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Chapter 9

ADJUSTMENTS FOR SCOPE OF INCOME

In the comparisons that yield the basic variant we attempt to measure both the income and population represented on tax returns so as to approximate economic income and the number dependent upon it. In this attempt to fit the information on tax returns to our concepts we were hampered by lack of data and did not resort to partial information or assumptions we could not support empirically. However, since with the data for the basic variant we could not estimate shares of upper income groups completely free from omissions and other defects, we experimented with adjustments that would suggest the changes produced by taking account of the missing elements or other ways in which the variant departs from the ideal. In this chapter we discuss adjustments for scope of income: the first two are for items that are excluded from income reported on tax returns but are part of economic income; the second two for modifications in the direction of approximating the disposable income of individuals. The adjustments do not, indeed cannot, yield measures as valid as the basic variant itself.

1 *Compensation of Nonfederal Government Employees*

Until 1939 employees of state and local governments did not have to report their compensation on federal tax returns. We can therefore assume that practically all compensation paid by nonfederal governments is omitted from federal tax returns until 1939. Nevertheless it is part of economic income. What would have been the distribution of the economic income recorded on tax returns had it been included? This question should be answered if only to show to what degree omission before 1939 and inclusion subsequently affect the continuous series of estimates yielded by the basic variant.

A complete answer would require annual distributions of the compensation of nonfederal employees by per capita income, data on the extent to which such compensation is combined with income from other sources, the proportion of recipients whose income from other sources made them subject to tax, plus an indication of the income brackets they entered, and the amounts of other income they received. We have only annual totals of payments to employees of state and local governments and of the num-

ber of recipients. For lack of other data we assume that compensation paid by nonfederal governments is the sole income of their employees and that consequently none filed federal tax returns before 1939. Though extreme, this assumption does not do great violence to the facts: only a small fraction of total income would be received by this group from sources other than the nonfederal governments that employ them, and only a minute fraction would be reported on federal tax returns.

For the one year 1937-38, we do have the distribution of compensation paid by nonfederal governments by size among recipients. We assume that the size classes do not differ with respect to the number of dependents per recipient, at least not enough to prevent using the distribution as a rough approximation to that among the total population dependent upon nonfederal compensation. On this assumption and the one, already stated, that identifies compensation with the total income of the group in question, the 1937-38 distribution becomes one of total income per capita for the entire population dependent upon compensation from nonfederal governments. Comparison of the shares of the upper percentage bands of this distribution with those in our basic variant reveals the expected difference: the shares in the distribution of nonfederal compensation are smaller. In the basic variant for both the total and the nonfarm population, the average share of the top 1 percent for 1937 and 1938 is well over 12 percent of total income; in the distribution of nonfederal compensation, it is less than 5 percent of total compensation. The latter lacks the sharp edge of inequality associated with the share of the top percentage band in the basic variant. The distribution of nonfederal compensation would be quite similar to that underlying the basic variant if we excluded the top 1 percent from the latter. This is confirmed by Table 79 where the shares of the percentage bands below the top 1 percent in the basic variant, expressed as shares of the lower 99 percent of the population, are close to the shares derived from the distribution of nonfederal compensation.

This agreement provides whatever empirical foundation there is for the chief assumption used to calculate the annual adjustment for the inclusion of nonfederal compensation: that for each year the relative inequality in its distribution is the same as that shown in the basic variant for the range below the top 1 percent. To illustrate: for 1929 the share of the top 2.02 percent of the lower 99 percent of the population (i.e., the 2nd and 3rd percentage band of total population) in the income of the lower 99 percent is 7.96 percent; we assume, therefore, that the top 2.02 percent of the population dependent upon nonfederal compensation is 7.96 percent of total nonfederal compensation.

The annual adjustment rests also upon the two assumptions underlying

Table 79

Shares of Upper Income Groups of Employees of Nonfederal Governments and of Total and Nonfarm Population, 1937-1938

UPPER INCOME GROUPS	PERCENTAGE SHARES OF INCOME		
	Nonfederal Government Employees (1)	Basic Variant, Excl. Top 1 Percent Total Population (2)	Nonfarm Population (3)
<i>Discrete Groups</i>			
Top 2.02 percent	7.47	7.45	7.51
Next 2.02 percent	5.06	5.39	5.32
Next 2.02 percent	4.42	4.98	4.59
<i>Cumulated from Top</i>			
2.02 percent	7.47	7.45	7.51
4.04 percent	12.54	12.85	12.83
6.06 percent	16.96	17.82	17.42

Column

- 1 Derived from *Bulletin of the Treasury Department*, January 1940, p. 3.
- 2, 3 The shares of the 2nd and 3rd, 4th and 5th, and 6th and 7th percentage bands adjusted to 99 percent of the population by the procedure indicated in Appendix 4, Section A, lines 7-12. The shares were calculated separately for 1937 and 1938, then an arithmetic mean for the two years taken.

our derivation of the shares of upper income groups in the distribution of nonfederal compensation which identify nonfederal compensation with total income of nonfederal employees and posit an equal number of dependents per recipient in each compensation size class. A fourth assumption, indispensable in calculating the number dependent upon nonfederal compensation, states that the number of dependents per nonfederal employee is the same as the average number of persons per tax return on all tax returns for the given year. The procedure built upon these assumptions can best be followed in detail in the illustrative calculation for 1929 (App. 4, Sec. A). It consisted of computing for each year the shares of the upper percentage bands of the population dependent upon nonfederal compensation in percentages of income of the entire population, total or nonfarm, excluding the share of the top 1 percent; identifying the bands of the basic variant these upper bands would enter in the usual array downward by per capita income; making the entries; and shifting downward the fractions of population and income displaced by the new entries.

The assumptions, however reasonable, are obviously challengeable and could easily be modified without undermining the plausibility of the procedure. For example, we could assume that the number of dependents per nonfederal employee is set by the ratio of the total population to the gainfully occupied, which is slightly larger than that set by the average number of persons per tax return. The effect would be to reduce the per capita

income of persons dependent upon nonfederal compensation, thereby reducing slightly the size of the adjustment for the inclusion of such compensation. Or we could calculate the shares of the top 1, 2nd and 3rd, 4th and 5th, etc. percentage bands of the population dependent upon nonfederal compensation on the assumption that the relative difference between them and those of the corresponding percentage bands in the entire population is constant — at the 1937-38 level. The results would differ only slightly from those derived on the basis of the similarity shown in Table 79, since the lesser inequality in the distribution of nonfederal compensation together with the moderate income per capita of the population dependent upon it would still mean that the adjustment would not reach into the top 1 percent of the entire population but would affect chiefly the 2nd and 3rd, and 4th and 5th percentage bands.¹ Finally, we could attempt to allow for combining nonfederal compensation with other income or for varying the number of dependents per recipient among size classes of the distribution of nonfederal compensation per recipient. But there is no evidence that leads us to believe these factors are of much importance. All in all, the assumptions used are among the more plausible, and any acceptable modification in them would not materially alter the character of the adjustment actually calculated.

The main conclusions from the level and fluctuations of the adjustment in the basic variant for total population (Table 80 and Chart 7) are six:

First, the shares of the upper percentage bands are inevitably increased: in calculating the shares in the basic variant, nonfederal compensation was included in individuals' total income receipts, thereby entering the denomi-

¹ We applied the alternative assumption just stated and calculated a new adjustment in the basic variant for the total population for 1919 and 1932.

	ADJUSTMENTS IN SHARES OF UPPER PERCENTAGE BANDS				
	Top 1	2nd & 3rd	4th & 5th	6th & 7th	Top 7
<i>1919</i>					
Assumption used	0	0	0.016	0.017	0.033
Alternative	0	0.007	0.034	0.009	0.050
<i>1932</i>					
Assumption used	0	0.759	0.223	0.192	1.174
Alternative	0	0.587	0.209	0.211	1.007

These two years were chosen because they yielded the smallest and largest adjustment respectively. While the alternative assumption does yield different results, the differences are insignificant in comparison with the similarities. Particularly important is the confirmation of the absence of the effect on the share of the top 1 percent and the large contribution of the adjustment in the 2nd and 3rd or 4th and 5th percentage band.

Table 80

Adjustment for Inclusion of Compensation of Nonfederal Government
Employees and Factors Affecting Its Magnitude
Basic Variant, Total Population, 1917-1938

	Change in Share of Given Percentage Band Due to Adjustment			Compensation of Nonfederal Employees as % of Income of Lower 99 Percent of Total Population	Ratio: Per Capita Income of Nonfederal Employees to That of Lower 99 Percent of Total Population
	<i>2nd & 3rd</i>	<i>4th & 5th</i>	<i>Top 5</i>		
	(1)	(2)	(3)		
1917	0.01	0.04	0.04	3.18	1.06
1918	0.00	0.03	0.03	3.10	0.90
1919	0.00	0.05	0.05	3.15	0.94
1919	0.00	0.02	0.02	2.95	0.77
1920	0.00	0.03	0.03	3.31	0.83
1921	0.08	0.18	0.25	4.82	1.31
1922	0.06	0.15	0.21	4.78	1.22
1923	0.01	0.07	0.08	4.33	1.04
1924	0.03	0.10	0.14	4.64	1.13
1925	0.04	0.12	0.15	4.60	1.14
1926	0.03	0.12	0.15	4.64	1.12
1927	0.06	0.14	0.20	4.98	1.22
1928	0.07	0.16	0.23	5.15	1.23
1929	0.05	0.14	0.18	5.07	1.16
1930	0.11	0.17	0.28	5.80	1.33
1931	0.33	0.20	0.53	7.10	1.60
1932	0.76	0.22	0.98	8.95	2.03
1933	0.57	0.28	0.84	8.35	1.91
1934	0.35	0.23	0.58	7.12	1.69
1935	0.32	0.21	0.54	6.82	1.65
1936	0.20	0.30	0.50	6.53	1.56
1937	0.16	0.36	0.52	6.42	1.52
1938	0.38	0.32	0.70	7.35	1.70
1929	0.06	0.16	0.22	5.36	1.20
1930	0.14	0.21	0.36	6.32	1.39
1931	0.35	0.22	0.57	7.53	1.61
1932	0.85	0.23	1.09	9.37	2.08
1933	0.67	0.28	0.96	8.75	2.00
1934	0.45	0.26	0.71	7.70	1.79
1935	0.34	0.22	0.57	7.14	1.67
1936	0.20	0.30	0.51	6.74	1.55
1937	0.16	0.36	0.52	6.60	1.51
1938	0.36	0.33	0.69	7.58	1.66

Because of rounding, columns may not add to total.

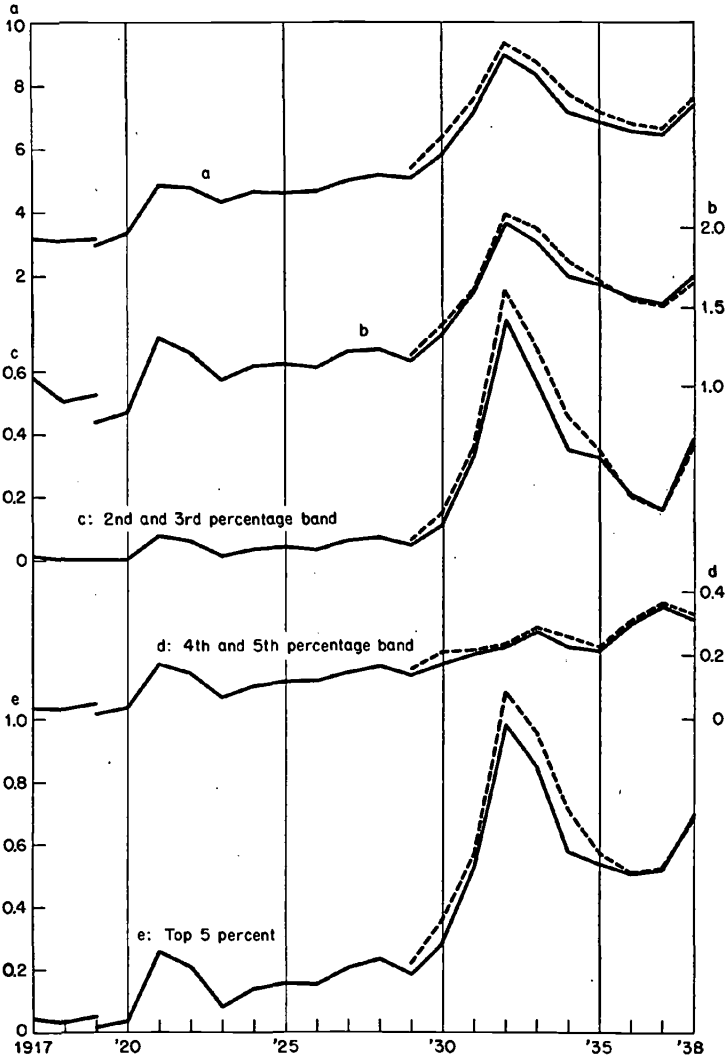
Column

- 1-3 Table 118: column 2 minus column 1.
- 4 Column 5 of Table 115 is divided by column 12 of Table 114 to yield nonfederal compensation as a percentage of total income receipts. This percentage is divided by the share of income received by the lower 99 percent of the population (100 percent minus the share of the top 1 percent, Table 118, col. 1).
- 5 Column 4 divided by the percentage that persons dependent upon nonfederal compensation (Table 115, col. 4) are of 99 percent of total population (99 percent of col. 5 of Table 69).

Chart 7

Adjustment for Inclusion of Compensation of Nonfederal Government Employees, Basic Variant, Total Population, 1917-1938

- a Compensation of nonfederal employees as % of income of lower 99 percent of total population
- b Ratio: per capita income of nonfederal employees to that of lower 99 percent of total population
- c, d, & e Change in share of given percentage band due to adjustment (% of total income receipts)



nator of the fraction whose numerator was economic income received by the upper percentage bands of total population. If some of the upper percentage bands of the population dependent upon nonfederal compensation

are included among the upper percentage bands of the total population, the numerator will be raised, thereby increasing the shares. The shares would be reduced only if, in calculating the basic variant, the denominator, i.e., individuals' total income receipts, had excluded nonfederal compensation.

Second, the share of the top 1 percent is unaffected, because the distribution of nonfederal compensation is less unequal and because even in the years such as the depressed 1930's when the per capita income of persons dependent upon nonfederal compensation is appreciably higher than that of the total population, none of the former's upper percentage bands has a per capita income high enough to enter the top 1 percent of the basic variant. While different assumptions might modify the result somewhat, even upon the most extreme premises the share of the top 1 percent would not be affected significantly.

Third, the increases are chiefly in either the 2nd and 3rd or the 4th and 5th percentage band, depending upon the ratio of the per capita income of persons sharing in nonfederal compensation to that of the total population (see especially col. 5). Below the 4th and 5th percentage band they are negligible in all years except 1919 and a few in the middle 1930's. Moreover, had the basic variant extended to lower percentage bands, the increases would probably have been equally insignificant because the relative difference in per capita income from one percentage band to the next diminishes rapidly as we descend the income scale. When per capita incomes in two percentage bands are close, the effect of entrants into the upper one from the distribution of nonfederal compensation and of consequent displacements downward is necessarily quite limited.

Fourth, the increases are moderate. For 1919-38 they average about 0.18 percentage points for the 2nd and 3rd percentage band, or only about a thirty-fifth of its average share; again about 0.18 percentage points for the 4th and 5th percentage band, or only about a twenty-eighth of its average share; and about 0.36 percentage points for the top 5 percent, or only about a seventieth of its average share. It may be doubted that any other set of reasonable assumptions would yield much larger increases. Since nonfederal compensation averaged nearly a twentieth of individuals' total income receipts, the increase of only about a seventieth in the share of the top 5 percent of the population may seem surprising. But it should not, since the effect is produced only by the *difference* between the shares of the upper bands of the population dependent upon nonfederal compensation and the shares of the fractions of the upper bands in the basic variant that move down.

Fifth, changes produced by the adjustment are closely correlated with

changes in the proportion of nonfederal compensation in the total income of the lower 99 percent of the population and in the ratio of the per capita income of the persons dependent upon the former to that of persons dependent upon the latter. Since nonfederal compensation is much less sensitive to cyclical ups and downs than individuals' total income receipts, its proportion in the latter rises appreciably during contractions and declines during expansions. Moreover, the period is characterized by a fairly marked upward trend in the proportion and relative level (per capita) of nonfederal compensation. Presumably, were the analysis made for years after 1938, both would decline markedly, especially after 1941; and so would the increases in the share of the top 5 percent.

Finally, the correlation between the relative size of total or per capita nonfederal compensation and the increases in the shares is closest when the latter are taken *in toto* for the top 5 percent group. It is still close when we distinguish between the increases in the share of the 2nd and 3rd percentage band and those of the 4th and 5th but some divergencies appear, probably because we deal with fairly wide percentage bands of persons dependent upon nonfederal compensation, i.e., operate with 'chunks' whose effects on the shares in the basic variant may be erratic.

Table 81 and Chart 8 present the results of the adjustment of the basic variant for nonfarm population. The assumptions and the procedure are strictly parallel to those underlying the adjustment of the basic variant for the total population. Since at least a preponderant majority of persons dependent upon nonfederal compensation and almost all in the upper brackets reside in nonfarm areas, the application of the adjustment to the nonfarm variant is quite as justified as its application to the variant for the total population.

The level of and changes due to the adjustment are fairly similar to those found above. Indeed, the six conclusions from Table 80 and Chart 7 could be repeated for Table 81 and Chart 8. The only differences result from the higher per capita income of the nonfarm population which makes the ratio of the per capita income of persons dependent upon nonfederal compensation to that of the nonfarm population lower than its ratio to the per capita income of the total population. This places the effect of the adjustment in the nonfarm variant in lower percentage bands than in the basic variant for the total population — more in the 6th and 7th, and less in the 2nd and 3rd. Consequently, the increases in the share of the top 5 percent of the nonfarm population are smaller than those in the share of the corresponding band of the total population — averaging about 0.27 percentage points per year for 1919-38 instead of 0.36. Finally, changes in the increases in the shares of the several percentage bands diverge some-

Table 81

Adjustment for Inclusion of Compensation of Nonfederal Government
Employees and Factors Affecting Its Magnitude
Basic Variant, Nonfarm Population, 1917-1938

	Change in Share of Given Percentage Band Due to Adjustment				Compensation of Nonfederal Employees as % of Income of Lower 99 Percent of Nonfarm Population	Ratio: Per Capita Income of Nonfederal Employees to That of Lower 99 Percent of Nonfarm Population
	2nd & 3rd	4th & 5th	6th & 7th	Top 7		
	(1)	(2)	(3)	(4)		
1917	0.00	0.04	0.02	0.06	3.94	0.90
1918	0.00	0.03	0.02	0.06	3.92	0.79
1919	0.00	0.05	0.04	0.09	3.91	0.82
1919	0.00	0.01	0.04	0.05	3.66	0.67
1920	0.00	0.01	0.04	0.05	3.91	0.69
1921	0.02	0.13	0.06	0.20	5.44	1.05
1922	0.00	0.11	0.10	0.20	5.40	0.99
1923	0.00	0.05	0.03	0.08	4.90	0.85
1924	0.00	0.09	0.06	0.16	5.26	0.94
1925	0.00	0.11	0.04	0.16	5.28	0.96
1926	0.00	0.13	0.02	0.15	5.26	0.94
1927	0.01	0.15	0.03	0.19	5.64	1.03
1928	0.02	0.16	0.04	0.22	5.81	1.04
1929	0.00	0.14	0.04	0.18	5.72	0.98
1930	0.04	0.17	0.03	0.25	6.43	1.11
1931	0.13	0.24	0.12	0.48	7.75	1.32
1932	0.45	0.31	0.14	0.90	9.70	1.65
1933	0.36	0.22	0.21	0.79	9.24	1.58
1934	0.17	0.30	0.12	0.60	8.01	1.42
1935	0.15	0.36	0.10	0.60	7.75	1.41
1936	0.12	0.35	0.03	0.50	7.40	1.34
1937	0.11	0.30	0.08	0.49	7.27	1.31
1938	0.22	0.21	0.24	0.68	8.26	1.46
1929	0.01	0.16	0.04	0.21	6.04	1.01
1930	0.06	0.21	0.04	0.31	6.98	1.16
1931	0.15	0.25	0.13	0.53	8.24	1.33
1932	0.51	0.34	0.15	1.00	10.14	1.69
1933	0.43	0.25	0.22	0.89	9.63	1.64
1934	0.20	0.33	0.13	0.66	8.39	1.45
1935	0.17	0.39	0.10	0.66	8.19	1.44
1936	0.11	0.32	0.03	0.46	7.47	1.30
1937	0.12	0.31	0.08	0.50	7.51	1.31
1938	0.21	0.21	0.24	0.67	8.51	1.43

Because of rounding, columns may not add to total.

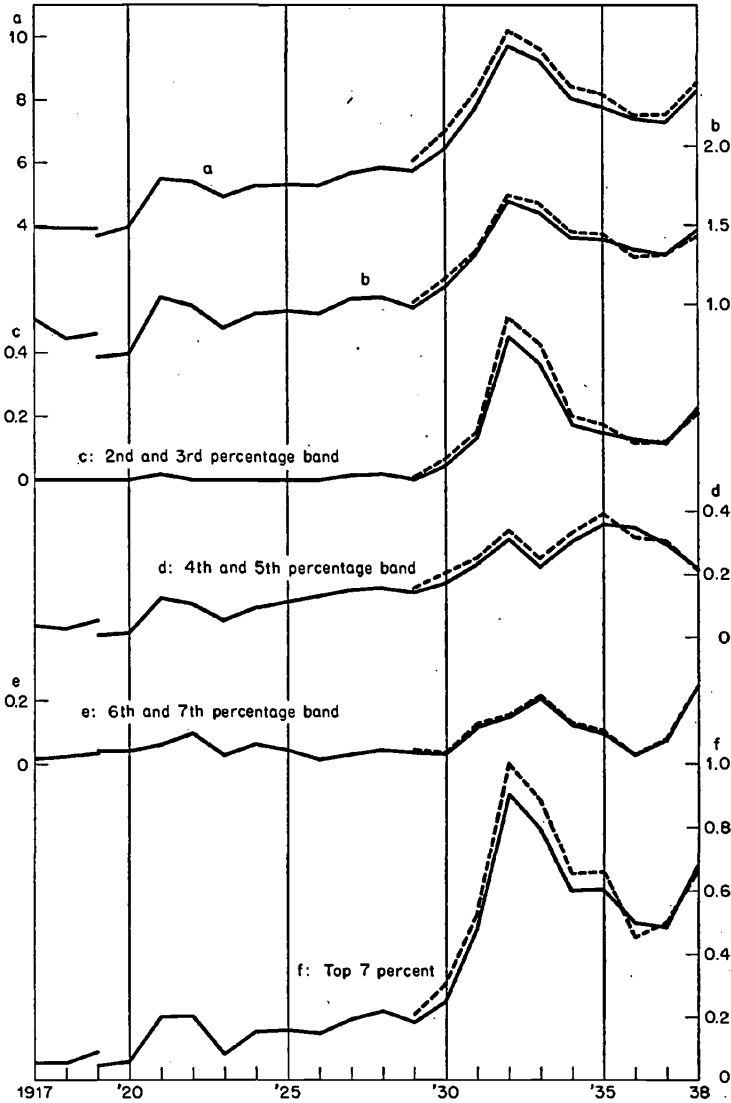
Column

- 1-4 Table 119: column 2 minus column 1.
- 5 Column 5 of Table 115 is divided by column 13 of Table 114 to yield non-federal compensation as a percentage of income of nonfarm population. This percentage is divided by the share of income received by the lower 99 percent of nonfarm population (100 percent minus the share of the top 1 percent, Table 119, col. 1).
- 6 Column 5 divided by the percentage that persons dependent upon nonfederal

Chart 8

Adjustment for Inclusion of Compensation of Nonfederal Government Employees, Basic Variant, Nonfarm Population, 1917-1938

- a Compensation of nonfederal employees as % of income of lower 99 percent of nonfarm population
- b Ratio: per capita income of nonfederal employees to that of lower 99 percent of nonfarm population
- c, d, e, & f Change in share of given percentage band due to adjustment (% of income of nonfarm population)



Notes to Table 81 concluded:

compensation (Table 115, col. 4) are of 99 percent of the nonfarm population (99 percent of col. 1 of Table 115).

what more on Chart 8 than on Chart 7, although the correlation of increases in the share of the combined top 7 percent with the relative level of non-federal compensation (total or per capita) is as close as was the correlation in Chart 7 between the increases in the share of the top 5 percent of the total population and the movement of nonfederal compensation.

2 *Imputed Rent*

Imputed rent on owner-occupied dwellings is not reported on tax returns, nor did we include it in individuals' total income receipts in calculating the basic variant.² Yet, in a country where home owners are common and people can usually choose whether to buy or to rent, there are good reasons for including imputed rent in economic income. To exclude it and to include net income from residences rented to others is inconsistent. We thought it worth while to experiment with including imputed rent to see how much the shares of upper income groups would be modified.

Total imputed rent on owner-occupied dwellings is estimated annually in deriving national income by industrial source, although with a wide margin of error. But even accepting these estimates at their face value, we must still find out how this rent is distributed by income classes and what its proportion is in total economic income at various levels of per capita income. The only reasonably complete information is for 1935-36 in the Consumer Expenditures Study. In the distribution of family income by income per family, we calculate the proportion imputed rent is of total income for each size of income class. Moreover, total imputed rent is given for all single individuals, and we can apportion it by income size classes on the basis of its distribution for families. The error in this allocation is not large because imputed rent assigned to single individuals is only 3 percent of the countrywide total.³ We can also calculate the proportion of imputed rent in economic income for the total population; of imputed rent in economic income for each upper percentage band; and finally, the ratios of the latter proportions to the former. Then, assuming that these ratios are the same for each year as they were in 1935-36, we apply them to the annually changing proportion of imputed rent in individuals' total income receipts, deriving for each upper percentage band an

² Because imputed rent on owner-occupied farm dwellings could not be separated from net income of farmers for 1919-38, our total income receipts for that period do include this item even though they exclude imputed rent on nonfarm owner-occupied dwellings. However, judging by figures for other years, imputed farm rent is only 10-15 percent of the imputed rent for the country as a whole; and the consequent error in our denominator is fairly small (much less than 1 percent of total income receipts).

³ *Consumer Expenditures in the United States*, Table 7, p. 46.

annual series of the proportion of imputed rent in its income. From these proportions we recalculate the shares of the upper percentage bands in income including imputed rent.

The details of the procedure can best be learned by consulting Appendix 4, Section B. Here we give merely the general characteristics, and point out its three major limitations. First, we use proportions of imputed rent in economic income derived from averages for income size classes: these averages fail to reveal intra-class variations in the proportions. Second, the distribution derived from the Consumer Expenditures Study is by classes of economic income per consuming unit (a family or an individual), not per capita.⁴ This means that in the upper percentage bands of that distribution, single individuals and small families are underrepresented and large families overrepresented. Since the proportion of imputed rent in income tends to be lower for single individuals and small families, its proportion in the upper percentage bands of the distribution we are using is overestimated compared with what it would be in a distribution by income per capita. Consequently, the adjustment should have been larger. Finally, it is incorrect to assume that the ratio of the proportion of imputed rent in the income of the upper percentage bands to its proportion in total income receipts remains the same throughout the period — at the levels of 1935-36.

Because of these limitations, the adjustment is not of definitive value. It suggests the order of magnitude and the general characteristics of changes introduced by taking account of imputed rent but it does not yield a revised variant that truly measures the shares of upper percentage bands in a distribution of income including imputed rent. The second, and most important, qualification suggests that the average adjustment could be doubled at most without influencing the year to year changes. The third qualification would probably not affect the year to year changes significantly, since house ownership and the income class ratio of house expenses to income are determined by slowly changing, long standing institutional factors. We may, therefore, examine the effects of the adjustment in the belief that the general conclusions are not invalidated by the limitations of our procedure (Table 82 and Chart 9).

First, the effect on the basic variant for total population is chiefly on the share of the top 1 percent. The changes in the share of the 2nd and 3rd percentage band are minor, and those in the 4th and 5th percentage band

⁴ While the Consumer Expenditures Study distribution can be converted to one by income per capita, and has in fact been so converted by us for purposes of other analysis, it is not possible to do so and still determine the proportion of imputed rent in total income.

Table 82

Adjustment for Inclusion of Imputed Rent and the Factor that Determines Its Magnitude: Basic Variant, Total Population, 1913-1947

	Change in Share of Given Percentage Band Due to Adjustment			Imputed Rent as % of Total Income Receipts (excl. imputed rent)
	<i>Top 1</i>	<i>2nd & 3rd</i>	<i>Top 5</i>	
	(1)	(2)	(3)	
1913	-0.15			3.43
1914	-0.14			3.61
1915	-0.14			3.42
1916	-0.13			2.95
1917	-0.10	-0.01	-0.11	2.45
1918	-0.08	-0.01	-0.09	2.28
1919	-0.08	-0.01	-0.09	2.19
1919	-0.09	-0.01	-0.10	2.38
1920	-0.10	-0.02	-0.12	2.86
1921	-0.16	-0.03	-0.20	4.05
1922	-0.16	-0.03	-0.18	3.93
1923	-0.13	-0.02	-0.15	3.52
1924	-0.15	-0.03	-0.18	3.97
1925	-0.15	-0.02	-0.17	3.64
1926	-0.13	-0.02	-0.15	3.27
1927	-0.14	-0.02	-0.15	3.22
1928	-0.13	-0.02	-0.14	2.96
1929	-0.12	-0.02	-0.14	2.91
1930	-0.13	-0.02	-0.15	3.18
1931	-0.11	-0.02	-0.14	2.92
1932	-0.11	-0.02	-0.13	2.80
1933	-0.10	-0.02	-0.12	2.72
1934	-0.07	-0.01	-0.09	2.03
1935	-0.07	-0.01	-0.08	1.96
1936	-0.07	-0.01	-0.08	1.75
1937	-0.07	-0.01	-0.08	1.90
1938	-0.08	-0.02	-0.09	2.23
1929	-0.15	-0.02	-0.17	3.49
1930	-0.15	-0.02	-0.17	3.55
1931	-0.14	-0.03	-0.18	3.58
1932	-0.14	-0.03	-0.18	3.59
1933	-0.10	-0.02	-0.12	2.67
1934	-0.07	-0.02	-0.08	1.90
1935	-0.06	-0.01	-0.07	1.66
1936	-0.06	-0.01	-0.07	1.58
1937	-0.06	-0.01	-0.07	1.69
1938	-0.07	-0.02	-0.09	2.16
1939	-0.07	-0.02	-0.09	2.12
1940	-0.07	-0.01	-0.08	2.01
1941	-0.06	-0.01	-0.07	1.83
1942	-0.05	-0.01	-0.06	1.74
1943	-0.04	-0.01	-0.05	1.66
1944	-0.04	-0.01	-0.05	1.75
1945	-0.05	-0.01	-0.06	1.80
1946	-0.04	-0.01	-0.04	1.34
1947	-0.03	-0.01	-0.04	1.20

Because of rounding, columns may not add to total.

Chart 9
 Adjustment for Inclusion of Imputed Rent
 Basic Variant, Total Population, 1913-1947

a Imputed rent as % of total income receipts
 b & c Change in share of given percentage band due to adjustment (% of total income receipts)



Notes to Table 82:

Column

1-3 Table 118: column 3 minus column 1.

4 Column 6 of Table 115 divided by column 12 of Table 114.

so small that confining the figures to two decimal places removes them entirely. The reason is that while the income class differences in the proportion of imputed rent in income in the 1935-36 distribution are large, they become small when weighted by the low countrywide proportion. The results would be altered only if the income class differences in the rent-income proportions proved to differ widely from those assumed, or if the weight of imputed rent in countrywide income were much heavier than that derived from the national income series. Neither contingency is probable; and the conclusion that the adjustment affects significantly the share of the top 1 percent alone is likely to stand.

Second, the change introduced by the adjustment is negative, i.e., it reduces the share of the top 1 percent and, in very minor degree, that of the 2nd and 3rd percentage band — because the proportion of imputed rent in total income is lower for the top 1 percent and also, but only slightly, for the 2nd and 3rd percentage band than for the total population. Hence adding imputed rent raises the income of the top 1 percent less than it raises the income of the total population, and in consequence reduces the share of the former in the latter. If the analysis were carried to lower percentage bands we would reach levels at which the adjustment would raise the share because their proportion of imputed rent in income is higher than that for the total population. Indeed, reductions in the shares of upper percentage bands must be compensated for by increases in those of lower bands since the total of the shares of all bands must be 100 percent.

Third, year to year changes in the adjustment and in the proportion of imputed rent in individuals' total income receipts are closely correlated (see especially Chart 9) since the countrywide proportion is the sole factor that can produce annual changes in the adjustment. The higher this proportion the bigger the reduction in the share of the top 1 percent; and, within the limits of the 2 decimal place entries, also in the share of the 2nd and 3rd percentage band. Conversely, the smaller this proportion the smaller the reduction in the share of these upper bands.

In the adjustment for including imputed rent in the nonfarm variant (Table 83 and Chart 10), the procedure is parallel to that used in the basic variant for total population except that the over-all proportions are for imputed rent on nonfarm dwellings in the income of the nonfarm population. And since it is impossible to separate out farm families from the 1935-36 distribution and still study the income class proportions of imputed rent in total income, we must again use those calculated from the distribution for total population. This qualifies our results even further; however, imputed rent on farm dwellings is a relatively small proportion of total imputed rent.

Table 83

Adjustment for Inclusion of Imputed Rent and the Factor that Determines Its Magnitude: Basic Variant, Nonfarm Population, 1913-1947

	Change in Share of Given Percentage Band Due to Adjustment				Imputed Rent as % of Income of Nonfarm Popu- lation (excl. imputed rent)
	<i>Top 1</i> (1)	<i>2nd & 3rd</i> (2)	<i>4th-7th</i> (3)	<i>Top 7</i> (4)	
1913	-0.18				3.68
1914	-0.16				3.89
1915	-0.17				3.68
1916	-0.16				3.18
1917	-0.12	-0.01	0.01	-0.12	2.70
1918	-0.11	-0.01	0.01	-0.11	2.57
1919	-0.10	-0.01	0.01	-0.10	2.43
1919	-0.12	-0.02	0.01	-0.12	2.91
1920	-0.13	-0.02	0.01	-0.13	3.36
1921	-0.18	-0.03	0.01	-0.21	4.57
1922	-0.18	-0.03	0.01	-0.20	4.44
1923	-0.15	-0.02	0.01	-0.16	3.97
1924	-0.18	-0.03	0.01	-0.20	4.50
1925	-0.17	-0.03	0.01	-0.19	4.16
1926	-0.15	-0.03	0.01	-0.17	3.69
1927	-0.16	-0.02	0.01	-0.17	3.64
1928	-0.15	-0.02	0.01	-0.16	3.32
1929	-0.14	-0.02	0.01	-0.15	3.28
1930	-0.14	-0.02	0.01	-0.16	3.52
1931	-0.12	-0.02	*	-0.14	3.20
1932	-0.11	-0.02	0.01	-0.13	3.04
1933	-0.11	-0.02	0.00	-0.13	3.01
1934	-0.08	-0.02	*	-0.09	2.28
1935	-0.08	-0.02	0.01	-0.09	2.22
1936	-0.08	-0.01	0.01	-0.08	1.98
1937	-0.08	-0.01	0.01	-0.09	2.14
1938	-0.08	-0.02	*	-0.10	2.50
1929	-0.16	-0.02	0.01	-0.17	3.55
1930	-0.15	-0.02	0.01	-0.16	3.50
1931	-0.13	-0.02	*	-0.16	3.47
1932	-0.13	-0.02	*	-0.15	3.39
1933	-0.09	-0.02	0.00	-0.11	2.50
1934	-0.06	-0.01	*	-0.07	1.68
1935	-0.05	-0.01	0.01	-0.06	1.52
1936	-0.05	-0.01	0.01	-0.06	1.44
1937	-0.06	-0.01	0.01	-0.06	1.63
1938	-0.07	-0.02	*	-0.08	2.11
1939	-0.07	-0.02	0.01	-0.08	2.09
1940	-0.07	-0.01	0.01	-0.08	1.98
1941	-0.06	-0.01	0.01	-0.07	1.85
1942	-0.05	-0.01	0.01	-0.06	1.81
1943	-0.05	-0.01	0.01	-0.05	1.73
1944	-0.05	-0.01	0.01	-0.05	1.81
1945	-0.05	-0.01	0.01	-0.06	1.84
1946	-0.04	-0.01	*	-0.04	1.34
1947	-0.03	-0.01	*	-0.03	1.17

Because of rounding, columns may not add to total.

* Less than ± 0.005 percent.

For notes see page 325.

Chart 10

Adjustment for Inclusion of Imputed Rent
 Basic Variant, Nonfarm Population, 1913-1947

a Imputed rent as % of income of nonfarm population
 b, c, & d Change in share of given percentage band due to adjustment
 (% of income of nonfarm population)



The results are similar to those discussed in connection with Table 82 and Chart 9 except that the analysis is pushed to lower percentage bands, where the sign of the adjustment is positive. The major change is again in the share of the top 1 percent; and here too it is not large, averaging less than a hundredth of the top 1 percent's share in the basic variant. Here too the share of the top 1 percent is reduced, and also, though much less absolutely and relatively, that of the 2nd and 3rd percentage band. Again, year to year changes in the adjustment and annual fluctuations in the proportion of imputed rent in the income of the nonfarm population are closely correlated.

3 *Exclusion of Federal Income Taxes*

The basic variant, and the adjustments for scope discussed so far, are guided by the concept of economic income adhered to in national income measurement. Income excluding taxes or including capital gains may be urged as a better approximation to the annual flow of means at the disposal of individuals. Indeed, the entire process of the redistribution of income, once it has accrued from economic activity proper, is important since it may yield a distribution of disposable income among individuals quite different from that of economic income.

Tax returns permit an adequate coverage of two items involved in the transition from economic to disposable income: federal income taxes and gains and losses on sales of assets. In this section we deal with the changes in the shares of upper income groups due to deducting federal income taxes.

There is little doubt that practically all federal income taxes paid are reported on tax returns. The sole omissions are the additional taxes collected as a result of audit — a minor fraction either of total collections or of the tax payments by any single percentage band in our basic variant. The published data provide also considerable detail on federal income taxes in the various net income classes, tax definition. Hence deriving the shares of upper groups in income from which federal income taxes have been deducted is not difficult. We merely deduct federal income taxes from

Notes to Table 83:

Column

- 1-4 Table 119: column 3 minus column 1.
- 5 Imputed rent on owner-occupied nonfarm dwellings divided by income of nonfarm population (Table 115, col. 2). The imputed rent series is that in Table 115, column 6, adjusted in 1913-19 and in 1929-47 to exclude rent on owner-occupied farm dwellings (for 1919-38 it is already excluded). The adjustment for 1913-19 is from unpublished estimates by W. I. King; that for 1929-47 from unpublished estimates by the Department of Commerce, National Income Division.

economic income, as already derived for the various net income classes, tax definition; recompute the income, thus reduced, on a per capita basis for each class; rearrange the classes, if necessary; and draw new partition lines.

Appendix 4, Section C, provides an illustrative calculation for 1929. If we confine the analysis to deducting federal income taxes (instead of all direct taxes), the basic qualification of the procedure lies in operating with whole size of income classes: this disregards the intra-class variations in the proportion of taxes in economic income. But this limitation is characteristic of our analysis throughout, even of our basic variant. It renders the estimates crude and insensitive but does not consistently bias the long or short term changes they reveal. The broad results for the upper percentage bands in the basic variant for total population may be summarized from Table 84 and Chart 11.

First, because federal income taxes are progressive, their impact is naturally greatest at the top income levels. Consequently, excluding taxes reduces the share of the top 1 percent. But except for 1918 and 1920 and especially during World War II and the years following it, when taxes were heavy, the share of the 2nd and 3rd percentage band is increased; and that of the 4th and 5th percentage band is increased in all years except the ones associated with World War II and those immediately following it. The shares of percentage bands below the top 1 percent increase in these years because their proportion of taxes in income was lower than the countrywide proportion of taxes in income.

Second, the reduction in the share of the top 1 percent is relatively substantial only through a small part of the period prior to 1940, notably the years of World War I, 1919, 1936, and 1937. But even in these years it is not much more than about a tenth of the share. Only beginning with 1940 does it begin to be large, reaching in 1943 over four-tenths of the share.

Third, the effects of deducting federal income taxes naturally vary with changes in their proportion in individuals' total income receipts (see Chart 11). But the direction of the association depends upon whether we view the changes in the share of the top 1 percent or in the shares of the 2nd and 3rd, and 4th and 5th percentage bands. The reduction in the share of the top 1 percent is directly and closely correlated with changes in the proportion of federal income taxes in total income receipts of individuals: the higher the proportion, the larger the reduction; the lower the proportion, the smaller the reduction. But the association of changes in the share of the 2nd and 3rd, and 4th and 5th percentage bands with those in the countrywide proportion of taxes in total income receipts varies. During World Wars I and II (and the few years since World War II), when the over-all proportion of taxes in income was at peak levels, the changes in

Table 84

Effect of Deducting Federal Income Taxes
Basic Variant, Total Population, 1914-1947

	Change in Share of Given Percentage Band Due to Adjustment			Federal Income Taxes as % of Total Income Receipts Excl. Taxes
	<i>Top 1</i> (1)	<i>2nd & 3rd</i> (2)	<i>4th & 5th</i> (3)	(4)
1914	-0.08			0.11
1915	-0.12			0.16
1916	-0.36			0.43
1917	-1.30	0.04	0.05	1.63
1918	-1.52	-0.03	0.02	2.09
1919	-1.52	*	0.03	2.05
1919	-1.51	*	0.03	2.03
1920	-1.12	-0.03	*	1.63
1921	-0.98	0.02	0.03	1.37
1922	-1.12	0.01	0.05	1.52
1923	-0.73	*	0.02	1.01
1924	-0.84	0.03	0.03	1.06
1925	-0.87	0.05	0.04	1.05
1926	-0.83	0.04	0.04	1.00
1927	-0.94	0.05	0.05	1.13
1928	-1.29	0.08	0.07	1.56
1929	-1.07	0.07	0.06	1.26
1930	-0.55	0.03	0.03	0.67
1931	-0.34	0.02	0.02	0.42
1932	-0.55	0.01	0.02	0.72
1933	-0.68	0.02	0.03	0.84
1934	-0.82	0.03	0.04	1.00
1935	-0.96	0.04	0.04	1.18
1936	-1.55	0.05	0.07	1.94
1937	-1.32	0.03	0.06	1.67
1938	-0.96	0.01	0.04	1.22
1929	-1.08	0.08	0.06	1.28
1930	-0.56	0.03	0.03	0.68
1931	-0.34	0.02	0.02	0.42
1932	-0.56	0.01	0.02	0.74
1933	-0.69	0.02	0.03	0.87
1934	-0.84	0.03	0.04	1.04
1935	-0.96	0.04	0.04	1.18
1936	-1.53	0.04	0.06	1.91
1937	-1.31	0.02	0.06	1.65
1938	-0.96	0.01	0.04	1.21
1939	-1.05	0.01	0.04	1.37
1940	-1.50	0.01	0.06	2.05
1941	-2.37	-0.14	-0.02	4.46
1942	-2.93	-0.36	-0.13	8.22
1943	-3.91	-0.56	-0.18	13.59
1944	-2.84	-0.47	-0.16	11.67
1945	-3.09	-0.58	-0.18	11.97
1946	-2.95	-0.57	-0.18	10.45
1947	-2.63	-0.52	-0.17	10.71

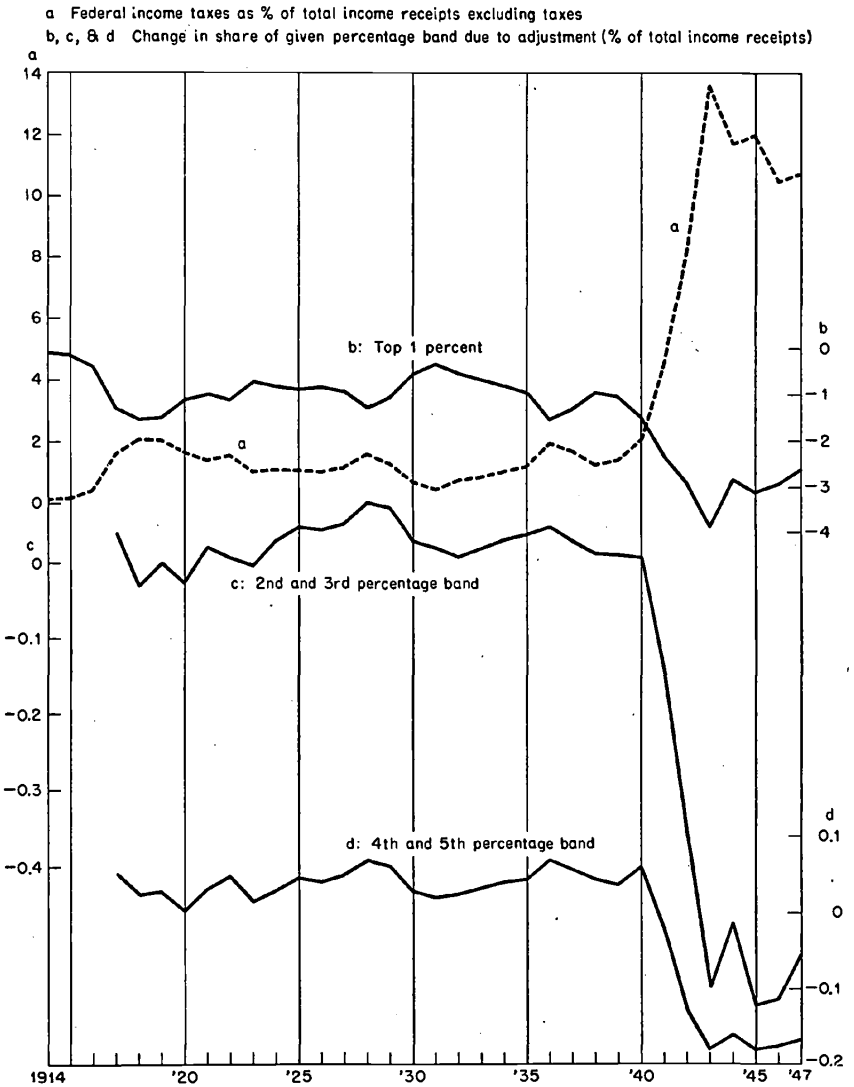
* Less than ± 0.005 percent.

Column

1-3 Table 118: column 4 minus column 1.

4 Column 7 of Table 115, divided by column 12 of Table 114 minus column 7 of Table 115.

Chart 11
 Effect of Deduction of Federal Income Taxes
 Basic Variant, Total Population, 1914-1947



the shares of the 2nd and 3rd, and 4th and 5th percentage bands and in the proportion are *negatively* correlated, i.e., correlated in the same way as are changes in the share of the top 1 percent throughout the period. During the remaining years, roughly from 1925-1940, when changes in

the shares of the 2nd and 3rd, and 4th and 5th percentage bands are all positive, they are positively correlated with changes in the countrywide proportion of taxes in income receipts; and hence negatively correlated with changes in the share of the top 1 percent. These results reflect the varying ratio of the proportion of taxes in income within each percentage band to the countrywide proportion. But whatever the direction of changes in the shares of the 2nd and 3rd, and 4th and 5th percentage bands, the changes themselves are minor.

Table 85 and Chart 12 summarize the adjustment for the basic variant for nonfarm population, the population which accounts for almost all federal income taxes paid. The results parallel those observed for the basic variant for the total population. Here again deducting taxes reduces chiefly the share of the top 1 percent; those in the lower bands are reduced only during World War I, the years immediately following it and, most markedly, those associated with and following World War II. Here too changes in the lower bands are quite small, whether positive or negative, throughout the period excepting again the recent years. Here, too, annual changes in the share of the top 1 percent are correlated negatively with those in the countrywide proportion of taxes in income, whereas changes in the shares of the 2nd and 3rd, 4th and 5th, and, also in this case, the 6th and 7th percentage band are negatively correlated only during 1918, 1919, 1921, 1925, and 1941-46.

The small effect of deducting federal income taxes on the shares of upper income groups during all except the very recent years in the period does not easily square with general notions concerning the impact of federal income taxes on upper income classes. But in Table 86 and Chart 13 the results are checked and explained for the basic variant for total population. First, we derive the federal income taxes chargeable to each income class included in the successive percentage bands of the basic variant; then, if no income class shifts from one band to another when taxes are deducted from economic income, as is true in our calculations, we can show: (a) the proportion of taxes in income within the original percentage band of the basic variant (col. 2, 3, and 4);⁵ (b) the countrywide proportion of taxes in income (col. 1), identical with column 4 of Table 84; (c) the relative change in the share of the given percentage band due to deducting taxes (col. 5, 6, and 7); and (d) the change under (c) as the ratio of (a) plus 100 to (b) plus 100.

Since item (c) represents the ratio of income including taxes paid,

⁵ The calculations can be carried through in terms of the proportion of taxes in income, either excluding or including taxes consistently throughout. The present calculations use proportions of taxes in economic income excluding taxes.

Table 85

Effect of Deducting Federal Income Taxes
Basic Variant, Nonfarm Population, 1914-1947

	Change in Share of				Federal Income Taxes as % of Income of Nonfarm Population Excl. Taxes
	Given Percentage Band Due to Adjustment				
	Top 1 (1)	2nd & 3rd (2)	4th & 5th (3)	6th & 7th (4)	
1914	-0.09				0.13
1915	-0.13				0.19
1916	-0.42				0.51
1917	-1.53	0.03	0.05	0.06	1.99
1918	-1.81	-0.02	0.01	0.04	2.60
1919	-1.79	*	0.03	0.04	2.53
1919	-1.77	*	0.03	0.04	2.50
1920	-1.25	-0.04	0.01	0.02	1.92
1921	-1.07	-0.01	0.04	0.04	1.55
1922	-1.22	-0.01	0.03	0.05	1.73
1923	-0.80	-0.02	0.02	0.02	1.14
1924	-0.93	0.02	0.04	0.03	1.21
1925	-0.98	0.05	0.05	0.04	1.20
1926	-0.92	0.04	0.04	0.04	1.14
1927	-1.04	0.06	0.05	0.04	1.28
1928	-1.43	0.09	0.07	0.06	1.76
1929	-1.20	0.08	0.06	0.05	1.42
1930	-0.61	0.03	0.03	0.03	0.74
1931	-0.37	0.02	0.02	0.02	0.46
1932	-0.58	*	0.02	0.02	0.79
1933	-0.73	0.01	0.03	0.02	0.94
1934	-0.90	0.02	0.04	0.04	1.12
1935	-1.07	0.02	0.05	0.05	1.34
1936	-1.72	0.04	0.07	0.06	2.20
1937	-1.46	0.02	0.05	0.05	1.89
1938	-1.06	*	0.04	0.04	1.37
1929	-1.20	0.09	0.06	0.05	1.44
1930	-0.62	0.03	0.03	0.03	0.76
1931	-0.38	0.02	0.02	0.02	0.46
1932	-0.60	*	0.02	0.02	0.81
1933	-0.75	0.02	0.03	0.03	0.96
1934	-0.91	0.02	0.04	0.04	1.14
1935	-1.08	0.02	0.05	0.05	1.35
1936	-1.67	0.03	0.07	0.06	2.12
1937	-1.45	0.02	0.05	0.05	1.88
1938	-1.05	*	0.04	0.04	1.36
1939	-1.14	*	0.04	0.04	1.53
1940	-1.64	0.01	0.03	0.06	2.30
1941	-2.56	-0.17	-0.03	0.04	5.05
1942	-3.15	-0.38	-0.11	-0.05	9.52
1943	-4.16	-0.62	-0.16	-0.08	15.68
1944	-2.99	-0.51	-0.16	-0.08	13.35
1945	-3.24	-0.63	-0.19	-0.08	13.64
1946	-3.11	-0.62	-0.18	-0.08	12.02
1947	-2.77	-0.55	-0.17	-0.07	12.32

* Less than ± 0.005 percent.

Column

1-4 Table 119: column 4 minus column 1.

5 Table 115: column 7, divided by column 2 minus column 7.

Chart 12

**Effect of Deduction of Federal Income Taxes
Basic Variant, Nonfarm Population, 1914-1947**

a Federal income taxes as % of income of nonfarm population excluding taxes
 b, c, d, & e Change in share of given percentage band due to adjustment
 (% of income of nonfarm population)

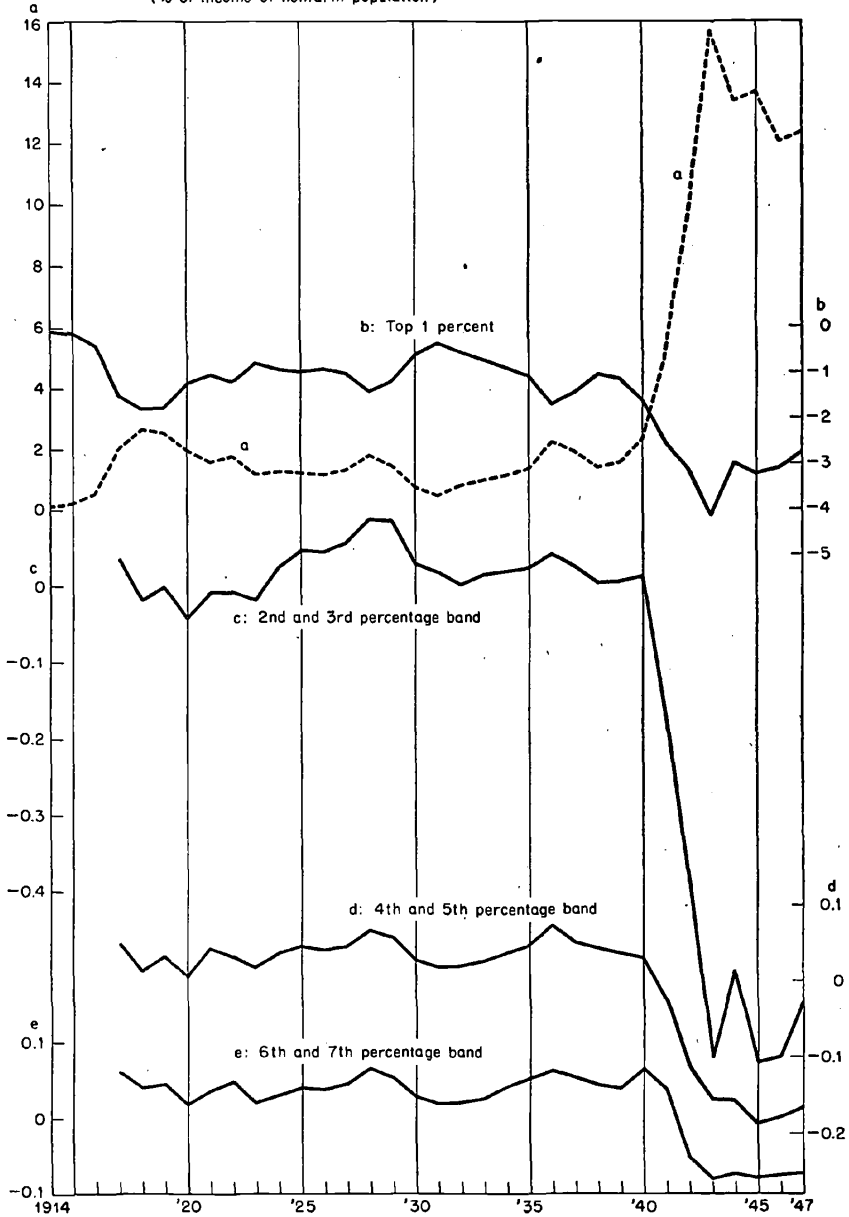


Table 86

Ratios of Shares of Upper Income Groups Before to Shares After Deduction of Federal Income Taxes: Basic Variant, Total Population, 1914-1947

	Federal Income Taxes as % of Income Receipts Excl. Taxes				Ratio of Shares		
	Country- wide (1)	Top 1 percent (2)	2nd & 3rd per- centage band (3)	4th & 5th per- centage band (4)	Top 1 percent (5)	2nd & 3rd per- centage band (6)	4th & 5th per- centage band (7)
1914	0.11	0.76			1.01		
1915	0.16	1.01			1.01		
1916	0.43	2.82			1.02		
1917	1.63	11.92	0.94	0.56	1.10	0.99	0.99
1918	2.09	16.00	2.64	1.51	1.14	1.00	0.99
1919	2.05	15.59	2.07	1.37	1.13	1.00	0.99
1919	2.03	15.59	2.05	1.40	1.13	1.00	0.99
1920	1.63	11.76	2.11	1.56	1.10	1.00	1.00
1921	1.37	9.32	1.06	0.77	1.08	1.00	0.99
1922	1.52	10.76	1.44	0.50	1.09	1.00	0.99
1923	1.01	7.41	1.06	0.68	1.06	1.00	1.00
1924	1.06	8.05	0.61	0.45	1.07	1.00	0.99
1925	1.05	7.88	0.36	0.11	1.07	0.99	0.99
1926	1.00	7.40	0.36	0.14	1.06	0.99	0.99
1927	1.13	8.18	0.37	0.13	1.07	0.99	0.99
1928	1.56	11.12	0.39	0.18	1.09	0.99	0.99
1929	1.26	9.32	0.18	0.01	1.08	0.99	0.99
1930	0.67	4.86	0.24	0.14	1.04	1.00	1.00
1931	0.42	3.09	0.15	0.09	1.03	1.00	1.00
1932	0.72	5.20	0.61	0.32	1.04	1.00	1.00
1933	0.84	6.78	0.58	0.26	1.06	1.00	0.99
1934	1.00	8.35	0.54	0.25	1.07	1.00	0.99
1935	1.18	9.94	0.62	0.36	1.09	0.99	0.99
1936	1.94	15.35	1.23	0.49	1.13	0.99	0.99
1937	1.67	13.18	1.27	0.44	1.11	1.00	0.99
1938	1.22	10.42	1.03	0.32	1.09	1.00	0.99
1929	1.28	9.32	0.16	0.04	1.08	0.99	0.99
1930	0.68	4.86	0.24	0.14	1.04	1.00	1.00
1931	0.42	3.09	0.16	0.08	1.03	1.00	1.00
1932	0.74	5.20	0.61	0.34	1.04	1.00	1.00
1933	0.87	6.78	0.58	0.27	1.06	1.00	0.99
1934	1.04	8.35	0.54	0.24	1.07	1.00	0.99
1935	1.18	9.94	0.62	0.35	1.09	0.99	0.99
1936	1.91	15.35	1.22	0.52	1.13	0.99	0.99
1937	1.65	13.18	1.28	0.42	1.11	1.00	0.99
1938	1.21	10.42	1.02	0.32	1.09	1.00	0.99
1939	1.37	11.23	1.20	0.64	1.10	1.00	0.99
1940	2.05	16.81	1.96	0.66	1.14	1.00	0.99
1941	4.46	31.86	6.94	4.93	1.26	1.02	1.00
1942	8.22	52.65	15.96	12.27	1.41	1.07	1.04
1943	13.59	94.88	27.50	20.30	1.72	1.12	1.06
1944	11.67	66.97	23.62	17.67	1.50	1.11	1.05
1945	11.97	72.51	25.79	18.52	1.54	1.12	1.06
1946	10.45	64.54	22.85	16.25	1.49	1.11	1.05
1947	10.71	60.52	22.30	16.33	1.45	1.10	1.05

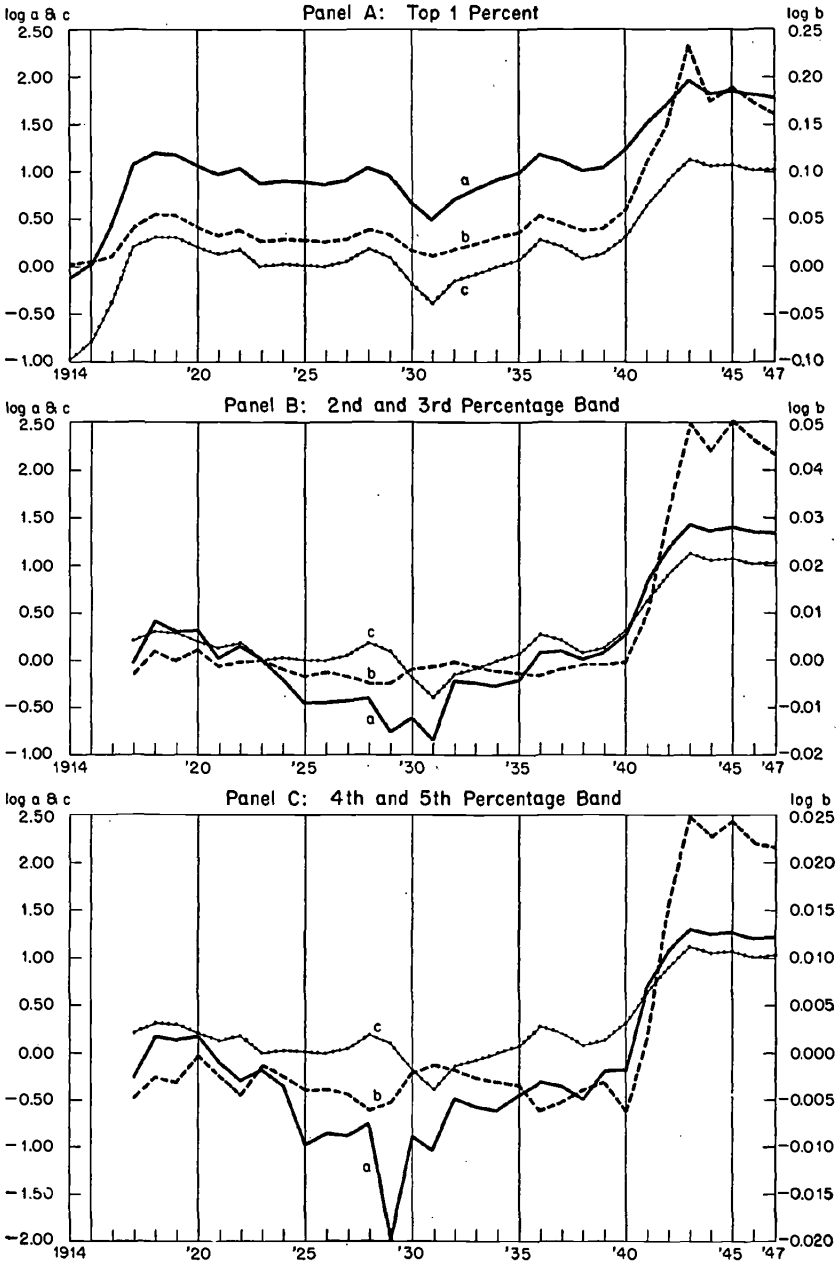
Column

- 1 Table 84, column 4.
- 2-4 (a) Total income receipts (Table 114, col. 12) are multiplied by the share of the given percentage band of the basic variant (Table 118, col. 1); (b) total income receipts excluding federal income taxes (col. 12 of Table 114 minus col. 7 of Table 115) are multiplied by the share of the given percentage band adjusted to exclude federal income taxes (Table 118, col. 4); (c) the product calculated in (b) is subtracted from that calculated in (a) to yield federal income taxes for the given percentage band; (d) the amount in (c) is divided by that derived in (b).
- 5-7 Columns 2-4 respectively plus 100, divided by column 1 plus 100.

Chart 13

Percentage Federal Income Taxes Are of Income Receipts Excluding Taxes
 Basic Variant, Total Population, 1914-1947

- a Federal income taxes as % of income receipts excluding taxes, given percentage band
- b Ratio of share before taxes to share after taxes, given percentage band
- c Federal income taxes as % of total income receipts excluding taxes, countrywide



expressed as a multiple of the average per capita income (including taxes) for the country, to income excluding taxes paid, also expressed as a multiple of the average per capita income (excluding taxes) for the country, it should equal the share of the given percentage band in the basic variant divided by its share after income taxes have been deducted. And it does indeed. To use a numerical illustration: for 1917 the entry in column 5, 1.10, equals 1.1192 (from col. 2) divided by 1.0163 (from col. 1); and it equals also the share of the top 1 percent in the basic variant, 14.16 percent (Table 118, col. 1), divided by its share adjusted to exclude federal income taxes, 12.86 percent (Table 118, col. 4).

Only for the top 1 percent does the proportion of taxes in income consistently exceed the countrywide proportion; and even for this top 1 percent, it is quite high only for 1918, 1919, and 1936. But it rises spectacularly in the years beginning with 1940. For the 2nd and 3rd, and 4th and 5th percentage bands, the proportion of taxes in income is lower in most years than the countrywide proportion; and so, obviously, would be the proportion for percentage bands further down the scale. The recent years again constitute a striking exception.

Chart 13 reveals an aspect of the relation not evident so far: annual changes in the proportion of taxes in income for the top 1 percent and for the country as a whole are quite similar, except that the former are of much wider amplitude. Because of this close similarity in pattern and consistent difference in relative amplitude, the ratios for the top 1 percent (Table 86, col. 5), which measure the relative reduction in the share effected by deducting taxes, move in close correlation with the proportion of taxes for the country as a whole. The reason is that tax payments by the top 1 percent constitute an overwhelming proportion of total tax payments, never, except in 1920 and the years since 1940, less than 85 percent and often more than 90 percent. As long as the share of the top 1 percent in total income receipts varies so much less than its share in taxes — as it does up to 1940 — the proportions in columns 1 and 2 of Table 86 are similar to percentages of one and the same numerator (i.e., taxes) in two denominators, one of which (the share of the top 1 percent in the basic variant, say, about 14.3 percent) is consistently about a seventh of the other (individuals' total income receipts, i.e., 100 percent).

This is not true of the shares of the 2nd and 3rd, and 4th and 5th percentage bands whose federal income taxes are only small fractions of the countrywide total. Thus even though their shares in the basic variant also vary within narrow limits, the proportion of their income they pay in taxes does not necessarily move like the countrywide proportion of taxes in income (Chart 13, Panels B and C). The difference is notable during the

late 1920's: from 1926 to 1929 the latter rises and the former declines. In consequence, the ratios for the two percentage bands below the top (Table 86, col. 6 and 7) fail to show the close or consistent conformity to the movement of the countrywide tax proportion that the ratio for the top 1 percent shows. Their movement is similar to that for the top 1 percent only in a few years associated with an over-all high proportion of taxes, 1917-21 and 1940-47.

The analysis of the effects of deducting federal income taxes on shares of upper groups in the nonfarm variant is along parallel lines except that it is extended down through the 6th and 7th percentage band (Table 87 and Chart 14). The effects too are similar: their concentration in the share of the top 1 percent; the close correlation between annual changes in the latter and in the countrywide proportion of federal income taxes in income; the minor effect on the shares of the lower percentage bands; and the absence of a consistent correlation between annual changes in their shares and in the countrywide proportion of taxes.

In conclusion, we stress one aspect of the analysis that has not been noted explicitly. As explained in Chapter 7, in deriving economic income we exclude gains on sales of assets which are treated under the law as parts of net income, tax definition, include certain items that have been omitted, and reinclude certain deductions. The proportion of income taxes in economic income is, therefore, quite different from that of taxes in net income, tax definition: the former is larger as far as the income base excludes gains on sales of assets, and smaller as far as the income base is widened by reincluding deductions.

We draw two inferences from this consideration. First, as far as at least some of the deductions should not be reincluded in economic income, our income base is too wide and the calculated proportion of taxes in income too low. What is more important, this underestimate of the proportion of taxes in income may be relatively larger in the upper income brackets than in the lower because, as noted in Chapter 7, the proportion of all deductions in economic income is larger for the former. To the degree that this is true, the proportion in Tables 86 and 87 of taxes in the income of the top 1 percent is underestimated; correspondingly, the relative reduction of the share of the top 1 percent (whether of total or nonfarm population) due to deducting federal income taxes must be underestimated.

Second, the rise in the proportion of taxes in income during the late 1920's for the countrywide totals and for the top 1 percent but missing for the 2nd and 3rd and lower percentage bands is presumably due to gains on sales of assets. As will be seen presently, this item is of major importance for the top 1 percent alone. It is subject to federal income

Table 87

336 Ratios of Shares of Upper Income Groups Before to Shares After Deduction of Federal Income Taxes
Basic Variant, Nonfarm Population, 1914-1947

	Federal Income Taxes as % of Income Receipts Excl. Taxes					Ratios of Shares				
	Country- wide (1)	Top 1 percent (2)	2nd & 3rd percentage band (3)	4th & 5th percentage band (4)	6th & 7th percentage band (5)	Top 1 percent (6)	2nd & 3rd percentage band (7)	4th & 5th percentage band (8)	6th & 7th percentage band (9)	
1914	0.13	0.76				1.01				
1915	0.19	1.02				1.01				
1916	0.51	3.04				1.02				
1917	1.99	13.08	1.39	0.81	0.45	1.11	0.99	0.99	0.98	
1918	2.60	17.74	2.95	2.26	1.46	1.15	1.00	1.00	0.99	
1919	2.53	17.49	2.56	1.71	1.22	1.15	1.00	0.99	0.99	
1919	2.50	17.49	2.56	1.70	1.20	1.15	1.00	0.99	0.99	
1920	1.92	12.90	2.67	1.76	1.34	1.11	1.01	1.00	0.99	
1921	1.55	10.31	1.68	0.58	0.61	1.09	1.00	0.99	0.99	
1922	1.73	11.92	1.87	0.98	0.38	1.10	1.00	0.99	0.99	
1923	1.14	8.10	1.48	0.69	0.58	1.07	1.00	1.00	0.99	
1924	1.21	8.98	0.84	0.37	0.40	1.08	1.00	0.99	0.99	
1925	1.20	8.82	0.52	0.14	0.19	1.08	0.99	0.99	0.99	
1926	1.14	8.26	0.50	0.15	0.16	1.07	0.99	0.99	0.99	
1927	1.28	9.05	0.48	0.20	0.18	1.08	0.99	0.99	0.99	
1928	1.76	12.34	0.52	0.24	0.18	1.10	0.99	0.98	0.98	
1929	1.42	10.36	0.20	0.09	0.10	1.09	0.99	0.99	0.99	
1930	0.74	5.36	0.32	0.13	0.10	1.05	1.00	1.00	1.00	
1931	0.46	3.42	0.20	0.10	0.04	1.03	1.00	1.00	1.00	
1932	0.79	5.67	0.77	0.42	0.36	1.05	1.00	1.00	1.00	
1933	0.94	7.48	0.71	0.41	0.36	1.06	1.00	1.00	0.99	
1934	1.12	9.26	0.84	0.35	0.17	1.08	1.00	0.99	0.99	
1935	1.34	11.02	1.00	0.32	0.08	1.10	1.00	0.99	0.99	
1936	2.20	16.95	1.59	0.44	0.69	1.14	0.99	0.98	0.98	
1937	1.89	14.47	1.52	0.67	0.56	1.12	1.00	0.99	0.99	
1938	1.37	11.48	1.32	0.50	0.30	1.10	1.00	0.99	0.99	

1929	1.44	10.36	0.19	0.09	0.10	1.09	0.99	0.99
1930	0.76	5.35	0.33	0.14	0.09	1.05	1.00	0.99
1931	0.46	3.42	0.19	0.11	0.04	1.03	1.00	1.00
1932	0.81	5.67	0.78	0.42	0.37	1.05	1.00	1.00
1933	0.96	7.48	0.71	0.43	0.35	1.06	1.00	0.99
1934	1.14	9.27	0.84	0.34	0.16	1.08	1.00	0.99
1935	1.35	11.02	1.01	0.31	0.08	1.10	1.00	0.99
1936	2.12	16.95	1.60	0.46	0.65	1.14	1.00	0.98
1937	1.88	14.47	1.52	0.68	0.56	1.12	1.00	0.99
1938	1.36	11.48	1.31	0.50	0.33	1.10	1.00	0.99
1939	1.53	12.35	1.47	0.67	0.60	1.11	1.00	0.99
1940	2.30	18.53	2.13	1.57	0.45	1.16	1.00	0.99
1941	5.05	34.81	7.91	5.70	3.88	1.28	1.03	1.01
1942	9.52	56.87	17.55	13.12	11.53	1.43	1.07	1.03
1943	15.68	102.43	30.73	21.44	19.16	1.75	1.13	1.05
1944	13.35	71.41	25.69	19.15	16.66	1.51	1.11	1.03
1945	13.64	77.38	28.06	20.28	17.05	1.56	1.13	1.06
1946	12.02	69.22	24.97	17.76	14.98	1.51	1.12	1.05
1947	12.32	64.71	24.31	17.75	15.22	1.47	1.11	1.03

Column

1

Table 85, column 5.

2-5

(a) Income of nonfarm population (Table 115, col. 2) is multiplied by the share of the given percentage band of the basic variant (Table 119, col. 1); (b) income of non-farm population excluding federal income taxes (Table 115, col. 2 minus col. 7) is multiplied by the share of the

Column

6-9

given percentage band adjusted to exclude federal income taxes (Table 119, col. 4); (c) the product calculated in (b) is subtracted from that calculated in (a) to yield federal income taxes for the given percentage band; (d) the amount in (c) is divided by that derived in (b).
Columns 2-5 respectively plus 100, divided by column 1 plus 100.

Chart 14

Percentage Federal Income Taxes Are of Income Receipts Excluding Taxes
 Basic Variant, Nonfarm Population, 1914-1947

- a Federal income taxes as % of income receipts excluding taxes, given percentage band
- b Ratio of share before taxes to share after taxes, given percentage band
- c Federal income taxes as % of income of nonfarm population excluding taxes, countrywide

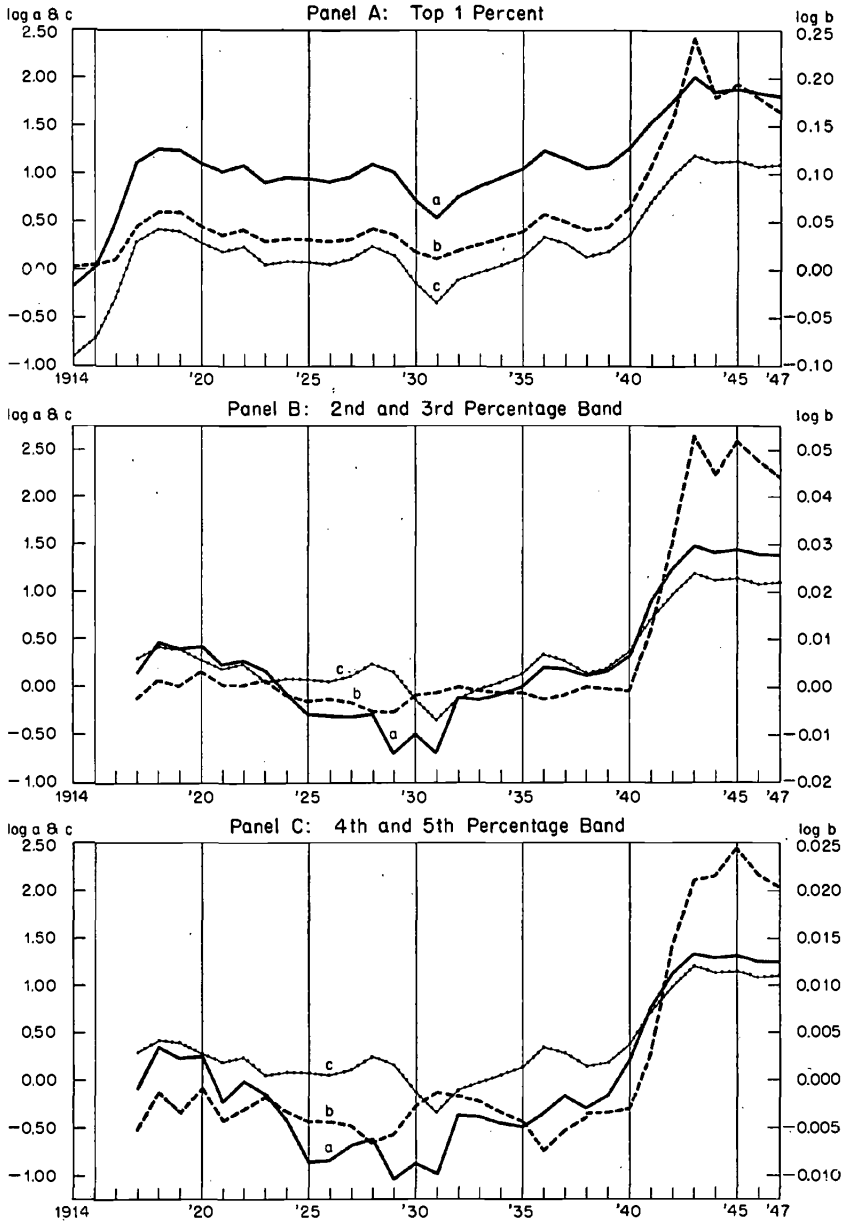
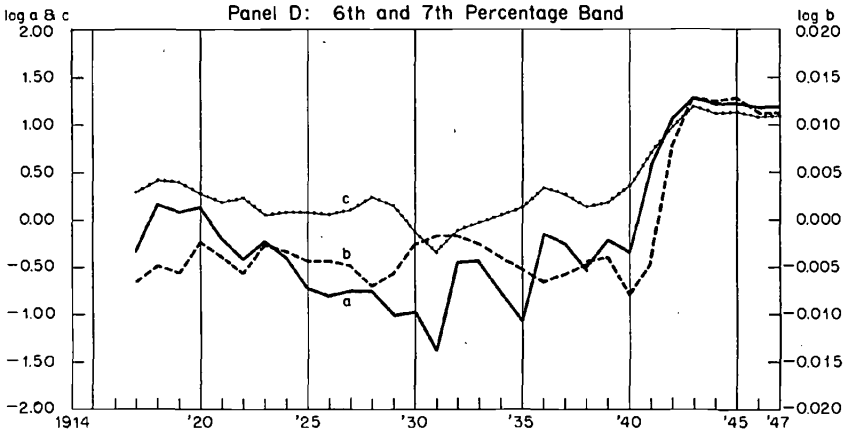


Chart 14 (concl.)

- a Federal income taxes as % of income receipts excluding taxes, given percentage band
- b Ratio of share before taxes to share after taxes, given percentage band
- c Federal income taxes as % of income of nonfarm population excluding taxes, countrywide



taxes yet not included in the income base we use in calculating the proportion of taxes in income. The marked rise in gains from sales of assets in the late 1920's meant a substantial increase in federal income taxes, both countrywide and particularly concentrated in its incidence in the top 1 percent; yet neither individuals' total income receipts nor the economic income of the top 1 percent includes these gains. Partly as a result of this difference in the numerator and denominator, Charts 13 and 14 show bulges in the proportion of taxes in income in the late 1920's, both countrywide and for the top 1 percent; but not in the proportion for the 2nd and 3rd, and lower percentage bands.

4 Gains and Losses on Sales of Assets

The coverage of this, the second of the two available items in the transition from economic to disposable income, is incomplete in two major respects. First, gains and losses on sales of assets may be incurred by persons who are not required to file tax returns. An adjustment for such omission is impossible. Although in the very low brackets of the tax return population extremely low or zero gains or losses are typical, there are so many persons in these and lower brackets that they may account for a substantial proportion of aggregate net gains and losses in some years.⁶ Hence

⁶ See Lawrence H. Seltzer, *The Nature and Tax Treatment of Capital Gains and Losses* (NBER, 1951), especially Chapter 5, Sections 1, 2, 8, pp. 109-12, 122-31; and Tables 4-6 in Appendix Two, pp. 374-7. Seltzer not only discusses the theoretical interpretation of capital gains in an illuminating way but also presents a rich store of statistical information.

it seems likely that persons with incomes so small as to be exempt from filing may, in some years, have realized substantial net gains or losses. But usable estimates of these amounts cannot be obtained.⁷

Second, capital gains realized since, but representing appreciation before, March 1, 1913, have not been taxed and are not reported (even though depreciation sustained before that date can be included in capital losses realized subsequently). Moreover, for years beginning with 1934, the law provides for differential taxation of gains, exempting a fraction of gains from sales of assets held for a given period; and from 1932 on, limiting the claiming of losses as offsets to income subject to tax. For these years the amounts reported for the tax return population are decidedly incomplete; and Seltzer's adjustment, which we used, may be incomplete. In general, Seltzer tried to get complete data by supplementing the partial totals published in *Statistics of Income* by unpublished Treasury tabulations of total realized gains and losses.⁸

Thus, in including capital gains and losses we add to the income of the upper groups as complete an estimate as is possible but can add to the income receipts of the entire population only an incomplete total of the net balance of gains over losses. The resulting shares of upper income groups in the variant including capital gains are, therefore, overestimated when groups outside the tax return population enjoy an over-all net balance of gains over losses and underestimated when they suffer a net balance of losses over gains. That the effect of such variable shortages in the denominator upon the estimated shares of upper income groups is not fatal is due to two factors. First, the denominator covers the income of all individuals, compared to which even the *countrywide* net balance of gains

⁷ An estimate of the excess of profits over losses from sales of real estate, stocks, bonds, etc. for 1929 is given in Leven, Moulton, and Warburton, *America's Capacity to Consume* (Brookings Institution, 1934), p. 163. The total, \$6.2 billion, is considerably larger than that reported in *Statistics of Income* and used by us, \$2.9 (Table 115, col. 8). The Brookings total of profits was estimated by: (a) raising the profits reported on tax returns with incomes over \$5,000 65 percent for underreporting; (b) approximating profits by persons with incomes less than \$5,000 (*America's Capacity to Consume*, p. 167). Losses were taken as reported in *Statistics of Income*, but those on which a 12½ percent tax credit was claimed were disregarded. The biggest source of the excess of the Brookings figure over ours is the allowance for underreporting on tax returns with incomes over \$5,000. A comparison of the Brookings Tables 27 and 29 (pp. 206 and 208) indicates that only \$0.4 billion of net capital gains is assigned to persons with incomes under \$5,000. The basis for the Brookings adjustment for underreporting of capital gains does not seem sufficiently firm to merit acceptance.

⁸ *Op. cit.*, Chapter 5, Sections 1 and 2, pp. 109-12; Appendix One, pp. 321-56; and Appendix Two, pp. 361 ff.

over losses is a small fraction and the *omitted* part of that net balance, a minor fraction indeed. Second, the capital gain (and loss) items are of much greater weight, relative to other income, at the top income brackets than elsewhere in the income size distribution, and they are items that swing widely in the short term changes associated with business cycles. Consequently, the changes in the shares reflecting the inclusion of the capital gain items are largely determined by the numerator, especially those for the top groups, and only in much less degree by the denominator.

The calculation of effects of including in income the excess of gains over losses (positive or negative, i.e., the algebraic difference) from sales of assets on the shares of upper groups is parallel to the calculation of effects of deducting federal income taxes. We take economic income for each net income class; add to it the algebraic difference between gains and losses on sales of assets; recalculate per capita income, now including this item; rerearrange, if necessary, the classes in descending order of per capita income and interpolate, computing the shares in terms of countrywide income including the excess of aggregate gains over losses from sales of assets. An illustrative calculation is provided for 1929 in Section D of Appendix 4. The resulting changes in the shares of the upper percentage bands in the basic variant for the total population can be summarized from Table 88 and Chart 15.⁹

First, the effect is almost exclusively on the share of the top 1 percent because of its overwhelming share of the excess of gains over losses in most years. Its share cannot be stated simply in percentage terms because combining plus and minus signs makes a relative apportionment erratic in some years. However, in years when the countrywide net balance is quite large (whether positive or negative), the percentage accounted for by the top 1 percent tends to be large, often over 80 or 90 percent; and it is not much less in a good many of the years when the countrywide net balance is small. Only in 1919, 1930, 1931, 1933, 1934, and 1938-42 is it not sufficiently large to dominate the countrywide total.

Second, inclusion of gains and losses affects the share of the top 1 percent more than any other adjustment or modification of the income concept so far discussed. The effects range from relatively large additions to

⁹ In this calculation of the shares to include gains and losses from sales of assets we continue to use the income classes as given in the published tabulations without allowing for possible shifts of returns from one class to another as a result of adding capital gains and losses to their income. In this respect the procedure is similar to that used in our other adjustments for *scope* of income. In Chapter 10, where we study the effect of excluding capital gains and losses (and other items) from the income used as the basis of classification by size (Sec. 4-6), an attempt was made to take account of possible shifts of returns from one income class to another.

Table 88

Effect of Including Excess of Gains over Losses from Sales of Assets
Basic Variant, Total Population, 1917-1946

	Change in Share of Given Percentage Band Due to Adjustment				Excess of Gains over Losses from Sales of Assets as % of Total Income Receipts
	<i>Top 1</i>	<i>2nd & 3rd</i>	<i>4th & 5th</i>	<i>Top 5</i>	
	(1)	(2)	(3)	(4)	
1917	0.24	0.10	0.02	0.35	0.56
1918	-0.15	0.14	0.01	-0.10	-0.12
1919	0.06	0.15	0.03	0.24	0.42
1919	0.06	0.15	0.03	0.24	0.41
1920	-0.32	0.22	0.06	-0.03	-0.02
1921	-0.75	0.19	-0.21	-0.77	-1.20
1922	0.30	0.03	-0.02	0.31	0.40
1923	0.11	0.06	0.03	0.20	0.29
1924	0.93	0.10	0.02	1.05	1.55
1925	2.57	0.10	-0.10	2.58	3.63
1926	2.01	0.11	-0.06	2.06	2.94
1927	2.44	0.03	-0.05	2.43	3.54
1928	4.34	-0.02	-0.19	4.14	5.93
1929	3.78	-0.04	-0.17	3.57	3.60
1930	0.39	0.03	0.03	0.45	-1.90
1931	-0.52	0.15	0.14	-0.22	-4.57
1932	-2.34	0.19	0.22	-1.93	-5.84
1933	-0.76	0.11	0.10	-0.55	-3.13
1934	-0.27	-0.09	-0.04	-0.40	-1.22
1935	0.36	-0.05	-0.04	0.27	-0.16
1936	1.01	-0.01	-0.06	0.94	0.92
1937	0.33	-0.02	-0.02	0.30	-0.15
1938	0.37	-0.03	-0.01	0.33	-0.54
1929	3.82	-0.04	-0.18	3.60	3.64
1930	0.40	0.03	0.03	0.47	-1.94
1931	-0.52	0.15	0.14	-0.22	-4.58
1932	-2.39	0.20	0.24	-1.94	-6.00
1933	-0.77	0.12	0.11	-0.54	-3.22
1934	-0.27	-0.09	-0.04	-0.41	-1.26
1935	0.36	-0.05	-0.04	0.27	-0.16
1936	0.99	-0.01	-0.06	0.92	0.91
1937	0.33	-0.02	-0.02	0.29	-0.15
1938	0.37	-0.03	-0.01	0.33	-0.53
1939	0.22	0.01	0.01	0.23	-0.39
1940	0.16	0.00	0.01	0.17	-0.59
1941	0.05	-0.08	0.00	-0.03	-0.98
1942	0.10	-0.06	-0.01	0.04	-0.32
1943	0.54	0.04	0.00	0.58	0.74
1944	0.61	0.10	0.02	0.72	1.02
1945	1.26	0.24	0.05	1.55	2.65
1946	1.43	0.31	0.11	1.86	3.86

Because of rounding, columns may not add to total.

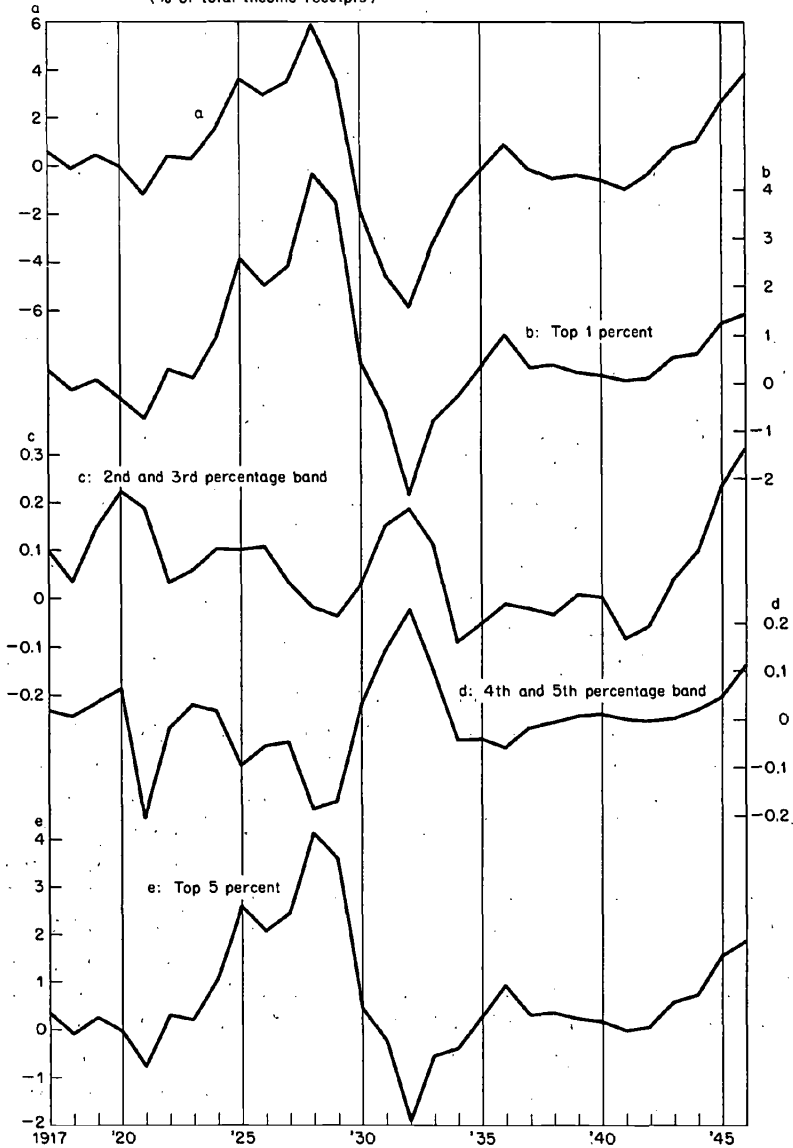
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1-4 Table 118: column 5 minus column 1.

5 Column 8 of Table 115 divided by column 12 of Table 114.

Chart 15
**Effect of Including Excess of Gains over Losses from Sales of Assets
 Basic Variant, Total Population, 1917-1946**

a Excess of gains over losses from sales of assets as % of total income receipts
 b, c, d, & e Change in share of given percentage band due to adjustment
 (% of total income receipts)



relatively large deductions. For example, in the peak gains of 1928 the addition of 4.34 percent of countrywide income increases the share of the top 1 percent almost three-tenths from its level in the basic variant; and the relative reduction of the share in 1932, the year of the maximum proportion of losses in income, is almost a fifth.

Third, annual changes in the adjustment of the share of the top 1 percent and in the countrywide proportion of the item in total income are closely correlated (Chart 15, lines b and a) — a natural consequence of the tendency for capital gains and losses to be concentrated in the top 1 percent together with the relatively invariable level of the top 1 percent's share in total income receipts.

Fourth, the effects on the shares of the 2nd and 3rd, and 4th and 5th percentage bands do not display the same consistent correlation with fluctuations in the proportion of gains and losses in individuals' total income receipts (Chart 15, lines c and d). Positive correlation in both bands is chiefly in 1918-24 and 1938-46. But during 1925-37, when both the countrywide proportion of the item in total income and the share of the top 1 percent go through a violent cycle with a peak in 1928, a trough in 1932, and a second, less conspicuous, peak in 1936, the changes in shares of the 2nd and 3rd, and 4th and 5th percentage bands, especially the latter, tend to be inversely correlated with changes in the countrywide proportion of capital gains and losses in income.

The procedure for calculating the effects on the shares of the upper groups in the nonfarm variant is parallel to that employed for the basic variant for the total population except that it is extended down through the 6th and 7th percentage band (Table 89 and Chart 16). And the results resemble those observed in Table 88 and Chart 15: here again the effect is chiefly on the share of the top 1 percent, and the marked year to year fluctuations in its adjustment and in the countrywide proportion of capital gains and losses in income are similar. The adjustment of the shares of the lower percentage bands is minor, although somewhat larger than in the corresponding percentage bands of the basic variant for the total population: the percentage bands of the smaller total, the nonfarm population, lie within higher reaches of the country's income distribution and include relatively more tax returns that report gains and losses from sales of assets. Here too annual variations in the adjustment of the shares of the percentage bands below the top 1 percent are inversely correlated with those in the countrywide proportion of capital gains and losses in income during part of the period. Those for the 2nd and 3rd percentage band are inversely correlated only in 1920 and 1927-34 (except 1929); those for the 4th and 5th percentage band, in 1920, 1922-38, and 1940; and those

Table 89

Effect of Including Excess of Gains over Losses from Sales of Assets
Basic Variant, Nonfarm Population, 1917-1946

	Change in Share of Given Percentage Band Due to Adjustment					Excess of Gains over Losses from Sales of Assets as % of Income of Nonfarm Population
	<i>Top 1</i>	<i>2nd & 3rd</i>	<i>4th & 5th</i>	<i>6th & 7th</i>	<i>Top 7</i>	
	(1)	(2)	(3)	(4)	(5)	
1917	0.24	0.10	0.04	0.01	0.39	0.68
1918	-0.19	0.06	0.02	*	-0.12	-0.15
1919	*	0.18	0.06	0.02	0.26	0.51
1919	*	0.18	0.06	0.02	0.26	0.50
1920	-0.43	0.24	0.10	0.05	-0.04	-0.03
1921	-0.82	-0.01	0.04	-0.05	-0.83	-1.35
1922	0.32	0.05	*	-0.02	0.34	0.46
1923	0.13	0.02	0.05	0.02	0.22	0.32
1924	0.98	0.12	0.03	*	1.13	1.76
1925	2.76	0.18	-0.05	-0.11	2.78	4.16
1926	2.14	0.14	*	-0.07	2.21	3.32
1927	2.63	0.08	-0.08	-0.04	2.59	3.99
1928	4.68	0.06	-0.16	-0.18	4.39	6.68
1929	4.12	0.04	-0.15	-0.16	3.85	4.06
1930	0.45	0.05	0.04	0.03	0.56	-2.10
1931	-0.52	0.12	0.17	0.12	-0.10	-5.00
1932	-2.49	0.15	0.20	0.20	-1.93	-6.35
1933	-0.82	0.12	0.11	0.09	-0.50	-3.48
1934	-0.23	-0.13	-0.04	-0.03	-0.42	-1.37
1935	0.43	-0.06	-0.04	-0.04	0.30	-0.18
1936	1.10	0.01	-0.05	-0.06	1.01	1.04
1937	0.39	-0.03	-0.01	-0.02	0.34	-0.17
1938	-0.44	-0.04	-0.01	-0.01	0.39	-0.60
1929	4.15	0.03	-0.15	-0.16	3.87	4.09
1930	0.47	0.05	0.04	0.03	0.59	-2.14
1931	-0.52	0.13	0.18	0.12	-0.09	-5.02
1932	-2.53	0.17	0.21	0.22	-1.93	-6.52
1933	-0.83	0.13	0.11	0.09	-0.49	-3.55
1934	-0.23	-0.13	-0.04	-0.03	-0.42	-1.38
1935	0.44	-0.06	-0.04	-0.04	0.30	-0.18
1936	1.07	0.02	-0.05	-0.05	0.98	1.00
1937	0.38	-0.03	-0.01	-0.01	0.33	-0.17
1938	0.44	-0.04	-0.01	-0.01	0.38	-0.60
1939	0.25	0.01	0.01	0.01	0.27	-0.44
1940	0.19	*	0.02	0.01	0.21	-0.66
1941	0.11	-0.10	-0.01	0.01	0.00	-1.10
1942	0.14	-0.08	-0.01	*	0.05	-0.37
1943	0.58	0.05	0.00	-0.01	0.63	0.84
1944	0.65	0.11	0.02	*	0.79	1.15
1945	1.34	0.26	0.07	0.01	1.67	2.97
1946	1.51	0.31	0.13	0.06	2.01	4.38

Because of rounding, columns may not add to total.

* Less than ± 0.005 .

Column

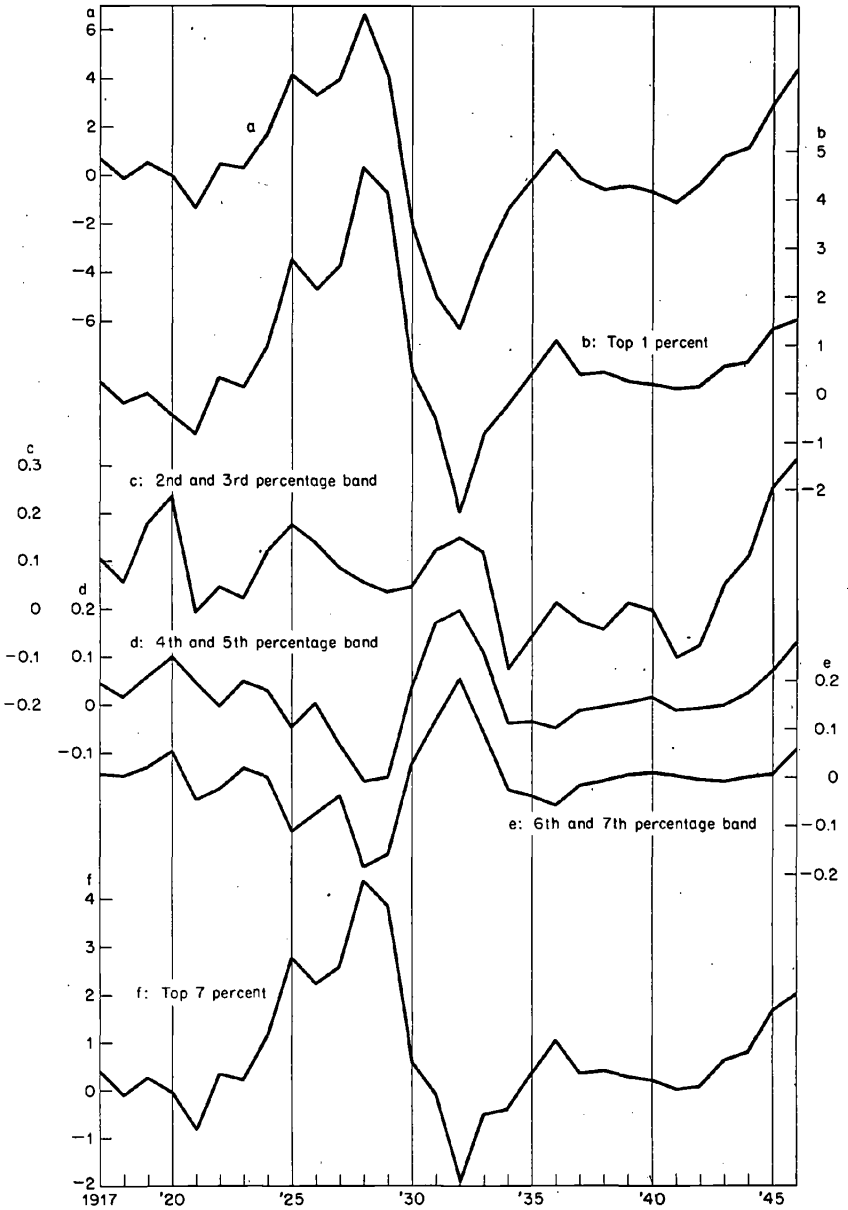
1-5 Table 119: column 5 minus column 1.

6 Table 115: column 8 divided by column 2.

Chart 16

Effect of Including Excess of Gains over Losses from Sales of Assets
 Basic Variant, Nonfarm Population, 1917-1946

a Excess of gains over losses from sales of assets as % of income of nonfarm population
 b, c, d, e, & f Change in share of given percentage band due to adjustment
 (% of income of nonfarm population)



for the 6th and 7th percentage band, during a somewhat longer period. Obviously, had our analysis reached to lower percentage bands, the inverse correlation would have been more clear-cut and extended over the full period covered.

As in the calculation of the effects of deducting federal income taxes, the procedure used to calculate the effects of including gains and losses on sales of assets does not shift net income classes among the upper percentage bands. Consequently, we can repeat the analysis based on comparing: (a) the proportion of gains and losses in total income for each percentage band with (b) the proportion of gains and losses in income for the total population; and deriving (c) — the ratio of (a) plus 100 to (b) plus 100, which at the same time measures (d) — the ratio of the share of the given percentage band after adjustment for the inclusion of gains and losses to its share in the basic variant (Table 90 and Chart 17).

As in the case of the deduction of federal income taxes, the effect is chiefly on the share of the top 1 percent, and there is close correlation between the proportion of gains and losses in countrywide income, their proportion in the income of the top 1 percent, and the ratio of the latter's share after the inclusion of gains and losses to its share before their inclusion (Chart 17, Panel A).

The new evidence revealed by Table 90 and Chart 17 is that the proportion of gains and losses in the income of the 2nd and 3rd, and 4th and 5th percentage bands is also closely correlated with the countrywide proportion. In Chart 17, Panels B and C, the proportion of gains and losses for these percentage bands describes the same clear-cut cycles as in Panel A: peaks in 1919 or 1920, troughs in 1921 or 1922; minor troughs from 1924 to 1925 or 1926 to 1927; major peaks in 1927 or 1928; major troughs in 1932; another peak in 1936, and so on. But their amplitude is not consistently wider or narrower than that of the countrywide proportion. It is wider in the 1918-21-22 cycle; narrower in the long sweep from 1921 to 1932; wider again in the shorter cycle superimposed upon this long sweep, with a peak about 1924-25 and a trough about 1925 or 1927, and so on. This variability in relative amplitude produces cycles in the ratio of the shares of the 2nd and 3rd, and 4th and 5th percentage bands after including gains and losses to their shares in the basic variant that sometimes run with and at other times counter to the cycles in the countrywide proportion of gains and losses in income; and thus also to the cycles in the adjustment in the share of the top 1 percent.

A parallel analysis of the changes in the basic variant for the nonfarm population yields similar results (Table 91 and Chart 18). The tendency for gains and losses to be incurred chiefly by the top 1 percent together

Table 90: Ratios of Shares of Upper Income Groups After to Shares Before Inclusion of Excess of Gains over Losses from Sales of Assets
Basic Variant, Total Population, 1917-1946

	Excess of Gains over Losses from Sales of Assets as % of Income Receipts				Ratio of Shares		
	Country- wide (1)	Top 1 percent (2)	2nd & 3rd per- centage band (3)	4th & 5th per- centage band (4)	Top 1 percent (5)	2nd & 3rd per- centage band (6)	4th & 5th per- centage band (7)
1917	0.56	2.24	2.31	0.89	1.02	1.02	1.00
1918	-0.12	-1.27	0.50	0.02	0.99	1.01	1.00
1919	0.42	0.87	2.90	1.21	1.00	1.02	1.01
1919	0.41	0.87	2.90	1.21	1.00	1.02	1.01
1920	-0.02	-2.59	3.82	1.57	0.97	1.04	1.02
1921	-1.20	-6.69	1.51	-5.14	0.94	1.03	0.96
1922	0.40	2.67	0.86	-0.01	1.02	1.00	1.00
1923	0.29	1.22	1.26	0.94	1.01	1.01	1.01
1924	1.55	8.84	3.11	1.93	1.07	1.02	1.00
1925	3.63	23.05	5.20	1.51	1.19	1.02	0.98
1926	2.94	17.76	4.59	1.67	1.14	1.02	0.99
1927	3.54	21.12	4.05	2.52	1.17	1.00	0.99
1928	5.93	36.72	5.64	1.94	1.29	1.00	0.96
1929	3.60	30.65	3.01	-0.10	1.26	0.99	0.96
1930	-1.90	0.87	-1.45	-1.29	1.03	1.00	1.01
1931	-4.57	-8.29	-2.50	-2.26	0.96	1.02	1.02
1932	-5.84	-22.95	-3.36	-2.30	0.82	1.03	1.04
1933	-3.13	-9.22	-1.58	-1.36	0.94	1.02	1.02
1934	-1.22	-3.43	-2.56	-2.02	0.98	0.99	0.99
1935	-0.16	2.83	-0.94	-0.96	1.03	0.99	0.99
1936	0.92	8.52	0.75	-0.32	1.08	1.00	0.99
1937	-0.15	2.41	-0.49	-0.52	1.03	1.00	1.00
1938	-0.54	2.68	-1.05	-0.66	1.03	1.00	1.00
1929	3.64	30.65	3.01	-0.11	1.26	0.99	0.96
1930	-1.94	0.86	-1.44	-1.30	1.03	1.00	1.01
1931	-4.58	-8.28	-2.51	-2.26	0.96	1.02	1.02
1932	-6.00	-22.94	-3.36	-2.32	0.82	1.03	1.04
1933	-3.22	-9.22	-1.57	-1.36	0.94	1.02	1.02
1934	-1.26	-3.45	-2.56	-2.01	0.98	0.99	0.99
1935	-0.16	2.82	-0.95	-0.96	1.03	0.99	0.99
1936	0.91	8.52	0.77	-0.33	1.08	1.00	0.99
1937	-0.15	2.42	-0.49	-0.53	1.03	1.00	1.00
1938	-0.53	2.68	-1.05	-0.66	1.03	1.00	1.00
1939	-0.39	1.44	-0.29	-0.27	1.02	1.00	1.00
1940	-0.59	0.73	-0.54	-0.36	1.01	1.00	1.00
1941	-0.98	-0.51	-2.29	-0.98	1.00	0.99	1.00
1942	-0.32	0.68	-1.41	-0.46	1.01	0.99	1.00
1943	0.74	6.50	1.53	0.74	1.06	1.01	1.00
1944	1.02	8.19	3.02	1.63	1.07	1.02	1.01
1945	2.65	17.39	7.24	4.09	1.14	1.04	1.01
1946	3.86	20.42	9.58	7.16	1.16	1.06	1.03

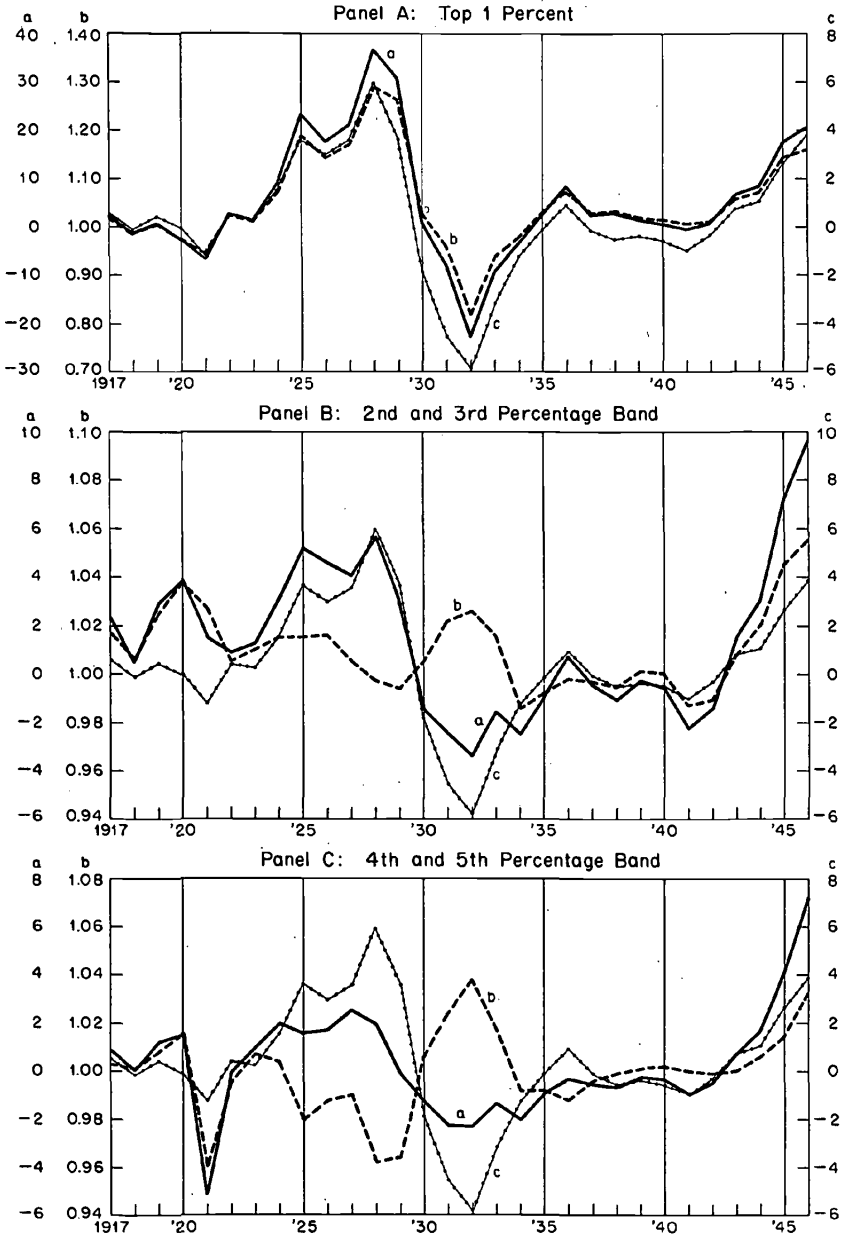
Column

- 1 Table 88, column 5.
- 2-4 (a) Total income receipts (Table 114, col. 12) are multiplied by the share of the given percentage band of the basic variant (Table 118, col. 1); (b) total income receipts including excess of gains over losses from sales of assets (col. 12 of Table 114 plus col. 8 of Table 115) are multiplied by the share of the given percentage band adjusted to include excess of gains over losses from sales of assets (Table 118, col. 5); (c) the product calculated in (a) is subtracted from that in (b) to yield the excess of gains over losses for the given percentage band; (d) the amount in (c) is divided by that derived in (a).
- 5-7 Columns 2-4 respectively plus 100, divided by column 1 plus 100.

Chart 17

Percentage Excess of Gains over Losses from Sales of Assets Is of Income Receipts, Basic Variant, Total Population, 1917 - 1946

- a Excess of gains over losses from sales of assets as % of income receipts, given percentage band
- b Ratio of share after to share before inclusion of excess of gains over losses from sales of assets, given percentage band
- c Excess of gains over losses from sales of assets as % of total income receipts, countrywide



1929	4.09	33.14	4.58	0.47	-0.06	1.28	1.00	0.96	0.96
1930	-2.14	1.11	-1.42	-1.30	-1.42	1.03	1.01	1.01	1.01
1931	-5.02	-8.75	-3.22	-1.80	-2.57	0.96	1.02	1.03	1.03
1932	-6.52	-24.80	-4.19	-2.80	-2.27	0.80	1.02	1.04	1.04
1933	-3.55	-10.05	-1.66	-1.48	-1.54	0.93	1.02	1.02	1.02
1934	-1.38	-3.23	-3.28	-2.14	-2.00	0.98	0.98	0.99	0.99
1935	-0.18	3.36	-1.10	-0.93	-1.07	1.04	0.99	0.99	0.99
1936	1.00	9.20	1.26	-0.16	-0.29	1.08	1.00	0.99	0.99
1937	-0.17	2.75	-0.58	-0.43	-0.62	1.03	1.00	1.00	1.00
1938	-0.60	3.16	-1.26	-0.69	-0.77	1.04	0.99	1.00	1.00
1939	-0.44	1.63	-0.24	-0.32	-0.27	1.02	1.00	1.00	1.00
1940	-0.66	0.91	-0.69	-0.31	-0.37	1.02	1.00	1.00	1.00
1941	-1.10	-0.18	-2.69	-1.36	-0.96	1.01	0.98	1.00	1.00
1942	-0.37	0.96	-1.72	-0.57	-0.51	1.01	0.99	1.00	1.00
1943	0.84	6.89	1.84	0.84	0.58	1.06	1.01	1.00	1.00
1944	1.15	8.62	3.35	1.94	1.23	1.07	1.02	1.01	1.00
1945	2.97	18.24	7.68	5.13	3.20	1.15	1.05	1.02	1.00
1946	4.38	21.48	9.84	8.08	6.46	1.16	1.05	1.04	1.02

Column

1 Table 89, column 6.

2-5 (a) Income of nonfarm population (Table 115, col. 2) is multiplied by the share of the given percentage band in the basic variant (Table 119, col. 1); (b) income of nonfarm population including excess of gains over losses from sales of assets (Table 115, col. 2 plus col. 8) is multiplied by the share of the given percentage band adjusted to include

Column

excess of gains over losses from sales of assets (Table 119, col. 5); (c) the product calculated in (a) is subtracted from that in (b) to yield the excess of gains over losses for the given percentage band; (d) the amount in (c) is divided by that derived in (a).

6-9 Columns 2-5 respectively plus 100, divided by column 1 plus 100.

Chart 18

Percentage Excess of Gains over Losses from Sales of Assets Is of Income Receipts, Basic Variant, Nonfarm Population, 1917-1946

- a Excess of gains over losses from sales of assets as % of income receipts, given percentage band
- b Ratio of share after to share before inclusion of excess of gains over losses from sales of assets, given percentage band
- c Excess of gains over losses from sales of assets as % of income of nonfarm population, countrywide

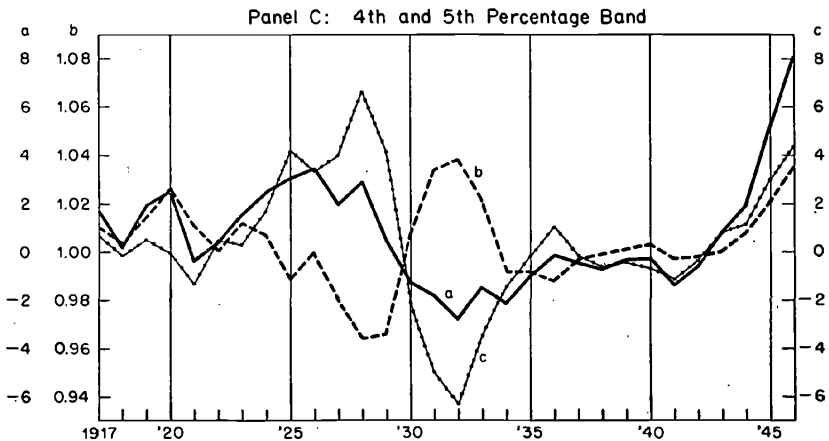
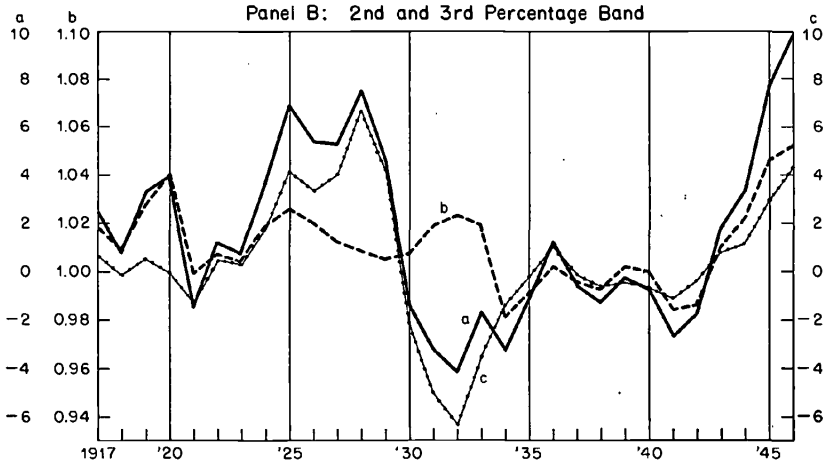
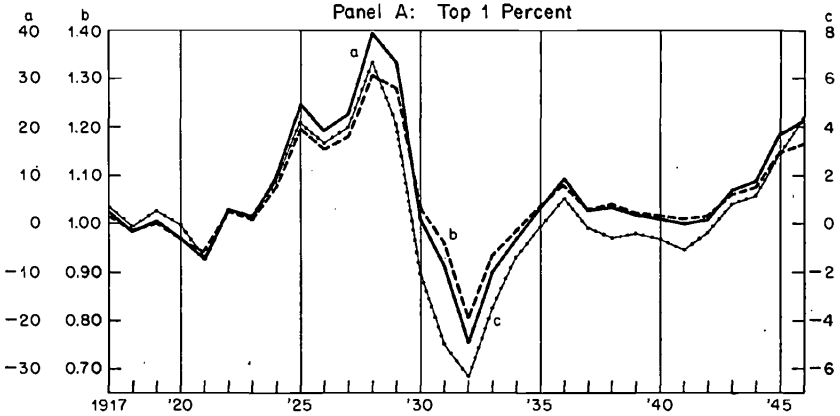
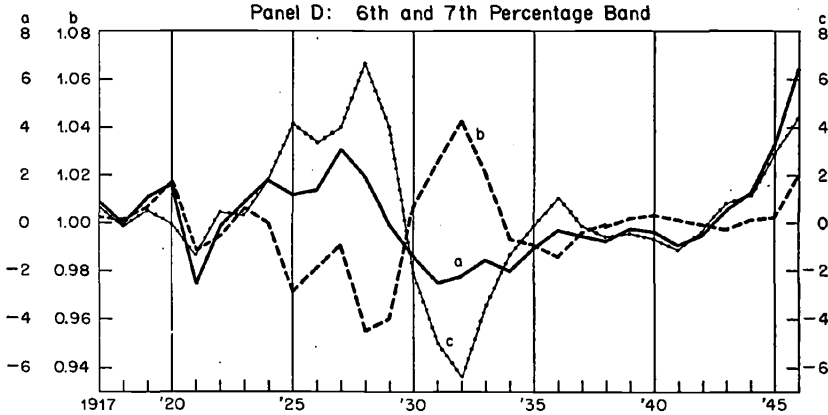


Chart 18 (concl.)

- a Excess of gains over losses from sales of assets as % of income receipts, given percentage band
- b Ratio of share after to share before inclusion of excess of gains over losses from sales of assets, given percentage band
- c Excess of gains over losses from sales of assets as % of income of nonfarm population, countrywide



with variations in the proportion of gains and losses in its income that overshadow variations in its share of economic income assure the close correlation of the proportions in Panel A of Chart 18; and the continued excess of its proportion of gains and losses in income over the countrywide proportion imposes a similar pattern on the year to year changes in the ratios. In the lower percentage bands changes in the proportion of gains and losses in income show, on the whole, the same cycles as do those in the countrywide proportion; but as in the case of the basic variant for the total population, the relative amplitude of these cycles in the intra-band proportions (2nd and 3rd, 4th and 5th, and here, also, the 6th and 7th percentage band) changes from cycle to cycle. Hence the changes in the shares of these lower percentage bands produced by including gains and losses do not conform closely to annual changes in the countrywide proportion of gains and losses in total income.

However, any changes in the shares of the lower percentage bands produced by including gains and losses on sales of assets are minor. As in the deduction of federal income taxes, consideration of gains and losses from sales of assets is important for the share of the top 1 percent alone.

