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# Chapter 2

## Changes in Income Shares over Time, Several Variants, 1913-1948

Having considered the average level of the shares of upper income groups for 1919-38, we now examine the changes over time the annual estimates reveal. We deal here with shares in total income as measured in several variants – the basic, the economic income, and the disposable income variants, all described in Chapter 1 (Sec. 1), and two others described below.[1] In Chapter 3 changes in the shares in the various types of income are discussed, and their effects on the composition of upper group incomes analyzed.

The shares in total income for one and the same percentage band in the basic, economic income, and disposable income variants move more or less similarly, as do those for one and the same percentage band in the same variant for total and for nonfarm population (Charts 2 and 3). As to changes over time, the following movements merit examination: the marked decline in the shares of upper percentage bands since about 1939; their general drift as revealed by decade averages; and their fluctuations during periods associated with cycles in business activity.

### 1 *Changes since 1939*

The decline since 1939 is the most conspicuous movement revealed by Charts 2 and 3. It began before 1939, in some variants and shares as early as 1929, in others as late as 1934, but not until after 1939 when the shares reached previously unrecorded low levels did its long term character become apparent. The shares appear to have reached a trough in 1944 and have recovered only slightly since. Table 11, which assembles measures of this decline for the several variants, records the changes, first from 1939

[1] The series on shares underlying the calculations in this chapter and in Chapter 1 are those that use as denominator (after minor adjustments) the countrywide income totals for 1919-38 in *National Income and Its Composition, 1919-38* (NBER, 1941). In the detailed calculations we used also as denominators (after certain adjustments) the Department of Commerce countrywide income totals from 1929 onward, and W. I. King's series from 1913 through 1919. For the analysis here it did not seem worth while to present the overlap. We therefore extrapolated the 1919-38 series backward and forward, using 1919 as the splicing base with King's series and the average for 1936-38 as the splicing base with the Department of Commerce series. The splicing was applied directly to the shares; and it is the resulting continuous series for 1913 to 1946 (or to 1948) that are analyzed in this chapter and appear in Charts 2 and 3.

Chart 2

## Income Shares of Upper Income Groups, Total Population Three Variants, 1913–1948

Basic variant
Economic income variant
Disposable income variant

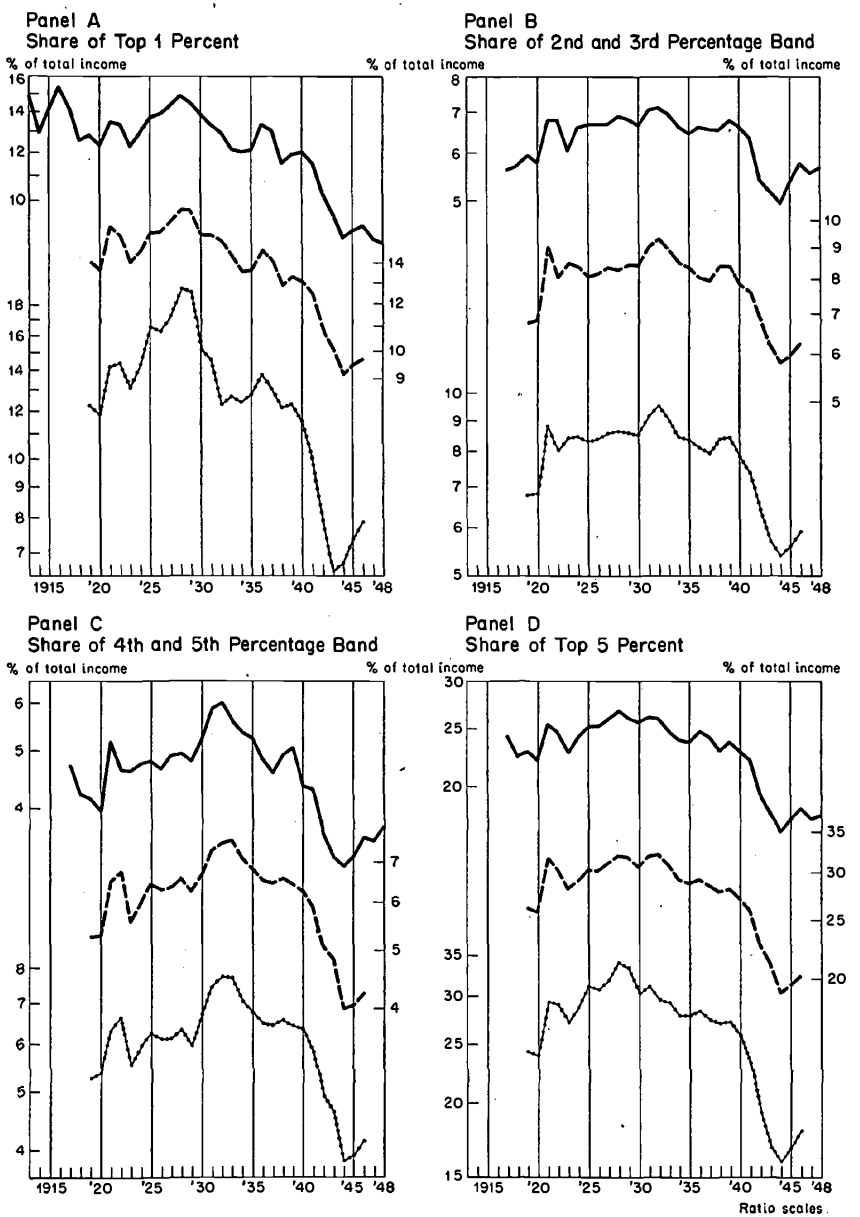


Chart 3

## Income Shares of Upper Income Groups, Nonfarm Population Three Variants, 1913-1948

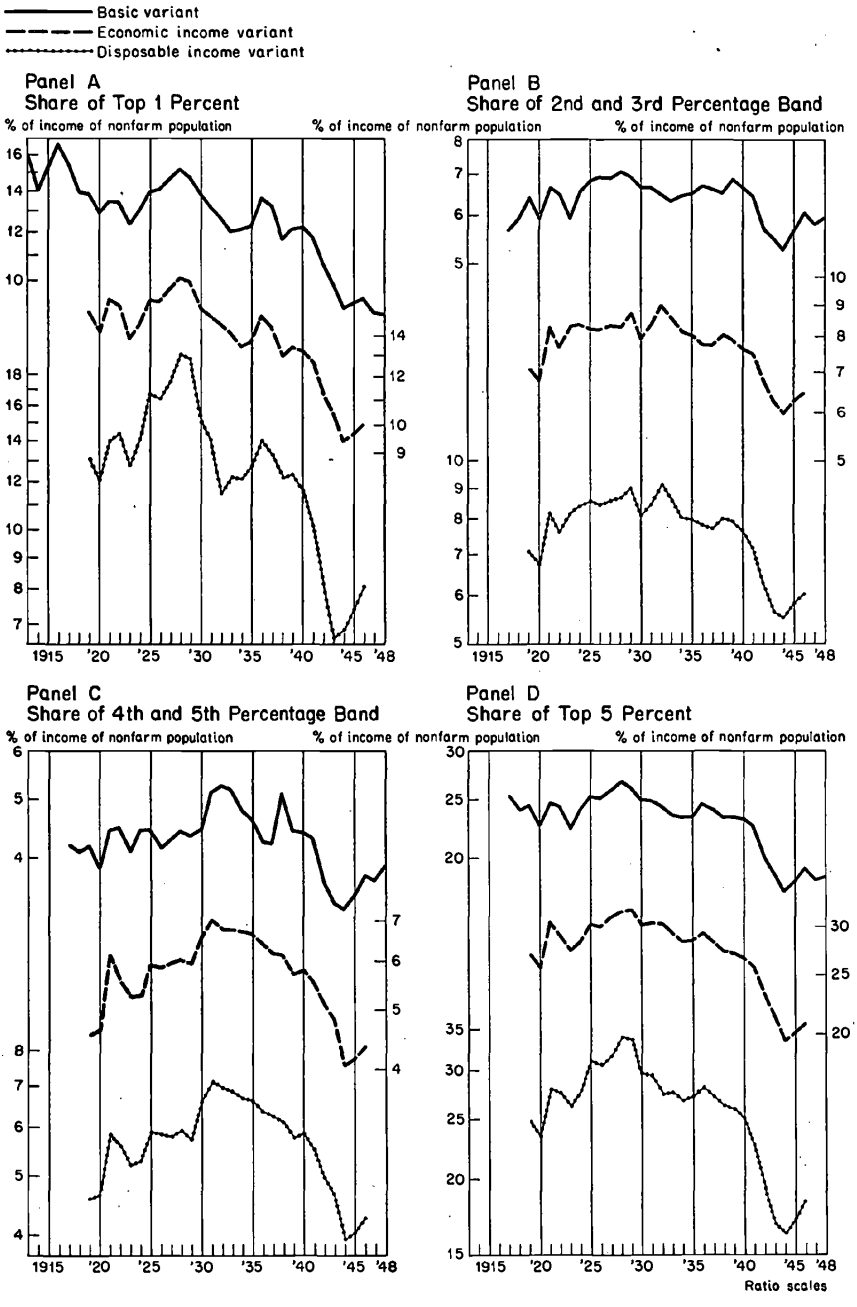
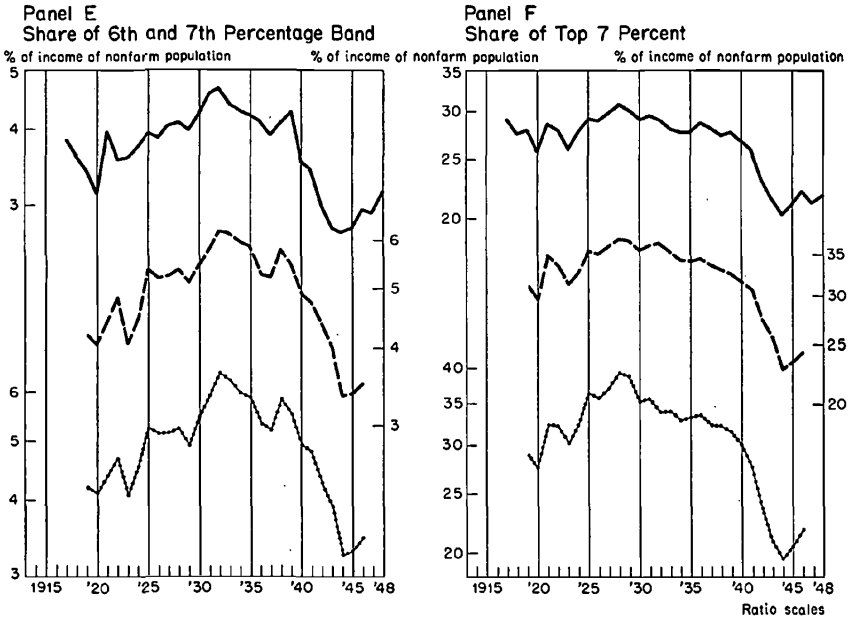


Chart 3 (concl.)

Basic variant
Economic income variant
Disposable income variant




to 1944, then from 1939 to 1946 – the latest year for which shares in the economic income and disposable income variants can be calculated.

If we confine attention first to the estimates for the three variants distinguished in our earlier discussion, the following conclusions emerge:

a) The shares of upper percentage bands in all three variants declined from 1939 to 1944 or to 1946. The decline to 1944 ranged from about a quarter to over four-tenths of the level of the shares in 1939; and while there was a perceptible recovery from 1944 to 1946, it offset only a minor part of the preceding drop, with the result that the decline from 1939 to 1946 was still appreciable, ranging from a ninth to over a third of the 1939 level for upper percentage bands of both total and nonfarm population.[2]

[2] A 100 percent decline in the shares is impossible: the share of the top 1 percent can go down only to 1 percent, the share of the 2nd and 3rd percentage band only to 2 percent; and so on. For this reason there may be some merit in using the difference between the actual and the equality share as a base. (I am indebted to Geoffrey H. Moore for calling my attention to this point.) I was reluctant to do so, however, because of the strong suggestion thus conveyed that arithmetical income equality is a goal, either desirable or actual, by which we should measure any observed changes. Also, the difference so derived would show a much wider range than the upper group shares themselves show; and for a lower percentage band, such as the 6th and 7th, the difference between the actual and the equality share is so small, absolutely, that percentages based on it are erratic.

Table 11

Changes in Shares of Upper Income Groups, Several Variants, Total and Nonfarm Population, 1939-1946

| *Variant and Percentage Band* | *Average Share 1919-38* (1) | *Share 1939* (2) | *Change from 1939 to 1944* (3) | *Change from 1939 to 1946* (4) | *Decline as % of 1939 to 1944* (5) | *Decline as % of 1939 to 1946* (6) |
|---|---|---|---|---|---|---|
| | | A TOTAL POPULATION | | | | |
| *Basic* | | | | | | |
| Top 1 | 13.1 | 11.9 | −3.3 | −2.9 | 27 | 24 |
| 2nd & 3rd | 6.6 | 6.8 | −1.8 | −1.0 | 27 | 15 |
| 4th & 5th | 4.9 | 5.0 | −1.8 | −1.5 | 37 | 29 |
| Top 5 | 24.7 | 23.7 | −6.9 | −5.3 | 29 | 22 |
| *Economic Income* | | | | | | |
| Top 1 | 15.0 | 13.3 | −4.2 | −3.6 | 32 | 27 |
| 2nd & 3rd | 8.3 | 8.4 | −2.6 | −2.1 | 31 | 26 |
| 4th & 5th | 6.5 | 6.4 | −2.4 | −2.2 | 38 | 34 |
| Top 5 | 29.8 | 28.1 | −9.2 | −7.9 | 33 | 28 |
| *Disposable Income* | | | | | | |
| Top 1 | 14.3 | 12.3 | −5.6 | −4.4 | 45 | 36 |
| 2nd & 3rd | 8.4 | 8.4 | −3.0 | −2.5 | 36 | 30 |
| 4th & 5th | 6.4 | 6.4 | −2.6 | −2.3 | 40 | 35 |
| Top 5 | 29.1 | 27.1 | −11.2 | −9.2 | 41 | 34 |
| *Disposable Income Incl. Corporate Savings* | | | | | | |
| Top 1 | 13.6 | 12.8 | −4.6 | −3.0 | 36 | 23 |
| 2nd & 3rd | 8.4 | 8.4 | −2.8 | −2.2 | 34 | 26 |
| 4th & 5th | 6.5 | 6.4 | −2.6 | −2.3 | 40 | 35 |
| Top 5 | 28.6 | 27.7 | −10.0 | −7.5 | 36 | 27 |
| *Disposable Income Incl. Corporate Savings, Excl. Individuals' Gains & Losses from Sales of Assets* | | | | | | |
| Top 1 | 13.1 | 12.6 | −5.0 | −4.1 | 39 | 32 |
| 2nd & 3rd | 8.4 | 8.4 | −2.9 | −2.5 | 35 | 30 |
| 4th & 5th | 6.5 | 6.4 | −2.6 | −2.4 | 41 | 37 |
| Top 5 | 28.0 | 27.4 | −10.5 | −8.9 | 38 | 33 |
| | | B NONFARM POPULATION | | | | |
| *Basic* | | | | | | |
| Top 1 | 13.3 | 12.1 | −3.1 | −2.7 | 26 | 23 |
| 2nd & 3rd | 6.6 | 6.9 | −1.6 | −0.8 | 23 | 11 |
| 4th & 5th | 4.5 | 4.4 | −1.1 | −0.7 | 26 | 15 |
| Top 5 | 24.4 | 23.4 | −5.8 | −4.2 | 25 | 18 |
| 6th & 7th | 4.0 | 4.3 | −1.6 | −1.3 | 37 | 31 |
| Top 7 | 28.4 | 27.7 | −7.4 | −5.5 | 27 | 20 |
| *Economic Income* | | | | | | |
| Top 1 | 15.1 | 13.4 | −4.1 | −3.4 | 30 | 25 |
| 2nd & 3rd | 8.1 | 7.9 | −1.9 | −1.4 | 24 | 18 |
| 4th & 5th | 6.0 | 5.7 | −1.7 | −1.4 | 29 | 24 |
| Top 5 | 29.2 | 27.1 | −7.7 | −6.2 | 28 | 23 |
| 6th & 7th | 5.2 | 5.5 | −2.1 | −2.0 | 39 | 36 |
| Top 7 | 34.4 | 32.6 | −9.8 | −8.2 | 30 | 25 |
| *Disposable Income* | | | | | | |
| Top 1 | 14.3 | 12.4 | −5.5 | −4.3 | 45 | 35 |
| 2nd & 3rd | 8.2 | 7.9 | −2.4 | −1.9 | 30 | 24 |
| 4th & 5th | 6.0 | 5.8 | −1.8 | −1.5 | 32 | 26 |
| Top 5 | 28.5 | 26.0 | −9.8 | −7.7 | 37 | 29 |
| 6th & 7th | 5.2 | 5.5 | −2.3 | −2.1 | 41 | 37 |
| Top 7 | 33.7 | 31.5 | −12.0 | −9.7 | 38 | 31 |

As will be seen below, through most of the period before 1939 changes in the shares of upper income groups were within fairly narrow limits. It is against the background of such relative stability that the decline since 1939 is conspicuous.

b) The largest absolute and relative declines are in the shares in the disposable income variant. For the top 5 percent group of total population the decline in the basic variant to 1944 is about three-tenths of the 1939 level; that in the economic income variant, about a third; that in the disposable income variant, over four-tenths. There are similar differences when we compare the declines in the shares in the three variants to 1946. This is true also of the shares in the three variants for nonfarm population, and of the shares of the percentage bands within the top 5 or 7 percent. Obviously, the deduction of federal income taxes accentuated the decline, since their greater impact upon upper income groups is not offset by the net balance of the latter's gains and losses from sales of assets.

c) The absolute decline is naturally larger in the share of the top 1 percent than in the shares of the lower percentage bands. But when it is related to the 1939 level, the picture is different. The relative decline in the share of the 4th and 5th percentage band of total population is about as large or larger than that in the share of the top 1 percent. Likewise, the relative decline in the share of the 6th and 7th percentage band of nonfarm population is almost as large or larger than that in the share of the top 1 percent.

d) As between total and nonfarm population, the shares of upper groups of the latter declined somewhat less, relatively, especially those of the top 5 percent groups as wholes or even that of the top 5 percent of the total population as compared with that of the top 7 percent of the nonfarm. The reason is that the income of the farm population forged ahead very rapidly, and its exclusion from the countrywide total in our estimates of the shares of the upper income groups of the nonfarm population reduces somewhat the loss in their relative position.

Before considering the reasons for this prolonged and sharp reduction in the shares of upper income groups, and whether the decline continued beyond 1946, we must ascertain the extent to which it was offset by the rise in the undistributed net profits of corporations (corporate savings), not taken into account in our estimates. It may be argued that because the upper income groups receive the major portion of dividends they are the chief claimants to corporate savings, and that the current changes in their economic position should reflect changes in corporate savings as well as in the share of personal income flowing to individuals. This argument is of limited validity since it is doubtful that dividend recipients, i.e., individual owners of equities, do or can claim corporate savings except in

personal or family-owned corporations. Moreover, the shares of dividends received by upper income groups are measured against the total flow to individuals, and do not take into account dividends received (and hence equity stock owned) by enterprises.

Nevertheless we measured the effect of including corporate savings. Corporate savings were not adjusted for effects of inventory valuation or of the basis of depreciation accounting; and gains and losses from sales of assets were included since the purpose was to take account of all changes in economic position. Corporate savings, imputed to upper income groups on the basis of their shares in the total flow of dividends to individuals, were added to the income assigned to the top 1, 2nd and 3rd, and 4th and 5th percentage bands in the disposable income variant, yielding a new income numerator; and total corporate savings were added to the country-wide total of income receipts used in the disposable income variant, yielding a new income denominator. Not having imputed corporate savings by detailed income classes, we could not rearray the latter; so that the newly calculated shares are for income groups classified by the level of their income excluding corporate savings. Consequently, the effects of including corporate savings studied below are on the shares of already given upper income groups.

If we add the roughly allocated shares in undistributed corporate profits to shares in the disposable income variant including the net balance of individuals' gains and losses from sales of assets the result involves duplication: some of the undistributed corporate profits, reflecting higher prices of assets, are converted into realized capital gains. It is for this reason that in Table 11, Part A, where we show the effects of including undistributed corporate profits on changes in the shares of upper percentage bands of total population, the shares are given both including and excluding the net balance of individuals' gains and losses from sales of assets (excluded without rearraying the distributions).

In either case the effect on the decline in the shares of upper income groups since 1939 is moderate: the decline is large even after a generous allocation of undistributed corporate profits is made to the upper income groups. For the top 5 percent group as a whole the decline is still well over a third of the 1939 level; and the decline from 1939 to 1946 well over a quarter.

Did the decline continue beyond 1946? The available data permit calculating only the basic variant through 1948; but the results are of sufficient interest to merit examination (Table 12, col. 1-3).

It is apparent at once from columns 1-3 of Table 12 that the shares of upper income groups did not recover between 1946 and 1948: the decline

Table 12

Changes in Shares of Upper Income Groups, Basic Variant Before and After Federal Income Taxes: Total and Nonfarm Population, 1939-1948

| Percentage Band | Basic Variant: Change from 1939 to 1946 (1) | Basic Variant: Change from 1939 to 1948 (2) | Basic Variant: Decline 1939-48 as % of 1939 (3) | Basic Variant Excluding Federal Income Taxes: Average Share 1919-38 (4) | Share 1939 (5) | Change from 1939 to 1944 (6) | Change from 1939 to 1948 (7) | Decline 1939-48 as % of 1939 (8) |
|---|---|---|---|---|---|---|---|---|
| A TOTAL POPULATION | | | | | | | | |
| Top 1 | −2.9 | −3.5 | 29 | 12.2 | 10.9 | −5.1 | −4.6 | 42 |
| 2nd & 3rd | −1.0 | −1.1 | 17 | 6.6 | 6.8 | −2.3 | −1.5 | 23 |
| 4th & 5th | −1.5 | −1.3 | 26 | 5.0 | 5.1 | −2.0 | −1.5 | 29 |
| Top 5 | −5.3 | −5.9 | 25 | 23.8 | 22.7 | −9.4 | −7.6 | 33 |
| B NONFARM POPULATION | | | | | | | | |
| Top 1 | −2.7 | −3.3 | 27 | 12.3 | 10.9 | −5.0 | −4.4 | 40 |
| 2nd & 3rd | −0.8 | −0.9 | 14 | 6.6 | 6.9 | −2.1 | −1.4 | 20 |
| 4th & 5th | −0.7 | −0.5 | 12 | 4.5 | 4.4 | −1.3 | −0.7 | 16 |
| Top 5 | −4.2 | −4.8 | 20 | 23.4 | 22.2 | −8.4 | −6.5 | 29 |
| 6th & 7th | −1.3 | −1.1 | 27 | 4.0 | 4.3 | −1.7 | −1.3 | 29 |
| Top 7 | −5.5 | −5.9 | 21 | 27.4 | 26.6 | −10.1 | −7.8 | 29 |

in the share of the top 1 percent was accentuated at the same time that it was somewhat reduced for the 4th and 5th percentage band, and for the 6th and 7th percentage band of nonfarm population. For the top 5 or 7 percent group as a whole, the decline in the share from the1939 level was larger by 1948 than by 1946. If one may judge by sample data for later years, the shares of upper income groups declined further after 1948: according to the 1951 Survey of Consumer Finances the percentage of total money income received by the upper tenth of spending units was 31 in 1948, 30 in 1949, and 29 in 1950.[3]

As already indicated, we cannot carry the calculations of any except the basic variant beyond 1946. But by adjusting the basic variant to exclude federal income taxes we obtain shares that more nearly approximate shares in disposable income. These shares show the striking magnitude of the decline since 1939 and the absence of any significant recovery by 1948 (col. 4-8). While there was some rise from 1944 to 1948, the shares of the top 5 and 7 percent groups were still three-tenths or a third below their 1939 levels; and recent sample surveys indicate that by 1950 the shares of the upper groups were back to the trough levels of 1944. What is also significant is that by 1948 the proportionate decline in the share of the top 1 percent – in the basic variant adjusted to exclude federal in-

[3] *Federal Reserve Bulletin,* August 1951, Table 9, p. 929. However, the Survey estimates are not fully consistent with ours. Like ours, they show a rise in the share of the upper tenth from 1945 to 1946 and a decline from 1947 to 1948; but unlike ours, they show a rise from 1946 to 1947.

come taxes – was substantially larger than that of the upper percentage bands below the top.

The decline in upper group shares from 1939 to 1948, and apparently also to 1950, has no parallel in our record in either magnitude or duration. The shares of the upper income groups declined substantially during World War I also. Unfortunately, only the share of the top 1 percent in the basic variant can be estimated for these earlier years (see Part V for data underlying the continuous series). It declined from a peak of 15.4 percent in 1916 to a low of 12.3 percent in 1920. By 1928 it had recovered, temporarily, to 14.9 percent – close to its peak level; and in 1925, nine years after 1916, was 13.7 percent – about a tenth below its peak. During the years associated with World War II it reached a trough in 1944, 8.7 percent, or over a quarter below its 1939 level, 11.9 percent; after a temporary recovery to 9.1 percent in 1946, it dropped to 8.5 percent in 1948. This comparison is for the share in the basic variant before federal taxes: were we to allow for the latter, the conclusion – that the recent decline in the share of the top 1 percent was much larger relatively than during World War I, and lasted longer – would be more strongly accentuated.[4]

An exhaustive analysis of this recent decline in upper group shares can scarcely be attempted here: it would require as much study of lower group shares as of upper, since the decline in the latter was apparently due not to a drop in absolute income levels but to the much higher rate of rise of

[4] The combined evidence of several field surveys on income distribution not yet cited (the Consumer Purchases Study for 1935-36; the survey for 1941 made jointly by the Bureaus of Labor Statistics and of Human Nutrition and Home Economics; and the surveys for 1944-48 conducted by the Census Bureau) further corroborate the marked decline in the shares of upper income groups since the end of the 1930's and its persistence to recent years. Taking advantage of the recent evaluation of these data by Selma F. Goldsmith (Statistical Information on the Distribution of Income by Size in the United States, *Papers and Proceedings of the American Economic Association,* May 1950, pp. 320-41), and limiting our comparison to the upper 20 percent of family units in a distribution of family money income by size, we find its share (as a percentage of money income) to be: 1935-36, 53.0; 1941, 48.8; 1944, 45.4; 1945, 43.4; 1946, 45.3; 1947, 44.3; 1948, 43.8 (based on Tables 2 and 3 of Mrs. Goldsmith's article, the figures in Table 2 being extrapolated by those in Table 3, pp. 332-4). The decline in this share from 1935-36 to 1948 was over a sixth. The decline from 1941 to 1948 was only about a tenth of the share in the earlier year. The extension of the upper group to cover 20 percent instead of 5 or 7 percent of total population, and the use of a distribution by family units have probably reduced the decline in comparison with that characterizing our narrowly selective top groups in a distribution by economic income per capita. Also, Mrs. Goldsmith's estimates are for a distribution of money income whereas ours are for total income including income in kind. But the figures cited clearly support the broad conclusions discussed in the text.

lower incomes during these years when the countrywide per capita income was rising. We list only a few of the more obvious and direct factors.

One was the decline in unemployment, from 9.5 million in 1939 to 0.7 million in 1944,[5] to take the year in which upper group shares reached their trough. If we assume that of the *employed* labor force the top 5 percent were also in our top 5 percent of total population, the decrease in unemployment means adding to the lower 95 percent of employed labor force a sizeable group who formerly received practically no income. If we further assume that the average income of the formerly unemployed is equal to the average income per head of the lower 95 percent of the employed group in 1939, and that no other changes occurred in the type-structure of total income receipts or the distribution of the various types of income, the share of the top 5 percent in 1944 in the economic income variant would be 24.5 percent as against 28.1 percent in 1939.[6] Thus, of the total decline in this share between 1939 and 1944, which amounted to 9.2 points, 3.6 or almost four-tenths could be assigned to the reduction in unemployment alone, although this may be somewhat of an overestimate since it assigns to formerly unemployed a per capita income equal to that per head of the lower 95 percent of the total working population.

Another factor was the rapid growth in the income of the farm population, already referred to, which greatly exceeded that in total income receipts. Hence, while the decline in the share (economic income variant) of the top 5 percent of total population from 1939 to 1944 was 9.2 points, that of the top 5 percent of nonfarm population was only 7.7 points. Thus about a sixth of the decline in the share of the top 5 percent of the total population may be assigned to the shift in favor of the farm population, whose per capita income averaged and still continues to average less than that of the nonfarm or total population.

[5] *Midyear Economic Report of the President,* July 1951, Table B-11, p. 235.

[6] This simple calculation can be set forth as follows. In 1939, of the 55.6 million labor force, 9.5 million were unemployed. Since the lower 95 percent of population in that year received 71.9 percent of total income receipts (economic income variant), income per million employed of the lower 95 percent of the working force [their total being 43.3 million, i.e., $(55.6 \times 0.95) - 9.5$] was 1.66 percent of total income receipts. In 1944, only 1 percent of the labor force was unemployed. Assuming the same labor force as in 1939, this means an addition of 8.94 million to the employed (i.e., $9.5 - 0.56$), and additional income, to the base of 1939, of 14.8 percentage points (i.e., $8.94 \times 1.66$). Hence total income in 1944, to the base of 1939, on the basis of the factors accounted for in the calculation above, is 114.8 percent, of which the lower 95 percent of the population receives 86.7 (i.e., $71.9 + 14.8$), and the top 5 percent, 28.1, the same as in 1939. The share of the latter in this total thus becomes 24.5 percent.

A third factor was the shift toward an increasing proportion of service incomes and a decreasing proportion of property incomes, of importance because of the smaller weight of the former in the type-structure of upper group incomes. The effects of these shifts are calculated directly in Chapter 3. But in the present connection a simple comparison will suffice. From the Department of Commerce series we calculate the percentage change from 1939 in service income per fulltime engaged person (which eliminates effects of reduced unemployment) and in property income per capita of total population (which implies that property incomes are received throughout the period by a constant proportion of the total population). Service income per fulltime engaged person increased 78 percent from 1939 to 1944, and 144 percent from 1939 to 1948; property income per capita, however, increased only 28 and 65 percent respectively.[7]

Fourthly, there is evidence that even within total employee compensation there must have been a shift toward smaller upper group shares, due largely to the smaller rise in the average income of sectors whose per worker income in 1939 was far above the countrywide average; and partly to a reduction in the relative number of worker groups whose average income was either greatly above or greatly below the countrywide average. From the Department of Commerce publication cited in note 7 (Tables 24 and 26), we find that between 1939 and 1944 (or 1948), the percentage increase in employee compensation per fulltime worker in finance, transportation, and communication, in which it was well over a third above the private industry average in 1939, was appreciably smaller than in per employee income for all private industries (we exclude government to avoid the wide swings in the totals and averages that would result from including the armed services). At the same time, the number of employees in these three sectors declined slightly in proportion to total employees in the private sector: from about 13.9 percent in 1939 to 13.1 percent in 1944 and to 13.8 percent in 1948. The proportion of sectors with relatively low per worker income, such as services and agriculture (the former being numerically the more important) also declined: thus fulltime employees in services dropped from 16.4 percent of the total in 1939 to 13.2 in 1944 and to 13.7 in 1948.

Finally, to the factors suggested above as making for the recent decline in upper group shares in the economic income variant, we must add the

[7] Based on the allocation of personal income between property incomes — the sum of rent, interest, and dividends — and service incomes — the residual (see *National Income*, 1951 ed., Supplement to *Survey of Current Business*, Tables 1 and 3). The figures on fulltime engaged are from *ibid.*, Tables 24 and 27; those on total population, from the *Midyear Economic Report of the President*, July 1951, Table B-10, p. 234.

increased differential impact of federal income taxes as contributing to the decline in shares in the disposable income variant. The appreciably larger decline in the latter is a clear indication that the heavier load of taxes was not offset by an increase in the net balance of gains and losses from sales of assets.

Even these brief notes indicate that the recent decline in upper group shares was fed from several sources, and therefore represents the combined effect of far reaching shifts in the industrial structure, employment opportunities, earning power of capital, and the tax system of the country.

2 *Changes in Decade Averages*

Before considering the long term changes in upper group shares revealed by the decade averages, it is useful to emphasize the fairly narrow range of their annual changes before 1939, i.e., before the recent decline (Table 13).

For the basic and economic income variants, the range, i.e., the maximum spread between the annual values during the twenty years is, on the whole, less than a third of the arithmetic mean share. Indeed, for the percentage bands that are of most interest in this connection, the top 1 and 5 or 7 percent, it is from about a sixth to three-tenths of the average share. How small such a variation is may be seen by comparing it with the range in per capita income in current prices (the series underlying the shares) which exceeded half of the average per capita income for the period (lines 6 and 15).

Only when we deduct federal income taxes and add gains and losses from sales of assets, particularly the latter, does the range of temporal variations in the shares of upper income groups become appreciably wider. This is especially true of the top 1 percent's share, where the disposable income variant has a range equal to somewhat over half of its average level for the period; and the effect is carried over to the share of the top 5 or 7 percent, where the disposable income variant has a relative range more than 1.5 times that for the basic and economic income variants.

We already know that the years since 1939 have witnessed a marked decline in the shares of upper income groups. Was there a similar decline before 1939, even though it could not have been as large? In view of the difficulty of determining trends over a period as short as twenty years, only simple measures are warranted. Yet they are needed: a glance at the several panels in Charts 2 and 3 shows that the drift during 1919-38 as a whole in the shares of upper income groups differs significantly from one percentage band to the next. The share of the top 1 percent declines slightly, whereas the shares of the 2nd and 3rd, 4th and 5th, and 6th and 7th percentage bands rise.

Table 13

Range of Annual Variations in Shares of Upper Income Groups, Three Variants, 1919-1938

| | | Basic Variant | | Economic Income Variant | | Disposable Income Variant | |
|---|---|---|---|---|---|---|---|
| | | *Range* (1) | *Ratio of col. 1 to 1919-38 average* (2) | *Range* (3) | *Ratio of col. 3 to 1919-38 average* (4) | *Range* (5) | *Ratio of col. 5 to 1919-38 average* (6) |
| | | TOTAL POPULATION | | | | | |
| 1 | Top 1 percent | 3.41 | 0.26 | 4.34 | 0.29 | 7.32 | 0.51 |
| 2 | 2nd & 3rd percentage band | 1.34 | 0.20 | 2.57 | 0.31 | 2.75 | 0.33 |
| 3 | 4th & 5th percentage band | 2.04 | 0.41 | 2.33 | 0.36 | 2.46 | 0.38 |
| 4 | Top 5 percent | 4.71 | 0.19 | 6.36 | 0.21 | 10.10 | 0.35 |
| 5 | Lower 95 percent | 4.71 | 0.06 | 6.36 | 0.09 | 10.10 | 0.14 |
| 6 | Income per capita, current $ | 302 | 0.56 | 312 | 0.56 | 340 | 0.62 |
| | | NONFARM POPULATION | | | | | |
| 7 | Top 1 percent | 3.56 | 0.27 | 4.50 | 0.30 | 7.95 | 0.55 |
| 8 | 2nd & 3rd percentage band | 1.17 | 0.18 | 2.23 | 0.28 | 2.42 | 0.30 |
| 9 | 4th & 5th percentage band | 1.41 | 0.31 | 2.46 | 0.41 | 2.53 | 0.42 |
| 10 | Top 5 percent | 4.33 | 0.18 | 6.34 | 0.22 | 10.58 | 0.37 |
| 11 | 6th & 7th percentage band | 1.56 | 0.39 | 2.18 | 0.42 | 2.34 | 0.45 |
| 12 | Top 7 percent | 5.04 | 0.18 | 7.60 | 0.22 | 11.71 | 0.35 |
| 13 | Lower 95 percent | 4.33 | 0.06 | 6.34 | 0.09 | 10.58 | 0.15 |
| 14 | Lower 93 percent | 5.04 | 0.07 | 7.60 | 0.12 | 11.71 | 0.18 |
| 15 | Income per capita, current $ | 346 | 0.54 | 359 | 0.54 | 399 | 0.61 |

To check these impressions and to get some view of the possible long term changes during this twenty-year period as a whole we divided it into decades and calculated averages for each (Table 14). Since 1919-28 covers three of the five business cycles in the period – plus one extra year, these decade averages represent roughly the average level of the first three and the last two cycles respectively. We calculated also the average for the last decade, 1939-48, for the basic variant, and that for the last eight years, 1939-46, for the other two variants, to see whether the recent decline is a continuation or a reversal of earlier long term changes.

The results can be summarized as follows:

a) The share of the top 1 percent showed a downward drift even before 1939. The average share of the top 1 percent of both total and nonfarm population declines from 1919-28 to 1929-38 in all three variants, but most markedly in the disposable income variant. True, the changes are absolutely small, but when related to the base they are not insignificant. Thus, the drop in the share of the top 1 percent in the basic variant for total population is from 13.42 to 12.86 percent, only 0.56 points, but about 4 percent of the level in the first decade. Moreover, variations in its share during 1919-38, as shown by the average deviations, are fairly narrow.

For the basic variant we can take account also of the estimates for the years back to 1913. For the six years 1913-18 the average level of the share was 14.0 percent, 0.6 points higher than that for 1919-28. This only confirms the picture of a long term downward drift of the share of the top 1 percent, of which the recent decline is in a way a continuation and major acceleration.

b) The shares of the upper percentage bands below the top, on the contrary, show an upward drift during 1919-38. The average shares for the 2nd and 3rd, and 4th and 5th percentage bands, and for the 6th and 7th percentage band of nonfarm population, all three variants, are at a somewhat higher average level during 1929-38 than during 1919-28. The rise from the first to the second decade ranges from 0.3 to 22.5 percent of the average level in 1919-28 and gives a strong impression that the recent decline in the shares of these upper percentage bands below the top is a reversal of the drift that prevailed during 1919-38.

c) The combination of a slight downward drift in the share of the top 1 percent, and of a slight upward drift in the shares of the upper percentage bands below the top, made the average share of the top 5 percent of total population as a whole and of the top 7 percent of nonfarm population rise slightly from the first to the second decade. But since the rise constitutes only a small fraction of the base, it is safest to conclude that there was no

Table 14

Average Level of Shares of Upper Income Groups, Three Variants, Total and Nonfarm Population
1919-28, 1929-38, and 1939-48

| Percentage Band | Basic Variant | | | Economic Income Variant | | | Disposable Income Variant | | |
|---|---|---|---|---|---|---|---|---|---|
| | *1919-28* (1) | *1929-38* (2) | *1939-48* (3) | *1919-28* (4) | *1929-38* (5) | *1939-46* (6) | *1919-28* (7) | *1929-38* (8) | *1939-46* (9) |
| **A TOTAL POPULATION** | | | | | | | | | |
| **I AVERAGE LEVEL** | | | | | | | | | |
| Top 1 | 13.42 | 12.86 | 9.90 | 15.33 | 14.67 | 10.99 | 14.91 | 13.74 | 8.77 |
| 2nd & 3rd | 6.49 | 6.74 | 5.75 | 8.05 | 8.54 | 6.86 | 8.12 | 8.60 | 6.56 |
| 4th & 5th | 4.65 | 5.22 | 3.79 | 6.10 | 6.88 | 5.09 | 5.99 | 6.89 | 5.01 |
| Top 5 | 24.56 | 24.82 | 19.44 | 29.48 | 30.10 | 22.95 | 29.02 | 29.23 | 20.34 |
| Lower 95 | 75.44 | 75.18 | 80.56 | 70.52 | 69.90 | 77.05 | 70.98 | 70.77 | 79.66 |
| **II AVERAGE DEVIATION** | | | | | | | | | |
| Top 1 | 0.67 | 0.74 | 1.22 | 0.98 | 0.98 | 1.45 | 1.90 | 1.47 | 1.88 |
| 2nd & 3rd | 0.35 | 0.20 | 0.49 | 0.50 | 0.32 | 0.81 | 0.55 | 0.37 | 0.98 |
| 4th & 5th | 0.26 | 0.38 | 0.46 | 0.46 | 0.41 | 0.82 | 0.36 | 0.49 | 0.90 |
| Top 5 | 1.22 | 0.94 | 2.12 | 1.78 | 1.40 | 3.08 | 2.41 | 1.53 | 3.76 |
| **III RATIO OF AVERAGE DEVIATION TO ARITHMETIC MEAN** | | | | | | | | | |
| Top 1 | 0.05 | 0.06 | 0.12 | 0.06 | 0.07 | 0.13 | 0.13 | 0.11 | 0.21 |
| 2nd & 3rd | 0.05 | 0.03 | 0.09 | 0.06 | 0.04 | 0.12 | 0.07 | 0.04 | 0.15 |
| 4th & 5th | 0.06 | 0.07 | 0.12 | 0.08 | 0.06 | 0.16 | 0.06 | 0.07 | 0.18 |
| Top 5 | 0.05 | 0.04 | 0.11 | 0.06 | 0.05 | 0.13 | 0.08 | 0.05 | 0.18 |
| Lower 95 | 0.02 | 0.01 | 0.03 | 0.03 | 0.02 | 0.04 | 0.03 | 0.02 | 0.05 |

## B NONFARM POPULATION

### I AVERAGE LEVEL

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Top 1 | 13.70 | 12.92 | 10.19 | 15.60 | 14.62 | 11.27 | 15.05 | 13.61 | 8.89 |
| 2nd & 3rd | 6.57 | 6.59 | 5.99 | 7.94 | 8.23 | 6.86 | 8.06 | 8.30 | 6.51 |
| 4th & 5th | 4.28 | 4.73 | 3.80 | 5.53 | 6.52 | 4.95 | 5.46 | 6.54 | 4.87 |
| Top 5 | 24.54 | 24.24 | 19.98 | 29.06 | 29.36 | 23.08 | 28.56 | 28.45 | 20.27 |
| 6th & 7th | 3.75 | 4.26 | 3.16 | 4.73 | 5.69 | 4.21 | 4.67 | 5.72 | 4.18 |
| Top 7 | 28.29 | 28.50 | 23.13 | 33.80 | 35.06 | 27.29 | 33.24 | 34.16 | 24.45 |
| Lower 93 | 71.71 | 71.50 | 76.87 | 66.20 | 64.94 | 72.71 | 66.76 | 65.84 | 75.55 |

### II AVERAGE DEVIATION

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Top 1 | 0.66 | 0.80 | 1.20 | 0.89 | 0.89 | 1.40 | 1.96 | 1.53 | 1.85 |
| 2nd & 3rd | 0.31 | 0.13 | 0.42 | 0.48 | 0.33 | 0.62 | 0.55 | 0.41 | 0.81 |
| 4th & 5th | 0.17 | 0.36 | 0.34 | 0.47 | 0.28 | 0.59 | 0.42 | 0.33 | 0.65 |
| Top 5 | 0.96 | 0.72 | 1.84 | 1.67 | 1.08 | 2.60 | 2.71 | 1.57 | 3.29 |
| 6th & 7th | 0.25 | 0.18 | 0.36 | 0.49 | 0.34 | 0.65 | 0.41 | 0.39 | 0.70 |
| Top 7 | 1.21 | 0.79 | 2.21 | 2.08 | 1.13 | 3.26 | 3.11 | 1.40 | 3.97 |

### III RATIO OF AVERAGE DEVIATION TO ARITHMETIC MEAN

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Top 1 | 0.05 | 0.06 | 0.12 | 0.06 | 0.06 | 0.12 | 0.13 | 0.11 | 0.21 |
| 2nd & 3rd | 0.05 | 0.02 | 0.07 | 0.06 | 0.04 | 0.09 | 0.07 | 0.05 | 0.12 |
| 4th & 5th | 0.04 | 0.08 | 0.09 | 0.09 | 0.04 | 0.12 | 0.08 | 0.05 | 0.13 |
| Top 5 | 0.04 | 0.03 | 0.09 | 0.06 | 0.04 | 0.11 | 0.09 | 0.06 | 0.16 |
| 6th & 7th | 0.07 | 0.04 | 0.12 | 0.10 | 0.06 | 0.16 | 0.09 | 0.07 | 0.17 |
| Top 7 | 0.04 | 0.03 | 0.10 | 0.06 | 0.03 | 0.12 | 0.09 | 0.04 | 0.16 |
| Lower 93 | 0.02 | 0.01 | 0.03 | 0.03 | 0.02 | 0.04 | 0.05 | 0.02 | 0.05 |

significant drift either upward or downward during the period before 1939 in the share of the top 5 or 7 percent of the population. Hence the decline in the averages after 1939 is a sharp break.

The other entries in Table 14 – the average deviation of the annual shares from the arithmetic mean for each decade, and its ratio to the arithmetic mean – confirm the conclusions from Table 13 concerning the narrow limits within which annual shares fluctuated during 1919-38, and the sharp decline following 1939. Most of the average deviations for the first two decades are well below 10 percent of the mean: the only significant exception is for the share of the top 1 percent in the disposable income variant which, as already indicated, is affected by the gyrations in the gains and losses from sales of assets. Hence, for 1919-38, any fluctuations in the shares that were associated with business cycles must have been within a narrow compass relative to the average level of the shares themselves. Most of the average deviations for the decade or eight years beginning with 1939 are, on the contrary, at least 10 percent of the mean, some being well above that fraction and all appreciably higher than for 1919-38.

### 3 *Changes during Business Cycles*

Study of short term changes in the shares of upper income groups is impeded by the annual character of the data as well as by the crudities and margin of error inherent in our estimates. To try, on the basis of such crude estimates, to date cycles characteristic of the shares would hardly yield reliable results. The most we can do is observe the movement of the shares during phases established by the business cycle chronology marking off cyclical peaks and troughs in the general economic conditions of the country. Even the measures derived from such an analysis can at best be treated as plausible suggestions, not firm findings.

Table 15 presents the changes per year in the shares of upper income groups in the basic variant during successive business cycle phases distinguished in the chronology since 1913. These are the changes per year during expansions and contractions in the shares, i.e., percentages of total income, without conversion to relatives of the average level for each cycle. Omission of this conversion step, usual in National Bureau procedure, is justified by the relative stability of the average level of the shares from one cycle to another. In interpreting the changes we shall have to allow, however, for differences in the average level of shares among the several percentage bands.

Directing our attention first to the averages for 1919-38, a period excluding the war years, we find that, by and large, the shares of upper percentage bands of both total and nonfarm population decline during

expansions and rise during contractions. In consequence, the rate of change rises from expansion to contraction. We are dealing with percentages: the rises and declines are in the percentage shares received by upper income groups, not in their dollar income which changes with, rather than counter to, the movements of the business cycles. The inverted movement of the percentage shares means that as the total income flow increases during expansions, the proportionate increase in the flow to upper income groups is not as large as that to lower income groups; and during contractions the proportionate decline in the flow to upper groups is not as large as that to the rest of the population.

However, averages can be quite misleading, especially when based on a few cases. It is important, therefore, to examine the *consistency* with which the shares of the upper income groups move with or counter to cycles in the country's general economic condition. The conformity indexes in Table 15 are designed to measure such consistency.[8] We calculated these indexes not only for 1919-38 but also for the full period covered.

If we regard a conformity index of 50 as barely consistent, and that of 60 or over as significantly consistent, we can easily summarize the evidence in Table 15.

First, the shares of upper income groups below the top 1 percent of total population and below the 2nd and 3rd percentage band of nonfarm population run counter to business cycles with high consistency.

The indexes for expansion are, on the whole, low, reflecting the upward drift that characterized these shares during most of the period; and for the same reason, the indexes for contraction tend to be higher. But the crucial measures, those for conformity over the cycle as a whole, are quite high

[8] For each business cycle phase the scoring is +100 if the movement is in accord with that in general business conditions (rises during expansion, declines during contraction, declines in the rate of change from expansion to the following contraction, and rises in the rate of change from contraction to the following expansion); and −100 if the movement is counter to that in general business conditions. The conformity index for expansion and for contraction is the algebraic sum of the scores for all observed expansions or contractions, divided by their number; the index for the cycle is the sum of the scores for all changes from expansion to contraction and from contraction to expansion, divided by their number. An index of +100 indicates fully consistent positive conformity; an index of −100, fully consistent inverted (counter-cyclical) conformity; and an index close to 0, absence of consistency in the movement of the series during business cycles. For 1919-38, the indexes of conformity for expansion and for contraction are based on 5 entries each; the indexes for the full cycle, on 9 entries. It should be noted that whereas the indexes for expansion and for contraction are affected by any longer term trend that may exist in the series, the indexes for the cycle are relatively free from it and are, therefore, more reliable in gauging the consistency with which changes in the series follow cycles in general business conditions.

Table 15

Change per Year in Shares of Upper Income Groups during Business Cycles
Basic Variant, Total and Nonfarm Population, 1913-1946

| Business Cycle Expansion or Contraction | Top 1 Percent (1) | 2nd & 3rd Percentage Band (2) | 4th & 5th Percentage Band (3) | Top 5 Percent (4) | 6th & 7th Percentage Band (5) | Top 7 Percent (6) |
|---|---|---|---|---|---|---|
| | | A. Total Population | | | | |
| Con., 1913-14 | −1.89 | | | | | |
| Exp., 1914-18 | −0.10 | | | | | |
| Con., 1918-19 | +0.27 | +0.24 | −0.07 | +0.44 | | |
| Exp., 1919-20 | −0.50 | −0.16 | −0.19 | −0.84 | | |
| Con., 1920-21 | +1.16 | +1.01 | +1.24 | +3.40 | | |
| Exp., 1921-23 | −0.61 | −0.38 | −0.30 | −1.29 | | |
| Con., 1923-24 | +0.63 | +0.62 | +0.15 | +1.40 | | |
| Exp., 1924-26 | +0.51 | +0.02 | −0.06 | +0.48 | | |
| Con., 1926-27 | +0.46 | (+)0.00* | +0.26 | +0.72 | | |
| Exp., 1927-29 | +0.05 | +0.06 | −0.05 | +0.06 | | |
| Con., 1929-32 | −0.53 | +0.10 | +0.40 | −0.03 | | |
| Exp., 1932-37 | +0.02 | −0.11 | −0.29 | −0.38 | | |
| Con., 1937-38 | −1.46 | −0.02 | +0.36 | −1.13 | | |
| Exp., 1938-44 | −0.48 | −0.26 | −0.29 | −1.02 | | |
| Con., 1944-46 | +0.20 | +0.40 | +0.19 | +0.80 | | |
| AVERAGES, 1919-38 | | | | | | |
| Expansion | −0.10 | −0.11 | −0.18 | −0.40 | | |
| Contraction | +0.05 | +0.34 | +0.48 | +0.87 | | |
| Difference | +0.16 | +0.46 | +0.66 | +1.27 | | |
| CONFORMITY INDEXES | | | | | | |
| *1919-38* | | | | | | |
| Expansion | +20 | −20 | −100 | −20 | | |
| Contraction | −20 | −60 | −100 | −20 | | |
| Cycle | −11 | −56 | −100 | −56 | | |
| *Full Period* | | | | | | |
| Expansion | −14 | −33 | −100 | −33 | | |
| Contraction | −25 | −71 | −71 | −43 | | |
| Cycle | −14 | −67 | −100 | −50 | | |

* Less than 0.005.

for the 2nd and 3rd percentage band of total population; and show fully consistent inverted conformity for the 4th and 5th percentage band of both total and nonfarm population, and for the 6th and 7th percentage band of nonfarm population.

Second, by contrast, the movement of the share of the top 1 percent of both total and nonfarm population, and of the 2nd and 3rd percentage band of nonfarm population fail to show any consistency during business cycles. The indexes of conformity are uniformly low. This lack of consistency explains why the *average* difference between the change per year during expansion and the following contraction is smaller than that in the shares of the lower percentage bands: declines in some business

*Table 15 concluded:*

| Business Cycle Expansion or Contraction | Top 1 Percent (1) | 2nd & 3rd Percentage Band (2) | 4th & 5th Percentage Band (3) | Top 5 Percent (4) | 6th & 7th Percentage Band (5) | Top 7 Percent (6) |
|---|---|---|---|---|---|---|
| | B NONFARM POPULATION | | | | | |
| Con., 1913-14 | −1.99 | | | | | |
| Exp., 1914-18 | −0.01 | | | | | |
| Con., 1918-19 | −0.02 | +0.49 | +0.07 | +0.54 | −0.17 | +0.37 |
| Exp., 1919-20 | −1.00 | −0.51 | −0.34 | −1.85 | −0.30 | −2.15 |
| Con., 1920-21 | +0.61 | +0.76 | +0.62 | +2.00 | +0.84 | +2.84 |
| Exp., 1921-23 | −0.56 | −0.39 | −0.19 | −1.14 | −0.19 | −1.33 |
| Con., 1923-24 | +0.67 | +0.65 | +0.36 | +1.68 | +0.16 | +1.84 |
| Exp., 1924-26 | +0.51 | +0.20 | −0.15 | +0.56 | +0.06 | +0.62 |
| Con., 1926-27 | +0.60 | −0.04 | +0.14 | +0.70 | +0.19 | +0.89 |
| Exp., 1927-29 | +0.05 | +0.02 | +0.04 | +0.10 | −0.04 | +0.07 |
| Con., 1929-32 | −0.71 | −0.14 | +0.30 | −0.56 | +0.23 | −0.33 |
| Exp., 1932-37 | +0.13 | +0.02 | −0.21 | −0.05 | −0.16 | −0.21 |
| Con., 1937-38 | −1.64 | −0.10 | +0.89 | −0.85 | +0.22 | −0.63 |
| Exp., 1938-44 | −0.44 | −0.21 | −0.30 | −0.96 | −0.23 | −1.19 |
| Con., 1944-46 | +0.19 | +0.42 | +0.23 | +0.83 | +0.12 | +0.95 |
| AVERAGES, 1919-38 | | | | | | |
| Expansion | −0.17 | −0.13 | −0.17 | −0.48 | −0.12 | −0.60 |
| Contraction | −0.09 | +0.23 | +0.46 | +0.59 | +0.33 | +0.92 |
| Difference | +0.08 | +0.36 | +0.63 | +1.07 | +0.45 | +1.52 |
| CONFORMITY INDEXES | | | | | | |
| *1919-38* | | | | | | |
| Expansion | +20 | +20 | −60 | −20 | −60 | −20 |
| Contraction | −20 | +20 | −100 | −20 | −100 | −20 |
| Cycle | −33 | +11 | −100 | −33 | −100 | −33 |
| *Full Period* | | | | | | |
| Expansion | −14 | 0 | −67 | −33 | −67 | −33 |
| Contraction | 0 | −14 | −100 | −43 | −71 | −43 |
| Cycle | −14 | −17 | −100 | −50 | −100 | −50 |

cycles may be averaged with rises in others, thereby reducing the average for all cycles to a low level. Since the average share of the top 1 percent is about twice that of the 2nd and 3rd percentage band, and more than twice that of the 4th and 5th, or 6th and 7th percentage band, the greater mildness of its cyclical response would be even more conspicuous if related to its average level.

Inspection of Table 15 and Charts 2 and 3 shows a distinct reversal in the conformity of the share of the top 1 percent of both total and nonfarm population, and of the 2nd and 3rd percentage band of nonfarm population – from inverted during the cycles of 1919-24 to positive during the cycles of 1927-38. Inverted conformity re-emerges during the cycle 1938-46.

The causes and meaning of this shift are not clear. The cycles in these shares during 1919-38 are appreciably longer than the business cycles. The charts suggest one long swing from a trough in 1920 to a peak in 1928, to a terminal trough in 1932, 1933, or 1934; and another to a peak in 1936 and a trough in 1938. Such longer cycles are much less, if at all, apparent in the shares of the lower percentage bands. The chronology used here is thus a series of short cycles, some of which coincide with the longer cycles in the share of the top 1 percent, and of the 2nd and 3rd percentage band of nonfarm population, and some of which do not. The brief contractions of 1924 and 1927 may not have been sufficiently intense to affect the property incomes and the high level salary receipts that must dominate the total income of these top groups. A thorough explanation would require much more detail concerning the composition of their income than is available.

Third, even when the shares of the several bands are added, the inconsistency in the cyclical changes of the shares of the uppermost bands is still evident: the index of conformity for the top 5 percent of total population tends to be lower than that for the 2nd and 3rd percentage band and appreciably lower than that for the 4th and 5th percentage band, as is the index for the top 7 percent of nonfarm population compared with that of the 4th and 5th, or 6th and 7th percentage band. But, by and large, the shares of these groups combined, i.e., the share of the top 5 percent of total and the top 7 percent of nonfarm population, move counter to business cycles, though barely consistently.

Were it possible to extend this top group to cover, say, the top 10 percent of total and the top 15 percent of nonfarm population, its share would probably show even more consistent inverted conformity to business cycles — sufficiently consistent to warrant accepting the pattern as strongly suggested, at least for the period under study.[9]

[9] This surmise is strengthened by the fact that the inverted pattern is more prominent in the share of the 4th and 5th percentage band than in that of the 2nd and 3rd (total population); and one could reasonably assume that such inverted conformity would characterize the 6th and 7th and lower percentage bands — as long as we stay in the income distribution above the cyclically sensitive wages, salaries, and entrepreneurial income (which are reached at somewhat lower income levels).

Estimates of the basic variant for total population, available through the 10 percent line from 1919 through 1924, confirm the surmise in some degree. During the two cycles covered in this period, the shares of both the top 5 and 10 percent groups moved invertedly without exception. But for the 5 percent group, the average difference (per year) between the change per year during expansion and the following contraction was +3.47 relative to an average level (for this period) of 23.7 percent; that for the 10 percent group was +5.18 relative to an average level of 33.2 percent. The relative amplitude of the counter-cyclical movement for the 10 percent group was thus slightly wider. The results are similar in the variant for nonfarm population.

Analysis of the shares of the upper percentage bands in the economic income variant confirms and somewhat strengthens the conclusions drawn from the analysis of the basic variant (Table 16). In general, the conformity indexes for the former are somewhat higher, suggesting more strongly the inverted pattern of movement during business cycles. Thus, the share of the 2nd and 3rd percentage band of nonfarm population in this variant, unlike that in the basic variant, shows significant inverted conformity over the cycle as a whole. Likewise, the share of the top 5 percent of total population and of the top 7 percent of nonfarm population move consistently counter to business cycles, with indexes of conformity that run close to 80 and 60 respectively. This indicates that the adjustments made in passing from the basic to the economic income variant, particularly those allowing for the effect of family status and of unwarranted inclusions and deductions, were, on the whole, counter-cyclical, tending to depress the shares of upper groups during expansions and to raise them during contractions.

Since the economic income variant yields the best approximation to shares of upper income groups in aggregate payments as the latter is defined in national income estimates, it is of some significance that for this analytically preferable variant, the inverted pattern of the shares of upper percentage bands below the top 1 percent, of the top 5 percent of total population, and of the top 7 percent of nonfarm population, is fairly consistent. Only the share of the top 1 percent of both total and nonfarm population displays the lack of consistent movement during business cycles already observed of its share in the basic variant.

Shares in the disposable income variant cause us to modify our conclusions concerning the pattern of change during business cycles only slightly (Table 17). The items that distinguish the disposable income variant from the economic income – the balance of gains and losses from sales of assets, which is added, and federal income taxes, which are subtracted – both conform closely to business cycles. Addition of the former would tend to make upper group shares move with business cycles, thereby reducing any inverted conformity they would otherwise show; subtraction of the latter would tend to make upper group shares move counter to business cycles, thereby strengthening their inverted conformity.

But it must be remembered that these items are important to the share of the top 1 percent alone (and, to some extent, that of the 2nd and 3rd percentage band of nonfarm population). Consequently, the chief differences between the indexes of the shares in the disposable and the economic income variants are for the top 1 percent. For the latter, failure to show consistent conformity, evident in its share in the economic income variant,

Table 16

Change per Year in Shares of Upper Income Groups during Business Cycles
Economic Income Variant, Total and Nonfarm Population, 1919-1946

| Business Cycle Expansion or Contraction | Top 1 Percent (1) | 2nd & 3rd Percentage Band (2) | 4th & 5th Percentage Band (3) | Top 5 Percent (4) | 6th & 7th Percentage Band (5) | Top 7 Percent (6) |
|---|---|---|---|---|---|---|
| | | A Total Population | | | | |
| Exp., 1919-20 | −0.39 | +0.05 | +0.01 | −0.34 | | |
| Con., 1920-21 | +2.51 | +2.21 | +1.21 | +5.94 | | |
| Exp., 1921-23 | −1.07 | −0.28 | −0.47 | −1.81 | | |
| Con., 1923-24 | +0.67 | −0.10 | +0.41 | +0.98 | | |
| Exp., 1924-26 | +0.54 | −0.11 | +0.15 | +0.58 | | |
| Con., 1926-27 | +0.69 | +0.24 | +0.05 | +0.98 | | |
| Exp., 1927-29 | +0.35 | +0.04 | −0.05 | +0.34 | | |
| Con., 1929-32 | −0.63 | +0.29 | +0.42 | +0.08 | | |
| Exp., 1932-37 | −0.23 | −0.28 | −0.22 | −0.72 | | |
| Con., 1937-38 | −1.28 | +0.46 | +0.12 | −0.70 | | |
| Exp., 1938-44 | −0.62 | −0.43 | −0.43 | −1.48 | | |
| Con., 1944-46 | +0.30 | +0.22 | +0.12 | +0.65 | | |
| AVERAGES, 1919-38 | | | | | | |
| Expansion | −0.16 | −0.12 | −0.11 | −0.39 | | |
| Contraction | +0.39 | +0.62 | +0.44 | +1.46 | | |
| Difference | +0.55 | +0.74 | +0.56 | +1.84 | | |
| CONFORMITY INDEXES | | | | | | |
| *1919-38* | | | | | | |
| Expansion | −20 | −20 | −20 | −20 | | |
| Contraction | −20 | −60 | −100 | −60 | | |
| Cycle | −33 | −100 | −78 | −78 | | |
| *Full Period* | | | | | | |
| Expansion | −33 | −33 | −33 | −33 | | |
| Contraction | −33 | −67 | −100 | −67 | | |
| Cycle | −27 | −100 | −82 | −82 | | |

is even more striking in its share in the disposable income variant: half the negative indexes for the top 1 percent group in Table 16 are appreciably nearer zero in Table 17. But there are no important changes in the indexes of conformity for the shares of percentage bands below the top 1 percent. The effect of the share of the top 1 percent is carried over to that of the top 5 or 7 percent group: for both total and nonfarm population the consistency of inverted conformity in the shares of the upper groups as a whole is less in the disposable than in the economic income variant. However, even here the share of the top 5 percent of total population, but not of the top 7 percent of nonfarm population, still shows significant inverted conformity.

The addition of corporate savings materially alters the cyclical movement of the share of the top 1 percent, and of the top 5 percent group as

*Table 16 concluded:*

| Business Cycle Expansion or Contraction | Top 1 Percent (1) | 2nd & 3rd Percentage Band (2) | 4th & 5th Percentage Band (3) | Top 5 Percent (4) | 6th & 7th Percentage Band (5) | Top 7 Percent (6) |
|---|---|---|---|---|---|---|
| | B Nonfarm Population | | | | | |
| Exp., 1919-20 | −1.15 | −0.29 | +0.07 | −1.37 | −0.16 | −1.54 |
| Con., 1920-21 | +1.96 | +1.54 | +1.52 | +5.02 | +0.41 | +5.43 |
| Exp., 1921-23 | −1.17 | (−)0.00* | −0.45 | −1.63 | −0.19 | −1.82 |
| Con., 1923-24 | +0.83 | +0.06 | +0.02 | +0.92 | +0.43 | +1.35 |
| Exp., 1924-26 | +0.66 | −0.07 | +0.30 | +0.90 | +0.03 | +0.93 |
| Con., 1926-27 | +0.80 | +0.14 | +0.10 | +1.03 | +0.04 | +1.07 |
| Exp., 1927-29 | +0.25 | +0.18 | −0.02 | +0.42 | −0.07 | +0.35 |
| Con., 1929-32 | −0.88 | +0.08 | +0.27 | −0.52 | +0.37 | −0.16 |
| Exp., 1932-37 | −0.02 | −0.25 | −0.11 | −0.38 | −0.20 | −0.58 |
| Con., 1937-38 | −1.52 | +0.33 | −0.06 | −1.25 | +0.60 | −0.64 |
| Exp., 1938-44 | −0.60 | −0.35 | −0.34 | −1.29 | −0.41 | −1.71 |
| Con., 1944-46 | +0.32 | +0.24 | +0.15 | +0.71 | +0.09 | +0.80 |
| AVERAGES, 1919-38 | | | | | | |
| Expansion | −0.29 | −0.08 | −0.04 | −0.41 | −0.12 | −0.53 |
| Contraction | +0.24 | +0.43 | +0.37 | +1.04 | +0.37 | +1.41 |
| Difference | +0.53 | +0.52 | +0.41 | +1.45 | +0.49 | +1.94 |
| CONFORMITY INDEXES | | | | | | |
| *1919-38* | | | | | | |
| Expansion | −20 | −60 | −20 | −20 | −60 | −20 |
| Contraction | −20 | −100 | −60 | −20 | −100 | −20 |
| Cycle | −33 | −56 | −56 | −33 | −100 | −56 |
| *Full Period* | | | | | | |
| Expansion | −33 | −67 | −33 | −33 | −67 | −33 |
| Contraction | −33 | −100 | −67 | −33 | −100 | −33 |
| Cycle | −27 | −64 | −64 | −45 | −100 | −64 |

* Less than −0.005.

a whole (Table 18, for total population only). For the first time the cyclical behavior of an upper group share shows significant positive conformity to business cycles – that of the top 1 percent of total population, and most probably also that of the top 1 percent of nonfarm population. With the assignment of corporate savings to dividend recipients, the percentage of income received by the top 1 percent shows, with significant consistency, a decline in the rate of change from expansion to contraction (or a rise from contraction to expansion).

For reasons already indicated, we do not attribute much significance to this variant including corporate savings: the latter cannot be conceived as all accruing to individuals, and their distribution among upper income groups, as we estimated it, must exaggerate the latter's shares in them. Furthermore, since it also includes individuals' gains or losses from sales

Table 17

Change per Year in Shares of Upper Income Groups during Business Cycles
Disposable Income Variant, Total and Nonfarm Population, 1919-1946

| Business Cycle Expansion or Contraction | Top 1 Percent (1) | 2nd & 3rd Percentage Band (2) | 4th & 5th Percentage Band (3) | Top 5 Percent (4) | 6th & 7th Percentage Band (5) | Top 7 Percent (6) |
|---|---|---|---|---|---|---|
| | A TOTAL POPULATION | | | | | |
| Exp., 1919-20 | −0.41 | +0.03 | +0.08 | −0.30 | | |
| Con., 1920-21 | +2.40 | +1.99 | +0.96 | +5.35 | | |
| Exp., 1921-23 | −0.56 | −0.19 | −0.39 | −1.13 | | |
| Con., 1923-24 | +1.20 | +0.04 | +0.44 | +1.68 | | |
| Exp., 1924-26 | +0.99 | −0.04 | +0.07 | +1.02 | | |
| Con., 1926-27 | +0.96 | +0.18 | 0.00 | +1.14 | | |
| Exp., 1927-29 | +0.85 | +0.02 | −0.08 | +0.79 | | |
| Con., 1929-32 | −2.21 | +0.31 | +0.59 | −1.31 | | |
| Exp., 1932-37 | +0.13 | −0.32 | −0.26 | −0.44 | | |
| Con., 1937-38 | −0.87 | +0.43 | +0.12 | −0.31 | | |
| Exp., 1938-44 | −0.90 | −0.50 | −0.45 | −1.85 | | |
| Con., 1944-46 | +0.57 | +0.26 | +0.15 | +0.99 | | |
| AVERAGES, 1919-38 | | | | | | |
| Expansion | +0.20 | −0.10 | −0.11 | −0.01 | | |
| Contraction | +0.30 | +0.59 | +0.42 | +1.31 | | |
| Difference | +0.10 | +0.69 | +0.54 | +1.32 | | |
| CONFORMITY INDEXES | | | | | | |
| *1919-38* | | | | | | |
| Expansion | +20 | −20 | −20 | −20 | | |
| Contraction | −20 | −100 | −80 | −20 | | |
| Cycle | −11 | −100 | −78 | −56 | | |
| *Full Period* | | | | | | |
| Expansion | 0 | −33 | −33 | −33 | | |
| Contraction | 0 | −100 | −83 | −33 | | |
| Cycle | −27 | −100 | −82 | −64 | | |

of assets, there is duplication between the latter and such undistributed profits of corporations as have in fact been cashed in through *realized* gains. But it is interesting that even in this variant which exaggerates an item that moves *with* business cycles, the shares of the upper percentage bands below the top 1 percent move consistently *counter* to business cycles; and it is only the movement of the share of the top 1 percent that makes for positive, though not significant, conformity for the share of the top 5 percent group as a whole.

The shortness of the period covered and the crudeness of the data preclude firm inferences. But, in summary, the following conclusions concerning the behavior of upper group shares during business cycles seem justified. First, the share of the top 1 percent of both total and nonfarm population in all variants except that including corporate savings, and the share of the 2nd and 3rd percentage band in the basic variant for nonfarm

*Table 17 concluded:*

| Business Cycle Expansion or Contraction | Top 1 Percent (1) | 2nd & 3rd Percentage Band (2) | 4th & 5th Percentage Band (3) | Top 5 Percent (4) | 6th & 7th Percentage Band (5) | Top 7 Percent (6) |
|---|---|---|---|---|---|---|
| | B Nonfarm Population | | | | | |
| Exp., 1919-20 | −1.04 | −0.37 | +0.06 | −1.35 | −0.10 | −1.44 |
| Con., 1920-21 | +1.94 | +1.45 | +1.20 | +4.58 | +0.29 | +4.88 |
| Exp., 1921-23 | −0.62 | +0.01 | −0.32 | −0.93 | −0.16 | −1.09 |
| Con., 1923-24 | +1.32 | +0.24 | +0.09 | +1.65 | +0.45 | +2.10 |
| Exp., 1924-26 | +1.14 | +0.02 | +0.27 | +1.44 | −0.04 | +1.40 |
| Con., 1926-27 | +1.11 | +0.13 | −0.04 | +1.20 | +0.01 | +1.21 |
| Exp., 1927-29 | +0.78 | +0.20 | −0.03 | +0.96 | −0.12 | +0.84 |
| Con., 1929-32 | −2.54 | +0.04 | +0.40 | −2.10 | +0.51 | −1.59 |
| Exp., 1932-37 | +0.36 | −0.28 | −0.14 | −0.06 | −0.24 | −0.31 |
| Con., 1937-38 | −1.04 | +0.30 | −0.10 | −0.85 | +0.63 | −0.22 |
| Exp., 1938-44 | −0.89 | −0.42 | −0.37 | −1.68 | −0.43 | −2.11 |
| Con., 1944-46 | +0.60 | +0.26 | +0.18 | +1.04 | +0.11 | +1.15 |
| AVERAGES, 1919-38 | | | | | | |
| Expansion | +0.12 | −0.08 | −0.03 | +0.01 | −0.13 | −0.12 |
| Contraction | +0.16 | +0.43 | +0.31 | +0.90 | +0.38 | +1.28 |
| Difference | +0.03 | +0.51 | +0.34 | +0.89 | +0.51 | +1.40 |
| CONFORMITY INDEXES | | | | | | |
| *1919-38* | | | | | | |
| Expansion | +20 | +20 | −20 | −20 | −100 | −20 |
| Contraction | −20 | −100 | −20 | −20 | −100 | −20 |
| Cycle | −11 | −56 | −33 | −11 | −100 | −33 |
| *Full Period* | | | | | | |
| Expansion | 0 | 0 | −33 | −33 | −100 | −33 |
| Contraction | −33 | −100 | −33 | −33 | −100 | −33 |
| Cycle | −9 | −64 | −45 | −27 | −100 | −45 |

population, do not change consistently. Second, the shares of all percentage bands below these, in all variants, except the share of the 4th and 5th percentage band of nonfarm population in the disposable income variant, move consistently counter to cycles in business activity. Third, the inconsistency in cyclical behavior of the top 1 percent's share prevents a significantly consistent pattern in the share of the top 5 or 7 percent in most variants. Even so, the share of the top 5 percent of total population and of the top 7 percent of nonfarm population in the economic income variant move counter to business cycles with significant consistency, and their conformity indexes in the basic and disposable income variants, while somewhat lower, still show fair consistency. Furthermore, there is indication that, could we extend our top group to cover, say, the top 10 or 15 percent, the consistently counter-cyclical pattern of change in the shares below that of the top 1 percent would outweigh the inconsistent movement in the

Table 18

Change per Year in Shares of Upper Income Groups during Business Cycles
Disposable Income Variant Including Corporate Savings, Total Population
1919-1946

| Business Cycle Expansion or Contraction | Top 1 Percent (1) | 2nd & 3rd Percentage Band (2) | 4th & 5th Percentage Band (3) | Top 5 Percent (4) |
|---|---|---|---|---|
| Exp., 1919-20 | −2.49 | −0.03 | +0.14 | −2.38 |
| Con., 1920-21 | −1.60 | +1.73 | +1.14 | +1.27 |
| Exp., 1921-23 | +1.64 | −0.07 | −0.48 | +1.10 |
| Con., 1923-24 | +0.66 | +0.02 | +0.45 | +1.13 |
| Exp., 1924-26 | +1.26 | −0.03 | +0.05 | +1.29 |
| Con., 1926-27 | +0.18 | +0.15 | +0.05 | +0.38 |
| Exp., 1927-29 | +1.20 | +0.01 | −0.11 | +1.10 |
| Con., 1929-32 | −5.98 | +0.52 | +0.92 | −4.54 |
| Exp., 1932-37 | +2.04 | −0.44 | −0.43 | +1.16 |
| Con., 1937-38 | −1.47 | +0.43 | +0.15 | −0.90 |
| Exp., 1938-44 | −0.49 | −0.46 | −0.46 | −1.42 |
| Con., 1944-46 | +0.80 | +0.31 | +0.16 | +1.28 |
| AVERAGES, 1919-38 | | | | |
| Expansion | +0.73 | −0.11 | −0.17 | +0.45 |
| Contraction | −1.64 | +0.57 | +0.54 | −0.53 |
| Difference | −2.38 | +0.68 | +0.71 | −0.98 |
| CONFORMITY INDEXES | | | | |
| *1919-38* | | | | |
| Expansion | +60 | −60 | −20 | +60 |
| Contraction | +20 | −100 | −100 | −20 |
| Cycle | +78 | −100 | −78 | +33 |
| *Full Period* | | | | |
| Expansion | +33 | −67 | −33 | +33 |
| Contraction | 0 | −100 | −100 | −33 |
| Cycle | +64 | −100 | −82 | +9 |

latter. Hence, we can reasonably infer that, for the period covered here, the income shares of upper groups, say, top 10 percent of total population and top 15 percent of nonfarm, would, in all three variants (excluding corporate savings) move fairly consistently counter to business cycles.

4 *Changes in Inequality within Upper Groups*

Rises or declines in the share of the top 5 or 7 percent group as a whole mean corresponding changes in 'inter-inequality', to use the term employed in Chapter 1, i.e., inequality in the distribution of income between the lower 95 or 93 percent and the top 5 or 7 percent of the population. Thus the decline in the share of the top 5 or 7 percent group from 1939 onward means a large drop in inter-equality; and its movement during business cycles means a similar movement in inter-inequality. The measures of total inequality, as they can be calculated here, are so dominated by inter-inequality that its movement would be very similar.

We omit discussion of changes in inter- or in total inequality because

we would simply have to repeat that above, with its three major conclusions: decline since 1939, no change from 1919-28 to 1929-38, and inconsistently inverted conformity to business cycles. To a degree, the same is true of inequality within the top 5 or 7 percent group. In dealing with differences in the behavior of shares among the several upper percentage bands we have in fact discussed implicitly changes in the inequality within the top 5 or 7 percent group. Obviously, the decline in the average share of the top 1 percent from the first decade to the second, and the rise in the average shares of the 2nd and 3rd, 4th and 5th, and 6th and 7th percentage bands mean that the inequality within the top 5 or 7 percent must have declined from the first to the second decade. Likewise, the differences between the top 1 percent and the lower percentage bands in their response to business cycles mean short term variations in intra-top inequality. But these differences in movement among the several upper percentage bands vary from one part of the period to another; and it may be useful to summarize them by directly measuring changes in the inequality of the distribution within the top 5 or 7 percent.

The measure used here is the concentration ratio for the upper segments calculated in the manner described in Chapter 1. Table 19 and Chart 4 yield several conclusions.

First, while the share of the top 5 or 7 percent group as a whole declined markedly after 1939, which meant a corresponding decline in inter-inequality, the change in inequality *within* the top 5 or 7 percent group was quite different (lines 1-4, Parts A and B of Table 19). As measured by the shares in the basic and economic income variants, intra-top inequality increased to a peak in 1943 or 1945, and then declined. By 1948, inequality within the top 5 or 7 percent for the shares in the basic variant was below the 1939 level; by 1946, that for the shares in the economic income variant was still above the 1939 level. As measured by the shares in the disposable income variant intra-top inequality declined to a trough in 1943, then rose again, regaining approximately its 1939 level by 1946. In summarizing these divergent movements one may say that intra-top inequality declined after 1939 only in the shares in the basic variant, particularly if they are adjusted for federal income taxes (see Table 12 above, and comments on it); and the same might perhaps be true of the shares in the disposable income variant could we have carried it to 1948. But by and large, there is no such marked drop in intra-top inequality as in the inequality between the top 5 or 7 and the lower 95 or 93 percent of the population. This is consistent with the evidence discussed earlier to the effect that the relative decline since 1939 in the share of the 4th and 5th percentage band of total population and of the 6th and 7th percentage

Table 19

Changes in Relative Inequality (Concentration Ratio) in Distribution of Total Income within the Top 5 Percent Group of Total and Top 7 Percent Group of Nonfarm Population, Three Variants, 1919-1948

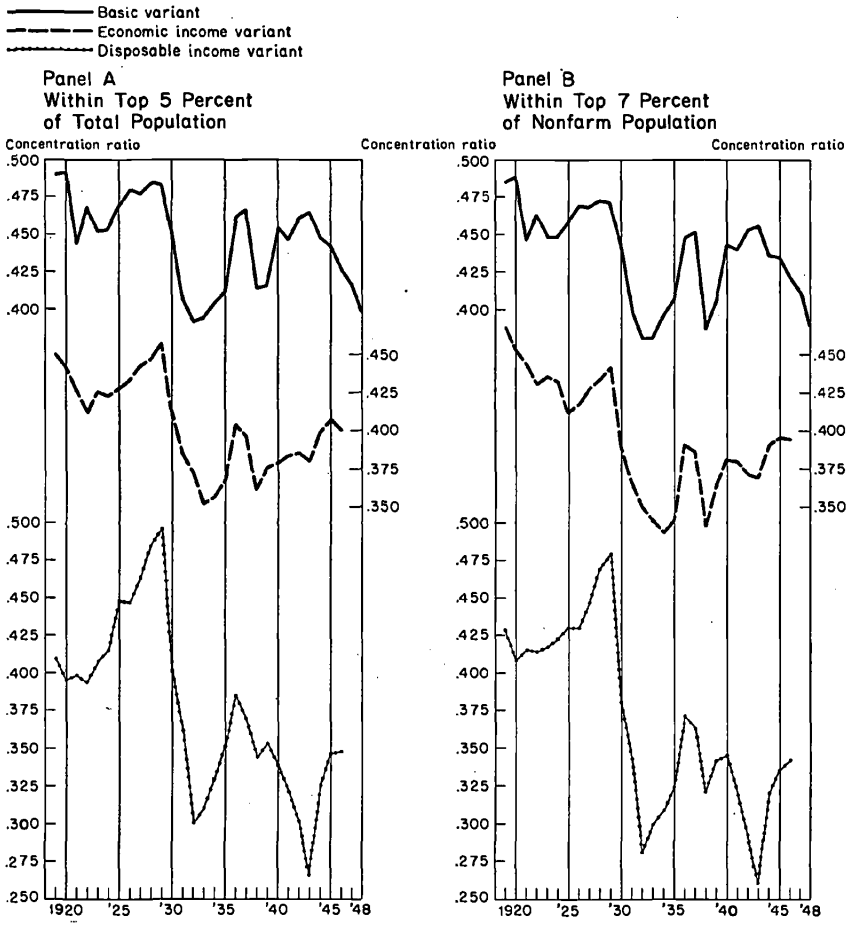
| | | Basic Variant (1) | Economic Income Variant (2) | Disposable Income Variant (3) |
|---|---|---|---|---|
| | **A TOTAL POPULATION** | | | |
| | CHANGES SINCE 1939 | | | |
| 1 | Level in 1939 | 0.415 | 0.376 | 0.353 |
| 2 | Date of next peak (p) or trough (t) | 1943-p | 1945-p | 1943-t |
| 3 | Level at date in line 2 | 0.464 | 0.407 | 0.265 |
| 4 | Level in last year (1948 or 1946) | 0.398 | 0.400 | 0.347 |
| | AVERAGE LEVELS | | | |
| 5 | 1919-28 | 0.471 | 0.433 | 0.426 |
| 6 | 1929-38 | 0.428 | 0.387 | 0.365 |
| 7 | 1939-48 or 1939-46 | 0.437 | 0.389 | 0.325 |
| | CHANGE PER YEAR DURING BUSINESS CYCLES AVERAGES FOR ALL 5 CYCLES, 1919-38 | | | |
| 8 | Expansion | +0.007(5) | +0.002(3) | +0.007(4) |
| 9 | Contraction | −0.026(4) | −0.014(4) | −0.013(2) |
| 10 | Difference | −0.034(5) | −0.016(4) | −0.021(2.5) |
| | **B NONFARM POPULATION** | | | |
| | CHANGES SINCE 1939 | | | |
| 1 | Level in 1939 | 0.405 | 0.365 | 0.341 |
| 2 | Date of next peak (p) or trough (t) | 1943-p | 1945-p | 1943-t |
| 3 | Level at date in line 2 | 0.455 | 0.395 | 0.259 |
| 4 | Level in last year (1948 or 1946) | 0.390 | 0.394 | 0.342 |
| | AVERAGE LEVELS | | | |
| 5 | 1919-28 | 0.464 | 0.436 | 0.428 |
| 6 | 1929-38 | 0.416 | 0.368 | 0.346 |
| 7 | 1939-48 or 1939-46 | 0.429 | 0.381 | 0.319 |
| | CHANGE PER YEAR DURING BUSINESS CYCLES AVERAGES FOR ALL 5 CYCLES, 1919-38 | | | |
| 8 | Expansion | +0.006(5) | −0.003(3) | +0.003(4) |
| 9 | Contraction | −0.027(4.5) | −0.016(4) | −0.016(2) |
| 10 | Difference | −0.033(5) | −0.014(2) | −0.019(2) |

Figures in parentheses, lines 8-10, show number of cycles with same sign as entry in the column proper.

band of the nonfarm was as great or greater in some variants than that in the share of the top 1 percent.

Second, while there was no significant change in the share of the top 5 or 7 percent from 1919-28 to 1929-38, and hence no significant change

Chart 4
Relative Inequality in Distribution of Total Income within the Top Group (Concentration Ratio), Total and Nonfarm Population Three Variants, 1919 – 1948




in inter-inequality, the inequality of the income distribution within the top 5 or 7 percent declined markedly in all variants, for both total and nonfarm population (lines 5 and 6). The reason is obviously the difference between the downward drift in the share of the top 1 percent and the upward drift in the shares of the lower percentage bands noted in Section 2. The average for the decade or eight years beginning with 1939 (line 7) rises over that for the 1929-38 average for the shares in the basic and economic income variants; but even so the rise is small compared with the drop from the first to the second decade, and the general impression conveyed by the full

period is that of a significant downward movement of inequality within the top 5 or 7 percent. This conclusion is even more marked for the shares in the disposable income variant where the averages for the period after 1938 are lower than those for 1929-38, resulting in a decline which cuts the measure of intra-top inequality by about one-quarter of its level in 1919-28.

Third, while the share of the top 5 or 7 percent group, and hence inter-inequality, move counter to business cycles, although not consistently, inequality within the top 5 or 7 percent moves with cycles in business activity (lines 8-10).[10] In other words, the relative spread within the top 5 or 7 percent becomes wider during expansions and smaller during contractions. This finding is observed consistently for the shares in the basic variant, as evidenced by the number of cycles in which it is found. Consistently, inequality within the top 5 or 7 percent group rises during expansions and declines during contractions. The cyclical behavior of the shares in the economic and disposable income variants is much less consistent. But even here, the average difference between the change per year during expansion and the following contraction is negative in all variants, i.e., represents a decline.

In conclusion we emphasize the differences in the pattern of movement between inter- and intra-top inequality just brought out. In the changes during the years following 1938, in the drift from 1919-28 to 1929-38, and in the periods marked off by the business cycle chronology, changes in inequality within the top 5 or 7 percent group, by and large, run counter to those in inequality between the lower 95 or 93 and the top 5 or 7 percent groups. Any analysis and interpretation of changes in inequality in the total income distribution must recognize that the inequality within and among the separate segments may move differently.[11]

[10] We have not included here or in the averages in Chapter 3 the evidence for cycles following 1938, largely because the period was dominated by World War II and changes during it are not likely to be typical of business cycle patterns.

[11] This finding confirms the value of Horst Mendershausen's emphasis upon distinguishing the several components of inequality in the family income distribution (see his *Changes in Income Distribution during the Great Depression*, NBER, 1946).