the eight groups already considered, have been lumped together as "unclassified." Many of these enterprises could best have been put into one of these eight groups, if adequate information about them were available, particularly certain transportation and financial enterprises. This group, then, represents the no-man's-land of income statistics. The basis for estimating pay rolls and rents is extremely unsatisfactory, and the same is true of the interest payments and profits of individual enterprisers.

The income statement for 1925 makes clear the importance of labor and of individual enterprisers for this group. The following is an income statement (in millions of dollars) of unclassified enterprises and occupations, 1925:

Wages.....	7,117
Salaries.....	3,614
Rent paid to individuals.....	767
Interest paid to individuals.....	257
Corporate cash dividends to individuals.....	572
Individual profits withdrawn.....	4,125
	<hr/>
Total realized income.....	16,452

The proportion of salaries to wages is high, but far from all of salaries represent supervisory labor, since teachers in private institutions and ministers are included. While some enterprises have heavy investments and pay a large proportion of income to capital, other enterprises, like churches and colleges, disburse chiefly labor income. Moreover, some employees are employed directly by families. Some idea of the kinds of profit-making enterprises included may be gained from Table 24. Public service enterprises—professions, amusements, hotels, etc., and brokerage houses make up the bulk of these concerns. King estimates that there were 9,444,000 persons who looked to this unclassified group of enterprises and occupations for gainful employment in 1925: 6,033,000 wage workers, 1,587,000 salary workers, and 1,824,000 independent enterprisers.

The proportion of total realized income going to employees decreased during the war, but has since risen steadily, except for a slight check in 1925, to about two-thirds of the total. The percentage of total realized income going to borrowed capital (rent and interest), on the other hand,

TABLE 24.—ANALYSIS OF TYPES OF UNCLASSIFIED ENTERPRISES, 1925
(Income tax returns)

	Corporations net income		Reporting individuals	
	Reported gross income	Reported net income less tax deficits ^a	Thousands of returns	Business profits (millions of dollars)
	Millions of dollars			
1. Local transportation, cartage, and storage . . .	612	25	...	...
2. Miscellaneous transportation and public utilities . . . . .	...	...	27	84
3. Public service: Professions, amusements, hotels, etc.	2,849	146	288	1,244
Finance:				
4. Stock and bond brokers	6,654	485	...	...
5. Insurance	1,980	58	...	...
6. Other, multiplied by 103½ per cent (following King)	161	14	...	...
7. Total	8,795	557	38	222
8. "All other" (exclusive of inactive corporations)	322	3	43	152
9. Total "unclassified" returns	12,578	731	396	1,702
10. Estimated total profits (King) . . . . .	...	731	...	5,123

^a Net income, less deficit and tax, equals profits, less tax-exempt interest and dividends received.

^b Includes individual enterprisers in transportation and public utility group.

^c Includes individual enterprisers in finance group.

rose during the war and has gradually declined since. The proportion disbursed in dividends and profits withdrawn has fluctuated similarly to rent and interest.

Average annual wages in the unclassified occupations rose less rapidly during the war, according to King, than in all nonagricultural groups, and though they have risen steadily since the war they are still behind other wages in the increase over 1913. A similar and more striking discrepancy appears in the estimates for average annual salaries. Columns (7) and (10) in Table 25 show total realized income relative to 1913, corrected for price changes, and the number of all persons, including independent enterprisers, attached to the unclassified group for gainful employment. Up to 1920, deflated income increased more slowly than number of persons. Between 1920 and 1922, deflated income grew rapidly, so that in 1922 both series were about 4 per cent above the 1913 figures. And since that time, income has continued to grow more rapidly than number of persons attached to the group.

TABLE 25.—ANALYSIS OF INCOME REALIZED FROM THE UNCLASSIFIED INDUSTRIES AND OCCUPATIONS, UNITED STATES, 1913-14 AND 1918-1927

Year	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Share of employees	Rents, royalties, interest	Dividends and profits withdrawn	Average annual wage per wage employee		Total number of employees in the unclassified industries	Total number of employees and enterprisers attached to unclassified industries	Average annual salary per salaried employee		Total realized income in 1913 dollars, unclassified group
	Per cent of total income realized from unclassified group			Unclassified group	Nonagricultural industries			Unclassified industries	All industries	
	Relative to 1913 = 100									
1913.....	60	8	32	100	100	100	100	100	100	100
1914.....	61	8	31	97	92	108	106	99	102	101
1918.....	50	10	40	126	159	63	71	122	119	65
1919.....	53	9	38	145	173	63	71	124	136	59
1920.....	56	8	36	162	214	80	86	139	163	67
1921.....	62	7	31	164	164	102	102	140	159	90
1922.....	60	8	32	170	170	103	104	147	161	105
1923.....	61	7	32	177	193	107	106	151	172	109
1924.....	65	6	29	179	190	131	124	153	178	127
1925.....	65	6	29	186	197	136	128	158	183	134
1926.....	*66	*6	*28	*189	*204	143	132	*160	*190	...
1927.....	*68	*6	*26	*189	*201	157	143	*162	196	...

* Preliminary estimate.

Miscellaneous Income.—There remain a number of income streams not directly connected with any domestic industry. Two of these items represent cash receipts, and three are valuations of commodities and services consumed in whole or in part by the owners or purchasers. The following statement shows estimates of miscellaneous income (in millions of dollars) for the years 1925.

1. Income from urban gardens and poultry and cow keeping.....	243
2. Imputed interest on consumers' stocks of goods other than real estate.....	3,000
3. Rental value of urban owned homes (less depreciation and maintenance)...	1,760
4. Rent paid to individuals for leased urban homes (less depreciation and maintenance).....	2,517
5. Interest paid to individuals on long-term foreign investments.....	419
Total miscellaneous realized income.....	7,939

Items 1 and 2 are presumably the least accurate, while item 5 is at least more accurate than the other four, although it cannot command a high degree of confidence. Item 1, income from village poultry, gardens, and cows, has been declining in relative importance and is only slightly larger than in 1920. Allowing for price changes and growth of population, it has declined absolutely. There has been a rapid growth in the rental

TABLE 26.—ANALYSIS OF MISCELLANEOUS REALIZED INCOME, UNITED STATES, 1913-14 AND 1918-1927

Year	Index of per capita income from poultry, gardens, and cows not on farms (1913 dollars) relative to 1913 as 100 per cent	Ratio of rental value of owned urban homes to rent paid for leased homes	Interest on investment in durable consumption goods other than homes (millions of current dollars)	Net income from foreign investment (millions of current dollars)
		<i>Per cent</i>		
1913.....	100	86	1,070	-90
1914.....	100	85	1,116	-85
1918.....	167	80	2,302	-26
1919.....	117	79	2,740	-17
1920.....	101	76	3,717	-8
1921.....	77	75	3,015	-7
1922.....	78	74	2,596	354
1923.....	82	73	2,834	369
1924.....	81	71	2,923	390
1925.....	84	70	3,000	419
1926.....	83	69	3,022	*410
1927.....	84	*68	*3,051	*410

* Preliminary estimate.

value of durable consumption goods, the automobile representing the largest of the consumer's investments in new types of mechanical and other modern devices. The ratio of rental value of owned urban homes to contract rents shows a very considerable decline. Net interest on investments abroad has changed from a minus quantity to an important and steadily growing item in the national income.

IV. HOW THE SEVERAL PARTS OF THE COUNTRY HAVE FARED³⁴

We have seen that the United States as a whole has been enjoying an era of great prosperity, but that this prosperity has been far from evenly distributed among the various industries and occupations, and territorial specialization suggests that different parts of the country have fared very differently. In fact, most of the country has been less prosperous than the region which contains most of the population and receives most of the income. It will be helpful in interpreting the analysis of income for the several regions into which the Bureau of the Census has divided the United States, if we consider first the distribution of income in 1919,³⁵ as estimated by Leven. Since the prosperity of a region is largely a reflection of the prosperity of its industries, it would be desirable to know what proportion of its income comes from each industry group. Leven's estimates do not lend themselves to a complete answer to this question, but a partial answer will suffice for the purpose. Table 27 shows the percentage distribution of population in 1920 and of total realized income in 1919, by regions. It also shows for each region the percentage distribution of income received from various sources. Over 40 per cent of the population, and nearly 50 per cent of the income, are concentrated in the eight Middle Atlantic and East North Central states, which comprise only about one-ninth of the total area. On the other hand, the South Central and Mountain states, which include nearly half the area of the country, received less than one-fifth of the national income in 1919. The prosperity of the United States, measured in income, is largely determined by the prosperity of its northeastern corner. The predominance of agriculture in the income for four of the other regions, the West North Central and the Southern states, makes it easy to see why these parts of the country may have fared differently from the country as a whole.

One other fact, brought out by Table 27, is of considerable interest. The income is even more highly concentrated than the population. Per capita income is highest in the Pacific and Middle Atlantic states. New England and the East North Central states also have

³⁴ See Chap. II, Industry, Part 3, p. 206.

³⁵ A prewar year might be preferable to 1919, but no analysis is available for such a year. Since Leven's regional estimates were made, the national totals have been revised, hence Table 27 disagrees slightly with previous tables.

TABLE 27.—PER CENT DISTRIBUTION OF 1919 REALIZED INCOME RECEIVED FROM VARIOUS SOURCES FOR UNITED STATES AND NINE CENSUS REGIONS (PER CENT OF ALL INCOME)

(Based on Leven's estimates)

	United States	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
1. Total income realized from agriculture.....	18.3	4.6	4.8	15.6	36.7	26.8	35.5	35.3	30.2	18.5
2. Rent, interest, and dividends paid, and profits withdrawn (except agriculture).....	25.5	29.6	33.5	23.4	18.1	21.4	17.4	21.8	19.1	26.7
3. Construction (pay roll).....	2.0	1.8	1.9	2.5	1.7	2.1	1.4	2.2	1.7	1.9
4. Mining (pay roll).....	2.1	.2	2.5	1.8	1.3	2.6	3.5	2.2	7.0	1.0
5. Manufacturing (pay roll).....	20.3	32.5	25.2	26.2	10.1	14.9	11.9	7.7	8.4	15.9
6. Other nonagricultural (pay roll).....	25.1	24.6	26.1	23.3	24.8	25.5	23.5	24.4	26.7	29.1
7. Miscellaneous income ^a	6.7	6.7	6.0	7.2	7.3	6.7	6.8	6.4	6.9	6.9
8. Total realized income.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Per cent distribution of total realized income in 1919 and of population as of Jan. 1, 1920, among the census regions (per cent of United States)										
9. Total realized income.....	100	8.2	26.7	22.2	11.2	9.6	4.7	7.4	3.2	6.8
10. Population.....	100	7.0	21.0	20.3	11.9	13.2	8.4	9.7	3.2	5.3
Per capita realized income in 1919—United States and nine census regions										
11. Per capita realized income.....	\$614	\$715	\$781	\$669	\$582	\$445	\$345	\$469	\$634	\$793

^a Includes income from urban cows, gardens, and poultry; imputed rent of owned urban homes and farmers' homes; and imputed interest on value of durable consumption goods in hands of consumers.

high per capita incomes, while the per capita incomes in the Southern states, where the negro population is a large part of the total, are low.

In analyzing the national income into income received in each of the nine census regions, it has only been possible to assign about 60 per cent of the total income. We shall treat this assigned portion as an index of the income for each region, and consider the regions in order. The chief omissions in this index are a part of property incomes, and wages in mining (other than coal), public utilities, trade, government (except the schools), and the unclassified occupations, but in a sense these items are included indirectly, since the indexes for the nine regions were adjusted so that the combined index for the entire country would agree with the estimate of total realized income.³⁶

³⁶ So far as possible, the methods developed and employed by Maurice Leven, in *Income in the Various States, 1919-1921*, have been followed, but the limitation of time has made it necessary to adopt various short cuts and to deal with only a part of the national income.

Because of the lack of classification of much of the basic income data on a geographical basis, it has only been possible in the time available to apportion about 60 per cent of total realized income to the nine census regions. The omitted items include: pay rolls in mining other than coal, in the transportation and public utility group, in government other than the public schools, and in merchandizing and the unclassified industries, and nonmoney incomes from property. About half of the money income from property is reported to the Bureau of Internal Revenue, and so only half of the estimated money income from property is included.

The national totals for 13 yearly series were apportioned to the nine census regions. These series fell into two groups: those having to do with agriculture, and those having to do with other types of income. The index of income for each district was made up by apportioning King's estimates for agricultural and nonagricultural income on the basis of these apportioned series. Five of the series referred to agriculture: (1) value of agricultural products—King's estimate of value of crops sold or eaten by the farm population plus the estimated value of crops fed to stock, used for seed, and wasted (two-year moving average of the Department of Agriculture estimate for fiscal years, *Crops and Markets*, Vol. 4, p. 252) plus value of animal products (King); (2) feed, seed, and waste cost as listed in (1) plus King's estimated cash feed cost; (3) expenditures for implements and autos and other machinery (King); (4) fertilizer expense (King); (5) interest paid to banks and merchants (King).

Following Leven's method, the apportioned items (2) plus (3) plus (4) plus (5) were deducted from (1) to approximate agricultural income for each region. The balance includes in addition to wages, rent, interest (to individuals), and profits, certain expenses which might have decreased the total current value product by 8 to 10 per cent.

Item (1) was apportioned by prorating on the value of crops and animal products estimated by Leven 1919-1921 and by the Department of Agriculture thereafter. Item (2) was prorated for 1924 on an estimate of its chief constituents for that year—cash, feed costs (census); value of wheat, corn, and oats not shipped out of country where grown; apples not marketed; Irish potatoes used for seed; other potatoes not sold prorated on total value of sweet and Irish potatoes separately; value of peaches wasted prorated on total value; value of hay and forage not sold prorated on total value, and dairy products not sold prorated on number of calves under one year of

It will be possible with each of these regions only to treat the region as a whole, but it is well to remember that none of these regions is par-

age (census). The data, except the two mentioned census items, were from *Crops and Markets*. For 1919, 1920, and 1921, item (2) was apportioned on the basis of Leven's estimates of feed and seed cost. This is the largest deduction item, and the percentage geographical distribution probably varies more from year to year than in the case of items (3) and (5). But none of these items shows a wide geographical variation from year to year, and the labor of making separate yearly estimates was so great that it seemed wise that the percentage of item (2) assigned to each region for the other years should be determined by interpolation. The fact that the results obtained by this process for 1920 and 1921 do not differ greatly from those which are obtained by using Leven's figures lends some support to this rough procedure.

The percentage distribution for item (3) for 1924 and 1925 was based on the census value of implements and machinery. For item (5) an estimate of agricultural loans and mortgages held by commercial banks and of interest rates charged as of December 31, 1923, formed the basis for the percentage distribution in 1923 and 1924. This estimate the Bureau of Agricultural Economics was kind enough to make, the basic data being from an unpublished study in which a questionnaire was answered by about one-half of the commercial banks of the country. The distribution of these two items for the other years was determined by interpolation. The distribution of fertilizer costs in 1919 and 1924 was that of the census. The 1920 and 1921 distributions were from Leven. For the three cotton-growing regions the other years were estimated on the basis of Department of Agriculture data for tons sold and their fertilizer price index. The percentages of total fertilizer expense for other regions were determined by interpolation and the totals adjusted to King's figures.

Finally, King's estimate of the net current income realized from agriculture was apportioned to each region by prorating it on item (1) minus items (2), (3), (4), and (5). The results of this method can not be compared directly with Leven's regional estimates because the estimates of net current income realized from agriculture have been revised. The percentage distributions are compared for the three years in the following table:

	1919		1920		1921	
	Leven's estimate	Present estimate	Leven's estimate	Present estimate	Leven's estimate	Present estimate
New England.....	2	2	3	3	4	4
Middle Atlantic.....	7	7	9	9	11	10
East North Central.....	19	18	20	20	19	19
West North Central.....	23	22	18	19	16	16
South Atlantic.....	14	15	13	13	12	13
East South Central.....	9	9	8	8	9	9
West South Central.....	14	15	14	14	13	13
Mountain.....	5	5	6	5	6	6
Pacific.....	7	7	9	9	10	10
Total United States.....	100	100	100	100	100	100

The other items employed in constructing the geographical income indexes are: (6) bituminous coal wages; (7) anthracite wages; (8) manufacturing wages; (9)

ticularly homogeneous, and were each state in any one region considered separately, we might expect to find as wide divergences among those states as we shall find among the several regions that go to make up the United States.

construction wages; (10) bank salaries; (11) teachers' salaries; (12) salaries, except agriculture, banking, and government; (13) one-half of property and entrepreneurial income received in money—agricultural rent, interest, and profits being excluded. Item (7) falls entirely in the Middle Atlantic region. Item (6) for this region is wages as reported to the Pennsylvania Department of the Interior. The total for the other seven regions (New England's figures being zero throughout) is prorated on Leven's wage and salary estimate for 1919-1921 and on value of coal produced (Bureau of Mines estimate) for the next four years. The 1926 figures for each of the seven regions were estimated on the basis of percentage increase in tonnage over 1925, and the total was adjusted to King's wage estimate. (8) King's estimate of manufacturing wages for census years was prorated on the census figures for each region. For other years the percentage distribution was determined by interpolation. (9) Construction wages in 1925 were estimated on two bases: (a) relative wage rates on the 1919 base, relative construction dollar volume, and Leven's estimate of wages and salaries in 1919 (in this estimate it was assumed that the percentage change in profits and nonlabor costs per unit of output from 1919 to 1925 was the same for all regions); (b) Leven's 1919 estimate, relative wage rates, and relative physical volume of construction. In the final estimate (a) was weighted two and (b) one. Wages were estimated for other years by interpolating on the basis of dollar volume of construction in each region. The dollar volume and physical volume estimates for five regions throughout, and for two other regions (East and West South Central) for part of the period, were based on figures furnished by the F. W. Dodge Corporation. Other dollar volume figures (especially for the Mountain and Pacific states) were based on urban building permits and physical volume figures on number of permits, on building sand and gravel sold and on cement shipments (Bureau of Mines).

Item (10), bank salaries, was apportioned to regions on the basis of estimated salaries for those regions for fiscal years ended June 30, 1920, 1922, 1924, and 1926. These estimates were based on national bank salaries, and total assets of national and all banks for each region. The percentage distribution for each calendar year was determined by interpolation. The estimates for item (11), salaries of teachers and executives in public, elementary, and secondary schools, were based on data for total salaries by states and average salaries for the United States for fiscal years ended June 30, 1918, 1920, 1922, 1924, and 1925 from the Bureau of Education. Totals for calendar years and the percentage distributions were estimated by interpolation. Item (12) was prorated on income figures from the Bureau of Internal Revenue for wages and salaries, and item (13) on figures for income from business partnerships, rents and royalties, interest, dividends, and fiduciary income.

The apportioned items (6) to (13) were then totaled, and King's estimates for nonagricultural realized income were apportioned on these totals. The apportioned totals of agricultural and nonagricultural income were added to make the indexes of total realized income. The percentage distribution of nonagricultural income may be compared with Leven's distribution of nonagricultural current income. It appears that the three regions in the northeastern part of the United States have consistently larger percentages according to this crude apportionment than they do according to Leven's more accurate apportionment, presumably because they have a larger proportion of the higher money incomes which are reported in the income

CHART 3.—REALIZED INCOME OF THE NEW ENGLAND REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)

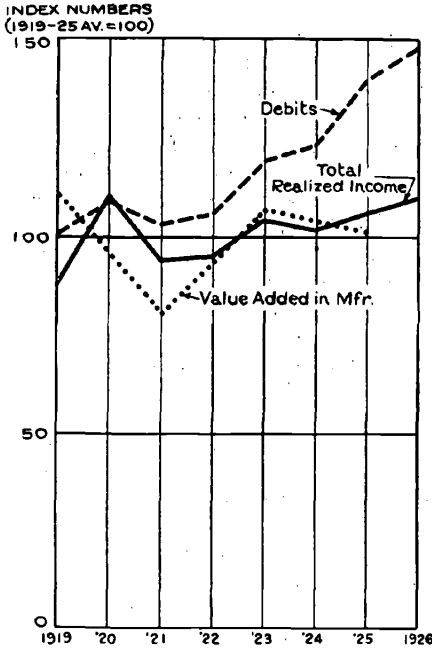
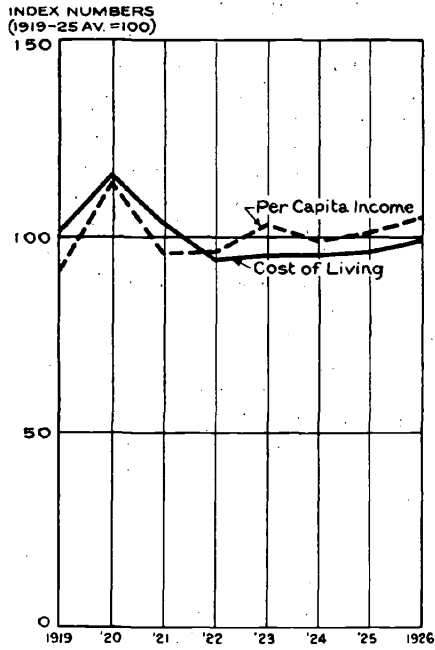


CHART 4.—PER CAPITA REALIZED INCOME AND COST OF LIVING; NEW ENGLAND REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)



New England.—New England is like the more prosperous parts of the country in receiving a large proportion of its income from manufacturing, in having a dense population, and a high per capita income in tax returns, a discrepancy which probably does not invalidate the year-to-year comparisons, which are the chief point of present interest. The following table shows the per cent distribution of total realized income, 1919-1921:

	1919		1920		1921	
	Leven's estimate	Present estimate	Leven's estimate	Present estimate	Leven's estimate	Present estimate
New England.....	8	9	9	10	9	10
Middle Atlantic.....	27	27	28	29	30	31
East North Central.....	22	23	23	23	21	22
West North Central.....	11	11	10	9	9	8
South Atlantic.....	10	9	9	9	9	8
East South Central.....	5	4	4	4	4	4
West South Central.....	7	7	7	6	7	6
Mountain.....	3	3	3	3	3	3
Pacific.....	7	7	7	7	8	8
Total United States.....	100	100	100	100	100	100

1919: Less than 5 per cent of the income comes from agriculture. But New England's income in the last few years has not grown as rapidly as the income of the country as a whole. Chart 3 compares the index of realized income with debits to individual accounts in eleven centers. The income peak in 1920 is higher than that of debits, but after 1923 income increases only slightly, while debits rise with the growth of speculation. Chart 4 shows a per capita income index, and an index of urban living costs for wage earners (Boston and Portland). Between 1919 and 1923 there is an apparent gain in per capita income, corrected for changes in prices in this predominantly urban community. But thereafter, when price changes are allowed for, per capita income has probably been about constant. Value added in manufacturing, that is, revenue from sales less cost of materials, is a rough index of accrued income produced by manufacturing. According to the census, this actually declined nearly 6 per cent between 1923 and 1925 in New England. Value added in the manufacture of boots and shoes (other than rubber) declined about 13 per cent in these two years, and this item for cotton goods manufacture declined 25 per cent. In 1923, these two industries accounted for 13 per cent of all value added in manufacturing in New England. Evidently New England has been losing in competition with other parts of the country, and can hardly be said to have been prosperous during the past few years.

TABLE 28.—INCOME INDEXES AND RELATED DATA, NEW ENGLAND REGION, 1919 TO 1926

(1919 = 100 for all items except as noted)

	1919	1920	1921	1922	1923	1924	1925	1926
Index of total realized income....	100	126	107	108	118	116	120	*125
Debits to individual accounts in eleven centers (relative to 1919 as 100).....	100	109	102	105	117	121	137	146
Total population July 1 (thousands).....	7,355	7,450	7,568	7,668	7,777	7,894	7,986	8,092
Farm population Jan. 1 (thousands).....		626					658	
Index of per capita income.....	100	124	104	104	112	108	110	*114
Index of urban cost of living (Boston and Portland).....	100	114	101	92	93	93	94	97
	<i>Millions of dollars</i>		<i>Millions of dollars</i>		<i>Millions of dollars</i>		<i>Millions of dollars</i>	
Value added to all manufactures..	3,231		2,376		3,125		2,936	
Value added to boots and shoes (except rubbers).....					188		164	
Value added to cotton goods.....					332		251	

* Preliminary estimate.

The Middle Atlantic States.—The three Middle Atlantic states, New York, New Jersey, and Pennsylvania, with about one-fifth of the

CHART 5.—REALIZED INCOME OF THE MIDDLE ATLANTIC REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)

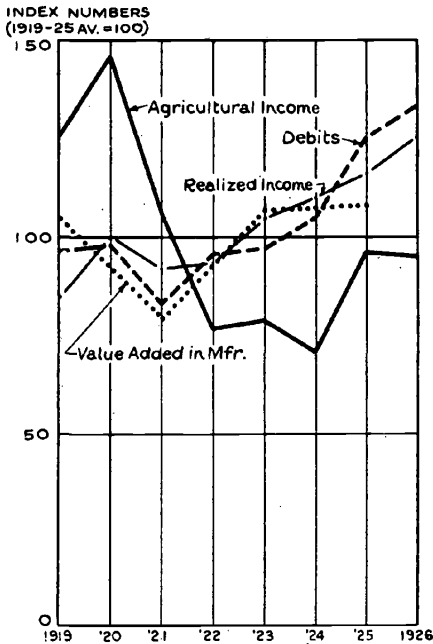
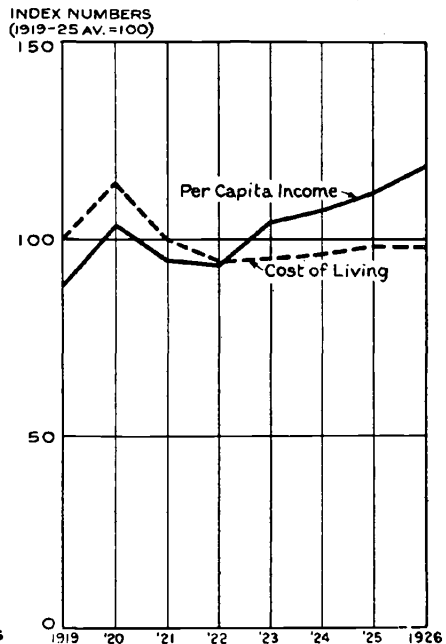


CHART 6.—PER CAPITA REALIZED INCOME AND COST OF LIVING; MIDDLE ATLANTIC REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)



total population in 1920, received one-quarter of the national income in 1919, and probably as much as 30 per cent of the total in 1926. Chart 5 shows the growth of realized income, and of debits to individual accounts in 20 centers. In spite of the rapid rise of the latter since 1923, the total percentage increase of income since 1919 is greater than that

TABLE 29.—INCOME INDEXES AND RELATED DATA, MIDDLE ATLANTIC REGION, 1919 TO 1926

(1919 = 100 for all items except as noted)

	1919	1920	1921	1922	1923	1924	1925	1926
Index of total income realized from agriculture.....	100	116	84	61	62	56	76	75
Index of all other realized income.....	100	119	111	113	127	134	141	152
Index of total realized income.....	100	118	109	110	124	131	138	148
Debits to individual accounts in twenty centers (relative to 1919 as 100).....	100	101	86	99	100	109	129	138
Total population July 1 (thousands).....	22,101	22,417	22,815	23,131	23,496	23,897	24,238	24,597
Farm population January 1 (thousands).....		1,893					1,818	
Index of per capita income.....	100	116	106	105	117	121	126	133
Index of urban cost of living (Buffalo, New York, Philadelphia, Pittsburg, Scranton).....	100	114	100	94	95	96	98	98
Value added to all manufactures (millions of dollars).....	8,431		6,443		8,596		8,727	

of debits. The per capita income index and an index of the cost of living for wage earners in five cities (urban income represents over 95 per cent of all income) are compared in Chart 6. The spread between the two lines increases each year, and we may fairly conclude that per capita income, corrected for price changes, has shown a pretty steady growth, with scarcely a setback even in depression years. Clearly this growth has not been due to agriculture, which has shown a decline of realized income in every region during the eight-year period. And Chart 5 seems to show almost as clearly that manufacturing has not been responsible for the growth of income that has occurred. Presumably the explanation is to be found in the other industry groups (except mining), transportation, banking, construction, trade, government, and the unclassified industries.

East North Central Region.—The East North Central region, or the states of Ohio, Indiana, Illinois, Michigan, and Wisconsin, is both a

CHART 7.—TOTAL AND AGRICULTURAL INCOME; EAST NORTH CENTRAL REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)

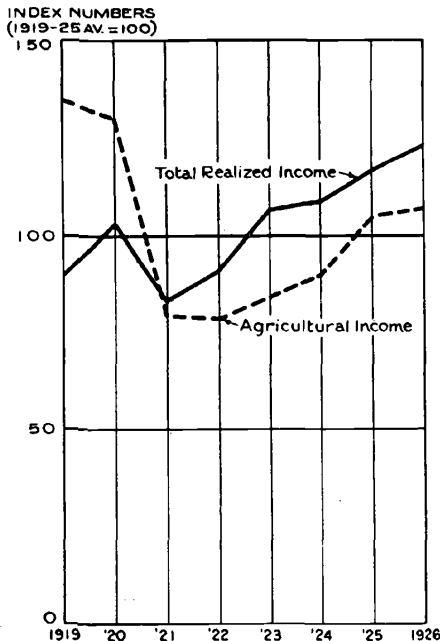
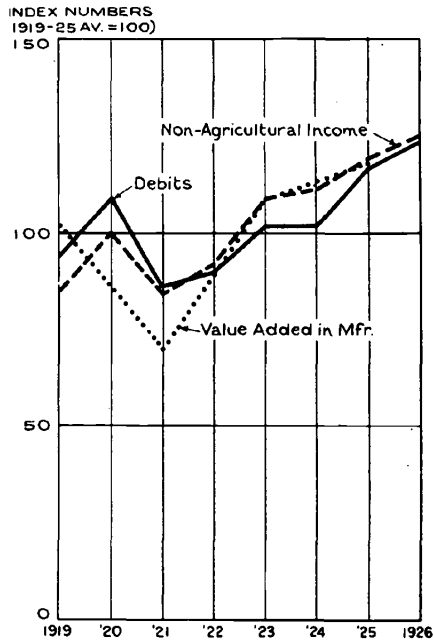


CHART 8.—NONAGRICULTURAL INCOME, DEBITS AND VALUE ADDED IN MANUFACTURE; EAST NORTH CENTRAL REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)



highly industrialized territory and one in which agriculture is important. Its per capita income was not so high as the older portion of the North in 1919, but it received about 22 per cent of the country's income.

CHART 9.—PER CAPITA REALIZED INCOME AND COST OF LIVING; EAST NORTH CENTRAL REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)

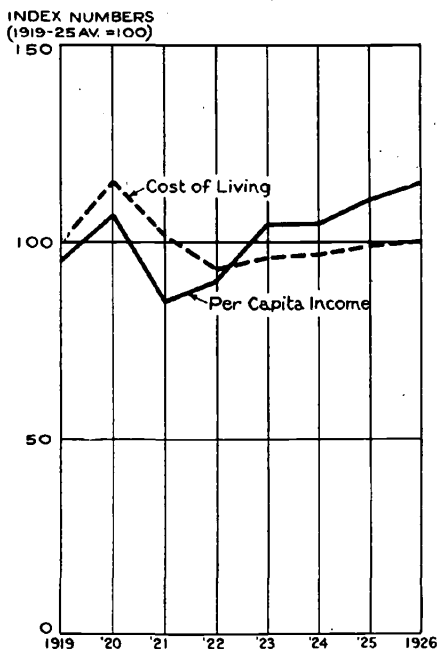


CHART 10.—TOTAL AND AGRICULTURAL REALIZED INCOME; WEST NORTH CENTRAL REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)

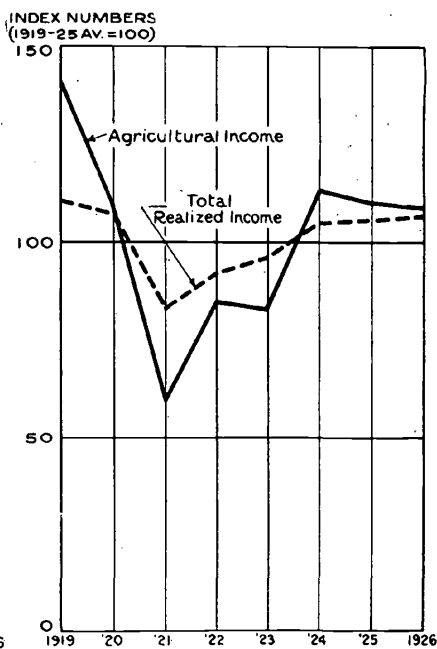


Chart 7 compares the index of total realized income and that for income realized from agriculture. Total income has apparently grown steadily since 1921, though not so rapidly as in the Middle Atlantic region. Since 1923 it has been above the 1920 peak. Agricultural income remains at about 60 per cent of the 1919 figure from 1921 to 1924, and then rises to about 80 per cent of the 1919 income in 1925 and 1926. Nonagricultural income and debits to individual accounts in 24 centers are compared in Chart 8. The fluctuations of the two curves are fairly similar, except for the last two years when debits rise steeply toward the income curve, reflecting the growth of speculative activity. Prior to 1925, debits have a much more gentle upward trend than the nonagricultural income index. Manufacturing appears more nearly to have kept pace with the growth of nonagricultural income than in the Middle Atlantic states, but here, too, other lines (mining not included) must be looked to to account for the growth of income.

The per capita income index is compared with an index of the cost of living in five cities in Chart 9. While this cost index is far from satisfactory as a measure of price changes for all classes of income recipients, it suggests a very considerable gain since 1922. Farm population

declined between 1920 and 1925, but agricultural income declined still more, so that per capita agricultural income fell 14 per cent in these five years, while nonagricultural income per capita of nonfarm population rose 4 per cent. The East North Central region has prospered, but the prosperity has not included the agricultural part of the community.

TABLE 30.—INCOME INDEXES AND RELATED DATA, EAST NORTH CENTRAL REGION, 1919 TO 1926

(1919 = 100 for all items except as noted)

	1919	1920	1921	1922	1923	1924	1925	1926
Index of total income realized from agriculture.....	100	97	59	58	63	67	78	*80
Index of all other realized income.....	100	118	99	108	129	132	140	*147
Index of total realized income.....	100	115	93	101	119	122	131	*137
Debits to individual accounts in 24 centers relative to 1919 as 100.....	100	116	91	96	109	109	124	132
Total population July 1 (thousands).....	21,301	21,637	22,130	22,459	22,889	23,386	23,789	24,208
Farm population January 1 (thousands).....		4,914					4,511	
Index of per capita income.....	100	113	90	95	111	111	117	*121
Index of urban cost of living (five cities).....	100	116	102	93	96	97	99	100
Value added to all manufactures (millions of dollars).....	7,116		4,913		7,639		8,262	

* Preliminary estimate.

West North Central Region.—The West North Central region includes the following states: Minnesota, Iowa, Missouri, the Dakotas, Kansas, and Nebraska. In 1919, agriculture accounted for over one-third of its total realized income. It is not surprising, therefore, that the income of the region is slightly less in 1926 than in 1919, although there has been a steady increase since 1921. Chart 10 shows indexes of total realized income and of agricultural income. The latter slumped even more in 1921 than total income, and in 1926 was less than 80 per cent of the 1919 figure. There is a rough agreement in the movement of debits in 20 centers and nonagricultural income (Chart 11).

The per capita income index is shown in Chart 12. While urban living costs in three cities are an unsatisfactory basis for judging the extent to which price changes have been responsible for the decline after 1920, they suggest a gain in per capita deflated income in 1920–1923, followed by a somewhat smaller decline. If we consider agricultural and nonagricultural income separately, it appears that the former, per capita of farm population, actually increased by 5 per cent from 1920 to 1925, owing to the exodus from the farms, while nonagricultural income, per capita of nonfarm population, declined about 10 per cent. On the whole, it is clear that this region, which had in 1919 a lower per capita income than any other, excepting the three southern regions with large negro population, has not shared to any considerable extent in the general improvement shown by the United States considered as a unit.

CHART 11.—NONAGRICULTURAL
REALIZED INCOME AND DEBITS;
WEST NORTH CENTRAL RE-
GION, 1919-1926. (1919-1925
AVERAGE = 100
PER CENT)

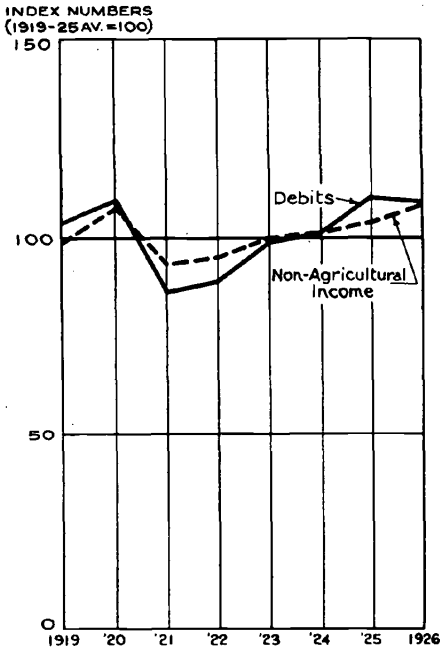


CHART 12.—PER CAPITA AND COST
OF LIVING REALIZED INCOME;
WEST NORTH CENTRAL RE-
GION, 1919-1926. (1919-1925
AVERAGE = 100
PER CENT)

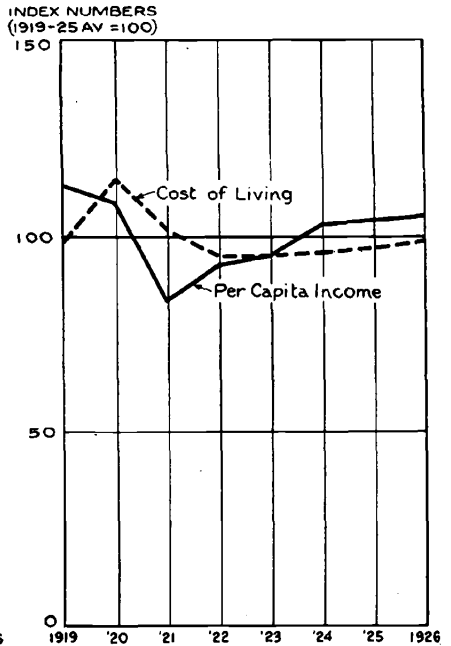


TABLE 31.—INCOME INDEXES AND RELATED DATA, WEST NORTH CENTRAL REGION,
1919 TO 1926
(1919 = 100 for all items except as noted)

	1919	1920	1921	1922	1923	1924	1925	1926
Index of total income realized from agriculture.....	100	78	43	61	59	81	79	*78
Index of all other realized income.....	100	108	94	96	101	102	105	*109
Index of total income.....	100	97	75	83	86	95	96	*97
Debits to individual accounts in 20 centers relative to 1919 as 100.....	100	105	83	85	95	97	106	105
Total population July 1 (thousands).....	12,495	12,581	12,680	12,750	12,842	12,941	13,021	13,108
Farm population January 1 (thousands).....		5,172					4,924	
Index of per capita income.....	100	97	74	82	84	91	92	*93
Index of urban cost of living (three cities).....	100	116	103	96	96	97	98	100

* Preliminary estimate.

The South Atlantic Region.—Delaware, Maryland, the District of Columbia, the Virginias, the Carolinas, Georgia, and Florida, make up the South Atlantic region. The per capita income of this region in 1919 was \$445. This was lower than that of the West North Central

CHART 13.—TOTAL AND AGRICULTURAL REALIZED INCOME; SOUTH ATLANTIC REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)

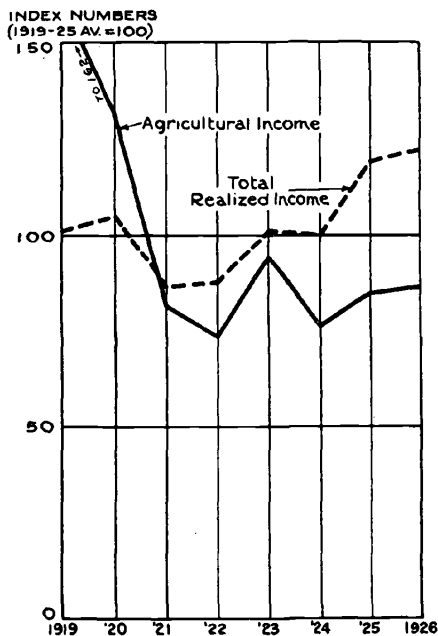
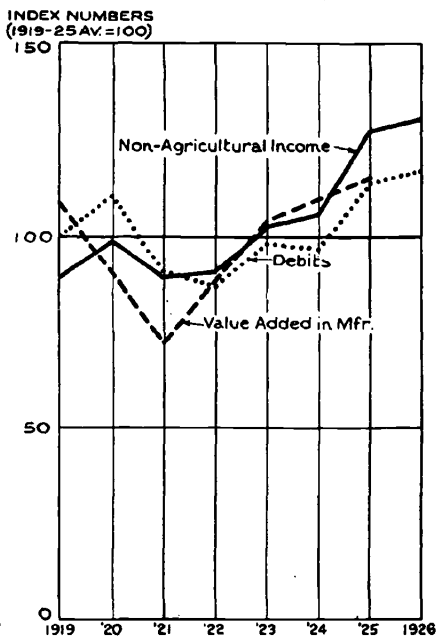


CHART 14.—NONAGRICULTURAL REALIZED INCOME, DEBITS, AND VALUE ADDED IN MANUFACTURE; SOUTH ATLANTIC REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)



states, but the region drew a smaller percentage of its income from agriculture and a larger percentage from manufacturing. It received about one-tenth of the national income for this year.

The indexes of total realized income and income realized from agriculture are shown in Chart 13. Total income in 1923 and 1924 was about the same as in 1919, and nearly 20 per cent higher in 1925 and 1926. Agricultural income has been about one-half the 1919 figure since 1921, rising slightly above 50 per cent in 1923 and in 1925-26. Debits in 16 centers and the nonagricultural income index move similarly from year to year, except that income has a steeper trend (Chart 14). Much has been said of the growth of manufacturing in this region, but value added by manufacture has hardly kept pace with the growth of non-agricultural income. The manufacture of cotton goods has not fared as badly as in New England, but value added by the industry was 9 per cent less in 1923 than in 1919, and 17 per cent less in 1925. This industry represented about one-sixth of all value added in 1919. Lumber and timber products manufactures, which represented about one-twelfth of the total, have similarly declined; while tobacco (cigars and cigarettes), with about one-tenth of total value added in 1919, shows an increase of

value added of nearly 60 per cent between 1919 and 1925. The sharp rise of nonagricultural income in 1925 is probably in part owing to the Florida boom, which increased the volume of property and salary incomes received in that state.

A per capita income index and an index of the cost of living for wage earners in seven cities are shown in Chart 15. If other living costs have moved at all closely with these, income per capita corrected for price changes was probably below the 1919 level until 1925. The rise in 1925 and slight decline in 1926 suggest the rise and fall of the activity in Florida. Agricultural income per capita of farm population fell 28 per cent from 1920 to 1925, and nonagricultural income per capita rose 2 per cent.

TABLE 32.—INCOME INDEXES AND RELATED DATA, SOUTH ATLANTIC REGION, 1919 TO 1926

(1919 = 100 for all items except as noted)

	1919	1920	1921	1922	1923	1924	1925	1926
Index of total income realized from agriculture.....	100	81	50	45	58	47	52	*53
Index of all other realized income.....	100	113	100	103	117	121	145	*148
Index of total realized income.....	100	104	85	86	100	99	117	*120
Debits to individual accounts in 16 centers relative to 1919 as 100.....	100	111	90	87	98	97	114	117
Total population July 1 (thousands).....	13,892	14,098	14,397	14,616	14,884	15,185	15,418	15,676
Farm population January 1 (thousands).....		6,417					5,661	
Index of per capita income.....	100	102	82	82	93	91	106	*106
Index of urban cost of living (seven cities)...	100	112	100	90	91	91	93	94
	<i>Millions of dollars</i>		<i>Millions of dollars</i>		<i>Millions of dollars</i>		<i>Millions of dollars</i>	
Value added to all manufactures.....	1,859		1,242		1,796		1,983	
Value added to cotton goods.....	314				287		260	
Value added to lumber and timber products.....	156				132		126	
Value added to tobacco (cigars and cigarettes).....	177				229		280	

* Preliminary estimate.

East South Central Region.—The East South Central states, Kentucky, Tennessee, Alabama, and Mississippi are probably a little better off to-day than they were in 1919, when the per capita realized income was only \$345. Agriculture is the predominant industry, but other lines

CHART 15.—PER CAPITA INCOME AND COST OF LIVING; SOUTH ATLANTIC REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)

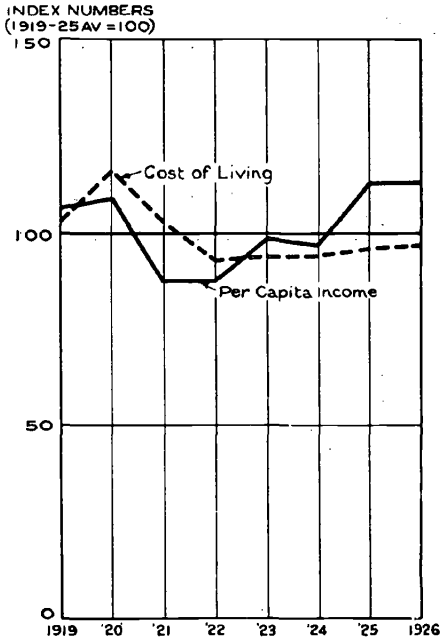
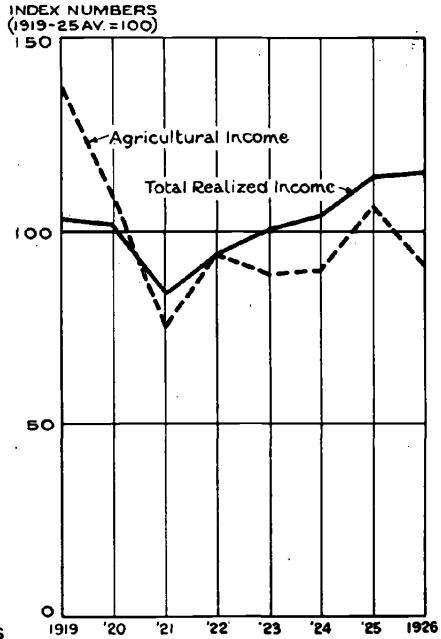


CHART 16.—TOTAL AND AGRICULTURAL REALIZED INCOME; EAST SOUTH CENTRAL REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)



have grown considerably in the last few years, and total realized income was about 12 per cent higher in 1926 than in 1919 or 1920 (Chart 16). Agricultural income, however, was lower in 1922 than in 1919 by about 32 per cent, and has continued at about that level except for 1925. Nonagricultural income and debits in 10 centers are compared in Chart 17; the yearly fluctuations of debits are greater for the most part, but the general upward trends of the two curves since 1921 are very similar.

Per capita income and an index of living costs in three cities are shown in Chart 18. If other living costs for the district have varied approximately as those in this index, per capita income corrected for price changes was low in 1920 and 1921, and in 1925-26 was above the 1919 level. The farm population declined about 10 per cent between 1920 and 1925, so that agricultural income per capita of farm population rose by 6 per cent. As in the grain-raising region of the North Central West, nonagricultural income per capita moved downward, though in this case by only 3 per cent. All this suggests that, while urban income has grown rapidly with the expansion of industry, that expansion has been insufficient to absorb the influx of population from the farms and maintain the earlier income standard.

CHART 17.—NONAGRICULTURAL
INCOME AND DEBITS; EAST
SOUTH CENTRAL REGION,
1919-1926. (1919-1925
AVERAGE = 100
PER CENT)

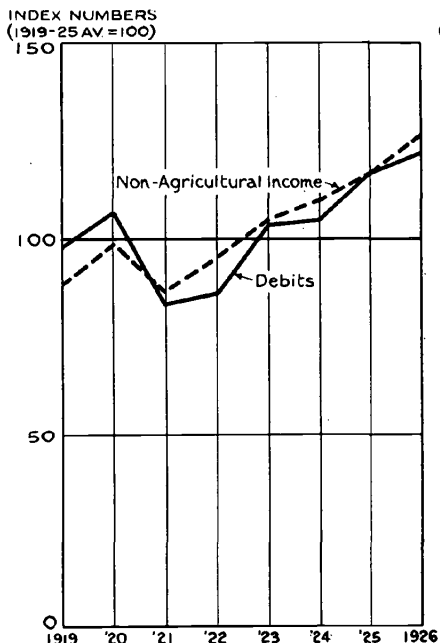


CHART 18.—PER CAPITA INCOME
AND COST OF LIVING; EAST
SOUTH CENTRAL REGION,
1919-1926. (1919-1925
AVERAGE = 100
PER CENT)

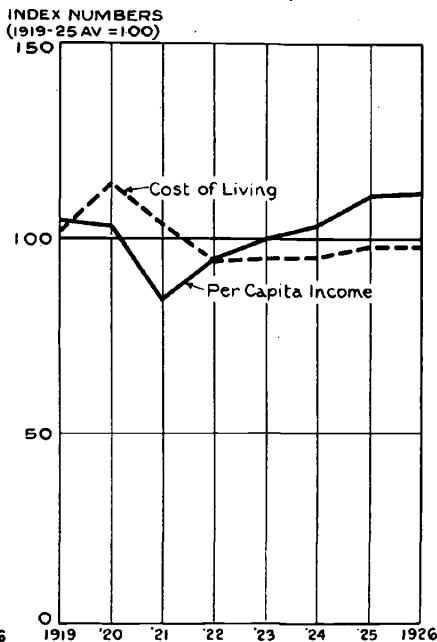


TABLE 33.—INCOME INDEXES AND RELATED DATA, EAST SOUTH CENTRAL REGION,
1919 TO 1926

(1919 = 100 for all items except as noted)

	1919	1920	1921	1922	1923	1924	1925	1926
Index of total income realized from agriculture.....	100	80	55	69	65	66	78	*67
Index of all other realized income.....	100	112	98	107	119	124	132	*141
Index of total realized income.....	100	99	81	92	98	101	111	*112
Debits to individual accounts in ten centers (relative to 1919 as 100).....	100	109	85	88	106	107	120	125
Total population July 1 (thousands).....	8,867	8,919	8,993	9,043	9,108	9,184	9,246	9,309
Farm population January 1 (thousands).....		5,183					4,632	
Index of per capita income.....	100	98	80	90	95	98	106	*107
Index of urban cost of living (three cities).....	100	112	101	92	93	93	96	96

* Preliminary estimate.

West South Central Region.—The West South Central region, which consists of Arkansas, Louisiana, Oklahoma, and Texas, is like the West North Central and East South Central regions in drawing more than one-third of its income from agriculture in 1919. And the story is similar. Total realized income was only 7.5 per cent higher in 1926

CHART 19.—TOTAL, AGRICULTURAL, AND NONAGRICULTURAL REALIZED INCOME, AND DEBITS; WEST SOUTH CENTRAL REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)

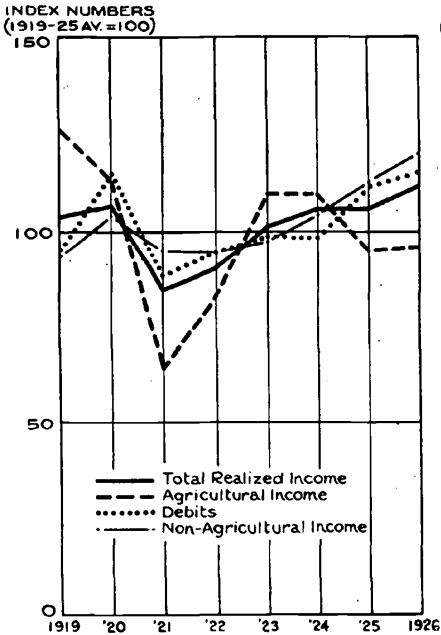
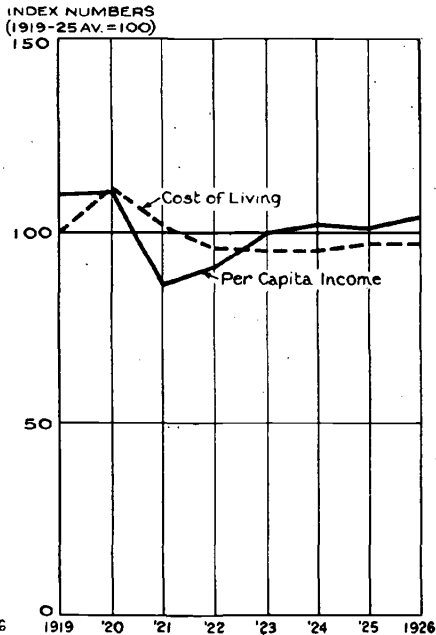


CHART 20.—PER CAPITA INCOME AND COST OF LIVING; WEST SOUTH CENTRAL REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)



than in 1919. Agricultural income was about 15 per cent lower in 1923 than in 1919, and has since declined (Chart 19). Nonagricultural income apparently fell less in 1921 than it had risen in the preceding year and in 1926 was about 15 per cent above the 1920 peak. Debits in 15 centers and nonagricultural income agree approximately as to trend, but debits fluctuate more widely. Per capita income declined more in 1921 than urban living costs (Houston and New Orleans—Chart 20), and the rise since has apparently not been sufficient to bring per capita income back to the 1919 level, price changes being allowed for. And in 1919 the per capita income was lower than in any other region except the East South Central. In part, this poor showing is owing to a rapid growth of population, 13 per cent in the seven years as against 11 per cent for the country as a whole, a growth which is suggestive of immigration from across the border. In contrast to the East South Central and West North Central regions, agricultural income per capita of farm population declined about 10 per cent between 1920 and 1925. Non-agricultural income per capita declined still more, 14 per cent. Clearly the West South Central states have not been particularly well off during the last few years.

TABLE 34.—INCOME INDEXES AND RELATED DATA, WEST SOUTH CENTRAL REGION, 1919 TO 1926

(1919 = 100 for all items except as noted)

	1919	1920	1921	1922	1923	1924	1925	1926
Index of total income realized from agriculture.....	100	90	51	65	87	87	75	*76
Index of all other realized income.....	100	112	102	101	105	112	122	*129
Index of total realized income.....	100	103	81	86	97	102	102	*107
Debits to individual accounts in 15 centers (relative to 1919 as 100).....	100	121	93	99	104	104	118	122
Total population July 1 (thousands).....	10,163	10,316	10,538	10,687	10,882	11,105	11,287	11,479
Farm population January 1 (thousands).....		5,228					4,736	
Index of per capita income.....	100	101	78	82	91	93	92	*95
Index of cost of living (two cities).....	100	112	102	96	95	95	97	97

* Preliminary estimate.

CHART 21.—TOTAL AND AGRICULTURAL REALIZED INCOME; MOUNTAIN REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)

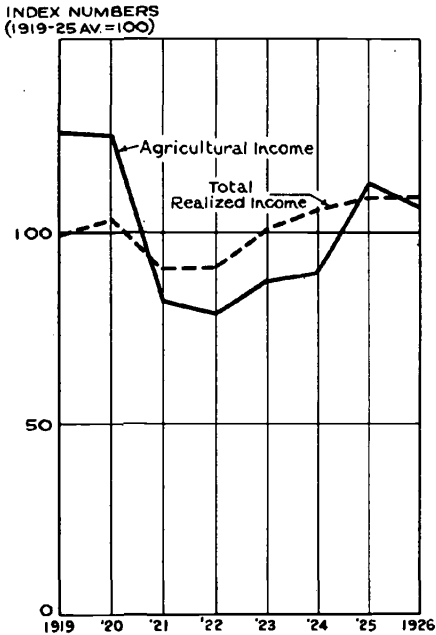
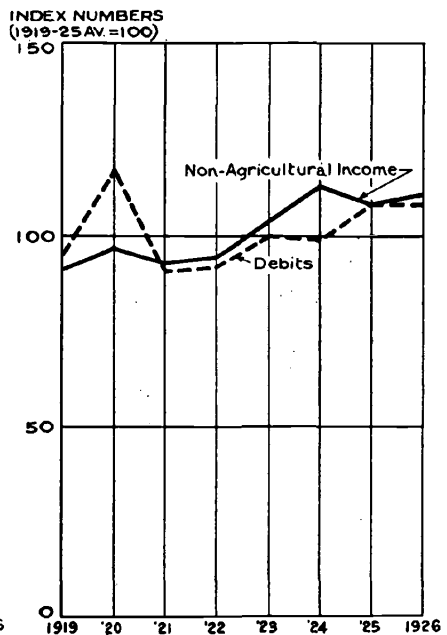


CHART 22.—NONAGRICULTURAL REALIZED INCOME AND DEBITS; MOUNTAIN REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)



The Mountain Region.—Montana, Idaho, Wyoming, Utah, Colorado, New Mexico, Arizona and Nevada comprise the Mountain region, a large and sparsely populated area, with less than four persons to the square mile in 1920. While the per capita income, at \$634, was higher than for the South and the Central West in 1919, only 3.2 per cent of the

CHART 23.—PER CAPITA REALIZED INCOME AND COST OF LIVING; MOUNTAIN REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)

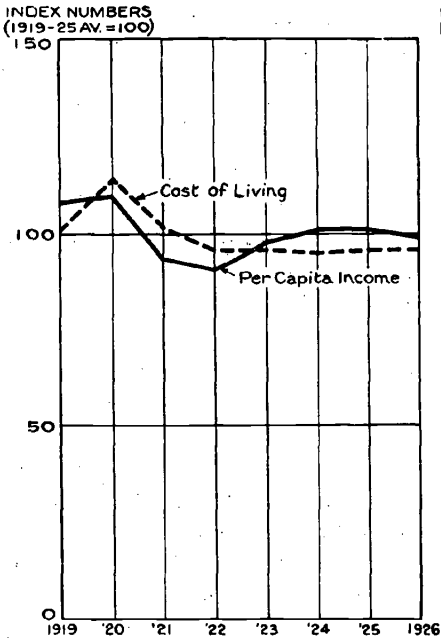
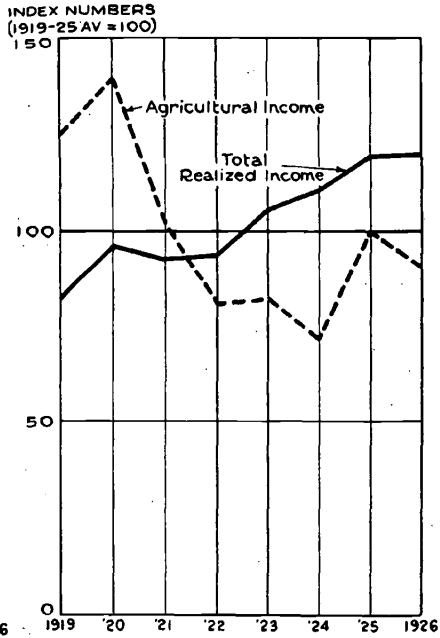


CHART 24.—TOTAL AND AGRICULTURAL REALIZED INCOME; PACIFIC REGION, 1919-1926. (1919-1925 AVERAGE = 100 PER CENT)



national total was received in this region. Agriculture, a considerable proportion of which is animal husbandry, accounted for 30 per cent of the income of the Mountain region in 1919, and manufacturing pay rolls less than 9 per cent.

Chart 21 shows that total realized income of the region increased approximately 23 per cent from 1921 to 1926 and was in the latter year about 6 per cent above the 1920 peak. As in the other regions, agricultural income in 1925 and 1926 was considerably below the 1919 figure, though in this region it was higher than in the years 1921-1924. Non-agricultural income and debits in 11 centers are compared in Chart 22. Both show a growth of about 20 per cent from 1921 to 1926, but debits fail to reach again the 1920 peak, while income is slightly lower in 1926 than in 1924. Whether this 1924 peak in nonagricultural income shows anything but an inaccuracy in the index may be questioned. An analysis of the index shows it to be owing to the salary and property income items assigned to regions on the basis of income tax data, which suggests a possible shift in the residence of the property income receiving classes.

The per capita income index drops to 85 per cent of the 1919 figure in 1921-22, rises to 94.5 per cent in 1924-25, and then declines slightly to 92 in 1926, while the cost of living for wage earners in Denver in 1926 is

95 per cent of the 1919 figure (Chart 23). As in several other regions, the per capita agricultural income rose from 1920 to 1925, while non-agricultural income per capita of nonfarm population declined, the former being 105 per cent on the 1920 base in 1925, and the latter 88 per cent.

TABLE 35.—INCOME INDEXES AND RELATED DATA, MOUNTAIN REGION, 1919 TO 1926
(1919 = 100 for all items except as noted)

	1919	1920	1921	1922	1923	1924	1925	1926
Index of total income realized from agriculture.....	100	99	65	62	69	70	89	*85
Index of all other realized income.....	100	107	102	104	115	124	119	*122
Index of total realized income.....	100	104	91	91	101	107	110	*110
Debits to individual accounts in eleven centers relative to 1919 as 100).....	100	124	95	97	106	105	114	114
Total population July 1 (thousands).....	3,298	3,371	3,478	3,551	3,646	3,754	3,842	3,936
Farm population January 1 (thousands).....		1,168					1,012	
Index of per capita income.....	100	102	86	84	91	94	94	*92
Index of cost of living (Denver).....	100	113	101	95	95	94	95	95

* Preliminary estimate.

Pacific States.—The Pacific states, California, Oregon, and Washington receive a considerably smaller proportion of their income from agriculture than any other region west of the Mississippi and south of Mason and Dixon's line, and a slightly larger proportion in the form of manufacturing pay roll. Less than 7 per cent of the total national income is received in this region, but the per capita income of \$793 was higher than for any other region in 1919.

Chart 24 shows the indexes of total and agricultural realized income. The former shows nearly as rapid a growth since 1921 as in the Middle Atlantic states, while agricultural income declines steadily from 1920 to 1924, and rises distinctly in 1925 only to fall slightly again in 1926. Debits in 14 centers and the nonagricultural income index are shown in Chart 25. The latter shows a slight gain even in 1921, while in 1925 and 1926 it rises less rapidly than debits, presumably because speculative activity has considerably influenced the rise of debits. Evidently manufacturing has had little to do with the rapid growth of income in this region. The increase shown by the income index is largely the result of growth in the property and higher salary incomes, and may well be due in part to a shift in the residence of persons receiving these classes of income.

The per capita income index rises distinctly above the index of cost of living for urban wage earners in four centers after 1921. Agricultural income per capita of farm population apparently fell about 29 per cent between 1920 and 1925, while nonagricultural income per capita of nonfarm population rose about 12 per cent. The urban population has clearly been prosperous during the past few years.

CHART 25.—NONAGRICULTURAL
REALIZED INCOME, DEBITS, AND
VALUE ADDED IN MANUFACTURE;
PACIFIC REGION,
1919-1926. (1919-1925
AVERAGE = 100
PER CENT)

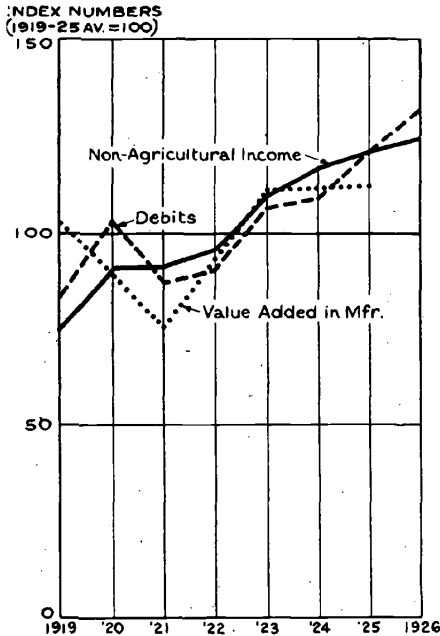


CHART 26.—PER CAPITA REALIZED
INCOME AND COST OF LIVING;
PACIFIC REGION, 1919-1926.
(1919-1925 AVERAGE = 100
PER CENT)

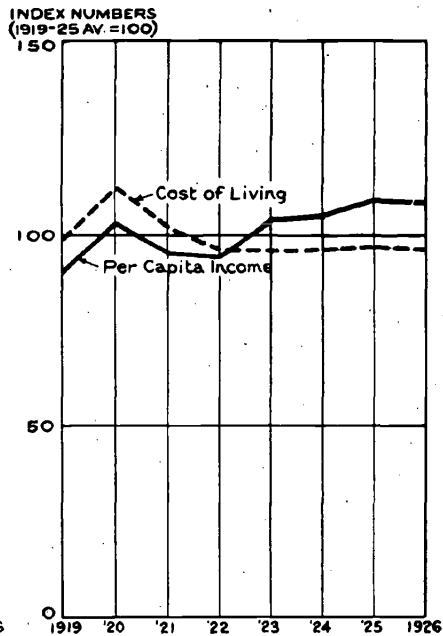


TABLE 36.—INCOME INDEXES AND RELATED DATA, PACIFIC REGION, 1919 TO 1926
(1919 = 100 for all items except as noted)

	1919	1920	1921	1922	1923	1924	1925	1926
Index of total income realized from agriculture.....	100	112	82	65	66	57	80	*73
Index of all other realized income.....	100	120	121	126	146	155	161	*164
Index of total realized income.....	100	118	113	114	130	136	145	*146
Debits to individual accounts in 14 centers (relative to 1919 as 100).....	100	124	105	108	128	131	145	159
Total population July 1 (thousands).....	5,492	5,635	5,846	5,986	6,170	6,382	6,553	6,731
Farm population January 1 (thousands).....	1,014						1,030	
Index of per capita income.....	100	115	106	104	116	117	121	*120
Index of urban cost of living (five cities)....	100	113	103	97	97	97	98	97
Value added to all manufactures (millions of dollars).....	1,289		944		1,397		1,414	

* Preliminary estimate.

V. THE INCOMES OF THE HIGHER AND LOWER INCOME CLASSES

How have the different income strata of population fared? There is no satisfactory method of answering this question fully from available

income data. But it is possible to separate from the rest of the national income that portion which is reported to the Bureau of Internal Revenue, and to estimate the number of persons who are dependent upon that income. This will not throw much light on the distribution of income among the lower and middle income classes. But it will enable us to determine the average per capita income of the bulk of the population. Moreover, it will throw some light on the question as to whether the distribution of income has been getting less or more nearly equal. Since we can estimate the proportion of total population dependent on the income reported for income tax purposes for each year, we have a basis for comparing the income distribution of different years.

The income tax data include certain items which are not properly regarded as a part of realized income (capital gains from sale of assets and profits from sale of real estate and securities). These items, moreover, fluctuate erratically from year to year. Table 37, column (1) shows total reported income with these items omitted. And in column (2) are given the estimated number of persons claimed in the returns as depending on "realized" money income.³⁷ Because the tax returns include

³⁷ Estimates of the number of persons claimed as dependent upon income reported in the Federal individual income tax returns were first made by the Federal Trade Commission for 1917-1923. The method here employed for this purpose consists in calculating: (1) number of head-of-family tax returns; (2) number of single returns; (3) total personal exemption; (4) total dependents claimed; (5) total number of persons claimed as dependent on reported income. (1) equals number of joint returns of husbands and wives, and returns of husbands whose wives file separately, plus number of single heads of families, male and female, plus one-half the number of community property returns. (2) equals "all other" returns, male and female. (3) equals (1) multiplied by personal exemption for head of a family plus (2) multiplied by single person's personal exemption. (4) equals total personal exemption and credit for dependents minus (3) divided by credit allowed for each dependent. (5) equals (4) plus (2) multiplied by the number of joint returns of husbands and wives and returns of husbands whose wives file separately, plus number of all other returns except returns of wives filing separately.

With regard to the accuracy of this method of estimate, the following points should be noted: (a) No incomes under \$5,000 are classed as community property incomes. Hence, beginning with 1920, a part of the "wives filing separate returns" may represent community property returns under \$5,000. This would tend to an underestimate of (1) and an overestimate of (4) and (5). (b) Estates filing returns are treated as living persons, which would tend to an overestimate of (5). (c) Some personal exemptions, owing to change of status or death, are for less than one year. Hence (3) tends to be overestimated, and (4) and (5) underestimated. (d) In the higher income groups, the deduction for personal exemption and credit for dependents may be omitted, thus tending to an underestimate of (5). On the whole, the tendency is toward too small an estimate, perhaps by as much as 1 per cent, but this error is not likely to affect greatly the accuracy of the analysis based on these estimates. Indeed an error in this direction presumably acts as a partial offset to whatever under-reporting of income there may be. A further possible source of error lies in the fact that the income tax statistics for net incomes of less than \$5,000 are based on samples, and are not exhaustive statistics. Lorenz curve

little of the nonmoney income included in King's income estimates, total national income disbursed in money appears to be the best conception of the national income to employ for purposes of comparison. This is shown in column (3) and total population in column (4).

TABLE 37.—MONEY INCOME AND POPULATION OF THE UNITED STATES AND OF THE CLASS SUBJECT TO THE FEDERAL INCOME TAX, 1918-1926

	(1)	(2)	(3)	(4)	(5)	(6)
	Reported income ^a (billions of dollars)	Dependent population (millions)	Total money income (billions of dollars)	Total population (millions)	(1) ÷ (3)	(2) ÷ (4)
						Per cent
1918.....	17.5	10.8	51.9	104.3	33.6	10.4
1919.....	21.4	12.3	57.2	105.0	37.5	11.7
1920.....	25.7	17.3	65.5	108.4	39.2	16.3
1921.....	22.9	14.8	55.8	108.3	41.0	13.7
1922.....	23.9	15.5	59.0	109.7	40.5	14.1
1923.....	28.1	17.9	67.1	111.4	42.0	16.1
1924.....	28.1	16.8	69.6	113.4	40.3	14.8
1925.....	22.3	9.3	74.3	115.0	30.1	8.1
1926.....	23.1	9.3	77.9	116.4	29.6	8.0
1924 over \$3,000.....	17.8	7.3	69.6	113.4	25.5	6.4
1924 over \$5,000.....	10.3	2.0	69.6	113.4	14.7	1.8
1925 over \$5,000.....	12.2	2.3	74.3	115.0	16.4	2.0
1926 over \$5,000.....	13.2	2.6	77.9	116.4	17.0	2.2

^a Income reported to the Bureau of Internal Revenue, excepting capital net gains and profits from the sale of real estate and securities.

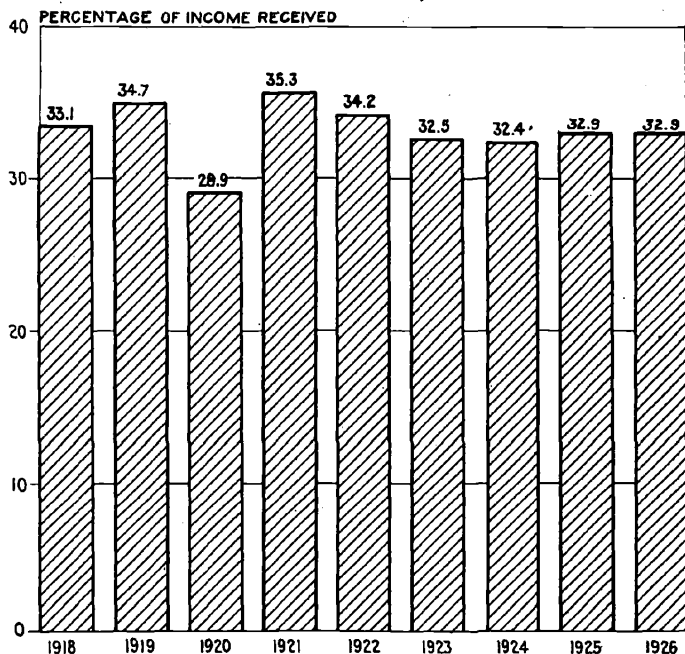
The table also shows the percentage ratios for reported to total money income, and for number of persons dependent on reported income to total population (last two columns).

It is difficult to compare one year with another when the data are in this form. But it is possible in 1924, knowing what proportion of the national income the richest 1.7 per cent of the population receive, what proportion the richest 6.4 per cent receive, and what proportion the richest 14.8 per cent receive, to estimate mathematically what proportion of the income is received by the richest 10 per cent. And on the basis of the analysis of this year, we can also estimate the proportion of income going to the richest 10 per cent in other years. These estimates are shown in Chart 27.

If the distribution of income in any year were equal, any 10 per cent of the population would receive just 10 per cent of the income. Hence,

points were plotted, using both column (2) and estimated total number of persons other than dependents, and the rating of the several years as to deviation from equality was not very different in the two cases.

CHART 27.—APPROXIMATE PERCENTAGE OF MONEY INCOME OF THE UNITED STATES RECEIVED BY THE WEALTHIEST TEN PER CENT OF THE POPULATION, 1918-1926



the excess of the proportion of income over 10 per cent received by the richest tenth of the population in any year measures the inequality of distribution in that year. It is possible that the errors in these estimates are so great as to make one year appear to have a more nearly equal distribution than another, when actually it has a less nearly equal distribution.³⁸ But the available evidence certainly does not tend to confirm the theory some have advanced that the distribution of income was more nearly equal during the war, and has since tended in the direction of increasing inequality. Roughly, it would seem that 1920 had the most nearly equal distribution, and 1921 the least. The years 1923 and 1924 are of more nearly equal distribution than most of the others, while 1919 to 1922, excepting 1921, are at the other extreme. The years 1918, 1925, and 1926 fall between these extremes. The year-to-year variations in approach to equality are more prominent than any trend.

In the section on the distribution of income among the different industry groups we considered the per capita income received by persons living on farms. Only a small proportion of the total income of the farm

³⁸ The data refer only to the deviations from equality of distribution for the richer portion of the country. It is possible, of course, for the deviation from equality to be greater for the richer portion of the country, say in 1921 as compared to 1920, and for the reverse to be the case with the poorer portion.

population is reported in the income tax returns, and by making allowance for this overlap of farm income and the income statistics of the Bureau of Internal Revenue³⁹ it is possible to estimate the income of the bulk of the nonfarm population, *i. e.*, all the nonfarm population whose income fell below the legal reporting limits. Both because of price changes and because of changes in the income-tax reporting limits, the figures for different years are not comparable. In 1920, the average per capita income, received in money by that part of the nonfarm population which was not dependent on income, reported to the Bureau of Internal Revenue was about \$596. There were radical price changes and minor changes in the tax law between 1920 and 1921. The average money income for the bulk of the nonfarm population was about \$470 in 1921, \$478 in 1922, and \$528 in 1923. There was no change in the requirements for filing returns in these three years, but prices declined some between 1921 and 1922, and rose slightly between 1922 and 1923. Apparently, therefore, there was a considerable gain in money income, corrected for price changes, between 1921 and 1923. In 1924, which is not comparable with either the preceding or the following years because of changes in the law, average per capita money income of the bulk of the nonfarm population was approximately \$541. The fact that the deflated per capita income for the entire population rose in 1924, in spite of the mild recession of business, makes it seem probable that the increase from \$528 to \$541 was not entirely owing to changes in the law. The same law applied to 1925 and to 1926. Average money income for the bulk of the nonfarm population was about \$603 in 1925 and \$625 in 1926. On the whole, these figures are consistent with the view that this part of the population has enjoyed an increasing income since 1921. But in interpreting these figures it must be remembered that they refer to total money income, not to consumed income, and that the upper income limit is too high to throw much light upon the condition of the lower income classes. We cannot say with certainty whether a smaller proportion of the population in 1926 than in 1920 falls below any given minimum standard of living.

³⁹ The estimated overlap equals agricultural money income other than wages, multiplied by reported profits in agriculture, divided by money profits in agriculture, that is, total estimated profit less value of agricultural products consumed by farm population.

Midyear farm population estimates (made by linear interpolation between census data for 1920 and 1925) and population dependent on reported incomes were deducted from total population and an estimate of overlap was added. Estimated overlap equals farm population multiplied by number of reporting enterprisers in agriculture, divided by estimated number of enterprisers in agriculture. If these methods of estimating overlap are at all accurate, the overlap of income is less than 2 per cent of the money income of the bulk of the nonfarm population, and the population overlap is less than 1.5 per cent of the bulk of the nonfarm population.

VI. SUMMARY

Judged by growth of national income, the last few years have been an era of great prosperity for the country as a whole, with slight recessions of business in 1924 and 1927. During this period the per capita realized income has considerably exceeded all previous records, even when price changes are allowed for. In this respect the condition of the United States stands in marked contrast to that of England.

But when the various regions of the country are considered separately, it appears that only a part of the United States has enjoyed this prosperity—the Middle Atlantic, the East North Central, and the Pacific states, an area which includes less than one-half the population and receives somewhat more than one-half the national income. The rest of the country can hardly be said to have prospered during these years. New England's manufactures have waned, and the South, the Middle West, and the Mountain states have suffered with the depression of agriculture.

There is little satisfactory information on the question as to distribution of national income among the different income classes. The evidence we have examined shows nothing that would indicate that the upper income classes have enjoyed either more or less than their accustomed share of the national income in recent years. The per capita income of the bulk of the urban population has apparently increased considerably, and the decline of farm population since 1920 has probably resulted in a commensurate increase in per capita income for the agricultural community, price changes allowed for. Average annual labor income of salaried employees, measured in dollars of constant purchasing power, has risen steadily since the war, and the growth in deflated annual wages per employee has grown still more rapidly. The rise of salaries has apparently been most marked in banking, and of wages in the construction industry.⁴⁰ The share of stockholders and of individual enterprisers in total realized income in the past few years has fully held its own, and there is little reason to believe that prosperity has been profitless. Neither does it appear that the share of employees in the national dividend has been declining in recent years.

The growth of national income has been in spite of the depression in agriculture. And while the increase in the income realized from the mineral extractive industries has kept pace with the increase in total income, an important part of this industry group, coal mining, does not appear to have been particularly profitable. The manufacturing and public utility industries have prospered, but have been accounting for a declining proportion of total income. The growth of national income

⁴⁰ In this connection, attention is again called to the possibility of error in both of these estimates because of the inadequacy of the basic data.

by industries is conveniently summarized in Table 38. The income disbursed by governments is naturally a smaller proportion of the total income to-day than during the war. A considerable and increasing

TABLE 38.—PER CENT DISTRIBUTION OF TOTAL REALIZED INCOME AMONG THE SEVERAL INDUSTRY GROUPS, UNITED STATES, 1913-14 AND 1918-1926

	1913	1914	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928
Agriculture ^a	14	14	19	19	15	11	11	11	11	11	11	10	10
Mining, etc.....	3	3	3	3	3	3	3	3	3	3	3	..	..
Manufacturing.....	21	19	24	24	26	21	21	23	21	21	21	..	..
Construction.....	4	4	2	3	3	3	3	3	4	4	4	..	..
Transportation, etc.....	9	9	9	9	10	10	9	9	8	8	8	..	..
Banking.....	1	1	1	1	1	1	1	1	1	1	1	..	..
Merchandising.....	13	13	11	12	12	13	13	14	14	15	15	14	15
Governments.....	6	6	10	9	7	9	9	8	8	7	8	..	..
Unclassified industries.....	20	21	12	11	13	18	19	18	20	20	20	..	..
Miscellaneous income.....	9	10	9	9	10	11	11	10	10	10	9	..	..
Total income.....	100	100	100	100	100	100	100	100	100	100	100	..	..

^a Includes rental value of farmers' homes owned.

proportion of our national income comes from foreign investments. Merchandising and the large group of unclassified industries and occupations have contributed more than proportionately to the recent growth of national income, as have the smaller groups, banking and construction.

Several significant facts regarding the nature and functioning of our economic system are brought out by the analysis of income: The two great impersonal forms of economic organization, corporations and governments, now disburse nearly one-half of our national money income, and during the war the proportion was even higher. There has been an appreciable increase in the proportion of total money income which may be called "fixed incomes"—salaries, interest, and rents—a change making for the increased stability of business conditions. The financial policy of corporations has come to be of such a character that cash dividends approximate the nature of fixed incomes to a marked degree, and fluctuate scarcely more on the whole with business conditions than nonagricultural wage payments. The responsiveness of output and of the employment of labor and capital assets to price changes, notably in agriculture, is not very prompt. Improved technique and efficiency of operation have apparently been associated with a more rapid growth of output of goods and services than of income (measured in dollars of constant purchasing power to the income recipients) in several industry groups—mining, electric power, and, for a part of the time, railroads and manufacturing. Changes in technique and probably in bargaining power must be reckoned as important factors in determining the distribution of income among the different industries.

