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Chapter 3

CHANGES IN INCOME SHARES BY TYPE, 1919-1948

Were the drastic decline since 1939, the changes in the decade averages, and the fluctuations associated with business cycles in shares of upper income groups in *total* income receipts by individuals characteristic of their shares in the various types of income too?

Since inequality in the distribution of the various types of income differs markedly, any shift in the proportions of the several types in total income receipts must affect shares of upper income groups. To illustrate: other conditions remaining the same, an increase in the proportion of dividends should raise, and an increase in the proportion of employee compensation lower the shares of upper income groups. To what extent are the changes in the shares of upper income groups in Chapter 2 due merely to shifts in the countrywide composition of income by type, 'inter-type' shifts? If they are not accounted for fully by inter-type shifts they must be due partly to changes in the shares of upper groups in each type, 'intra-type' shifts. What is the nature of these intra-type shifts? Does a decline or a rise in the shares of upper groups in total income receipts usually mean a corresponding change in their shares in each type? If the intra-type changes are not all similar in direction and identical in amplitude, changes in the composition of total income by type for upper groups must differ from those for the entire population and for lower groups. What is the nature of these differences?

For reasons indicated in Chapter 1, the analysis is in terms of the basic variant alone. But the results would be more or less valid for the economic income variant too, since the type-structure of income in it would not differ significantly from that in the basic variant. Only for the disposable income variant would some modifications have to be introduced because of the effects of federal income taxes and the balance of gains and losses from sales of assets, highly variable items.

One major qualification of the analysis must be noted in advance. We are perforce restricted to the types of income that can be distinguished in the estimates of countrywide flows to individuals and in the tabulations of federal income tax data. Even the classification into employee compensation, entrepreneurial income, rent, interest, and dividends stretches the limits of reliability, since the errors that may characterize the estimates for

some types, particularly entrepreneurial income and rent, are probably far larger relatively than those characterizing the estimates of total income receipts; and altogether too large for comfort. Yet even this five-fold division is too crude for effective analysis. Employee compensation includes flows that range from the low pay of farm and unskilled labor to the high salaries of corporation executives. In total entrepreneurial income are the low incomes of small farmers and shopkeepers as well as the large emoluments of individual entrepreneurs at high professional or business levels. Total rent must combine dribbles to casual landlords who own just one house with large chunks received by individuals for whom the ownership and management of rental properties is a fulltime and often highly lucrative occupation. Could income types be further subdivided, the weight attached to inter-type shifts would probably be greater than that shown below, and that attached to intra-type shifts correspondingly smaller. Consequently, our findings are circumscribed by the crude classification of income by type.

Since the analysis in this chapter relates to the changes in the shares of upper groups in total income receipts observed in Chapter 2, the discussion follows the order in that chapter: (1) changes since 1939; (2) changes in the decade averages; (3) changes during business cycles. Each section deals with: (a) the relative importance of inter- and intra-type shifts; (b) changes in shares in countrywide totals of each type (employee compensation, entrepreneurial income, etc.); (c) changes in the type-structure of total income at the upper and the lower income levels.

1 *Changes since 1939*

a) One way to study the effects of changes in the proportions of various types of income in total income receipts on the shares of upper income groups in that total is to compare changes in the former with those in the latter. Similarity would reveal the effects of the former, viz., changes in the countrywide composition of income receipts by type. An even more effective way is to assume that the shares of upper income groups in each income type are constant and that the sole changes over time are in the proportions of the various types of income in total income receipts; then calculate the shares of upper income groups in total income receipts thus derived. Since changes in these shares can be due to inter-type shifts alone, they reveal the latter's effects. Conversely, if we assume that the composition of total income receipts by type is constant and that, therefore, the sole changes over time are in the shares of upper income groups in each type, changes in the shares of upper income groups in total income receipts thus derived reflect changes due to shifts of shares within each type of

income alone, intra-type shifts. They are completely free from any effects of shifts in the countrywide composition of income by type. The change due to inter-type shifts plus that due to intra-type shifts would equal the total change in the shares of the upper income groups in total income receipts if the two types of shift were not correlated. The correlation introduces merely a minor discrepancy, however, and generally the sum of the changes due to these two types of shift does approximate roughly the total change in the shares as measured directly in Chapter 2.¹

We calculated the changes due to the inter- and intra-type shifts in the manner just described for each upper percentage band of both total and nonfarm population. For constant proportions of various types in total income receipts and constant shares of upper percentage bands in the aggregate of each type, we used the arithmetic mean levels for 1919-38 in Tables 7 and 3 (or 8 and 4) respectively. It seemed best to use averages for a long period that were relatively free from year to year fluctuations, and to exclude the very recent years with their marked changes.

The relative importance of inter- and intra-type shifts in contributing to the decline from 1939 to 1948 in the shares of upper income groups in total income receipts is indicated in Table 20, Parts A-I and B-I. We know that during this recent decade, the proportions of employee compensation and entrepreneurial income in the countrywide total of income receipts rose, and those of property incomes declined (Table 20, Part A, col. 6, lines 15-24; Part B, col. 9, lines 15-24). But only for the top 1 percent did the shift in the countrywide composition of income by type contribute materially to the recent decline: here alone did the rise in the countrywide proportion of service incomes in total receipts and the decline in the proportion of property incomes contribute heavily to the marked drop in its share in total receipts. Inter-type shifts contributed also to the decline in the share of the 2nd and 3rd percentage band but were of much narrower amplitude than the intra-type shifts; and for the 4th and 5th, and 6th and 7th percentage bands of nonfarm population they raised the shares in total income receipts, although not significantly. However, since the top 1 percent dominates the total 5 or 7 percent group, inter-type shifts are important for it too. Of the decline from 1939 to 1948 in the share of the top 5 percent of the total population and of the top 7 percent of the nonfarm population about a quarter is due to inter-type and three-quarters to intra-type shifts.

The explanation of the different impact of the shift in the countrywide

¹ It did not seem desirable to force the two components to add to the total as was done in *National Income: A Summary of Findings*, Tables 32 and 33, pp. 99 and 102, since it resulted in overweighting the change due to inter-type shifts.

Table 20

68 Changes in Shares of Upper Income Groups by Type
Basic Variant, Total and Nonfarm Population, 1939-1948

COMPONENTS OF CHANGE	A TOTAL POPULATION					
	Top 1 (1)	2nd & 3rd (2)	4th & 5th (3)	Top 5 (4)	Lower 95 (5)	ENTIRE POPULATION (6)
I Inter- and Intra-type Shifts						
1 Inter-type shifts	-1.49	-0.06	0.00	-1.56	+1.56	0
2 Intra-type shifts	-2.62	-0.97	-1.31	-4.90	+4.90	0
3 Total change (1 + 2)	-4.11	-1.04	-1.31	-6.45	+6.45	0
4 Total change, directly	-3.47	-1.12	-1.31	-5.89	+5.89	0
II Changes in Shares in Countrywide Totals of Various Income Types						
<i>Employee Compensation</i>						
5 Level, 1939	6.52	6.35	5.37	18.24	81.76	100.0
6 Change, 1939-48	-2.65	-2.52	-1.93	-7.10	+7.10	0
<i>Entrepreneurial Income</i>						
7 Level, 1939	13.26	7.04	3.88	24.18	75.82	100.0
8 Change, 1939-48	+0.88	+2.98	+0.61	+4.48	-4.48	0
<i>Rent</i>						
9 Level, 1939	22.15	12.72	7.59	42.46	57.54	100.0
10 Change, 1939-48	-0.02	-1.13	-2.17	-3.31	+3.31	0
<i>Interest</i>						
11 Level, 1939	23.16	7.03	4.38	34.57	65.43	100.0
12 Change, 1939-48	-8.12	-0.05	-1.13	-9.30	+9.30	0
<i>Dividends</i>						
13 Level, 1939	58.38	8.32	4.08	70.78	29.22	100.0
14 Change, 1939-48	-7.96	+3.03	-0.13	-5.06	+5.06	0

III Changes in Proportions of Total Income Accounted for by Various Types

<i>Employee Compensation</i>														
15	Level, 1939	37.76	65.19	74.04	53.24	74.26	69.28							
16	Change, 1939-48	-5.40	-17.22	-8.47	-9.01	+2.45	+1.48							
<i>Entrepreneurial Income</i>														
17	Level, 1939	19.74	18.56	13.80	18.14	17.56	17.73							
18	Change, 1939-48	+15.92	+19.33	+12.04	+16.17	+0.43	+3.52							
<i>Rent</i>														
19	Level, 1939	3.43	3.50	2.80	3.32	1.41	1.85							
20	Change, 1939-48	+0.37	-0.51	-0.68	-0.12	-0.23	-0.40							
<i>Interest</i>														
21	Level, 1939	10.07	5.42	4.52	7.57	4.46	5.20							
22	Change, 1939-48	-5.50	-2.25	-2.26	-3.93	-2.09	-2.63							
<i>Dividends</i>														
23	Level, 1939	29.00	7.33	4.84	17.72	2.32	5.94							
24	Change, 1939-48	-5.39	+0.65	-0.63	-3.11	-0.56	-1.98							

B NONFARM POPULATION

		P E R C E N T A G E B A N D									LOWER 93 POPULATION	ENTIRE POPULATION
COMPONENTS OF CHANGE		Top 1 (1)	2nd & 3rd (2)	4th & 5th (3)	Top 5 (4)	6th & 7th (5)	Top 7 (6)	Lower 95 (7)	Lower 93 (8)		(9)	
I Inter- and Intra-type Shifts												
1	Inter-type shifts	-1.58	-0.07	+0.02	-1.62	+0.04	-1.58	+1.62	+1.58	0	0	
2	Intra-type shifts	-2.33	-0.77	-0.53	-3.63	-1.22	-4.85	+3.63	+4.85	0	0	
3	Total change (1 + 2)	-3.90	-0.84	-0.51	-5.25	-1.18	-6.43	+5.25	+6.43	0	0	
4	Total change, directly	-3.29	-0.94	-0.54	-4.76	-1.14	-5.90	+4.76	+5.90	0	0	

II Changes in Shares in Countrywide Totals of Various Income Types

<i>Employee Compensation</i>											
5	Level, 1939	5.95	5.66	4.38	15.99	4.37	20.36	84.01	79.64	100.0	0
6	Change, 1939-48	-2.36	-2.20	-1.41	-5.97	-1.45	-7.42	+5.97	+7.42	0	0

Table 20, Part B (Nonfarm Population), concluded:

COMPONENTS OF CHANGE	P E R C E N T A G E B A N D						Lower 95 (7)	Lower 93 (8)	ENTIRE POPULATION (9)
	Top 1 (1)	2nd & 3rd (2)	4th & 5th (3)	Top 5 (4)	6th & 7th (5)	Top 7 (6)			
<i>Entrepreneurial Income</i>									
7 Level, 1939	19.43	12.09	5.04	36.57	4.92	41.49	63.43	58.51	100.0
8 Change, 1939-48	+3.53	+5.26	+3.62	+12.42	(-)-0.00*	+12.41	-12.42	-12.41	0
<i>Rent</i>									
9 Level, 1939	19.55	11.92	6.90	38.37	5.29	43.66	61.63	56.34	100.0
10 Change, 1939-48	+0.69	-0.69	-1.32	-1.32	-1.95	-3.26	+1.32	+3.26	0
<i>Interest</i>									
11 Level, 1939	21.61	6.77	3.71	32.09	3.18	35.27	67.91	64.73	100.0
12 Change, 1939-48	-7.70	-0.06	-0.34	-8.10	-1.13	-9.23	+8.10	+9.23	0
<i>Dividends</i>									
13 Level, 1939	56.03	9.24	3.07	68.34	3.11	71.44	31.66	28.56	100.0
14 Change, 1939-48	-7.82	+2.41	+1.31	-4.11	-0.84	-4.95	+4.11	+4.95	0
III Changes in Proportions of Total Income Accounted for by Various Types									
<i>Employee Compensation</i>									
15 Level, 1939	36.08	60.53	73.34	50.27	74.52	54.04	80.41	80.78	73.40
16 Change, 1939-48	-4.60	-15.42	-13.76	-8.61	-2.67	-8.02	+5.09	+5.29	+3.92
<i>Entrepreneurial Income</i>									
17 Level, 1939	19.22	21.09	13.79	18.75	13.73	17.97	9.94	9.71	12.00
18 Change, 1939-48	+15.87	+18.32	+16.50	+16.72	+7.38	+15.43	-1.59	-1.89	+1.50
<i>Rent</i>									
19 Level, 1939	3.37	3.61	3.26	3.42	2.58	3.29	1.66	1.60	2.08
20 Change, 1939-48	+0.47	-0.45	-0.86	-0.10	-0.79	-0.19	-0.39	-0.38	-0.41
<i>Interest</i>									
21 Level, 1939	10.43	5.78	4.93	8.03	4.32	7.45	5.17	5.22	5.84
22 Change, 1939-48	-5.76	-2.42	-2.37	-4.22	-2.38	-3.91	-2.38	-2.40	-2.89
<i>Dividends</i>									
23 Level, 1939	30.90	8.99	4.68	19.54	4.84	17.25	2.82	2.70	6.67
24 Change, 1939-48	-5.99	-0.03	+0.49	-3.80	-1.54	-3.32	-0.71	-0.62	-2.12

* Less than -0.005.

composition of income by type on the several upper percentage bands lies in the differences in their average shares in each income type. For 1919-38 the top 1 percent of the total population received on the average 65 percent of dividends, 27.5 percent of interest, 18 percent of rent, 14 percent of entrepreneurial income, and 6.5 percent of employee compensation (Table 3). The spread between 65 and 6.5 percent is so wide that even small shifts in the countrywide composition of income by type can affect perceptibly the share of the top 1 percent in total income receipts. But for the 2nd and 3rd percentage band of total population the average shares in the several types of income have a much narrower range — from 11.4 percent for rent and somewhat over 8 percent each for dividends, interest, and entrepreneurial income to 5.6 percent for employee compensation; and for the 4th and 5th percentage band in total population the range is narrower still. Indeed, the range for these two upper percentage bands is so narrow that only very large shifts in the countrywide composition of income by type can produce large absolute changes in their shares in total income receipts. There are similar differences between the top 1 percent (and to some extent the 2nd and 3rd percentage band) and the lower percentage bands of the nonfarm population in their average shares in the several income types (Table 4).

This comment serves to explain why the *absolute* change in income shares of upper percentage bands below the top due to inter-type shifts was small despite the marked shift in the countrywide composition of income by type during the decade — the rise in the proportion of service incomes and the decline in that of property incomes. Since the absolute change due to inter-type shifts was small for all except the top 1 percent and those due to intra-type shifts were fairly marked, the relative importance of the former was necessarily limited.

b) As inter-type shifts account for only part of the recent decline in upper group shares, it becomes all the more important to examine the changes due to intra-type shifts.

Changes due to intra-type shifts as measured in Table 20, Parts A-I and B-I, are the changes in upper group shares in total income receipts that would have occurred if the countrywide composition of income by type had been constant, and if, therefore, the sole changes had been in the upper group shares in the several income types. But they reflect the combined effect of changes in the shares of a given percentage band in the countrywide totals of various income types; i.e., a rise in the share of a given percentage band in countrywide dividends may be offset (or exceeded) by a decline in its share in countrywide employee compensation. Hence, if the intra-type series shows, say, a decline in the share of a given top

percentage band, we know that its share in total income receipts has fallen, but not necessarily its share in employee compensation, entrepreneurial income, or other income types. The main question is therefore: are there differences in the changes over time in the shares of upper income groups in the various types of income?

This question can be answered only by studying the shares of each upper percentage band in each income type separately. The annual series are given in the detailed tables in Part V; changes in them from 1939 to 1948 are shown in Table 20, Parts A-II and B-II.²

The decline in the shares of upper income groups in total income receipts from 1939 to 1948 was accompanied by a decline in their shares in employee compensation — for each percentage band, of both total and nonfarm population; in interest — again consistently; and in rent — with the single exception of a rise in the share of the top 1 percent of the nonfarm population. The shares of upper income groups in the countrywide total of entrepreneurial income, on the contrary, rose (the single exception is a very slight decline in the share of the 6th and 7th percentage band of nonfarm population). Finally, the shares in the countrywide total of dividends changed differently for the several upper percentage bands: the share of the top 1 percent declined quite drastically; the share of the 2nd and 3rd percentage band, of total and nonfarm population, and of the 4th and 5th percentage band of nonfarm population rose; the share of the top 5 or 7 percent group as a whole declined.

Two general observations are relevant. First, it is particularly important here to remember that the personal composition of upper percentage groups is not identical from year to year, and therefore not in 1939 and 1948. Thus, when we find that the share of the top 5 percent group in employee compensation declined, this does not necessarily mean that the compensation received by Mr. Jones and Mr. Smith who were in that group in both 1939 and 1948 did not rise as much as that of Mr. Brown and Mr. White who in both years were in the lower income groups. It may well have done so. But it is quite as likely that Mr. Smith, who re-

² The series of shares for 1919-38 and those beginning with 1939 are based on different sets of countrywide totals (entering the calculations as denominators) — those of the National Bureau and of the Department of Commerce. The two series of shares in the countrywide total of each income type were spliced into a single continuous series, as was done for the two series of shares in total income receipts for analysis in Chapter 2 (i.e., by using 1936-38 as an overlap), although the relative difference between the two series is fairly sizeable for some income types (e.g., entrepreneurial income and rent). It seemed justifiable, however, to deal with these breaks in continuity in a simple fashion, since whatever errors might result could scarcely affect our conclusions.

ceived a large salary and was in the top 5 percent group in 1939, was no longer at the upper level in 1948 and his position in the top 5 percent group in that year was occupied by a Mr. Merchant who derived his income from his own firm. This shift would cause a decline in the share of the upper group in employee compensation and a rise in its share in entrepreneurial income. In other words, changes from 1939 to 1948 in the shares of an upper group in countrywide totals of various types may be due partly to changes in the shares of identical persons who were in that group in both years and partly to changes in the personal composition of the upper group resulting from the upward shift of persons with entrepreneurial income who replace persons dropping below the upper levels whose incomes were more dominated by employee compensation or by interest and dividends.

Second, it is not clear whether, were we to hold the personal composition of the upper income groups constant, a decline in their shares in total income of the magnitude observed from 1939 to 1948 would be accompanied by a decline in their shares in the countrywide total of each of the five income types distinguished. Even then there might be no complete uniformity of decline. Be that as it may, for the upper income groups of the kind we can distinguish here, i.e., of shifting composition, we find during the period a consistent *rise* in the shares of at least one income type, entrepreneurial income, and some rise in the shares of dividends. Clearly, the rises in these shares served to reduce the decline in the shares in total income, and as far as this divergence of movement in the shares of countrywide totals of various types is associated with shifts in and out of the upper groups, the latter served to damp the decline. If we were to hold the personal composition of each upper group constant, distinguishing them by their income in 1939, the decline in their shares in total income from 1939 to 1948 would exceed that observed in Chapter 2 and the decline in their shares in countrywide totals of various types would probably be more consistently observed than in Table 20; the same might be true of upper income groups of constant composition determined on the basis of average income status (rather than on the basis of their income in the single year 1939), provided the average represented the situation centering about 1939.

c) It is clear from Table 20, Parts A-II and B-II, that the movement from 1939 to 1948 in the shares of the several upper percentage bands, the top 5 or 7 percent as a whole, and the lower 95 or 93 percent group in various types of income differed. Consequently, whatever the shifts in the countrywide composition of income by type, the shifts in the income structure of the top 5 or 7 percent group and of the lower 95 or 93 percent cannot have been the same; likewise, changes in the composition of income

by type must have differed as among the several upper percentage bands (Table 20, Parts A-III and B-III).

During 1939-48 the proportion of employee compensation in individuals' total income receipts rose, markedly for the nonfarm population, less so for the total population; that of entrepreneurial income also rose, markedly for the total population and somewhat less for the nonfarm population; the proportion accounted for by rent fell off; and the proportions of interest and dividends declined quite markedly (Parts A-III and B-III, col. 6 and 9 respectively). But the shifts in the structure of income by type for the upper income groups were substantially different. The proportion of employee compensation in the total income of these upper groups declined instead of rising; the proportion of entrepreneurial income rose but much more markedly, both absolutely and relatively, than did its proportion in countrywide income receipts; for the top 1 percent, the proportion of rent in its total income rose, but for the upper groups below the top 1 percent it declined; the proportion of interest in the total income of upper income groups declined about as much relatively as did the countrywide proportion. Finally, while the proportion of dividends declined quite markedly for the top 1 percent, it declined only slightly for the 2nd and 3rd percentage band of nonfarm population, rose somewhat for the 2nd and 3rd percentage band of total population and the 4th and 5th percentage band of nonfarm population, and only for the 6th and 7th percentage band of nonfarm population declined as much relatively as the countrywide proportion.

The decline in the proportion of employee compensation in upper group income, not observed in the income of the entire population, was more than compensated for by the much bigger rise in the proportion of entrepreneurial income which offset also the larger absolute decrease in the proportions of interest and dividends. In the income of the lower 95 and 93 percent of the population the marked rise in the proportion of employee compensation (and a very mild one in that of entrepreneurial income for the lower 95 percent of the total population) was offset by declines in the proportions of rent, interest, and dividends (and of entrepreneurial income for the lower groups of nonfarm population).

Thus, while over the period aggregate income for the entire population was becoming more dominated by employee compensation and entrepreneurial income and much less by property incomes, upper group income was becoming more dominated by entrepreneurial income, and employee compensation and property incomes were declining in importance. As compared with that of the lower income groups, income of the upper groups was still characterized by a much higher proportion of property

incomes, but the most significant change was the very marked increase in the proportion of entrepreneurial income.

In concluding this discussion of the components of the decline in upper group shares from 1939 to 1948 one may note that the evidence summarized in Table 20 suggests emphasis not only on the factors already mentioned in Chapter 2 — the closer approach to full employment, the shifts from property to service incomes, the shifts between incomes of farmers and of the urban population, the changes within the distribution of employee compensation, and the increased burden of progressive taxation — but also on the large and sustained rise in prices, with its differential impact on various groups in society, especially unfavorable to certain fixed types of property income and relatively favorable to entrepreneurial incomes. It is this price trend, together with such government policy as tended to keep down the return on long term securities (in connection with the placing of war-necessitated public loans) and urban rent, that partly explains the sharp drop in the proportion of property incomes in the countrywide total of individuals' income receipts — as well as the rise in the proportion of entrepreneurial income (for total population). It explains also the rise in the share of upper income groups in the countrywide total of entrepreneurial income, and thus also the increase in the proportion of the latter type in their total income. Moreover, the impacts of the price rises and of other conditions accompanying World War II and its aftermath were probably different for the various groups of nonfarm entrepreneurs, accentuating the inequality in the distribution of entrepreneurial incomes.

2 *Changes in Decade Averages*

As noted in Chapter 2, while the shares of all upper groups in total income declined from 1929-38 to 1939-48, no such marked and consistent changes were observed from the first to the second interwar decade. From 1919-28 to 1929-38 the share of the top 1 percent declined; those of the upper percentage bands below the top 1 percent rose; and for the top 5 or 7 percent group as a whole, there was no significant change. We now study the components of these changes in the decade averages — the changes due to shifts in the countrywide composition of income by type (inter-type shifts) and those due to changes in upper group shares in the various income types (intra-type shifts).

a) In the change from 1929-38 to 1939-48 both inter- and intra-type shifts served to depress the shares of upper income groups, with the exception of the slight rises due to inter-type shifts in the shares of the 4th and 5th, and 6th and 7th percentage bands of the nonfarm population (Table 21,

Table 21

74 Changes in Decade Averages of Shares of Upper Income Groups by Type
Basic Variant, Total and Nonfarm Population, 1919-1948

COMPONENTS OF CHANGE	A TOTAL POPULATION					
	Top 1 (1)	2nd & 3rd (2)	P E R C E N T A G E 4th & 5th (3)	B A N D Top 5 (4)	Lower 95 (5)	ENTIRE POPULATION (6)
I Inter- and Intra-type Shifts						
Change, 1919-28 to 1929-38						
1 Inter-type shifts	+0.41	-0.13	-0.10	+0.18	-0.18	0
2 Intra-type shifts	-1.02	+0.35	+0.67	+0.01	-0.01	0
3 Total change (1 + 2)	-0.60	+0.22	+0.58	+0.19	-0.19	0
4 Total change, directly	-0.56	+0.25	+0.57	+0.26	-0.26	0
Change, 1929-38 to 1939-48						
5 Inter-type shifts	-2.15	-0.12	(-)0.00*	-2.27	+2.27	0
6 Intra-type shifts	-1.39	-0.79	-1.52	-3.69	+3.69	0
7 Total change (5 + 6)	-3.54	-0.91	-1.52	-5.96	+5.96	0
8 Total change, directly	-2.97	-0.98	-1.43	-5.38	+5.38	0
Change, 1919-28 to 1939-48						
9 Inter-type shifts	-1.74	-0.25	-0.10	-2.09	+2.09	0
10 Intra-type shifts	-2.40	-0.44	-0.84	-3.69	+3.69	0
11 Total change (9 + 10)	-4.14	-0.69	-0.94	-5.78	+5.78	0
12 Total change, directly	-3.53	-0.74	-0.86	-5.12	+5.12	0
II Changes in Shares in Countrywide Totals of Various Income Types						
Employee Compensation						
13 Average, 1919-28	6.19	4.95	4.19	15.33	84.67	100.0
14 Change, 1919-28 to 1929-38	+0.64	+1.35	+1.18	+3.17	-3.17	0
15 Change, 1929-38 to 1939-48	-2.17	-1.91	-1.54	-5.62	+5.62	0
16 Change, 1919-28 to 1939-48 (14 + 15)	-1.53	-0.56	-0.36	-2.45	+2.45	0

<i>Entrepreneurial Income</i>							
17	Average, 1919-28	14.82	8.96	5.46	29.24	70.76	100.0
18	Change, 1919-28 to 1929-38	-2.28	-1.78	-0.58	-4.63	+4.63	0
19	Change, 1929-38 to 1939-48	+4.41	+1.62	-1.31	+4.72	-4.72	0
20	Change, 1919-28 to 1939-48 (18 + 19)	+2.13	-0.15	-1.89	+0.09	-0.09	0
<i>Rent</i>							
21	Average, 1919-28	15.80	10.64	7.57	34.01	65.99	100.0
22	Change, 1919-28 to 1929-38	+4.28	+1.63	+2.66	+8.57	-8.57	0
23	Change, 1929-38 to 1939-48	-1.23	-1.40	-5.09	-7.72	+7.72	0
24	Change, 1919-28 to 1939-48 (22 + 23)	+3.05	+0.23	-2.43	+0.85	-0.85	0
<i>Interest</i>							
25	Average, 1919-28	31.05	9.86	6.15	47.06	52.94	100.0
26	Change, 1919-28 to 1929-38	-7.13	-2.64	-1.28	-11.04	+11.04	0
27	Change, 1929-38 to 1939-48	-3.49	+0.47	-1.46	-4.48	+4.48	0
28	Change, 1919-28 to 1939-48 (26 + 27)	-10.62	-2.16	-2.74	-15.53	+15.53	0
<i>Dividends</i>							
29	Average, 1919-28	70.23	8.94	3.64	82.81	17.19	100.0
30	Change, 1919-28 to 1929-38	-10.99	-1.48	-0.03	-12.50	+12.50	0
31	Change, 1929-38 to 1939-48	-7.77	+2.90	-0.17	-5.04	+5.04	0
32	Change, 1919-28 to 1939-48 (30 + 31)	-18.76	+1.42	-0.20	-17.54	+17.54	0
III Changes in Proportions of Total Income Accounted for by Various Types							
<i>Employee Compensation</i>							
33	Average, 1919-28	29.78	49.20	58.15	40.25	72.32	64.43
34	Change, 1919-28 to 1929-38	+6.39	+14.26	+11.40	+10.32	+0.90	+3.14
35	Change, 1929-38 to 1939-48	-3.39	-9.98	+1.87	-4.23	+3.53	+3.26
36	Change, 1919-28 to 1939-48 (34 + 35)	+3.00	+4.28	+13.27	+6.09	+4.43	+6.40

Table 21, Part A (Total Population) continued:

COMPONENTS OF CHANGE	Top 1 (1)	P E R C E N T A G E 2nd & 3rd (2)	4th & 5th (3)	B A N D Top 5 (4)	Lower 95 (5)	ENTIRE POPULATION (6)
<i>Entrepreneurial Income</i>						
37 Average, 1919-28	21.96	27.56	23.25	23.70	18.82	20.02
38 Change, 1919-28 to 1929-38	-5.98	-10.10	-8.22	-7.52	-2.47	-3.70
39 Change, 1929-38 to 1939-48	+19.84	+14.45	+4.73	+15.45	+1.02	+3.88
40 Change, 1919-28 to 1939-48 (38 + 39)	+13.86	+4.35	-3.49	+7.93	-1.45	+0.19
<i>Rent</i>						
41 Average, 1919-28	4.72	6.57	6.50	5.54	3.50	4.00
42 Change, 1919-28 to 1929-38	-1.54	-2.82	-2.47	-2.04	-1.90	-1.93
43 Change, 1929-38 to 1939-48	-0.07	-0.67	-1.83	-0.59	-0.27	-0.44
44 Change, 1919-28 to 1939-48 (42 + 43)	-1.62	-3.49	-4.30	-2.63	-2.18	-2.38
<i>Interest</i>						
45 Average, 1919-28	13.15	8.70	7.56	10.92	4.02	5.71
46 Change, 1919-28 to 1929-38	+0.07	-1.00	-0.90	-0.60	+2.14	+1.49
47 Change, 1929-38 to 1939-48	-6.87	-3.61	-3.85	-5.32	-3.51	-4.09
48 Change, 1919-28 to 1939-48 (46 + 47)	-6.80	-4.61	-4.75	-5.92	-1.37	-2.60
<i>Dividends</i>						
49 Average, 1919-28	30.39	7.98	4.54	19.60	1.34	5.84
50 Change, 1919-28 to 1929-38	+1.06	-0.33	+0.20	-0.16	+1.33	+1.01
51 Change, 1929-38 to 1939-48	-9.51	-0.19	-0.92	-5.31	-0.77	-2.61
52 Change, 1919-28 to 1939-48 (50 + 51)	-8.44	-0.52	-0.72	-5.47	+0.56	-1.61

COMPONENTS OF CHANGE		B NONFARM POPULATION								
		P E R C E N T A G E					B A N D			
Top	2nd & 3rd	4th & 5th	Top 5	6th & 7th	Top 7	Lower 95	Lower 93	ENTIRE POPULATION	(9)	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)			
I Inter- and Intra-type Shifts										
<i>Change, 1919-28 to 1929-38</i>										
1	+0.30	-0.19	-0.14	-0.04	-0.12	+0.04	+0.16	0	0	
2	-1.11	+0.20	+0.58	-0.33	+0.63	+0.33	-0.30	0	0	
3	-0.81	+0.01	+0.44	-0.37	+0.50	+0.37	-0.13	0	0	
4	-0.78	+0.02	+0.46	-0.30	+0.51	+0.30	-0.21	0	0	
<i>Change, 1929-38 to 1939-48</i>										
5	-2.17	-0.09	+0.04	-2.22	+0.07	+2.22	+2.15	0	0	
6	-1.08	-0.37	-1.00	-2.45	-1.24	+2.45	+3.70	0	0	
7	-3.25	-0.46	-0.96	-4.67	-1.18	+4.67	+5.85	0	0	
8	-2.73	-0.60	-0.93	-4.27	-1.11	+4.27	+5.37	0	0	
<i>Change, 1919-28 to 1939-48</i>										
9	-1.87	-0.28	-0.11	-2.26	-0.06	+2.26	+2.32	0	0	
10	-2.19	-0.18	-0.42	-2.79	-0.61	+2.79	+3.40	0	0	
11	-4.06	-0.46	-0.52	-5.04	-0.67	+5.04	+5.72	0	0	
12	-3.51	-0.58	-0.48	-4.57	-0.60	+4.57	+5.16	0	0	
II Changes in Shares in Countrywide Totals of Various Income Types										
<i>Employee Compensation</i>										
13	5.55	4.45	3.31	13.32	3.18	86.68	83.50	100.0	100.0	
14	+0.60	+1.09	+1.19	+2.88	+1.03	+3.91	-3.91	0	0	
15	-1.84	-1.64	-1.18	-4.67	-1.11	-5.78	+5.78	0	0	
16	-1.25	-0.55	(+) 0.00*	-1.79	-0.08	-1.87	+1.79	+1.87	0	
<i>Entrepreneurial Income</i>										
17	22.39	14.10	8.26	44.75	6.65	51.39	48.61	100.0	100.0	
18	-4.06	-3.00	-1.47	-8.53	-0.96	+9.49	+9.49	0	0	
19	+8.61	+4.34	-0.36	+12.59	-1.68	-12.59	-10.92	0	0	
20	+4.55	+1.34	-1.83	+4.06	-2.64	+1.43	-1.43	0	0	

Table 21, Part B (Nonfarm Population), concluded:

COMPONENTS OF CHANGE	P E R C E N T A G E B A N D										ENTIRE POPULATION (9)
	Top 1 (1)	2nd & 3rd (2)	4th & 5th (3)	Top 5 (4)	6th & 7th (5)	Top 7 (6)	Lower 95 (7)	Lower 93 (8)			
<i>Rent</i>											
21 Average, 1919-28	13.62	8.95	6.37	28.94	5.42	34.36	71.06	65.64			100.0
22 Change, 1919-28 to 1929-38	+4.06	+1.74	+1.74	+7.54	+2.14	+9.68	-7.54	-9.68			0
23 Change, 1929-38 to 1939-48	-0.80	-0.17	-3.00	-3.97	-4.15	-8.11	+3.97	+8.11			0
24 Change, 1919-28 to 1939-48 (22 + 23)	+3.26	+1.57	-1.25	+3.57	-2.01	+1.56	-3.57	-1.56			0
<i>Interest</i>											
25 Average, 1919-28	28.50	9.15	5.36	43.01	4.31	47.32	56.99	52.68			100.0
26 Change, 1919-28 to 1929-38	-6.30	-2.28	-1.27	-9.84	-0.76	-10.60	+9.84	+10.60			0
27 Change, 1929-38 to 1939-48	-3.28	+0.77	-0.67	-3.18	-1.31	-4.49	+3.18	+4.49			0
28 Change, 1919-28 to 1939-48 (26 + 27)	-9.57	-1.52	-1.93	-13.02	-2.07	-15.09	+13.02	+15.09			0
<i>Dividends</i>											
29 Average, 1919-28	66.98	9.51	3.96	80.45	2.48	82.93	19.55	17.07			100.0
30 Change, 1919-28 to 1929-38	-10.10	-1.43	-0.62	-12.16	+0.04	-12.12	+12.16	+12.12			0
31 Change, 1929-38 to 1939-48	-7.80	+2.89	+0.40	-4.52	-0.35	-4.87	+4.52	+4.87			0
32 Change, 1919-28 to 1939-48 (30 + 31)	-17.91	+1.46	-0.23	-16.68	-0.32	-16.99	+16.68	+16.99			0
III Changes in Proportions of Total Income Accounted for by Various Types											
<i>Employee Compensation</i>											
33 Average, 1919-28	28.11	46.98	53.58	37.56	58.64	40.35	79.41	80.51			69.15
34 Change, 1919-28 to 1929-38	+6.04	+13.16	+14.36	+10.21	+11.61	+10.78	-0.78	-1.38			+1.98
35 Change, 1929-38 to 1939-48	-2.37	-10.91	-1.36	-4.23	+4.81	-3.32	+6.05	+6.03			+5.46
36 Change, 1919-28 to 1939-48 (34 + 35)	+3.66	+2.25	+13.00	+5.98	+16.42	+7.46	+5.27	+4.65			+7.44

Entrepreneurial Income

37	Average, 1919-28	21.29	28.08	25.31	23.82	22.99	23.72	9.61	8.90	13.09
38	Change, 1919-28 to 1929-38	-5.74	-9.62	-9.56	-7.45	-8.48	-7.63	-0.45	-0.07	-2.17
39	Change, 1929-38 to 1939-48	+20.01	+16.07	+7.35	+16.59	+2.61	+14.74	-0.66	-0.77	+2.31
40	Change, 1919-28 to 1939-48 (38 + 39)	+14.27	+6.45	-2.21	+9.14	-5.86	+7.11	-1.11	-0.84	+0.14

Rent

41	Average, 1919-28	4.56	6.23	6.82	5.40	6.54	5.56	4.31	4.19	4.58
42	Change, 1919-28 to 1929-38	-1.45	-2.53	-2.88	-1.98	-2.47	-2.03	-2.36	-2.36	-2.27
43	Change, 1929-38 to 1939-48	-0.04	-0.46	-1.47	-0.43	-2.10	-0.66	-0.47	-0.41	-0.46
44	Change, 1919-28 to 1939-48 (42 + 43)	-1.50	-2.99	-4.35	-2.40	-4.56	-2.70	-2.83	-2.77	-2.73

Interest

45	Average, 1919-28	13.54	9.08	8.21	11.42	7.46	10.90	4.93	4.80	6.52
46	Change, 1919-28 to 1929-38	+0.11	-0.79	-1.26	-0.56	-0.81	-0.67	+2.16	+2.32	+1.49
47	Change, 1929-38 to 1939-48	-7.15	-3.89	-3.77	-5.62	-4.10	-5.35	-4.00	-4.00	-4.48
48	Change, 1919-28 to 1939-48 (46 + 47)	-7.04	-4.68	-5.03	-6.17	-4.91	-6.02	-1.84	-1.68	-2.99

Dividends

49	Average, 1919-28	32.50	9.63	6.07	21.79	4.37	19.48	1.73	1.59	6.66
50	Change, 1919-28 to 1929-38	+1.06	-0.23	-0.66	-0.23	+0.14	-0.45	+1.43	+1.49	+0.97
51	Change, 1929-38 to 1939-48	-10.45	-0.80	-0.75	-6.31	-1.22	-5.41	-0.91	-0.85	-2.83
52	Change, 1919-28 to 1939-48 (50 + 51)	-9.39	-1.03	-1.42	-6.54	-1.08	-5.86	+0.52	+0.64	-1.86

* Less than ±0.005.

Parts A-I and B-I). This finding was suggested also by the corresponding analysis of inter- and intra-type shifts in the decline of upper group shares from 1939 to 1948 (Table 20, Parts A-I and B-I). But it is significant that here the relative contribution of inter-type shifts is somewhat larger: whereas in the decline from 1939 to 1948 they accounted for about a quarter of the total drop in the share of the top 5 or 7 percent, they account for almost four-tenths of the decline in its share from 1929-38 to 1939-48 (Table 21, Parts A-I and B-I, lines 5 and 6). Apparently, the longer span involved and the fact that the initial period in the present comparison is the depressed decade of the 1930's makes for a greater change in the countrywide composition of total income by type, and hence for the greater weight of inter-type shifts.

The picture of the change from the first to the second interwar decade is quite different. Shifts in the countrywide composition of income by type tended to raise rather than depress the share of the top 1 percent in the drift from the first to the second decade: obviously the rise in the proportions of interest and dividends during the 1930's bolstered the share of the top 1 percent in total income receipts, despite a concurrent rise in the countrywide proportion of employee compensation. The downward drift in that share is due exclusively to a decline in its share *within* the income types.

Change from the first to the second decade associated with inter-type shifts in the shares of percentage bands below the top 1 is, in contrast, downward. Shifts in the countrywide composition of income that tend to raise the shares of some percentage bands would at the same time necessarily depress the shares of others, since the sum of all changes associated with inter-type shifts must be zero. This reversal in the effect of inter-type shifts is already observable in the 2nd and 3rd percentage band, and continues through the 4th and 5th, and 6th and 7th. But being smaller than the upward drift of their shares within the income types, they merely diminish instead of cancel the latter; consequently, as already observed, the total change from 1919-28 to 1929-38 in the shares of these percentage bands below the top 1 is upward.

For each upper percentage band the sign of the change from 1919-28 to 1929-38 due to inter-type shifts is opposite to that of the change due to intra-type shifts. Only when the effects of the given shift are totaled for the top 5 percent of the total or of the nonfarm population (but not the top 7 percent of the latter) do the signs of inter- and intra-type shifts become identical. The drift from the first to the second decade in the shares of the upper percentage groups is thus significantly reduced by the partial cancellation of the effects of inter- and intra-type shifts.

When we combine the two intervals and thus measure the change from the first to the last decade, the declines that characterize the latter are so large that they dominate the changes from 1919-28 to 1939-48. Both inter- and intra-type shifts are consistently downward, i.e., cause a decline in the share of each upper income group of total and of nonfarm population. The relative contribution of inter-type shifts to this decline is substantial — somewhat less than four-tenths for the top 5 percent of total population, and slightly more than four-tenths for the top 7 percent of nonfarm population.

b) In discussing Table 20 we noted that the decline from 1939 to 1948 in the shares of upper income groups in total income was accompanied by a decline in their shares in employee compensation, rent, interest, and dividends (not consistently in the latter), and a rise in their shares in entrepreneurial income. Similar conclusions emerge when we study changes from 1929-38 to 1939-48 (Table 21, Parts A-II and B-II).

But the picture revealed by the comparison of the first and second inter-war decades is quite different. For each upper percentage band the share in employee compensation rose. Obviously, during the depressed 1930's the upper groups resisted the contraction of earnings more strongly than the lower groups although we must remember that, as always, part of the change may have been due to shifts of units into and out of upper groups. For each upper percentage band the share in rent also increased from 1919-28 to 1929-38. The shares of the upper income groups in entrepreneurial income, interest, and dividends, on the contrary, declined, except the share of dividends received by the 6th and 7th percentage band of nonfarm population, which rose slightly.

For employee compensation, entrepreneurial income, and rent the changes in upper group shares during 1939-48 represent a reversal of the drift from 1919-28 to 1929-38. But the decline from 1939 to 1948 in the shares of interest and of dividends may be viewed as a continuation of their downward drift from the first to the second decade. Consequently over the full period, 1919-48, the shares of interest and of dividends received by the upper groups of both total and nonfarm population declined markedly. And even for the shares in the other types of payment, the movement during the recent decade tends to outweigh that from the first to the second. Hence when we add the changes, and thus compare 1919-28 with 1939-48, the shares of upper groups in employee compensation show a decline for all percentage bands, and their shares in entrepreneurial income show a rise for the top 5 and 7 percent groups as wholes.

As indicated repeatedly, since the upper groups are selected on the basis of income levels current during the year, their composition is not neces-

sarily identical from year to year. This *caveat* is especially important when the comparisons extend over as long a period as Table 21 covers. The changes in the shares of a given group in various income types do not, therefore, mean that one and the same group of high income recipients got a smaller or larger share of the countrywide total of employee compensation, or of dividends, etc., in one period than in another. The changes may be due partly to shifts *into* the given income group of units whose shares in a given income type are larger or smaller than those of units that shifted *out of* the group; and partly to changes in shares received by units that were in the given upper group in both periods of the comparison. With the data at hand, it is impossible to estimate the relative weight of these two elements.

c) Changes in the type-structure of the total income of upper groups reflect partly differences in the changes in their shares in the countrywide totals of various types. From 1929-38 to 1939-48 the proportions of employee compensation, rent, interest, and dividends in the total income of upper groups declined, and the proportions of entrepreneurial income rose (Table 21, Parts A-III and B-III). These movements in type-structure are similar to those from 1939 to 1948 observed in Table 20, Parts A-III and B-III, but with two interesting differences. First, in the comparison of decade averages, the decline in the proportions of rent and of dividends in total income is observed for each upper percentage band of both total and nonfarm population, and fails to show the rise observed for some bands from 1939 to 1948. Second, and by contrast, the decline in the proportion of employee compensation in total income stops at the 2nd and 3rd percentage band of total and the 4th and 5th percentage band of nonfarm population — these bands already showing a rise in that proportion. But by and large, the changes in the type-structure of income for the upper groups from 1929-38 to 1939-48 are roughly the same as those from 1939 to 1948; and differences between them and those for the entire population are also roughly similar.

From 1919-28 to 1929-38 the proportions of employee compensation, interest, and dividends in the income of the total and nonfarm population increased; those of entrepreneurial income and rent declined. The movement in the composition of income by type of the upper groups again differed from that for total and for nonfarm population. The proportion of upper group income accounted for by employee compensation rose, as it did for the entire population, but much more markedly. Likewise, the decline in the proportion of upper group income accounted for by entrepreneurial income was much larger, both absolutely and relatively. The decline in the proportion of rent was somewhat smaller relatively in the

total income of the upper groups than in that of the entire population. Finally, whereas the proportions of interest and of dividends in the income of the entire population increased, their proportions in the income of the top 5 or 7 percent group of both total and nonfarm population declined.

When we combine changes for the two intervals, we find that, unlike the comparison in Parts A-II and B-II where we deal with shares in the countrywide totals of the several types, the shift in the type composition from 1919-28 to 1929-38 outweighs that from 1929-38 to 1939-48 in the case of employee compensation and rent. But for entrepreneurial income, interest, and dividends the movement during 1939-48 dominates that for the entire period. The results for the full period indicate a fairly consistent shift in the type composition of total income of upper groups toward a larger proportion of employee compensation, and, somewhat less consistently, of entrepreneurial income; and a consistent shift toward smaller proportions of rent, interest, and dividends. The type-structure of the income of the lower 95 or 93 percent is characterized by a rise in the proportion of employee compensation, a decline in the proportions of entrepreneurial income, rent, and interest, and, surprisingly, a rise in the proportion of dividends. Thus, the decade averages suggest, as do the changes from 1939 to 1948, that the type-structure of the income of the upper groups as compared with that of the lower, is becoming more heavily dominated by entrepreneurial income; moreover, the inequality in the distribution of dividends seems to be less, in the sense that their importance among the groups below the top has increased whereas at the top income levels it has declined. To some extent this is true also of the distribution of interest, since the *relative* reduction of the proportion of the latter in the total income of the top 5 or 7 percent exceeds that in the total income of the lower 95 or 93 percent (Table 21, Parts A and B, line 48).

3 *Changes during Business Cycles*

Since the margin of error in the estimates of shares in the various income types is wider than in those in total income, the analysis here of changes during business cycles must necessarily be even more tentative than that in Chapter 2. We should, therefore, emphasize only findings that reveal differences of major magnitude and, more importantly, are highly consistent.

The averages in Tables 22 and 23 are confined to changes during the five business cycles in 1919-38. The basic estimates cover also the last business cycle, with a peak in 1944 and a trough in 1946. But the changes in the shares during this last cycle are so large, compared with those before 1938, that their inclusion in the averages would completely dominate them. We therefore omit that cycle from the averages, but take account of the *sign* of the change during it, to see whether it reinforces or weakens the

Table 22

Change per Year during Business Cycles in Shares of Upper Income Groups in Total Income Due to Inter-type and to Intra-type Shifts
Basic Variant, Total and Nonfarm Population, 1919-1946

Percentage Band	Inter-type Shifts (1)	Intra-type Shifts (2)	Total Change (1 + 2) (3)	Total Change Directly (4)
A TOTAL POPULATION				
<i>Differential Change per Year, Averages for 5 Cycles, 1919-1938</i>				
Top 1	-0.06(3)(3)	+0.23(2)(3)	+0.18	+0.16(2)(3)
2nd & 3rd	+0.03(3)(4)	+0.42(4)(5)	+0.45	+0.46(4)(5)
4th & 5th	+0.02(5)(6)	+0.66(5)(6)	+0.68	+0.66(5)(6)
Top 5	(-)-0.00*(3)(3)	+1.32(5)(6)	+1.31	+1.27(3)(4)
<i>Averages for First 3 Cycles, 1919-1927</i>				
Top 1	+0.32	+0.66	+0.99	+0.95
2nd & 3rd	+0.07	+0.64	+0.71	+0.72
4th & 5th	+0.03	+0.72	+0.75	+0.73
Top 5	+0.42	+2.03	+2.45	+2.39
<i>Averages for Last 3 Cycles, 1924-1938</i>				
Top 1	-0.39	-0.32	-0.71	-0.71
2nd & 3rd	-0.02	+0.06	+0.04	+0.04
4th & 5th	+0.02	+0.47	+0.49	+0.47
Top 5	-0.39	+0.21	-0.18	-0.20
B NONFARM POPULATION				
<i>Differential Change per Year, Averages for 5 Cycles, 1919-1938</i>				
Top 1	-0.06(3)(3)	+0.14(3)(3)	+0.08	+0.08(3)(4)
2nd & 3rd	+0.04(2)(3)	+0.29(2)(3)	+0.33	+0.36(2)(3)
4th & 5th	+0.03(2)(3)	+0.59(5)(6)	+0.62	+0.63(5)(6)
Top 5	+0.01(1)(2)	+1.02(3)(4)	+1.02	+1.07(3)(4)
6th & 7th	+0.02(2)(3)	+0.47(5)(6)	+0.49	+0.45(5)(6)
Top 7	+0.03(1)(2)	+1.48(5)(6)	+1.51	+1.52(3)(4)
<i>Averages for First 3 Cycles, 1919-1927</i>				
Top 1	+0.34	+0.64	+0.98	+0.98
2nd & 3rd	+0.09	+0.58	+0.67	+0.69
4th & 5th	+0.04	+0.56	+0.60	+0.60
Top 5	+0.47	+1.78	+2.25	+2.27
6th & 7th	+0.02	+0.54	+0.57	+0.54
Top 7	+0.50	+2.32	+2.82	+2.81
<i>Averages for Last 3 Cycles, 1924-1938</i>				
Top 1	-0.44	-0.37	-0.81	-0.81
2nd & 3rd	-0.03	-0.17	-0.20	-0.17
4th & 5th	(-)-0.00*	+0.52	+0.52	+0.55
Top 5	-0.47	-0.02	-0.49	-0.44
6th & 7th	+0.01	+0.28	+0.29	+0.26
Top 7	-0.46	+0.26	-0.20	-0.18

Figures in the first parentheses show the number of cycles during 1919-38 with the same sign as the entry in the column proper, those in the second parentheses, the number of cycles during 1919-46 with the same sign as the entry in the column proper.

* Less than -0.005.

impression of consistency (or lack of it) derived from the record for 1919-38.

a) Shifts in the countrywide composition of income by type seem to contribute little to the average change in the shares of upper income groups during business cycles (Table 22).³ That this should be the case for the shares of the percentage bands below the top 1 percent is not surprising. But the contribution of inter-type shifts to changes in the share of the top 1 percent is somewhat smaller than we expected.

The reason is the lack of consistency of the effects of inter-type shifts on the behavior of shares during business cycles. Of the entries in parentheses, indicating the number of cycles for which the direction of change is the same as that of the average change, only one was larger than 3, and most of those for nonfarm population were below 3. This inconsistency would naturally make the average change due to inter-type shifts small, even in the share of the top 1 percent.

The picture is different when averages are calculated for the first three and the last three business cycles in the 1919-38 period (with the middle cycle, 1924-27, included in both groups). It then appears that shifts in the countrywide composition of income by type contribute to the inverted conformity of the share of the top 1 percent during the first three cycles and to its positive conformity during the last three; and the effects for the two groups of cycles almost cancel. Intra-type shifts also contribute to the reversal in conformity, but their average change for the first group of three cycles is much larger than that for the second group. The reversal in the cyclical pattern of the share of the top 1 percent is thus traceable both to shifts in the countrywide composition of income by type and to changes in the shares within the income types.

Once the two groups of business cycles have been set off, inter-type shifts are seen to contribute heavily to the total cyclical change in the share of the top 1 percent, accounting for about a third to over a half; but their contribution to cyclical changes in the shares of the lower percentage bands remains negligible. For the change in the share of the top group as a whole, however, inter-type shifts remain quite important, weighed against the sum of all shifts added regardless of sign.

³ May we correct an unfortunate error in *National Income: A Summary of Findings* (pp. 99-106), where the column headings were switched: inter-type shifts were described as shifts *within* the income types, and intra-type as shifts *among* the income types. This error did not produce any untoward consequences in interpreting the results for the top 1 percent, but did lead to a mistaken exaggeration of the importance of inter-type shifts in discussing the change in the share of the 2nd through 5th percentage band.

If we now ask what consistent responses to business cycles may be found in the effects of inter- and intra-type shifts on shares of upper income groups, and set 4 as the minimum measure of consistency for 1919-38 (i.e., 4 of the 5 business cycles in that period), and 5 for 1919-46 (i.e., 5 of the 6 business cycles in that period), the answer is simple. These measures (shown for 1919-38 in the first parentheses following the entry proper, and for 1919-46 in the second) tell us that the effects of intra-type shifts alone show consistent response to business cycles — and solely for the percentage bands below the top 1 of total population, and below the 2nd and 3rd of nonfarm population. Because in this case the percentage bands below the top dominate the top 5 or 7 percent group, the inverted conformity of their intra-type shifts causes a consistently inverted conformity in the share of the top 5 percent of total and of the top 7 percent of the nonfarm population. Thus, the inverted conformity of the shares in the total income of the upper percentage bands below the top observed in Chapter 2 is due almost exclusively to the effects of intra-type shifts. The sole exception is the consistently inverted conformity of the effects of inter-type shifts on the share of the 4th and 5th percentage band of total population.

b) Changes during business cycles in upper group shares in the several income types must, for reasons already indicated, be interpreted with caution especially since the diversity of the patterns of their short term movements may make a standard scale of business cycles inappropriate. Nevertheless, it still seems safest to study their changes against that scale, for we can then at least explain the findings in Chapter 2, and tell whether the movements in these shares have a consistent relation to cycles in general economic conditions.

The results, though merely suggestive, are of interest (Table 23, Parts A-I and B-I). In general, shares of upper income groups in employee compensation move counter to business cycles: they decline, although not consistently, during expansions; rise quite consistently during contractions; and show, quite consistently, a rise in the rate of change from expansion to contraction. This is true of the share of each percentage band, including the top 1 percent, the high consistency being clearly indicated by the frequency of entries in parentheses showing the maximum number of cycles with the same sign as that of the average change.

Less uniform but still substantial consistency characterizes the cyclical behavior of upper group shares in the countrywide total of rent: on the whole they decline during expansions, rise during contractions, and show a rise in the rate of change from expansion to contraction. This behavior is quite similar to that of the shares in employee compensation. The share

of the top 1 percent of both total and nonfarm population, and of the 2nd and 3rd percentage band of the nonfarm, however, did not participate in the decline during expansions; and inverted conformity is somewhat less consistent than for the shares in employee compensation.

The patterns of cyclical changes in upper group shares in entrepreneurial income, interest, and dividends are highly diverse and none too consistent. It is consequently difficult to summarize them in broad terms without oversimplifying and overstating.

On the whole, the differential change in the shares in entrepreneurial income suggests a pattern *counter* to business cycles for all upper percentage bands of total population except the 2nd and 3rd. But for the nonfarm population, the pattern is, on the whole, one of *positive* conformity to business cycles for all upper percentage bands except the 6th and 7th. This suggests that in some business cycles net entrepreneurial income from agriculture responded markedly and positively. Its inclusion heightens the sensitivity of the countrywide total of entrepreneurial income to business cycles so that, in comparison with it, the cyclical movement of entrepreneurial income received by upper groups of *total* population is narrower — hence the inverted conformity of their shares. The exclusion of entrepreneurial income from agriculture removes the cyclically variable component from the *countrywide* total of entrepreneurial income and damps the cyclical swings in the latter; and since the income from that type received by upper groups remains unaffected, their shares in the new total of entrepreneurial income may move with business cycles. However, the differences in the cyclical movement of shares in entrepreneurial income between upper groups of total population and those of nonfarm population, and the explanation suggested above, are limited in significance because neither the patterns nor the differences are consistent.

In the distribution of the countrywide total of interest, the share of the top 1 percent of both total and nonfarm population, and of the 2nd and 3rd percentage band of nonfarm, move with business cycles at least as far as the differential change is concerned. On the whole, the shares of the lower percentage bands (below the top 1 of total population, and the 2nd and 3rd percentage band of nonfarm) move *counter* to business cycles. And since the top 1 percent dominates the top 5 or 7 percent group, it imposes its pattern upon the latter.

Changes in upper group shares in dividends do not trace a consistent pattern. On the whole, the shares of the uppermost groups — the top 1 percent of total and nonfarm population, and the 2nd and 3rd percentage band of nonfarm population — move with business cycles, showing a decline in the rate of change from expansion to contraction. But for the

Table 23

Change per Year during Business Cycles in Shares of Upper Income Groups in Countrywide Totals of Various Income Types
Basic Variant, Total and Nonfarm Population, 1919-1946

Percentage Band and Business Cycle Phase	Averages for Five Cycles, 1919-1938				
	Employee compensation (1)	Entrepreneurial income (2)	Rent (3)	Interest (4)	Dividends (5)
A. TOTAL POPULATION					
I Changes in Shares in Countrywide Totals of Various Income Types					
<i>Top 1</i>					
1 Expansion	-0.21(4)(5)	+0.12(4)(5)	+0.32(4)(4)	-0.70(3)(4)	-0.40(3)(4)
2 Contraction	+0.39(5)(6)	+0.34(3)(3)	+0.75(4)(5)	-1.72(4)(5)	-2.75(4)(5)
3 Difference	+0.60(5)(6)	+0.23(3)(3)	+0.43(4)(5)	-1.03(4)(5)	-2.36(3)(3)
<i>2nd & 3rd</i>					
4 Expansion	-0.13(3)(4)	+0.23(4)(5)	-0.31(4)(5)	-0.25(5)(5)	-0.18(2)(2)
5 Contraction	+0.46(5)(6)	-0.20(3)(3)	+1.11(4)(5)	+0.28(2)(3)	+0.38(2)(3)
6 Difference	+0.59(5)(6)	-0.44(4)(4)	+1.42(4)(5)	+0.53(3)(3)	+0.55(2)(3)
<i>4th & 5th</i>					
7 Expansion	-0.19(3)(4)	-0.18(4)(5)	-0.16(2)(3)	-0.04(4)(5)	-0.23(5)(6)
8 Contraction	+0.49(5)(5)	+0.47(4)(5)	+0.76(4)(5)	+0.24(4)(5)	+0.55(4)(5)
9 Difference	+0.68(5)(6)	+0.66(4)(5)	+0.92(4)(5)	+0.28(3)(4)	+0.78(4)(5)
<i>Top 5</i>					
10 Expansion	-0.52(3)(4)	+0.17(2)(3)	-0.16(3)(4)	-0.98(2)(3)	-0.80(3)(4)
11 Contraction	+1.34(5)(6)	+0.62(3)(3)	+2.62(4)(5)	-1.20(4)(5)	-1.82(4)(4)
12 Difference	+1.86(5)(6)	+0.45(3)(3)	+2.77(4)(5)	-0.22(4)(5)	-1.02(3)(3)

II Changes in Proportions in Total Income Accounted for by Various Types

	DIFFERENTIAL CHANGE ALONE			
13 Top 1	+2.54(4)(5)	-0.13(2)(3)	+0.24(3)(4)	+1.03(4)(5)
14 2nd & 3rd	+1.92(4)(4)	-2.98(5)(5)	+0.80(4)(5)	+1.05(4)(5)
15 4th & 5th	-0.43(3)(4)	-0.12(2)(2)	+0.16(3)(4)	+0.36(3)(4)
16 Top 5	+2.51(4)(4)	-0.94(4)(5)	+0.38(3)(4)	+0.77(4)(5)
17 Lower 95	-1.18(3)(4)	+0.18(1)(2)	+0.20(3)(3)	+0.86(5)(6)
18 Entire population	-0.69(2)(3)	-0.03(4)(4)	+0.26(3)(3)	+0.94(5)(6)

-3.69(5)(5)
-0.79(4)(4)
+0.03(2)(3)
-2.73(5)(5)
-0.06(2)(2)
-0.48(3)(3)

B NONFARM POPULATION

I Changes in Shares in Countrywide Totals of Various Income Types

Top 1	-0.18(4)(5)	+0.22(4)(5)	+0.31(3)(3)	-0.64(3)(4)	-0.46(3)(4)
19 Expansion	+0.34(5)(6)	-0.04(2)(3)	+0.72(4)(5)	-1.54(4)(5)	-2.43(4)(5)
20 Contraction	+0.52(5)(6)	-0.26(3)(4)	+0.41(4)(5)	-0.90(4)(5)	-1.97(3)(3)
21 Difference					
2nd & 3rd					
22 Expansion	-0.14(3)(4)	+0.19(3)(4)	+0.14(4)(4)	(-)-0.00*(3)(3)	+0.30(3)(4)
23 Contraction	+0.48(5)(6)	-0.34(3)(4)	+0.36(4)(5)	-0.34(5)(5)	-0.63(4)(4)
24 Difference	+0.62(5)(6)	-0.52(4)(5)	+0.23(4)(5)	-0.34(4)(5)	-0.94(5)(5)
4th & 5th					
25 Expansion	-0.10(3)(4)	+0.05(2)(2)	-0.51(5)(6)	-0.31(5)(6)	-0.45(4)(5)
26 Contraction	+0.41(5)(5)	-0.13(2)(2)	+1.47(4)(5)	+0.76(4)(5)	+1.03(3)(4)
27 Difference	+0.51(5)(6)	-0.18(3)(3)	+1.99(4)(5)	+1.07(4)(5)	+1.48(3)(4)
Top 5					
28 Expansion	-0.42(3)(4)	+0.45(3)(4)	-0.06(3)(4)	-0.95(3)(4)	-0.61(3)(4)
29 Contraction	+1.23(5)(5)	-0.50(2)(3)	+2.56(4)(5)	-1.13(4)(5)	-2.04(4)(4)
30 Difference	+1.65(5)(6)	-0.96(3)(4)	+2.62(4)(5)	-0.18(4)(5)	-1.43(3)(3)

Table 23, Part B (Nonfarm Population), concluded.

Percentage Band and Business Cycle Phase	Averages for Five Cycles, 1919-1938				Dividends (5)
	Employee compensation (1)	Entrepreneurial income (2)	Rent (3)	Interest (4)	
<i>6th & 7th</i>					
31 Expansion	-0.10(3)(4)	-0.24(4)(5)	-0.02(2)(3)	+0.01(2)(2)	-0.17(4)(5)
32 Contraction	+0.34(5)(5)	+0.49(3)(4)	+0.46(4)(5)	+0.17(4)(5)	+0.44(4)(5)
33 Difference	+0.44(4)(5)	+0.74(4)(5)	+0.49(4)(5)	+0.16(3)(4)	+0.61(4½)(5½)
<i>Top 7</i>					
34 Expansion	-0.52(3)(4)	+0.21(2)(3)	-0.09(3)(4)	-0.94(3)(4)	-0.78(3)(4)
35 Contraction	+1.57(5)(6)	-0.01(2)(3)	+3.02(4)(5)	-0.96(2)(3)	-1.60(4)(4)
36 Difference	+2.09(5)(6)	-0.22(2)(3)	+3.10(4)(5)	-0.02(4)(4)	-0.82(3)(3)

II Changes in Proportions in Total Income Accounted for by Various Types

	DIFFERENTIAL CHANGE ALONE	
	1919-38	1919-46
37 Top 1	+2.44(4)(5)	+0.24(3)(4)
38 2nd & 3rd	+3.63(5)(5)	+0.17(4)(5)
39 4th & 5th	-0.80(2)(3)	+1.35(3)(4)
40 Top 5	+2.79(4)(4)	+0.44(3)(4)
41 6th & 7th	-0.95(3)(4)	+0.10(3)(4)
42 Top 7	+2.54(4)(4)	+0.39(3)(4)
43 Lower 95	-1.57(4)(5)	+0.25(3)(3)
44 Lower 93	-1.50(4)(5)	+0.25(3)(3)
45 Entire population	-0.97(1)(2)	+0.30(3)(3)

Figures in first parentheses show the number of cycles during 1919-38 with the same sign as the entry in the column proper, those in the second parentheses, the number of cycles during 1919-46 with the same sign as the entry in the column proper.

* Less than -0.005.

lower percentage bands — 2nd and 3rd of total population, 4th and 5th of both total and nonfarm population, and 6th and 7th of nonfarm — the general pattern of response, as reflected in the differential change, is *counter*-cyclical. And since, as in the case of interest, the top 1 percent group dominates the top 5 and 7 percent groups, their shares in dividends tend to show *positive* conformity, but with a low consistency.

In broad terms, as far as the inverted conformity of upper group shares in total income receipts is due to changes in shares *within* income types, it is to be attributed largely to the inverted conformity of upper group shares in employee compensation and in rent, particularly the former. For the upper groups of total population, it is reenforced by the inverted conformity of their shares in entrepreneurial income. In the case of lower percentage bands (below the top 1 percent of total population and the 2nd and 3rd percentage band of nonfarm) it is reenforced also by the inverted conformity of their shares in interest and in dividends. By contrast, the inverted conformity of the shares in total income receipts of the uppermost income groups (top 1 percent of both total and nonfarm population, and the 2nd and 3rd percentage band of nonfarm) is weakened by the positive conformity of their shares in interest and in dividends.

c) When we glance at the shifts during business cycles in the type-structure of income, the first impression is that of lack of consistent response (Table 23, Parts A-II and B-II). For total population, the proportions of employee compensation, entrepreneurial income, and dividends in total income tend to move *with* business cycles, and those of rent and interest *counter* to them, judging by the sign of the average differential change. But the only consistent response is the inverted conformity of the proportion accounted for by interest. For the nonfarm population, the proportions of employee compensation and dividends in total income move with business cycles, but *not* the proportions of entrepreneurial income which, with rent and interest, move counter to business cycles. Yet here again, the counter-cyclical movement of the proportion of interest is the only consistent response.

It is not surprising, therefore, that when we study changes in the type-structure of the total income of upper groups, we find few cases of consistent response to business cycles. By and large, the proportions of the total income of the upper groups of the total population accounted for by employee compensation, rent, and interest, move *counter* to business cycles; and those of entrepreneurial income and dividends move *with* business cycles. But for the top 5 percent group as a whole, only the differential changes for entrepreneurial income, interest, and dividends meet our criterion of consistency. The broad picture suggests that the

income of the upper groups tends during expansions to be dominated more by entrepreneurial income and less by employee compensation than is the income of the lower groups; the opposite happens during contractions.

For the nonfarm population also, on the whole, the proportions of employee compensation, rent, and interest in the total income of the upper groups move counter to business cycles, and those of entrepreneurial income and dividends with business cycles. In the type-structure of the income of the lower 93 percent, the proportions of employee compensation change with business cycles, as do the proportions of dividends; and those of entrepreneurial income, rent, and interest move counter to them. Here again, therefore, the chief difference in cyclical response between the upper and the lower groups lies in the movement of the proportions of total income accounted for by employee compensation and entrepreneurial income.