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Chapter Title: LONG-TERM SHIFTS IN THE PERSONAL INCOME STRUCTURE

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CHAPTER 2

LONG-TERM SHIFTS IN THE PERSONAL INCOME STRUCTURE

AS NOTED above, personal income is here defined as the sum of factor returns received by individuals plus transfer payments, all measured before direct personal taxes.¹ The factor returns, i.e. earnings in public and private enterprise, are wages and salaries and their supplements (mainly compensation for injury and employer contributions to private pension and welfare funds), net income of proprietorships, and individuals' receipts of dividends, net rents, and monetary interest from nongovernmental sources. Transfer payments are income receipts unrelated to the rendering of current service, chiefly social security benefits, relief payments, and government interest.² In the view of some, profits and losses realized by individuals from changes in the market value of assets not regularly offered for sale (in national income terminology, realized capital gains and losses) might also be included in total personal income.³ However, aside from the conceptual uncertainties, the statistics on realized capital gains and losses are not adequate for our purposes, since they are not available on a quarterly or monthly basis in any year and are lacking completely for the years before 1917. Hence total personal income is defined in this study to exclude realized

¹ Disposable income (personal income after direct personal taxes) is not used as the basic measure, although for some purposes it may be conceptually superior. From an operational viewpoint, estimates of disposable income have two serious limitations: estimates for a time unit shorter than a year, which are highly desirable for cyclical analysis, are available only since 1939; and it is difficult to apportion the tax liability among types of income. Moreover, the differences in the configurations of personal and disposable income before 1943 are negligible. Even from 1943 on the cyclical turns occur in the same quarters; amplitude measures differ somewhat.

² In its personal income series, the Department of Commerce and we include government interest under interest and dividend payments instead of under transfer payments. We exclude transfer payments originating in private business, such as consumers' bad debts, but these are not excluded from the monthly series as monthly estimates are not readily available. In 1950, business transfer payments amounted to .3 per cent of personal income according to estimates in *National Income Supplement, 1951, Survey of Current Business*, Dept. of Commerce.

³ Unrealized capital gains can be converted into current purchasing power by various devices besides selling assets. These, however, cannot be taken into account statistically. For a discussion of these devices see Lawrence H. Seltzer's *The Nature and Tax Treatment of Capital Gains and Losses* (National Bureau of Economic Research, 1951, pp. 231-253).

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capital gains or losses unless the contrary is specifically indicated. In brief, we use the Department of Commerce definition of personal income with minor adjustments to exclude imputed interest and business transfer payments.

The following analysis deals with three main types of income:

1. Labor income: all wages and salaries plus other labor income and transfer payments excluding government interest. A distinction is made between executive and other salaries, executive salaries being taken as equivalent to the compensation of corporate officers.

2. Net income from independent professions and from proprietorships.

3. Property income: personal receipts of dividends, monetary interest from all sources, and net rents.

These three types make up the personal income structure, and our interest is in how this structure changes over time. Here we must anticipate one of our later findings on cyclical behavior: the relative importance of each type of income varies according to the phase of the cycle in total personal income. Comparisons over time must therefore employ years similar in cyclical position. We have selected years representing peaks in personal income and, with the exception of 1937, reasonably full employment: 1913, 1920, 1929, 1937, 1948, and 1951.⁴ The various types of income are expressed as percentages of total personal income in each of these years (Chart 2 and Table 1).⁵

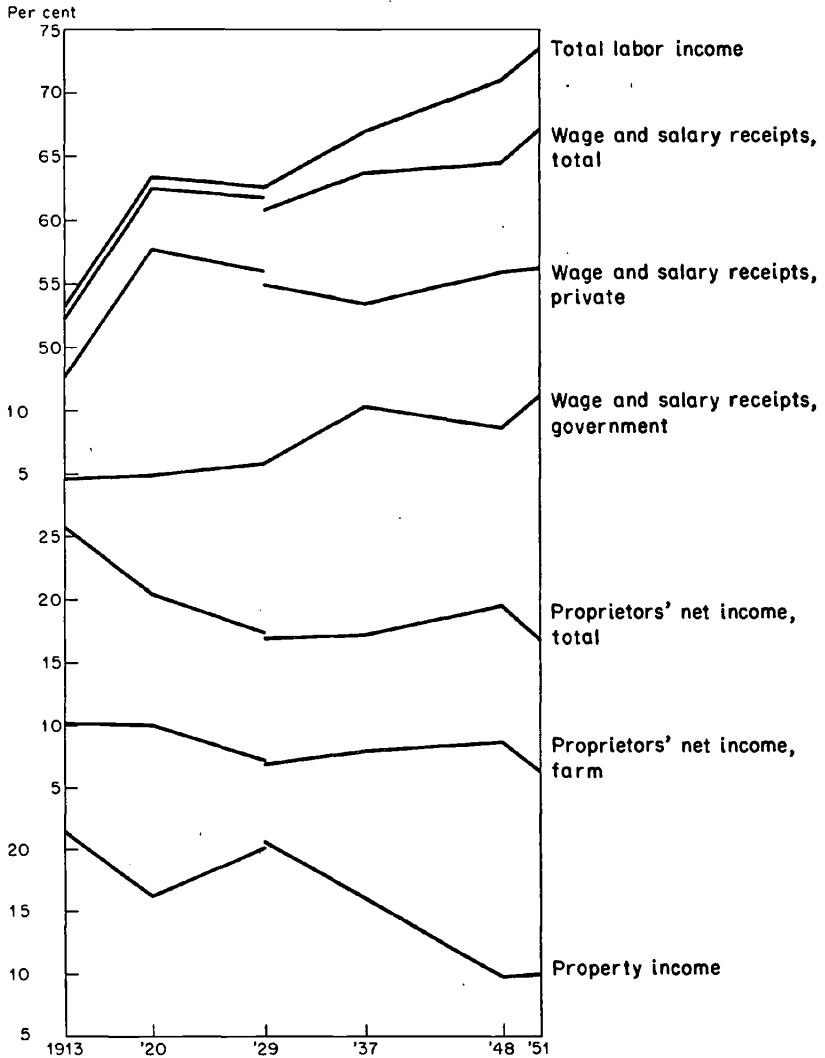
That secular shifts occurred during the forty years is clear. Let us trace first those in the share of income going to labor. In the high-income year before World War I, labor income accounted for slightly more than half of all personal income; by 1920 its share had increased to 63 per cent, and it remained at that level in 1929, the last year of high prosperity before the Great Depression. Up to this point the movement of the wage and salary component paralleled that of the total. In 1937, the first cyclical peak after the emergence from the Great Depression, the share of labor income increased to 67 per cent, while the increase in wage and salary receipts was relatively less. The difference between the two rates of change is

⁴ We include 1951 not merely because it is the last full year for which figures are available but also because it is a year of full employment and very high income. Our computations show that the same results are obtained from an analysis based on cycle averages.

⁵ Since the estimates before and after 1929 have somewhat different conceptual bases, we present the distributions for 1929 on both bases.

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CHART 2
Types of Personal Income as Percentage of Total
in Peak Income Years, 1913-1951



Source: Table 1.

explained largely by the enhanced importance of transfer payments, specifically direct-relief payments to the unemployed.⁶ The next peak in personal income brings us to the period after World War II,

⁶ Work-relief wages are included under wages and salaries.

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TABLE 1
Types of Personal Income as Percentage of Total
in Peak Income Years, 1913-1951
(per cent)

	1913	1920	1929 ^a	1929 ^b	1937	1948	1951
TOTAL PERSONAL INCOME	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<i>Labor income</i>	53.2	63.4	62.6	62.6	66.9	70.9	73.3
Wage and salary receipts	52.3	62.6	61.8	60.8	63.7	64.4	67.0
Corporate officers	n.a.	3.5	4.0	4.0	3.9	3.3	n.a.
Other	n.a.	59.1	57.8	56.8	59.8	61.1	n.a.
Private	47.7	57.7	56.0	54.9	53.4	55.8	56.1
Farm	2.3	2.6	1.6	1.6	1.4	1.5	1.2
Nonfarm	45.4	55.1	54.4	53.3	52.0	54.3	54.9
Government	4.6	4.9	5.8	5.8	10.2	8.6	11.0
Civilian	4.0	3.9	5.4	5.6	7.4	6.9	7.7
Military	.3	1.0	.4	.2	.4	1.8	3.3
Work relief	0	0	0	0	2.4	0	0
Other labor income				.6	.7	1.3	1.7
Transfer payments				1.1	2.7	5.1	4.6
<i>Proprietors' net income</i>	25.6	20.4	17.3	16.9	17.1	19.4	16.8
Farm	10.1	10.0	7.2	6.9	7.9	8.6	6.3
Nonfarm	15.2	10.5	10.1	10.1	9.3	10.8	10.5
<i>Property income</i>	21.3	16.2	20.1	20.5	16.0	9.7	9.8
Dividends	6.0	4.6	7.6	7.0	6.6	3.5	3.6
Interest	4.0	5.3	6.7	6.4	5.0	2.5	2.6
Net rent	11.2	6.2	5.9	7.0	4.3	3.7	3.6
<i>Property income plus net capital gains or losses^d</i>	n.a.	16.2	22.8	23.2	15.9	11.6	n.a.

^a Comparable with preceding years.

^b Comparable with following years.

^c Transfer payments and other labor income are not distinguished for 1913-1929. All industries are not covered for this period.

^d Property income and realized net capital gains or losses as percentage of personal income including realized net capital gains or losses.

n.a. = not available

Note: Details may not add to totals because of rounding.

Source: Based on Tables A-1 and A-3.

when, as in World War I and its aftermath, there was a substantial relative increase in labor income, amounting in 1948 to 71 per cent of total personal income. Once again, the relative rise in the wage and salary component of labor income was slight and, as before, was due to the increased importance of transfer payments. The character of these payments, however, was much altered from the

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prewar period, which was dominated by direct-relief payments. In 1948 the principal transfer payments besides direct relief were benefits from social insurance funds; military pension, disability, and retirement payments; and readjustment, self-employment, and subsistence allowances to veterans.⁷

Wage and salary receipts include the earnings of skilled and unskilled workers, white-collar employees, and executives. It would be interesting to show the shares of all these groups separately. Unfortunately, we can make an approximation only in the case of executives, by using the compensation (salaries and cash bonuses) of corporate officers reported to the Bureau of Internal Revenue. Thus we can compare the compensation of corporate officers in years of peak income with wages and salaries received by all other employees. The share of the former increased by a seventh during the 1920's, while the share of the latter declined slightly. During the next decade the movement was reversed: corporate executive salaries accounted for a slightly smaller percentage of total personal income in 1937 than in 1929, and other wages and salaries for a somewhat larger percentage. This trend continued during the war and postwar inflation of the 1940's: there was a further decline in the percentage of personal income paid out to executives and a modest gain in the percentage paid to other employees.

The growing importance of the government as a source of personal income shows clearly in a breakdown of wages and salaries paid by the government and by the private sector of the economy. Wages and salaries paid by private enterprise amounted to 47.7 per cent of personal income in 1913 and to 57.7 per cent in 1920, a gain of a fifth. By 1929 this share had declined slightly, and more than half of the decline was attributable to farm wages. Thereafter, in years of prosperity, this share has deviated very little from the 1929 level. Wages and salaries disbursed by government, on the other hand, accounted for a progressively larger share of personal income between 1913 and 1937, increasing from 4.6 to 10.2 per cent. This was due to the expansion of regular civilian employment and to the work-relief program. The sharp reduction of the armed forces after V-J Day and the elimination of work relief caused the government percentage to fall to 8.6 in 1948, but the remobilization connected with the Korean War brought government payrolls to 11.0 per cent of the personal income total in 1951. While the increase in military payrolls has been a significant factor, it is the expansion of the non-

⁷ *National Income Supplement, 1951, Table 36, pp. 201-202.*

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military functions of government that accounts for the major part of the rise between 1913 and 1948 in the share of personal income coming from the government.

Our analysis thus far clearly shows that labor income made persistent relative gains during the forty years after 1913. During the last twenty years these relative gains have been restricted entirely to wages and salaries below the highest salary bracket, to supplements to wages and salaries (other labor income), and to transfer payments. Executive salaries account for a smaller percentage of the total. Moreover, since 1920 the wages and salaries paid by private enterprise have been a virtually stable share of personal income in years of business cycle peaks, in contrast to wages and salaries paid by government, which have been an increasing share.

While the share of labor income in total personal income was rising, the shares of all other types of income were falling. The net income of proprietors (i.e. all owners of unincorporated enterprises, including farm operators and self-employed professional persons) may be said to comprise both compensation for labor and management and a return on invested capital. Since it is a mixture of labor and property income, it is treated separately from both. By 1920 the percentage of total personal income received by proprietors was down to four-fifths of its level before World War I. All of this loss was incurred in the income of nonfarm proprietors, and part of it was undoubtedly due to the conversion of proprietorships into corporations, which transforms proprietors' income into salaries, dividends, and corporate savings. A much more moderate relative decline in the net income of all proprietors occurred between 1920 and 1929, with the farm component causing most of the decrease. In 1937, and again in 1951, the shares of both farm and nonfarm proprietors stood at about the 1929 level. In 1948 both regained the 1920 level, but this may have been merely a temporary development.

The share of property income—dividends, interest, and net rent—took still another course. In 1913, property income represented slightly more than one-fifth of all personal income and in 1948 not quite one-tenth. This was the largest relative reduction found among the three major types of income. World War I and the ensuing inflation reduced the share of property income by one-fifth, but most of this was restored by 1929. The economic developments during the Great Depression and the subsequent recovery, however, did not favor property income: in 1937 its share was 16 per cent as compared with the 1929 level of 20 per cent. By 1948 its share was down

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to about 10 per cent. Moreover, when net capital gains and losses realized by individuals are included in property income, these trends are not significantly affected.

While the percentage disbursed as dividends traced much the same course as that of total property income, the other two components had different patterns. As regards interest payments, their share increased from 1913 to 1920 and from 1920 to 1929, but by 1937 it was back at the 1920 level, and in 1948 it was only 62 per cent of the 1913 level. Net rent,⁸ on the other hand, formed a declining percentage of personal income throughout the four decades, although the decline was negligible between 1920 and 1929. Again, the increased use of the corporate form in real estate management, which transforms net rent into other types of income, would be a partial explanation of its secular decline. Of the three components of property income, net rent suffered the greatest relative decline during these forty years.

In all these ways the income structure has been significantly altered during the last four decades. Wages and salaries have formed an increasing percentage of personal income. This has been accompanied by a decrease in the percentages formed by proprietors' net income and property income. Property income, particularly net rent, sustained the largest relative losses. These, together with the accompanying shifts in the distribution of income by size, constitute far-reaching structural changes.

The structural shifts just described may be viewed statistically as the net result of changes in the volume of the various productive factors and changes in the rates of return to these factors. Our materials shed some light on the question whether changes in volume of input or changes in rate of return were more important. Chart 3 presents approximations to both elements for the three main types of income; some are more accurate than others.⁹ More specifically, it shows the movement in (1) the number of full-time equivalent nonfarm employees, and average annual full-time equivalent earnings per nonfarm employee; (2) the number of hired farm workers, and the composite farm wage rate; (3) the number of nonfarm proprietors, and their total net income; (4) the number of family workers in agriculture, and the total net income of farm operators;

⁸ Estimates of net rent are perhaps more subject to error than the other estimates (see Chapter 6, note 1). To keep the record straight, we should indicate that net imputed farm rent is included in net income of farm proprietors.

⁹ See Appendix B for details on sources and methods.

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(5) total nonfarm reproducible wealth (other than that of households, government, and nonprofit institutions) in 1929 prices, and the ratio of net dividend disbursements to corporate net worth; and (6) the yield of high-grade corporate bonds, the rent index in the Bureau of Labor Statistics Consumers Price Index, and the yield on federal government bonds.

Under labor income the input and unit returns for the farm and nonfarm components are examined separately (Panel A). In the nonfarm sector the long-run trend in numbers employed has been upward even if we omit the periods of world wars. Average annual earnings during World War I rose much faster than numbers employed (both on a full-time equivalent basis). During the two interwar decades the trend movements were suspended in both nonfarm labor input and labor return, but beginning with 1938 both rose at similar rates until 1944; thereafter, annual earnings continued to rise, but numbers employed declined for three years and then remained stable until 1949. The striking difference in the long-term movements of farm and nonfarm labor is not in the labor return (earnings) but in the numbers employed: the trend in number of hired farm workers has been slightly downward in contrast to a decidedly upward trend for the number of nonfarm employees.

We now turn to the input and returns of proprietors (Panel B). Here the measures for net income are of aggregates, in contrast to the measures for labor and property income, which are of unit rates of return. It will be recalled that the share of farm operators in total personal income has been falling since 1920. The chart indicates that this has been largely due to a relative decline in labor input. Family workers in agriculture have represented a declining percentage of the total labor force; their absolute number has been virtually constant over this period. Net farm income, on the other hand, shows a rising trend from 1909 to the mid-1920's. From then until World War II the movement is dominated by cyclical forces. After 1940 the net income of farm operators increased rapidly, but not fast enough to offset the relative decline in labor input and the increases in some other types of income.

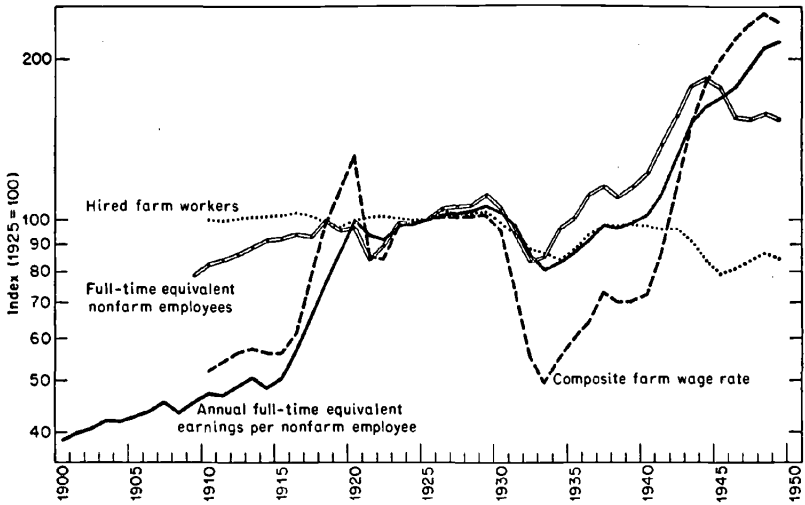
The net income of nonfarm proprietors shows much the same trend as net farm income. But the number of nonfarm proprietors, in contrast to the number of family workers in agriculture, shows an upward trend; the rise, however, was less rapid than that of the total labor force. It is worth noting that the decline of one-third in the share of nonfarm proprietors in total income all occurred be-

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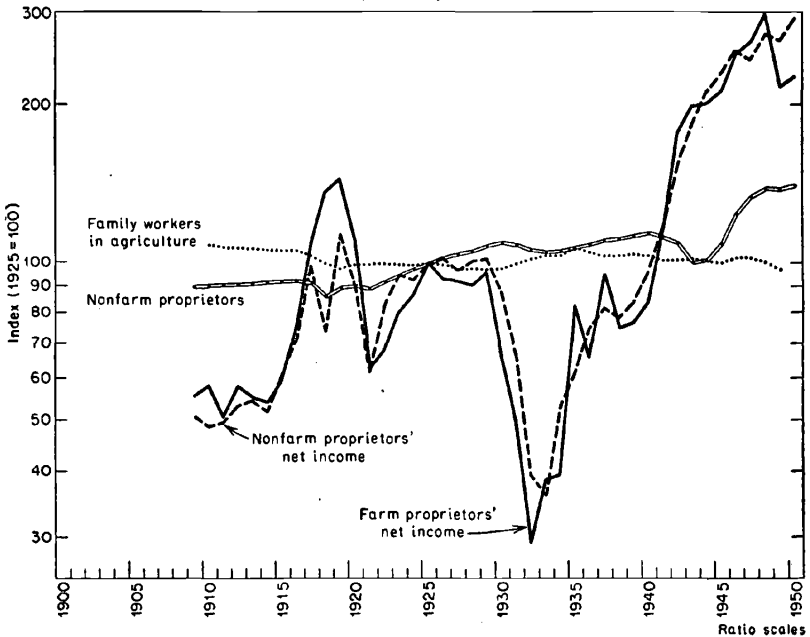
CHART 3

Indexes of Factor Inputs and Factor Returns by Type of Income, 1900-1950

Panel A. Labor, Farm and Nonfarm



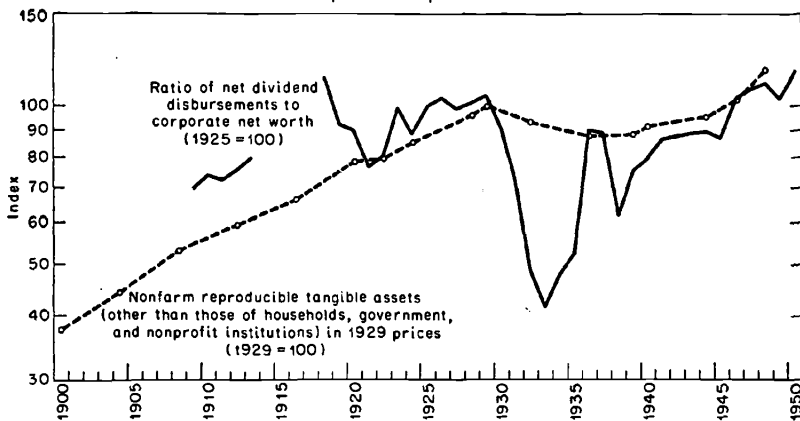
Panel B. Proprietors, Farm and Nonfarm



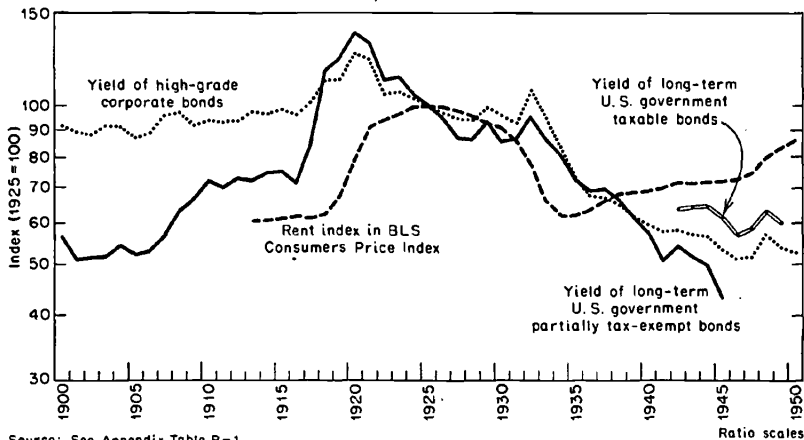
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CHART 3 (continued)

Panel C. Capital - Input and Rate of Return



Panel D. Capital - Rate of Return



Source: See Appendix Table B-1.

tween 1913 and 1920, a period during which there was virtually no change in the number of nonfarm proprietors.¹⁰

The measure of nonfarm reproducible wealth (other than that of households, government, and nonprofit institutions) in 1929 prices (Panel C) shows that capital in use increased from 1900 to 1929 and then declined until 1936. Thereafter capital rose, reaching the 1929 level about 1945. The various measures of rate of return on capital, however, tell a different story. The rate of return on that

¹⁰ However, it must be emphasized that the estimates of numbers of nonfarm proprietors and their net income are subject to large errors during this period (see Chapter 7, note 7).

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part of capital financed by debt (Panel D) increased from 1900 to 1920 and then declined until the middle 1940's. There is evidence of another reversal in trend since that time.

For a measure of the rate of return on that part of capital financed by equity funds we use the ratio of net dividends disbursed to corporate net worth (Panel C), because only distributed corporate profits are included in personal income. This ratio had an upward trend from 1909 to 1929. Since then cyclical factors have so dominated its movement that it is not possible to discern any trend, at least through 1947, when the ratio returned to the 1929 level.

Our indicator of a rate of return on rental property (Panel D) is crude indeed, since it is not a rate of return at all but the rent component of the BLS Consumers Price Index for urban families of moderate income. However, it is probably a reasonably reliable indicator of the trend in the rate of return. The course of the movement has been unequivocal. An upward movement is indicated from the very beginning of the series in 1913 to the peak in 1925. For a decade thereafter the trend was sharply downward, and the recovery initiated in 1936 had not, by 1950, regained the level of the 1925 peak.

On the basis of the charted evidence we conclude that the principal factors explaining the rising percentage of personal income in the form of nonfarm labor income are the increasing percentage of the labor force employed in nonfarm occupations and the long-term rise in annual average earnings, combined with declining rates of return on capital and with smaller numbers (absolutely and relatively) employed in farming. Against this background we shall now analyze cycles in personal income and in its major components.