PART III. Distribution of Consumer Income in 1949 1

Interruption in late 1948 and the first half of 1949 of the extended postwar rise in economic activity and prices was accompanied by only a slight decline in total income of consumers. While aggregate consumer income remained at very high levels, readjustments during the year had varying effects on the incomes of different groups in the population. Information concerning the effect of these changes on the distribution of income among major population groups and on levels of money income in 1949 is presented in this article.²

SUMMARY

In the first half of 1949 increased unemployment and lowered levels of income for a substantial part of the population accompanied declines in production. The incomes of many persons who remained employed were affected by less steady work or by a reduction in the number of hours worked. Farm income declined as a result of falling prices and unincorporated business income turned down. Increased business activity in the second half of the year tended to raise consumer incomes (as has been discussed in Part I of this series) and to reduce the volume of unemployment. However, the upturn in the second half was not sufficient to offset the decline in the early part of the year. Farm prices continued to drift downward for most of the year.

Reflecting these readjustments, the total amount

The present article was prepared by Irving Schweiger of the Consumer Credit and Finances Section of the Board's Division of Research and Statistics. The author has necessarily maintained a close working relationship with the staff of the Survey Research Center at all stages of his work and in his analysis of survey tabulations has had the benefit of many suggestions from the Center's staff, particularly John B. Lansing, James K. Dent, and E. Scott Maynes.

of consumer income in 1949 was slightly below 1948. Since the number of consumer units in the population increased, the decline in average income was more than proportional to the decline in total income. For the first time since the end of the war, there was an increase in the proportion of the population with incomes of less than \$2,000 and a decrease in the proportion with incomes between \$2,000 and \$4,999.

Those hardest hit by declines in income were the entrepreneurial groups—spending units headed by farm operators and by managerial and self-employed persons. The incomes of other occupational groups were less seriously affected, although there were many individuals in each group with substantial income declines. Despite the decline in total and average incomes, one and one-half times as many consumers reported increases in income as decreases. This factor, in conjunction with the undiminished rate of expenditure for major durable goods by the occupational groups whose incomes were most seriously reduced, helps to account for the maintenance of total consumer expenditures in 1949 in the face of a slightly lower level of total consumer income.

Increases in income in 1949 were obtained some-

The limitations of survey data outlined in the June 1950 BULLETIN and in the discussion of methods presented in the July BULLETIN are applicable to the information presented in this article. Survey findings approximate the true order of magnitude of data but do not represent exact values. Variations from the true values may be introduced by chance fluctuations in the particular sample of interviews, by errors in reporting on the part of those interviewed, by differences in interpretation by either respondents or interviewers, and by methods used in processing data. Only the first of these—sampling error—can be measured statistically. It should be kept in mind that the other sources of error may be of equal importance to the accuracy of survey results.

FEDERAL RESERVE BULLETIN

948

This is the third in a series of articles presenting the results of the 1950 Survey of Consumer Finances sponsored by the Board of Governors of the Federal Reserve System and conducted by the Survey Research Center of the University of Michigan. The first article in the series appeared in the June Bulletin and covered the general financial position and economic outlook of consumers. The second article, devoted to durable goods expenditures in 1949 and buying plans for 1950, appeared in the July Bulletin, as did a special article on the methods of the surveys. Subsequent issues of the Bulletin will contain articles analyzing changes in consumer saving patterns and in holdings of liquid and nonliquid assets.

² Data are based on the results of about 3,500 interviews taken in 66 sampling areas throughout the nation. The sample is representative of the entire population of the United States residing in private households. The following groups are omitted: (1) members of the armed forces and civilians living at military reservations; (2) residents in hospitals and in religious, educational, and penal institutions; and (3) the floating population, that is, people living in hotels, large boarding houses, and tourist camps. The interview unit of the survey is the spending unit, defined as all persons living in the same dwelling and belonging to the same family who pool their incomes to meet their major expenses.

what more frequently and decreases somewhat less frequently by consumers who had been at the lower end of the income scale in 1948 than by those who had been at the upper end. This continued the pattern of change between 1947 and 1948, with a somewhat less pronounced differential in favor of the lower income groups.

The pattern of income changes from 1947 to 1948 apparently resulted in a reduction in the proportion of total income going to the highest tenth of the population when ranked according to income. Continuation in 1949 of this general pattern of income change appears to have resulted in a further reduction in this proportion. The data from four surveys, each covering a year of the postwar period 1946-49, indicate that the share of income received by the highest tenth of the population was greatest in 1947, following the lifting of most wartime controls and the onset of inflationary rises in prices and incomes. By 1949, this share was equal to or slightly lower than it had been in 1946 and smaller than is indicated for 1941 by data from other sources.

LEVELS OF INCOME

Reflecting the economic readjustments in 1949, total consumer money income before taxes declined slightly from the 1948 level, according to both survey data and Department of Commerce estimates. This was the first decline in the postwar period. At the same time, the number of consumer spending units in the population increased by about 3 per cent. The combination of these factors resulted in a noticeable decline in the average amount of consumer income per spending unit. The median (middlemost) income of consumer spending units slipped to \$2,700 in 1949 from \$2,840 in the previous year. Mean income (arithmetic average), which is subject to somewhat greater sampling variations, declined from \$3,450 to \$3,270 (see Table 1). Notwithstanding the decline, money incomes still averaged higher in 1949 than in 1947 or 1946, when the median income was estimated to be \$2,530 and \$2,300 respectively. Changes in consumer prices in this four-year period, however, as measured by the Department of Labor, roughly matched the rise and fall in median money income. Accordingly, it would appear that there has been little change in real income for the middlemost spending unit in this period.

TABLE I INCOME GROUPING OF SPENDING UNITS AND MONEY INCOME RECEIVED, 1949, 1948, AND 1947 1

[Percentage distribution]

		_				
	19	49	19	48	19	47
Annual money income before taxes	Spend- ing units	Total money income		Total money income		Total money income
Under \$1,000 \$1,000-\$1,999 \$2,000-\$2,999 \$3,000-\$3,999 \$4,000-\$4,999 \$5,000-\$7,499 \$7,500-\$9,999 \$10,000 and over	21 19	2 9 16 19 15 19 20	12 18 23 20 12 10 2 3	2 8 16 20 r15 17 } 22	14 22 23 17 10 9 2	2 10 17 18 13 16 24
All income groups.	100	100	100	100	100	100
Median income 2 Mean income 3			\$2,840 \$3,450		\$2,530 \$3,290	
	į	I	ł	1	i l	I

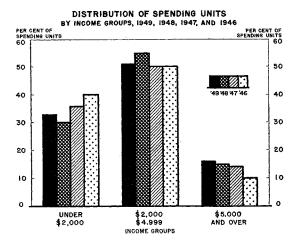
Income data for each year are based on interviews during January, February, and early March of the following year. The median amount is that of the middle spending unit when all units are ranked by size of income.

The mean amount is the average obtained by dividing aggregate income by the number of spending units.

The decline in total money income in 1949, the first in the postwar period, was accompanied by an increase in the relative frequency of low-income spending units. After having fallen from 40 per cent in 1946 to 30 per cent in 1948, the proportion of units with incomes of less than \$2,000 rose to 33 per cent in 1949. The number with negative incomes due to business or farm losses rose from negligible frequencies in previous years to about 1 per cent of the consumer unit population in 1949. Some decline occurred in the relative frequency of units at intermediate income levels (between \$2,000 and \$4,999) while little change was noted for higher income levels (\$5,000 or more), as is shown in the chart on the following page.

In terms of number of units, roughly 17 million spending units received incomes of less than \$2,000 in 1949, approximately 2 million more than in 1948 but still about 1.5 million fewer than in 1946. About 8.5 million units had incomes of \$5,000 or more, which was approximately the same as in 1948 and nearly double the number at this income level in 1946.

As in previous years, the largest average income was received by the group of spending units headed by managerial and self-employed persons (median \$4,500, mean \$5,630). As shown in Table 2, professional and semi-professional persons followed (\$4,000-\$5,350); next came skilled and semi-



skilled workers (\$3,200-\$3,350); and clerical and sales personnel (\$2,800-\$3,260). The lowest incomes, on the average, were received by unskilled and service workers (\$2,100-\$2,410) and farm operators (\$1,500-\$2,570). The wide divergence between the median and mean income of farm operators is evidence of the heavy concentration of farmers at the lower end of the income scale, which results in a low middlemost income. The substantial number with high incomes (\$5,000 or more), on the other hand, has a considerable effect in raising the arithmetic average for the entire group. It should be noted that money income only is being considered here. Most farm operators also have a substantial amount of nonmoney income, such as food produced and consumed on the farm. Their reported incomes, which refer solely to money incomes, are therefore not fully comparable with those of other occupational groups.

Changes in Income from 1948 to 1949

To this point, discussion has centered on the decline in the general level of income in 1949. This, however, tells only part of the story. A balanced appraisal of income movements from one period to another requires more than aggregates and averages for the entire population.

Declines in income in 1949 were concentrated among a relatively small part of the population, being reported by only 25 per cent of all units.

TABLE 2 Income Grouping of Spending Units within Different Occupational Groups, 1949 and 1948 1

			[Per	centage	distribut	ion]		-				
Annual money income before taxes	Profes and s profes	emi-	Mana and empl	self-	Clerical and sales personnel		Skilled and semiskilled		Unskilled and service		Farm operators ²	
	1949	1948	1949	1948	1949	1948	1949	1948	1949	1948	1949	1948
Under \$1,000 . \$1,000-\$1,999 . \$2,000-\$2,999 . \$3,000-\$3,999 . \$4,000-\$4,999 . \$5,000-\$7,499 . \$7,500 and over .	15 22 15 19	3 10 16 20 17 16 18	5 11 12 15 14 24 19	5 11 13 11 13 25 22	3 22 28 17 14 13 3	3 18 30 24 14 9	3 11 26 30 17 12	2 r8 26 33 r19 11	19 27 30 17 4 3 (³)	14 31 31 17 5 2	36 22 15 9 4 6	30 23 17 9 5 11
All income groups	100	100	100	100	100	100	100	100	100	100	100	100
Median income	\$4,000 \$5,350									\$2,100 \$2,310		
Number of cases	287	293	466	470	486	495	895	886	344	427	410	430

*Less than one-half of 1 per cent.

NOTE.—The "number of cases" shown in this and in subsequent tables represents the actual number of spending units falling in each cell. Because the survey oversamples certain groups and corrects for the oversampling by the use of weights, the unweighted number of spending units in a cell does not represent the same proportion of the total sample as the weighted proportion. For example, spending units with incomes of \$5,000 or more in 1949 were 15.8 per cent of the weighted sample, but there were 706 such spending units which, on an unweighted basis, amounted to 20.1 per cent of the 3,512 spending units in the sample. Tables based on entire samples do not state the number of cases, which approximates 3,500 respondents for the annual surveys and about half that for the midvear surveys. For a detailed description of the sampling methods, see "Methods of the Survey of Consumer Finances," July 1950 BULLETIN, pp. 795–809.

FEDERAL RESERVE BULLETIN

950

r Revised.

Income data for each year are based on interviews during January, February, and early March of the following year. Because of the small number of cases in the various occupational groups and also because of some differences in the coding by occupations between the two years, these distributions should be considered as approximations only and as very rough guides to general shifts in the distribution of income between 1948 and 1949. All the occupational groupings are in terms of the occupation of the head of the spending unit. For comparable 1947 and 1946 data, see June 1948 Federal Reserve BULLETIN, Table 7, p. 656; for 1945 income data, see July 1947 BULLETIN, Table 2, p. 792.

² As explained in the text, income distribution for farm operators is not directly comparable with the distribution for other groups because of the large amount of nonmoney income that farmers produce for their own consumption.

³ Less than one-half of 1 per cent.

The incomes of the majority of the population were unchanged or increased. Compared with a situation in which an over-all decline in income resulted from a loss in income by most spending units in the population, the distribution of declines in 1949 tended to minimize curtailment or post-ponement of buying, particularly of expensive items such as automobiles and refrigerators.

Distribution of increases and decreases. Although both aggregate income and average consumer income before taxes were lower in 1949 than in the preceding year, less than 3 in every 10 spending units reported declines in income. Many of the declines, however, were quite large. Another 3 in 10 had the same income in both years and 4 in 10 obtained larger incomes in 1949.³

It is significant that income declines in 1949 were not only confined to a relatively small part of the population but were outnumbered by increases in income. This finding helps to explain the continuation of a very high level of consumer expenditures in 1949 despite a decline in aggregate income. Consumers whose incomes had risen tended to maintain or expand their purchases, especially of major durable goods. In addition, although a larger proportion of farm operators than of any other group experienced income declines, the group as a whole not only maintained their purchases of major household items but also sharply increased their purchases of automobiles. Special factors in the maintenance of expenditures by farmers were the greater availability of new cars in farm areas, partly due to revision of manufacturer's marketing quotas; the relatively recent extension of rural electrification to large groups of farmers which fostered demand for household appliances; continued large holdings of liquid assets; the assurance afforded by the Federal price support program; and the fact that farm incomes, though down from the all-time peak of 1948, were still high relative to prewar years.

The number of consumer spending units who received higher incomes in 1949 compared with the preceding year—20 million—was smaller than in any previous year-to-year comparison in the postwar period. On the other hand, the number with decreases in income—nearly 13 million—was larger than in any year since 1946 and nearly as

large as in the reconversion period between 1945 and 1946. A greater frequency of increases than decreases is, of course, consistent with a decline in total income, if the increases are smaller in size than the decreases. This general relationship appears to have been true for the consumer spending units covered by the 1950 Survey of Consumer Finances. It should be noted that in every survey the frequency of decreases in income is probably somewhat understated inasmuch as persons who had died, entered the armed services, or otherwise left the population covered by the survey in a given year are not included in the next year's survey.

Changes in income for various groups. Age groups. The frequency of increases in income between 1948 and 1949 was greatest among young consumer spending units (those headed by persons from 18 to 24 years of age) and less frequent at each older age group, as can be seen in Table 3. This pattern was similar to those found in previous surveys. Rises in income substantially outnumbered declines for consumers less than 45 years of age, while increases and decreases were about equally numerous among consumers 45 or more years of age. The large number of income increases for the younger group and the high rate of family formation and growth in this group were undoubtedly major elements in the considerably higher frequency of durable goods purchases by this group.

Occupational groups. Each of the major occupational groups reported fewer increases in annual income between 1948 and 1949 than between 1947 and 1948 and, except for the professionals, a greater number of declines. As in previous years, the 1950 survey indicated that increases were most frequent and decreases least frequent among professional and semi-professional persons and clerical and sales personnel. In these groups, increases were from three to four times as frequent as declines. Also, as in previous years, entrepreneurial types-farm operators and managerial and self-employed persons —were at the opposite end of the scale. They had the largest proportion of decreases and the smallest proportion of increases in income of the major occupational groups. Farm operators fared worst of all.

For the first time in the postwar period, a major occupational group—farmers—experienced more declines than increases in money income. Many of the declines were substantial; 1 in every 4 farm operators reported his income to be at least 25 per

August 1950 951

⁸ It should be kept in mind that data on income change rely upon the respondents' recollection of their incomes for a period covering two years and are therefore subject to considerable memory error.

Table 3

Income Changes for Spending Units in Various Occupational and Age Groups.

1948 to 1949 and 1947 to 1948

[Percentage distribution of spending units within specified groups]

				Change	in annual	money inc	ome befor	re taxes		
Characteristic	Númber of		Iı	icome larg	er		In	come smal	ler	
of group	cases	All units	Total	By 25 per cent or more	Some- what	No sub- stantial change	Total	Some- what	By 25 per cent or more	Not ascer- tained
All spending units: 1948-49 1947-48 Occupation of head of spending unit: Professional and semiprofessional—	3,512	100	39	16	23	29	25	15	10	7
	3,510	100	50	19	31	27	19	12	7	4
1948-49	287	100	56	19	37	27	12	8	4	5
	293	100	59	19	40	23	14	11	3	4
1948-49. 1947-48. Clerical and sales personnel—	466 470	100 100	37 46	15 22	22 24	27 30	27 20	19 14	8 6	9 4
1948-49	486	100	50	25	25	30	16	11	5	4
	495	100	60	22	38	25	13	9	4	2
1948-49. 1947-48. Unskilled and service—	894 886	100 100	44 54	15 20	29 34	25 26	25 16	19 12	6 4	6 4
1948–49	344	100	39	16	23	32	22	14	8	7
	427	100	54	20	34	26	16	11	5	4
1948-49	410	100	30	15	15	19	46	20	26	5
	430	100	45	21	24	22	27	17	10	6
18-24 years— 1948-49 1947-48 25-34 years—	342 343	100 100	62 72	41 38	21 34	14 12	19 13	11 9	8 4	5 3
1948-49	779	100	48	20	28	21	24	14	10	7
	717	100	60	25	35	20	16	11	5	4
1948-49	777	100	40	13	27	26	28	17	11	6
	793	100	48	18	30	29	21	15	6	2
1948–49. 1947–48. 55–64 years—	670 739	100 100	33 50	10 18	23 32	31 29	29 17	18 11	11 6	7 4
1948-49	495	100	31	10	21	34	29	17	12	6
	518	100	44	13	31	31	20	13	7	5
65 years or over—	419	100	19	7	12	51	22	14	8	8
1948–49	388	100	28	8	20	43	21	11	10	8

¹ Based on changes in amount of annual income received as reported by spending units early in 1950 (fifth survey) and early in 1949 (fourth survey).

cent smaller in 1949 than in the previous year. Although unskilled as well as skilled and semi-skilled workers had considerably fewer increases and more cutbacks in income between 1948 and 1949 than in previous year-to-year comparisons, they reported nearly twice as many boosts in income as cuts.

Persons who were not self-employed most frequently gave increases in wage rates or in salary scales as the explanation of a higher rate of current earnings in early 1950 than a year earlier.⁴ As in previous years, from one-half to two-thirds of

the income increases of employed persons in each occupation were explained in this manner. Other reasons frequently given were transfer to a better paying job, steadier work or more overtime, and the employment of one or more additional members of the spending unit. Declines in income among unskilled and also skilled and semiskilled wage earners were due, in about two-thirds of the cases, to less steady employment or to less overtime. Cuts in wage rates were also mentioned by a few members of these two occupational groups. The necessity of taking another job at lower pay was mentioned frequently as a cause of reduced income by unskilled workers but not by other groups.

The extent to which heads of spending units

952

⁴ This compares the rate of earnings at time of survey with that of a year earlier. These data are related to but not identical with a comparison of annual incomes.

TABLE 4	
PERIOD OF EMPLOYMENT OF SPENDING UNITS IN VARIOUS OCCUPATIONAL GRO	oups, 1949 1

	Percentage distribution of spending units in each group											
Number of months of employment in 1949	Professional and semi- professional	Managerial and self- employed	Clerical and sales personnel	Skilled and semi- skilled	Unskilled and service	Unemployed2						
None (unemployed all year) 1-2. 3-4. 5-6. 7-8. 9-10. 11-12. Not applicable 4. Not ascertained.	3 3 3 10 64 15	(8) (8) (8) (8) (8) (1) 29 67 2	(8) 1 2 4 4 6 80 2 1	(3) 1 2 4 6 14 71 2	1 2 4 8 8 13 57 3 4	15 5 12 14 18 15 8 10						
All cases	100	100	100	100	100	100						
Number of cases	287	466	486	895	344	187						

Number of months of employment in 1949 of head of spending unit or chief income earner.

Unemployed at time of survey in early 1950. Does not include retired persons, students, or housewives.

Less than one-half of 1 per cent.

obtained less than a full year's employment in 1949 is indicated by the survey finding that of those in the major occupational groupings who were not self-employed, only about 7 in every 10 worked at least 11 months during 1949. Seasonal factors and adjustments in business activity contributed heavily to this. Some (less than 5 per cent) persons heading spending units were not in the labor market during all of 1949 and thus could not have worked for a full year. Clerical and sales personnel and salaried managerial, professional and semi-professional persons worked most steadily, with approximately 8 in every 10 employed for a minimum of 11 months. The next best record was about 7 in every 10 in the skilled and semiskilled group, which was followed by about 6 in every 10 in the unskilled and service worker group (see Table 4). Approximately 5 in every 10 of the wage earners who were unemployed at the time of the survey said they had worked for 6 months or less during 1949,

Income groups. The survey also provides data on changes in income for consumer spending units at different income levels. For some purposes it is best to make such analysis on the basis of income level before the change, and for others, income level after the change. Respondents were asked at the time of the survey in early 1950 to report their incomes in 1949 and also in 1948. Because of the memory factor, the data are less reliable for 1948 than for 1949. Also, since about 1 unit in every 10 could not furnish this information for

1948, the data are somewhat less representative for that year than for 1949.

When the preceding year's income is used as the starting point, it is found that consumers at the

TABLE 5 INCOME CHANGES FROM 1948 TO 1949 RELATED TO Incomes of Spending Units in Year before Changes1

Change in annual	Percentage distribution of spending units within 1948 income groups												
money income before taxes, 1948 to 1949		\$1,000- \$1,999	\$2,000- \$2,999	\$3,000- \$3,999		\$5,000- \$7,499	\$7,500 and over						
Income larger By 25 per cent	49	43	44	40	37	37	31						
or more Somewhat	39 10	19 24	13 31	10 30	12 25	8 29	8 23						
No substantial change	28	30	26	28	27	29	34						
Income smaller	18	23	27	30	34	31	33						
Somewhat	10	12	17	19	20	21	17						
By 25 per cent or more	8	11	10	11	14	10	16						
Not ascertained	5	4	3	2	2	3	2						
All cases	100	100	100	100	100	100	100						
Number of cases	479	604	672	615	397	437	269						

¹ The distribution of income changes within the various income groups is based on reports of nine-tenths of the spending units interviewed early in 1950 (fifth survey) concerning 1948 incomes (either in dollar amounts or by income class) and changes in annual incomes from 1948 to 1949. The 1948 income of one-tenth of all spending units could not be determined in the 1950 survey. Data in this table are not strictly comparable with similar data regarding 1947 income obtained early in 1949 (fourth survey) and published in the July 1949 BULLETIN, because the earlier data were obtained from only two-thirds of the spending units in the 1949 survey.

lower end of the income scale in 1948 received increases in income during 1949 somewhat more frequently than did units higher in the income scale (see Table 5). The increases were also larger proportionately for the lower income units. Decreases in income in 1949, on the other hand, were relatively more frequent and tended to be larger for units who had been at the higher end of the income scale in 1948.

Although lower income units appear to have fared somewhat better between 1948 and 1949 than those higher in the income range, the extent to which they fared better was not as great as between 1947 and 1948. In this earlier period, income groups below \$4,000 had substantially more increases in income and fewer decreases than did groups above this level.

When changes in income are related to the level of income after change (1949 income), the pattern is the reverse of that obtained for income before change (1948 income), which has been discussed above. As is shown in Table 6, units at higher income levels after the change reported considerably more increases and fewer decreases than those at lower levels.

This reversal of pattern results, in major part, from the movement of consumers from one income group to another. The considerable extent of this movement between 1948 and 1949 is shown in Table 7. Except for the lowest income group (under \$1,000) and for the highest (\$7,500 or more), no more than 1 in every 2 units was in the same income group in both years. The effect of income rises in bringing consumer units into higher income groups is shown by the fact that of the units who received incomes of between \$5,000 and \$7,499 in 1949, more than 3 in 10 reported that they had been at lower income levels in 1948. Conversely, at the bottom of the income scale, about 2 in every 10 units with incomes of less than \$1,000 in 1949 reported that they had been at higher income levels in the previous year.

Substantial changes in individual consumer income within one year were also found between 1947 and 1948 in the preceding survey. They indicate that an income distribution for the same consumer population based on the average incomes received by these consumers over several years would be considerably different from that based on one year alone. Such an income distribution would prob-

TABLE 6 Income Changes Related to Incomes in Year after Changes 1 1948 to 1949 and 1947 to 1948

				Percer	ntage d	listribu	tion o	f spend	ling ur	its wi	thin in	come g	groups			
Change in annual money income before taxes		pend- units		der 000	\$1,000- \$1,999		\$2,000- \$2,999		\$3,000- \$3,999		\$4,000- \$4,999		\$5,000- \$7,499		\$7,500 and over	
meonic before taxes	1948 to 1949 ²	1947 to 1948 ⁸	1948 to 1949 ²	1947 to 1948 ³	1948 to 19492	1947 to 1948 ²	1948 to 19492	to	1948 to 19492	1947 to 1948 ³	1948 to 1949 ²	to	1948 to 19492	1947 to 19483	1948 to 19492	to
Income larger than in preceding year	39	51	23	36	35	45	3 9	51	44	57	48	59	49	55	46	54
By 25 per cent or more Somewhat	16 23	20 31	16 7	14 22	18 17	17 28	14 25	20 31	12 32	22 35	16 32	21 38	18 31	20 35	20 26	27 27
No substantial change	29	27	32	32	29	29	27	29	30	24	26	24	27	27	33	26
Income smaller than in preceding year	25	18	36	26	29	22	29	16	22	17	20	13	17	14	16	14
Somewhat	15 10	12 6	12 24	11 15	13 16	12 10	21 8	12 4	15 7	13 4	18 2	11 2	13 4	10 4	11 5	11 3
Not ascertained	7	4	9	6	7	4	5	4	4	2	6	4	7	4	5	6
All units	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Number of cases	3,512	3,510	479	416	604	571	672	722	615	686	397	416	437	408	269	262

¹ Based on changes in amount of annual income received as reported by spending units early in 1950 (fifth survey) and early in 1949 (fourth survey).

2 Income change from 1948 to 1949 related to 1949 income.

3 Income change from 1947 to 1948 related to 1948 income.

TABLE 7 DISTRIBUTION BY 1948 INCOMES OF SPENDING UNITS WITHIN 1949 INCOME GROUPS 1

	Percentage distribution of spending units within 1949 income groups												
1948 annual money income before taxes	All spending units	Under \$1,000	\$1,000- \$1,999	\$2,000- \$2,999	\$3,000- \$3,999	\$4,000- \$4,999	\$5,000- \$7,499	\$7,500 and over					
Under \$1,000. \$1,000-\$1,999. \$2,000-\$2,999. \$3,000-\$3,999. \$4,000-\$4,999. \$5,000-\$7,499. \$7,500 and over. Not ascertained.	15 20 18 10 8	67 12 5 2 (²) 1 (²) 13	18 50 13 4 1 1 (2) 13	5 16 54 13 2 1	1 3 23 53 10 2 (²) 8	1 1 7 29 39 11 1	(2) 2 2 8 22 50 5 11	1 4 19 65 11					
All income groups	100	100	100	100	100	100	100	100					
Number of cases	3,512	479	604	672	615	397	437	269					

¹ Based on reports of spending units interviewed early in 1950 (fifth survey) concerning annual incomes in both 1948 and 1949. As shown in the table, the 1948 income of one-tenth of all spending units could not be determined at the beginning of 1950.

² Less than one-half of 1 per cent.

ably have many more consumer units in the middle of the distribution and many fewer at either the high or low end than is found in a distribution based on incomes received in a single year.

DISTRIBUTION OF INCOME

Survey data indicate that the share of total money income obtained by the highest tenth of the population when ranked by size of income was smaller in 1949 than in 1947, when it was at a postwar high. The 1947 peak followed the lifting of most wartime controls and the onset of inflationary rises in prices and incomes. Some groups whose incomes lagged in the early stages of the inflation improved their relative positions in 1948 and 1949; other groups which benefited initially lost ground relatively in the following years. These changes apparently resulted in a distribution of income in 1949 similar to that existing before 1947. As shown in Table 8, the share of the top tenth in 1949 was perhaps even slightly below that in 1946, although the difference is not great enough to be statistically reliable.

The half of the population immediately below

TABLE 8 PROPORTION OF TOTAL MONEY INCOME RECEIVED BY EACH TENTH OF THE NATION'S SPENDING UNITS When Ranked by Size of Income, 1949, 1948, 1947, and 1946

Spending units		Percentage of total money income before taxes By each tenth Cumulative								Lowest within		
to size of income												
to size of mesme	1949	1948	1947	1946	1949	1948	1947	1946	1949	1948	1947	1946
Highest tenth Second Third Fourth Fifth Sixth Seventh Eighth Ninth Lowest tenth	30 15 12 11 9 8 6 5	731 15 12 10 9 78 6 5	33 15 12 10 9 7 6 4 3	32 15 12 10 9 7 6 5	30 45 58 68 78 85 91 96 99	731 46 58 68 776 84 90 95 99	33 48 60 70 78 86 91 96 99	32 46 58 69 77 85 91 95 99	\$5,800 4,500 3,760 3,200 2,700 2,290 1,810 1,280 710 (2)	\$6,000 4,500 3,750 3,200 2,840 2,400 2,000 1,500 860 (2)	\$5,700 4,200 3,500 3,000 2,530 2,100 1,700 1,200 750 (2)	\$4,850 3,750 3,100 2,700 2,300 2,000 1,500 1,150 700 (2)

r Revised.

Income data for each year are based on interviews during January, February, and early March of the following year. It is possible that the proportion of income received by the highest tenth of income receivers is underestimated by several percentage points in all years. Samples of approximately 3,500 spending units having been used in these three surveys, it cannot be expected that a completely representative sample of the highest dollar incomes was obtained.

Not available from survey data.

Note.—Detailed figures may not add to cumulative figures because of rounding.

the highest tenth (the second through the sixth highest deciles, where incomes ranged between \$2,290 and \$5,800 in 1949) increased its share of total income to about 55 per cent in 1949, the biggest it had received in the postwar period. The lowest four-tenths of the population, when ranked by income, appeared to receive the same or a slightly smaller share of the total than in 1948. A substantial increase in the volume of business losses (negative income) by farm and nonfarm businessmen contributed to an apparent reduction in the share of the lowest tenth of the population.

Available data indicate that income has been more evenly distributed throughout the postwar period than in 1941. While comparisons with prewar data have certain limitations, they are not considered sufficient to affect the major point.⁵ In the postwar period, the share of the highest tenth has been consistently smaller than in 1941 and that of the lowest four deciles has been consistently larger. Even in 1947, when the share of the lowest four-tenths of the population was at a postwar minimum, it amounted to 14 per cent of total income compared with 12 per cent in 1941. The chief reasons for this shift are the relatively high levels of employment and low levels of unemployment that have prevailed since the war and the marked increase in farm cash income.

Sources of Income

The Survey of Consumer Finances provides some information on the sources of income of the various groups in the population and the characteristics of people who receive income from rent, from wages and salaries, etc. Although the survey is not designed to provide detailed information of this nature, certain of these types of data are obtained in the course of the interview. This material is suggestive but by no means conclusive on these points. Many people tend to forget or disregard

small amounts of income or income from sources other than their chief one. The survey interview is designed to help people recall these items but not to probe exhaustively into these matters. In a few cases, also, when people promptly report their total annual income from all sources, they are not asked to provide details regarding sources. These limitations affect the precision of the data but probably do not seriously alter their major outlines.

As one would expect, by far the most frequently received type of income was that from wages and salaries. Nearly 8 in every 10 spending units reported some income from this source in 1949, which was about the same proportion as in earlier postwar years. The next most frequent source of income (received by almost 3 in every 10 units) was some type of pension, annuity, allowance, benefit, or contribution. For some spending units, this was the only or major source of income; for others, it constituted supplementary income. For instance, some consumers who were employed for most of the year reported receiving unemployment compensation for a few weeks and some veterans received State bonuses.

Other sources of income included unincorporated nonfarm business, farming, rental income from roomers and boarders, other rental income, professional practice, and interest, dividends, trust funds, and royalties (see Table 9).

The pattern of change in wage and salary income between 1948 and 1949 was generally similar to that already described for total income in that there was an increase in the proportion of low incomes (below \$2,000) and a decline in the proportion of intermediate incomes (between \$2,000 and \$4,999). The increase in frequency of units with high incomes (\$5,000 and over) was greater in the case of incomes from wages and salaries alone than when total money income was considered, chiefly because of a falling off in the frequency of incomes of this size from unincorporated nonfarm businesses and from farming.

Receipt of some income from wages and salaries was reported by nearly all units (about 9 in every 10) with incomes between \$2,000 and \$7,499. Among units with very low incomes (less than \$1,000) or very high incomes (\$7,500 or more), this type of income was much less frequent, as can be seen in Table 10. It is of interest that as many as 3 in 10 of the spending units headed by farm

⁶ Income data for 1941 are available from a survey conducted jointly by the Bureau of Labor Statistics, U. S. Department of Labor, and the Bureau of Human Nutrition and Home Economics, U. S. Department of Agriculture. See Family Spending and Saving During Wartime (Bureau of Labor Statistics Bulletin No. 822), April 1945. The survey covering 1941 and the surveys covering 1946 through 1949 differed somewhat in their definitions of money income, spending unit, universe, as well as in sampling methods. However, it is believed that the data show with reasonable accuracy the nature of certain broad changes in the pattern of income during these years.

TABLE 9 Percentage Distribution of Spending Units by Amount of Income Received from Specified Sources, 1949

	Wages	Pensions,	Re	nt ²	Unincor-	Professional		Interest.
Amount of income from specified source	and salaries	benefits, contribu- tions, etc. ¹	Roomers and boarders	Other rent	porated nonfarm business	practice, other self-employment, and farming ³	Farming 4	dividends, trust funds, and royalties
None	22 78	72 28	96 4	90 9	91 9	84 16	91 9	88 12
Negative \$1-\$99. \$100-\$499. \$500-\$999. \$2,000-\$2,999. \$3,000-\$2,999. \$4,000-\$4,999. \$5,000-\$9,999. \$10,000 and over. Undetermined amount	5 6 15 18 15	3 13 8 3 3	1 2 1 1 (5) (5)	1 4 2 1 1 1 (5)	1 1 1 1 1 1 1 1 1 (5)	1 1 3 2 3 2 3 2 1 1 (5)	1 2 2 1 (5) (5) (5) (5) (5)	5 4 1 1 (8) 1 (6) (6) (6)
Not ascertained	(5)	(5)	(5)	(5)	(5)	(2)		(5)
All units	100	100	100	100	100	100	100	100

'How much was it after allowing for expenses?'

3 Includes net income from farming by nonfarm operators as well as farm operators. See footnote 4.

4 Includes only net income from farming by farm operators. Farm operator spending units are, in general, headed by persons who receive more than half of their money income from the operation of a farm. See footnote 3.

5 Less than one-half of 1 per cent.

operators reported some income from wages and salaries.6 In most cases, the sums involved amounted to less than \$500.

Income from pensions, annuities, allowances, benefits, or contributions was received by some persons at all income levels. The frequency of this source of income was greatest at the lower levels of income, but as many as 1 in every 10 with incomes of \$7,500 or more reported receipts of this type. Income of this nature was the sole or the chief source of income for nearly 2 units in every 10 with total money incomes of less than \$1,000 in 1949. As might be expected, retired persons depended on these sources to a greater extent than other groups; about 7 in every 10 spending units headed by such persons received some income of this type and the amounts received were larger, on the average, than those reported by other groups.

Rental income other than from roomers and boarders, such as from a house or an apartment, a commercial building, or a farm, was obtained by about 1 spending unit in every 10. The proportion was somewhat smaller among lower income units and somewhat higher in the upper part of the income scale. For approximately half of the recipients of such income the amounts involved were small, amounting to less than \$500. Of the 5 in every 100 consumer spending units that received \$500 or more in rental income other than from roomers and boarders, about 80 per cent had total money incomes of \$2,000 or more in 1949. About 2 per cent of all consumer units received rents as part of total incomes of less than \$2,000. For many in this group, rents were an important source of

Approximately 4 in every 10 of the units with rental incomes from property of \$500 or more in 1949 were headed by managerial and self-employed persons or by retired persons. As in the case of pensions, etc., retired persons appear to have obtained income in this manner more frequently than other consumer groups and in larger amounts. More than 1 in every 10 spending units headed by retired persons received \$500 or more in rental income during 1949 and for about half of this group the amount came to \$2,000 or more.

Income from dividends, interest, trust funds, and royalties was reported by slightly more than 1 in every 10 spending units. This is a substantial understatement of the frequency of such receipts, because a large proportion of people forget or disre-

¹ Includes income from old-age pensions, retirement pay, annuities, unemployment compensation, welfare payments, alimony, regular contributions, veterans' pensions, school allotments, State bonuses, and allotments to families of servicemen.
² The question was first asked: "Did you receive income from roomers and boarders?" If yes, "How much?" A gross figure was accepted if less than four roomers were involved. Respondents were then asked: "Did you receive money from other rent?" If yes,

⁶ Farm operator spending units are generally headed by persons who receive more than half of their money income from the operation of a farm.

TABLE 10

Income from Specified Sources Received by Spending Units in Various Income and Occupational Groups, 1949 ¹

[Percentage distribution of spending units within specified groups]

			1949 a	nnual mo	oney inco	me befor	e taxes			Occup	pation of	head of	spending	unit	
Amount of income from specified source	All spend- ing units	Under \$1,000	\$1,000- \$1,999	\$2,000- \$2,999	\$3,000- \$3,999	\$4,000- \$4,999	\$5,000- \$7,499	\$7,500 and over	Professional and semiprofessional	Man- agerial and self- em- ployed	Cler- ical and sales	Skilled and semi- skilled	Un- skilled and service	Farm oper- ator	Retired
Wages and salaries: None. \$1-\$99. \$100-\$499. \$500-\$999. \$1,00-\$1,999. \$2,000-\$2,999. \$3,000-\$4,999. \$5,000 and over. Undetermined amount.	22 (2) 5 6 15 18 24 10	54 2 20 21 3 3 — — (2)	25 (2) 6 10 57 3 2 — (2)	14 2 2 13 69 (2)(3) (2)	$ \begin{array}{c c} $	9 1 1 2 2 85 (2)	13 1 1 2 2 2 3 10 67 (2)	40 2 3 2 2 2 47 (2)	13 2 1 11 15 33 25	45 -2 -3 -7 -7 15 -20 (2)	2 1 4 24 27 28 14 (2)	(2) 1 4 13 27 43 12	5 (2) 7 12 28 26 18 3	68 2 19 5 4 2	73 1 9 3 8 4 2 (2)
Not ascertained	(2)		(2)	(2)	(2)	(2)	1	2	(2)	11	(2)	(2)	1	(2)	1
All cases	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Pensions and allowances, etc.; 1 None. \$1-\$99. \$100-\$499. \$500-\$999. \$1,000-\$1,999. \$2,000-\$2,999. \$3,000 and over. Undetermined amount.	72 3 13 8 3 1 (2) (2)	62 2 18 18 ——————————————————————————————	64 3 13 9 11 —	72 4 14 7 2 1 (2)	77 3 12 6 1 1 (2)	76 3 13 5 2 -	82 1 8 6 1 1	91 2 6 1 (2) (3)	81 11 6 (2) 1 (2)	87 2 7 3 (2) 1	85 2 8 4 1 (2) (2) (2) (2)	73 5 16 5 1 (2)	79 2 12 5 2 (2) (2)	81 7 6 5	28 1 16 29 20 4 1
Not ascertained	(2)	(2)	(2)	_	(2)	_	_	_	_	-	_	(2)	_	_	1
All cases	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Interest, dividends, etc.: \$ None. \$1-\$99. \$100-\$499. \$500-\$999. \$1,000-\$1,999. \$2,000-\$2,999. \$3,000-\$4,999. \$5,000 and over. Undetermined amount.	88 5 4 1 1 (2) 1 (2) (2) (2)	91 4 5 (2)	93 3 2 1 1 ——————————————————————————————	92 3 3 (2) 1 1 —	89 6 3 1 1 (2) (2) —	88 5 3 1 2 (2) 1	80 9 7 2 1 1 (2) (2)	57 8 13 6 6 2 2 5	81 4 8 1 3 1 (2)	81 5 6 2 2 1 1 1	88 7 4 (2) 1 (2) ———————————————————————————————————	93 4 2 1 (2) —	96 3 1 (2) —	83 8 7 1 (2) 1 (2)	74 5 8 2 6 1 3
Not ascertained	(2)	_	_	_	(2)	(2)	-	(2)		(2)	(2)			_	
All cases Rent other than from	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
roomers and boarders: 6 None	91 14 2 1 1 (2) (2) (2)	93	94 (2) 3 2 1 — (2)	92 (2) 5 1 1 1 —	91 4 2 1 1 (2)	88 (2) 6 5 1 (2) (2) (2)	87 1 4 4 2 1 1 (2)	77 1 5 3 5 1 2 4 (2)	90 1 4 2 1 - 1 (2) -	80 1 8 4 3 2 1 1 (2)	93 (2) 3 3 1 (2) — (2)	93 1 5 1 (2) (2) (2) (2)	94 1 2 2 1 (2)	94 1 2 1 1 1 —	79 (2) 8 5 2 3 (2)
Not ascertained	(2)			(2)		<u> </u>		2	1	(2)					(2)
All cases	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Number of cases	3,512	479	604	672	615	397	437	269	287	466	486	895	344	410	180

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

Data are subject to considerable reporting error, especially where small amounts are involved.
 Less than one-half of 1 per cent.
 Total income is less than income from wages and salaries for these units because of business losses or negative farm income.
 Includes income from old-age pensions, retirement pay, annuities, unemployment compensation, welfare payments, alimony, regular contributions, veterans' pensions, school allotments, State bonuses, and allotments to families of servicemen.
 Includes interest, dividends, trust funds, and royalties.
 The question was first asked: "Did you receive income from roomers and boarders?" Respondents were then asked "Did you receive money from other rent?" If yes, "How much was it after allowing for expenses?"

gard these items, especially when the amounts are small. In the case of individuals with savings accounts, for instance, less than 1 in every 3 with deposits of \$1,000 or more reported having obtained any interest income during 1949. For those with smaller amounts on deposit, the proportion was even smaller. Understatements of this type of income were probably much less frequent where the amounts received were sizable.

Reports of income of \$500 or more from interest, dividends, etc. were very infrequent among consumers with total money incomes of less than \$7,500. Among those with incomes above this level, such receipts were reported by about 2 in every 10 units. Again, as in the case of rent from property, retired persons obtained income in this manner relatively more frequently and in larger amounts than persons with other occupational status.

Tables 14-18 at the end of this article contain data supplemental to those given in this text.

Family Income in 1949

Some of the income data reported by spending units in the Survey of Consumer Finances are tabulated by family units as well as by spending units. A family is defined as all persons living in the same dwelling who are related by blood, marriage, or adoption. A single person may constitute a "family" if he is living by himself or with persons unrelated to him. The term "family unit" as used in the survey is thus equivalent to the "family" and "individual not in family" definitions of the Bureau of the Census, United States Department of Commerce.

There may be more than one spending unit in a family since a spending unit is defined as all persons living in the same dwelling and belonging to the same family who pool their incomes to meet their major expenses. For example, a grown son who is working and does not pool his income with his parents' income, even though he may pay something for board and room, is treated as a separate spending unit if he retains more than half of his income. Likewise, married children or other relatives who do not pool their incomes with that of the head of the family, even though living in the same dwelling, constitute separate spending units. In tabulating on a family basis, the incomes of all related persons living in the same dwelling are combined.

It is estimated that at the beginning of 1949 there were approximately 45.2 million family units and 52.0 million spending units residing in private households. Since the same total amount of consumer income is distributed among the smaller number of family units, it is to be expected that families will have somewhat higher average incomes than spending units.

Table 11

Income Grouping of Family Units and Money Income Received, 1949, 1948, and 1947.

[Percentage distribution]

	19	49	19	48	19	47
Annual money income before taxes	Fam- ily units²	Total money income		Total money income		Total money income
Under \$1,000 \$1,000-\$1,999 \$2,000-\$2,999 \$3,000-\$3,999 \$4,000-\$4,999 \$5,000-\$7,499 \$7,500-\$9,999 \$10,000 and over	13 15 18 19 12 15 4	2 6 12 18 14 23 } 25	11 15 20 20 12 14 4	2 6 12 18 14 21 21	13 18 20 17 11 13 4	2 7 13 15 13 20 30
All income groups.	100	100	100	100	100	100
Median income Mean income			\$3,120 \$4,020		\$2,920 \$3,780	

¹ Income data for each year are based on interviews during January, February and early March of the following year. Family units are defined as all persons living in the same dwelling who are related by blood, marriage, or adoption.

² Includes single-person family units.

As is shown in Table 11, the median family income in 1949 was \$3,100 or roughly 15 per cent higher than the median income for spending units. The grouping in some cases of more than one spending unit into a family unit resulted in 23 per cent of all family units having incomes of \$5,000 or more in 1949 compared with 16 per

cent of all spending units. Conversely a smaller

proportion of families than of spending units had

incomes of less than \$3,000.

DISPOSABLE INCOME

Thus far this article has been discussing the distribution of money income before taxes. For some purposes it is more useful to know the distribution of income after taxes. A beginning step in this direction was made in the 1948 survey, in which estimates of Federal personal income tax *liability* on 1947 income, apart from tax on capital gains or losses, were prepared for each spending unit. Fol-

August 1950 959

lowing a somewhat improved procedure, the data of the 1949 and 1950 surveys have been utilized to prepare like estimates of personal income tax liability for 1948 and 1949 incomes.

Income after tax, called disposable income in this article, was estimated for each spending unit by deducting computed Federal income tax liability from money incomes before taxes.⁷ The tax estimates, unlike other survey data, were not based on special information concerning tax liabilities obtained during the interview. They were computed on the basis of the income, size, and composition of each spending unit and the number of persons not living in the dwelling who were dependent on the members of the spending unit for support. A detailed presentation of the estimating procedure is given in the appendix to this article.

It should be stressed that these income tax estimates are only approximations; that they refer not to payments but to Federal personal income tax liabilities, apart from taxes on capital gains and losses; and that State and local income taxes are not included.

The distribution of spending units by income after Federal taxes shows, of course, a general downward shift from the distribution by income before taxes. The downward shift was most marked at the upper end of the income distribution, as can be seen in Table 12. The number of spending units with incomes of \$5,000 or more (before taxes) was reduced by one-fourth through taxation—from 16 per cent to 12 per cent of the approximately 52.0 million spending units. Median income was lowered to \$2,600 from \$2,700.

Survey estimates indicate that nearly two-thirds of all spending units had Federal income tax liabilities in 1949. The proportion of units with no tax liabilities rose from 32 per cent in 1948 to 35 per cent in 1949 in response to the slight decline in individual incomes. This had the effect of reducing by more than 1 million the number of spending units with tax liabilities. The decline in income also tended to lower somewhat the amount of the tax liabilities, as is shown in Table 13.

For 1 spending unit in every 7, Federal income

tax amounted to 10 per cent or more of income before tax. The frequency of tax liabilities above this rate fell off so sharply that only about 1 unit in every 100 incurred a liability of 16 per cent or more of income before tax. In terms of amount, nearly 4 spending units in every 10 incurred an obligation of \$200 or more; for slightly more than 1 in 10, the amount came to \$500 or more.

Reflecting the progressive nature of the Federal income tax, the proportion of units with such tax liabilities rose very sharply from lower to higher income groups, as did the amount of the tax. Less than 1 unit in every 10 with incomes under \$1,000 had tax liabilities and it is estimated that the amount involved was less than \$50 in every case. By way of comparison, nearly every unit with an income between \$5,000 and \$7,499 was obligated to pay income tax and in a majority of these cases the amounts came to \$500 or more.

The effect of this tax was to reduce by 2 percentage points the proportion of total income received by the units with the highest incomes. In 1949, the highest tenth of income receivers before tax obtained about 30 per cent of total personal income, while the tenth with the largest incomes after tax obtained approximately 28 per cent (see Table 14 on page 962). Spending units in the lower half of the income scale had a larger share

Table 12

Distribution of Spending Units and Total Money Income
Before and after Federal Income Tax
By Income Groups, 1949

[Per cent]

	Spend	ing units	Total money income			
Income groups	Before Federal income tax	After Federal income tax (dis- posable income) ¹	Before Federal income tax	After Federal income tax (dis- posable income) ¹		
Under \$1,000 \$1,000-\$1,999 \$2,000-\$2,999 \$3,000-\$3,999 \$4,000-\$4,999 \$5,000-\$7,499 \$7,500-\$9,999 \$10,000 and over	19 21 19	15 21 23 18 11 8 2	2 9 16 19 15 19 20	2 11 19 21 16 16 16		
All cases	100	100	100	100		
Median income Mean income	\$2,700 \$3,270	\$2,600 \$3,000				

¹ Money income after deduction of estimated Federal personal income tax liability. See appendix, pp. 961-62, for method of estimating disposable income. Money income figures exclude capital gains or losses and tax estimates make no allowance for such gains or losses.

960

⁷ The U. S. Department of Commerce, in estimating disposable income for its national income series, deducts from personal income actual Federal personal income tax payments (not liabilities), including taxes on capital gains and losses, as well as other tax and nontax payments to governments, chief of which are Federal estate and gift taxes and State and local personal tax and nontax payments.

Table 13
Estimated Federal Personal Income Tax Liability of Spending Units within Various Income Groups, 1949 and 1948

			Perce	ntage (listrib	ıtion o	f spen	ding u	nits wi	thin in	come	group	before	taxes		
Estimated tax liability		come ups		der 000	\$1,0 \$1,	000- 999		100- 1999)00- 999		000 ~ 999		000- 499		500 over
	1949	1948	1949	1948	1949	1948	1949	1948	1949	1948	1949	1948	1949	1948	1949	1948
None. \$1-\$49 \$50-\$99. \$100-\$199 \$200-\$499. \$500-\$999. \$1,000-\$1,999. \$2,000-\$4,999. \$5,000 and over. Not ascertained.	6 8 13 25 9 2	32 5 8 15 26 9 3 1 (2)	93 7 — — — — — — (2)	94 6 (2)	60 8 15 17 — —	57 8 15 20 (²) (²)	33 12 10 19 26 —	29 10 11 23 27 — — — (2)	15 4 12 25 43 1	15 4 11 23 46 1 — — (2)	5 2 2 10 68 12 —	5 3 3 9 66 14 —	1 1 1 2 42 53 (2) —	1 (2) 1 2 33 62 1	(2) 1 27 45 21 5	(2) (2) (2) (2) (2) 29 45 17 8
All units	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Number of cases	3,512	3,510	479	416	604	571	672	722	615	686	397	416	437	408	269	262

¹ Tax liability apart from capital gains or losses. Money income figures exclude capital gains or losses and tax estimates make no allowance for such gains or losses.

² Less than one-half of 1 per cent.

of income after tax than of income before tax. Estimates of the tax liabilities and disposable incomes of family units are presented in supplementary Tables 19 and 20 at the end of this article.

APPENDIX

METHOD OF ESTIMATING DISPOSABLE INCOME

Estimates of disposable personal income, defined for purposes of the Consumer Finances Surveys as the total money income of a spending unit less its Federal income tax liability, were made for the third time in the 1950 survey. While no questions about Federal income tax payments were asked in the interviews, it was possible to estimate a rough tax liability figure for each spending unit by taking into account the number of income receivers and dependents in each unit and by making certain assumptions about the filing of joint returns, deduction of allowances for contributions, and other considerations entering into the tax computations. In the 1950 and 1949 surveys, but not in the preceding one, information was obtained on the number of dependents living outside of the dwelling. This improvement in method tended to lower estimated tax liabilities, although only about 5 per cent of the cases were affected. The estimates thus made from the 1950 survey represented the Federal tax liabilities on 1949 incomes, not the tax payments of spending units during 1949. No estimates were made for State and local taxes.

The disposable income figures shown in this report therefore represent total money income less estimated Federal tax liabilities. These disposable income figures differ from the disposable personal income figures that are a part of the personal income series of the Department of Commerce in that the Commerce series excludes tax payments (not liabilities) and State and local as well as Federal taxes.

Certain information which would have been necessary in order to calculate personal income tax liability with precision was not available. The most important missing item was exact information on deductions claimed by spending units. The survey deduction allowance was the Treasury standard deduction on incomes up to \$5,000 and 10 per cent of incomes of \$5,000 or more. Some units undoubtedly claimed deductions that were larger than the amounts estimated for them, and some units with incomes of \$10,000 or more may have claimed less than the estimated deductions. Table 13 shows the amounts of tax liability estimated for spending units within various income groups.

The tax liability for each spending unit was estimated by using a standardized procedure of

Note.—For 1947 estimates, see July 1949 Federal Reserve Bulletin, Table 10, p. 789.

computation.1 The steps in the calculation follow:

- (1) A table was prepared giving the amount of tax by size of income and by number of dependents (including an extra exemption where the head of the unit or his wife was over 65 years of age). The table provided for the Treasury standard deduction for contributions, medical bills, etc., on incomes up to \$5,000, and a deduction of 10 per cent on taxable income (including items in (2) below), for incomes larger than \$5,000.
- (2) Taxable income was computed by deducting from total income amounts received by individual income recipients from social security benefits, sickness and injury benefits, armed forces pay and allowances up to the limit of their special exemption, contributions for support, and other allowable deductions. Tax-free interest was not deducted but would be received by only about 1 per cent of the income recipients.
- (3) In the case of spending units containing one person only, the tax was taken directly from the prepared table.
- (4) In all cases of spending units containing a husband and wife, it was assumed that a joint return would be filed.
- (5) If persons other than the head of the spending unit and his wife received income in such amounts that filing separate tax returns was obligatory, this was done in the 1950 survey. In previous years, separate returns were calculated only if the tax liability of the entire spending unit was thereby reduced. Dependents were always included on the tax return of the main income receiver, unless a different handling was indicated by the interview.
- (6) Where more than one tax return was estimated for a given spending unit, the separate tax liabilities were computed and added together and the total was considered to be the tax liability of the spending unit.
- (7) Where a family contained more than one spending unit, the separate tax liabilities were computed and added together and the total was considered to be the tax liability of the family.

This method of estimating taxes made no provision for the following:

- 1. Special exemption for the blind; ²
- 2. Larger deductions than the Treasury standard deduction on incomes up to \$5,000, or larger or

smaller deductions than 10 per cent on incomes greater than \$5,000;

- 3. Tax-free interest;
- 4. Taxes on alimony received; 2
- 5. Taxes on capital gains and losses;
- 6. Carry-over of business and capital losses from previous years;
- 7. Allocation of income among the taxpayers in a spending unit that may differ somewhat from the survey allocation;
- 8. Number of exemptions claimed for dependents not living in the dwelling that may differ from the survey figure because no question was asked concerning the number of outside dependents that would be claimed on the tax returns. However, information was obtained in the 1950 survey on the number of relatives not living with the respondent who were dependent on him for more than half of their living and in the 1949 survey on the number of persons who were dependent upon him for their living; and
- 9. State and local income taxes, which amount to about one-tenth of Federal personal income tax.

For individual spending and family units, taxes may have been over- or under-estimated. The limitations of these tax estimates should be recognized in making use of either the tax or disposable income data.

TABLE 14 PERCENTAGE OF TOTAL MONEY INCOME RECEIVED BY EACH TENTH OF THE NATION'S SPENDING UNITS WHEN RANKED By Size of Income, 1949, 1948, and 1947

	1					
Spending units ranked according to size of income ¹	bef	ney incore Fed	eral	Feder	y incom al incon sable in	ne tax
to size of income i	1949	1948	1947	1949	1948	1947
Highest tenth. Second. Third. Fourth. Fifth. Sixth. Seventh. Eighth. Ninth. Lowest tenth.	30 15 12 11 9 8 6 5 3	r31 15 12 10 9 r8 6 5 3	33 15 12 10 9 7 6 4 3	28 15 13 11 9 8 7 5 3	29 15 12 10 9 8 7 5 4	31 15 12 10 9 8 6 5 3

[&]quot; Revised.

¹ Acknowledgment is made of the assistance of members of the Division of Tax Research, Treasury Department, in formulating the method of estimate.

I Units have been ranked by size of money income either before or after tax, as indicated by the column headings.

Money income after deduction of estimated Federal personal income tax liability. See appendix, pp. 961-62, for method of estimating disposable income. Money income figures exclude capital gains or losses and tax estimates make no allowance for such gains

² In a few cases, the interviews furnished information concerning this point, which was then taken into account in estimating the tax liability.

TABLE 15 Percentage Distribution of Spending Units within Various Income Groups according to Specified Characteristics 1949 AND 1948

				1	949 A	ND 19	48									
						Annı	ıal moı	ney inc	come b	efore i	taxes					
Characteristics of spending unit	All in	come ups	Un \$1,0	der 000	\$1,0 \$1,5		\$2,0 \$2,9		\$3,0 \$3,9		\$4,0 \$4,9		\$5,0 \$7,		\$7,50 ov	
	1949	1948	1949	1948	1949	1948	1949	1948	1949	1948	1949	1948	1949	1948	1949	1948
Number of persons in spending unit:																
One. Two Three Four Five or more. Not ascertained	22 28 21 14 15	22 31 20 13 14 (¹)	44 29 10 6 11	44 31 10 5 10 (1)	37 28 19 6 10	37 28 14 11 10 (1)	24 27 22 14 13	26 29 21 10 14	12 26 26 19 17	11 30 24 19 16	8 25 26 23 18	6 33 25 17 18	5 33 26 16 19	6 38 27 15 14 (¹)	4 35 25 20 16 (¹)	30 24 26 16 (¹)
All cases	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Number of income receivers in spending unit: None One Two or more Not ascertained	1 76 23 (¹)	1 77 22 (¹)	3 84 13	5 80 15 (1)	83 17 (1)	1 84 15 (¹)	81 19	(1) 83 17 (1)	78 22 (¹)	76 23	66 34	67 32	54 46	1 59 40	71 29	1 75 24 (¹)
All cases	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Age of head of spending unit: 18-24 25-34 35-44 45-54 55-64 Not ascertained	10 23 22 18 14 12	11 21 22 20 15 11 (¹)	11 12 11 13 18 35 (¹)	13 8 8 12 18 41 (¹)	20 21 15 15 14 14 14	19 19 15 16 15 16 (¹)	14 26 23 15 13 8	15 23 21 17 16 7	6 31 25 18 13 6	7 29 27 21 12 4 (¹)	26 30 24 13 2	6 26 31 20 12 5 (1)	3 27 27 26 11 5	3 21 30 27 14 5	12 35 30 15 8 (1)	(1) 14 27 37 16 6 (1)
All cases	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Race: White	92 7 (1)	(2) (2) (2) (2) (2)	83 15 2	(2) (2) (2) (2) (2)	89 10 1	(2) (2) (2) (2) (2)	92 7 (¹) 1	(2) (2) (2) (2)	96 3 (¹) 1	(2) (2) (2) (2) (2)	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	(2) (2) (2) (2) (2)	97 2 (1) 1	(2) (2) (2) (2) (2)	98 -1 -1	(2) (2) (2) (2) (2)
All cases	100	(2)	100	(2)	100	(2)	100	(2)	100	(2)	100	(2)	100	(2)	100	(2)
Occupation of head of spending					}		}					ĺ				
unit: Professional and semi-professional. Managerial and self-employed Clerical and sales. Skilled and semiskilled Unskilled and service workers. Farm operator. Retired. Other. Not ascertained.	13 27 14 10 5	7 12 14 27 15 9 6 8 1	1 4 3 7 15 24 14 32 (1)	2 5 4 4 16 23 20 26	3 7 16 16 18 11 8 20	4 8 14 13 25 12 9 15	5 7 17 33 17 7 4 10 (1)	5 7 19 31 19 7 4 8	8 10 12 44 14 4 2 6 (¹)	7 7 17 45 12 4 1 7	9 15 17 42 8 4 1 4	10 13 17 44 7 4 2 3	11 27 16 31 5 5 3 2 (1)	11 29 12 30 3 9 1 5	22 44 8 5 2 14 4 1	24 48 6 8 - 9 2 3
All cases	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Place of residence of spending unit: Metropolitan area 8 Other urban area 4 Rural area 5	30 38	32 37 31	14 35 51	18 33 49	23 41 36	24 37 39	28 39 33	32 37 31	34 38 28	34 39 27	42 40 18	40 40 20	44 36 20	45 32 23	39 38 23	42 32 26
All cases	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Education of head of spending unit: Grammar school High school College None Not ascertained	41 39 16	40 40 17 2 1	61 23 6 9 1	62 22 7 8 1	47 38 10 4 1	51 34 11 3	45 39 14 2 (¹)	40 45 12 2 1	34 50 14 2 (¹)	34 48 16 1	30 45 24 1 (¹)	29 47 22 1 1	26 42 30 1	25 43 30 (1) 1	16 34 48 -	16 24 59
	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
All cases	. 100	100	100	100	100	100	100	100	100	100	1.00	100.	1 100	100	100	100

¹ Less than one-half of 1 per cent.
2 Data not available.
3 The 12 largest cities in the United States and their surrounding suburban and rural areas.
4 Includes cities of 2,500 population or more, but not metropolitan.
5 Includes towns of less than 2,500 population and open country.
NOTE.—Details may not add to totals because of rounding.

TABLE 16 INCOME DISTRIBUTION OF SPENDING UNITS HAVING SPECIFIED CHARACTERISTICS, 1949 1 [Per cent]

		Annual money income before taxes							
Characteristic of spending unit	Number of cases	All income groups	Under \$1,000	\$1,000- \$1,999	\$2,000- \$2,999	\$3,000- \$3,999	\$4,000- \$4,999	\$5,000- \$7,499	\$7,500 and over
All spending units	3,512	100	14	19	21	19	11	11	5
Number of persons in spending unit: One. Two. Three. Four. Five or more.	748 1,012 744 515 491	100 100 100 100 100	28 15 7 6 11	31 19 17 9	23 20 22 21 20	10 17 22 26 22	4 10 13 18 13	3 13 13 13 14	1 6 6 8 6
Number of income receivers in spending unit: One	2,679 811	100 100	16 8	21 13	22 17	19 18	9 16	8 21	5 7
Age of head of spending unit: 18-24 25-34 35-44 45-54 55-64 55 or over	342 779 777 670 495 419	100 100 100 100 100 100	16 7 7 10 18 43	36 18 13 16 19 23	29 24 22 18 20 14	11 24 21 19 18 10	4 12 15 14 10 2	12 14 15 9	
Race of head of spending unit: White Negro	3,310 185	100 100	13 32	18 29	21 21	19 10	11 4	11 3	6 1
Education of head of spending unit: Grammar school High school College.	1,321 1,371 706	100 100 100	21 8 5	22 18 12	23 21 18	16 23 16	9 13 15	7 12 19	2 5 15
Place of residence of spending unit: Metropolitan area ² . Other urban area ³ . Rural area ⁴ .	1,157 1,253 1,102	100 100 100	7 13 23	14 21 22	20 22 22 22	21 18 16	15 11 6	16 10 7	7 5 4

Note.—Details may not add to totals because of rounding. TABLE 17

INCOME RECEIVED FROM UNINCORPORATED FARM AND Nonfarm Businesses, 1949 and 1948

	Percentage distribution							
Amount of net income	Farm of	perators !	receivi incom unincor	ng units ng any e from porated businesses				
	1949	1948	1949	1948				
Negative. Under \$500 \$500-\$999 \$1,000-\$1,999 \$2,000-\$2,999 \$3,000-\$3,999 \$4,000-\$4,999 \$5,000-\$9,999 \$10,000 and over Not ascertained	14 19 11 20 13 7 3 8 4	5 19 17 20 12 7 5 13	10 6 8 13 15 14 7 16 7	3 8 5 12 14 10 11 24 8 5				
All cases	100	100	100	100				
Number of cases	410	428	309	329				

¹ Amounts of income refer to farm income only. These figures are especially influenced by exclusion of nonmoney income of farmers.

TABLE 18

DISTRIBUTION OF TOTAL MONEY INCOME BEFORE AND AFTER FEDERAL INCOME TAX, BY INCOME GROUPS BEFORE TAX, 1949

		Percentage of total money income					
1949 annual money income before taxes	Percent- age of spending units	Before Federal income tax	After Federal income tax (disposable income) 1				
Under \$1,000 \$1,000-\$1,999 \$2,000-\$2,999 \$3,000-\$3,999 \$4,000-\$4,999 \$5,000-\$7,499 \$7,500-\$9,999 \$10,000 and over	19	2 9 16 19 15 19 20	2 9 17 20 15 19 18				
All cases	100	100	100				

¹ Money income after deduction of estimated Federal personal income tax liability. See appendix, pp. 961-62 for method of estimating disposable income. Money income figures exclude capital gains or losses and tax estimates make no allowance for such gains or losses.

FEDERAL RESERVE BULLETIN

964

¹ For comparable 1948 data, see July 1949 BULLETIN, p. 792; for 1945 data, see U. S. Department of Agriculture, Division of Program Surveys, National Survey of Liquid Asset Holdings, Spending and Saving, Pt. 2, Tables 18, 19, and 20.

² Includes the 12 largest cities in the United States and their surrounding suburban and rural areas.

³ Includes cities of 2,500 population or more, but not metropolitan.

⁴ Includes towns of less than 2,500 population and also open country. These figures are especially influenced by exclusion of non-money income of farmers.

TABLE 19

Income Grouping of Family Units and Money Income Estimated Federal Personal Income Tax Liability of Before and after Federal Income Tax, 1949

Estimated Federal Personal Income Tax Liability of Family Units, 1949, 1948, and 1947 Before and after Federal Income Tax, 1949

[Percentage distribution]

	Fam	Family units 1 Total m			
Income group	Before Federal income tax	After Federal income tax (disposable income) ²	Before Federal income tax	After Federal income tax (disposable income) ²	
Under \$1,000 \$1,000-\$1,999 \$2,000-\$2,999 \$3,000-\$3,999 \$4,000-\$4,999 \$5,000-\$7,499 \$7,500-\$9,999 \$10,000 and over	13 15 18 19 12 15 4	13 16 22 19 12 12 3 3	2 6 12 18 14 23 25	2 7 16 19 16 21 19	
All income groups	100	100	100	100	
Median income Mean income	\$3,100 \$3,760	\$2,950 \$3,460			

TABLE 20

[Percentage distribution of family units]

Estimated tax liability 2	1949	1948	1947
None	34	32	29
\$1-\$49	6	5	5
\$50~\$99	7	8	7
\$100-\$199	12	13	12
\$200-\$499	25	25	25
\$500-\$999	11	12	15
\$1,000-\$1,999	3	3	4
\$2,000-\$4,999	ĭ	l ĭ	1 2
\$5,000 and over	(3)	ĩ	ī
All units	100	100	100

¹ Includes single-person families.

Note.—The schedule of Federal personal income taxes was revised in 1948 in a manner which tended to lower liabilities at all levels of the income distribution. For the most part, the downward shift in tax liabilities reflects this revision. However, methods of working out the tax estimates have been improved. These changes in method tend to lower slightly the level of 1948 and 1949 tax liabilities as compared with those for 1947.

¹ Includes single-person families.
² Money income after deduction of estimated Federal personal income tax liability. See appendix, pp. 961-62 for method of estimating disposable income. Money income figures exclude capital gains or losses and tax estimates make no allowance for such gains or losses.

² Tax liability apart from capital gains or losses. Money income figures exclude capital gains or losses and tax estimates make no allowance for such gains or losses.

 $^{{}^{3}\}operatorname{Less}$ than one-half of 1 per cent.