Consumer incomes
in U.S.

August 1938

NATIONAL RESOURCES COMMITTEE

CONSUMER INCOMES IN THE UNITED STATES

AUGUST 1938

CONSUMER INCOMES IN THE UNITED STATES

THEIR DISTRIBUTION IN 1935–36

NATIONAL RESOURCES COMMITTEE

UNITED STATES GOVERNMENT PRINTING OFFICE WASHINGTON : 1938

For sale by the Superintendent of Documents, Washington, D. C. - - - - Price 30 cents (paper cover)

NATIONAL RESOURCES COMMITTEE

NORTH INTERIOR BUILDING

WASHINGTON

May 27, 1938

The PRESIDENT,
The White House.

MY DEAR MR. PRESIDENT:

We have the honor to transmit herewith a Report on the Distribution of Consumer Income in 1935–36, prepared under the direction of our Industrial Committee by Dr. Hildegarde Kneeland and her staff. This report provides the first estimates in this field based on a nation-wide canvass of family incomes. These estimates have been developed from data on over 300,000 families obtained through A Federal Works Project on the study of consumer purchases conducted by the Bureau of Home Economics and the Bureau of Labor Statistics with the cooperation of the National Resources Committee.

The report provides for the first time an authoritative, broad, national picture of division of income among the American people. The facts disclosed are significant not only to business men concerned with the market for consumers' goods, but also to all citizens concerned with problems of economic opportunity in a democracy.

Sincerely yours,

HARRY H. WOODRING,
Secretary of War.

HENRY A. WALLACE,
Secretary of Agriculture.

E. K. BURLEW,
Acting Secretary of the Interior.

R. C. PATTERSON, Jr.
Acting Secretary of Commerce.

C. V. MCLAUGHLIN,
Acting Secretary of Labor.

HARRY L. HOPKINS,
Works Progress Administrator.

FREDERIC A. DELANO.

CHARLES E. MERRIAM.

•

BEARDSLEY RUML.

HENRY S. DENNISON.

NATIONAL RESOURCES COMMITTEE

HAROLD L. ICKES, *Chairman*
Secretary of the Interior

FREDERIC A. DELANO
Vice Chairman

HARRY H. WOODRING
Secretary of War

HENRY A. WALLACE
Secretary of Agriculture

DANIEL C. ROPER
Secretary of Commerce

HARRY L. HOPKINS
Works Progress Administrator

FRANCES PERKINS
Secretary of Labor

CHARLES E. MERRIAM

ADVISORY COMMITTEE

FREDERIC A. DELANO, *Chairman*

CHARLES E. MERRIAM

HENRY S. DENNISON

BEARDSLEY RUML

STAFF

CHARLES W. ELIOT, 2d
Executive Officer

HAROLD MERRILL
Assistant Executive Officer

INDUSTRIAL COMMITTEE

THOMAS C. BLAISDELL, JR., *Chairman*

LAUCHLIN CURRIE

CHARLES W. ELIOT, 2d

MORDECAI EZEKIEL

LEON HENDERSON

ISADOR LUBIN

GARDINER C. MEANS

HARRY D. WHITE

TECHNICAL STAFF

Hildegarde Kneeland,
in Charge of Study

Enid Baird

Selma E. Fine

Blanche Bernstein

Louie L. Rhudy

Richard Sasuly

Henrietta Liebman

Michael Sapir

Marian A. Wayave

ACKNOWLEDGMENTS

This report on the distribution of consumer incomes in 1935–36 was prepared by the Consumption Research staff of the Industrial Section of the National Resources Committee, under the immediate direction of Hildegarde Kneeland. In addition to the staff members listed above, acknowledgment is due to Janet H. Murray, Jacob J. Kaufman, William C. Shelton, Willard Friedman, and Lawrence Neiman for assistance in various phases of the work, and to Sopha Lunsford, who served as secretary to the staff. Acknowledgment is also due to Milton Friedman, Erika H. Wulff, and W. Allen Wallis, who collaborated with Dr. Kneeland in preparing the preliminary plans for the study.

The report is based primarily on data from the Study of Consumer Purchases, a Works Progress Administration project conducted by the Bureau of Home Economics of the United States Department of Agriculture and the Bureau of Labor Statistics of the United States Department of Labor. The plans for the project were formulated by the National Resources Committee and the two operating bureaus, with the cooperation and advice of the Central Statistical Board and the Works Progress Administration, and the study was administered under the guidance of a committee representing the five cooperating agencies. Grateful acknowledgment is made of the generous cooperation given by the two bureaus in making the data from the project available for use in this report. Appreciation is especially due to Dr. Day Monroe, Director of the Study in the Bureau of Home Economics, and to Dr. A. D. H. Kaplan, Director of the Study and Dr. Faith M. Williams, Chief of the Cost of Living Division in the Bureau of Labor Statistics.

Acknowledgment is also made of the cooperation rendered by the Income Tax Unit of the Bureau of Internal Revenue, the United States Public Health Service, and various other Government agencies in providing access to unpublished statistical data.

CONSUMER INCOMES IN THE UNITED STATES

CONTENTS

LIST OF CHARTS

LIST OF TABLES

PART I

INCOMES OF ALL CONSUMERS

THE great stream of national income flows continually through the hands of millions of American consumers. To some the inflow comes day by day, sometimes steadily, often interrupted by periods of economic drought. To some it comes in weekly or monthly pay checks, regularly in good years, but in times of depression choked off by unemployment. Others, like the farmer, depend upon the income of one season to see them through the year. And finally there are those to whom the channels of income open at intervals for the flow of dollars from profits and dividends, interest, and rent.

The money income thus received pours out again in exchange for food, for housing, for clothes and recreation, for all the goods and services that constitute the real income of the American people.

The amount consumers have to spend and what their incomes purchase are measures of the effectiveness with which we use our productive resources. The volume and the distribution of this purchasing power, in turn, play an important role in guiding our further use of these resources—in determining what goods and services are produced and in what quantity, which workers are employed and how fully, which communities have the tax facilities to maintain their schools and roads.

Since the stream of income plays so important a part in the national economy, it is imperative that we add to our present meager knowledge of the channels through which it passes. Those concerned with the living standards of the people need more accurate information on the extent to which shortage of income brings poverty damaging to health and happiness. Law-making bodies striving to apportion taxes equitably and without damage to the processes of industry need to know what will swell or deplete the stream. Business men require more abundant and reliable data on the probable demand for their products in order to stimulate and meet that demand. Any attempt on the part of Government or business to grapple with basic economic problems must rely heavily on what can be learned of the distribution of income among the various groups of the Nation's consumers.

The Scope and Significance of the Study

This report on consumer income distribution in the United States is a much-needed addition to the scanty information previously at our disposal. Although the data cover only a single year, they give the most complete picture ever presented of the division of the national income among the American people.

The preparation of the estimates was undertaken by the Industrial Section of the National Resources Committee as part of a larger study of the Nation's consumption demands in relation to its productive capacities. While primarily designed for use in building up national estimates of consumer expenditures, these figures on income distribution are considered of sufficient interest in themselves to justify separate presentation.

The study covers the 12-month period from July 1935 through June 1936. It shows estimates of the incomes received by all of the Nation's income-spending units—by the 29 million families of 2 or more persons, by the 10 million "single" individuals living alone or as lodgers, and by the 2 million persons living in institutions and in quasi-institutional groups. For family incomes, this broad national picture is traced in more detail to show the flow of the income stream to farms, villages, and cities, to different geographic regions, to different occupational groups, to families of different size, and—in the South and in Northern cities—to the white and Negro population.

Previous Estimates of Income Distribution

These estimates of income distribution for 1935–36 are the first to appear since the Brookings Institution estimates for the year 1929, published in America's Capacity to Consume.[1] Previous to that report, very few attempts had been made to measure the division of national income by income classes, and only one study [2] had appeared in published form—that of the National

[1] Leven, Maurice, Moulton, Harold G., and Warburton, Clark, *America's Capacity to Consume*, the Brookings Institution, Washington, D. C., 1934.

[2] Prepared by Frederick R. Macaulay and published in *Income in the United States, Its Amount and Distribution, 1909–1919*, vols. I and II, National Bureau of Economic Research, New York, 1921 and 1922.

Bureau of Economic Research, giving estimates for the year 1918.[3]

The lack of attention given to this important aspect of the national economy can be accounted for, in large part, by the paucity of data available for preparing such estimates. In both the 1918 and the 1929 studies, it was necessary to rely primarily on statistics of earnings of individual workers, supplemented for the higher income brackets by data from Federal income tax returns. In the report of the National Bureau, no attempt was made to adjust the figures to a family income basis, or to present more than a single national curve of income distribution, covering all individual income recipients. The Brookings study, however, carried the estimates through to a family or "consumer unit" basis, and presented separate distribution curves for farm families, nonfarm families, and unattached individuals. A further division of the population was found impracticable with the data available.

How The Present Estimates Were Made

In the present study for 1935–36 it has been possible, in the main, to base the estimates directly upon data on family incomes. Such data became available for the first time from a Nation-wide sample [4] through the Study of Consumer Purchases—a Works Progress Administration project conducted by the United States Bureau of Home Economics and the United States Bureau of Labor Statistics in cooperation with the National Resources Committee and the Central Statistical Board.[4a] The data from this study, covering some 300,000 American families, show the income received by each family from all sources—from the net earnings of different members, from profits, dividends, interest, and rent, from pensions, annuities, and benefits, from gifts used for current living expenses, from the occupancy of owned homes, and—for rural families—from home-grown food and other farm products used by the family.[5] Similar data were also obtained from a small sample of single men and women.

The findings of this study have been supplemented by other sample data on family and individual incomes, by data on earnings, and by income tax statistics. The material from these various sources has provided the basis for a series of sample income distributions, representing more than 700 different groups of the population. These sample distributions have been used to build up income estimates for all of the Nation's consumers. The methods used in extending the sample data to a national basis are described in Part II and, in more detail, in Appendix A.

The Limitations of the Estimates

While the statistical material available for preparing these estimates is far more extensive than for previous years, it is none the less subject to many limitations and shortcomings. The results of the study must, therefore, be considered as approximations to the actual income situation in 1935–36.

The basic data are especially inadequate for families who received relief at some time during the year and for single individuals, and it has not been possible to estimate the incomes of these two groups according to type of community, occupation, and other characteristics. For many groups of nonrelief families as well, the data do not insure reliable results for the finer classifications of the population. These more detailed figures are therefore presented in reference tables in Appendix B. The estimates for the major groups of families, however, and for all families and single individuals, are believed to be sufficiently reliable to serve the practical purposes for which they were prepared. These estimates are dealt with in the main body of the report.

Income Distribution on a National Basis

The most significant results of the study are those showing the broad national picture of the division of income among the American people. These figures are brought together in the charts and tables which follow. Estimates for the various component groups of the population are presented in Part II.

Family Incomes

The great majority of the Nation's consumers are members of families of two or more persons, sharing a common income and living under a common roof. The 29,400,300 families in the population during 1935–36 were by far the most important group of income-spending units, including nearly 91 percent of the total body of consumers.

The distribution of these 29 million families by income level is shown graphically in chart 1. As the bars on the left of the chart indicate, 14 percent of all families received less than $500 during the year studied; 42 percent received less than $1,000, 65 percent less than $1,500, and 87 percent less than $2,500. Above the

---

[3] Mention should also be made of an estimate for 1929 presented, without discussion, in the Business Week for August 31, 1932, in one of a series of articles on *The American Consumer Market*.

[4] Data on family incomes are also now available from an extensive sample of urban families and from a smaller sample of rural families through the National Health Survey recently conducted by the U. S. Public Health Service. For discussion of use made of these data, see Appendix A, pp. 58–59.

[4a] The Study was administered under the guidance of a Steering Committee and a Technical Subcommittee, each composed of representatives of the five cooperating agencies. The membership of these committees was as follows:

Steering Committee: Stuart A. Rice, Chairman, Works Progress Administration; Louise Stanley, Bureau of Home Economics; Isador Lubin, Bureau of Labor Statistics; Gardiner C. Means, National Resources Committee; Morris A. Copeland, Central Statistical Board.

Technical Subcommittee: Hildegarde Kneeland, Chairman, National Resources Committee; Day Monroe, Bureau of Home Economics; Faith M. Williams, Bureau of Labor Statistics; Milton Forster, Works Progress Administration; Samuel J. Dennis, Central Statistical Board.

[5] It should be noted that income was measured before payment of income taxes. For definition of income and for explanation of certain items not included, see Appendix A, p. 41. For description of Study of Consumer Purchases, see Appendix A, sec. 2.

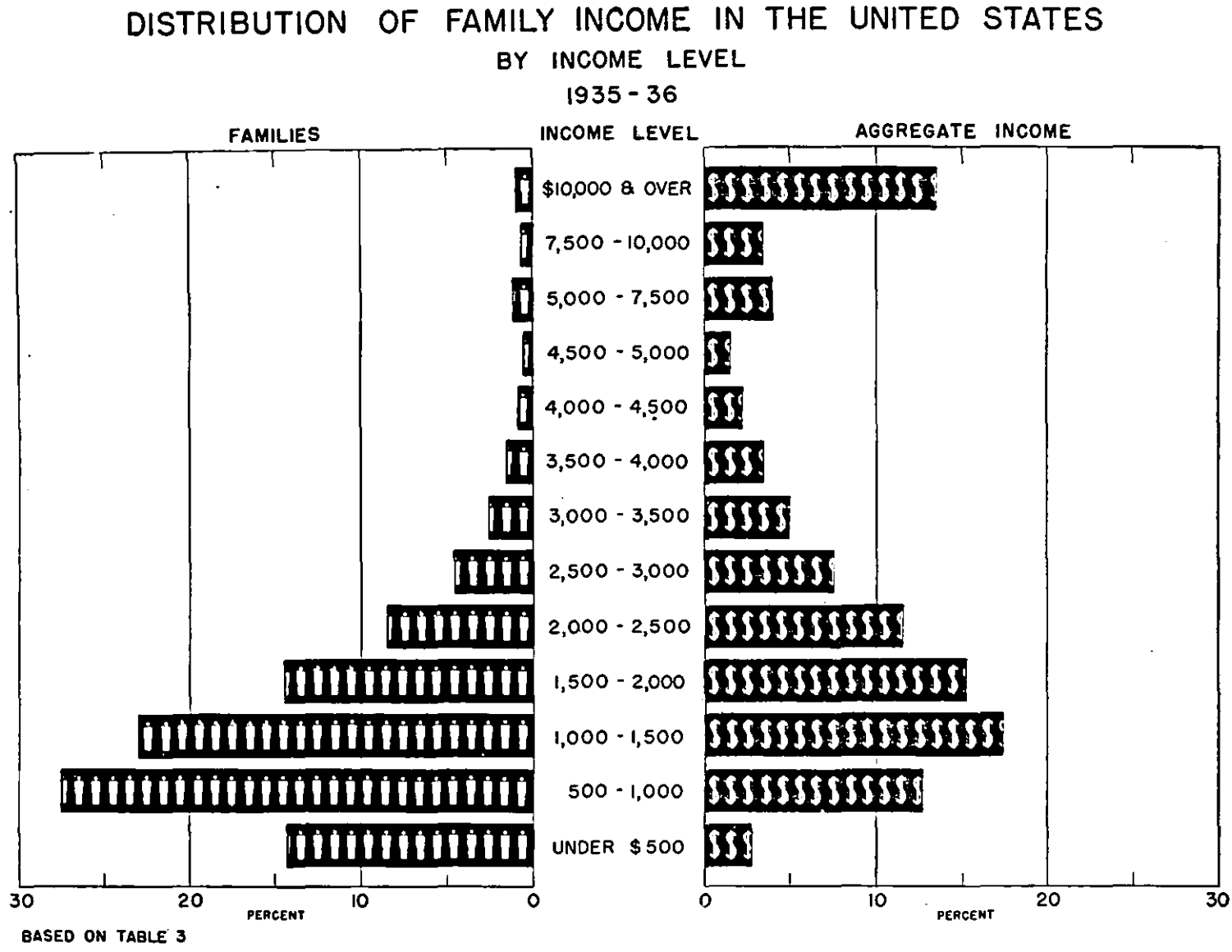


CHART 1

This chart may be read either by length of bars or by symbols
Each figure symbol represents 1 percent of all families or 294,000 families
Each dollar symbol represents 1 percent of aggregate income of all families or $476,792,380

$2,500 level, there were about 10 percent with incomes up to $5,000, about 2 percent receiving between $5,000 and $10,000, and only 1 percent with incomes of $10,000 or more. These figures are shown in fuller detail in table 3, in a later section of the report.

When the incomes of all families are added together, the aggregate is approximately $48 billion. The shares of this total income going to the various income groups are also shown in chart 1. Thus we find that the 42 percent of families with incomes under $1,000 received less than 16 percent of the aggregate, while the 3 percent with incomes of $5,000 and over received 21 percent of the total. The incomes of the top 1 percent accounted for a little over 13 percent of the aggregate.

Incomes of Single Individuals

In addition to the 116 million consumers living in family groups in 1935–36, there were 10 million men and women lodging in rooming houses and hotels, living as lodgers or servants in private homes, or maintaining independent living quarters as one-person families.[6] These single individuals constituted nearly 8 percent of the total population, and—as indicated in table 1—received 19 percent of the total consumer income.

The distribution of income among these individual consumer units, shown in chart 2, resembles very closely that for families, except that there was considerably greater concentration in the lower brackets. Sixty-one percent received incomes of less than $1,000 and accounted for 29 percent of the total income of the group. Ninety-five percent received less than $2,500 and a little over 1 percent received $5,000 or more. The detailed figures for this group are presented later in table 15.

[6] Sons and daughters living with their parents but paying for board and lodging and not pooling their incomes in the common family fund are classified as single individuals, rather than as members of families. The number of such individuals in 1935-36 is estimated at approximately 400,000. For further explanation, see p. 76.

DISTRIBUTION OF INCOME OF SINGLE INDIVIDUALS IN THE UNITED STATES

BY INCOME LEVEL

1935 - 36

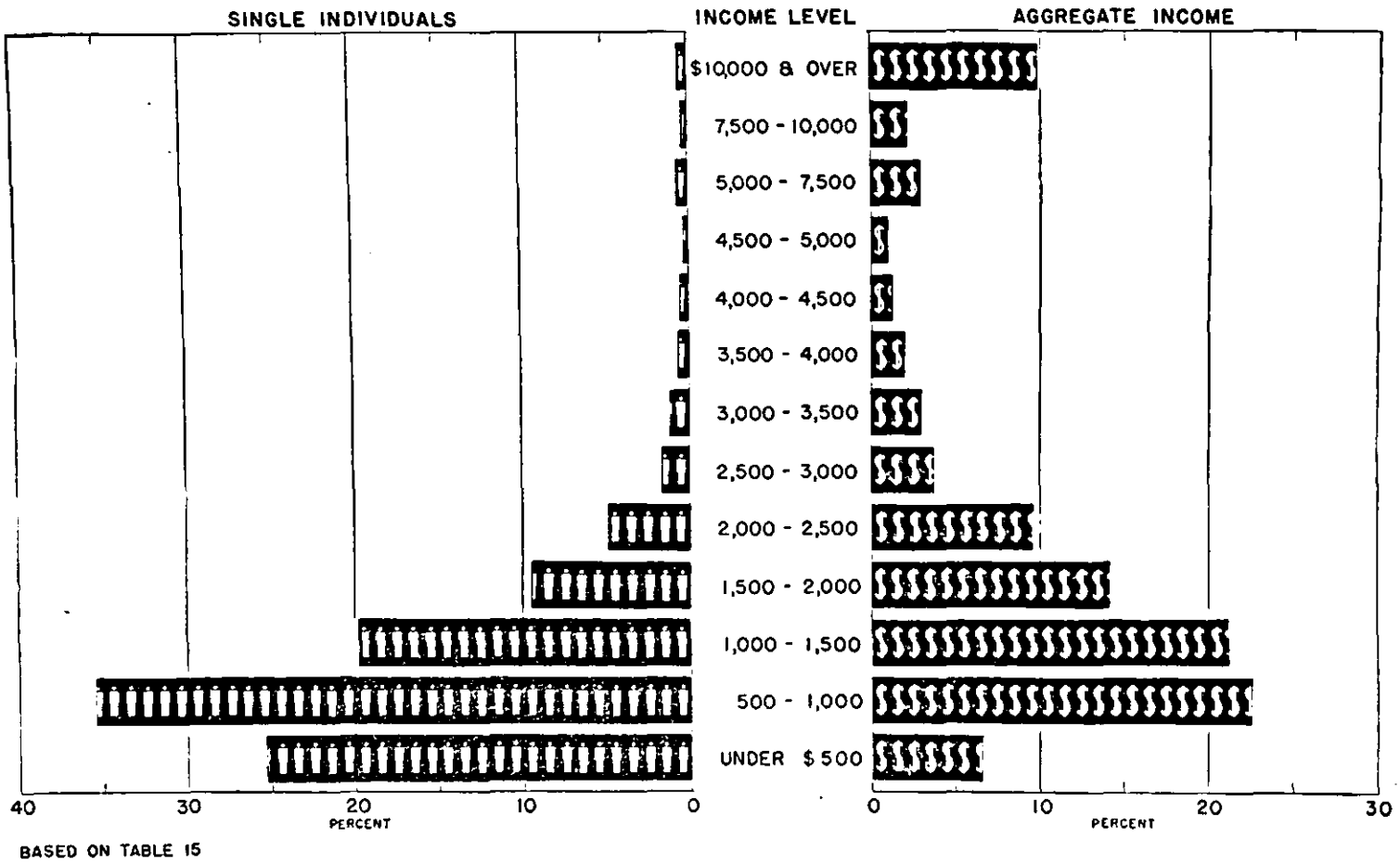


CHART 2

This chart may be read either by length of bars or by symbols
Each figure symbol represents 1 percent of all single individuals or 100,580 single individuals
Each dollar symbol represents 1 percent of aggregate income of all single individuals or $115,793,900

TABLE 1.—*Distribution of population by type of consumer unit and average and aggregate incomes of each type, 1935–36*

Type of consumer unit	Number of consumer units	Persons		Average income			Aggregate income	
		Number	Percent	Per consumer unit		Per capita (mean)	Amount (in thousands)	Percent
				Median	Mean			
Families of 2 or more persons	29,400,300	115,966,000	90.6	$1,160	$1,622	$411	$47,670,238	79.5
Single individuals	10,058,000	10,058,000	7.8	830	1,151	1,151	11,579,390	19.3
All families and single individuals	39,458,300	126,024,000	98.4	$1,070	$1,502	$470	$59,258,628	98.8
Institutional groups	(1)	2,000,000	1.6	(1)	(1)	362	724,300	1.2
All consumers	(1)	128,024,000	100.0	(1)	(1)	$469	$59,982,928	100.0

(1) Not available.

Incomes of All Consumers

For a comprehensive picture of the distribution of consumer income in the United States, families and single individuals can be considered together. Such treatment is justified by the lack of a sharp distinction between the two groups from the standpoint of the receipt and use of income. The diversity among the consumer units that make up the 29 million families is fully as great as that between families as a group and single individuals. An income of $1,000 a year means, to be sure, one thing to a single man or woman and another to an average family of four. But it also has

quite different meanings to the family of two persons and to the family of eight. These two major groups of consumer units can therefore be combined, at each income level, to show the curve of income distribution for the Nation as a whole.

Institutional Residents Not Included.—This summary of income distribution, however, must omit the small group of the population living in institutions of various types and in military and naval posts, labor camps, and other quasi-institutional groups. All together, these institutional residents number about 2 million. A large part of the incomes of these consumers—and in many cases the entire income—is supplied by the institution in the form of subsistence and care. Thus the institutional group, rather than the individual resident, constitutes the spending unit. The incomes of the individual residents are more comparable to the per capita incomes of members of families than to the incomes of independent consumers. For this reason, no distribution by income level has been prepared for the institutional population. To have included them on a parallel basis with the 39 million families and single individuals would have been misleading. The per capita averages for the three main types of consumers are compared in table 1.

Distribution by Income Level.—The income distribution of all families and single individuals combined is presented in detail in table 2. The figures show both the number of consumer units at each level of income and the share of the aggregate income they received. The results tell a story very similar to that already described for each group of consumer units separately. Nearly one third (32 percent) of the total number of families and single individuals had incomes under $750, nearly one half (47 percent) received less than $1,000, and more than two thirds (69 percent) received less than $1,500. At the other end of the income scale, about 2 percent had incomes of $5,000 and over, and less than 1 percent incomes of $10,000 and over.

Distribution of Consumer Units by Tenths.—The disparity of incomes is revealed somewhat more clearly by chart 3. Here the 39 million consumer units are grouped by tenths, or deciles, according to the size of their incomes. The poorest tenth, with incomes under

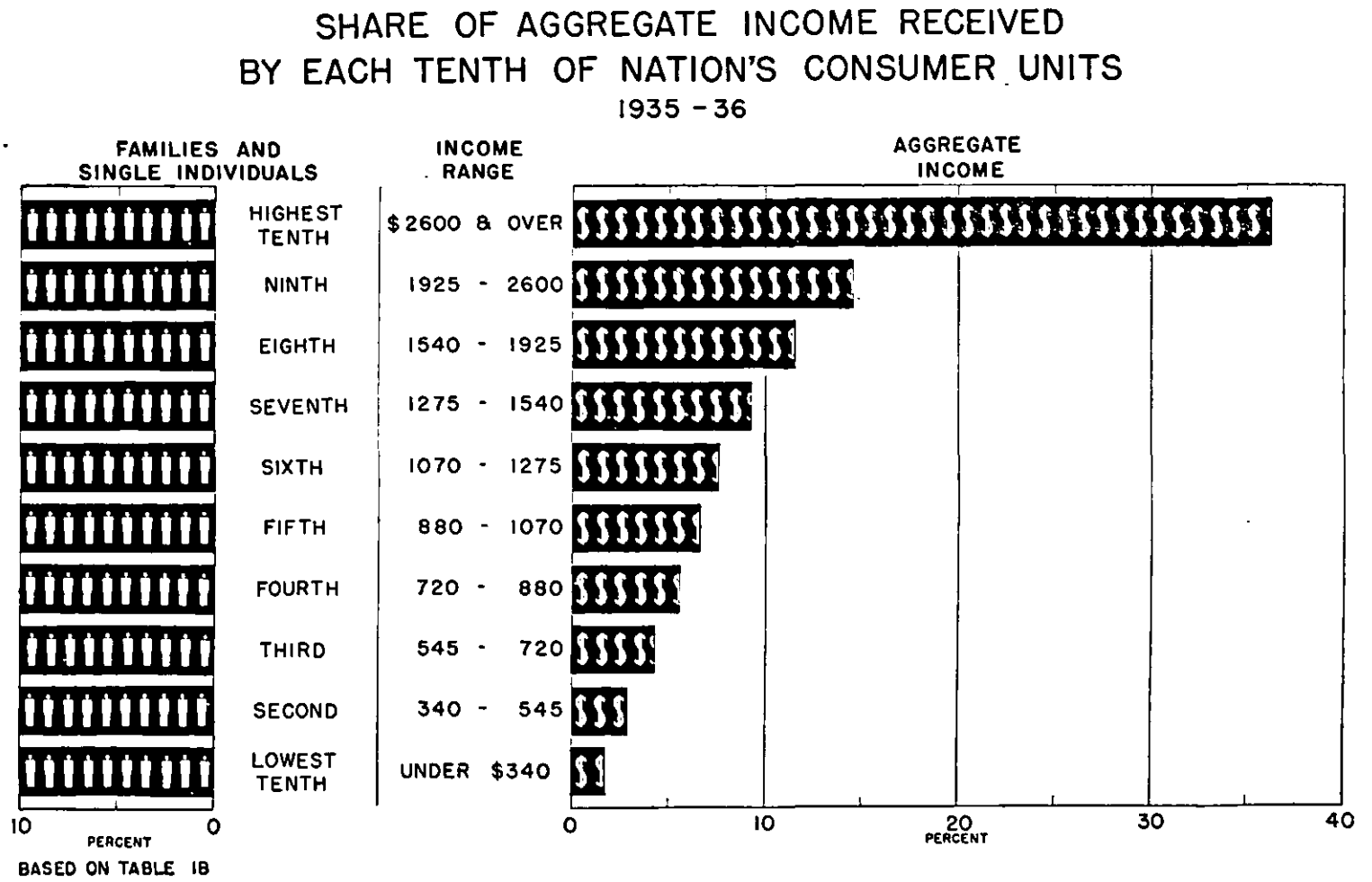


CHART 3

This chart may be read either by length of bars or by symbols
Each figure symbol represents 1 percent of all families and single individuals or 394,583 consumer units
Each dollar symbol represents 1 percent of aggregate income of all families and single individuals or $592,586,280

TABLE 2.—*Distribution of families and single individuals and of aggregate income received, by income level, 1935–36*

Income level	Families and single individuals			Aggregate income		
	Number	Percent at each level	Cumulative percent	Amount (in thousands)	Percent at each level	Cumulative percent
Under $250	2,123,534	5.38	5.38	$294,138	0.50	0.50
$250–$500	4,587,377	11.63	17.01	1,767,363	2.98	3.48
$500–$750	5,771,960	14.63	31.64	3,615,653	6.10	9.58
$750–$1,000	5,876,078	14.90	46.54	5,129,506	8.65	18.23
$1,000–$1,250	4,990,995	12.65	59.19	5,589,111	9.42	27.65
$1,250–$1,500	3,743,428	9.49	68.68	5,109,112	8.62	36.27
$1,500–$1,750	2,889,904	7.32	76.00	4,660,793	7.87	44.14
$1,750–$2,000	2,296,022	5.82	81.82	4,214,203	7.11	51.25
$2,000–$2,250	1,704,535	4.32	86.14	3,602,861	6.08	57.33
$2,250–$2,500	1,254,076	3.18	89.32	2,938,932	5.01	62.34
$2,500–$3,000	1,475,474	3.74	93.06	4,004,774	6.76	69.10
$3,000–$3,500	851,919	2.16	95.22	2,735,487	4.62	73.72
$3,500–$4,000	502,159	1.27	96.49	1,863,384	3.14	76.86
$4,000–$4,500	286,053	.72	97.21	1,202,826	2.03	78.89
$4,500–$5,000	178,138	.45	97.66	841,766	1.42	80.31
$5,000–$7,500	380,266	.96	98.62	2,244,406	3.79	84.10
$7,500–$10,000	215,642	.55	99.17	1,847,820	3.12	87.22
$10,000–$15,000	152,682	.39	99.56	1,746,925	2.95	90.17
$15,000–$20,000	67,923	.17	99.73	1,174,574	1.98	92.15
$20,000–$25,000	39,825	.10	99.83	889,114	1.50	93.65
$25,000–$30,000	25,583	.06	99.89	720,268	1.22	94.87
$30,000–$40,000	17,959	.05	99.94	641,272	1.08	95.95
$40,000–$50,000	8,340	.02	99.96	390,311	.66	96.61
$50,000–$100,000	13,041	.03	99.99	908,485	1.53	98.14
$100,000–$250,000	4,144	.01	100.00	539,006	.91	99.05
$250,000–$500,000	916	(1)	----	264,498	.45	99.50
$500,000–$1,000,000	240	(1)	----	134,803	.23	99.73
$1,000,000 and over	87	(1)	----	157,237	.27	100.00
All levels	39,458,300	100.00	----	$59,258,628	100.00	----

[1] Less than 0.005 percent.

$340, received less than 2 percent of the aggregate income; the second tenth, with incomes ranging from $340 to $545, received 3 percent of the total. Not until the eighth group is reached does the share of total income received pass the 10 percent line, showing a proportion of income received greater than the proportion of families and individuals receiving it. The 10 percent of families and individuals at the top of the income scale, with incomes of $2,600 and over, received 36 percent of the aggregate income—about the same amount as the 70 percent at the bottom of the scale.

The Average Income.—As chart 3 indicates, half of the families and single individuals had incomes below $1,070 and half had incomes above that amount. This figure of $1,070—the median income—is considerably lower than the mean income of $1,502. The mean, obtained by dividing the aggregate income by the total number of families and individuals, is affected to a greater extent than is the median by the very high incomes received by a relatively small number of consumer units. The difference between the two averages thus provides further evidence of the wide variation in consumer incomes.

Aggregate Income Received by Upper Five Percent.—Chart 4 shows the shares of the aggregate income received by the very high income groups. The highest 5 percent of all families and single individuals—those with incomes of $3,400 and over—received 27 percent of the aggregate—almost as much as the lowest 60 percent. The highest 2 percent, with incomes of $5,800 and over, received 18 percent of the total. And the highest 1 percent, with incomes of $9,100 and over

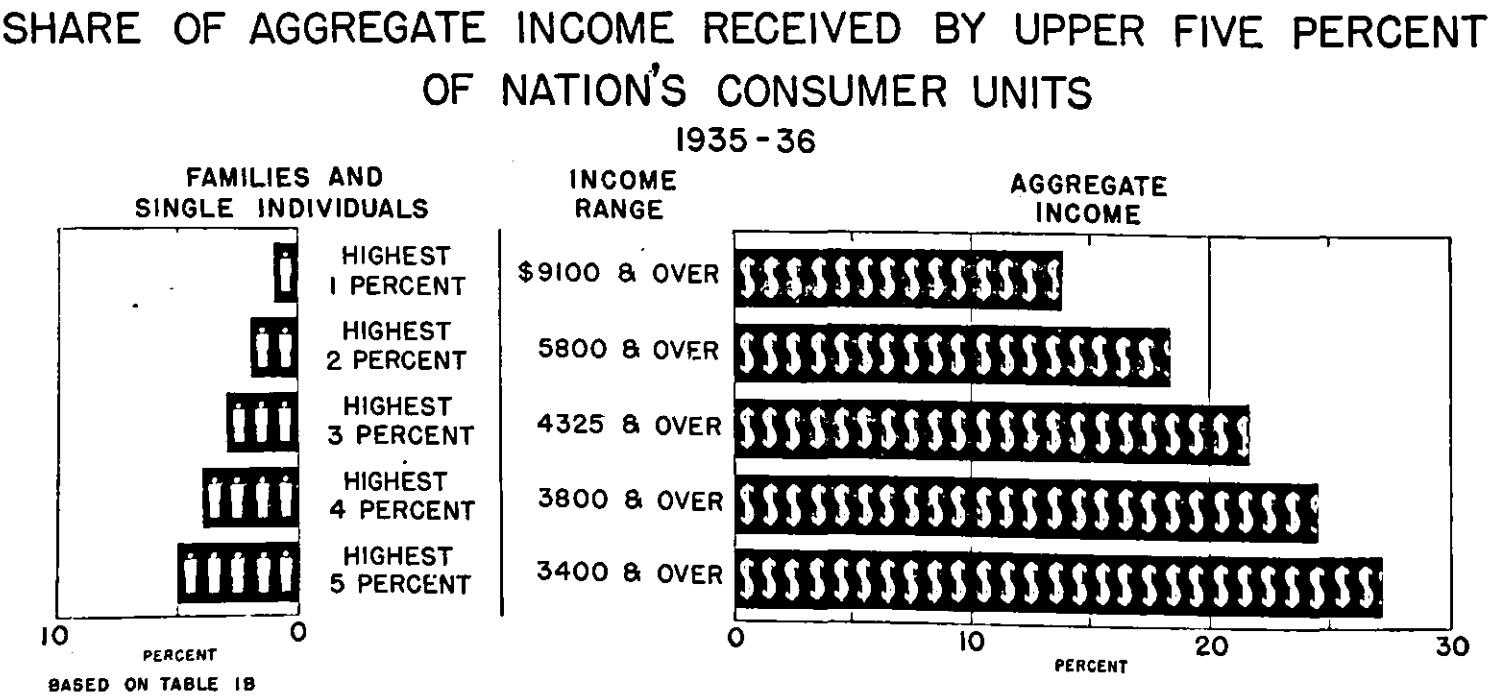


CHART 4

This chart may be read either by length of bars or by symbols
Each figure symbol represents 1 percent of all families and single individuals or 394,583 consumer units
Each dollar symbol represents 1 percent of aggregate income of all families and single individuals or $592,586,280

received 14 percent of the total—only a trifle less than the lowest 40 percent.

Division of Aggregate Income by Tenths.—The unequal distribution of the aggregate income among consumer units is strikingly illustrated by chart 5. Here, reversing the procedure used in chart 3, the total income of $59 billion received by families and single individuals is divided into tenths, and the percent of consumer units supported by each tenth is shown. Thus we can see that one-tenth of the aggregate income supports almost the whole lower third of the families and single individuals. The next tenth of the income is divided among only half as many consumer units. The top tenth goes to one-half of 1 percent of all consumer units—those with incomes of $14,600 and over. The number of families and single individuals supported by the intermediate tenths of the aggregate income decreases fairly regularly from the second to the highest decile.

Five percent of the aggregate income supports 21 percent of the consumer units at the bottom of the income scale, whereas at the top of the income scale 5 percent of the aggregate supports only 0.1 percent of the consumer units. Similarly, the lowest 1 percent of the aggregate income is shared by 7 percent of the consumer units, while the upper 1 percent is shared by less than 0.005 percent of all consumer units.

The Three Thirds of the Nation

This summary of the distribution of national income has revealed that almost one third of all families and single individuals in the country had incomes of less than $750 during the year 1935–36. This finding is provocative of many questions. Where did these people live? What were their occupations? How many of them were dependent on relief at some time during the year? How did they compare with the other two-thirds of the Nation?

Answers to these questions are provided by the next three charts. In chart 6 the 39 million consumer units are divided into three equal groups, according to the size of their incomes. Within each third, the 13 million families and single individuals are divided into those who received no relief during the year and those who

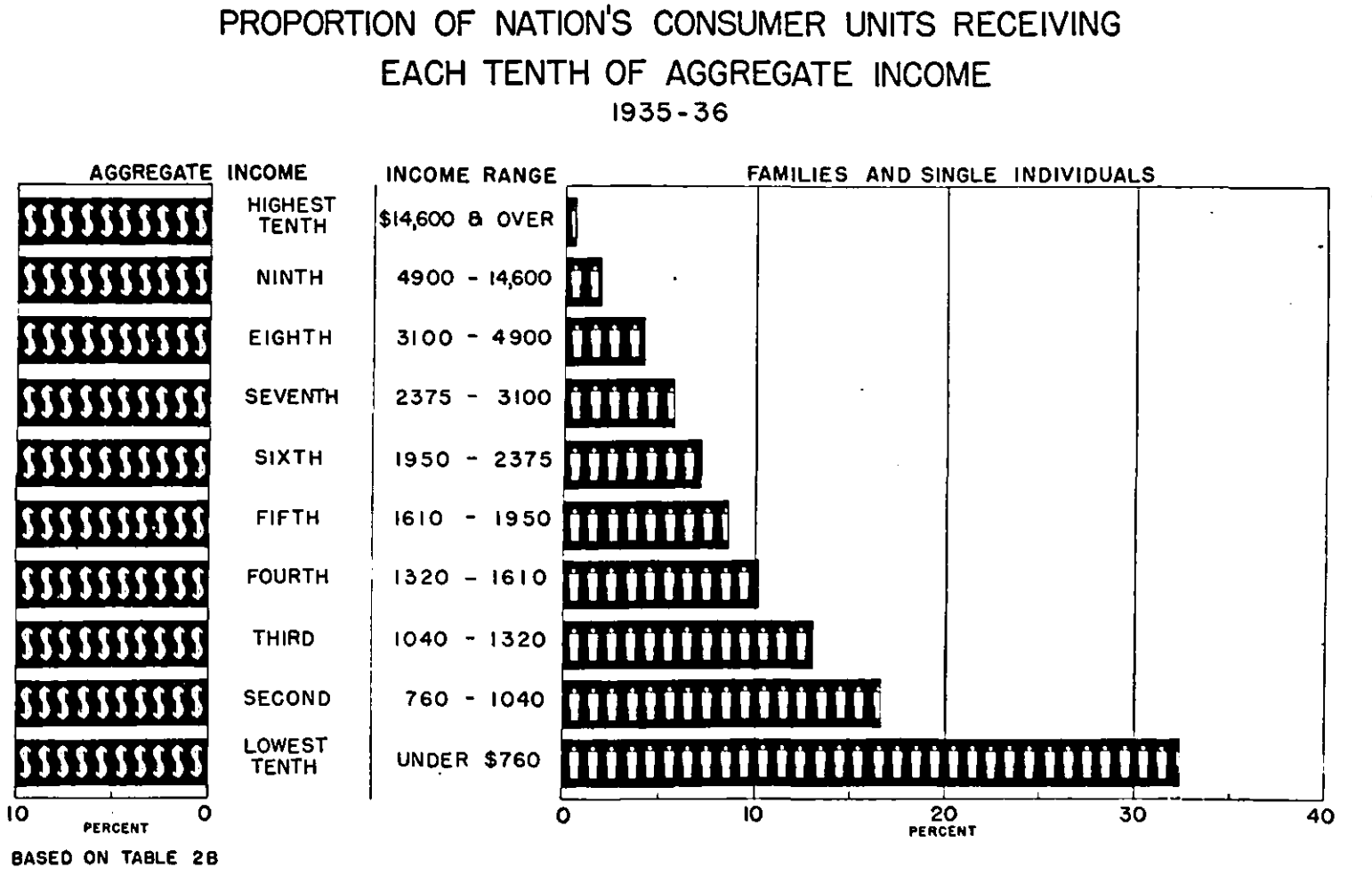


CHART 5

This chart may be read either by length of bars or by symbols
Each dollar symbol represents 1 percent of aggregate income of all families and single individuals or $592,586,280
Each figure symbol represents 1 percent of all families and single individuals or 394,583 consumer units

did receive some form of work relief or direct relief from either a public or a private agency. The nonrelief families, in turn, are further divided according to size of family, and the single individuals according to sex. In chart 7 the nonrelief families are reclassified according to the type of community in which they lived, and in chart 8 according to the occupational group to which they belonged.[7]

In considering the group classified as receiving relief, it should be noted that many of these families and single individuals were dependent on relief for part of the year only—some for a very short time. Earnings from regular employment and income from other sources thus supplemented the income received as work relief earnings or as direct relief, and in many cases this nonrelief income accounted for most of the income received during the year. It should also be noted that in the occupational classification the families are grouped according to the occupation from which the largest amount of all family earnings was derived, rather than according to the occupation of the principal earner. The basis for the classifications used in the three charts and the variations in incomes among the different groups are considered more fully in later sections of the report.[8]

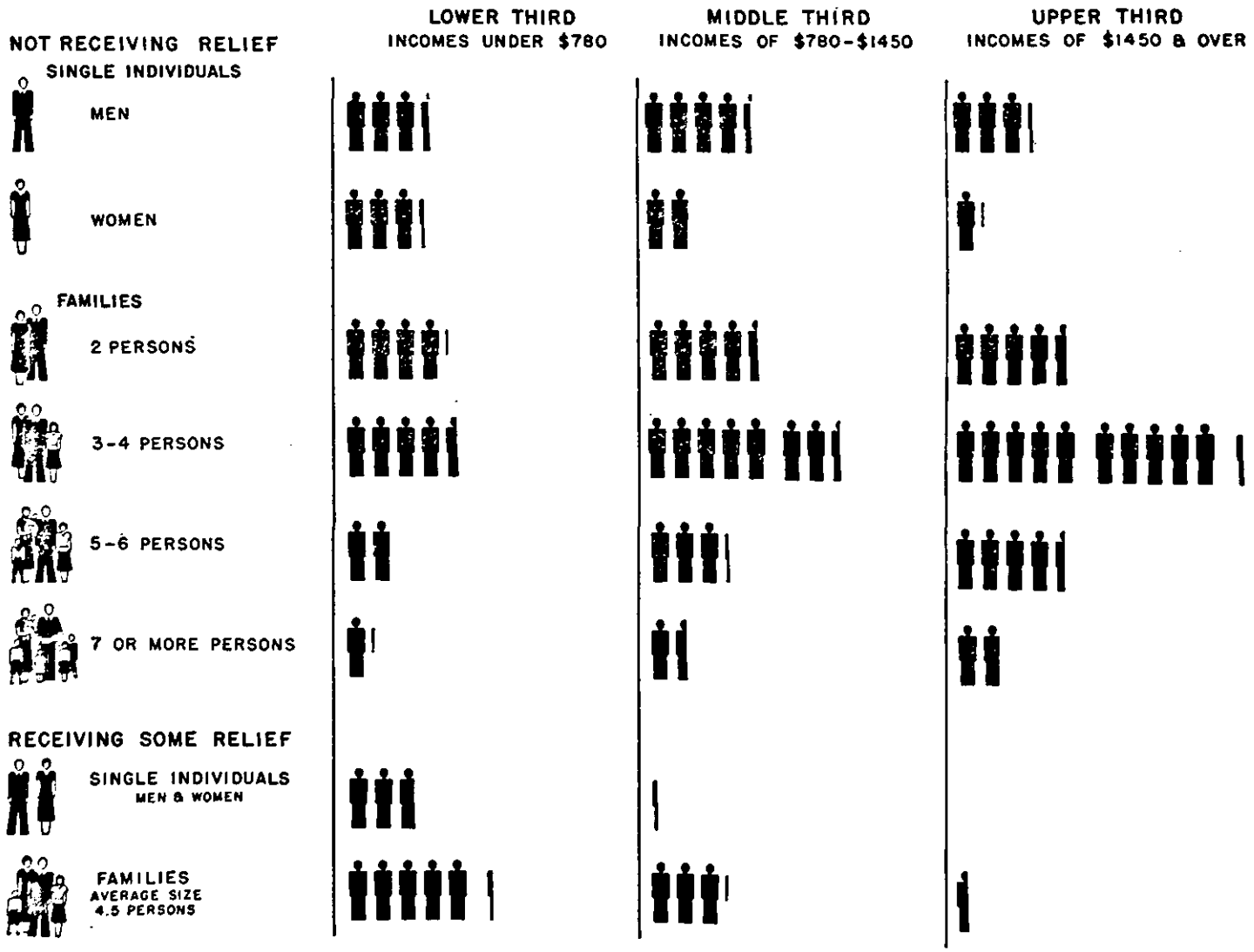
The Lower Third

When all consumer units are grouped into exact thirds, we find that the lower third received incomes of

[7] Classification of single individuals and of relief families by type of community and by occupation was not possible with the available data. See p. 16 and Appendix A, pp. 66 and 67.

[8] For definitions of relief groups and other classifications, see Appendix A, sec. 1.

FAMILIES AND SINGLE INDIVIDUALS IN EACH THIRD OF NATION
1935-36



BASED ON TABLE 38

EACH FIGURE REPRESENTS 500,000 FAMILIES OR SINGLE INDIVIDUALS

CHART 6

less than $780 during 1935–36. As the three charts indicate, these 13 million families and single individuals are not a distinct and unusual group; they include all types of consumer units, living in all types of community, and belonging to all of the major occupational classifications. They differ from the other two thirds of the Nation principally in the larger proportion receiving relief at some time during the year, in the larger number living on farms, and in the small number found in professional, business, and clerical occupations.

Although almost 4 million families and single individuals in this lower third were dependent on relief for at least part of the year, fully 70 percent of the total number—that is, a little over 9 million—received no assistance of any kind from a relief agency. About 1,700,000 of this nonrelief group were independent single men living alone or as lodgers; almost the same number—1,600,000—were single women; and 5,900,000 were families of 2 or more persons.

Somewhat more than half of these nonrelief families lived on farms or in rural communities of less than 2,500 population, and about one-sixth—just 1 million—lived in cities of 100,000 population or more. According to occupation, these families were almost equally divided between wage earners and farmers, with only one-fifth—1,200,000 in all—in other occupational groups.

As chart 5 has already roughly shown, the share of the aggregate income received by this lower third of the Nation was just over 10 percent of the total $59 billion. The average income of the group—that is, the mean income of the 13 million consumer units—was $471.

The Middle Third

The middle third of the Nation included the 13 million families and single individuals receiving from $780 to $1,450 during the year. Only 13 percent of these consumer units, or about 1,700,000, were dependent on relief at some time during the year. In the nonrelief group there were more single men and fewer single women than in the lower third, twice as many families living in large cities and metropolises, and more than twice as many families in the clerical, business, and professional groups.

The total income received by all consumer units in this "middle class" amounted to 24 percent of the aggregate income. The average (mean) income per consumer unit was $1,076.

The Upper Third

The upper 13 million consumer units covered a wide range of incomes, extending from $1,450 to over a mil-

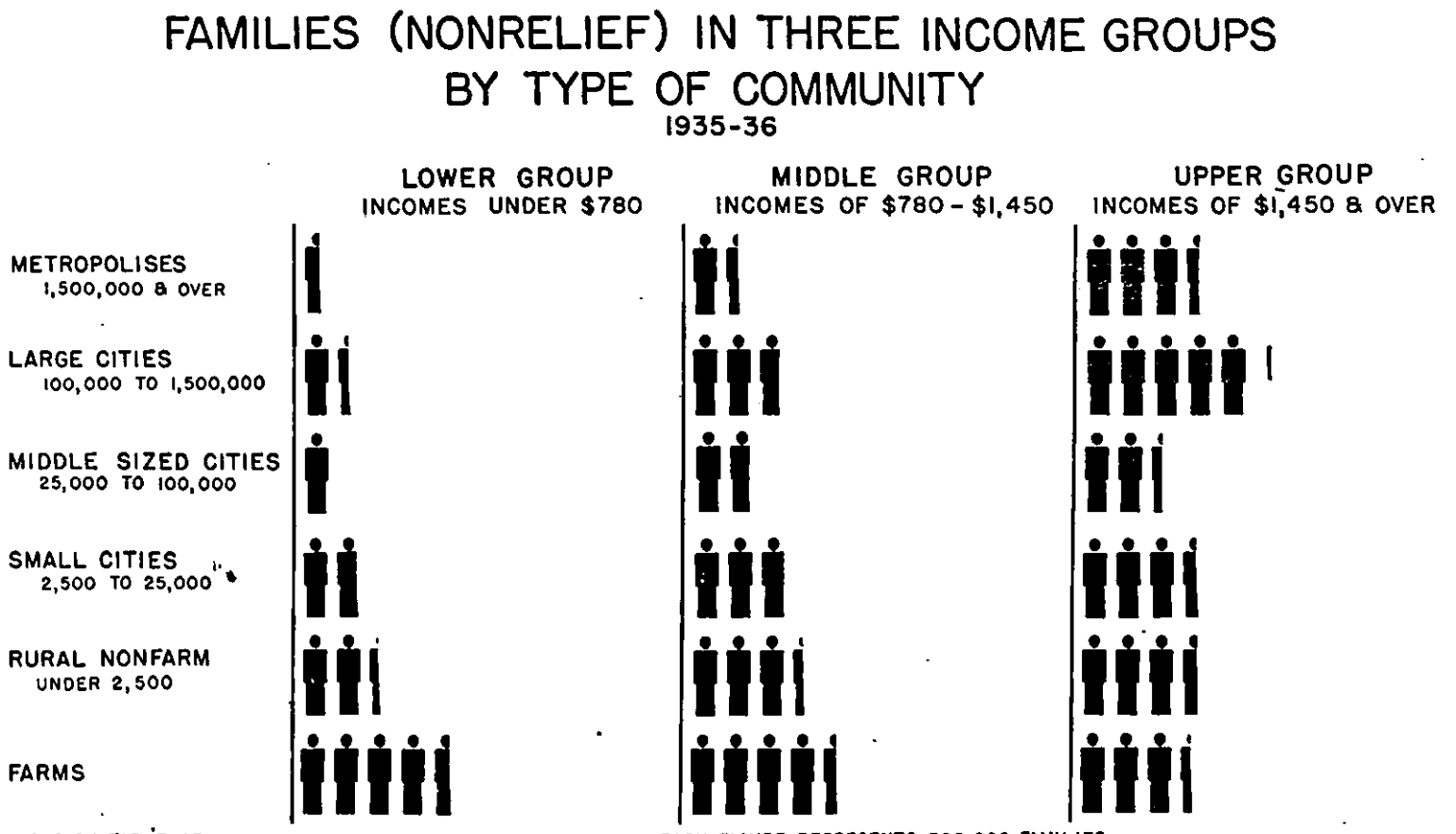


CHART 7

72736°—38——2

lion dollars. The great majority of this upper third—over 80 percent—were nonrelief families. Only a small number of families that received work relief or direct relief at some time during the year had incomes that brought them over the $1,450 line, when earnings from regular employment and income from all other sources were added together. No single individuals who received any relief had incomes sufficient to bring them into this group. The number of nonrelief single individuals was smaller than in the middle and lower thirds. This was particularly true of single women; only one-sixth of the total number of nonrelief single women were in the upper third, while more than half were in the lower third.

When we compare the nonrelief families in the three income groups according to size of family, we find that families of three to six persons show the largest proportion in the upper third. As chart 6 indicates, two-person families are about equally divided among the three thirds, while the three- to four-person families and those of five to six persons are twice as numerous in the upper as in the lower group. This difference is probably due to the fact that the larger families are likely to have more earners than the two-person families, and the age of the principal earner, and consequently his income, is apt to be greater.

With the families of seven or more persons, however, this tendency does not appear as strongly. Since half of these large families lived on farms, their incomes less frequently placed them in the upper third.[9] Furthermore, many of the large families with incomes of less than $780 had to depend on relief at some time during the year, and they therefore appear in the chart with the 2½ million relief families found in the lower third. If it had been possible to divide the relief group according to size of family, the total number of large families in the lower income group would have been more clearly evident.

The contrast between the incomes of farm and city dwellers is strikingly shown in chart 7. Of the whole group of 7,500,000 nonrelief families living in large cities and metropolises, more than 4,000,000—that is, 58 percent—are found in the upper third. Only 27 percent of the 6,200,000 nonrelief farm families, however, had incomes as high as $1,450. In chart 8 the incomes of the various occupational groups are similarly contrasted. Almost 80 percent of the nonrelief families in the professional group are found in the upper third, and 63 percent of the business and the clerical groups, as compared with 35 percent of wage-earning families and 27 percent of farm families.

[9] For discussion of incomes of families of different sizes, see pp. 20 to 22.

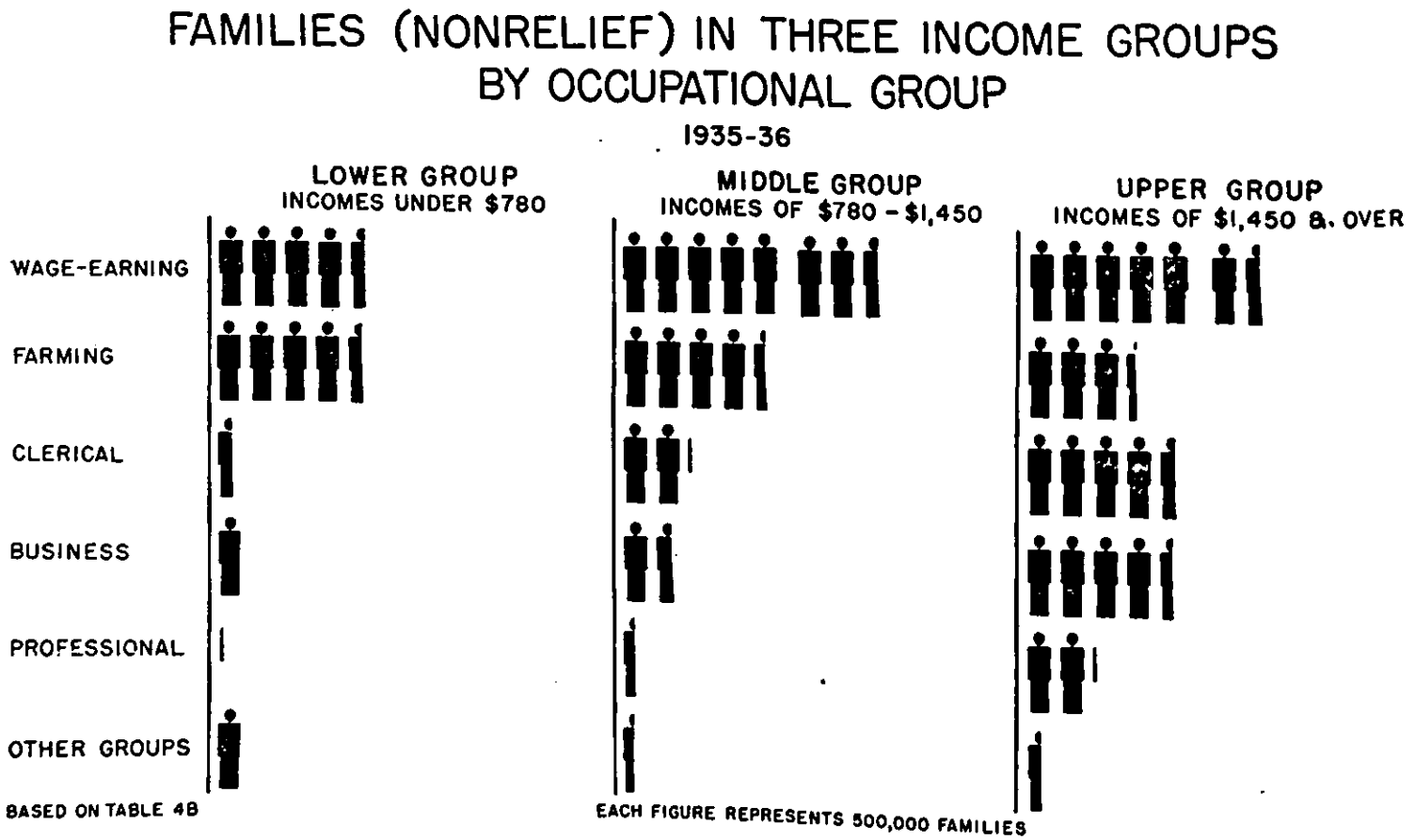


Chart 8

In interpreting those figures for nonrelief families, it should be borne in mind that if families receiving relief during the year had been included, the proportions found in the upper third would have been somewhat lower for each occupational group, and distinctly lower for the wage-earning group. More than half of the 4,500,000 relief families belonged in wage-earning occupations, and their inclusion in the picture would have markedly increased the number of wage-earning families in the lower third, without appreciably affecting the number in the upper third. It should also be kept in mind that many of these nonrelief wage-earning families had several earners, and that the total family income includes the earnings of all members, as well as income from other sources.

The total income received by all of the 13 million consumer units in this top third of the Nation was $39 billion—about 66 percent of the aggregate income of all families and single individuals. The average (mean) income of the group as a whole was thus just under $3,000. This average, however, covers such widely divergent incomes that it has little meaning. Most of the families in the nonrelief wage-earner group were concentrated toward the lower end of the income range, with the average for the group amounting to about $2,100. For the clerical group of nonrelief families the average was about $2,500, and for the farm group, about $2,600—still well under the average for the whole third. Families in business and professional groups, on the other hand, were scattered through the full range of the income scale, and the high incomes of those at the top brought the average of the first group to more than $4,400, and that for the second group to nearly $5,000.

Variations in Real Incomes

The discussion thus far has considered the incomes of consumers entirely in terms of dollars and cents. But it is obvious that these dollar figures do not give a true measure of the variations in real income among the American people. Differences in cost of living in different communities, in modes of living of different groups of the population, in the number of persons dependent on the income and in their individual needs, must also be taken into account. Unfortunately, it is not possible to adjust the dollar figures to allow for these various factors. But the need for such adjustment must continuously be kept in mind in interpreting the findings of the study.

This warning is, of course, particularly appropriate in comparing the incomes of the farm population with those of families living in cities. An income of $965—the median dollar income shown by the study for all nonrelief farm families [10]—obviously would provide a distinctly different standard of living in the hands of the average city family. Insofar as the farm income is used to buy goods and services in the retail market, it provides somewhat more than it would for the city family, since retail prices tend to be somewhat lower in smaller communities and also somewhat lower in the South, where one-half of the Nation's farm families live.[11] And insofar as it represents the estimated value of food, fuel and housing provided by the farm for the family's use, it also means more in terms of actual living standards.[12]

In addition, this dollar income is supplemented for the average farm family by a larger volume of unpaid services on the part of the housewife and other members of the family—services which appreciably reduce the amount of money that must be spent for food, clothing, and other items in the family budget. On the other hand, the number of persons to be supported by the family income is larger, on the average, for farm families than for the urban or rural nonfarm population.[13] On the whole, it seems probable that the advantages in living costs accruing to farm families are not sufficient to offset the full amount of difference found between their incomes and those of other groups. Beyond these differences in money incomes and costs of living there are, of course, many differences in the satisfactions derived from rural and urban modes of living which cannot possibly be evaluated in monetary terms.

In comparing the incomes of other groups of the population, differences in real income similar in kind to those between farm and nonfarm families, although less important in degree, must be borne in mind. Thus the demands upon the incomes of wage-earning families tend, on the average, to be somewhat higher than those of white-collar groups, owing to the fact that the average size of family is somewhat greater, and also because the heavier physical labor involved in wage-earning occupations increases the amount which must be spent for food.[14] The larger average income shown for the clerical group, on the other hand, is partially offset by the higher proportion of clerical families living in cities of 100,000 population and over,[15] where average living costs are relatively high.

The distinction between dollar incomes and real incomes is particularly significant when we compare the incomes of single individuals and of families of different

[10] See table 7.

[11] For comparative figures on cost of living by size of city and by region, see National Industrial Conference Board, The Cost of Living in 59 Communities, Conference Board Bulletin, vol. XI, No. 9, July 31, 1937. No comparative figures for cost of living in rural communities are available.

[12] For explanation of method used in evaluating these items of income, see Appendix A, p. 41.

[13] See table 7.

[14] Data from the Study of Consumer Purchases show, in general, a somewhat higher expenditure for food by wage-earning families than by families in other occupations in similar communities, when income and family composition are held constant.

[15] See table 33B.

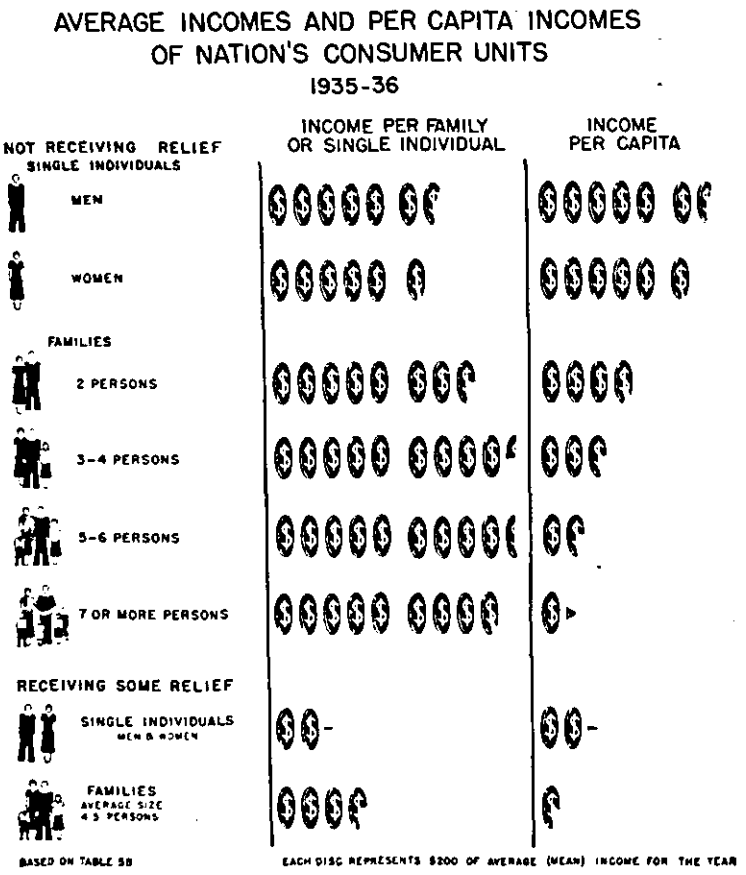


CHART 9

sizes. As chart 9 indicates, the average (mean) incomes of nonrelief families and individuals shown by this study increased only moderately with the increase in the number of persons supported by the income, varying from $1,188 for single women and $1,331 for single men to $1,905 for families of five to six persons. With the larger families of seven or more members, the average dropped back to $1,787 for reasons already mentioned.[16]

When these average family incomes are reduced to a per capita basis, the failure of the income to keep pace with the needs of the family is still more clearly revealed. As the symbols on the right of the chart show roughly, the per capita income amounted to $774 for two-person families, and decreased sharply for the two intermediate sizes to $221 for families of seven or more persons. For families that received relief at some time during the year, averaging 4.5 persons in size, the income available per family member was $165.

Now it is obvious that the costs of maintaining a given standard of living do not increase in direct proportion to the number of persons dependent on the income. While two cannot live as cheaply as one, or four as cheaply as two, yet the various economies in living expenses possible in the larger household reduce in considerable measure the amount of additional income required for each additional member. The contrast shown in chart 9 between the per capita incomes of single men and women and of two-person families may perhaps be largely interpreted in terms of these differences in cost of living—especially when allowance is made for the reduction in family living expenses due to the housewife's services.[16a] But for families of three or more members, it is evident that the average level of living fell as the size of family increased. Although a large proportion of these households included young children, whose costs of maintenance are lower than for the average adult, the sharpness of the drop in per capita incomes clearly suggests a drop in real income.

These examples of differences in apparent and real incomes serve to illustrate the need for caution in drawing hard and fast comparisons between the income figures for different consumer groups shown in this report. This caution is all the more needed because of the fact that most of the figures presented are for broad groups of the population; if reliable estimates were available for the finer cross-classifications, some of the differences in income would be accounted for more clearly.

In considering the findings of the study, many readers will doubtless wish to compare these estimates of 1935–36 incomes with various existing standards of income adequacy. In making such comparisons it is particularly important to bear in mind the wide variations in income needs among different groups of the Nation's consumers.

[16] See p. 10.

[16a] These unpaid services of the housewife constitute, of course, a very substantial contribution to the real income of the family, even though it was not considered feasible in this study to ascribe an imputed money value to them and include them as an item of family income.

PART II

INCOMES OF VARIOUS CONSUMER GROUPS

THE national distribution of income in 1935–36 discussed in Part I was built up from the distributions for a large number of component groups. In Part II the incomes of these component groups are analyzed, and variations among their income distributions are pointed out.

The three primary groups into which all consumer units were divided in the study were families, single individuals, and institutional residents. The family consists of two or more persons living together as one economic unit and dependent on a common or pooled income. The basis of the family estimates and the similarities and differences in the incomes of families are discussed in section 1. The incomes of single individuals—men and women living alone or as lodgers—are considered in section 2. Institutional residents—whose incomes are not included in the national distribution by income level—are discussed in section 3.

SECTION 1. INCOMES OF FAMILIES

The Basis of the Family Estimates

The general method followed in preparing the estimates of family incomes was to extend the findings for families in sample areas to cover all families in the United States. The steps in this process, in broad outline, were: (1) To secure data on incomes from a large sample of families; (2) To tabulate the sample data by homogeneous groups of families, and to calculate for each group the proportion of families at each income level; (3) To divide all families in the United States into homogeneous groups comparable to those into which the sample was divided; (4) To obtain an estimated income distribution for each homogeneous group of the family population by extending to it the income distribution of the comparable sample group; (5) To adjust the results by available income tax data; and (6) To build up an estimated national distribution, and distributions for major component groups, by combining the adjusted figures for the various groups.

The Sample Data

As pointed out in Part I, the estimates were based primarily on data on family incomes collected in the Study of Consumer Purchases.[1] The families interviewed in this study comprised a broad sample of American families with diverse social and economic characteristics living in various types of community in different sections of the United States. The information secured from these families was classified separately for each homogeneous group of families having similar characteristics as to size, occupation, relief status, and color and nativity, and living in the same type of community and geographical region.

The sample income data were obtained from approximately 300,000 families living in cities and villages and on farms in 30 different States. In all, 66 farm counties were included in the sample, 140 villages, and 51 cities, ranging in size from 9,000 population to metropolises of more than 1,000,000.[2] The geographic distribution of the sample units is shown by the accompanying map, chart 10. It will be observed that certain sections of the country, notably the four States in the Southwest, are not represented by any sample communities. The limitations of the sample in this respect will be discussed below.

The information on incomes was obtained in personal interviews with the families, through random house-to-house canvassing. Native-white families that contained both husband and wife were sampled most intensively. In all cities, however, and in some rural communities a smaller sample was taken of native-white broken families and of families belonging to other color-nativity groups. In all Southern communities and in two large cities in the North Central region, Negro families with husband and wife were sampled as intensively as were the native-white families.

The income schedule for each family covered the 12-month period immediately preceding the interview or, in some cases, a similar period ending 1 or 2 months before the date of the interview. All of the field work was carried out during 1936, with the heaviest volume of interviewing falling in the summer months. The total period covered by the income schedules, therefore, fell within the years 1935 and 1936, and the majority of the schedules were concentrated in the middle of the 2-year period. Thus the data are in the main representative of the 12 months from July 1935 through June 1936.

The information obtained from each family covered the amount of income received during the year from all sources, separate entries being made on the schedule for the income from each source. The information on money income covered the earnings of each member of the family from each kind of work engaged in during the year and, in addition, income from profits, interest, dividends, and rents, from pensions, annuities, and benefits, from gifts in cash insofar as these gifts were used for current family expenses, and from several minor sources Estimates were also made of the value of the occupancy of an owned home and of rent received as pay, and—for rural families—of home-grown food and other farm products used by the family.

[1] For a more detailed description of the data from this study, see Appendix A, sec. 2.

[2] For list of sample communities, see table 1A and Appendix A, pp. 46–47.

COMMUNITIES COVERED IN STUDY OF CONSUMER PURCHASES

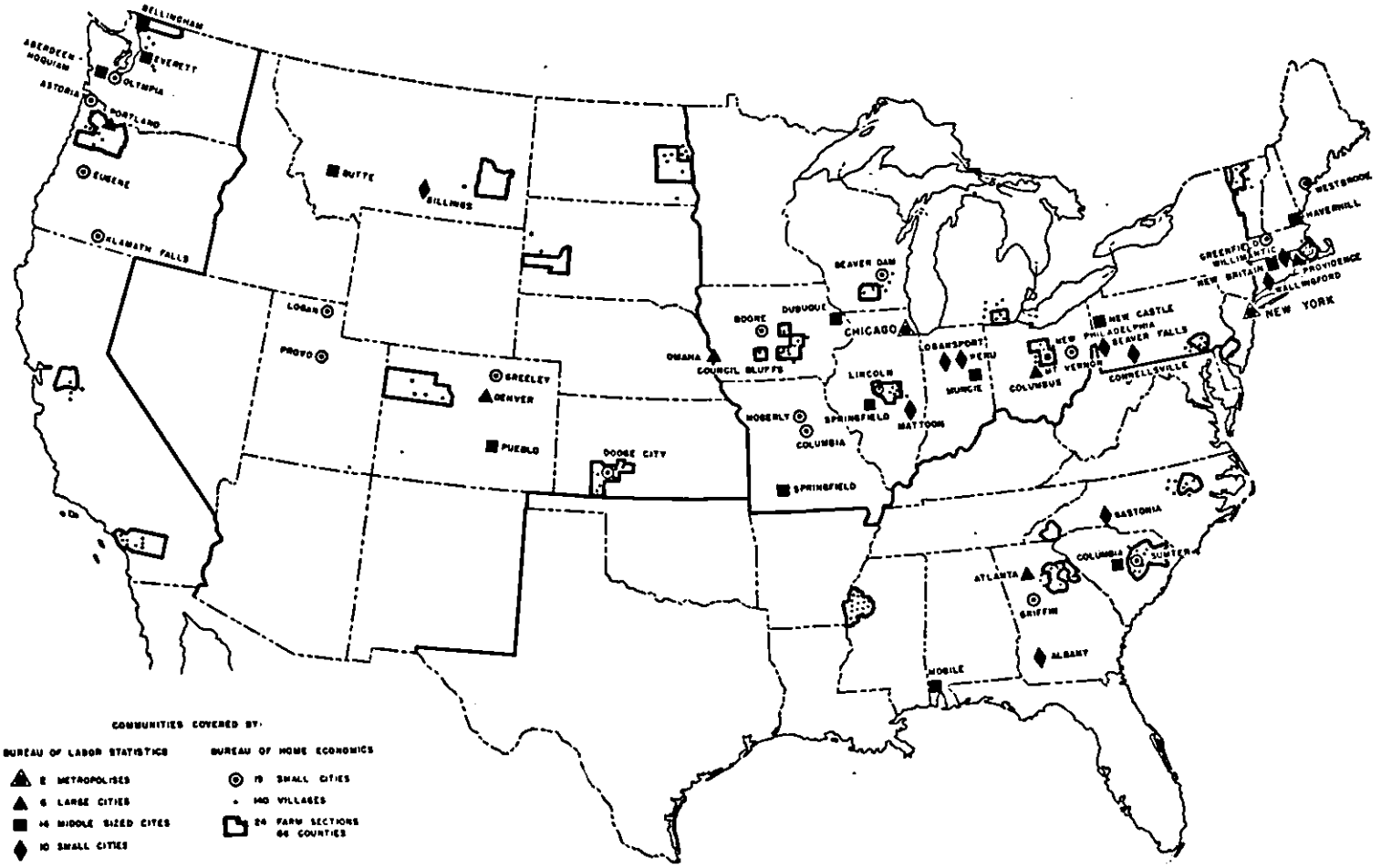


CHART 10

These various items of money and nonmoney income were added together to arrive at the total income of the family. However, the income schedules for those families that had received direct relief, either in cash or in kind, at some time during the year did not include the value of such direct relief, although the amount of work relief earnings and of income from all other sources was reported for these families.[3]

It should be noted that income was defined as net income after business operating expenses and expenses connected with income-yielding property were deducted. It should also be noted that taxes forming part of business expenses were deducted from income, but that income taxes, poll taxes, and taxes on goods and services consumed by the family were not deducted.

Constructing the Sample Distributions

On the basis of these data from the Study of Consumer Purchases there was constructed for each homogeneous group of families in the sample a percentage distribution showing the proportion of families at each income level. More than 1,200 such percentage distributions were calculated. In the majority of cases, there were several percentage distributions for each homogeneous group of families because two or more communities of a given type were sampled in the same region. These distributions were averaged together to result finally in 729 distributions, each of which represented the pattern of income for one homogeneous "qualitative" group.[4]

The large number of families included in the sample made it possible to build up the national income distributions for nonrelief families directly from the unsmoothed income distributions derived from the basic data reported on the family schedules. These distributions were checked against data for comparable groups of families from the National Health Survey but no adjustments to smooth or alter the distributions seemed desirable.[5] The only correction that seemed necessary was for the high income levels, where Federal income tax data were used to supplement the sample material.

[3] For further definitions of income and of relief families, see Appendix A, pp. 41 and 42.

[4] For further description of the sample distributions, see Appendix A, secs. 3 and 4.

[5] For discussion of comparison with data from the National Health Survey, see Appendix A, pp. 58–59.

For families that had received relief at some time during the year a special adjustment in the distributions was needed before applying the final population weights. Since the family schedules in the Study of Consumer Purchases did not include the amount of direct relief received, either in cash or in kind, it was necessary to add the estimated value of such relief to the income distributions of relief families. Data from the Works Progress Administration, the Social Security Board, the Farm Security Administration, and the Federal Surplus Commodities Corporation were used for this purpose. No adjustment was needed with respect to work relief, as such earnings had been reported on the schedules of the study, with earnings from private employment and income from other sources. The estimated value of direct relief added to the distributions amounted to less than 23 percent of the total aggregate income of relief families from all sources.[6]

In preparing the distributions for relief families, it was not possible to show separate estimates for different occupations and for different sizes of family, as the income data from the Consumer Purchases Study had not been tabulated according to these factors at the time this report was prepared. Furthermore, even if these tabulations had been available, it would have been difficult, if not impossible, to find a satisfactory basis for determining the amount of direct relief to be added to the income distributions of each group. For similar reasons, it was not possible to prepare satisfactory distributions for relief families living in different types of community. As a result, the income distributions for the various component groups of families shown in the following pages are for nonrelief families only. Such families constituted 85 per cent of all families in the Nation in 1935–36.

Extension of Sample Distributions to Family Population

In extending the sample distributions to a national basis, it was necessary to divide the total number of families in the United States into relatively small homogeneous groups corresponding as closely as possible with the groups for which the sample income distributions were available. All families living in the same type of community and region, that belonged to the same color-nativity group, had the same relief status, and the same family-size or occupational classification, were assigned to the same group. The total number of families in each group was then distributed among the several income levels by using the percentage distribution which was found from the sample data to prevail for families of that description.

For example, the sample income distributions for nonrelief native-white husband-wife families of three to four persons living in Haverhill, Mass., and New Britain, Conn., were used to distribute by income level the total number of nonrelief native-white husband-wife families of three to four persons living in all middle-sized cities in New England.

In order to divide the family population in this way it was necessary to estimate the total population in 1935–36, first for the United States, and then for each type of community within each region and for the several color-nativity groups in all of these areas. The basic data used were from the 1930 Census, with estimates for the population as of January 1, 1936, based on recent studies of trends in population growth and composition.

Families that had received relief at some time during the year were treated separately from nonrelief families. The proportions of relief and nonrelief families for each color and nativity group in each locality were determined on the basis of data from the Study of Consumer Purchases and from the National Health Survey recently conducted by the United States Public Health Service in 84 cities and 23 rural areas.

As indicated above, relief families were not classified by occupational group or by family size. Nonrelief families, however, were divided among the various occupational groups and the four sizes of family on the basis of the sample data, with a check at various points with available census material. Percentage distributions of families by income level were calculated from the sample for each size of family without any break-down by occupation, and again for each occupation without any break-down for family size. Hence it was not necessary to estimate the total number of families in the population of each size within each occupational group.

The 29,400,300 families in the United States were divided in these various ways to form 729 homogeneous groups, comparable to those for which sample distributions were calculated.[7] The families in each group were then distributed to the different income levels by applying the appropriate percentage distribution from the sample data. The next step was to combine the distributions for related groups by adding the families at each income level, in order to obtain the patterns of income for broad groups of families. For example, the income distribution of farm families was built up by adding together the distributions for 65 component groups of farm families. The national summary for families represents the sum of the component distributions.

Adjustment by Income Tax Data

Although random sampling methods were used in the communities covered by the Study of Consumer Purchases it was found that families in the higher income

[6] For discussion of direct relief adjustment, see Appendix A, pp. 62-66.

[7] See tables 1A and 3A.

brackets were somewhat underrepresented. For this reason it was necessary to correct the income distributions by using Federal income tax data. The number of income tax returns and the reported aggregate net income for the year 1935, classified by income level and by type of return, together with data on sources of income and deductions, also classified by income level, were made available for this purpose by the United States Bureau of Internal Revenue. Preliminary figures on the number of returns and the aggregate income for 1936 were also utilized.

The income tax data for incomes above $5,000 were adjusted to make them correspond as closely as possible with the definition of income used in the Study of Consumer Purchases Capital gains were subtracted from the reported net income and certain items—e. g., interest paid, taxes and contributions—which had been deducted for income tax purposes were added. Similarly, interest received from tax-exempt securities was added at each income level. This correction for the addition of deductions and tax-exempt interest to the net income, as well as most of the subsequent corrections described below, necessitated the shifting of a certain number of returns and of aggregate income from one income interval to the next higher income interval.

The next type of adjustment was to combine various types of returns to represent family units rather than individual income recipients. Thus, the separate returns of husbands and wives were combined, on the basis of certain assumptions as to the relative size of their incomes, to yield a new distribution according to the combined income of the family unit. This distribution was then added to the joint returns of husbands and wives and the separate returns of other heads of families. This resulted in a single distribution showing the number of families and the aggregate income at each income level above $5,000.

The distribution was next adjusted to take into account the difference between the size of the national income for the calendar year 1935 and for the year ending June 30, 1936. This adjustment was made on the basis of relationships shown by the Department of Commerce figures on national income paid out in 1935, 1935–36, and 1936, and those shown by the 1935 Federal income tax data and preliminary data on the number of returns and aggregate income for 1936.

Adjustments were then made for the understatement and for the nonreporting of income. The adjustment for nonreporting was made to allow for the failure of some persons to file returns, although they were subject to the income tax, and to care for persons whose salaries are not subject to Federal taxation—e. g., officials of State and municipal Governments. The correction for understatement was made because certain items of income, such as profits, rents, royalties, and fees, tend to be understated on the income tax returns. To make these adjustments it was necessary to assume a percentage of nonreporting and a percentage of understatement which varied at the different income levels. In the case of nonreporting the percentages were estimated on the number of returns; for understatement they were made on the basis of the aggregate income at each income level.

Data from the Study of Consumer Purchases provided the basis for an estimate of the additional family income, at each income level, received by members of the family other than those already accounted for in the income tax returns. The same study was used to obtain an estimate of the nonmoney income of the family—e. g., the value of the occupancy of an owned home—at each income level.

The adjustments resulted, finally, in distributions showing the number of families and the aggregate income in each income interval above $7,500. The national income distribution derived from the Consumer Purchases data was corrected by adding at each income interval above $7,500 the additional number of families shown by the income tax data to have belonged in these income classes. The distribution below $7,500 was corrected to allow for the shifting of this number of families to the higher income brackets. The correction by income tax data raised the number of families with incomes of $7,500 or over from the 0.47 percent of the total number of families indicated by the sample to an estimated 1.61 percent.

The Federal income tax data supplied by the Bureau of Internal Revenue gave separate figures for each State similar to those for the total United States, though with no detail on sources of income, deductions, or type of return. By combining the State figures and adjusting them on the basis of the changes made in the national distribution, corrected distributions were obtained for each geographic region, showing the number of families and the aggregate income at each income level above $7,500.

Because the income tax figures were not classified by type of community, occupation, family size and color and nativity, the methods used in correcting the income distributions for these component groups of families were necessarily more arbitrary. A description of these methods, together with a detailed account of the various adjustments made in the income tax data, is presented in Appendix A, section 7.

Aggregate and Average Incomes

The estimates of aggregate income presented in this report were built up in essentially the same way as the income distributions. The Study of Consumer Purchases provided information on the average (arithmetic mean) income at each income level for many of the

sample distributions. The average was in each case multiplied by the number of families at that income level. Where information on averages was not available from the sample data it was necessary to compute the average income at each income level by correcting the midpoint figure on the basis of the numbers of families in adjacent income classes. For income classes above $7,500 the aggregate income was obtained from the adjusted income tax data.

The aggregate incomes at the different income levels were added together, and the resulting totals were then summed for various related groups of families to obtain the estimates of aggregate income presented in the report. The national aggregate income is the sum of the aggregates for component groups.

The average (arithmetic mean) income for each group of families was then obtained by dividing the aggregate income by the number of families in the group. This average is, of course, much affected by the very high incomes received by a small number of families. For some purposes, therefore, the median income—representing the income of the middle family in the distribution—is a more significant measure. Half of the families receive more than the median income, half receive less. Both the mean and the median incomes are shown for each group of families for which an income distribution is given.

Reliability of the Estimates

Although the variety and number of sample distributions used in distributing the families to income levels take into account a great many of the factors which make for differences in income distributions, nevertheless there are distinct limitations in the results obtained. The incomes of families may differ by reason of a number of factors which could not possibly be measured in a Nation-wide statistical study. Moreover, in some important instances the sample itself was too small to be sure that the findings were representative of the total group of families to which they were applied. Attention has already been directed to the absence of sample income data for certain sections of the Southern Region. While the sample communities were more scattered in other regions, the lack of representation of some areas and the small number of communities covered inevitably introduce a certain amount of error into the estimates.[8]

On the other hand, the total number of families sampled was large, and the sample data were found to be internally consistent—that is, the variations in income pattern among different groups of families were similar in comparable communities. Where the number of families in any given sample was small, the resulting distributions were checked with those for other groups of families with similar characteristics before they were used. In only a few cases, and for relatively minor groups in the population, were the sample data so inadequate that it was necessary to borrow the percentage distribution for one group of families to use in distributing a closely-related group to the different income intervals.

The national distribution of families by income level is believed, therefore, to be a good approximation to the true situation in 1935–36. The measurement of variations in the income patterns among broad groups of families, in terms of the income distributions and average incomes, are also considered reliable. The sample distributions for certain of the component groups, however, are more tentative and have been placed in Appendix B. These tentative distributions include certain cross-classifications of the data—such as the distributions for each type of community within each region—which are useful in interpreting the findings for the broader groups of families. Various other cross-classifications used in building up the estimates were omitted from the appendix, as their value was not considered sufficient to justify their presentation.

Incomes of All Families

The salient findings concerning family incomes in 1935–36 were presented in Part I of the report. Chart

TABLE 3.—*Distribution of families and of aggregate income received, by income level, 1935–36*

Income level	Families			Aggregate income		
	Number	Percent at each level	Cumulative percent	Amount (in thousands)	Percent at each level	Cumulative percent
Under $250	1,162,880	3.95	3.95	$135,830	0.28	0.28
$250–$500	3,015,394	10.26	14.21	1,166,500	2.45	2.73
$500–$750	3,799,215	12.92	27.13	2,384,017	5.00	7.73
$750–$1,000	4,277,048	14.55	41.68	3,738,014	7.84	15.57
$1,000–$1,250	3,882,444	13.20	54.88	4,348,429	9.12	24.69
$1,250–$1,500	2,865,472	9.75	64.63	3,907,765	8.20	32.89
$1,500–$1,750	2,343,358	7.97	72.60	3,777,570	7.92	40.81
$1,750–$2,000	1,897,057	6.45	79.05	3,468,803	7.27	48.08
$2,000–$2,250	1,420,883	4.83	83.88	3,002,082	6.30	54.38
$2,250–$2,500	1,043,977	3.55	87.43	2,471,672	5.18	59.56
$2,500–$3,000	1,314,199	4.47	91.90	3,568,624	7.48	67.04
$3,000–$3,500	743,559	2.53	94.43	2,385,903	5.00	72.04
$3,500–$4,000	438,428	1.49	95.92	1,625,887	3.41	75.45
$4,000–$4,500	249,948	.85	96.77	1,048,398	2.20	77.65
$4,500–$5,000	152,647	.52	97.29	719,447	1.51	79.16
$5,000–$7,500	322,950	1.10	98.39	1,900,091	3.90	83.15
$7,500–$10,000	187,060	.64	99.03	1,605,632	3.37	86.52
$10,000–$15,000	131,821	.45	99.48	1,496,000	3.14	89.66
$15,000–$20,000	58,487	.20	99.68	1,013,964	2.13	91.79
$20,000–$25,000	34,208	.12	99.80	702,240	1.00	93.39
$25,000–$30,000	22,233	.08	99.88	627,567	1.32	94.71
$30,000–$40,000	15,561	.05	99.93	560,300	1.18	95.89
$40,000–$50,000	6,603	.02	99.95	314,689	.66	96.55
$50,000–$100,000	10,571	.04	99.99	755,017	1.58	98.13
$100,000–$250,000	3,336	.01	100.00	440,554	.92	99.05
$250,000–$500,000	699	(1)	.....	200,174	.42	99.47
$500,000–$1,000,000	197	(1)	.....	110,954	.23	99.70
$1,000,000 and over	75	(1)	.....	142,650	.30	100.00
All levels	29,400,300	100.00	.....	$47,679,238	100.00	.....

[1] Less than 0.005 percent.

[8] The number of cases in the sample for different regions and types of community and for different color-nativity groups is shown in tables 10A and 11A in relation to the number of families in the population. For discussion of limitations of these sample for Southern farms and villages, see Appendix A, pp. 54 and 57.

1 reproduced, in abbreviated form, the estimated distribution of all families by income level which appears in table 3 above. This distribution is the composite national picture built up from the separate income distributions for families of different size and composition, living in different parts of the country and belonging to distinct color and occupational groups.

Variations in the income patterns of these component groups are merged in the national picture, which treats all 29,400,300 families as though they were similar consumer units, differing from each other only in the amount of income received. Together these families comprised 91 percent of the population in 1935–36. They received approximately four-fifths of the aggregate consumer income, representing a combined purchasing power of almost $48 billion.

If this purchasing power had been divided equally among the family units, it would have meant an income of $1,622 for each family. Actually, more than 4,000,000 families received incomes of less than $500; a very few received incomes of more than $1,000,000. The bulk of the families were concentrated in income classes just above and below $1,000. The median family income was $1,160—that is, half the families received less than that amount, half more.

The disparity in family incomes is further revealed by comparing the proportion of families with the proportion of aggregate income at a given income level. Because the unequal numbers of families in the different income classes render precise comparison difficult, chart 11 has been prepared to show the shares of aggregate income going to each tenth of the families from the lowest to the highest income levels. The situation is essentially the same as appeared in chart 3 for all consumer units, including single individuals. The lowest 40 percent of the families had incomes below $970 and received 15 percent of the total income; the next 40 percent had incomes between $970 and $2,050 and received 35 percent of the total. The upper 20 percent, with incomes above $2,050, received 51 percent of the aggregate family income.

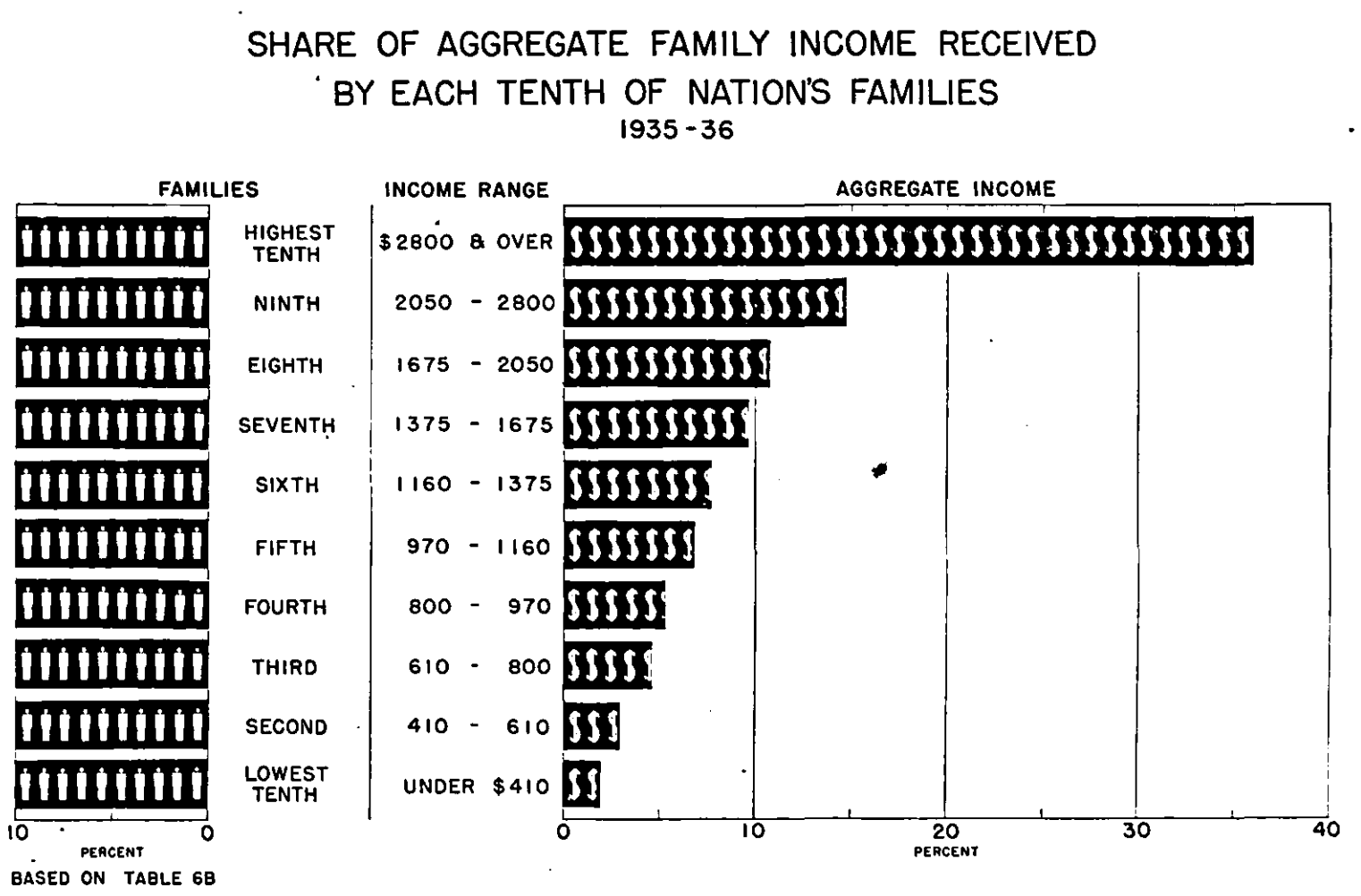


CHART 11

This chart may be read either by length of bars or by symbols
Each figure symbol represents 1 percent of all families or 294,000 families
Each dollar symbol represents 1 percent of aggregate income of all families or $476,792,380

In chart 12, the aggregate family income has been divided into tenths with the bars on the right indicating the number of families receiving each tenth. This comparison parallels that given in chart 5 for all consumer units. The proportions of families supported by each tenth are almost identical with the proportions shown in chart 5, although the income ranges for the various groups are somewhat higher. Thus the lowest tenth of the aggregate family income is divided among the 32 percent of the families with incomes under $820, whereas the lowest tenth of the total aggregate was divided among the 32 percent of families and single individuals with incomes under $760.

The national distribution tells in summary fashion what family incomes were in 1935–36, but it inevitably conceals the incomes received by specific groups of families. Estimates of the incomes of the major component groups of families are presented in succeeding sections of the report. They permit comparison of family incomes by size of family, by region, by type of community, by occupation, and by color and nativity.

Incomes of Families of Different Sizes

As the preceding discussion has pointed out, family size is related to family income in two opposing ways. On the one hand, the number of earners and the age of the principal earner—and consequently the total family earnings—are apt to increase with family size. On the other hand, family needs also tend to increase with family size, so that a larger income is necessary to maintain the same standard of living. Hence if the relative adequacy of family incomes is to be revealed, it is important to discover the proportions of families of each size at the various income levels.

Comparisons of the incomes of families of different sizes are necessarily confined in this report to the non-relief group, since the sample data for the relief group did not permit tabulation in this manner. As table 4 indicates, approximately 15 percent of the total number of families received some form of work relief or direct relief at some time during the year. The share of the aggregate family income received by these relief families, however, amounted to only 7 percent and the mean in-

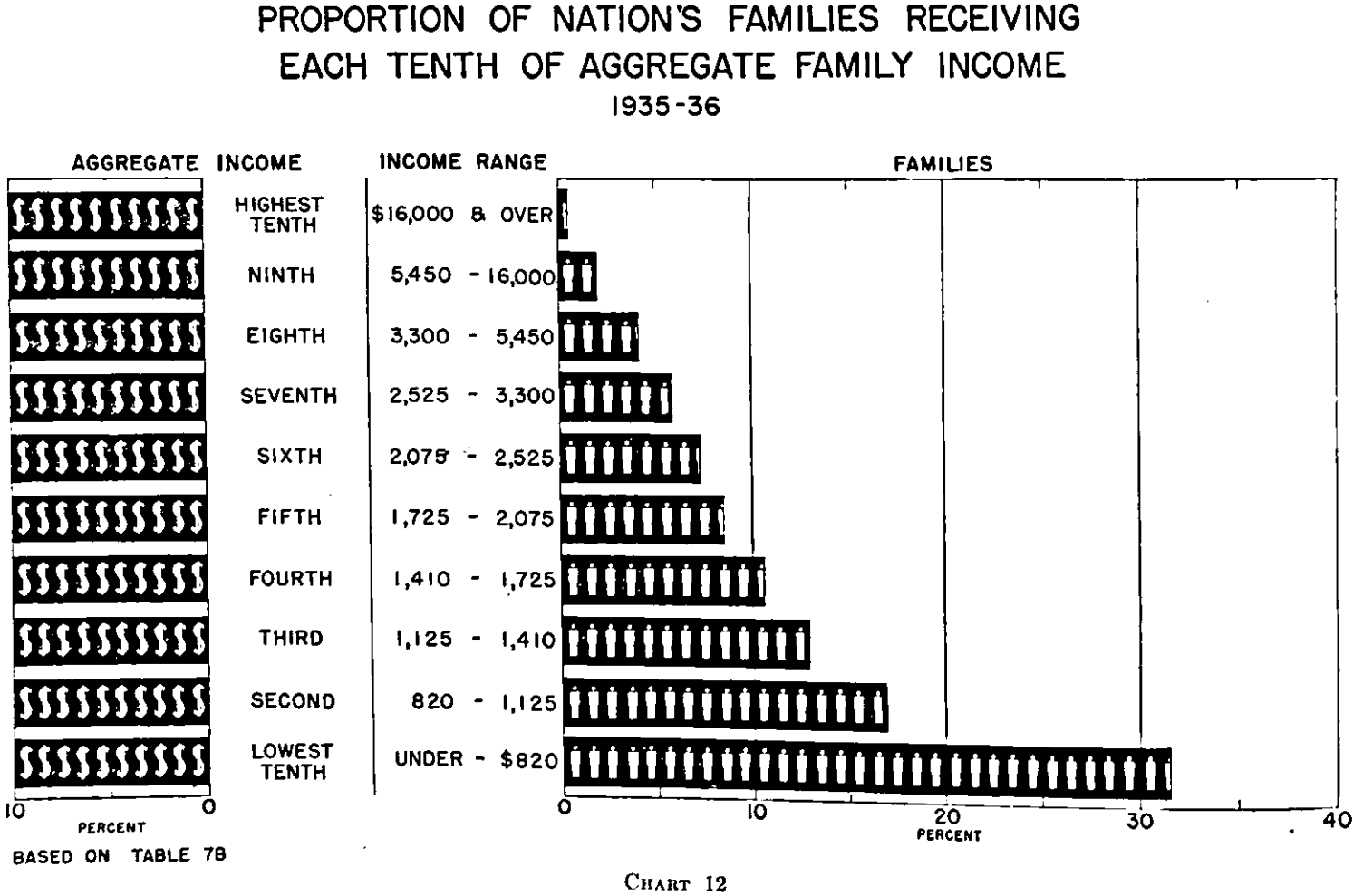


CHART 12

This chart may be read either by length of bars or by symbols
Each dollar symbol represents 1 percent of aggregate income of all families or $476,792,380
Each figure symbol represents 1 percent of all families or 294,000 families

TABLE 4.—*Average and aggregate incomes of nonrelief families of four sizes and of relief families,*[1] *1935–36*

Relief status and size of family	Families		Average number of persons per family	Average income			Aggregate income	
	Number	Percent		Per family		Per capita (mean)	Amount (in thousands)	Percent
				Median	Mean			
Families not receiving relief:								
2 persons	6,668,800	22.7	2.0	$1,130	$1,549	$774	$10,329,539	21.7
3–4 persons	11,170,400	38.0	3.4	1,360	1,864	542	20,823,778	43.6
5–6 persons	4,804,400	16.3	5.4	1,370	1,905	355	9,151,457	19.2
7 or more persons	2,269,600	7.7	8.1	1,235	1,787	221	4,055,126	8.5
All nonrelief families	24,913,200	84.7	3.8	$1,285	$1,781	$463	$44,359,900	93.0
Families receiving some relief[1]	4,487,100	15.3	4.5	685	740	165	3,319,338	7.0
All families	29,400,300	100.0	3.9	$1,160	$1,622	$411	$47,679,238	100.0

[1] Families are classified as receiving relief if they received any direct or work relief (however little) at any time during year. Many such families were dependent on relief for part of the year only, and then may have been only partially dependent. The incomes of the relief group therefore include earnings from regular employment and other nonrelief income as well as direct relief, in cash and kind, and work-relief earnings. For further explanation, see Appendix A, p. 41.

come per family to only $740. Their omission from the classification of families by size reduces appreciably the proportion of families found in the lower income levels.

The classification of the 24,900,000 nonrelief families into four size groups, shown in table 4, indicates that more than a fourth of the total number are two-person families, and more than two-fifths are three- and four-person families. The seven- or more-person families constitute the smallest of the four groups, including less than a tenth of all nonrelief families. The proportions of families in the different size groups are based on the sample data from the Study of Consumer Purchases. They differ from those shown by census classifications in two respects: First, because relief families are omitted from the break-down, and second, because the definition of the "economic" family used in the study differs somewhat from the census definition of a family.[9] Both of these differences tend to reduce slightly the proportion of families of larger size. As table 4 indicates, the average size of family for the relief group is 4.5 persons as compared with 3.8 persons for the nonrelief group, and 3.9 for all families.

The essential similarity of the income distributions for the four sizes of families is shown in chart 13, and in the more detailed figures presented in table 5. The chief difference appears in the relatively greater concentration of two-person families in the low income levels. This difference is to be expected, in view of the smaller number of earners in these families and the shorter average period of earning experience on the part of the head of the family. If the families in each size group were further classified according to the number of earners and the age of the principal earner, significant differences in income distribution would undoubtedly be revealed. Such classification, unfortunately, was not feasible in connection with the present study.

Comparison of the average incomes received by families in each of the four size groups has already been made in chart 9. The mean income of two-person families—$1,549—is the lowest of the four groups, but that for seven or more persons is next to the lowest. The latter average, in fact, is only slightly above $1,781, the mean income for all sizes of family combined. This result, as already in part explained, may be accounted for by the fact that fully half of the nonrelief families of seven or more persons are farm families, and more than half are families living in the South.[10] Since farm incomes are relatively low—and also incomes in the Southern States—the mean income for all families of seven or more persons is lowered.

[9] For explanation of this difference, see Appendix A, p. 40.

[10] See table 31B.

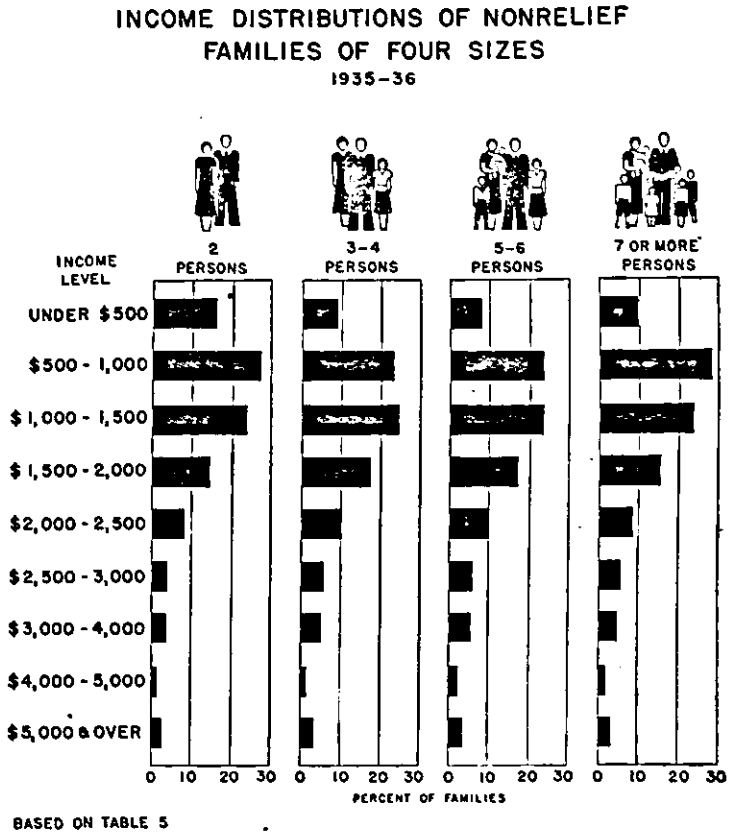


CHART 13

TABLE 5.—*Percentage distributions of nonrelief families [1] of four sizes, by income level, 1935–36*

Income level	All families	Families of—			
		2 persons	3–4 persons	5–6 persons	7 or more persons
Under $250	2.8	5.1	2.1	1.7	1.9
$250–$500	7.8	10.7	6.8	6.3	7.9
$500–$750	11.3	12.8	10.4	10.4	13.2
$750–$1,000	13.4	14.2	12.7	13.5	14.8
$1,000–$1,250	13.2	13.6	13.2	12.7	12.9
$1,250–$1,500	10.8	10.1	11.1	11.2	10.7
$1,500–$1,750	9.1	8.2	9.6	9.1	8.7
$1,750–$2,000	7.3	6.3	8.0	7.7	6.3
$2,000–$2,250	5.5	4.7	5.8	5.9	5.0
$2,250–$2,500	4.0	3.5	4.4	4.3	3.[illegible]
$2,500–$3,000	5.2	3.8	5.8	5.9	5.3
$3,000–$3,500	3.0	2.2	3.2	3.4	3.0
$3,500–$4,000	1.8	1.2	1.9	2.2	1.7
$4,000–$4,500	1.0	.7	1.0	1.4	1.1
$4,500–$5,000	.6	.5	.6	.7	.8
$5,000–$7,500	1.3	.9	1.4	1.6	1.4
$7,500–$10,000	.8	.6	.8	.8	.5
$10,000 and over	1.1	.9	1.2	1.2	1.3
All levels	100.0	100.0	100.0	100.0	100.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see Appendix A, p. 41.

For none of the four sizes of family does the mean income vary widely from the mean for all nonrelief families combined. The median incomes show even less variation, ranging from $1,130 for two-person families to $1,370 for five- and six-person families.

Regional Differences in Family Incomes

The different sections of the United States are so diverse in their agricultural and industrial characteristics that significant differences in income patterns are not surprising. Some of these differences, such as the prevailing disparity between incomes in the South and in other regions, have long been common knowledge. Recent Government policies directed toward the conservation of natural resources and the rehabilitation of depressed areas have also focused attention on the exceedingly low economic status of consumer groups in particular problem areas. But no large body of comparable data has been available for comparison of family incomes in different geographic regions.

TABLE 6.—*Average incomes of families in five geographic regions, based on sample data,[1] 1935–36*

Geographic region	Average income per family			
	Median		Mean	
	All families	Nonrelief families [2]	All families	Nonrelief families [2]
New England	$1,230	$1,365	$1,810	$2,011
North Central	1,260	1,410	1,786	1,973
South	905	985	1,326	1,431
Mountain and Plains	1,040	1,220	1,363	1,537
Pacific	1,335	1,485	1,775	1,937

[1] For location of communities included in sample, see chart 10. For discussion of limitations of the regional comparison, see pp. 18, 22–23, 56, and 57.
[2] The nonrelief group excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see Appendix A, p. 42.

The estimates presented in this report throw some light on these regional variations. But, as has already been emphasized, the sample communities in the various regions were too few in number and too poorly distributed to insure findings adequately representative of all of the population living in each region. The results shown in this section of the report are therefore limited to the average incomes of the families in each region. These figures appear in table 6. The distributions of the families by income level are included in the more tentative material shown in Appendix B.

In obtaining these averages the communities covered in the Study of Consumer Purchases were grouped according to the five geographic regions shown on the map in chart 10. These regions differ widely in area, and also in the number of families living within their boundaries. Each region was represented in the sample data by from 7 to 12 cities, from 14 to 46 villages, and from 2 to 22 farm counties.[11] The number of families covered by the sample in relation to the total number in the region was highest in the three regions with relatively small populations—the Pacific, the Mountain and Plains, and New England Regions, and lowest in the two heavily populated regions—the North Central and the South. In accordance with the usual procedure followed in the study in combining sample data, the figures for the various communities in each region were weighted according to the relative importance of each type of community, each size of family, and each color-nativity group in the total family population in the region. The distribution for each region was then corrected by income tax data.[12]

The relative economic status of the families in these five regional samples, as measured by the income received by the average family, is shown first in table 6 for relief and nonrelief families combined. According to this comparison, the families in the New England Region, with a mean income of $1,810, fared slightly better—in terms of dollar income—than the families in other regions. The families in the North Central and in the Pacific Regions came next in order, with mean incomes of $1,786 and $1,775, respectively. The averages for the Mountain and Plains Region and for the sample covered in the South were considerably lower, amounting to $1,363 and $1,326.

It must be remembered in interpreting these differences that the averages are affected by the concentration of very high incomes among families living in large cities, and that these families are relatively more numerous in the New England, North Central, and Pacific States. It must also be borne in mind that the averages for the South, and for the Mountain and Plains Region as well, are weighted by a relatively large proportion of farm families.[13] Furthermore, it should be recalled

[11] For list of sample communities, see table 1A and Appendix A, pp. 46–47.
[12] For comparison of number of families in the population and number in the sample in each region, see table 10A. For comparison of total income received by all consumers in each region (including single individuals and institutional residents) with regional income estimates prepared by the National Industrial Conference Board, see p. 36.
[13] For number of families living in each type of community within each region, see table 10A.

that costs of living differ from one part of the country to another, and also that the comparison is for a particular 12-month period in 1935 and 1936. Any abnormal conditions during that period, such as the drought and wheat rust in the Mountain and Plains area, are reflected in the estimates.

The median family incomes in the five regional samples also appear in table 6. They run considerably lower than the mean incomes and show a somewhat different order of ranking. The highest median income, of $1,335, was found in the Pacific Region, and the lowest, of $905, in the South. New England was in a middle position with a median family income of $1,230.

When all families that received relief at some time during the year are excluded from the estimates, the average incomes are, of course, appreciably higher. As table 6 indicates, the percent of increase, for both the median and the mean incomes, is approximately the same in all of the regions—in the neighborhood of 10 percent. The figures for the Mountain and Plains Region show a slightly higher proportionate increase, and those for the South a slightly smaller one. These differences correspond with the slight differences in the percentage of families receiving relief in the five regions. In the Mountain and Plains Region, 20 percent of all families are included in the relief group, and in the South, a little less than 14 percent. The proportions for the other regions fall between these two figures.[14]

Rural-Urban Differences in Family Incomes

The contrast between the incomes of rural families and of those living in cities of different size has already been indicated by the figures presented in chart 7. These differences are shown in fuller detail in the next group of charts and tables.

[14] For percentage of relief families in each region, see table 9A.

The estimates available for these rural-urban comparisons relate only to nonrelief families, and hence do not tell the complete story of how family incomes differ from one type of community to another. If the 4½ million families that received relief had been included in the estimates, the proportion of families in the lower income intervals would have been appreciably greater, and the average income per family appreciably lower. Except in the case of farm families, however, the relative position of the different types of community would have been little altered, for the proportion of families receiving relief at some time during the year showed little variation with size of community. The highest proportion was found in the rural nonfarm areas, where 19 percent of all families received some relief, and the lowest proportion (except for farms) in metropolises of 1,500,000 population and over, where about 15 percent received relief. The percentage for farm families was distinctly lower, averaging 9 percent for all of the farm counties sampled. Hence the inclusion of the relief group in the estimates would have had relatively less effect on the figures for farm incomes.[15]

The division of the 25 million nonrelief families among the six types of community considered in the study appears in table 7. More than 6 million, or one-fourth of the total number, were farm families, and about 4½ million were rural families living in communities of less than 2,500 population or in the open country but not on farms. Of the 14 million urban families, nearly 3 million lived in the four great metropolises in the North Central Region—New York, Chicago, Philadelphia, and Detroit. Over 4½ million lived in large cities of 100,000 to 1,500,000 population in various sections of the country, about 2½ million in middle-sized cities, and the remaining 4 million in small cities or towns of 2,500 to 25,000 population.

[15] For percentage of relief families in each type of community in each region, see table 9A. For sources of estimates, see Appendix A, p. 73–74.

TABLE 7.—*Average and aggregate incomes of nonrelief families [1] in six types of community, 1935–36*

Type of community	Families		Average number of persons per family	Average income per family		Aggregate income	
	Number	Percent		Median	Mean	Amount (in thousands)	Percent
Metropolises: [2] 1,500,000 population and over	2,806,900	11.3	3.5	$1,730	$2,704	$7,591,014	17.1
Large cities: 100,000 to 1,500,000 population	4,666,700	18.7	3.5	1,560	2,177	10,161,241	22.9
Middle sized cities: 25,000 to 100,000 population	2,607,600	10.4	3.7	1,360	1,813	4,728,161	10.7
Small cities: 2,500 to 25,000 population	4,079,700	16.4	3.7	1,290	1,653	6,744,813	15.2
All urban communities	14,160,900	56.8	3.6	$1,475	$2,064	$29,225,229	65.9
Rural nonfarm communities [3]	4,585,700	18.4	3.7	$1,210	$1,607	$7,371,101	16.6
Farms	6,166,600	24.8	4.5	965	1,259	7,763,570	17.5
All rural communities	10,752,300	43.2	4.2	$1,070	$1,408	$15,134,671	34.1
All communities	24,913,200	100.0	3.8	$1,285	$1,781	$44,359,900	100.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see Appendix A, p. 42.
[2] Metropolises of this size are in North Central Region only (New York, Chicago, Philadelphia, and Detroit).
[3] Includes families living in communities with population under 2,500, and families living in the open country but not on farms.

As table 7 shows, the families in large cities and in the metropolises received somewhat larger shares of the total family income in relation to their numbers in the population, and had the highest average incomes per family. Farm families received a smaller relative share of the aggregate, and had the lowest average income.

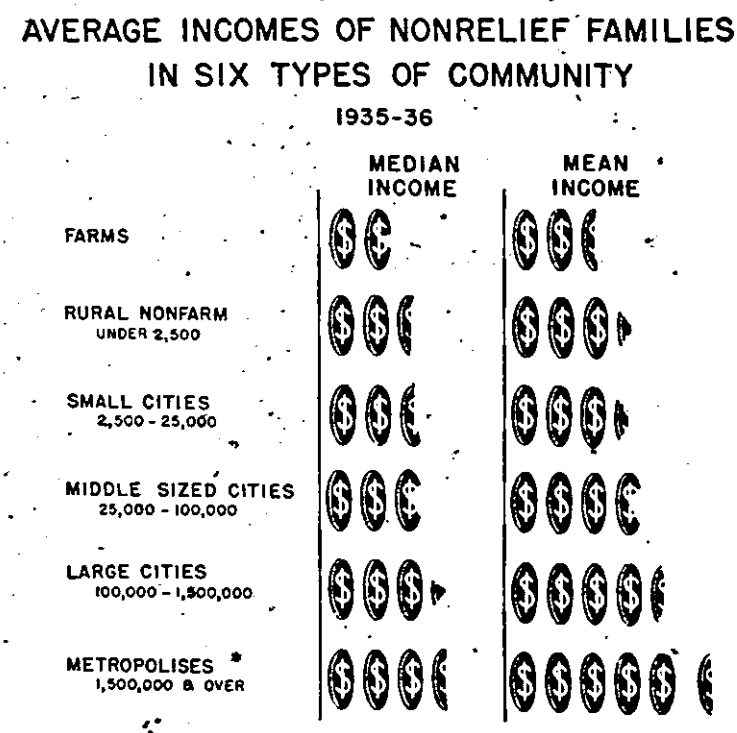


CHART 14

The mean and the median family incomes for the four sizes of cities and for the two types of rural community are compared graphically in chart 14. Both sets of averages show the progressive rise in income level with increasing urbanization. The median incomes, ranging from $965 for farms to $1,730 for metropolises, vary less widely than do the means, since they are less affected by the very high incomes of the families at the top of the income scale. For farm families the mean income was $1,259, but for families living in metropolises, where the range of incomes is widest, it reached the strikingly high figure of $2,704. The median income for all urban nonrelief families was $1,475 as compared with $1,070 for rural families; the corresponding mean incomes were $2,064 and $1,408.

Chart 15 bears out the story told by the averages as to the relative income status of families in the six types of community. Farm families are conspicuously massed in the lower income levels—52 percent falling below $1,000. Rural nonfarm families and families living in small cities are most numerous in the income classes between $500 and $1,500. The distributions for middle-sized and large cities show more dispersion through the middle income ranges, and that for metropolises shows a distinctly larger proportion of families in the higher levels. Seven percent of the metropolitan families received incomes of $5,000 and over, as compared with a little over 1 percent of farm families. The proportion of nonrelief families in the several types of community at each income level are compared in table 8 with the proportions of all nonrelief families at the same levels.

The discussion of variation in real incomes in a preceding section of the report has emphasized the limitations of these dollar figures as a measure of the actual differences in economic status between rural and urban families.[16] The points mentioned in that discussion need not be repeated here. However, some further comment is required regarding the coverage of the sample data on which the income distributions for each type of community were based.

In choosing the communities to be included in the Study of Consumer Purchases an attempt was made to

[16] See pp. 11-12.

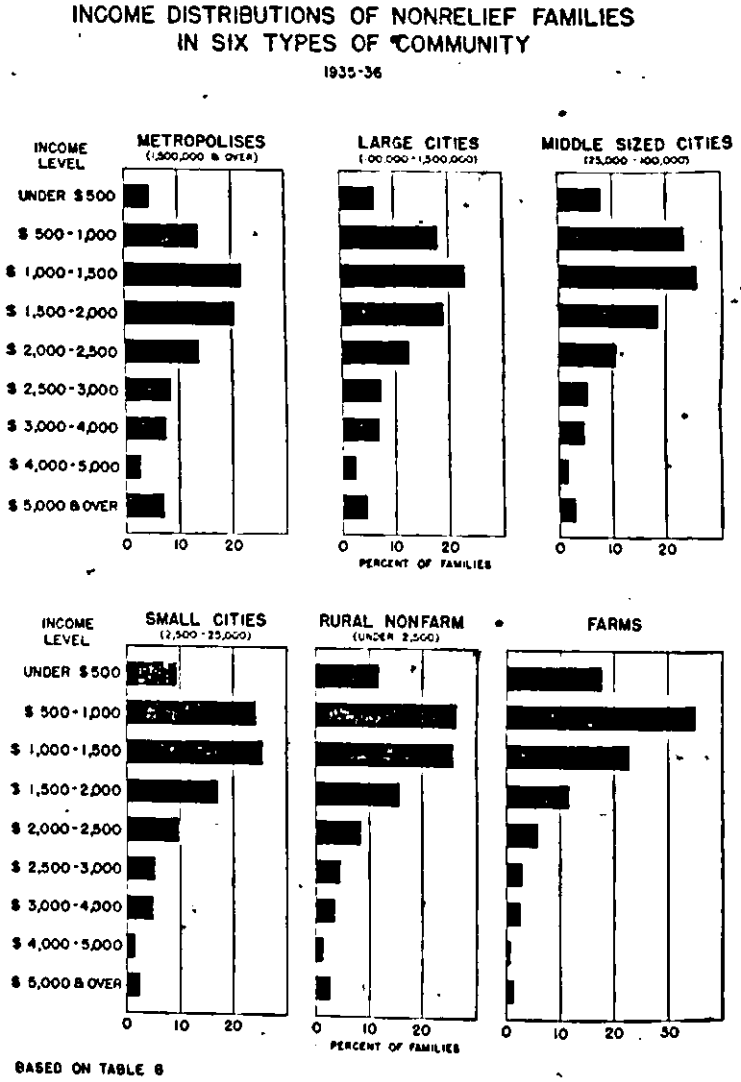


CHART 15

avoid communities that were satellites of larger cities and did not represent distinct degrees of urbanization in themselves.[17] Accordingly, no suburban villages or cities were included in the sample. As a result, the income figures for rural-nonfarm communities and for small cities are possibly somewhat lower than they should be.

TABLE 8.—*Percentage distributions of nonrelief families [1] in six types of community, by income level, 1935–36*

Income level	All families	Families living in—					
		Urban communities				Rural communities	
		Metropolises,[2] 1,500,000 population and over	Large cities, 100,000 to 1,500,000 population	Middle-sized cities, 25,000 to 100,000 population	Small cities, 2,500 to 25,000 population	Nonfarm [3]	Farm
Under $250	2.8	1.7	2.0	2.4	3.1	3.0	3.8
$250–$500	7.8	2.8	4.4	5.5	6.3	8.9	13.9
$500–$750	11.3	5.2	7.6	9.4	10.3	11.8	18.0
$750–$1,000	13.4	8.5	10.5	13.6	13.9	14.4	16.6
$1,000–$1,250	13.2	10.9	12.4	13.9	14.6	14.0	12.8
$1,250–$1,500	10.8	11.0	10.6	11.6	11.1	11.6	9.8
$1,500–$1,750	9.1	10.8	10.0	9.7	9.4	9.1	7.0
$1,750–$2,000	7.3	9.7	9.0	8.5	7.8	6.5	4.8
$2,000–$2,250	5.5	7.9	6.9	6.1	5.8	5.1	3.1
$2,250–$2,500	4.0	5.8	5.5	4.5	4.0	3.4	2.5
$2,500–$3,000	5.2	8.5	7.1	5.4	5.3	4.4	2.9
$3,000–$3,500	3.0	4.7	4.2	3.1	3.1	2.3	1.6
$3,500–$4,000	1.8	2.9	2.7	1.7	1.7	1.3	1.0
$4,000–$4,500	1.0	1.7	1.6	1.0	.8	.8	.5
$4,500–$5,000	.6	.9	.9	.7	.5	.6	.3
$5,000–$7,500	1.3	2.1	1.8	1.3	1.1	1.4	.6
$7,500–$10,000	.8	1.6	1.1	.6	.6	.6	.4
$10,000 and over	1.1	3.3	1.7	1.0	.6	.8	.4
All levels	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see Appendix A, p. 42.
[2] Metropolises of this size are in North Central Region only (New York, Chicago, Philadelphia, and Detroit).
[3] Includes families living in communities with population under 2,500, and families living in the open country but not on farms.

Similarly, the farm areas sampled in the Study of Consumer Purchases were chosen to represent the more important types of farming, and cannot be considered a random sample adequately representative of all farm areas. The sample areas in the South, particularly, afforded a poor basis for estimating farm incomes in that region. In extending the sample data to the Southern farm population, use was made of information on farm incomes in Southern States obtained from various sources, as a basis for weighting the distributions shown by the Study of Consumer Purchases.[18] But the final estimates for farm families in the South are considered distinctly less reliable than those for other sections of the country.

In general, the coverage of the sample data is less adequate for both the farm and the rural-nonfarm population than for urban families, and less adequate for small cities than for those of larger size.[19] Although the sample included only 20 cities of 25,000 population and over, as compared with 22 small cities, 140 villages and 56 farm counties,[20] the greater number of families available for sampling in the larger communities resulted in a higher ratio of number of families in the sample to the total number in the population.

Occupational Differences in Family Incomes

Differences in family incomes among the various occupational groups are considerably more pronounced than the family-size, regional, and type-of-community differences already discussed.

The occupational group into which a family was placed for purposes of this study was determined by the occupation from which the largest amount of all family earnings was derived, rather than by the occupation of the principal earner. Income received from investments and property or from other sources did not affect this classification, although such income was, of course, included in the total income determining the income level to which the family belonged. The definitions of the major occupational groups conform with those used in the Study of Consumer Purchases, and follow, in general, the groupings developed by the Federal Emergency Relief Administration and later adopted by the Works Progress Administration.[21]

Families that had received relief at any time during the schedule year were necessarily excluded from the occupational distributions, since the sample income data for relief families were not available by occupational group at the time the distributions were prepared. Because of this omission, and because supplementary family earners do not appear separately in the classification, the proportions between the several groups differ considerably from those shown by the census and by other occupational classifications. As was pointed out above, the proportion of families in the wage-earner group is unusually low, because of the relatively high incidence of relief among families in this category.

The numbers of nonrelief families in the eight occupational groups used in the study are shown in table 9, together with the average and aggregate incomes of each group. Average incomes are compared graphically in chart 16. Wage-earning and farming [22] families are most numerous, representing 38 percent and 25 percent,

[17] The basis of choice of communities was determined by the major purpose of the study—the analysis of variations in family expenditure among different groups of the population.
[18] For explanation of this procedure, see Appendix A, pp. 54 and 57.
[19] For comparison of number of families in the population and number in the sample for each type of community, see table 10A.
[20] For list of communities included in the Study of Consumer Purchases but not included in the income estimates presented in this report, see footnote 6, p. 57, in Appendix A.
[21] W. P. A., Circular No. 2, Occupational Classification and Code, July 1935, and Circular No. 2 A, Index of Occupations. See also Appendix A, p. 44.
[22] Farm families were defined on the same basis for both the type of community and the occupational classifications.

respectively, of the total. The same two groups had the lowest mean incomes—$1,289 for the wage-earning, and $1,259 for the farming group. The group covering "other" occupations came next in order, with a mean income of $1,696; this group includes a small number of families deriving their main earnings from farming but living in cities or villages and hence excluded from the farm group. It also includes all nonrelief families that received no income from earnings during the year.

TABLE 9.—*Average and aggregate incomes of nonrelief families* [1] *in eight occupational groups,* [2] *1935–36*

Occupational group	Families		Average income per family		Aggregate income	
	Number	Percent	Median	Mean	Amount (in thousands)	Percent
Wage-earning	9,459,300	37.9	$1,175	$1,289	$12,189,038	27.5
Farming [3]	6,166,600	24.8	965	1,259	7,763,570	17.5
Clerical	3,626,200	14.5	1,710	1,901	6,893,835	15.5
Business:						
Salaried	1,112,600	4.5	2,485	4,212	4,686,662	10.6
Independent	2,372,700	9.5	1,515	2,547	6,043,451	13.6
Professional:						
Salaried	989,200	4.0	2,100	3,087	3,053,568	6.9
Independent	340,900	1.4	3,540	6,734	2,295,669	5.2
Other [4]	845,700	3.4	745	1,696	1,434,107	3.2
All groups	24,913,200	100.0	$1,285	$1,781	$44,359,900	100.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see Appendix A, p. 42.
[2] Families are classified according to occupation from which largest amount of family earnings was derived, rather than according to occupation of the principal earner. For further explanation, see p. 25 and Appendix A, p. 44.
[3] Includes families living on farms in rural areas only.
[4] Includes families with no income from earnings during the year, and village and city families with major earnings from farming.

The clerical group—the third group in numerical importance—was next in size of income, the mean for the group amounting to $1,901. The independent business group came next, with the salaried professional and the salaried business groups following. The independent professional group, much the smallest in number, had by far the highest mean income, $6,734.

The median incomes are lower than the means for all of the occupational groups, and distinctly lower for families in "other" occupations and for independent professional families. Half of the "other" occupation families received incomes of less than $745, and half of the independent professional group had incomes under $3,540. While this median for the latter group is much lower than the mean income of the group it is nevertheless distinctly higher than the medians for any of the other occupational groups.

Striking differences in the range and concentration of incomes in the occupational groups are shown in chart 17. More detailed comparisons of the income distributions are presented in table 10. Farm families, as the preceding discussion indicated, are quite scarce in the upper income ranges. More than 85 percent of them appear in the income classes below $2,000, more than half below $1,000. The wage-earning families are equally concentrated below $2,000, with a negligible proportion—two-tenths of 1 percent—in the $5,000 and over group. Many of these wage-earner incomes, it must be remembered, included the earnings of several members of the family, and all of the earners

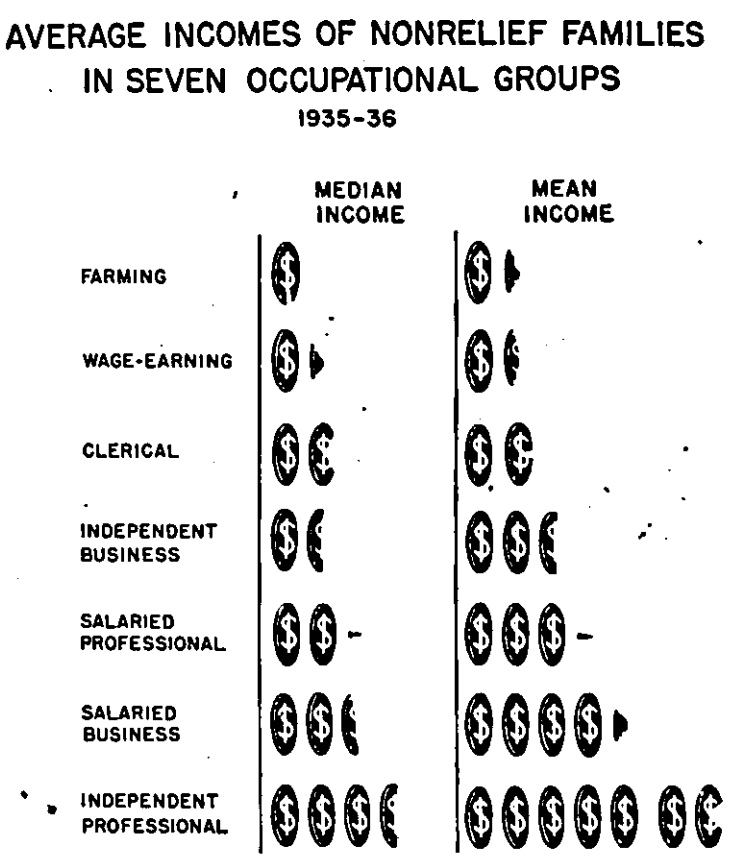


CHART 16.

TABLE 10.—*Percentage distributions of nonrelief families* [1] *in seven occupational groups,* [2] *by income level, 1935–36*

Income level	Families in—						
	Wage-earning group	Farming group [3]	Clerical group	Business group		Professional group	
				Salaried	Independent	Salaried	Independent
Under $250	3.0	3.8	0.5	0.1	1.5	0.7	0.2
$250-$500	7.5	13.9	1.7	.3	6.1	1.7	.4
$500-$750	12.0	18.0	4.6	1.3	9.1	3.1	1.2
$750-$1,000	16.2	16.6	9.2	2.9	10.6	4.8	2.6
$1,000-$1,250	16.2	12.8	11.8	5.1	12.4	6.8	5.1
$1,250-$1,500	12.7	9.8	12.0	5.8	9.8	9.1	4.6
$1,500-$1,750	9.8	7.0	12.1	9.1	9.0	9.6	3.8
$1,750-$2,000	7.4	4.8	11.0	9.3	7.6	10.5	4.9
$2,000-$2,250	4.8	3.1	9.4	8.9	6.3	9.9	4.2
$2,250-$2,500	3.2	2.5	7.1	7.7	4.4	7.8	5.2
$2,500-$3,000	3.9	2.9	8.0	11.8	6.2	10.5	9.2
$3,000-$3,500	1.7	1.6	5.0	9.2	3.8	7.0	8.1
$3,500-$4,000	.8	1.0	2.7	6.1	2.4	5.2	5.0
$4,000-$4,500	.4	.5	1.4	3.6	1.8	2.8	4.3
$4,500-$5,000	.2	.3	.8	2.5	1.2	2.0	3.8
$5,000 and over	.2	1.4	1.8	10.3	7.8	8.5	37.4
All levels	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see Appendix A, p. 42.
[2] Families are classified according to occupation from which largest amount of family earnings was derived, rather than according to occupation of the principal earner. For further explanation, see p. 25 and Appendix A, p. 44.
[3] Includes families living on farms in rural areas only.

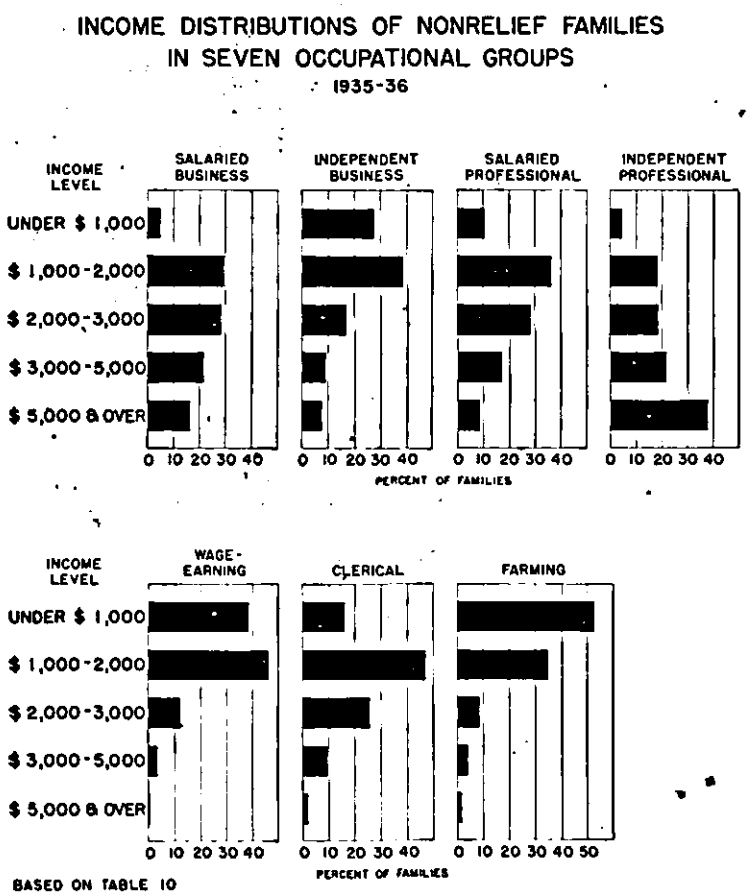


CHART 17.

in a given family were not necessarily employed in wage-earning occupations.

In decided contrast is the distribution for independent professional families. More than one third of this small occupational group, including families of physicians, lawyers, accountants, and other professional workers engaged in private practice, received incomes of $5,000 and over.[23] The salaried families, both business and professional, are widely dispersed in the income intervals between $1,000 and $5,000, with a considerable proportion of the business group receiving $5,000 and over. The independent business and the clerical groups are more concentrated below the $2,000 level.

In considering these figures it should be borne in mind that the salaried business group is made up of employees performing executive and managerial types of work, since the clerical business employees are separately classified. It should also be remembered that the independent business group includes the small shopkeeper as well as the large entrepreneur.

Because of the importance of the wage-earning group, and the representative scope of the sample data, it has seemed both desirable and feasible to analyze the incomes of wage-earning families by type of community. The resulting income estimates are presented for comparative purposes in tables 11 and 12. It must again be noted that the relief families excluded from these tables contain a high proportion of families with very low incomes, and that therefore the income distributions, as well as the average income figures, are somewhat higher than they would be if relief families were included.

[23] The income figures for the independent professional group appear surprisingly high in relation to the other occupational groups. While the income distributions for this group were very consistent from one sample area to another, and there is no recognized source of error in the data, it should be noted that this group is small and that the findings may be somewhat less representative than those for other occupational groups.

TABLE 11.—*Average incomes of wage-earning families* [1] *(nonrelief)* [2] *in five types of community, 1935–36*

Type of community	Families		Average income per family	
	Number	Percent	Median	Mean
Metropolises: [3] 1,500,000 population and over	1,368,500	14.5	$1,500	$1,626
Large cities: 100,000 to 1,500,000 population	2,155,100	22.8	1,300	1,414
Middle-sized cities: 25,000 to 100,000 population	1,409,600	14.9	1,165	1,263
Small cities: 2,500 to 25,000 population	2,305,800	24.3	1,150	1,261
Rural communities	2,220,300	23.5	950	1,004
All communities	9,459,300	100.0	$1,175	$1,289

[1] Families are classified according to occupation from which largest amount of family earnings was derived, rather than according to occupation of the principal earner. For further explanation, see p. 25 and Appendix A, p. 44.
[2] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see Appendix A, p. 42.
[3] Metropolises of this size are in North Central Region only (New York, Chicago, Philadelphia, and Detroit).

TABLE 12.—*Percentage distributions of wage-earning families* [1] *(nonrelief)* [2] *in five types of community, by income level, 1935–36*

Income level	All families	Families living in—				
		Metropolises,[3] 1,500,000 population and over	Large cities, 100,000 to 1,500,000 population	Middle-sized cities, 25,000 to 100,000 population	Small cities, 2,500 to 25,000 population	Rural communities
Under $250	3.0	1.0	1.9	2.4	3.8	4.7
$250–$500	7.5	3.0	5.5	6.3	7.1	13.5
$500–$750	12.0	6.2	10.1	12.5	12.4	16.6
$750–$1,000	16.2	11.4	14.8	17.8	16.7	19.1
$1,000—$1,250	16.2	14.2	15.4	17.2	17.2	17.0
$1,250–$1,500	12.7	14.4	12.8	13.0	12.0	11.0
$1,500–$1,750	9.8	12.5	11.0	10.0	9.1	7.5
$1,750–$2,000	7.4	10.3	9.2	7.5	7.1	4.1
$2,000–$2,250	4.8	7.1	5.9	4.8	4.7	2.3
$2,250–$2,500	3.2	5.2	4.0	3.1	3.3	1.2
$2,500–$3,000	3.9	7.7	5.1	3.0	3.6	1.4
$3,000–$3,500	1.7	3.5	2.2	1.2	1.7	.4
$3,500–$4,000	.8	1.8	1.2	.5	.8	.1
$4,000–$4,500	.1	.8	.5	.3	.3	.1
$4,500–$5,000	.2	.4	.2	.2	.1	.1
$5,000 and over	.2	.5	.2	.2	.1	.....
All levels	100.0	100.0	100.0	100.0	100.0	100.0

[1] Families are classified according to occupation from which largest amount of family earnings was derived, rather than according to occupation of the principal earner. For further explanation, see p. 25 and Appendix A, p. 44.
[2] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see Appendix A, p. 42.
[3] Metropolises of this size are in North Central Region only (New York, Chicago, Philadelphia, and Detroit).

As was true for all families combined, the incomes of wage-earning families increased steadily with the de-

gree of urbanization. The mean income ranged from $1,004 for rural communities, where nearly one quarter of the wage-earning families are found, to $1,626 for the North Central metropolises, which include nearly 15 percent of the total number. The mean incomes for small and for middle-sized cities were similar—$1,261 and $1,263, respectively, and that for large cities $1,414. Fifty-four percent of the wage-earning families in rural communities had incomes under $1,000 as compared with about 40 percent in small and in middle-sized cities, 32 percent in large cities, and 22 percent in metropolises. Two percent of the rural group had incomes of $2,500 or over, as against 15 percent in the metropolises.

Incomes of White and Negro Families

Marked dissimilarities in the income distributions of various racial and nativity groups were revealed by the sample data collected in the Study of Consumer Purchases. These dissimilarities were allowed for in building up the income estimates for major groups of families and are reflected in the national distribution. However, detailed analysis of the income patterns of foreign-born families could not be made in the time available, and the data for minor color and racial groups were considered too scanty to justify such analysis. Because Negroes form such a large part of the total population, they were more extensively sampled.[24] It is, therefore, possible to make direct comparisons of the incomes of nonrelief white and Negro families in urban and rural communities in the South and in large cities in the North Central Region. These figures are presented in tables 13 and 14, and in the two accompanying charts.

TABLE 13.—*Average incomes of white and Negro families (nonrelief)*[1] *in Southern rural communities and cities and in North Central cities,*[2] *1935–36*

Region and type of community	Average income per family			
	Median		Mean	
	White	Negro	White	Negro
Southern rural communities	$1,100	$480	$1,535	$566
Southern cities of 2,500 population and over	1,570	525	2,019	635
North Central cities of 100,000 population and over	1,720	1,095	2,616	1,227

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see Appendix A, p. 42.
[2] For location of communities included in sample, see chart 10. For discussion of limitations of the regional comparison, see pp. 18, 22-23, 54, and 57.

Chart 18 indicates that in both urban and rural Southern communities the mean income of nonrelief white families in 1935–36 was approximately three times that of nonrelief Negro families. The disparity

[24] For comparison of number of families in the population and number in the sample for native-white, foreign-born white, and Negro families and families belonging to other color groups, see table 11A.

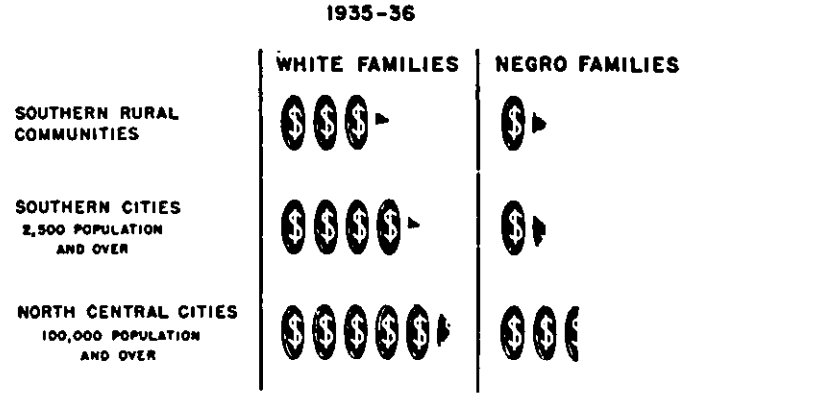


CHART 18

was somewhat less in North Central cities of 100,000 and over, but even there the mean income for Negro families was less than half that for white families. The median incomes, given in table 13, reveal the same general relationship, but indicate somewhat less disparity between the incomes of white and Negro families in Southern rural communities. The median income for white families was $1,100 as compared with $480 for Negro families. The negligible proportion of high incomes among Negro as compared with white families in these areas explains why the medians differ less than the means.

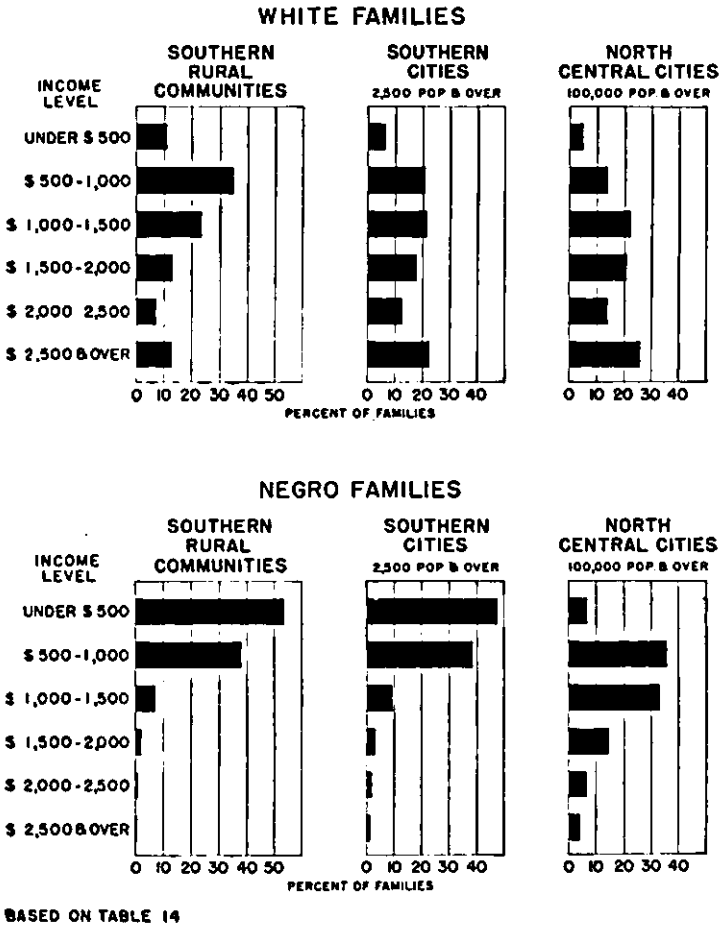
TABLE 14.—*Percentage distributions of white and Negro families (nonrelief)* [1] *in Southern rural communities and cities and in North Central cities,*[2] *by income level, 1935–36*

Income level	Families living in—					
	Southern rural communities		Southern cities of 2,500 population and over		North Central cities of 100,000 population and over	
	White	Negro	White	Negro	White	Negro
Under $250	0.9	12.0	1.6	16.2	1.6	1.9
$250–$500	9.6	41.1	4.4	31.1	2.7	4.7
$500–$750	17.7	26.1	9.5	25.4	5.1	13.5
$750–$1,000	16.6	11.6	10.8	13.0	8.5	22.2
$1,000–$1,250	12.9	4.4	11.7	6.3	11.2	20.1
$1,250–$1,500	10.2	2.5	9.5	2.0	11.2	12.8
$1,500–$1,750	7.7	1.2	9.1	2.1	10.8	8.5
$1,750–$2,000	5.1	.6	8.5	.8	9.9	6.0
$2,000–$2,250	4.1	.2	6.7	.7	7.7	3.9
$2,250–$2,500	2.9	.2	5.7	.6	5.9	2.5
$2,500–$3,000	4.0	.1	7.5	.4	8.4	1.7
$3,000–$3,500	2.4	(3)	4.8	.2	4.9	1.1
$3,500–$4,000	1.5	(3)	3.4	.1	2.9	.4
$4,000–$4,500	.9	(3)	2.0	.1	1.7	.2
$4,500–$5,000	.7	(3)	1.2	(3)	1.0	.1
$5,000–$7,500	1.5	(3)	2.3	.1	2.1	.2
$7,500–$10,000	.6	(3)	.5	(3)	1.5	.2
$10,000 and over	.7	(3)	.8	(3)	2.9	(3)
All levels	100.0	100.0	100.0	100.0	100.0	100.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see Appendix A, p. 42.
[2] For location of communities included in sample, see chart 10. For discussion of limitations of the regional comparison, see pp. 18, 22-23, 54, and 57.
[3] Less than 0.05 percent.

INCOME DISTRIBUTIONS OF WHITE AND NEGRO FAMILIES (NONRELIEF) IN THREE TYPES OF COMMUNITY

1935-36



BASED ON TABLE 14

CHART 19

The concentration of Negro families in the low, and their scarcity in the high, income classes is shown by chart 19, which compares the income distributions of whites and Negroes in the South and in North Central large cities.

In the rural South, more than half of the nonrelief Negro families had incomes of less than $500; more than nine-tenths of them had incomes under $1,000. One-tenth of the nonrelief white families had incomes under $500 and 45 percent incomes under $1,000. In Southern cities the situation was very similar for the Negro group. Forty-seven percent of the nonrelief Negro families received less than $500 and 86 percent less than $1,000. The incomes of nonrelief white families in Southern cities, however, were much higher than in rural communities; only 6 percent received less than $500 and 26 percent less than $1,000.

In the North Central cities, the Negro families were most numerous in the income classes from $500 to $1,500, with a minor proportion of them scattered through the higher income ranges. Since the incidence of relief among urban Negro families in the North Central Region was unusually high, it is probable that the inclusion of relief families in this comparison would alter considerably the relationship between the two color groups, by throwing a relatively higher proportion of Negroes in the lower income levels.

A comparison of the income status of Negro and white families in Southern farm communities can be made from the more tentative income distributions presented in Appendix B. These appendix tables show the incomes of Negro and white farm operators as compared with Negro and white sharecroppers. These income data were drawn from the sample areas in the Southeastern States and may not be fully representative of the relative status of operators and sharecroppers in other parts of the South. The median income for white operators in the sample areas was $1,010 as compared with $645 for white sharecroppers. Negro operators had a median income of $600, and Negro sharecroppers, a median income of $460. It should be remembered that these figures represent not only money income but also income in kind, including the value of home-produced food and fuel and the imputed rental value of housing.

Further comparisons of the income status of Negro families and of native and foreign-born white families are presented for reference purposes in Appendix B.

SECTION 2. INCOMES OF SINGLE INDIVIDUALS

"Single individuals," as defined in this study, include individual householders, classified by the census as one-person families, single persons living in lodging houses or hotels or in similar quasi-family groups, and servants or lodgers in private homes. Included also are sons and daughters living with their parents but paying for board and lodging and not pooling their incomes in the common family fund. Individuals living in institutions or as members of quasi-institutional groups are not included, since they do not maintain a separate and independent economic status. Both relief and non-relief individuals are included in the income distribution in table 15, which shows the number and percent of single individuals and the percent of aggregate income at each income level.

The most conspicuous feature of the distribution is the concentration in the lower income intervals.

TABLE 15.—*Distribution of single individuals and of aggregate income received, by income level, 1935–36*

Income level	Single individuals			Aggregate income		
	Number	Percent at each level	Cumulative percent	Amount (in thousands)	Percent at each level	Cumulative percent
Under $250	900,644	9.55	9.55	$158,302	1.37	1.37
$250–$500	1,571,983	15.63	25.18	600,854	5.19	6.56
$500–$750	1,972,745	19.62	44.80	1,231,636	10.63	17.19
$750–$1,000	1,599,030	15.91	60.71	1,391,492	12.01	29.20
$1,000–$1,250	1,108,551	11.02	71.73	1,240,682	10.71	39.91
$1,250–$1,500	877,956	8.73	80.46	1,201,347	10.37	50.28
$1,500–$1,750	546,546	5.43	85.89	883,223	7.03	57.91
$1,750–$2,000	398,985	3.97	89.86	745,400	6.44	64.35
$2,000–$2,250	283,652	2.82	92.68	600,779	5.19	69.54
$2,250–$2,500	210,099	2.09	94.77	497,260	4.29	73.83
$2,500–$3,000	161,275	1.60	96.37	436,150	3.77	77.60
$3,000–$3,500	108,360	1.08	97.45	349,494	3.02	80.62
$3,500–$4,000	63,731	.63	98.08	237,497	2.05	82.67
$4,000–$4,500	36,105	.36	98.44	154,458	1.33	84.00
$4,500–$5,000	25,491	.25	98.69	122,319	1.06	85.06
$5,000–$7,500	57,316	.57	99.26	344,315	2.97	88.03
$7,500–$10,000	28,582	.28	99.54	242,188	2.09	90.12
$10,000–$15,000	20,861	.21	99.75	250,325	2.16	92.28
$15,000–$20,000	9,436	.09	99.84	160,910	1.39	93.67
$20,000–$25,000	5,617	.06	99.90	126,874	1.10	94.77
$25,000–$30,000	3,350	.03	99.93	92,701	.80	95.57
$30,000–$40,000	2,398	.02	99.95	80,882	.70	96.27
$40,000–$50,000	1,737	.02	99.97	75,022	.65	96.92
$50,000–$100,000	2,470	.02	99.99	153,408	1.33	98.25
$100,000–$250,000	808	.01	100.00	98,452	.85	99.10
$250,000–$500,000	217	(1)	.....	64,324	.56	99.66
$500,000–$1,000,000	43	(1)	.....	23,849	.21	99.87
$1,000,000 and over	12	(1)	.....	14,587	.13	100.00
All levels	10,058,000	100.00	.....	$11,579,390	100.00	.....

[1] Less than 0.005 percent.

Almost 45 percent of the 10,058,000 individuals received incomes of less than $750 during the year 1935–36. At the other end of the income scale, we find less than 1⅓ percent with incomes of $5,000 and over. A comparison with the family distribution in table 3 emphasizes the relatively greater concentration of incomes for single individuals. Nearly 61 percent of the individuals had incomes below $1,000 as compared with 42 percent of the families; 29 percent had incomes between $1,000 and $2,000 as compared with 37 percent of the families; and only 10 percent had incomes of over $2,000 as compared with 21 percent of the families. The lowness of the distribution as compared with the distribution for family units is explained, in part at least, by the fact that single individuals as a group are younger than heads of families.[1]

As already indicated in table 1, the share of the total consumer income received by single individuals was high in relation to their numbers in the total population, as their average income was higher than the per capita incomes of family members. But the division of the aggregate income among the 10 million individual consumer units reveals an inequality similar to that for families. Thus the 45 percent with incomes of less than $750 received only 17 percent of the aggregate income of single individuals, while the 1⅓ percent above $5,000 received 15 percent of the total. The concentration of individuals in the lower income intervals and the disparity between the high and low income groups were shown by chart 2, presented earlier in the report.

Some warning should be given that the income distribution for single individuals is relatively less reliable than those for families. Since the Study of Consumer Purchases did not provide a comprehensive sample of the incomes of single individuals, it was necessary to rely, to a large extent, on earnings data from miscellaneous sources. These data did not permit of detailed breakdowns according to different characteristics.

Distributions for nonrelief single women in three occupational groups—wage-earner, clerical, and business and professional—were built up on the basis of

[1] For reference, see Fifteenth Census of the United States, 1930, Population, vol. II, p. 842.

earnings data from various studies of the United States Women's Bureau and the United States Employment Service. Distributions for nonrelief single men in the same occupational groups were then obtained by adjusting the income distributions for single women on the basis of relationships shown by various studies to exist between the earnings of men and women.

These earnings distributions were checked against the income distributions for single men and women shown by small samples from the Study of Consumer Purchases and the National Health Survey, to make allowance for income received from sources other than earnings. For single men, the results were also checked against the income distributions shown by the Study of Consumer Purchases for two-person families consisting of husband and wife, in which the husband was usually the sole earner. For single men engaged in farming, it was necessary to use the Consumer Purchases Study distribution for two-person farm families, without modification.

For single individuals receiving relief at some time during the year, distributions were constructed on the basis of fragmentary data from the Works Progress Administration, and certain assumed relationships between the average incomes of individuals receiving relief and those not receiving relief.

The relief and nonrelief distributions were then combined to obtain income distributions for all single men and for all single women. These distributions were adjusted above the $3,000 income level in accordance with separate distributions derived from income tax data, by methods similar to those described above for families.

The sources of data and the methods used in building up the estimates for single individuals are explained in detail in Appendix A, section 5.

SECTION 3. INCOMES OF INSTITUTIONAL RESIDENTS

Estimates of the incomes of residents of institutions and members of quasi-institutional groups present certain difficulties that do not appear for families and single individuals. The difficulties arise largely from the fact that a significant portion of such incomes is received in the form of food, clothing, and other subsistence items provided through a central commissary or purchasing office.

Many types of institutional residents have no money income or only incidental sums from earnings or from friends and relatives. Personal income in such groups is virtually synonymous with per capita subsistence costs. This is true, to greater or less extent, of the residents of institutions for mental defectives, physical defectives, dependent children, and dependent adults, and for the inmates of prisons and reformatories. Members of the quasi-institutional groups, including enrollees in the Civilian Conservation Corps, workers in labor camps—such as lumber, railroad, and other construction camps—enlisted Army and Navy personnel, and crews on vessels, receive a salary over and above subsistence. However, in the case of C. C. C. enrollees, the majority of them are required to allocate the greater part of their monthly wages to their families. Accordingly, there has been included in the estimates for this group only that portion of earnings that enrollees were allowed to retain for their personal use.

The total institutional population of the United States in 1935–36 is estimated at approximately 2,000,000 individuals. These are divided, in table 16, into seven main groups according to the type of resident cared for, or—in the case of the quasi-institutional groups—the general type of work performed by the members.

The residents of institutions "proper" number approximately 1,200,000, or 60 percent of the combined groups. Mental defectives, including the inmates of insane asylums, homes for the feeble-minded, and hospitals for epileptics, make up almost half of this number. Inmates of penal and reformatory institutions number 207,000; dependent adults in almshouses and homes for the aged, 169,000; dependent children in orphan asylums and reformatories for juvenile delinquents, 160,000. Physical defectives constitute the smallest group of 101,000. Members of the quasi-institutional groups total about 800,000.

The estimated average incomes of the residents of institutions are based on sample data for State institutions in 17 States. These data were compiled from budget reports, reports of departments of public welfare, boards of control, and other official sources. Since comparable data were not available for privately-supported institutions or for Federal and local institutions, it was assumed that the State institutions represented typical or at least average institutional units.

TABLE 16.—*Average and aggregate incomes of institutional residents in seven types of institutional group, 1935–36*

Type of institutional group	Institutional residents		Average income per resident	Aggregate income	
	Number	Percent		Amount (in thousands)	Percent
Institutions for:					
Mental defectives	563,000	28.2	$143	$80,500	11.1
Physical defectives	101,000	5.0	406	41,000	5.7
Prisoners and delinquent adults	207,000	10.4	151	31,200	4.3
Dependent and delinquent children	160,000	8.0	197	31,500	4.4
Dependent adults	169,000	8.4	177	29,900	4.1
Total	1,200,000	60.0	$178	$214,100	29.6
Quasi-institutional groups:					
Civilian Conservation Corps and labor camps	515,000	25.8	$486	$250,200	34.5
Military and naval posts and crews on vessels	285,000	14.2	912	260,000	35.9
Total	800,000	40.0	$638	$510,200	70.4
All institutional groups	2,000,000	100.0	$362	$724,300	100.0

Data on subsistence costs and wage payments for members of the Civilian Conservation Corps in 1935–36 were supplied by that agency and by the Annual Reports of the Director of Emergency Conservation Work; those for enlisted Army and Navy men were obtained from the committee hearings on the Navy Department and Military Establishment Appropriation bills for 1937 and 1938. Inasmuch as no data were available on the incomes of workers in labor camps or

of crews on vessels, the per capita figures for C. C. C. enrollees and for Army and Navy personnel, respectively, were used as applying roughly to these two groups as well.

The average income per resident of institutions proper represents average subsistence costs, exclusive of administrative overhead and capital outlays by the institution. The imputed value of food produced by the institutions has been included in costs for subsistence, but no value was ascribed to institutional labor in making clothing for the residents. No attempt was made to ascribe an imputed value for housing, although expenses for the maintenance and upkeep of buildings and grounds were included. Institutional expenditures for medical service, education, and recreation were excluded from the estimates of the personal incomes of the residents, on the assumption that the services received were comparable to those received by families from free clinics, public schools, libraries, and recreational facilities, the value of which was not included in the estimates of family income.

Computed on the basis described above,[1] which presumably results in some underestimation, the average incomes of persons in institutions of various types were found to be very similar, with the conspicuous exception of the physical defectives, whose average income was $406 as contrasted with the average income of $178 for the combined groups. The average incomes of members of the quasi-institutional groups were naturally somewhat higher—$486 for those in Civilian Conservation Corps and labor camps and $912 for those on vessels or in Army and Navy posts. The combined incomes of institutional residents were estimated at approximately $724 million. No income distribution was calculated for the institutional population, for reasons explained in Part I.

The above estimates are necessarily rough, because of the incompleteness and heterogeneity of the data available for compiling them and because of the absence of any information on incomes received, either in cash or kind, from other than institutional sources. Nevertheless, the estimates serve as a rough measure of the income status of this minor group of consumers, and complete the picture of consumer incomes in the United States.

[1] For further explanation of sources of data and methods used, see Appendix A, sec. 9.

PART III

COMPARISON WITH OTHER INCOME STUDIES

THESE figures on the incomes received by American consumers immediately call for comparison with the results of other income studies. Two major questions are of interest in this connection: First, how do these estimates for 1935–36 compare with previous estimates of the distribution of income among the American people? And, second, how do they compare with other estimates of the Nation's income for the same 12-month period?

Answers to the first question, if they were available, would be of notable significance and value. But so little attention has hitherto been given to the consumption aspects of our economy that the material is not on hand to provide even tentative answers.

As indicated in the first pages of this report, there is only one previous study of the distribution of income presenting estimates on a family or consumer unit basis. This is the study for 1929 prepared by the Brookings Institution.[1] Unfortunately, it is not possible to make a satisfactory comparison with the Brookings figures. Differences in the data available for preparing the estimates and in the methods used in their construction result in a wide discrepancy between the two studies which cannot be accounted for in terms of differences in definitions of income used or in the size of the national income in the 2 years.[2] Since it is impossible to tell how and where this discrepancy affects the curves of income distribution, it is impossible to make allowance for it in comparing the 1929 distribution with that for 1935–36. For knowledge of the variations in income distributions from one year to another we must await the results of further investigation.

[1] *America's Capacity to Consume.*

[2] The magnitude of this discrepancy appears to be in the neighborhood of $7 billion. The aggregate consumer income for 1929, as estimated by Brookings, is almost $33 billion higher than the aggregate for 1935-36 shown by the present study—$93 billion as compared with $60 billion. The major part of this difference is accounted for by the difference in the size of the national income in the 2 years—about $20 billion as measured by the Department of Commerce estimates of income paid out. (Nathan, Robert R., and Cone, Frederick M., *Monthly Income Payments in the United States, 1929-37*, Survey of Current Business, February 1938.) An additional $6.2 billion is due to the inclusion in the Brookings estimate of capital gains from the sale of securities and other assets. Such profits were not considered as an item of income in the present study. While a few minor differences in items covered by the two estimates can also be identified, those included in the present study slightly exceed in amount those included in the Brookings estimate. There remains, therefore, a difference of about $7 billion which cannot be specifically accounted for.

National Income in 1935–36

Answers to the second question raised above are, however, fairly readily obtained. Much attention has been given in recent years to the measurement of national income from the standpoint of the production of goods and services by various divisions of industry, and the distribution of the total product according to various types of income payment. These estimates are, of course, based on data drawn from entirely different sources than those used in the present study of incomes received by consumers. But the results of the two approaches should none the less be in harmony, when allowance is made for certain necessary differences in the items of income covered. Comparison of the present estimates of aggregate consumer income with these estimates of national income produced and paid out provides a useful and significant check on the reliability of the figures presented in this report.

Department of Commerce Estimates: For a measure of the size of the national income produced we can turn to the estimates prepared by the United States Department of Commerce. For the 12-month period from July 1935 through June 1936, the total income produced by the Nation, as estimated by the Department, was $59,584 million.[3]

Before this figure can be compared with the estimate of aggregate consumer income—$59,983 million—allowance must be made for differences in the methods used in the two computations. The largest source of difference arises from the fact that the estimate of the Department of Commerce does not count as income the imputed net rental value of owned homes occupied by their owners, whereas this item is included in the estimates of family incomes presented in this report. In addition, the Department of Commerce has, because of the nature of the data used in compiling its estimate, omitted several small items of income which are included in the consumer income figures—that is, earnings from boarders and lodgers and from odd jobs, and bonuses

[3] Estimate supplied by national income section of the Division of Economic Research, Bureau of Foreign and Domestic Commerce, based on monthly income payments for the 12 months covered and on the estimated share of 1935 and 1936 business savings applicable to the same 12-month period. For figures on income payments, see *Monthly Income Payments in the United States, 1929-37*.

paid to employees. A rough estimate of the magnitude of these omitted items indicates that they amount to approximately $3¼ billion.[4]

Furthermore, to effect a comparison, deductions must be made from both aggregates. Allowance must be made in the Department of Commerce figure for income produced that did not reach the hands of consumers during the year covered, but was retained as savings by corporations or held as dividends and interest by savings institutions. A deduction must also be made in the estimate of aggregate consumer income, since some items of income were necessarily counted twice in preparing this estimate—first, in the income of the family or individual originally receiving the item, and second, in the income of the family or individual to whom it was transferred. Gifts of money made by one family to another and direct relief supplied by the community to part of the population are examples of such double counting. These two sets of deductions are of approximately equal magnitude—about $1,100 million for the Department of Commerce adjustment[5] and $1,200 million for the adjustment of consumer income.[6]

Thus the difference between the two measures of national income, after they are placed on a comparable basis, is in the neighborhood of $3 billion—the estimate of income received by consumers falling about 5 percent below that for income produced. In view of the fact that the two figures represent entirely independent estimates of the Nation's economic activity for the year, prepared from entirely separate sources of data, this discrepancy does not appear excessive. Rather, it seems cause for somewhat greater confidence in both the Department of Commerce figures and those presented in this report.

National Industrial Conference Board Estimates: In addition to the comparison with the Department of Commerce estimates of income produced, it is possible to check the results of the present study against income estimates prepared by the National Industrial Conference Board. These estimates measure the realized income received by the Nation as a whole and in the various States from current production and from several other items which are "accountable" with the existing data.

Since the estimates are available only on a calendar year basis, an average of the 2 years 1935 and 1936 has been used to represent the 12-month period covered by the present study. The national totals shown by the Conference Board for the 2 years average approximately $59½ billion [7]—a figure almost identical with the Commerce estimate of income produced for 1935–36. The two totals do not, however, cover wholly identical items of income, and the adjustments needed to place the Conference Board estimates on a comparable basis with the estimate of consumer income differ somewhat from those required for the comparison with the Commerce figures.

When these adjustments are made, the Conference Board figures and those shown by the present study are found to be in surprisingly close agreement. The estimate of incomes received by consumers falls below the national income estimate of the Board by a little over $1 billion, or by approximately 2 percent.[8] This correspondence is, indeed, so close as to suggest that it is to

[4] This estimate, amounting to $3,278 million, was obtained by adding the following four items:

(1) $2,378 million for imputed net rental value of owned homes occupied by their owners. (Preliminary estimate of National Resources Committee, based on income distributions presented in this study and expenditure data from Study of Consumer Purchases.)

(2) $400 million for earnings from odd jobs. (Based on Brookings Institution estimate of $700 million for 1929, *America's Capacity to Consume*, p. 163.)

(3) $300 million for earnings from boarders and lodgers. (Preliminary approximation made by National Resources Committee from family income data from Study of Consumer Purchases.)

(4) $100 million for bonuses paid to employees. (Based on preliminary tabulations of data obtained by Bureau of Labor Statistics for the year 1936, quoted by Robert R. Nathan in *National Income, 1929–36*, U. S. Department of Commerce, p. 18.)

[5] This estimate, amounting to $1,117 million, was obtained by adding the following two items:

(1) $117 million for corporate savings. (Estimate supplied by the national income section of the Department of Commerce. Business savings of farmers and other individual entrepreneurs were included in the consumer income figures and hence do not need to be deducted from the estimate of income produced in comparing the two estimates.)

(2) $1,000 million for interest and dividends received by savings banks, building and loan associations, life insurance companies, and similar associations of individuals and not paid out to individuals. (Estimated as half of the total of these receipts, on the assumption that the remaining half was paid out to individuals as interest on savings deposits, insurance dividends, and other items of income. The total of these receipts was estimated as about one-fourth of all dividends and interest payments made during the 12-month period covered. See *National Income in the United States, 1929–35*, U. S. Department of Commerce, pp. 54–55, and *Monthly Income Payments in the United States, 1929–37*.)

[6] This estimate, amounting to $1,213 million, was obtained by adding the following three items:

(1) $899 million for direct relief in cash and kind received by families and single individuals. (See table 5A.)

(2) $214 million for subsistence and care supplied to residents of institutions for mental and physical defectives, dependent and delinquent children and dependent adults, and to inmates of prisons and reformatories. (See table 16.)

(3) $100 million for gifts in cash received by families and individuals and used for current living expenses. (Rough approximation made for purposes of this study.)

[7] Martin, Robert F., *Realized National Income, 1909–35*, National Industrial Conference Board Bulletin, vol. XI, No. 5, April 19, 1937; *idem*, *The National Income in 1936 and 1937*, National Industrial Conference Board Bulletin, vol. XII, No. 2, February 17, 1938.

[8] This estimate, amounting to $1,276 million, was obtained by first subtracting from the average of the Conference Board estimates for 1935 and 1936 ($59,463 million) the following three items:

(1) $1,000 million for interest and dividends received by associations of individuals. (See footnote 5.)

(2) $937 million for half of 1936 soldiers' bonus payments. These payments, amounting to $1,873 million for the year 1936, were included in the Conference Board estimate but not counted as income (with minor exceptions) in the present study.

(3) $899 million for direct relief received by families and single individuals, which was included in the Conference Board estimates and in the estimates presented in the present study, but which represents a transfer of income among consumers. (Estimate used in present study. See footnote 6.)

The adjusted estimate thus obtained ($56,627 million) was further adjusted by adding the following two items:

(1) $3,278 million for the four items of income shown in footnote 4, which were not covered in the Conference Board estimates.

(2) $141 million for business savings of individual entrepreneurs in industries other than agriculture. Such savings were not covered in the Conference Board estimates, but were included in the consumer income figures. (Average of estimates for 1935 and 1936 supplied by the national income section of the Department of Commerce.)

The resulting figure ($60,046 million) is $1,276 million higher than the adjusted estimate of aggregate consumer income. ($58,770 million. See footnote 6.)

some degree accidental—due, that is, to compensating discrepancies in the various component figures entering into the national totals.

Regional Division of Income in 1935–36

This suggestion is, in fact, borne out by examination of the division of the two national aggregates by geographic regions. In building up the estimates of consumer incomes, the data for single individuals and institutional residents were classified, for convenience in handling, into the same five regional areas used in preparing the estimates of family incomes. The choice of these regions, as indicated in the preceding discussion, was determined by the location of the sample communities covered by the Study of Consumer Purchases.[9] The total income received by all consumers within each region could therefore be computed.

This regional break-down is necessarily on a very rough basis, for the sample data on consumer incomes were far too limited to give adequate representation to every section of the country. The results nevertheless provide a useful check against the corresponding regional figures from the Conference Board studies.[10] Since the Conference Board presents separate estimates of the income received in each State, it is possible to combine the various State totals to fit the regional groupings used in the present study.[11]

The results of this regional comparison show almost identical proportions of the national income totals for the Pacific Region and for the States in the Mountain and Plains Region. For the Southern States, however, the estimates of consumer incomes shown by this study run appreciably higher than the estimates of the Conference Board—about 25 percent of the national aggregate as against the 21 percent shown by the Board figures. This discrepancy is offset by correspondingly lower proportions of the consumer income total in the States in the North Central Region and in New England.[12]

With the information now at hand, it is impossible to judge the extent to which these differences reflect shortcomings in the basic data available for one or both of the studies of national income. But there seems to be some reason to believe that the results of the present study somewhat overestimate the incomes of consumers living in the South through an overestimate of the incomes of rural families.[13] While the total amount of the discrepancy is not sufficient to affect materially the income figures presented for most groups of the population, the possibility of an upward bias in the estimates should be kept in mind in interpreting the results for the Southern groups. This bias may also affect to some extent the estimates for all farm families, since half of the farm population resides in the Southern States.

Despite these regional differences, the various estimates of the Nation's income in 1935–36 show, on the whole, a striking and encouraging consistency. Considerable progress can undoubtedly be expected during the next few years in the measurement of national income, from both the production and the consumption aspects of the economy. The present study of income distribution, it is hoped, will help to stimulate such investigation, and will provide a useful basis for comparison with further studies of the incomes of the American people.

[9] See pp. 41–42 and map shown in chart 10.

[10] Slaughter, John A., *Income Received in the Various States, 1929–35*, National Industrial Conference Board Bulletin, vol. XI, No. 5, April 19, 1937; *idem*, *Income Received in the Various States, 1936 and 1937*, National Industrial Conference Board Bulletin, vol. XII, No. 2, February 17, 1938.

[11] Adjustments of the regional figures for the two studies to place them on a comparable basis with respect to items of income covered could not be made. It is probable, however, that the percentage distribution of the national totals by region would not have been appreciably altered if such adjustments had been made.

[12] The comparative figures for each region for the two studies are as follows, the figures for the Conference Board appearing first: Pacific, 8.7 percent and 8.7 percent; Mountain and Plains, 5.6 percent and 5.7 percent; South, 20.8 percent and 24.6 percent; North Central, 56.9 percent and 53.6 percent; and New England, 8.0 percent and 7.4 percent.

[13] See Appendix A, pp. 53 and 56.

APPENDIX A

SOURCES AND METHODS USED IN THE STUDY

THE material presented in this appendix describes the sources of data used as a basis for preparing the estimates of income distribution shown in the preceding pages, and the methods employed in constructing the estimates. The procedures adopted at each stage of the work are set forth in considerable detail, so that readers interested in the more technical aspects of the study can interpret and evaluate the findings.

In the first section of this appendix, the major definitions and classifications used in the study are brought together, for convenience in reference. In the second section, the Study of Consumer Purchases—the major source of basic data—is briefly described. The following sections discuss the construction of the sample distributions for various groups of the population, the methods used to extend them to cover all of the American people, and the methods of estimating average and aggregate incomes.

APPENDIX A

CONTENTS

LIST OF TABLES

SECTION 1. DEFINITIONS AND CLASSIFICATIONS USED

The definitions and concepts used in the study and the classifications of data adopted were determined both by the purposes of the study and by the nature of the available data. Since the estimates of family incomes are based mainly on the Study of Consumer Purchases, many of the definitions and classifications used in that study have been carried over unchanged to the present report.

The Spending Unit Concept

The estimates of income presented in this report were prepared primarily for use as weights in building up estimates of the consumption demands of the American people. The analysis has, therefore, been made in terms of spending or consumer units rather than in terms of individual income recipients. Three main types of consumer unit are distinguished in the report: The family, the single individual and the institutional group.

Since the majority of persons live in family groups, with expenditures for food, shelter, and many other commodities and services incurred jointly for all members, the family is the major economic unit determining the utilization of income for consumption purposes. The *family*, as defined in this study, consists of two or more persons living together as one economic unit, having a common or pooled income and living under a common roof. Usually, of course, members of the "economic family" are related by blood, marriage or adoption, but they may be unrelated persons maintaining a joint home, provided they share a joint income.

In accordance with this definition, sons and daughters living with their parents but paying for board and lodging and not pooling their incomes in the common family fund are classified as single individuals, rather than as members of the family. On the same basis, sons and daughters away at school or for other reasons living away from home for all or part of the year, but dependent on the family income for at least three-quarters of their support, are classified as members of the family.

This definition of the economic family follows that adopted in the Study of Consumer Purchases.[1] It should be noted that it differs somewhat from the definition of family used by the United States Bureau of the Census. In the first place, it defines the family as consisting of two or more persons, whereas the census classifies persons living alone—that is, maintaining independent housekeeping quarters—as one-person families. In the second place, it departs from the census practice in classifying as single individuals sons and daughters living as boarders and lodgers in the homes of their parents and not pooling their incomes in the common family fund.

The number of such sons and daughters in 1935–36 is estimated as approximately 400,000 on the basis of the family schedules obtained in the Study of Consumer Purchases. The elimination of these sons and daughters from the total number of family members reduces slightly the average size of the economic family as compared with the census family, but the effect on the estimated total number of families in the population is negligible.[2]

According to the definition followed in this study the number of persons living as members of family groups in 1935–36 is estimated at 115,966,000 out of the total population of 128,024,000, and the number of families is estimated at 29,400,300.[3]

The *single individual*, as defined in this study, is an unattached person maintaining an independent economic status. Single individuals thus include all persons maintaining independent living quarters, or living as lodgers or servants in private homes, or as roomers in lodging houses and hotels. Although most members of the group are "single," both with respect to marital status and economic status, the group also includes some married persons and persons widowed, divorced, or separated.

The number of single individuals so defined is estimated at 10,058,000 in 1935–36, or 7.8 percent of the total population. Approximately 6,538,000, or 65 percent of the total, were men and 3,520,000 were women.[4]

The *institutional group*, the third type of consumer unit distinguished in the study, consists of the residents

[1] For a more complete definition of the "economic" family unit, see reports on Study of Consumer Purchases issued by the Bureau of Home Economics and the Bureau of Labor Statistics.

[2] See pp. 72 and 76–77.

[3] For further discussion, see pp. 71–72.

[4] For further discussion, see pp. 77–78.

of institutions "proper," including mental and physical defectives, dependent and delinquent children, dependent aged and poor, and inmates of prisons and reformatories, and persons living in various quasi-institutional groups—at Army and Navy posts, in Civilian Conservation Corps and labor camps, and in crews on vessels. These institutional residents cannot be considered as independent spending units comparable to single individuals, since their incomes are received, in whole or in part, as subsistence and care supplied by the institution. The institutional group itself thus constitutes the spending unit.[5]

The number of institutional residents in 1935–36 is estimated at approximately 2,000,000. Of these, 1,200,000 were residents of institutions proper, and 800,000 were members of quasi-institutional groups.

Definition of Income

The definition of income used in this study follows that of the Study of Consumer Purchases. It includes the total net money income received during the year by all members of the economic family, plus the value of certain items of nonmoney income. Facsimiles of the income schedules used in the Study of Consumer Purchases, presented in the next section, show the various items of income covered.

Money income comprises the net earnings of all family members, including work relief earnings and earnings from roomers and boarders and other paid work in the home; net profits from business enterprises operated or owned by the family, and from property bought and sold within the year; net rents from property; interest and dividends from stocks, bonds, and other property; pensions, annuities, and benefits; gifts in cash insofar as these are used during the year for current living expenses;[6] and income received as rewards, prizes, alimony, or gambling gains. In addition, money income includes money allotted to the family by a son in a Civilian Conservation Corps camp and money received as direct cash relief. This last item of income was not included on the income schedules, but the relief income distributions constructed for this report were corrected to add the estimated value of direct relief in both cash and kind.

In calculating net income from earnings and from property, business and occupational expenses, including all taxes on income-producing property and on business operations, have been deducted. Personal taxes, such as income, property, and poll taxes, have not been deducted. Business losses for the year from operation of all independent business, net losses on rental property, and money losses from sales of securities and real estate bought and sold during the schedule year have also been deducted in calculating net income. Paper losses, such as depreciation in the value of property owned, have not been counted as business losses.

Excluded from net money income are gains or losses from the sale of capital assets owned at the beginning of the schedule year; inheritances, with the exception of that part of cash inheritances used for current living expenses;[6] soldiers' bonus payments; (with minor exceptions) and funds obtained through borrowing.

Nonmoney income, for all groups of families, includes the net value of the occupancy of an owned home and rent received as pay, as well as the estimated value of direct relief received in kind. For farm and village families, it includes, in addition to these items, the net imputed value of food produced at home for the family's own use. For farm families, it also includes the net imputed value of certain other farm-produced goods used by the family—i. e., fuel, ice, tobacco, and wool—plus or minus the value of any increase or decrease in the amount of livestock owned or of crops stored for sale. Except for owned homes, no attempt was made to include as nonmoney income the value of the use of durable goods owned by the family such as automobiles, furniture and household equipment.[7]

In placing an imputed value on food and other farm products used by the family, the Consumer Purchases Study used prices separately estimated for each locality, based on the prices customarily paid for products of similar quality purchased from neighbors or from the most likely place of purchase.

In estimating the imputed value of the occupancy of owned homes for urban and village families, the difference between the rental value of the home and the expenses paid for interest on the mortgage and for taxes, insurance, and repairs was used. Information on the amount of interest paid by the family and on the number of months during which the home was occupied was obtained on the income schedule for each home-owning family. An estimate of the amount paid for expenses other than interest on the mortgage was arbitrarily made for each family on the basis of data secured by the Bureau of Labor Statistics in previous studies of family living.

The imputed value of the occupancy of farm homes was arbitrarily set at a fixed percentage of the estimated value of the dwelling, as entered on the income schedule for the family. For families living on owned farms, a figure of 9 percent was used, and for those living on rented farms, 10 percent; in the Southeast Region and in California, these figures were increased by 1 percent.[7]

[5] For further discussion, see sec. 9.

[6] Inheritances and gifts not used for current consumption are considered, as in the Study of Consumer Purchases, as changes in family assets.

[7] For items included in income for urban, village and farm families and for discussion of the way various income items were calculated and their accuracy checked, see Bureau of Home Economics report for Pacific Coast small cities and villages.

The basic class interval used in the analysis of income in the Study of Consumer Purchases was $250, with multiples of this interval at the higher income levels, and with a highest interval of $20,000 and over. In the present study, incomes below $2,500 were grouped in ten $250 classes. Between $2,500 and $5,000 there are five $500 classes; between $5,000 and $10,000, two $2,500 classes. Above $10,000, twelve income classes, ranging in width from $5,000 to $500,000, were set up for the estimated national and regional income distributions, on the basis of data from Federal income tax returns. The income classes above $10,000 were combined in the distributions for other component groups of consumers because of the impracticability of carrying out the income tax adjustments by income level beyond this point.[8]

The Year Covered

The income estimates presented in this study relate to the 12-month period ending June 30, 1936. This year was chosen because the majority of the schedules collected in the Study of Consumer Purchases covered approximately that same 12-month period. Some schedules contained information for the calendar year 1935, while others, covering the year immediately preceding the date of interview, contained information for a 12-month period ending somewhat before or after June 30, 1936. In no case did the schedule year end prior to December 1935 or later than December 1936.

Definition of Relief and Nonrelief Groups

Families and single individuals are classified in this study as receiving relief if they received any direct or work relief from any source at any time during the year covered by the estimates.

Direct relief was defined to include both relief in cash and in kind, from both public and private agencies. Mothers' pensions and all pensions of a noncontributory type paid upon proof of "need," such as certain old-age pensions, were considered direct relief, but war pensions and pensions from funds to which the individual had contributed were not considered relief. Relief vouchers for food, clothing, and other commodities were considered direct relief in kind, as were surplus commodities distributed by the Federal Government. Charitable contributions, in cash or kind, made by individuals rather than by agencies were also considered relief, but gifts from relatives and friends were not so considered.

Work relief was defined to include earnings from Federal Emergency Relief Administration, Public Works Administration, and Works Progress Administration jobs if the employee had been assigned from the relief rolls and/or had had to pass a means test before receiving the job. Earnings of supervisory employees not hired on a basis of need were not considered relief. A family who had had a son in a Civilian Conservation Corps camp at any time during the schedule year was considered to have received work relief.

Obviously, under such a definition, many families were designated as relief families although they had been largely self-supporting during the year, and had received only a small portion of their annual income from relief sources. Some families may have been on relief for only a few days and have received relatively high incomes from employment during the balance of the schedule year. Other families classified as relief families may have received only one allotment of surplus commodities during the year. This inclusiveness of the relief classification must be kept in mind in interpreting the income distributions for both relief and nonrelief families, and in appraising the relative status of the two groups.

Geographic Regions

The geographic regions defined in this study correspond with those used by the Bureau of Home Economics in the Study of Consumer Purchases.[9] They differ somewhat from the usual census groupings.[10] The five regions, and the States included in each region, are as follows:

New England:
- Maine.
- New Hampshire.
- Vermont.
- Massachusetts.
- Rhode Island.
- Connecticut.

South:
- District of Columbia.
- Delaware.
- Maryland.
- Virginia.
- West Virginia.
- North Carolina.
- South Carolina.
- Georgia.
- Florida.
- Kentucky.
- Tennessee.
- Alabama.
- Mississippi.
- Arkansas.
- Louisiana.

South—Continued.
- Oklahoma.
- Texas.

North Central:
- New York.
- New Jersey.
- Pennsylvania.
- Ohio.
- Indiana.
- Illinois.
- Michigan.
- Wisconsin.
- Minnesota.
- Iowa.
- Missouri.

Mountain and Plains:
- North Dakota.
- South Dakota.
- Nebraska.
- Kansas.
- Montana.
- Idaho.
- Wyoming.

[8] For discussion of methods used in making these adjustments, see sec. 7.

[9] For description of the regions covered by the Study of Consumer Purchases, see p. 46.

[10] The New England and the Pacific Regions correspond to the census grouping. The Southern Region comprises three of the census areas, i. e., South Atlantic, East South Central and West South Central. The North Central Region includes the census Middle Atlantic and East North Central areas and four States from the West North Central area. The Mountain and Plains Region includes the census Mountain area and the remaining States in the West North Central area.

Mountain and Plains—Con.
- Colorado.
- New Mexico.
- Arizona.
- Utah.
- Nevada.

Pacific:
- Washington.
- Oregon.
- California.

Types of Community

The classification by types of community follows closely that set up for the Study of Consumer Purchases. In that study, sample communities were selected to represent five distinct degrees of urbanization—the metropolis, the large city, the middle-sized city, the small city and the village—and farm areas. The range of population for each degree of urbanization was restricted within fairly narrow limits to make it possible to isolate the effect of this factor on consumption. In extending the data to a national basis, it was necessary to widen the size ranges of the various types of community to include all communities in the United States. The population ranges used in this study to classify all nonfarm communities are shown below in comparison with the approximate population ranges of the sample nonfarm communities covered in the Study of Consumer Purchases.

Type of community	All nonfarm communities	Sample nonfarm communities
Metropolises	1,500,000 and over	3,376,000–6,930,000
Large cities	100,000–1,500,000	253,000– 302,000
Middle-sized cities	25,000–100,000	31,000– 72,000
Small cities	2,500–25,000	9,000– 19,000
Rural nonfarm communities	Up to 2,500 [1]	[2] 500– 5,000

[1] Includes all rural nonfarm areas. All families living in communities with population under 2,500 and families living in the open country but not on farms were applied as population weights against the sample data collected from village families.
[2] Includes families living in communities within the population ranges shown but not families living in the open country. See footnote to table, p. 46.

The farm communities in the Study of Consumer Purchases were selected to represent the major types of farming throughout the country and the income data from farm families were classified according to these types. This classification has not been maintained in extending the data to the entire farm population, although consideration was given to this factor in determining the population weights to be applied against the various sample distributions for farm families.[11]

Color and Nativity Groups

Families interviewed in the Study of Consumer Purchases were classified into four color-nativity groups—native-white, foreign-born white, Negro, and "other color or races." This same classification was followed in building up the estimates in the present study. A white family was classified as foreign-born if either husband or wife—or the male or female head of the family—was born outside the United States. Mulattoes and others of Negro-mixed blood were classified as Negro. Families of other color or race included Mexican, Indian, Chinese, Japanese, Filipino, Hindu, and Korean, and mixtures of these races with others.

Normal and Broken Families

A normal family was defined in this study, as in the Study of Consumer Purchases, as a family containing both a husband and a wife, with or without other persons in the family. Any family not containing both a husband and a wife was considered a broken family.

Size of Family Classification

Families have been classified in this study into four size groups—families of two persons, families of three and four persons, families of five and six persons, and families of seven and more persons. Although the grouping is based upon the family-type classification used in the Study of Consumer Purchases, it ignores the differences in sex and age composition of families containing the same number of persons.

The normal (husband-wife) families supplying income data in the regular sample of the Study of Consumer Purchases were classified into family types, as follows:

Family composition:	*Number of persons in family*
Husband and wife only	2
Husband, wife and 1 child under 16	3
Husband, wife and 2 children under 16	4
Husband, wife, 1 person 16 and over, with or without 1 other person, regardless of age	3–4
Husband, wife, one child under 16, one person 16 or over and 1 or 2 others, regardless of age	5–6
Husband, wife, 3 or 4 children under 16	5–6
Husband, wife, 1 child under 16, and 4 or 5 others, regardless of age	7–8
Husband, wife and any combination not included in preceding types	7 or more

These family types were combined into the four size groups used in the present study. Broken families, and normal families of color-nativity groups not included in the regular income sample, were classified directly into the four size groups from information supplied on the family schedules for these groups.

The number of persons in the economic family was determined on the basis of year-equivalent members—that is, account was taken of the number of weeks each person was a member of the economic family in calculating the average size of the family over the 12-month period of the schedule year.[12]

[11] See p. 72. Data on Southern farm families were also classified according to tenure status—i. e., sharecroppers and operators. A farm operator was defined as one who owns or rents a farm as entrepreneur—i. e., is engaged in the business of farming on his own account, assuming the risks and receiving the profits of the farm enterprise. A sharecropper was defined as one who supplied his labor and some part of the expenses for the operation of the farm and received in return a specified proportion of the crop. He did not supply work animals and did not make major decisions as to farm operating policies. Farm laborers, employed on basis of a given wage for a definite period, with payment being in cash or in kind, were classified in the wage-earning group.

[12] For explanation of the method of calculating year-equivalent members, see the forthcoming report by the Bureau of Home Economics for Pacific Coast small cities and villages.

Occupational Classification

Families have been classified into broad occupational groups according to the major source of family earnings, i. e., if members of the family received earnings from two or more occupations, the family was classified according to the group from which the greater proportion of total family earnings was derived.

The occupational classification followed in this study, as in the Study of Consumer Purchases, was, in general, the classification set up by the Federal Emergency Relief Administration and adopted by the Works Progress Administration.[13] Eight broad occupational groups derived from this classification were used in the income analysis in the present study: (1) Wage-earner, (2) clerical, (3) independent business, (4) salaried business, (5) independent professional, (6) salaried professional, (7) farming, and (8) all others, including farm operators in villages or cities, persons with no earnings from occupations, and persons of unknown occupation. Families that had received relief at any time during the schedule year were excluded from the occupational classification.

Wage-earners included all skilled, semiskilled, or unskilled manual workers in manufacturing, service industries or mining. Clerical workers included office and sales personnel engaged in more or less routine work, as distinguished from salaried business workers who were persons in positions of responsibility in administration or policy making. Professional workers included those whose occupations fell into one of the recognized professional categories, such as doctors, lawyers, teachers, and artists of all types. They were classed as independent or salaried depending upon whether they were self-employed or were employed by others on a salary basis. The independent business classification was used to designate persons who were taking an entrepreneurial risk with their own or borrowed capital, who owned their equipment or place of business, and who may or may not have employed others to work for them. Families classified in the independent business group in the low income levels included small shopkeepers, dressmakers, taxidrivers and cobblers, while the upper income levels included owners and partners in large-scale enterprises. Family income from roomers, boarders, and tourists was also classified as derived from independent business.[14]

[13] The occupational classification and code, contained in Circular No. 2 of the Works Progress Administration, July 1935, and Circular 2A, Index of Occupations, was originally prepared by the research section of the Division of Research, Statistics and Finance of the Federal Emergency Relief Administration, with the assistance of the Division of Standards and Research of the U. S. Employment Service, the National Recovery Administration Construction Code Authority, and the Occupational Information Division of the New York State Employment Service. The coding scheme was adapted from that used by the U. S. Bureau of the Census in 1930.

[14] The above description of the occupational groups is based on the description appearing in the forthcoming report of the Bureau of Home Economics for the Pacific Coast small cities and villages. For detailed description of occupational groups and of the method of classifying families by occupation, see that study.

SECTION 2. THE STUDY OF CONSUMER PURCHASES

The major source of data used in preparing the estimates of income distribution presented in this report was the Study of Consumer Purchases. The results of this study, however, were supplemented by data from a wide variety of other sources. These sources are mentioned in the sections of the appendix which follow, in connection with the description of the procedures used at each stage of the work.

Since the data from the Consumer Purchases Study were utilized so extensively in building up the national estimates, it seems advisable to present here a brief description of the scope and nature of this study and of the methods used in collecting and tabulating the data. More detailed descriptions of the study will appear in reports now in preparation by the two Federal bureaus responsible for the administration of the project.[1] These reports should be consulted by readers interested in further information regarding the methodology of the study or in the findings for specific communities.[2]

Purpose of the Study

The study was undertaken in order to provide more adequate and comprehensive data on the incomes and expenditures of American families. None of the earlier studies in this field had been broad enough to supply information on a Nation-wide basis, representative of all important groups of the population. The project was planned to meet the need for such information. It covers a large and extensive sample of families living in cities of various sizes, in villages and on farms in several areas of the country.

The major purpose of the study centers in the analysis of the way in which American families spend their incomes, rather than in the amount of income they receive. This purpose therefore determined the choice of communities covered by the project, the character and size of the sample, and the definitions and classifications used in obtaining and tabulating the data.

Many of these definitions and classifications have been carried over from the survey to the present study of income distribution. Brief explanations in regard to the more important of these points have been presented in the preceding section of this appendix.

Administration of the Study

The study was conducted by the Bureau of Home Economics of the United States Department of Agriculture and the Bureau of Labor Statistics of the United States Department of Labor, with the cooperation of the National Resources Committee, the Central Statistical Board, and the Works Progress Administration. The plans for the project were formulated by the Consumption Research staff of the National Resources Committee and the staffs of the two bureaus, with the advice of the two other cooperating agencies.

The funds for the study were supplied by the Works Progress Administration, and the data were collected and tabulated with the aid of workers selected from Works Progress Administration rolls. The field work was started in the early spring of 1936 and terminated at the close of that year.

The administrative direction of the study was divided between the two bureaus, the Bureau of Home Economics conducting the survey in rural farm and nonfarm areas and in the majority of the small cities covered, and the Bureau of Labor Statistics assuming responsibility for the other small cities and for all of the larger urban communities. The project was carried out by the bureaus under the guidance of a Steering Committee composed of representatives of the five

[1] A series of preliminary mimeographed releases has been issued by each bureau, presenting a few selected tables summarizing the results of the basic tabulations. The first printed report to be issued by the Bureau of Home Economics will cover family incomes and expenditures in the Pacific Coast small cities and villages, and the first to be issued by the Bureau of Labor Statistics will cover similar data for Chicago, Ill.

[2] An interim report of plans for the study, prepared by the Consumption Research staff of the National Resources Committee, with the cooperation of the Economics Division of the Bureau of Home Economics and the Cost of Living Division of the Bureau of Labor Statistics, was issued in mimeographed form in January 1936. For other discussions of the study, see the following articles: *Plans For a Study of the Consumption of Goods and Services by American Families*, by Kneeland, Hildegarde, Schoenberg, Erika H., and Friedman, Milton, the Journal of the American Statistical Association, March 1936, vol. 31, pp. 135–150; *Consumer Purchases—Some Results of a National Study*, by Kaplan, A. D. H., Proceedings of the Boston Conference on Distribution, September 29, 1936; *Analyzing Families by Composition Type With Respect to Consumption*, by Monroe, Day, the Journal of the American Statistical Association, March 1937, vol. 32, pp. 35–39; and *Methods and Problems of Sampling Presented by The Urban Study of Consumer Purchases*, by Schoenberg, Erika H., and Parten, Mildred, the Journal of the American Statistical Association, June 1937, vol. 32, pp. 311–322.

cooperating agencies and with the aid of a Technical Subcommittee similarly composed.[2a]

Communities Covered by the Sample

The communities covered by the study include 51 cities, 140 villages, and 66 farm counties. In all, 30 States are represented in the sample. The location of the communities is shown on the map presented as chart 10.

These communities were selected so as to provide a basis for comparisons between different regions of the country, between different degrees of urbanization, and between different types of farming. Since the number of communities which could be included was not sufficient to cover adequately all of the major geographic areas or all sizes of community, it was necessary to concentrate the sample in a few fairly homogeneous areas and in communities of certain size ranges. It was also necessary to restrict the farm sample to sections representing the more important types of farming. This procedure was adopted to facilitate clear-cut comparisons in analyzing the effects of the various factors influencing the consumption habits of the population.

In accordance with this policy, the urban sample was located within six geographic regions, fairly closely defined—New England, East Central, West Central, Southeast, Rocky Mountain, and Pacific Northwest. Within each region, the sample included one large city, two or three middle-sized cities, and from four to nine small cities. In addition, two very large cities—New York and Chicago—were included to provide a picture of metropolitan living.

The rural sample was selected to include two or more groups of villages and two or more groups of farm counties within each of these six regions, with additional rural sections located outside of these areas. In carrying out the study it was found necessary, for administrative reasons, to make some changes in the original list of communities, which led to a regrouping of the farm and village areas and of the small cities in the West Central Region, those in the eastern half of this region being combined with the East Central Region, and those in the western half with the Mountain States.

This revised regional grouping has been followed in utilizing the data in the present study of income distribution. A list of the States included in each region was presented in the previous section.[3]

The list of cities covered by the study appears in table 1A in the next section of this appendix. To this list, however, must be added nine cities and three rural sections for which data were collected in the Study of Consumer Purchases but not utilized in the present report. The names of these cities and the reasons for their omission are given in footnote 6 on page 56.

The size ranges of the cities and villages covered, as shown by the 1930 Census of population, are as follows:

Type of community	Number	Population range
Metropolises	2	3,376,438–6,930,446
Large cities	6	252,981–301,815
Middle-sized cities	14	30,567–71,864
Small cities	29	9,370–18,901
Villages [1]	140	544–5,183

[1] Effort was made to select villages of 1,000 to 2,500 population. For administrative reasons, however, it was necessary to choose a number of villages of less than 1,000, and a few of approximately 3,000, with one (Camden, S. C.) of slightly over 5,000.

The particular villages included in the sample, grouped by States within the five geographic regions adopted, were the following:

New England (14 villages):
- Massachusetts: Avon, East Bridgewater, Hebronville, Kingston, North Easton, North Dighton, North Raynham, South Hanson-Bryantsville
- Vermont: Bristol, Essex Junction, Northfield, Richford, Swanton, Waterbury

North Central (46 villages):
- Illinois: Atlanta, Bement, Cerro Gordo, Farmer City, Maroa, Monticello, Mount Pulaski, Tuscola
- Iowa: Brooklyn, Bussey, Dallas, Earlham, Eddyville, Melcher, Montezuma, New Sharon, Pleasantville, State Center, Victor
- Michigan: Blissfield, Chelsea, Concord, Grass Lake, Hudson, Jonesville, Parma, Tecumseh
- Ohio: Bellville, Cardington, Fredericktown, Mount Gilead, Perrysville, Plymouth
- Pennsylvania: Denver, Marietta, New Freedom, New Holland, Quarryville, Spring Grove, Wrightsville
- Wisconsin: Horicon, Lake Mills, Mayville, Mount Horeb, Sun Prairie, Waterloo

South (34 villages):
- Georgia: Comer, Commerce, Greensboro, Jefferson, Madison, Social Circle, Washington, Winder
- Mississippi: Drew, Hollandale, Indianola, Itta Bena, Leland, Moorhead, Mound Bayou, Rosedale, Ruleville, Shaw, Shelby
- North Carolina: Elm City, Franklinton, Louisburg, Nashville, Spring Hope, Wake Forest, Whitakers, Zebulon
- South Carolina: Bishopville, Camden, Lake City, Lamar, Manning, Summerton, Timmonsville

Mountain and Plains (22 villages):
- Colorado: Glenwood Springs, Meeker, Red Cliff, Rifle
- Kansas: Bucklin, Cimarron, Fowler, Kinsley, Meade, Spearville
- Montana: Forsyth
- North Dakota: Casselton, Cooperstown, Finley, Hatton, Hillsboro, Hope, Lidgerwood, Mayville, Portland
- South Dakota: Belle Fourche, Sturgis

Pacific (24 villages):
- California: Beaumont, Brea, Ceres, Elsinore, Hemet, La Habra, Manteca, Newman, Oakdale, Placentia, San Jacinto, Tustin
- Oregon: McMinnville, Newberg, Sheridan, Silverton, Woodburn
- Washington: Arlington, Blaine, Burlington, Lynden, Marysville, Monroe, Snohomish

[2a] For membership of these committees, see footnote 42, p. 43.
[3] See pp. 41-42.

The farm counties included in the sample, also grouped according to States within the geographic regions, are listed below. The dominant type of farming prevailing in each group of counties is also indicated.

New England (4 counties):
- Massachusetts:[4] Bristol, Plymouth (dairy and poultry)
- Vermont: Chittenden, Franklin (dairy)

North Central (18 counties):
- Illinois: De Witt, Logan, Macon, Piatt (corn or cash grain)
- Iowa: Madison, Mahaska, Marion, Marshall, Poweshiek (animal specialty)
- Michigan: Lenawee (dairy and general)
- New Jersey:[4] Camden, Gloucester, Salem (truck)
- Ohio: Crawford, Knox, Richland (general)
- Pennsylvania: Lancaster (general)
- Wisconsin: Dane (dairy)

South (22 counties):
- Georgia: Clarke, Elbert, Greene, Jackson, Madison, Morgan, Oconee, Wilkes (cotton)
- Mississippi: Bolivar, Leflore, Sunflower, Washington (cotton)
- North Carolina: Jackson, Macon (self-sufficing)
- North Carolina: Edgecombe, Nash (cotton and tobacco)
- South Carolina: Clarendon, Darlington, Florence, Lee, Marion, Sumter (cotton and tobacco)

Mountain and Plains (13 counties):
- Colorado: Eagle, Garfield, Rio Blanco (range livestock)
- Kansas: Edwards, Ford, Gray, Meade (wheat or cash grain)
- Montana: Custer (range livestock and cash grain)
- North Dakota: Barnes, Cass, Griggs, Steele (wheat or cash grain)
- South Dakota: Pennington (range livestock and cash grain)

Pacific (9 counties):
- California: Orange, Riverside (fruit)
- California: San Joaquin (fruit and dairy)
- Oregon:[4] Clackamas, Marion, Multnomah, Polk, Washington (part-time)
- Oregon: Marion, Polk (general and fruit)
- Washington: Whatcom (poultry and dairy)

Sampling Procedures

Random sampling methods were used in the study, with controlled sampling superimposed, three distinct samples being taken in obtaining the data. The information was obtained by field agents, through personal interview with the housewife and other members of the family.

The Record Card Sample.—A random sample of all types of families was first taken in each community selected for study, each dwelling unit being given an equal chance of inclusion. This sample varied from a coverage of approximately 4 percent in New York City to a 100 percent coverage in most small cities and in all villages. A record card was filled out for each family contacted, supplying information on the color and nativity group to which the family belonged and on the composition of the family, and certain other information necessary for the selection of families to be interviewed in the second or income sample.

[4] Not utilized in present study of income distribution.

The Income Sample.—The income sample was limited in most communities to native-white families that had contained both husband and wife throughout the schedule year and that maintained housekeeping quarters at the time of the interview. For farm families there were the additional requirements that the home meet the census definition of a farm, and that the family had operated the farm throughout the preceding year. Native Negro normal families were included in the regular sample in all rural and urban communities surveyed in the Southeast area and in New York City and Columbus, Ohio.

Thus the income sample was a random sample drawn from a broader random sample and comprised of all families that met certain fixed qualifications admitting them to the "universe" selected for study.[5] From all such "eligible" families, detailed data on income, family composition, occupation, and housing were obtained by means of a short sampling schedule called the *family schedule*. The information obtained from each family covered the 12-month period immediately preceding the interview or—in the case of some families interviewed in the spring months—the calendar year 1935.

In certain communities family schedule data were also obtained from a relatively small random sample of the families that were ineligible for the regular income sample, including families in which either husband or wife was foreign-born, Negro families in communities where they were not included in the regular sample, and families not containing both husband and wife. This sample of ineligibles[6] supplied information on the relative income status of these less numerous groups in the population and made it possible to obtain an over-all picture of income, occupation, and family-type distributions in the sample communities covered.[7]

The Consumption Sample.—The information on family expenditures and savings was obtained from a third sample of families, selected from the income sample on the basis of certain controls designed to limit the types of families and the number of families of each type interviewed. This information, which constitutes the core of the study, was collected by means of an *expenditure schedule*, covering the goods and services purchased by the family and changes in family

[5] Single individuals were included in the income sample in four cities—Providence, R. I., Columbus, Ohio, Portland, Oreg., and Chicago, Ill. See p. 67 below.

[6] Referred to elsewhere in this report as the "clipped sample"—so-called because the corners of the family schedules were clipped off to distinguish them from the schedules from the regular income sample.

[7] Such samples were taken in all of the 51 cities covered in the Study of Consumer Purchases, except the following 12: Astoria, Oreg.; Beaver Dam, Wis.; Boone, Iowa; Dodge City, Kans.; Greeley, Colo.; Greenfield, Mass.; Klamath Falls, Oreg.; Moberly, Mo.; New Philadelphia, Ohio; New York, N. Y.; Provo, Utah; Willimantic, Conn. In addition, clipped samples were taken in the following five farm areas: California, Illinois, Michigan, Pennsylvania, Washington. The clipped sample data for all of these communities, however, were not utilized in the present report. The list of the communities that were omitted is given in footnote 6, on p. 57.

assets and liabilities during the 12 months covered by the income schedule.

The expenditure schedule was supplemented, for those families willing and able to give more detailed information, by check lists on specific items of clothing, furnishings and equipment purchased during the schedule year, and by a check list on food expenditure for a 7-day period. Weekly records of food consumption, kept by the housewife at several seasons of the year, were also obtained from a still more limited sample of families.

The Schedules Used

The family schedules obtained in the income sample contained all of the information from the Consumer Purchases Study utilized in the present report on the distribution of consumer income. The schedules used for urban families by the Bureau of Labor Statistics and for farm families by the Bureau of Home Economics are shown in facsimile below.

The schedule for village and small-city families used by the latter bureau was identical in content and wording with the urban schedule shown, except that for the village group an additional set of questions was included to cover the estimated money value of fruits and vegetables, poultry and other foods produced by the families for their own use. This source of family income occurs so infrequently in urban communities that it was not considered necessary to provide for it in the schedule used for city families.

The farm and urban schedules were identical, it will be noticed, for questions on the composition of the economic family and the household, and on most of the items of income. A number of additional questions, however, were needed on the farm schedule in order to arrive at the net income from the farm during the schedule year.

With all of the schedules used, the information on earnings was obtained in careful detail, so as to insure the inclusion of all of the earnings of each member of the family during the year. Work relief earnings were entered in the same section of the schedules as were earnings from other employment. On the urban and village schedules, a column was provided for indicating the status of the worker—whether salaried or wage earning (designated s), work relief (designated x), or working on own account (designated o).

The last questions called for on the schedules, it will be observed, asked whether the family had received relief in any form at any time during the year. Although the amount of work relief earnings was recorded, no attempt was made to determine the amount of direct relief received, either in cash or in kind, as it was felt that such estimates would be too much subject to error to justify tabulation. The omission of this item of income from the schedules proved to be a serious handicap in utilizing the data in the present study of consumer income distribution. The methods used to offset this omission are described in other sections of this report.

Since the record card served as a sampling device in the study to facilitate the selection of families interviewed in the income sample, it is also reproduced in facsimile below. Both the farm record card and that used for urban families are presented. The card used for village families was identical with that for the urban group.

Number and Distribution of Families in Income Sample

The broad random sample of families contacted in the record card sample totalled approximately 700,000 families. Family schedules, containing income data, were obtained from about 300,000 of these families. Of this number, about 274,000 were used in preparing the income distributions presented in this report.

The distribution of these sample families according to region and type of community is summarized in table 10A below, and the distribution by color-nativity group in urban and in rural communities within each region is indicated in table 11A.

With respect to occupation and to family size, the sample was random within each community for the universe covered, and—as elsewhere indicated [8]—served in the present study as a basis for distributing all nonrelief families in the population according to these factors.

With respect to income distribution, the sample was of course also random within each community. But—as indicated at other points in the report—there is reason to believe that the number of families included in the sample at the high income levels somewhat underrepresents the total number in the population. Although every effort was made to maintain the randomness of the sample, families in the wealthier neighborhoods were more frequently found to be away from home and more frequently refused to give the information desired, and these difficulties could not be entirely offset by the corrective sampling procedures adopted. The income distributions obtained from the sample for income levels of $7,500 and over were therefore adjusted, in the present study, on the basis of data from Federal income tax returns for 1935 and 1936.[9]

Methods Used to Assure Reliability of Data

In a study of this type, and especially in one of this magnitude, some question inevitably arises as to the

[8] See pp. 74-75.
[9] See sec. 7 of this appendix.

Urban family schedule used with income sample

FRONT

CONFIDENTIAL.—The information requested in this schedule is strictly confidential. Giving it is voluntary. It will not be seen by any except sworn agents of the cooperating agencies and will not be available for taxation purposes.

B. L. S. 937
U. S. DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
IN COOPERATION WITH
NATIONAL RESOURCES COMMITTEE
WORKS PROGRESS ADMINISTRATION
DEPARTMENT OF AGRICULTURE
WASHINGTON

STUDY OF CONSUMER PURCHASES
A FEDERAL WORKS PROJECT
FAMILY SCHEDULE—URBAN

Code No. .....
Schedule No. .....
City ..... Dist. .....
Agent .....
Date of interview ....., 1936.

I. YEAR COVERED BY SCHEDULE

Twelve months beginning ....., 1935,
and ending ....., 193...

II. FAMILY COMPOSITION (during schedule year)

A	B	C	D	E
Members of economic family (all persons sharing family income, including those temporarily away from home)	Sex	Age at last birthday	Number of weeks during year: In home	Away from home
1. Husband	M			
2. Wife	F			
Other Members of Family (give relationship)				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

If any member of family died during year, circle number in front of name. 14—3280

III. OTHER MEMBERS OF HOUSEHOLD (during schedule year)

Status	Persons	No. weeks
1. Sons and daughters boarding and rooming at home: Age ....., sex		
2. Other roomers with board		
3. Roomers without board		
4. Boarders without room		
5. Tourists or transients		
6. Guests		
7. Paid help living in		

IV. HOME OWNERSHIP

1. Number of months during schedule year living:
   a. As renter ____ *b.* As owner: 1st home ____ 2d home ____

IF AN OWNER:	1st home	2d home
2. Monthly rental value	$	$
3. Was home mortgaged (or being purchased on land contract)?	*a.* ☐ Yes. *b.* ☐ No.	*a.* ☐ Yes. *b.* ☐ No.
4. If mortgaged, interest on mortgage (or land contract) for months occupied	$	$

V. RESIDENCE IN THIS CITY

For how many months of schedule year did the family live in this city? .....

VI. LIVING QUARTERS OCCUPIED (at date of interview)

1. Did family occupy these living quarters at end of schedule year? *a.* ☐ Yes. *b.* ☐ No.
2. Does family ☐ own or ☐ rent these living quarters?
3. Monthly rent $.....*, if renter.*
4. Type of living quarters:
   One-family house:
   a. ☐ Detached.
   b. ☐ Attached.
   Two-family house:
   c. ☐ Side by side.
   d. ☐ Two decker.
   Apartment in building for:
   e. ☐ Three families.
   f. ☐ Four families.
   g. ☐ Five or more families.
   Dwelling unit in business bldg.:
   h. ☐
   Room or rooms:
   i. ☐ With another family.
   j. ☐ In rooming house.
   Other:
   k. ☐

VII. COLOR

a. ☐ White. *b.* ☐ Negro.

BACK

VIII. MONEY EARNINGS OF FAMILY FROM EMPLOYMENT OR BUSINESS OUTSIDE OF HOME OR AT HOME (during schedule year)

A	B	C	D	E	F	G	H	J
Members of family gainfully employed			OCCUPATION during year					
Relationship	Line No. If A	Age	Kind of work (such as machinist, bookkeeper, merchant, author)	Nature of industry (such as cotton mill, bank, shoe store, independent)	Status of worker (S, X, O)	Rate of earnings per unit of time	Time employed (use same time unit as in col. G)	Total money earnings from employment or business
1.						$.....per.....		$.....
2.						.....per.....		
3.						.....per.....		
4.						.....per.....		
5.						.....per.....		
6.						.....per.....		
7.						.....per.....		
8.						.....per.....		
9.						.....per.....		
10.						.....per.....		

IX. OTHER MONEY INCOME	Total for year
1. Income from roomers and boarders (gross)	$
2. Income from work in home not entered in VIII above (specify)	
3. Interest and dividends from stocks, bonds, bank accounts, trust funds, etc	
4. Profits not included in VIII above, less expenses	
5. Rents from property, less expenses	
6. Pensions, annuities, benefits	

IX. OTHER MONEY INCOME (continued)	Total for year
7. Gifts in cash for current use from persons not members of economic family	$
8. Losses in business (subtract). $.....	x x x x x
9. TOTAL money income	$
10. Has family received direct relief (in cash or kind), during schedule year? *a.* ☐ Yes. *b.* ☐ No.	
11. Has any member of family had work relief during schedule year? *a.* ☐ Cash. *b.* ☐ Kind. *c.* ☐ None.	

U.S. GOVERNMENT PRINTING OFFICE 14—3280

Farm family schedule used with income sample

FORM 100 — FRONT

I. YEAR COVERED BY SCHEDULE

Twelve months beginning _____, 1935
and ending _____, 193

U. S. DEPARTMENT OF AGRICULTURE
BUREAU OF HOME ECONOMICS
IN COOPERATION WITH
NATIONAL RESOURCES COMMITTEE
WORKS PROGRESS ADMINISTRATION
AND
DEPARTMENT OF LABOR
WASHINGTON

STUDY OF CONSUMER PURCHASES

A FEDERAL WORKS PROJECT

FAMILY SCHEDULE—FARM

Number in economic family _____ Code No. _____
Inc. _____ Family schedule No. _____
Ctr. _____ Expenditure schedule No. _____
County _____
Agent _____ M. C. D. _____
Date of interview _____ State _____

II. FAMILY AND HOUSEHOLD COMPOSITION during schedule year

A — Members of economic family (all persons sharing family income, including those temporarily away from home)	B — Sex	C — Age at last birthday	D — Number of weeks during year: At home	E — Number of weeks during year: Away from home
1. Husband	M			
2. Wife	F			
Other members of family (give relationship)				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

If any member of family died during schedule year, circle number in front of name.

Other persons living in home for one or more weeks during schedule year

A — STATUS (paid help, roomers, guests, children boarding)	B — Number of persons	C — Total number of weeks in household
11. Sons and daughters boarding and rooming at home (specify age and sex)		
12. Other roomers with board		
13. Roomers without board		
14. Boarders without room		
15. Tourists and transients		
16. Guests (overnight or longer)		
17. Paid help living in		

III. GROSS MONEY INCOME FROM FARMING during schedule year

	Total for year
Money received from sales of:	
1. Wheat	$
2. Other grains	
3. Vegetables	
4. Fruits, grapes, berries, nuts	
5. Tobacco	
6. Cotton, cottonseed	
7. Dairy products (milk, cream, butterfat, cheese)	
8. Poultry (eggs, chickens, turkeys, ducks, geese)	
9. Livestock (cattle, calves, hogs, sheep, wool)	
10. Other products	
Money received from other sources:	
11. A. A. A. benefit and rental payments (specify product by line number shown above)	
12. Other farm income	
13. TOTAL	$

CONFIDENTIAL.—The information requested in this schedule is strictly confidential. Giving it is voluntary. It will not be seen by any except sworn agents of the cooperating agencies and will not be available for taxation purposes.

TYPE OF FARM.—Circle line number of main product of farm. If general farm, circle line numbers of main products.

IV. FARM EXPENSES during schedule year

	Total for year
1. Hired labor for farm	$
2. Livestock purchased for resale or replacement	
3. Feed, hay, straw	
4. Fertilizer, spraying material	
5. Seeds, plants, trees	
6. Machinery, tools (repairs, replacements)	
7. Gasoline, oil, tires, etc., for farm production	
8. Repairs on farm buildings and fences	
9. Taxes and insurance on farm property	
10. Interest and refinancing charges on farm mortgage	
11. Rent for land and buildings	
12. Other farm expenses	
13. TOTAL	$

V. SIZE, TENURE, AND VALUE OF FARM(S) operated during schedule year

1. Total acres in farm(s) operated _____
2. Acres owned _____
3. Acres cash rented _____
4. Acres share rented _____
5. If share rented, does owner furnish all of the work animals; a. ☐ Yes. b. ☐ No.
6. Value of farm(s) (land and buildings) $ _____
7. Value of family's dwelling $ _____

(OVER)

BACK

VI. MONEY EARNINGS OF FAMILY FROM EMPLOYMENT OTHER THAN OPERATION OF FARM during schedule year

A — Members of family gainfully employed: Relationship	B — Line number from II-A	C — Age	D — Occupations during year (give kind of work and nature of industry, such as laborer on road work)	E — Rate of earnings per unit of time	F — Time employed (use same time unit as in E)	G — Total money earnings from employment
1.				$ per		$
2.				per		
3.				per		
4.				per		
5.				per		
6.				per		
7.				per		
8.				per		
9			TOTAL (1-8)			$

VII. OTHER MONEY INCOME during schedule year

	Total for year
1. From roomers and boarders (gross)	$
2. From sale of home-made products	
3. From work in home not entered in VI above (specify)	
4. Interest and dividends from bonds, stocks, bank accounts, trust funds, etc.	
5. Profits not included in VI above, less expenses	
6. Rents from property, less expenses	
7. Pensions, annuities, benefits	
8. Gifts in cash for current use from persons not members of economic family	$
9. Other money income	
10. TOTAL (1-9)	$
11. Losses from business not deducted above	
12. Differences (10 minus 11)	$
13. Has family received direct relief (in cash or kind) during schedule year?	a. ☐ Yes. b. ☐ No.
14. Has any member of family had work relief during schedule year?	a. ☐ Cash. b. ☐ Kind. c. ☐ None.

VIII. VALUE OF PRODUCTS FURNISHED BY FARM FOR FAMILY'S OWN USE during schedule year

	Total value for year
1. Milk for drinking and cooking: Quarts per week; Number of weeks	$
2. Cream for table use and for butter: Quarts per week; Number of weeks	
3. Eggs: Fall and winter: Dozen per week; Number of weeks. Spring and summer: Dozen per week; Number of weeks	
4. Poultry for meat: Winter and spring: Number per month; Number of months. Summer and fall: Number per month; Number of months	
5. Pork, dressed weight: Pounds for year	
6. Other meats, dressed weight: Pounds for year	
7. Potatoes (white): Bushels for year	
8. Value of other food from farm garden	
9. Value of fruits	
10. Value of other food (sirups, grain products, etc.)	
11. Value of fuel	
12. Value of other products (wool, tobacco, etc.)	
13 TOTAL	$

IX. TOTAL INCOME (III-13 minus IV-13 plus VI-9 plus VII-12 plus VIII-13) $ _____

X. COLOR: a. ☐ White. b. ☐ Negro.

U. S. GOVERNMENT PRINTING OFFICE 8—9668

Record cards used with urban and with farm families

CONFIDENTIAL.—The information requested in this schedule is strictly confidential. Giving it is voluntary. It will not be seen by any except sworn agents of the cooperating agencies and will not be available for taxation purposes.

STUDY OF CONSUMER PURCHASES
A FEDERAL WORKS PROJECT
RECORD CARD—URBAN

(City) (State)

B. L. S. 946
U. S. DEPARTMENT OF LABOR
BUREAU OF LABOR STATISTICS
IN COOPERATION WITH
NATIONAL RESOURCES COMMITTEE
WORKS PROGRESS ADMINISTRATION
DEPARTMENT OF AGRICULTURE
WASHINGTON

Schedule No. _____
E. D. _____
Agent _____
Editor _____

1. Street and number _____
2. Type of structure [1] _____
3. Apartment or floor _____ ☐ Vacant
4. Name _____ Telephone _____

Visit	Date	Time of day	At home Yes	At home No	Information obtained	Person interviewed
5. First						
6. Second						
7. Third						

8. Color: *a.* ☐ White *b.* ☐ Negro *c.* ☐ Other

9. Number in economic family: *a.* ☐ Two or more persons *b.* ☐ One person

Born In United States

	Yes	No	
10.	☐	☐	Husband or male head
11.	☐	☐	Wife or female head

12. Residence in (*a*) housekeeping quarters, or (*b*) rooms with another family, in rooming house, hotel, or institution:
a. ☐ Housekeeping quarters
b. ☐ Rooms only

13. Economic family includes husband and wife: [2]
a. ☐ Yes *b.* ☐ No
If yes:
c. Number of years married:
(1) ☐ Less than one
(2) ☐ One or more

If there is NO CHECK in any of the heavy boxes, request family schedule.

[1] Specify one-family house, detached, semidetached or row; two-family house, side by side or two decker; three-, four-, five- or more family apartment building; business building; hotel; institution.
[2] In filing record cards for ineligibles, file separately cards for families which are ineligible only because they come under 13b.

14—3309

BHE 112

U. S. DEPARTMENT OF AGRICULTURE
BUREAU OF HOME ECONOMICS
IN COOPERATION WITH
NATIONAL RESOURCES COMMITTEE
WORKS PROGRESS ADMINISTRATION
DEPARTMENT OF LABOR
WASHINGTON

STUDY OF CONSUMER PURCHASES
A FEDERAL WORKS PROJECT
RECORD CARD—FARM

(County) (State)

Record card No. _____
Family schedule No. _____
M. C. D. _____
Agent _____

1. Location (describe) _____ ☐ Vacant
_____ Telephone _____
2. Name _____

Visits	Date	Time of day	At home Yes	At home No	Information refused	Person interviewed
3. First						
4. Second						
5. Third						

6. Color: *a.* ☐ White. *b.* ☐ Negro. *c.* ☐ Other.
7. Number in family: *a.* ☐ Two or more persons. *b.* ☐ One person.

Born in United States.

	Yes	No	
8.	☐	☐	Husband, or male head.
9.	☐	☐	Wife, or female head.

10. Has family operated THIS farm for last 12 months? *a.* ☐ *Yes* *b.* ☐ *No*
11. Was farm operated for wage or salary last year? *a.* ☐ *Yes* *b.* ☐ *No*
12. Does farm have more than 3 acres? *a.* ☐ *Yes* *b.* ☐ *No*
13. If *No*, was gross income last year more than $250? *a.* ☐ *Yes* *b.* ☐ *No*
14. Principal crop _____
15. Economic family includes husband and wife:[1] *a.* ☐ *Yes* *b.* ☐ *No*
If *yes:*
c. Number years married:
(1) ☐ Less than one.
(2) ☐ One or more.

If there is NO CHECK in any of the heavy boxes, and if the type of farming is one to be studied, request family schedule.

[1] In filing record cards for ineligibles, file separately cards for families eligible except for 15b—a family which does not include husband and wife.

14—3709

reliability of the data collected. A brief indication of the methods used to assure the accuracy of the schedules and the randomness of the sample may therefore be desirable. For a fuller description of these precautions, the reader is referred to reports prepared by the two bureaus administering the study.

The first prerequisite for reliability in the results of such a study was, of course, careful advance planning of the collection and analysis of the data, with careful preparation of instructions for supervisors, field agents, editors, and tabulators. This requirement was clearly recognized by the Government agencies sponsoring the project, and arrangements were made on the initiation of the study to provide for adequate preparation. The various smaller studies of consumer expenditures previously made by the bureaus conducting the project and by other research agencies supplied a background of experience indispensable for this large-scale undertaking.

A second prerequisite was obviously the careful selection and training of personnel. Here again every effort was made to meet the needs of the project. The supervisory staffs in the regional administrative offices and in the local collection offices consisted of college graduates with training in the social sciences and statistics, and in many cases with experience in the direction of surveys. The field agents and editors were selected from persons of clerical and professional rating on Works Progress Administration rolls by means of aptitude tests. All of the workers appointed on the project were given a training period of 2 or 3 weeks, with practice in carrying through the duties to which they were assigned. Thus every field agent and editor started work with a knowledge of the requirements for correct, consistent reports.

As a further assurance of the accuracy of the data collected, a system of check interviewing was adopted, under the guidance of the regional office staffs. In general, one out of every eight families visited by each agent was revisited by a supervisor, editor or squad leader, to check enough of the entries on the schedule to prove that the agent had obtained the information from the family and had reported it correctly. The schedules to be checked were chosen at random. Similarly, spot editing of schedules was carried out by the regional editors, in order to check the work of the local editing supervisors.

In addition to the need for accurate collecting and editing of schedules, there was need for assuring that the sample of families from whom the schedules were obtained in each community was random. The first requirement here was for a satisfactory method of selecting the names or addresses from which a random sample could be drawn. In most of the smaller communities this problem was cared for by a 100 percent coverage of all dwelling units in the record card sample. In the larger cities, however, it was necessary to use city directories or similar lists as a basis for the selection of a series of random samples of dwelling units. For the farm counties, rural route maps were used, since comprehensive lists were not available. The procedures for drawing these samples were carefully developed by the Washington staffs of the two bureaus and carefully supervised through the regional offices.

The selection of a random sample of dwelling units, however, did not insure the actual collection of schedules from a random sample of families. In the course of the field work various difficulties were encountered because of the refusal or inability of some families to give the desired information, or because of unsuccessful attempts to contact families. To meet these difficulties, various preventive and corrective measures were adopted. Two or three calls were made upon such families before a record card or schedule with partial or no information was turned in. A special analysis was then made of the cards and schedules showing refusals or incomplete information in order to determine the economic or occupational groups from which they came. On the basis of this analysis, a revisiting or "recapture" program was instituted to offset the bias in the sample, the most skillful field agents being assigned to this work. Where a sufficient number of cases could not be "reclaimed" in this way, provision was made in some cities for the substitution of a neighboring family for the family refusing information. The instructions for this procedure were carefully drafted so that in each case a family belonging to a similar economic group was contacted for substitution.

As indicated above, this program for eliminating the bias in the sample did not fully insure adequate representation of the high income levels. Aside from this limitation, however, the sampling procedures used in the study appear to justify confidence in the reliability of the results and in the randomness of the income schedules. This confidence is further justified by the internal consistency revealed in the sample distributions for the various communities covered by the study.

SECTION 3. THE SAMPLE DISTRIBUTIONS FOR NONRELIEF FAMILIES

The sample income distributions used to distribute all families in the United States by income level were derived in the first instance from sample data collected in the Study of Consumer Purchases. The weighted distributions were then adjusted in accordance with data from Federal income tax returns for 1935 and 1936.[1]

The sample income data for nonrelief families and for families that had received relief at some time during the schedule year were tabulated separately by the Study of Consumer Purchases, so that the sample income distributions for nonrelief and for relief families built up from these data were prepared quite independently, although very similar procedures were followed.[2]

It is the purpose of this section of Appendix A to describe how the sample data for nonrelief families were combined to obtain the percentage distributions against which the population weights for nonrelief families were finally applied. The sample distributions for relief families and the population weights for both groups are described in later sections.

Classification of Families in Sample Data

In tabulating the income data from the Study of Consumer Purchases, each city was treated as a separate tabulation unit, but the villages and the farm areas were grouped by States into the village and farm tabulation units indicated in the summary tabulation on pages 55 and 56. Separate tabulations were made for Negro and for white families in each type of community in the South, and in New York City and Columbus, Ohio. In Southern farm areas, operators and sharecroppers were classified separately within each color group.

Income data for native-white normal families were available from the regular income sample,[3] which was taken in every community covered by the study. These data were classified by income level for each family type within each occupational group.[4] Data for Negro normal families were available from the regular income samples in the South and in the two North Central cities, and were classified in a similar manner. Clipped sample data[3] for native-white broken families and for minor color-nativity groups were available for 39 cities and for farm areas in 5 States.[5] These data had not been classified by income level for each family type and each occupational group at the time the preparation of the income distribution estimates was begun. Accordingly, the data were tabulated by the National Resources Committee directly from the family schedules which were loaned for this purpose by the Bureau of Labor Statistics and the Bureau of Home Economics.

Distributions by Family Size and by Occupational Group

The three-way classifications of the regular sample data—by income level for each family type within each occupational group—resulted in somewhat thin frequency distributions for certain of the qualitative groups in some sample communities. It was decided, therefore, to use two two-way classifications of the data by income level in building up the sample distributions: (1) each family type, all occupational groups combined, and (2) each occupational group, all family types combined.

The sample frequency distributions for the various family types were combined into frequency distributions for four family sizes—two-person families, three- and four-person families, five- and six-person families, and seven- or more-person families—which were used in building up the type of community, regional, and national estimates. The tabulations by occupational group were used in building up the occupational estimates for nonrelief families, and in building up a

[1] For description of the way the income tax data were used to adjust the distributions, see sec. 7.

[2] For definition of nonrelief and relief families, see p. 42.

[3] For description of regular and clipped samples, see p. 47.

[4] For description of family types and occupational groups used in the Study of Consumer Purchases, see pp. 43–44. For farm units, the occupational group was implicit in the type of community and only a two-way classification was necessary.

[5] For list of cities in which clipped samples were not taken, see footnote 7, p. 47.

second national estimate which served as a check of the estimate built up from the family-size distributions. The two national estimates were almost identical, as was to be expected, inasmuch as the sample distributions were derived from the same sample of families, classified once by family size and once by occupational group. The very slight differences, due to the rounding of the percents when the distributions for the sample communities were combined, have been adjusted in the final estimates presented.

Combining "Clipped" Sample Data

As indicated above, the first step in combining the data for each sample unit was to group the sample frequencies for the various family types of each color-nativity group into distributions for four sizes of family.

The fact that the clipped sample, covering broken families and minor color-nativity groups, was not taken in all communities and was too small in others to afford reliable income distributions for the separate color-nativity groups made it desirable to combine the frequencies for those groups at a comparatively early stage. The fuller break-down by color and nativity was retained only for North Central metropolises and large cities, where both the foreign-born white and the Negro groups constitute important elements in the population.

With the exception of these few communities, therefore, the frequencies for the minor color-nativity groups and for broken families in the clipped sample for each community were pooled, by income level, into distributions for four sizes of family. When clipped samples were available for two or more communities of the same type of community within a region, the frequency distributions for the same family-size groups were then pooled, by income level, before percentage distributions were calculated.

Implicit in the pooling of frequencies for the various color-nativity and broken family groups in the clipped sample was the somewhat questionable assumption that the proportions of these groups shown by the clipped sample data were representative not only of the communities sampled but of all communities of the same degree of urbanization in the region. This assumption undoubtedly introduced a degree of error into the estimates, but a check against census data indicated that the differences were in most instances not large.

Combining Regular Sample Data

The coverage of the regular sample was sufficient to yield for each sample community reliable frequency distributions for native-white normal families of each size group, and—in the South and in North Central large cities—for Negro normal families of each size group. Percentage distributions were calculated, therefore, for each family-size group within each color-nativity group in the sample. The percentage distributions for the same family-size groups from two or more communities of the same type within a region were averaged, each being given equal weight (except in the case of Southern village and farm units), to obtain the final percentage distributions against which the population weights for nonrelief families of that type were finally applied.

The decision to use a straight average of the percentage distributions in combining data from the regular samples in communities of the same type represented a choice among three possible procedures. Alternative procedures were to pool the frequency distributions (which was done in the case of the clipped sample because of the thinness of the separate distributions) or to attempt to weight the percentage distributions for the different communities on some logical basis which would involve matching all other communities of the same type in the region to one or another of the sample communities. The pooling of the frequency distributions would, because of some variations in the sample coverage from one community to another, have resulted in an involuntary weighting of the communities according to the percent of coverage, which seemed undesirable. On the other hand, available information offered no satisfactory basis for matching the sample communities against other communities of the same size and thus ascribing weights to the various distributions. In the absence of any objective criteria for weighting, it appeared better to take a straight average of the percentage distributions.

An exception to this procedure was made in the case of the sample distributions for Southern villages and farm units. Two of the five groups of Southern farm counties covered by the Study of Consumer Purchases were located in unusually prosperous agricultural areas in North Carolina and Mississippi, and hence could not be taken as representative of a proportionate share of the rural South. Another group of counties, also in North Carolina, was representative of the self-sufficing type of farming in the Appalachian Highlands, while the remaining two groups were located in Georgia and South Carolina, in areas more typical of Southern farming conditions.

Comparisons with data on income from farm production, available from the Bureau of Agricultural Economics, led to the decision to weight the sample distributions from the five farm units before averaging, in order to obtain a final distribution more representative of the South as a whole. The distributions for the two North Carolina units and for the Mississippi unit were each given a weight of one, while the Georgia and South Carolina distributions were each given a weight of three.

The 34 Southern villages covered in the Study of

TABLE 1A.—*Summary of sample income distributions for nonrelief families used to distribute nonrelief family population by income level*

[The sample income data and the population data for each qualitative group were subdivided once by family size, and once by occupational group,[1] and separate distributions prepared for each of these subgroups]

Communities covered by sample income data, by region and type of community	Method used in combining income data for communities of the same type	Qualitative groups for which sample income distributions were prepared	Population groups used to weight sample income distributions
NEW ENGLAND			
Large cities:			
Providence, R. I.		1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.
Middle-sized cities:			
New Britain, Conn. Haverhill, Mass.	Averaged percentage distributions from regular samples; pooled frequency distributions from clipped samples.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.
Small cities:			
Wallingford, Conn. Willimantic, Conn. Westbrook, Maine. Greenfield, Mass.	Averaged percentage distributions from regular samples; clipped sample for Wallingford only.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.
Village units:			
Vermont-Massachusetts.		1. Native-white normal.	1. All color-nativity groups, normal and broken.
Farm units:			
Vermont—dairy.		1. Native-white normal.	1. All color-nativity groups, normal and broken (Vermont, Maine, New Hampshire, Massachusetts, Connecticut, Rhode Island).
NORTH CENTRAL			
Metropolises:			
New York, N. Y. Chicago, Ill.	Averaged percentage distribution from regular samples for native-white normal; averaged percentage distributions from regular sample in New York and clipped sample in Chicago for Negro normal; remainder of clipped sample for Chicago only.	1. Native-white normal. 2. Native-white broken. 3. Foreign-born white. 4. Negro normal. 5. Negro broken. 6. Negro normal and broken combined.[2]	1. Native-white normal. 2. Native-white broken. 3. Foreign-born white. 4. Negro normal. 5. Negro broken. 6. Other color.
Large cities:			
Columbus, Ohio.		1. Native-white normal. 2. Native-white broken.[3] 3. Foreign-born white.[3] 4. Negro normal. 5. Negro broken.[3] 6. Negro normal and broken combined.[2]	1. Native-white normal. 2. Native-white broken. 3. Foreign-born white. 4. Negro normal. 5. Negro broken. 6. Other color.
Middle-sized cities:			
Dubuque, Iowa. Muncie, Ind. New Castle, Pa. Springfield, Ill.	Averaged percentage distributions from regular samples; pooled frequency distributions from clipped samples.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.
Small cities:			
Beaver Falls, Pa. Connellsville, Pa. Logansport, Ind. Peru, Ind. Mattoon, Ill.	Averaged percentage distributions from regular samples; pooled frequency distributions from clipped samples.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.
Village units:			
Pennsylvania-Ohio. Michigan-Wisconsin. Illinois-Iowa.	Averaged percentage distributions.	1. Native-white normal.	1. All color-nativity groups, normal and broken.
Farm units:			
Pennsylvania—general. Ohio—general.	Averaged percentage distributions.	1. Native-white normal.	1. All color-nativity groups, normal and broken (Pennsylvania, Ohio, and New Jersey).
Michigan—dairy and general. Wisconsin—dairy.	Averaged percentage distributions.	1. Native-white normal.	1. All color-nativity groups, normal and broken (Michigan, Wisconsin, New York, and Minnesota).
Illinois—corn or cash grain. Iowa—animal specialty.	Averaged percentage distributions.	1. Native-white normal.	1. All color-nativity groups, normal and broken (Illinois, Iowa, Indiana, and Missouri).
SOUTH			
Large cities:			
Atlanta, Ga.		1. Native-white normal. 2. Native-white broken. 3. Negro normal. 4. Negro broken. 5. Negro normal and broken combined.[2]	1. Native-white normal. 2. Native-white broken, foreign-born white. 3. Negro normal. 4. Negro broken. 5. Other color.
Middle-sized cities:			
Columbus, S. C. Mobile, Ala.	Averaged percentage distributions from regular samples; pooled frequency distributions from clipped samples.	1. Native-white normal. 2. Native-white broken. 3. Negro normal. 4. Negro broken. 5. Negro normal and broken combined.[2]	1. Native-white normal. 2. Native-white broken, foreign-born white. 3. Negro normal. 4. Negro broken. 5. Other color.
Small cities:			
Albany, Ga. Griffin, Ga. Gastonia, N. C. Sumter, S. C.	Averaged percentage distributions from regular samples; pooled frequency distributions from clipped samples for Albany and Gastonia only.	1. Native-white normal. 2. Native-white broken. 3. Negro normal. 4. Negro broken. 5. Negro normal and broken combined.[2]	1. Native-white normal. 2. Native-white broken, foreign-born white. 3. Negro normal. 4. Negro broken. 5. Other color.
Village units:			
Georgia-South Carolina. North Carolina - Mississippi.	Averaged percentage distributions after weighting as follows: Georgia and South Carolina, 3; North Carolina and Mississippi, 1.[4]	1. Native-white normal. 2. Negro normal.	1. Native-white, foreign-born white, normal and broken. 2. Negro and other color, normal and broken.

[1] Data for farm units were not, of course, classified by this factor.
[2] In obtaining the percentage distribution for "other color" families, the sample distributions for Negro normal and Negro broken families were weighted according to their relative importance in the type of community within the region.
[3] Used clipped sample distributions from Chicago.
[4] For explanation of the weighting of the distributions for Southern village and farm units, see pp. 54 and 57.

TABLE 1A.—*Summary of sample income distributions for nonrelief families used to distribute nonrelief family population by income level*—Continued

Communities covered by sample income data, by region and type of community	Method used in combining income data for communities of the same type	Qualitative groups for which sample income distributions were prepared	Population groups used to weight sample income distributions
SOUTH—Continued			
Farm units:			
North Carolina—self-sufficing.[5]	Averaged percentage distributions after weighting as follows: North Carolina, self-sufficing, 1; North Carolina, cotton and tobacco, 1; Mississippi, cotton, 1; South Carolina, cotton and tobacco, 3; Georgia, cotton, 3.[4]	1. Native-white normal operators.	1. All white operators (North Carolina, South Carolina, Georgia, Mississippi, Delaware, Maryland, Virginia, West Virginia, Florida, Kentucky, Tennessee, Alabama, Arkansas, Louisiana, Oklahoma, Texas).
North Carolina—cotton and tobacco.			
South Carolina—cotton and tobacco.			
Georgia—cotton.		2. Native-white normal sharecroppers.	2. All white sharecroppers (States listed above).
Mississippi—cotton.		3. Negro normal operators.	3. All Negro and other color operators (States listed above).
		4. Negro normal sharecroppers.	4. All Negro and other color sharecroppers (States listed above).
MOUNTAIN AND PLAINS			
Large cities:			
Denver, Colo.		1. Native-white normal.	1. Native-white normal.
		2. Native-white broken, foreign-born white, Negro, and other color.	2. Native-white broken, foreign-born white, Negro, and other color.
Middle-sized cities:			
Butte, Mont.	Averaged percentage distributions from regular samples; pooled frequency distributions from clipped samples.	1. Native-white normal.	1. Native-white normal.
Pueblo, Colo.		2. Native-white broken, foreign-born white, Negro, and other color.	2. Native-white broken, foreign-born white, Negro, and other color.
Small cities:			
Billings, Mont.	Averaged percentage distributions from regular samples; clipped sample for Billings only.	1. Native-white normal.	1. Native-white normal.
Greeley, Colo.		2. Native-white broken, foreign-born white, Negro, and other color.	2. Native-white broken, foreign-born white, Negro, and other color.
Logan, Utah.			
Provo, Utah.			
Dodge City, Iowa.			
Village units:			
Kansas-North Dakota.	Averaged percentage distributions.	1. Native-white normal.	1. All color-nativity groups, normal and broken.
Colorado-Montana-South Dakota.			
Farm units:			
North Dakota—wheat or cash grain.		1. Native-white normal.	1. All color-nativity groups, normal and broken (North Dakota, South Dakota).
Kansas—wheat or cash grain.		1. Native-white normal.	1. All color-nativity groups, normal and broken (Kansas, Nebraska).
Colorado-Montana-South Dakota—range livestock and cash grain.		1. Native-white normal.	1. All color-nativity groups, normal and broken (Colorado, Montana, Idaho, Wyoming, Nevada, Utah, Arizona, New Mexico).
PACIFIC			
Large cities:			
Portland, Oreg.		1. Native-white normal.	1. Native-white normal.
		2. Native-white broken, foreign-born white, Negro, and other color.	2. Native-white broken, foreign-born white, Negro, and other color.
Middle-sized cities:			
Aberdeen-Hoquiam, Wash.	Averaged percentage distributions from regular samples; pooled frequency distributions from clipped samples.	1. Native-white normal.	1. Native-white normal.
Bellingham, Wash.		2. Native-white broken, foreign-born white, Negro, and other color.	2. Native-white broken, foreign-born white, Negro, and other color.
Everett, Wash.			
Small cities:			
Astoria, Oreg.	Averaged percentage distributions from regular samples; pooled frequency distributions from clipped samples in middle-sized cities in region.[6]	1. Native-white normal.	1. Native-white normal.
Eugene, Oreg.		2. Native-white broken, foreign-born white, Negro, and other color.[4]	2. Native-white broken, foreign-born white, Negro, and other color.
Klamath Falls, Oreg.			
Olympia, Wash.			
Village units:			
California.	Average percentage distributions.	1. Native-white normal.	1. All color-nativity groups, normal and broken.
Oregon-Washington.			
Farm units:			
Washington—dairy, poultry.	Average percentage distributions.	1. Native-white normal.	1. All color-nativity groups, normal and broken, (Washington and Oregon).
Oregon—general and fruit.			
Central California—fruit and dairy.	Average percentage distributions.	1. Native-white normal.	1. All color-nativity groups, normal and broken (California).
Southern California—fruit.			

[4] For explanation of the weighting of the distributions for Southern village and farm units, see pp. 54 and 57. [5] White operators only. [6] See footnote 6, p. 57.

Consumer Purchases were drawn from the same groups of counties, except that no villages were included from the North Carolina Appalachian area. The distributions for the village units were therefore weighted in a similar manner, those for the Georgia and South Carolina samples being given a triple weight, to obtain an average sample distribution for rural nonfarm communities in the South.

While the weighting procedure followed brought the sample distributions for farm and rural nonfarm families more adequately in line with average conditions in the South, there seems reason to believe that the final distributions somewhat overestimate the incomes of rural families in this region, and especially of farm families. However, since definite evidence was not available to support this opinion, no further adjustment of the sample estimates was considered desirable.

Summary and Illustration of Procedure

The summary tabulation on pages 55 and 56 indicates, for each city and tabulation unit for which the sample data were used,[6] the way in which the income distributions for communities of the same type were combined, the qualitative groups for which percentage distributions for each family-size group and each occupational group were calculated, and the population groups used to weight the various sample distributions. In all, 1,135 sample percentage distributions were prepared for nonrelief families. These were combined into the 676 percentage distributions summarized in the accompanying table—against which population weights were applied to extend the distributions to the total number of nonrelief families in the United States.[7]

Perhaps the simplest way to clarify the process by which the sample data were combined, and then extended to a national basis, is to trace the sequence of steps for nonrelief families of one type of community in one of the five geographic regions—e. g., the middle-sized cities in the North Central Region. Data from four such cities covered by the Study of Consumer Purchases were used—Dubuque, Iowa, Springfield, Ill., Muncie, Ind., and New Castle, Pa. Only native-white normal families were included in the regular samples for these cities. Native-white broken, foreign-born white, Negro, and other color families were sampled less intensively in the clipped samples.

First Step.—The sample data from the regular sample in each of the four cities were classified by income level to give frequency distributions for nonrelief native-white families (all occupational groups combined) for each family-size group. This involved combining the frequency distributions for types of family composition[8] into four family-size groups—two-person families, three- to four-person families, five- to six-person families, and families of seven or more persons. This resulted in 16 distributions for nonrelief native-white normal families—4 distributions by family size for each city.

Second Step.—A percentage distribution was then calculated for each of these 16 frequency distributions, and the percentage distributions for the same family-size groups in the four cities averaged by income level—giving equal weight to each city—to obtain a single percentage distribution for each size group. This percentage distribution was later used in distributing by income level the total number of nonrelief native-white normal families of that size living in middle-sized cities in the North Central Region.

Third Step.—Data from the clipped samples for native-white broken families and for other color-nativity groups were pooled by income level, and the frequencies for the various types of family composition combined into the four family-size groups. This also resulted in 16 distributions for nonrelief native-white broken, foreign-born white, Negro, and other color families—four distributions by family size for each city.

Fourth Step.—The frequency distributions for the same family-size groups in the four cities were then pooled, by income level, to give a single frequency distribution for each size of family, from which a percentage distribution was calculated. This distribution was used to distribute by income level the total number of nonrelief families of that size in all color-nativity groups other than the native-white normal families, living in middle-sized cities in the North Central Region.

Variations in Procedure

As appears from the summary tabulation, the color-nativity groupings for those communities in which a regular Negro sample was taken and for those in which no clipped sample was taken were somewhat different from those described above for North Central middle-sized cities.

Thus in the South, separate percentage distributions were prepared for nonrelief families of each size group for native-white normal, for native-white broken, for Negro normal, and for Negro broken families. Because of the very small number of foreign-born and other color families in the South, no separate income dis-

[6] Data from the following communities included in the Study of Consumer Purchases were not used in constructing the income estimates, either because they were not available at the time the study was prepared or because their inclusion would have added unduly to the amount of labor involved without adding materially to the representativeness of the sample data: Omaha-Council Bluffs, Nebr.-Iowa; Springfield, Mo.; Lincoln, Ill.; Mt. Vernon, Ohio; New Philadelphia, Ohio; Boone, Iowa; Beaver Dam, Wis.; Moberly, Mo.; Columbia, Mo.; New Jersey truck farming, Massachusetts poultry farming, and Oregon part-time farming areas. In addition, clipped sample data from the following communities were not used, although the regular sample data were used: Westbrook, Maine; Griffin, Ga.; Sumter, S. C.; Logan, Utah; Eugene, Oreg.; Olympia, Wash.; and Pennsylvania, Michigan, Illinois, California, and Washington farm areas.

[7] For description of population weights for nonrelief families, see sec. 6.

[8] For description of types of family composition used in the Study of Consumer Purchases, see p. 43.

TABLE 2A.—*Summary of the 676 sample percentage distributions for nonrelief families against which population weights were applied* [1]

Region and type of community	(1) Color-nativity groups [2]	(2) Family-size groups for each color-nativity group	(3) Occupational groups for each color-nativity group [3]	Total groups
New England:				
Large cities	2	4	7	22
Middle-sized cities	2	4	7	22
Small cities	2	4	7	22
Rural nonfarm	1	4	8	12
Farm	1	4	1	5
Total				83
North Central:				
Metropolises	6	4	7	66
Large cities	6	4	7	66
Middle-sized cities	2	4	7	22
Small cities	2	4	7	22
Rural nonfarm	1	4	8	12
Farm: Pennsylvania-Ohio	1	4	1	5
Farm: Michigan-Wisconsin	1	4	1	5
Farm: Illinois-Iowa	1	4	1	5
Total				203
South:				
Large cities	5	4	7	55
Middle-sized cities	5	4	7	55
Small cities	5	4	7	55
Rural nonfarm	2	4	8	24
Farm: Operators	2	4	1	10
Farm: Sharecroppers	2	4	1	10
Total				209
Mountain and Plains:				
Large cities	2	4	7	22
Middle-sized cities	2	4	7	22
Small cities	2	4	7	22
Rural nonfarm	1	4	8	12
Farm: North Dakota	1	4	1	5
Farm: Kansas	1	4	1	5
Farm: Colorado-Montana	1	4	1	5
Total				93
Pacific:				
Large cities	2	4	7	22
Middle-sized cities	2	4	7	22
Small cities	2	4	7	22
Rural nonfarm	1	4	8	12
Farm: Washington-Oregon	1	4	1	5
Farm: California	1	4	1	5
Total				88
Total United States				676

[1] For summary of population weights as related to number of families in the various sample distributions, see tables 10A and 11A.

[2] 1 color-nativity group means native-white normal; 2 means (1) native-white normal and (2) all other color-nativity groups combined; 5 means (1) native-white normal, (2) native-white broken (with foreign-born white population weights also applied), (3) Negro normal, (4) Negro broken, and (5) "other color"; 6 means (1) native-white normal, (2) native-white broken, (3) foreign-born white, (4) Negro normal, (5) Negro broken and (6) "other color."

[3] For farm units the occupational group is implicit in the type of community. For rural nonfarm communities, families receiving the largest amount of their income from farming were classified separately from the independent unemployed, making 8 occupational groups; for urban communities both of these groups were included under "other occupational groups."

tributions were calculated for these two groups. The sample distributions for native-white broken families were used to distribute by income level the foreign-born white families in the South, since it appeared—from the separate distributions for foreign-born white families computed for North Central metropolises—that the distribution of foreign-born families by income level was more like the distribution for native-white broken families than for native-white normal families. For similar reasons, the sample distributions for Negro families (normal and broken combined) were used to distribute by income level the other color families in the South.

For metropolises and large cities in the North Central Region, separate percentage distributions were prepared for nonrelief families of each size group for native-white normal, for native-white broken, for foreign-born white, for Negro normal, and for Negro broken families. As in the South, a percentage distribution for Negro normal and broken families combined was used to distribute other color families by income level.

Clipped sample data were not available for any village unit and for very few farm units. Hence it was necessary to use the sample percentage distributions for native-white normal families to distribute by income level families of all color-nativity groups in these types of community, except in the South, where Negro families were covered in the regular sample. Since the proportion of foreign-born, Negro, and other color families is comparatively small in most rural areas the degree of error introduced into the income distributions for village and farm families by this procedure could not be very great.

Combining the Distributions for Component Groups

Once having applied the population weights for nonrelief families against the sample percentage distributions, it was possible to combine the weighted distributions by adding the frequencies at each income level. In this way frequency distributions were obtained for each type of community in each region and in the total United States, for each family size group and for other broad groups of nonrelief families. Percentage distributions were then calculated for each of these groups.

As indicated earlier, sample income distributions for each occupational group (all family sizes combined) were calculated for the same color-nativity and family composition groups for which family-size distributions were prepared. These distributions were combined and weighted in the same manner as were the family-size distributions.

The frequency distributions for relief families (discussed in the next section) were finally added to those for nonrelief families in each region, and the regional distributions combined to obtain the national distribution for all families in the United States.

Checking Distributions with Data from National Health Survey

Sample data on the incomes of families for the year 1935 were available from the National Health Survey recently conducted by the United States Public Health Service in 84 cities and 23 rural areas. The estimated income distributions for nonrelief families obtained in

the present study were compared with the data from the National Health Survey for each of four types of community—metropolises, large cities, middle-sized cities and small cities—within each region.

In making the comparison of the income distributions obtained in the two studies the percentage distributions for the National Health Survey cities of the same size and region were averaged by income level, each distribution being given equal weight. The resulting distributions were plotted and compared with the income distribution curves obtained in the present study for the same sizes of city within the same regions. These comparisons showed close similarity in the variations in income distribution from one type of community and region to another, although the distributions from the National Health Survey were consistently lower than those based on data from the Study of Consumer Purchases.

This difference was due, in part at least, to the fact that the definition of income used in the National Health Survey did not include certain items included in income by the Study of Consumer Purchases—e. g., the imputed value of the occupancy of an owned home—and also to the fact that one-person families were included in the distributions from the National Health Survey. The data from that study, moreover, were representative of the year 1935 rather than 1935–36. Furthermore, the income data in the National Health Survey represented only a global estimate of income received, each family having been asked to indicate in which of several broad income intervals its income for the year fell.

Comparisons of the income distributions obtained in the two studies for Negro and for white families in the same region and degree of urbanization revealed the same general similarity in variations between color-nativity groups, and the same tendency for the distributions from the National Health Survey to run lower than those based on data from the Study of Consumer Purchases. No attempt was made to compare the income distributions for different family-size groups and for different occupational groups because the classifications used in the two studies did not correspond closely.

Because of the considerable differences in definition of income and in the method of classifying families by income level in the two studies, and the difference in the 12-month period covered by the data, it was not considered desirable to make any adjustments of the estimated income distributions in the present study to bring these into closer agreement with the findings of the National Health Survey.

SECTION 4. THE SAMPLE DISTRIBUTIONS FOR RELIEF FAMILIES

Relief families, defined to include families that had received any type of public or private relief at any time during the year,[1] were included in both the regular and the clipped random income samples of the Study of Consumer Purchases, so that the sample income data were comparable in coverage to those for nonrelief families. However, the information on the incomes of relief families was incomplete, in that the families were not asked to specify the value of direct relief received either in cash or in the form of goods and services. Information was obtained, from all of the families interviewed, on earnings from Federal Emergency Relief Administration work relief projects and from Works Progress Administration, Civilian Conservation Corps, and Public Works Administration employment, and on all forms of nonrelief income, but it was felt that questions regarding the amount of direct relief benefits could not or would not be answered accurately by the families.

Classification of Families in Sample Data

The omission of direct relief income made it necessary to tabulate separately the income data for relief and for nonrelief families in each community. The sample income data for relief families had not been fully analyzed by the Study of Consumer Purchases at the time this report was undertaken, so that special tabulations—in $100 intervals—were supplied by the two bureaus conducting the study. These tabulations covered native-white normal families in most of the sample communities and Negro normal families in communities where they were included in the regular sample—i. e., in Southern communities and in two North Central cities—New York City and Columbus, Ohio. They provided no break by occupational group or by family size.[2]

Similar tabulations for relief families contacted in the clipped sample were made by the National Resources Committee directly from the family schedules, which were loaned by the bureaus for this purpose. Data for all such families—native-white broken, Negro broken, foreign-born, and other color families—were pooled, and one income distribution prepared for the entire clipped sample in a community, or—where clipped samples for more than one community of the same type were used—in one type of community within the region.

Combining the Sample Data

When percentage income distributions were available for the same qualitative group for two or more communities of the same type within a region—e. g., for native-white normal families in middle-sized cities in the North Central Region—the distributions were averaged, giving each distribution equal weight,[3] to obtain the sample percentage distribution finally used in distributing by income level the total number of relief families belonging to that qualitative group.

Apart from certain minor deviations caused by the lack of relief tabulations for a few sample areas,[4] the procedures followed in combining and weighting the sample distributions for relief families were similar to these described in the preceding section for nonrelief families. Income distributions—in $100 intervals and exclusive of direct relief—were thus obtained for each type of community within each region.

As indicated below, estimates of the value of direct relief omitted from the distributions could be made only for two types of community within a region. It was therefore necessary to effect a further combination of the relief income distributions before they could be adjusted by the addition of direct relief income. Within each region, the distributions for farms, rural nonfarm areas, and small cities were combined into one distribution, and those for other types of community into another. Since the percentage distributions for each type of community had already been weighted by the appropriate number of families, these combinations could be made by adding the frequencies at each income level.

[1] For further definition of relief family, see p. 42.

[2] For list of communities and qualitative groups for which relief sample income distributions were prepared, see summary tabulation on pp. 61–62.

[3] Except for farm and village units in the South, which were weighted in the same way that the nonrelief distributions for these units were weighted. For explanation, see pp. 54 and 57.

[4] The sample communities for which special relief tabulations were not available are indicated in the footnotes to the summary tabulation on pp. 61–62.

TABLE 3A.—*Summary of sample income distributions for relief families used to distribute relief family population by income level*

The sample income data and the population data for relief families were not subdivided by family size or by occupational group, so that only one income distribution, representing all family sizes and all occupational groups combined, was prepared for each qualitative group]

Communities covered by sample income data, by region and type of community	Method used in combining income data for communities of the same type	Qualitative groups for which sample income distributions were prepared	Population groups used to weight sample income distributions
NEW ENGLAND			
Large cities:			
Providence, R. I.		1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro and other color.
Middle-sized cities:			
New Britain, Conn. Haverhill, Mass.	Averaged percentage distributions from regular samples in small cities;[1] pooled frequency distributions from clipped samples in New Britain and Haverhill.	1. Native-white normal.[1] 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.
Small cities:			
Wallingford, Conn. Willimantic, Conn. Westbrook, Maine. Greenfield, Mass.	Averaged percentage distributions from regular samples; clipped sample for Wallingford only.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro and other color.
Village units:			
Vermont-Massachusetts.		1. Native-white normal.	1. All color-nativity groups, normal and broken.
Farm units:			
Vermont—dairy.		1. Native-white normal.	1. All color-nativity groups, normal and broken (Me., N. H., Vt., Mass., R. I., Conn.).
NORTH CENTRAL			
Metropolises:			
New York, N. Y. Chicago, Ill.	Averaged percentage distributions from regular sample for native-white normal; Negro normal for New York only; clipped sample for Chicago only.	1. Native-white normal. 2. Negro normal. 3. Native-white broken, Negro broken, foreign-born white, and other color.	1. Native-white normal. 2. Negro normal. 3. Native-white broken, Negro broken, foreign born white, and other color.
Large cities:			
Columbus, Ohio.		1. Native-white normal. 2. Negro normal. 3. Native-white broken, Negro broken, foreign-born white, and other color.	1. Native-white normal. 2. Negro normal. 3. Native-white broken, Negro broken, foreign-born white, and other color.
Middle-sized cities:			
Dubuque, Iowa. Muncie, Ind. New Castle, Pa. Springfield, Ill.[2]	Averaged percentage distributions from regular samples; pooled frequency distributions from clipped samples.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.
Small cities:			
Beaver Falls, Pa. Connellsville, Pa. Logansport, Ind. Peru, Ind. Mattoon, Ill.	Averaged percentage distributions from regular samples; pooled frequency distributions from clipped samples.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.
Village units:			
Pennsylvania-Ohio. Michigan-Wisconsin. Illinois-Iowa.	Averaged percentage distributions.	1. Native-white normal.	1. All color nativity groups, normal and broken.
Farm units:			
Pennsylvania—general. Ohio—general.	Averaged percentage distributions.	1. Native-white normal.	1. All color-nativity groups, normal and broken (Pa., Ohio, N. J.).
Michigan—dairy and general. Wisconsin—dairy.	Averaged percentage distributions.	1. Native-white normal.	1. All color-nativity groups, normal and broken (Mich., Wis., N. Y., Minn.).
Illinois—corn or cash grain. Iowa—animal specialty.	Averaged percentage distributions.	1. Native-white normal.	1. All color-nativity groups, normal and broken (Ill., Iowa, Ind., Mo.).
SOUTH			
Large cities:			
Atlanta, Ga.		1. Native-white normal. 2. Negro normal.	1. Native-white, foreign-born white, normal and broken. 2. Negro and other color, normal and broken.
Middle-sized cities:			
Columbus, S. C. Mobile, Ala.	Averaged percentage distributions.	1. Native-white normal. 2. Negro normal.	1. Native-white, foreign-born white, normal and broken. 2. Negro and other color, normal and broken.
Small cities:			
Albany, Ga. Griffin, Ga. Gastonia, N. C. Sumter, S. C.	Averaged percentage distributions.	1. Native-white normal. 2. Negro normal	1. Native-white, foreign-born white, normal and broken. 2. Negro and other color, normal and broken.
Village units:			
Georgia-South Carolina. North Carolina-Mississippi.	Averaged percentage distributions.[4]	1. Native-white normal. 2. Negro normal.	1. Native-white, foreign-born white, normal and broken. 2. Negro and other color, normal and broken.
Farm units:			
North Carolina—self-sufficing.[3]	Averaged percentage distributions.[4]	1. Native-white normal.	1. All white operators (N. C., S. C., Ga., Miss., Del., Md., Va., W. Va., Fla., Ky., Tenn., Ala., Ark., La., Okla., Tex.).
North Carolina—cotton and tobacco. South Carolina—cotton and tobacco. Georgia—cotton. Mississippi—cotton.		2. Native-white normal sharecroppers. 3. Negro normal operators. 4. Negro normal sharecroppers.	2. All white sharecroppers (States listed above). 3. All Negro and other color operators (States listed above). 4. All Negro and other color sharecroppers (States listed above).

[1] Special relief tabulations for regular sample not available at the time this report was prepared. Used percentage distributions from small cities in region.
[2] Special relief tabulation for regular sample not available at the time this report was prepared.
[3] White operators only.
[4] Relief distributions for Southern farms and villages were weighted in the same manner that nonrelief distributions were. For explanation, see pp. 54 and 57.

TABLE 3A.—*Summary of sample income distributions for relief families used to distribute relief family population by income level*—Continued

Communities covered by sample income data, by region and type of community	Method used in combining income data for communities of the same type	Qualitative groups for which sample income distributions were prepared	Population groups used to weight sample income distributions
MOUNTAIN AND PLAINS			
Large cities: Denver, Colo.		1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal 2. Native-white broken, foreign-born white, Negro, and other color.
Middle-sized cities: Butte, Mont. Pueblo, Colo.	Averaged percentage distributions from regular samples; pooled frequency distributions from clipped samples.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal 2. Native-white broken, foreign-born white, Negro, and other color.
Small cities: Billings, Mont. Dodge City, Iowa. Greeley, Colo. Logan, Utah. Provo, Utah.	Averaged percentage distributions from regular samples; clipped sample for Billings only.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal 2. Native-white broken, foreign-born white, Negro, and other color.
Village units: Kansas-North Dakota. Colorado-Montana-South Dakota.	Averaged percentage distributions	1. Native-white normal.	1. All color-nativity groups, normal and broken
Farm units: North Dakota—wheat or cash grain.		1. Native-white normal.	1. All color-nativity groups, normal and broken (N. Dak., S. Dak.)
Kansas—wheat or cash grain.		1. Native-white normal.	1. All color-nativity groups, normal and broken (Kans., Nebr.).
Colorado-Montana-South Dakota—range livestock and cash grain.		1. Native-white normal.	1. All color-nativity groups, normal and broken (Colo., Mont., Idaho, Wyo., Nev., Utah, Ariz., N. Mex.).
PACIFIC			
Large cities: Portland, Oreg.		1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.
Middle-sized cities: Aberdeen-Hoquiam, Wash. Bellingham, Wash. Everett, Wash.	Averaged percentage distributions from regular samples; pooled frequency distributions from clipped samples.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.
Small cities: Astoria, Oreg. Eugene, Oreg. Klamath Falls, Oreg. Olympia, Wash.	Averaged percentage distributions from regular samples; pooled frequency distributions from clipped samples in middle-sized cities in region.[1]	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.[1]	1. Native-white normal. 2. Native-white broken, foreign-born white, Negro, and other color.
Village units: California. Oregon-Washington.	Averaged percentage distributions	1. Native-white normal.	1. All color-nativity groups, normal and broken.
Farm units: Washington—dairy, poultry. Oregon—general and fruit.	Averaged percentage distributions.	1. Native-white normal.	1. All color-nativity groups, normal and broken (Wash., Oreg.).
Central California—fruit and dairy. Southern California—fruit.	Averaged percentage distributions.	1. Native-white normal.	1. All color-nativity groups, normal and broken (Calif.).

[1] See footnote 6 p. 57.

Summary of Procedure

Because of the absence of a family-size and an occupational break in the sample income tabulations, the total number of sample income distributions prepared for relief families was considerably smaller than the number for nonrelief families. In all, sample percentage distributions were available for 102 qualitative groups. As appears from the summary tabulation in table 4A, this number was reduced—by averaging the distributions for sample communities of the same type within a region—to 53 percentage distributions against which the population weights for relief families were finally applied.[5]

[5] For description of population weights for relief families, see Sec. 6.

Estimates of Direct Relief Omitted From Distributions

Estimates of the value of direct relief omitted from the income distributions were made for each region on the basis of relief figures from various Government agencies showing the amount of direct relief of various types distributed in the United States, by regions, from July 1935 through June 1936.

Included in these estimates were the following types of relief: direct relief distributed under the general relief program of the Federal Emergency Relief Administration from July 1935 through December 1935;[6]

[6] Data from F. E. R. A., *Statistical Summary of Emergency Relief Activities, January 1933 through December 1935*. Computed from table 6, Amount of Obligations Incurred for Emergency Relief (direct and work) Extended to Cases Under the General Relief Program, by States, and table 10, Amount of Earnings of Cases Employed on the Emergency Work Relief Program, by States.

TABLE 4A.—*Summary of the 53 sample percentage distributions for relief families against which population weights were applied* [1]

Region and type of community	Color-nativity groups [2]	Total groups
New England:		
Large cities	2	2
Middle-sized cities	2	2
Small cities	2	2
Rural nonfarm	1	1
Farm	1	1
Total		8
North Central:		
Metropolises	3	3
Large cities	3	3
Middle-sized cities	2	2
Small cities	2	2
Rural nonfarm	1	1
Farm:		
Pennsylvania-Ohio	1	1
Michigan-Wisconsin	1	1
Illinois-Iowa	1	1
Total		14
South:		
Large cities	2	2
Middle-sized cities	2	2
Small cities	2	2
Rural nonfarm	2	2
Farm:		
Operators	2	2
Sharecroppers	2	2
Total		12
Mountain and Plains:		
Large cities	2	2
Middle-sized cities	2	2
Small cities	2	2
Rural nonfarm	1	1
Farm:		
North Dakota	1	1
Kansas	1	1
Colorado-Montana	1	1
Total		10
Pacific:		
Large cities	2	2
Middle-sized cities	2	2
Small cities	2	2
Rural nonfarm	1	1
Farm:		
Washington-Oregon	1	1
California	1	1
Total		9
Total United States		53

[1] For summary of population weights as related to number of families in the various sample distributions, see tables 10A and 11A.

[2] 1 color-nativity group means native-white normal; 2 means (1) native-white normal and (2) all other color-nativity groups combined; 3 means (1) native-white normal, (2) Negro normal, and (3) all other color-nativity groups combined.

general relief distributed by States and localities from January through June 1936;[7] public assistance extended to the aged, the blind, and dependent children under the Social Security Act and under State laws authorizing such types of assistance prior to participation under the Social Security Act;[8] Resettlement emergency grants;[9] relief distributed by private agencies;[10] and the imputed value of surplus commodities distributed by the Federal Surplus Commodities Corporation.[11] The estimated amount of direct relief of these various types distributed in each region is shown in the accompanying table.

Division of Direct Relief Between Two Types of Community in Each Region

It was not possible, with the information available, to make a satisfactory estimate of the value of direct relief for each type of community covered by this study. Accordingly, the amount of direct relief in each region was divided into only two parts, representing the amounts distributed to the urban and to the rural-town population, respectively, as these were defined in the combined Urban-Rural-Town Relief Series recently developed by the Rural Section of the Division of Social Research in the Works Progress Administration. In that series, the urban population included the population of all counties containing a city of 25,000 or more persons, and of New England townships containing 5,000 or more persons. The rural-town population, on

[7] Monthly estimates for each of the five geographic regions supplied by W. P. A., Division of Research, Statistics and Records. General relief during this period was predominantly direct relief.

[8] Monthly estimates for each State supplied by Social Security Board, Bureau of Research and Statistics, Division of Public Assistance Statistics.

[9] Monthly data on grants certified for payment for each State from Resettlement Administration, First Annual Report, table 2, p. 162.

[10] Regional estimates built up by National Resources Committee on the basis of monthly data on private relief in the 118 urban areas included in the Urban Relief Series and in the 385 rural areas included in the Rural-Town Relief Series and checked with national estimate of private relief made by W. P. A., Division of Social Research, for the same period on the basis of the same sample data. For Urban Relief Series, see monthly bulletins U. S. Department of Labor, Children's Bureau, Changes During (name of month) in Different Types of Public and Private Relief in Urban Areas, (July 1935–May 1936) and U. S. Department of Labor, Children's Bureau, and Social Security Board, Changes During June 1936 in Different Types of Public and Private Relief in Urban Areas, table 4. For Rural-Town Relief Series, see monthly bulletins, W. P. A., Division of Social Research, Rural Section, Current Statistics of Relief in Rural and Town Areas, July 1935–June 1936. Relief extended by private agencies was predominantly direct relief.

[11] Volume data on commodities distributed in each State from July 1, 1935, to June 30, 1936, supplied by Federal Surplus Commodities Corporation. Values imputed by the National Resources Committee on the basis of average retail prices of commodities in 1935 and 1936, as shown by U. S. Bureau of Labor Statistics in bulletins on Retail Prices, and of information supplied by the U. S. Bureau of Agricultural Economics.

TABLE 5A.—*Estimated amounts of direct relief distributed in five regions,*[1] *July 1935 through June 1936* [2]

Type of relief	All regions	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region
Direct relief under the general relief program, F. E. R. A.—July-December, 1935	$406,882,298	$20,075,555	$292,744,286	$33,240,909	$20,949,026	$39,872,572
General public relief, January-June, 1936	249,209,334	21,521,415	184,047,022	14,625,110	9,478,142	19,537,645
Public assistance to the aged, to the blind and to dependent children	138,056,226	13,849,727	91,823,255	5,933,614	8,624,980	17,824,650
Resettlement emergency grants	15,343,325	50,014	2,841,075	3,475,230	7,569,791	1,407,215
Private relief	17,680,550	3,747,010	10,196,891	2,225,759	610,457	900,433
Federal surplus commodities	72,162,922	4,863,331	32,217,089	22,891,142	8,006,126	4,185,234
All types of direct relief	$899,334,655	$64,107,052	$613,869,508	$82,391,764	$55,238,522	$83,727,749

[1] For States included in each region, see pp. 42–43.

[2] For sources of data, see footnote 6, p. 63 and footnotes 7, 8, 9, 10 and 11 on this page.

the other hand, included the population of all counties not containing a city of 25,000 or more persons, and of New England townships containing less than 5,000 persons.

This division of the population was only crudely analogous to a division, at the 25,000 population level, of the six types of community defined in this study—i. e., farms, villages, and small cities in one group and middle-sized cities, large cities, and metropolises in another. Nevertheless, a break between these two degrees of urbanization seemed to offer a somewhat better basis for adjusting the income distributions for relief families than any attempt to add the value of direct relief in each region to the income distribution for all types of community combined.

In dividing direct relief between "urban" and rural-town areas in each region, use was made of methods similar to those used by the Works Progress Administration in preparing national estimates for the fiscal year ending June 30, 1936. These estimates, showing the volume of relief of each type distributed in total urban and total rural-town United States, were constructed by a process of generalizing the monthly data from the Urban and the Rural-Town Relief series [12] to represent the total urban and total rural-town population.[13]

In summary, the steps involved in the process of dividing the various types of direct relief in each region between the urban and the rural-town relief population of the region were as follows:[14] The total urban population in each region was determined by combining the 1930 population figures for urban areas as defined above. This figure was then subtracted from the total population of the region to ascertain the rural-town population of the region. These population figures for urban and for rural-town areas were then divided, respectively, by the population of the urban and of the rural-town sample areas within the region which were included in the Urban Relief Series and in the Rural-Town Relief Series. The resulting population ratios were then applied against the relief expenditure data from the Urban and the Rural-Town Relief Series for the 12-month period ending June 30, 1936, to obtain the estimated expenditures for various types of direct relief for the total urban and the total rural-town population in each region.

[12] See footnote 10, p. 63.

[13] For description and methodology of the combined Urban-Rural-Town Relief Series and the estimated expenditures for the component types of relief in urban and in rural-town areas, see Woofter, T. J., Jr.; Aaronson, Franklin, and Mangus, A. R.: Relief in Urban and Rural-Town Areas, 1932-1936, Research Bulletin, Series III, No. 3. (In preparation) Division of Social Research, W. P. A.

[14] Use of this process for deriving regional estimates similar to those prepared by the W. P. A. for the total United States involved the somewhat dubious assumption that the sample data from the Urban and the Rural-Town Relief Series were as representative for each region as the combined data were for the total United States. However, the combined regional estimates were found to approximate very closely the national estimates made by the W. P. A.

It was possible from these figures to calculate for each type of direct relief the percentage given to the urban and the percentage given to the rural-town population in each region. These percentages—derived from the built-up regional estimates based on sample data in the Urban and in the Rural-Town Relief Series—were used as a basis for the division, between urban and rural-town relief families, of the amounts of direct relief distributed in each region, as estimated independently by the Government agencies administering relief.

More explicitly, direct relief distributed under the general relief program of the Federal Emergency Relief Administration, general relief distributed by the States and localities from January through June 1936, and the imputed value of surplus commodities [15] were divided between urban and rural-town areas according to the proportions prevailing during 1935-36 for general relief in those communities reporting data to the Urban and to the Rural-Town Relief Series. Similarly, public assistance extended to the aged, the blind, and dependent children was divided according to the proportions prevailing for these types of assistance in the same reporting communities. Since no independent estimates were available for the amount of private relief distributed, it was necessary to use the estimates built up for urban and rural-town areas from the sample data in the two relief series. Emergency grants made by the Resettlement Administration were distributed only in rural communities so that no break by type of community was necessary for this type of relief.

The final estimates of the value of direct relief distributed to the ten population groups—i. e., to the urban and to the rural-town population in each region—were as follows:

TABLE 6A.—*Estimated amounts of direct relief distributed to "urban" and to rural-town population in five regions, 1935–36*

Region	Urban	Rural-town
New England	$59,108,000	$4,999,000
North Central	509,145,000	107,725,000
South	36,185,000	46,207,000
Mountain and Plains	14,470,000	40,768,000
Pacific	69,594,000	14,134,000
All regions	$985,502,000	$213,833,000

Division of Direct Relief Between Families and Single Individuals

It was next necessary to divide the amount of direct relief for each of the ten population groups between the families and the single individuals that received relief during the period. In the absence of any specific information concerning this division, an arbitrary ratio was adopted, based on such general information as was

[15] Surplus commodities were distributed through existing relief agencies dispensing general relief, so that it seemed reasonable to assume that the division as between urban and rural-town areas would be similar.

available concerning the ratio of average relief benefits per family to average relief benefits per single individual.

During the last half of 1935, the average monthly benefit per family case under the general relief program of the Federal Emergency Relief Administration was approximately double the average benefit per nonfamily case.[16] Accordingly, the proportion of direct relief going to families in each of the ten population groups was determined by the following formula: $\frac{f}{i+2f}$ where f equals the number of families receiving relief and i equals the number of single individuals receiving relief.[17]

On the basis of the percentages obtained by this formula, direct relief was allocated to families and to single individuals in the ten population groups as shown in the accompanying table.

TABLE 7A.—*Estimated amounts of direct relief distributed to families and to single individuals in "urban" and in rural-town areas in five regions, 1935–36*

Region and type of community	Direct relief to families	Direct relief to single individuals
New England:		
Urban	$50,661,000	$8,447,000
Rural-town	4,462,000	537,000
North Central:		
Urban	424,453,000	81,692,000
Rural-town	95,746,000	11,979,000
South:		
Urban	30,757,000	5,428,000
Rural-town	42,769,000	3,438,000
Mountain and Plains:		
Urban	12,145,000	2,324,000
Rural-town	32,451,000	8,317,000
Pacific:		
Urban	53,184,000	16,410,000
Rural-town	11,953,000	2,181,000
All regions	$758,582,000	$140,753,000

Addition of Direct Relief to Income Distributions

The estimated amounts of direct relief distributed to families in the two types of community in each region were now added to the income distributions, exclusive of direct relief, that had been built up from the sample distributions for relief families contacted in the Study of Consumer Purchases.

As indicated above, these sample distributions had been weighted and combined into 10 distributions representing 2 degrees of urbanization in each of the 5 regions—i. e., one distribution for relief families living on farms, in rural-nonfarm areas, and in small cities, and a second distribution for families in middle-sized cities, in large cities, and in metropolises.

The methods used in adding the value of direct relief to these income distributions were necessarily crude, and involved various arbitrary assumptions based upon very fragmentary evidence from available relief studies. Without attempting a detailed discussion of the reasons for accepting the particular assumptions used, it is possible to summarize briefly the steps taken, as follows:

(1) Relief families in each type of community within a region were divided into two groups—those that received work relief only, with no direct relief during the schedule year, and those that received some direct relief. The second group was assumed to include 60 percent of the relief families and—in the absence of any specific evidence as to how this percentage might vary at different income levels—60 percent of the relief families at each income level. The lower income levels would presumably contain many of the unemployable relief cases, largely dependent upon direct relief, while the upper income levels would include large families which were given direct relief at some time during the year to supplement occasional private earnings or work relief wages.

(2) Each of the 10 income distributions was then split into 2 frequency distributions by dividing the number of relief families at each income level in the proportions of 40 and 60.

(3) The distributions for families assumed to have received some direct relief were then corrected by adding to the incomes of families in each income interval an estimated average amount of direct relief, which would in the aggregate equal the estimated total amount of direct relief distributed to all families in the group represented by the distribution. The average amount of direct relief per family for all families in the group was first determined for urban and rural-town areas within each region, by dividing the estimated total amount of direct relief distributed by the total number of direct-relief families in the distribution.

It was assumed that the amount of direct relief per family would vary by income level, and that families with relatively low incomes exclusive of direct relief would receive more than the average for the group as a whole while those with relatively high incomes would receive less. It was decided, therefore, to vary the amounts of direct relief per family from approximately 150 percent of the average at the lower income levels to approximately 75 percent of the average at the higher income levels in the relief distribution.

The original income distributions for direct-relief families were then shifted upward by adding to the class limits of each $100 interval the average amount of direct relief assigned to families in that interval. For example, in North Central rural-town communities, families that had been in the income interval, $100 to $200, were shifted to a new income interval of $300 to $400, while those in income interval $800 to $900 were moved upward to an income interval of $925 to $1,025.

(4) The next step in the process was to transform the income distributions for relief families into $250

[16] Based on monthly data on case-loads and obligations incurred for relief as reported to the Federal Emergency Relief Administration, Division of Research, Statistics and Finance.

[17] For method of determining number of families and number of single individuals that received relief, see pp. 73–74.

income intervals, in order to place them on the same basis as the distributions for nonrelief families. This transformation was necessary both for the new distritions for direct-relief families and for the distributions for the 40 percent of the relief families that were assumed not to have received any direct relief.

For the latter groups it was possible to plot the original distributions as cumulative curves and read off the frequencies in the $250 income intervals. The new distributions for direct-relief families were not plotted in this fashion, because the addition of varying amounts of direct relief had caused some overlapping in the class intervals. When a class interval included parts of two $250 intervals it was assumed that the families were evenly distributed within the interval and the frequencies were distributed on a proportional basis.

The estimated value of direct relief added to the income distributions for relief families amounted to less than 23 percent of the total aggregate income of relief families from all sources. The proportion of direct relief to the aggregate income of relief families varied among regions, as follows: New England, 19 percent; North Central, 30 percent; South, 9 percent; Mountain and Plains, 17 percent; and Pacific, 27 percent.

Combining Distributions for Relief and Nonrelief Families

With the distributions for relief families shifted to $250 class intervals, it was possible to combine them with the distributions for nonrelief families by adding the frequencies at each income level. The first step in this procedure was to merge the urban and the rural-town relief distributions in each region, since this type-of-community division was not considered of sufficient interest to justify its retention in the final figures presented in the report. The resulting relief distribution for each region was then combined with the nonrelief distribution, to give a single distribution for all families in each region.

These five regional distributions—and the nationa. distribution derived from them—were then adjusted, on the basis of Federal income tax returns, to allow for underrepresentation of families at the higher income levels. The methods of making this adjustment are described in a later section of this appendix.

As indicated above, the sample data for relief families from the Consumer Purchases Study were not available by occupational group or by family size at the time this report was prepared. Even if they had been available, it would have been difficult, if not impossible, to find a satisfactory basis for dividing the amount of direct relief among the families of four sizes and among the various occupational groups, and for adding this direct relief income to the income from other sources included in the Consumer Purchases Study data. Because of these limitations in the available data, it was not possible to include relief families with nonrelief families in presenting income estimates by family size and by occupational group.

SECTION 5. THE SAMPLE DISTRIBUTIONS FOR SINGLE INDIVIDUALS

The 10 million "single" or unattached men and women comprise almost 8 percent of the 1935–36 population. They include the single person household—i. e., the census one-person family—lodgers and servants living with families, and single persons living in hotels, boarding and lodging houses, or in similar quasi-family groups. In addition, there are included those sons and daughters who were living with their families but who maintained a separate economic status, in that they did not pool their income with that of the family.[1] For reasons indicated in Part I, the institutional groups in the population have been treated as a separate type of consumer unit and unattached individuals belonging to such groups have not been included in the distribution for single individuals.[2]

No large body of sample data on the incomes of single individuals similar to that for families was available from the Study of Consumer Purchases. The paucity of income data for this group from other sources was likewise very great. Hence in building up the estimated income distribution for single individuals, it was necessary to rely on a number of different types of sample material, using one as a check against the other. The final distribution for single individuals is considered subject to greater error than that for families, and should be regarded as a rough approximation to the situation in 1935–36.

Types of Data Available for Estimating Income Distributions

The income data for single individuals collected in the Study of Consumer Purchases pertained, for the most part, to one-person families. A special sample of single individuals was taken in four cities—Chicago, Columbus, Providence, and Portland—but the number of schedules collected was small, amounting to approximately 2,500. Single individuals were included in the clipped samples in a number of other communities; these data were too scanty to be useful. An additional sample of single men and women living in lodging houses and hotels was taken in Chicago, but in other cities the samples were predominantly for individuals maintaining their own households.

This body of sample data therefore could not be used to represent the pattern of incomes of all single individuals, because a distribution of lodgers and servants by income level would probably be lower than that for one-person families, and because the distribution for one-person families would be too heavily weighted by women. The same objection applied to the income data for single individuals collected in the National Health Survey. It was therefore decided not to construct the income distribution of single individuals on the basis of the sample data from the two studies, but to use these data as a check against distributions for single men and women derived from other sources.

In estimating the distribution by income level of single men and women who had not received any relief at any time during the year, six types of material were used:

1. Studies of the earnings of women.
2. Studies of the relative size of the earnings of men and women.
3. Data on incomes of single individuals from the Study of Consumer Purchases.
4. Data on incomes of single individuals from the National Health Survey.
5. Data on the incomes of two-person families from the Study of Consumer Purchases, and the distribution by income level of two-person families presented in this report.
6. Federal income tax data.

It was not possible, because of the lack of adequate information, to estimate separate distributions for each type of single individual—e. g., one-person families, lodgers, servants. Neither was it feasible to build up separate distributions for single individuals of various color-nativity groups or for single individuals living in different types of community and regions, as was done for families. The available data permitted the construction of only seven component distributions for nonrelief single individuals—single men in each of four

[1] In 1930, the one-person families numbered 2.4 million, the lodgers and servants 5.8 million, and the single individuals in quasi-family groups 1.2 million. The number of independent sons and daughters was estimated in this study to have been 400,000 in 1935–36. For methods of obtaining the population weights for single individuals, see Appendix A, sec. 6.

[2] See p. 3, and Appendix A, sec. 9.

occupational groups, and single women in each of three occupational groups. In addition, two distributions were prepared for those single individuals who had received some form of direct or work relief during the year—one for single men and one for single women.

Distributions for Nonrelief

Single Women

The income distributions for nonrelief single women were constructed, in the first instance, on the basis of earnings data obtained from various sample studies. Twelve of the earnings studies were conducted by the Women's Bureau of the United States Department of Labor, and one by the United States Employment Service. The list of studies used is as follows:

United States Department of Labor, Women's Bureau Bulletins.[3]

- No. 92. Wage-Earning Women and Industrial Conditions of 1930 in South Bend (Indiana), 1932.
- No. 117. The Age Factor as it Relates to Women in Business and the Professions, 1934.
- No. 120. The Employment of Women in Offices, 1934.
- No. 124. Women in Arkansas Industries, 1936.
- No. 125. Employment Conditions in Department Stores in 1932–33, 1936.
- No. 126. Women in Texas Industries, 1935.
- No. 127. Hours and Earnings in Tobacco Stemmeries, 1934.
- No. 132. Women Who Work in Offices, 1935.
- No. 133. Employment Conditions in Beauty Shops, 1935.
- No. 143. Factors Affecting Wages in Power Laundries, 1936.
- No. 149. Employment of Women in Tennessee Industries, 1937.
- No. 150. Women's Employment in West Virginia, 1937.

United States Employment Service, Special Questionnaire Survey of Public Employment Offices, 1937.

These particular studies were selected from a much larger body of sample material because they contained information appropriate for the construction of frequency distributions by income level, and because they were comparatively recent. Six of the studies were conducted in the years 1934, 1935, or 1936; all of the studies were conducted after the onset of the depression in 1929. In constructing the distributions it was possible, in many cases, to supplement the published data with more detailed tabulations from the work sheets for the various studies which were made available by the Women's Bureau.

From the 13 studies listed, there were derived 33 frequency distributions, by income level, for single women in 3 occupational groups—wage-earning, clerical, and business and professional. Thirteen of these distributions were for wage-earning women,[4] 19 for women in clerical occupations,[5] and 1 for women in business and professional groups.[6]

Since these earnings data were either on a weekly or a monthly basis it was necessary, as a first step, to expand them into annual earnings. On the basis of information obtained for two-person families in the Study of Consumer Purchases, it was assumed that the average number of weeks of employment was 50. Though it was recognized that this figure was probably high, it was deemed best to err in this direction because of the downward bias introduced by the use of earnings instead of income data.

The weekly earnings data were multiplied by 50, and cumulative curves were plotted for the resulting frequency distributions. The frequencies were read off for the same $250 intervals used for the family distributions, except that the highest interval was for $5,000 and over. A percentage distribution was calculated for each of the 33 distributions.

The 13 percentage distributions for wage-earning women were then averaged, by income level, with each distribution given an equal weight. The same procedure was followed for the 19 distributions for clerical women. Because of the heterogeneity of the data, its scattered geographic character, and the differences in sample coverage, any particular scheme of weighting would have been as arbitrary as the straight averages, and would have insured no better results.

The resulting distributions for the three occupational groups were smoothed and were then weighted by the total number of single women in each of the occupational groups in 1935–36.[7] The weighted frequency distributions were then added together by income level to obtain a preliminary distribution for all single women.

[3] The approximate number of cases used from each of the studies, and the geographic area and date covered were as follows:

Bulletin No. 92, 2,500 cases, South Bend, Ind., 1930; No. 117, 16,000 cases, members of the National Federation of Business and Professional Women's Clubs, 1930; No. 120, 42,000 cases, New York, N. Y., Hartford, Conn., Philadelphia, Pa., Atlanta, Ga., Chicago, Ill., Des Moines, Iowa, St. Louis, Mo., 1931 and 1932; No. 124, 3,000 cases, Arkansas, 1932 and 1933; No. 125, 6,900 cases, 10 cities in New Jersey, Little Rock and Fort Smith, Ark., Denver, Colo., Los Angeles, Calif., San Francisco and Oakland, Calif., Seattle, Wash., 1932 and 1933; No. 126, 11,000 cases, Texas, 1932; No. 127, 5,000 cases, Virginia and North Carolina, 1934; No. 132, 5,000 cases, New York, N. Y., Philadelphia, Pa., Atlanta, Ga., Chicago, Ill., Des Moines, Iowa, St. Louis, Mo., 1930 and 1931; No. 133, 1,300 cases, Philadelphia, Pa., New Orleans, La., St. Louis, Mo., Columbus, Ohio, 1933 and 1934; No. 143, 3,000 cases, Chicago, Ill., Washington, D. C., 1934; No. 149, 24,000 cases, Tennessee, 1935; No. 150, 13,000 cases, West Virginia, 1936; U. S. Employment Service, Special Questionnaire Survey of Public Employment Offices, study of prevailing weekly wage rates of domestic workers in the United States, made in 1937 for the National Income Section, Department of Commerce.

[4] Women's Bureau, U. S. Department of Labor, Bulletins 92, 124, 126, 127, 133, 143, 149, 150. U. S. Employment Service, Special Questionnaire Survey of Public Employment Offices.

[5] Women's Bureau, U. S. Department of Labor, Bulletins 117, 120, 124, 125, 126, 132, 149, 150.

[6] Women's Bureau, U. S. Department of Labor, Bulletin 117.

[7] For method of obtaining these population weights, see p. 70.

Distributions for Nonrelief Single Men

Preliminary distributions for single men in wage-earning, clerical, and business and professional groups were derived, in the first instance, by adjusting the smoothed distributions for single women in these same occupational groups on the basis of relationships found to exist between the earnings of women and men. Such a procedure was necessitated by the lack of separate sample earnings data for single men.

On the basis of various studies, the following general relationships between the earnings of men and women were assumed to exist:[8]

1. Earnings of women in the wage-earning group equal to approximately 60 percent of the earnings of men in that group;
2. Earnings of women in the clerical group equal to approximately 75 percent of the earnings of men in that group;
3. Earnings of women in the business and professional groups equal to approximately 90 percent of the earnings of men in those groups.

These relationships were used to construct three income distribution curves for men, which were similar to those for women except that they were shifted slightly to the higher income levels.[9] The curves for men in each of the three occupational groups were smoothed and the percent was read off for each of the usual income intervals, the highest interval again being $5,000 and over.

The estimated numbers of single men in the 1935–36 population belonging to the wage-earning, the clerical, and the business and professional groups were then distributed by income level according to the appropriate percentage distributions.[10]

Single men who belonged in the farming group were distributed by income level on the basis of the percentage distribution for two-person farm families from the Study of Consumer Purchases. The weighted distribution for the farm group was then added to those for single men in the other occupational groups to obtain one distribution by income level for all single men.

Adjustment of Nonrelief Distributions

The earnings data, upon which the preliminary distributions for single individuals were based, were deficient in several respects, and it was therefore essential that the distributions be checked against data from other sources. It was necessary, especially for the higher income levels, to correct the earnings distributions so that they would represent income from all sources. Comparisons with other available data were also needed because the sample studies that were used included data for women who were members of economic families, as well as for women who were not living in family groups. The distribution for single men, in particular, required careful checking because of the arbitrary assumptions involved in its construction.

Adjustment on the Basis of Two-Person Family Distribution

The percentage distribution for all single men was first compared with that for two-person families in the United States. The two curves showed marked similarities although, as was to be expected, the distribution for single men showed a greater concentration in the lower income levels. On the basis of this comparison the distribution for single men was smoothed and altered slightly.

Correction by Income Tax Data

As in the case of families, it was necessary to correct the income distribution for single individuals because of underrepresentation at the higher income intervals. Federal income tax data for 1935, adjusted by methods described below,[11] were used to obtain separate distributions by income level for single men and for single women in the income classes above $3,000.

The distributions for single men and single women were first corrected by adding at the income class $5,000 and over the additional number of cases shown by the income tax data to have belonged in this class.[11] The data above $5,000 were classified into the 13 income intervals shown in table 15.

The income tax data were less reliable for the income classes between $3,000 and $5,000 than for the higher intervals, because they were estimated by the Bureau of Internal Revenue from only a sample of the total number of returns. Nevertheless, the fact that the preliminary distributions for single men and women were based on earnings data rather than on income data made it desirable to check the distributions in these middle income intervals against other information. The income curves for men and women were therefore compared above $3,000 with the corresponding curves based on income tax data. The curves based on the two sources of data were similar, both for single men and for single women, although the distributions based on earnings data were somewhat lower. Accordingly, the distributions were smoothed and the proportions in income classes above $3,000 raised.

Comparison With Data for Single Individuals From Other Studies

The income distributions for single individuals were next compared with the distributions for this group shown by data from the National Health Survey and from the Study of Consumer Purchases.

[8] Bulletin 152, Differences in the Earnings of Women and Men, U. S. Department of Labor, Women's Bureau, 1938; see also the other studies of the Women's Bureau listed above.

[9] For example, if 10 percent of single women in the clerical group received less than $500 during the year, the same percent of single men in this group were assumed to have received less than $666 during the year.

[10] For method of obtaining these population weights, see p. 79.

[11] For methods of adjusting the Federal income tax data, and of correcting the distributions by this data, see p. 87.

In the case of the National Health Survey, the sample data for single individuals were not classified by sex, and were available for only four broad income classes—under $1,000, $1,000 to $2,000, $2,000 to $3,000, and $3,000 and over. The sample percentage distributions for cities of the same size range in the same region were averaged, each distribution being given equal weight. The resulting distributions were combined by weighting them by the number of single individuals in the 1935–36 population living in each size of city within each region.

This distribution was compared with the distribution for single individuals obtained in the present study before correction by income tax data. The comparison showed a greater concentration of incomes below $1,000 in the National Health Survey data. The differences in the definitions of income, in the methods of obtaining the estimates, and in the year covered may well have accounted for this discrepancy.[12] These differences, which resulted in a lower distribution for the Health Survey sample, were apparently of sufficient magnitude to more than offset the upward bias introduced by the fact that the Health Survey included only single-person householders in its sample.

In view of these results, and the differences in coverage and in definition, it was concluded that no revision in the income distribution for single individuals was desirable. A comparison of the distribution with the distribution shown by the data for single individuals contacted in the Study of Consumer Purchases led to the same conclusion.

Distributions for Relief Single Individuals

The income distributions for single men and women who received direct or work relief at any time during the year were estimated on the basis of relationships shown between the distributions and between the average incomes of relief and nonrelief families. They were checked against income data—not entirely comparable—for one-person relief cases shown in various studies made by the Division of Social Research of the Works Progress Administration.

The ratio of the incomes of relief families to the incomes of nonrelief families was adjusted before being applied to single individuals, on the assumptions that a larger proportion of single individuals were unemployable and that single men and women were less able to supplement the direct relief they received with work relief or independent earnings than were families. The income distribution constructed for relief single individuals was therefore lower in relation to that for nonrelief single individuals than was the distribution for relief families in relation to that for nonrelief families.

The percentage distributions that were used in distributing relief single individuals by income level were as follows: for women, 37 percent under $250, 35 percent between $250 and $500, 23 percent between $500 and $750, and 5 percent between $750 and $1,000; and for men, 32 percent under $250, 31 percent between $250 and $500, 28 percent between $500 and $750, and 9 percent between $750 and $1,000.

These estimated distributions for relief single individuals are obviously subject to a considerable margin or error, but since they represent only 15 percent of the total number of single individuals the possible error in the national distribution is considerably less.

Combining the Relief and the Nonrelief Distributions

The income distribution of single men who had not received any relief during the year was combined with that for relief single men by adding the frequencies in the two distributions at each income level. The same procedure was followed for single women. The resulting distributions for all single men and for all single women were then combined to yield one distribution for all single individuals.

[12] See p. 59.

SECTION 6. POPULATION WEIGHTS FOR THE SAMPLE DISTRIBUTIONS

The population weights necessary for extending the sample income distributions to cover all consumers in the United States were obtained by dividing the estimated population on January 1, 1936, into homogeneous groups corresponding to those into which the sample income data were classified. The date of January 1, 1936 was chosen because it was the midpoint of the 12-month period covered by the study.

The primary division of the population was among the three major types of consumer units—members of families of two or more persons, single individuals, and members of institutional groups. Families were further subdivided by region, by type of community, by color and nativity, by composition—i. e., into normal families (with both husband and wife) and broken families—and by relief status.[1] Nonrelief families were still further subdivided, once according to family-size groups and again according to occupation. Single individuals were divided by sex, by relief status, and by occupational group; and institutional residents by region, and by type of institution or quasi-institutional group within each region.

The basis of the various break-downs and the steps followed in obtaining the population weights for the sample distributions are described here in the order in which they were carried out. The limitations of the available source material dictated to a considerable extent the methods used and the sequence followed.

Population by Type of Consumer Unit Within Each Region

Estimates of the total population and of the farm population on January 1, 1936, were available, by States, from the United States Bureau of the Census and the United States Bureau of Agricultural Economics, respectively.[2] These two sets of State estimates were used to ascertain the total farm and the total nonfarm population in each of the five geographic regions shown in chart 10.[3]

Institutional Residents

The numbers of institutional residents in the farm and in the nonfarm population in each region were then estimated and deducted from the above figures. The total institutional population in each region was estimated on the basis of data from the source materials listed on page 92 below. The proportions shown by the 1930 Census for institutional residents living on farms and in nonfarm areas in each region were used to divide the estimated 1936 institutional population into farm and nonfarm groups.[4]

Single Individuals and Members of Families

The farm and the nonfarm populations in each region, exclusive of institutional residents, were now separated into two groups—single individuals and persons living in families. This break was made according to the proportions of single individuals and persons in families in 1930, as derived from the census data for the farm and for the nonfarm population in each region.[5] An adjustment was made at a later stage in the work to take account of those sons and daughters who were living with their parents but were not members of the economic family as defined in this study.[6]

Family Members by Type of Community

Estimates of the number of persons in farm families in each region were obtained in the process of separating the farm population into single individuals and persons in families. The division of the total number of nonfarm family members in each region among the other types of community—rural nonfarm, small cities, middle-sized cities, large cities, and metropolises—was made by assuming the percentage relationships that

[1] For definitions of these classifications, see Appendix A, sec. 1.

[2] U. S. Department of Commerce, Bureau of the Census, Estimated Population of the United States by Six-Months Periods From January 1, 1930, to July 1, 1936. Release of January 21, 1937. U. S. Department of Agriculture, Bureau of Agricultural Economics, Farm Population Estimates, January 1, 1937. Release of June 24, 1937.

[3] For States included in the various regions, see pp. 42-43.

[4] The number of institutional residents in 1930 was determined by combining the following quasi-family groups reported by the Census: persons in institutions, in crews on vessels, in labor camps, and in military and naval posts. For method used in dividing institutional population by type of institutional group, see p. 92.

[5] For method of obtaining number of single individuals in 1930, see pp. 77-78.

[6] For explanation, see pp. 76-77.

were shown by the 1930 Census.[7] It should be noted that the population weights for rural nonfarm areas included nonfarm families living in open country as well as in villages, although the sample distributions against which they were applied included data from village families only.

Families by Region and Type of Community

Having determined, for each type of community within each region, the total number of persons living in families, the next step was to convert these persons into family units.

Data from the 1930 Census were first used to calculate the average size of family in each type of community within each region. But the average size of family in the United States has been declining since 1900 by the absolute amount of two-tenths of a person each decade. Since it is reasonable to assume that the trend has continued during the present decade, it was necessary to reduce somewhat the averages shown by the 1930 Census to avoid underestimating the number of families in the 1936 population. In line with suggestions made by the Census Bureau, the 1930 average size of family in the United States was assumed to have decreased from 4.1 to 4.0 by 1936. The average size of family in each type of community within each region was reduced in the same proportion, or 2.4 percent below the 1930 average.

The number of families in each degree of urbanization in each region was then obtained by dividing the estimated family population for 1936 by the adjusted average size of family.

It should be noted that both the family population and the average size of family used in determining the number of families in each degree of urbanization in each region were based on the census definition of a family rather than on the definition of the economic family used in this study. This procedure was unavoidable, and is considered justifiable, since there is no reason to assume that the number of economic families would be appreciably different from the number of census families.[8]

Families by Color and Nativity Group

Families in each type of community in each region were next divided among the four color and nativity groups: native-born white, foreign-born white, Negro, and other color. Recent estimates of the color-nativity distribution of the population for the total United States were available from a study made by the population committee of the National Resources Committee. A comparison of these figures with those shown by the 1930 Census indicated that the principal change that had occurred was a decrease in the proportion of foreign-born whites in the population from 10.9 percent to 9.4 percent of the total. The same relative reduction—13.8 percent of the 1930 figure—was applied uniformly to the proportions of foreign-born white families in each type of community within each region as shown by the 1930 Census. The absolute difference between the percentages of foreign-born whites in the 2 years was added to the 1930 percentage of native-born whites in the same area to obtain the 1936 percentage for that group. The proportions of Negro and of other color families remained the same as those shown by the 1930 Census.

The division of farm and rural nonfarm families by color and nativity groups was necessary, for obtaining population weights, only in the Southern Region. For this region, the total number of farm and of rural nonfarm Negro and other color families were applied as population weights against the sample income distributions for Negro normal families, while the total number of native-born and foreign-born whites were applied as population weights against the sample income distributions for native-white normal families. In other regions, the total number of farm and of rural nonfarm families were applied as population weights against the sample income distributions for native-white normal families.

Farm Families by Type of Farming

Population weights for the farm sample distributions were obtained by dividing all the farm families in the United States according to the principal types of farming represented by the sample data used from the Study of Consumer Purchases. The division of families was made along State boundary lines with all the farm families in a given State assigned to the same group, on the basis of the type of farming prevailing in the State as a whole. The total number of farm families in the States assigned to each type-of-farming group was used as the population weight for the sample distribution representing that type of farming.[9]

For the Southern States it was necessary to obtain separate population weights for operator and for sharecropper families in each of the three color groups—white, Negro and other color. The 1935 Agricultural Census furnished the basis of this tenure break within the white and the Negro groups. The tenure break for other color families was made on the basis of the proportions shown for Negro families.[10]

[7] For definitions of these various types of community, see Appendix A, sec. 1.

[8] The number of census families would be reduced only to the extent that the adjustment for sons or daughters living at home but not pooling their incomes in the common family fund left only one member of the family group. The average size of census family, however, would be appreciably larger than the average size of the economic family. For explanation of this point, see p. 77.

[9] See summary tabulations in tables 1A and 3A.

[10] For definitions of operator and sharecropper, see footnote 11, p. 43.

Families by Normal and Broken Composition

The division of families according to normal or broken composition [11] was carried through only for native-white families in urban communities in each region and for Negro families in Southern urban communities and in North Central large cities and metropolises. Since sample income data were not available for broken families living in villages and in most of the farm areas, it was not necessary to obtain separate population weights for normal and for broken families in these types of community. Similarly, no population weights were required for normal and broken families in other color and nativity groups, i. e., the foreign-born white, the other color, or—in areas where they were not included in the regular sample—for the Negro group.[12]

The division between native-white normal and native-white broken families was made on the basis of the proportions of normal and broken families found in 28 of the cities covered by the Study of Consumer Purchases. Because the percentage of the total population covered by the sample in each of these cities was much smaller for broken families than for normal families, it was necessary to multiply the number of broken families in each sample community by a step-up factor before computing the proportions of normal and of broken families. Thus if the regular sampling coverage for native-white normal families in a given city was 10 percent, while the coverage for other families was only 5 percent, it was necessary to multiply the number of broken families in the sample by two.[13]

The percentage of native-white families that were normal—i. e., contained both husband and wife—was then obtained for each city by dividing the number of normal families in the sample by the total of normal families plus the stepped-up number of broken families. When there was more than one sample of any type of community in the same region, the percentages for the various cities were averaged to obtain the percentage figures finally used to determine for each type of community within each region the number of normal and the number of broken native-white families.[14]

In each of the three sizes of cities in the South and in metropolises and large cities in the North Central Region the numbers of normal and of broken Negro families were obtained in the same way.

The above methods were adopted because no census data were available for dividing families according to normal or broken composition. The latest available figures were for 1930 and were not in sufficient detail to meet the needs of this study. The estimated proportions of normal and broken families in urban communities in each region are shown in the accompanying table.

TABLE 8A.—*Proportions of normal and broken urban families in two color-nativity groups, by region and type of community,*[1] *1935–36*

Region and type of community	Native-white		Negro	
	Normal families	Broken families	Normal families	Broken families
New England:	*Percent*	*Percent*	*Percent*	*Percent*
Large cities	76.6	23.4	----	----
Middle-sized cities	79.1	20.9	----	----
Small cities	82.6	17.4	----	----
North Central:				
Metropolises	81.8	18.2	70.5	29.5
Large cities	78.4	21.6	76.9	23.1
Middle-sized cities	81.2	18.8	----	----
Small cities	81.1	18.9	----	----
South:				
Large cities	80.2	19.8	62.9	37.1
Middle-sized cities	78.7	21.3	68.7	31.3
Small cities	82.4	17.6	67.5	32.5
Mountain and Plains:				
Large cities	79.9	20.1	----	----
Middle-sized cities	79.6	20.4	----	----
Small cities	81.5	18.5	----	----
Pacific:				
Large cities	80.7	19.3	----	----
Middle-sized cities	80.6	19.4	----	----
Small cities	80.6	19.4	----	----

[1] For definition of each type of community, see p. 43.

Families by Relief Status

The separation of relief and nonrelief families in the various color and nativity groups within each type of community in each region was made on the basis of the proportions shown by data from the Study of Consumer Purchases and also from the National Health Survey conducted by the United States Public Health Service. The studies covered approximately the same period, and both defined a relief family as one that had received any form of assistance from a public or private agency at any time during the schedule year, so that the data were comparable.[15]

For each sample community in the Study of Consumer Purchases, the percent of families that had received relief was calculated for each color-nativity

[11] For definitions of normal and broken families, see p. 43.

[12] Where sample income data were available for families in these groups, they were pooled and one sample income distribution obtained for all such nonrelief families in the community sampled. An exception to this practice was made in the case of foreign-born whites in North Central large cities and metropolises, where separate income distributions were obtained for this group. See p. 54.

[13] Step-up factors used to bring the clipped sample data for broken families up to the coverage of the regular sample data for normal families were as follows: Chicago, Ill., 8.60; Providence, R. I., 6.10; Columbus, Ohio, 14.78; Atlanta, Ga., 17.17; Denver, Colo. 6.91; Portland, Oreg., 14.62; Haverhill, Mass., 4.35; New Britain, Conn., 4.21; Muncie, Ind., 13.90; New Castle, Pa., 8.42; Springfield, Ill., 8.72; Dubuque, Iowa, 12.61; Columbia, S. C., 16.29; Mobile, Ala., 14.20; Butte, Mont., 14.50; Pueblo, Colo., 12.52; Aberdeen-Hoquiam, Wash., 12.97; Bellingham, Wash., 6.02; Everett, Wash., 15.67; Wallingford, Conn., 8.18; Beaver Falls, Pa., 4.61; Connellsville, Pa., 4.79; Logansport, Ind., 6.20; Peru, Ind., 5.32; Mattoon, Ill., 4.95; Albany, Ga., 9.71; Gastonia, N. C., 5.00; Billings, Mont., 2.87.

[14] Each city was given equal weight in this procedure. In the case of small cities in the New England and in the Mountain and Plains Regions there was only one sample city for which the percent of normal families was available. The percent for this city was averaged with the percent of normal families in the middle-sized cities in the region and the result used as representative of small cities. In the case of the Pacific Region there was no small city for which the percent of normal families was available; the percent in middle-sized cities was used as representative of small cities as well.

[15] For explanation of the relief classification, see p. 42.

group, with separate percents for normal and for broken families whenever the sample income data for any group had been classified in that manner.[16]

The relief percents for urban communities, as derived from the Consumer Purchases data, were adjusted by means of the relief percents for 71 cities included in the National Health Survey. The two studies showed very similar percentages for communities of the same degree of urbanization within a region, so that the adjustments were relatively minor.

The data from the National Health Survey did not yield separate relief percents for normal and broken families, or for every color and nativity group. For 38 cities, the relief percents were available for all color and nativity groups combined, and for 33 cities they were available for all white families and for all Negro plus other color families. In order to average the percents from the two studies, by type of community within each region, it was first necessary to place them on a comparable basis. This was done as follows: The number of relief families in each color and nativity group in each degree of urbanization in a region was first calculated on the basis of the Consumer Purchases Study percentages. Relief percents were then calculated for all color and nativity groups combined, or as separate percents for all white families and for all Negro and other color families. This done, it was possible to obtain a corrected relief percent for cities of the same degree of urbanization within each region by averaging the percents from the two studies. The percent from each study was weighted in accordance with the number of cities of a given size and region covered by the sample data from each study.

The corrected percents were then used to determine the number of relief families in each degree of urbanization within each region. These families were allocated to the various color-nativity groups and to normal and broken families within a group according to the proportions of relief families in these groups shown by the Consumer Purchases Study.[17] The estimated percents of relief families in the various types of community within each region are shown in the accompanying table.

TABLE 9A.—*Percent of families that received relief at any time during the year, by region and type of community,*[1] *1935–36*

Type of community	All regions	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region
Metropolises	14.8	.....	14.8	.....	.....	.....
Large cities	16.4	16.0	18.2	15.2	17.0	12.9
Middle-sized cities	18.3	20.6	17.7	15.6	24.4	21.9
Small cities	16.5	17.6	18.2	12.5	23.7	10.2
All urban communities	16.5	18.0	17.0	14.2	21.8	13.6
Rural nonfarm communities	19.3	20.9	20.9	16.6	20.8	20.4
Farms	8.9	5.3	2.9	11.2	17.9	8.2
All rural communities	13.6	15.8	12.2	13.2	19.1	15.3
All communities	15.3	17.4	15.5	13.6	20.1	14.2

[1] For definition of each type of community, see p. 43.

The use of sample data from the Study of Consumer Purchases and from the National Health Survey to determine the number and distribution of relief families in the United States perhaps calls for some explanation. No comprehensive relief statistics have been compiled on the basis of a relief definition such as was used in the Study of Consumer Purchases. Such integrated relief series as have been compiled on a national scale are on a monthly basis, and do not yield an unduplicated count of the number of families and individuals receiving any form of relief at any time during a year. The disadvantages of using sample data were minimized by the extensive coverage of the two studies.

Nonrelief Families by Size and by Occupational Group

By subtracting the number of relief families from the total number of families in each of the component groups, it was possible to ascertain the number of nonrelief families in each color-nativity group in each degree of urbanization in each region. These nonrelief families were then distributed among the four sizes of family and among the eight occupational groups.[18] Both of these divisions were made on the basis of the proportions shown by the nonrelief families interviewed in the Study of Consumer Purchases.

The income schedules from nonrelief families gave information on both size of family and occupational group, but no attempt was made in the present study to compute sample income distributions for each size of family within each occupational group. Instead the

[16] Thus in North Central large cities and metropolises, relief percents were calculated for native-white normal, native-white broken, Negro normal, Negro broken, and foreign-born white families. In urban communities in the South, relief percents were calculated for native-white normal, Negro normal, Negro broken, and the combined group of native-white broken and foreign-born white families. The percent of all Negro families that received relief was used as the relief percent for the other color group in the above communities. In urban communities in the New England, the Mountain and Plains and the Pacific Regions, and in middle-sized and small cities in the North Central Region, relief percents were calculated for native-white normal, for native-white broken and for the combined group of foreign-born white, Negro and other color families, both normal and broken. For village and farm communities in all regions except the South, the relief percent for native-white normal families was used for all color-nativity and family composition groups combined. For village and farm communities in the South, the relief percents for native-white normal families were used for all white families and those for Negro normal families for all Negro and other color families.

[17] When the National Health Survey yielded separate percentages for all whites and for all Negro and other color families, corrected percentages were computed for each of these two groups, and it was possible to determine the total number of white families on relief in a given degree of urbanization and the total number of Negro and other color families. In such instances, the distribution of families to component qualitative groups was made separately for each group—that is, white families were distributed among native-white normal, native-white broken, and foreign-born white groups according to the percentage distribution of relief families in these groups as shown by the Consumer Purchases Study data. Negro and other color relief families were allocated in a similar fashion among the component groups of families.

[18] For description of family-size and occupational classifications, see pp. 43–44.

data were first classified by family size, all occupations combined, and then reclassified by occupational group, all family sizes combined.[19] In obtaining the population weights, therefore, a similar procedure was followed—i. e., nonrelief families were divided once according to family size and once according to occupational group. The divisions were made separately for each color-nativity group, and for normal and broken families within a group whenever the sample data were classified in that manner. Thus the total number of nonrelief native-white normal families in small cities in the North Central Region was divided among the four sizes of family, and among the seven occupational groups according to the average proportions shown by the nonrelief native-white normal families in North Central small cities that were interviewed in the Study of Consumer Purchases.[20]

The sample income data collected from relief families interviewed in the Study of Consumer Purchases were not available, when the present study was undertaken, according to size of family or according to occupational group, so that it was unnecessary to attempt to divide all relief families in the population by these factors.

The United States Census for 1930 gave a distribution of all families by size which was used in various ways to check the distribution for nonrelief families obtained from the Consumer Purchases Study data. However, the differences in date and in definition of family, and the necessity of excluding relief families from the break-down made it impossible to use the 1930 Census proportions for distributing the estimated number of families in 1936 according to size of family.

The occupational distribution shown by the 1930 Census was inadequate for purposes of this study because it represented gainful workers rather than families. This fact, together with the difference in date, slight differences in definition, and the problem of excluding relief families from the 1936 classification made it necessary to use the occupational distribution shown by the data from the Study of Consumer Purchases.

Population Weights for Component Groups of Families as Related to Families in Sample

The numbers of families included in the sample income data from the various regions and types of community, and from the different color-nativity groups are shown in tables 10A and 11A in relation to the total number of families in the population. As table 10A indicates, the total income sample comprised slightly less than 1 percent of all families in the United

[19] For further explanation, see pp. 53–54.

[20] The distributions for sample communities of the same degree of urbanization in each region were averaged to obtain the percentages used. Urban families were classified into only seven occupational groups. Farm families constituted the eighth occupational group mentioned above. See p. 44.

TABLE 10A.—*Comparison of total number of families in the population and number of families in income sample from Study of Consumer Purchases,[1] by region and type of community,[2] 1935–36*

Region and type of community	Families in population	Families in sample	
		Number	Percent of all families
New England:			
Large cities	574,833	14,170	2.47
Middle-sized cities	461,201	6,998	1.52
Small cities	439,593	3,975	.90
All urban communities	1,475,627	25,143	1.70
Rural nonfarm	322,008	1,999	.62
Farms	154,237	543	.35
All rural communities	476,245	2,542	.53
All communities	1,951,872	27,685	1.42
North Central:			
Metropolises	3,295,100	49,797	1.51
Large cities	2,535,658	25,810	1.02
Middle-sized cities	1,694,623	18,876	1.11
Small cities	2,507,275	12,263	.49
All urban communities	10,032,656	106,746	1.06
Rural nonfarm	2,378,288	6,427	.27
Farms	2,190,761	6,142	.28
All rural communities	4,569,049	12,569	.28
All communities	14,601,705	119,315	.82
South:			
Large cities	1,354,753	20,412	1.51
Middle-sized cities	677,643	16,069	2.37
Small cities	1,210,764	7,842	.65
All urban communities	3,243,160	44,323	1.37
Rural nonfarm	2,082,513	7,406	.36
Farms	3,486,189	9,728	.28
All rural communities	5,568,702	17,134	.31
All communities	8,811,862	61,457	.70
Mountain and Plains:			
Large cities	217,292	9,387	4.32
Middle-sized cities	128,739	10,245	7.96
Small cities	369,577	5,295	1.43
All urban communities	715,608	24,927	3.48
Rural nonfarm	513,696	2,494	.49
Farms	662,587	2,889	.44
All rural communities	1,176,283	5,383	.46
All communities	1,891,891	30,310	1.60
Pacific:			
Large cities	896,794	16,746	1.87
Middle-sized cities	228,224	11,547	5.06
Small cities	361,014	5,634	1.56
All urban communities	1,486,032	33,927	2.28
Rural nonfarm	383,465	4,159	1.08
Farms	273,430	4,051	1.48
All rural communities	656,895	8,210	1.25
All communities	2,142,927	42,137	1.97
Total United States:			
Metropolises	3,295,100	49,797	1.51
Large cities	5,579,330	86,525	1.55
Middle-sized cities	3,190,430	63,735	2.00
Small cities	4,888,223	35,009	.72
All urban communities	16,953,083	235,066	1.39
Rural nonfarm	5,679,970	22,485	.40
Farms	6,767,204	23,353	.35
All rural communities	12,447,174	45,838	.37
All communities	29,400,257	[3] 280,904	.96

[1] Includes both relief and nonrelief families. Excludes those families in sample income data from the Study of Consumer Purchases which were not used in constructing the estimated income distributions. See footnote 6, p. 57.

[2] For definitions of regions and types of community, see pp. 42–43.

[3] Includes 6,775 families which are counted twice because of the occasional borrowing of part of the clipped or regular sample data from one type of community in a region for use in constructing sample distributions for another type of community in the same region. See footnotes to tables 1A and 2A.

States. The sampling ratio varied among regions from approximaetly 0.7 percent in the South to almost 2 percent in the Pacific Region. In general, the percent of coverage was higher for urban than for rural communities.

Sample income data were available for 2 percent of the total number of native-white normal families in urban communities and 0.4 percent of those in rural communities. The percent of coverage for Negro normal families was almost 3 percent in Southern urban and about 0.4 percent in Southern rural communities. Native-white broken, foreign-born, and other color families were included only in urban communities,[21] and the percent of coverage was quite low, as indicated by table 11A.

Adjustment for Sons and Daughters Not in the "Economic" Family

As indicated earlier in the discussion, it was necessary to make an adjustment in the division of the noninstitutional population between single individuals and family members to take account of those sons and daughters living with their parents but paying for board and lodging and not pooling their incomes in the common family fund. According to the census definition of the family, these sons and daughters are family members; according to the definition of the economic family used in the present study they are classified as single individuals, along with other persons lodging in private homes and maintaining an independent economic status.

From the tabulations of the Consumer Purchases Study it was possible to obtain two independent estimates of the total number of such sons and daughters. The first estimate was based on data on the average number of such sons and daughters per family for native-white and Negro families contacted in the regular sample in each community covered by the study. By averaging the figures for communities of the same type, one average was obtained for each type of community within each region. These averages were weighted by the total number of families (including all color and nativity groups) in each type of community. A total estimate of approximately 500,000 independent sons and daughters was obtained by this method.

The second estimate was based on data on the average size of family, excluding these independent sons and daughters, for native-white and Negro families in the regular sample in each community. These figures were averaged and weighted, in the same manner as the data on average number of sons and daughters, to yield an estimate of the total number of members of

[21] A small clipped sample of such families was taken in five farm areas, but these data were not used in the present study. See footnote 7, p. 47.

TABLE 11A.—*Comparison of total number of families in the population and number of families in income sample from Study of Consumer Purchases,[1] by color-nativity, region, and type of community,[2] 1935–36*

Region and color-nativity group	Urban communities [3]			Rural communities [3]		
	Families in population	Families in sample		Families in population	Families in sample	
		Number	Percent of all families		Number	Percent of all families
New England:						
Native-white normal	722,422	17,542	2.43	378,729	2,542	0.67
Native-white broken	188,361	942	.50		0	
Foreign-born white	546,178	6,417	1.18	96,974	0	.00
Negro	18,671	221	1.22	2,240	0	.00
Other color	523	0	.17	322	0	.00
Total	1,475,627	25,141	1.70	478,245	2,542	.53
North Central:						
Native-white normal	5,542,361	89,171	1.62	3,994,561	12,599	.32
Native-white broken	1,336,014	2,344	.18		0	
Foreign-born white	2,756,103	10,853	.39	546,342	0	.00
Negro	433,276	4,382	1.01	51,198	0	.00
Other color	15,022	23	.15	6,948	0	.00
Total	10,082,676	106,746	1.06	4,599,049	12,599	.28
South:						
Native-white normal	1,809,768	29,010	1.59	4,027,109	11,029	.27
Native-white broken	442,838	419	.09		0	
Foreign-born white	138,577	0	.00	66,779	0	.00
Negro normal	480,229	13,980	2.89	1,394,290	6,105	.44
Negro broken	248,327	408	.16		0	
Other color	72,313	0	.00	90,503	0	.00
Total	3,743,190	43,823	1.37	5,568,702	17,134	.31
Mountain and Plains:						
Native-white normal	477,212	23,133	4.85	949,959	5,393	.56
Native-white broken	114,137	736	.52		0	
Foreign-born white	85,384	1,013	1.17	150,570	0	.00
Negro	20,709	75	.36	4,407	0	.00
Other color	18,109	120	.66	61,366	0	.00
Total	715,551	24,977	3.48	1,176,283	5,393	.46
Pacific:						
Native-white normal	904,631	30,941	3.42	583,147	8,210	1.43
Native-white broken	216,785	818	.38		0	
Foreign-born white	278,655	2,128	.76	111,703	0	.00
Negro	18,760	14	.07	2,354	0	.00
Other color	67,201	26	.04	39,631	0	.00
Total	1,486,032	33,927	2.28	636,805	8,210	1.25
Total United States:						
Native-white normal	9,467,394	190,367	2.01	9,831,526	39,733	.40
Native-white broken	2,287,975	5,119	.22		0	
Foreign-born white	3,804,977	20,394	.54	972,417	0	.00
Negro	1,219,520	18,998	1.56	1,444,459	6,105	.42
Other color	173,217	170	.10	198,772	0	
Total	16,953,083	235,066	1.39	12,447,174	45,838	.37

[1] Includes both relief and nonrelief families. Excludes those families in sample income data from the Study of Consumer Purchases which were not used in constructing the estimated income distributions. See footnote 6, p. 57.

[2] For definitions of regions and types of community, see pp. 42–43.

[3] Includes 6,775 families which are counted twice because of the occasional borrowing of part of the clipped or regular sample data from one type of community in a region for use in constructing sample distributions for another type of community in the same region. See footnotes to tables 1A and 2A.

economic families in the United States in 1935–36. This total, subtracted from the total number of family members estimated from the census data, gave a figure of approximately 300,000, representing roughly the number of sons and daughters not members of economic families.

Since both estimates were obtained from the same sample data, it seemed advisable to give them equal weight. The figure of 400,000—midway between the two estimates—was therefore used to make the adjustment in the division of the population between family

members and single individuals. The number of single individuals estimated from the census data was increased by 400,000, and the number of family members decreased by 400,000.

Average Size of Family

The average size of all nonrelief families and the average size of all relief families in the United States were estimated on the basis of the average size of families in these groups included in the regular samples from the Study of Consumer Purchases. The figures on average size of nonrelief families in sample communities of the same type within each region were averaged, each community being given equal weight, to obtain the estimated average size of family in each type of community within each region. The resulting averages were weighted by the number of families in each type of community within each region in order to calculate the average size of nonrelief families in each type of community and the average size of all nonrelief families in the United States. The same procedure was followed to obtain an estimate of the average size of all relief families.

In the case of nonrelief families, it was also desired to estimate the average size of family for each family-size group—i. e., families of three and four persons, of five and six persons, and of seven and over persons. As a first step, the average size for each of these groups, as computed from the 1930 Census, and of two-person families was weighted by the number of nonrelief families in each family-size group to calculate the average size of all nonrelief families. The result obtained (3.87) was larger than the average size of nonrelief families shown by the Consumer Purchases data (3.85). This was accounted for by the fact that the census figures were not confined to nonrelief families, whose average size is well below that for relief families, and also, that the census figures include the independent sons and daughters who were not members of the economic family. In addition, the average size of family has decreased slightly between 1930 and 1935–36. For these reasons, the average size within each family-size group (except, of course, two-person families) was lowered slightly, on the assumption that the differences in definition of family and in year would have caused the proportion of four-person families in the three- to four-person group, of six-person families in the five- to six-person group, and of very large families in the seven- and over-person group to be slightly lower than the 1930 Census figures indicate. The adjusted average size figures for each family-size group yielded an estimated average for all nonrelief families of 3.849 persons, and for all relief families of 4.472. The estimates of the average size of nonrelief families in each family-size group are presented in table 4.

The average size of nonrelief families in each type of community was first estimated on the basis of the data for the average size of nonrelief families in the sample communities covered by the Study of Consumer Purchases. These averages were adjusted slightly to bring them into line with the average size for all nonrelief families in the United States as estimated above. The estimated average size for each type of community was then compared with the corresponding figure from the census data, as adjusted for 1935–36. Again, the census data were found to be higher, because they included relief families as well as independent sons and daughters. The comparison indicated that the estimated average size of nonrelief farm families derived from the Consumer Purchases data was out of line with the estimates for other types of community. As a result of this comparison, the estimate of the average size of family in this group was reduced slightly. The final estimates of the average size of family in each type of community are presented in table 7.

Estimated Number of Single Individuals

An estimate of the number of single individuals in the population in 1935–36 was necessary for two purposes: first, to separate single individuals from members of families; and second, to determine the population weights to be applied against the sample income distributions for single men and single women in the various occupational groups.

As indicated earlier in this section, it was assumed that the proportions of single individuals and family members in the total population and in the farm population were the same as those shown by the 1930 Census data.[22] The number of single individuals in each type of community within each of the five geographic regions in 1930 was calculated by adding together the census data for the following types of individuals: One-person families, numbering 2,357,463 in the total United States; lodgers and servants in private families, estimated at 5,793,175;[23] and members of the following quasi-family groups[24]—individuals living in hotels, 427,904; those living in boarding and lodging houses, 471,125; those living in schools, 166,910; and members

[22] See p. 71.

[23] The census provides data on the number of families having lodgers and the number of lodgers per family. The total number of lodgers in these families (4,961,193) was obtained by multiplying the number of families having one lodger by one, those having two lodgers by two, etc. Households having more than 10 lodgers are considered lodging houses and are classified as quasi-family groups. Since the above data on lodgers were classified only for farm, rural nonfarm, total large cities and metropolises, and total urban communities, urban lodgers outside of metropolises and large cities were divided between middle-sized and small cities on an arbitrary basis. The total number of families with servants in 1930 was 523,922. See Population Census, vol. VI, table 34. The estimate for servants and lodgers combined was raised by approximately 300,000 to allow for servants and lodgers in private homes having both servants and lodgers—information which is not given in the census data. The division by type of community was partially estimated, as in the case of lodgers.

[24] The remaining quasi-family groups were treated as institutional groups

of other quasi-family groups, 87,561. The last group includes lighthouse keepers, coast guard station men, and residents of fraternities, monasteries, priories, business women's and men's clubs, Y. M. C. A.'s, and Y. W. C. A.'s.[25]

The total number of single individuals in the United States in 1930 was estimated at 9,304,138. Of this number, 1,106,752 were estimated to belong to the farm population. On the basis of these estimates the proportion of single individuals in the total population in 1930 was calculated as 7.7 percent and the proportion of single individuals in the farm population as 3.7 percent. These percentages were applied against the estimated total population and the estimated farm population in 1935–36 to obtain the total number of single individuals in the United States in 1935–36 and the total number in the farm population. These figures were then subtracted from the total population in each group to obtain the estimated number of persons in census families of two or more persons. The adjustment for sons and daughters living at home but not members of the economic family increased the number of single individuals in the United States by 400,000 and correspondingly reduced the number of persons in families.

Population weights for the various sample income distributions constructed for single individuals were obtained by subdividing the total number of single individuals into nine component groups, as follows: Nonrelief women in three occupational groups, non-relief men in four occupational groups, single women that had received relief and single men that had received relief.

Single Individuals by Relief Status

The division of single individuals by relief status was made on the basis of the sample data for single individuals collected in the National Health Survey. Estimates of the percent of single individuals on relief in each type of community within each region were calculated from these data by methods similar to those used in calculating the relief percents for families from the Consumer Purchases data.[26] The resulting percents were applied to the total number of single individuals in each type of community within each region to obtain the total number of single individuals receiving any form of relief during 1935–36.

Single Individuals by Sex

The division of the single individual population as between men and women was not available directly from census data. It was therefore necessary to estimate the proportions of single men and single women on the basis of 1930 Census figures for unmarried or divorced gainful workers of each sex. The use of such data for estimating the sex break for unattached individuals as defined by this study is, of course, open to serious objection. The census classification "gainful workers" includes all persons who usually follow a gainful occupation, even though they were not employed at the time the census was taken, but it does not include unemployable persons or those individuals that have no gainful occupation.

Even more serious than the omission of these latter groups is the discrepancy between the classification of unmarried or divorced men and women and single individuals as defined in this study. The only justification for the procedure followed was the absence of more satisfactory data, and the possibility of checking the results against the relative number of income tax returns filed by men and women who were either single or not living with husband or wife and not heads of families.

The number of gainful women workers who were unmarried or divorced was available directly from the 1930 Census for age groups from 15 years and over.[27] It was necessary to estimate the number of gainful men workers who were unmarried or divorced by applying to the total number of gainful men workers in each age group the percent obtained by dividing the total number of unmarried and divorced men in that age group (including those without any gainful occupation) by the total number of men in the population. The ratio of unmarried or divorced gainful women workers to unmarried or divorced gainful men workers finally obtained was approximately 35 to 65.

This ratio was checked against the relative number of income tax returns filed for 1935 by single women and married women not living with their husbands and by single men and married men not living with their wives. The relative proportions of returns for these two groups for all income classes combined were 39 to 61. Since the proportion of women to men rose gradually from the lower to the higher income brackets, it was assumed that the inclusion of single individuals with incomes below the income tax level would probably have reduced the proportion of women somewhat.

The ratio of relief single women to relief single men was accepted as 4 to 9, or approximately 31 to 69 percent on the basis of findings from two surveys of the relief population: One, the October 1933 relief census taken by the Federal Emergency Relief Administration and, two, a survey of urban workers on relief in 79 cities during May 1934.[28]

[25] Division of the quasi-family groups by type of community within each region was partially estimated. It was assumed that there were no such quasi-family groups in the farm population.

[26] *For explanation, see pp. 73-74.*

[27] Population Census 1930, vol. IV, table 27. The figure used included a small number of women whose marital condition was unknown.

[28] F. E. R. A., Unemployment Relief Census, October 1933, Report No. 3, table 1, p. 35. W. P. A. Division of Social Research, Urban Workers on Relief, pt. 2, Appendix C, table 3, p. 74. The 1933 census showed the 4 to 9 ratio for unattached men and women receiving relief. The latter survey, covering only urban communities, indicated that 36 percent of the one-person cases receiving relief during May 1934 were women and 64 percent were men.

In the light of the available evidence considered above, it was decided to use the proportions of 35 to 65, shown in table 34B, for dividing the total number of single individuals by sex.

Nonrelief Single Individuals by Occupational Group

Inasmuch as no direct information was available concerning the distribution of single men and single women by occupational groups it was necessary to rely on data for gainful workers in the population as a basis for classifying nonrelief single men and nonrelief single women into the occupational groups for which percentage income distributions were prepared.

The classification of men and women gainful workers prepared by Alba M. Edwards from 1930 Census data was used to determine the proportions of women in each of the three occupational groups—wage-earning, clerical, and the business and professional—and the proportions of men in these occupational groups and in farming.[29] By applying these same proportions to the total numbers of nonrelief single men and single women, the population weights were obtained for the three sample income distributions for nonrelief single women and the four distributions for nonrelief single men. No break-down of relief single individuals by occupational group was needed since the relief distributions for single men and for single women were for all occupational groups combined.

[29] See, Edwards, Alba M., *A Social Economic Grouping of the Gainful Workers of the United States*, Journal of the American Statistical Association, December 1933, pp. 377-387.

SECTION 7. ADJUSTMENT OF INCOME DISTRIBUTIONS BY DATA FROM INCOME TAX RETURNS

Despite the random sampling methods employed in the Study of Consumer Purchases, families with high incomes were found to be somewhat underrepresented in the number of family schedules actually collected. This was due partly to the fact that many of the high income families were away from their regular places of residence during the scheduling period and could not be contacted by the field interviewers, and partly to the high percentage of refusals among those contacted.

Because of this underrepresentation at the high income levels, it was necessary to adjust the income distributions both for families and for single individuals to allow for a higher proportion of consumer units in the upper brackets. This adjustment was made on the basis of data from Federal income tax returns for the calendar years 1935 and 1936.

Income Tax Data Available for 1935 and 1936

Tabulations of the 1935 data, which will be published in the Statistics of Income for 1935, were released by the Bureau of Internal Revenue in the following preliminary photostated tables: [1]

"TABLE 5.—*Individual returns for 1935 by net income classes and by sex and family relationship, showing number of returns and net income.*

"TABLE 7.—*Individual returns for 1935 by net income classes, showing sources of income, deductions, and net income, also total number of returns and, for returns of net income of $5,000 and over, number of returns for each specific source of income and deduction.*

"TABLE 9.—*Individual returns for 1935, by States and territories and by net income classes, showing numbers of returns, net income and total tax; also totals for preceding years.*

"TABLE (unnumbered).—*Wholly and partially tax-exempt obligations reported in individual returns for 1935 with net incomes of $5,000 and over, showing amount owned and interest received, by nature of obligations and net income classes.*"

[1] The data contained in the first three tables are comparable to those for 1934 appearing in basic tables with the same numbers and titles in Statistics of Income for 1934, pt. I, U. S. Treasury Department, Bureau of Internal Revenue. The table on wholly and partially tax-exempt obligations corresponds to the text table of the same title appearing on pp. 18 and 19 of the 1934 report, U. S. Treasury Department, Bureau of Internal Revenue, Statistics of Income for 1934, pt. I.

Preliminary statistics of individual income tax returns for 1936 filed in the period through January-August 1937 were available, in less detailed form, from two press releases issued by the Treasury Department in February and in March 1938. These releases gave, for all types of individual returns combined, the number of returns, net income, sources of income and deductions, classified by broader income intervals than were used in the 1935 tabulations mentioned above.

The 1935 income tax data for returns with net incomes of $5,000 and over were tabulated into 34 income classes, as follows: Ten $1,000 intervals between $5,000 and $15,000; three $5,000 intervals, seven $10,000 intervals, four $50,000 intervals, two $100,000 intervals, and two $250,000 intervals between $15,000 and $1,000,000; six income intervals, ranging from $500,000 to $1,000,000 in width, between $1,000,000 and $5,000,000; and one open income interval for incomes of $5,000,000 and over.

Although the data from income tax returns were to be used to correct the estimated distributions based on sample data only above $7,500, it was necessary, in adjusting the income tax data to render it comparable with the sample income data used in the study, to make use of the data for income tax returns below $7,500. Since several of the adjustments involved the shifting of returns and of aggregate income from one income level to a higher level, it was possible to obtain a satisfactory income distribution above $7,500 only by carrying through the adjustment for the entire income range above $5,000.[2]

Accordingly, the adjustments of the income tax data were carried through on the basis of the full income classification, although the data for the income intervals below $7,500 were dropped out of the final distribution.[3]

[2] At one point, the combining of the incomes of husbands and wives making separate returns, use was also made of the data in the income classes just below $5,000. See p. 83.

[3] The income tax class intervals were combined into the class intervals used in this study when net income was adjusted to correspond with income as defined in this study. See pp. 82-83.

Limitations of the Income Tax Data for Purposes of Adjustment

Before the data from income tax returns could be used in adjusting the income distributions for families and single individuals, it was necessary, as indicated in Part II of the report, to carry through various combinations and adjustments of the data to render the income tax distributions comparable to those derived from the sample income data used in this study. These adjustments centered around four main problems:

1. Combining the data for various types of income tax returns and adjusting them to obtain distributions for family units and for single individuals.
2. Adjusting the net income data to include the same items of income included in income as defined in this study.
3. Adjusting the 1935 income tax data to allow for the effects of the increased national income during the fiscal year 1935–36.
4. Adjusting the income tax data to allow for the nonreporting of those not filing returns, and for the understatement of income by those that did file.

The detailed steps involved in making these various adjustments of the income tax data are described in this section of the appendix. It should be noted that the sequence of the various steps depended to some extent on the nature of the available statistical data and hence does not correspond exactly to the general grouping given above.

In the latter part of the section are described the methods used in correcting the national income distributions for families and single individuals by means of the adjusted income tax data, and in extending these corrections to the distributions for the various component groups of consumer units.

Grouping of Data for Various Types of Returns

Individual income tax data on number of returns and net income are classified by the Bureau of Internal Revenue into the following nine groups:

1. Joint returns of husbands, wives and dependent children, and returns of either husband or wife when no other return is filed,
2. Separate returns of husbands,
3. Separate returns of wives,
4. Male heads of families, including single men and married men not living with wives,
5. Female heads of families, including single women and married women not living with husbands,
6. Returns of single men and married men not living with wives, not heads of families,
7. Returns of single women and married women not living with husbands, not heads of families,
8. Community property returns,
9. Returns of estates and trusts.

The income tax returns filed for estates and trusts were excluded from further consideration inasmuch as they did not represent the income of either families or single individuals as defined in this study.

Single men and women not heads of families and other individuals filing returns classified in groups 6 and 7 were assumed to be, for the most part, unattached individuals who were either living alone, or, if living with others, were maintaining a separate economic existence and not pooling their incomes in a common fund. Data from these returns were used, therefore, to correct the estimated income distributions for single men and single women derived from sample data. A description of the methods used in adjusting the income tax data and in correcting the income distributions for single individuals is given later in this section.

The returns classified in groups 1, 2, 3, 4, 5, and 8 all represented returns by members of families, and it was desired to combine these into a single distribution representing the incomes of family units.

The returns in groups 1, 4, and 5 were combined directly, by adding the numbers and the net income at each income level.

Before further combinations could be made, a number of intermediate steps were necessary—first, the division of community property returns to correspond to the separate returns of husbands and the separate returns of wives, and the combination of the community property returns of husbands and of wives with the separate returns of husbands and the separate returns of wives, respectively; second, the adjustment of the income distributions for the various groups from a net income basis to one more nearly comparable to the definition of income used in this study; and third, the addition of the incomes of wives making separate returns (including community property returns) to the incomes of husbands making separate returns (including community property returns).

Division of Community Property Returns Between Husbands and Wives

Community property returns, filed by residents of only a few States, represent either joint or separate returns of husbands and wives deriving income from property that is jointly owned. Only those joint returns with net income of $10,000 or more, and separate returns with net income of $5,000 or more, are tabulated by the Bureau of Internal Revenue under the community property heading. Joint returns of community property showing net income under $10,000 and separate returns showing net income under $5,000 are classified either under joint returns of husbands and wives (group 1) or under the returns of husbands or wives filing separate returns (groups 2 and 3).

In tabulating the joint returns for incomes of $10,000 or over, the Bureau divides the data on net income, deductions, etc., to represent separate returns of husband and wife. When the return does not indicate the division of items as between husband and wife, the

data are divided evenly, with the net income class for each return equal to one-half of the combined net income of the joint return.[4]

Since the information concerning the actual proportions of husbands' and wives' community property returns at the various income levels was not available for use in this study, the data on community property returns were divided between husbands and wives by applying the proportions shown at the various income levels for husbands and wives making separate returns as classified in groups 2 and 3 above.

The community property returns of wives were then added, by income level, to the separate returns of wives, and the community property returns of husbands to the separate returns of husbands.

Adjustments of Net Income to Correspond With Income as Defined in Study

Net income, as defined for income tax purposes, omits certain items that are included within income as defined in this study, and includes net capital gains which are not included by the study definition. To place the income tax data on a comparable basis with the other income data it was necessary to add, at each income level, the value of certain types of income that had been subtracted from the gross income as deductions—i. e., contributions, taxes paid, interest paid and "other deductions"—and to subtract, at each income level, the value of net capital gains reported. It was also necessary to add to the income tax data the value of interest received from securities that are exempt from taxation and not included in gross income according to the Revenue Act of 1934, under which the 1935 income tax returns were filed.[5]

Since the data on tax-exempt interest, deductions and capital gains were not classified for each of the various types of returns, it was necessary to accept some arbitrary basis for allocating the aggregate amounts of such items at each income level among the following groups of returns:

1. Joint returns of husbands, wives, and dependent children and returns of either husband or wife when no other return is filed, and returns of heads of families who are single men, married men not living with wives, single women, or married women not living with husbands (groups 1, 4, and 5, above).
2. Separate returns of husbands, including community property returns of husbands.
3. Separate returns of wives, including community property returns of wives.
4. Returns of single men and married men not living with wives, not heads of families.
5. Returns of single women and married women not living with husbands, not heads of families,
6. Returns of estates and trusts.

The percentage distribution of aggregate net income, at each income level, among these six groups appeared to offer the most satisfactory basis for allocating to each group the appropriate share of tax-exempt interest and deductions to be added, and the appropriate share of capital gains to be deducted, at each income level.

The following deductions from gross income allowed in calculating net income for income tax purposes were totalled at each income level above $5,000: Net capital loss, contributions, taxes paid, interest paid and "other deductions."[6] The value of interest received from wholly tax-exempt obligations and of the nontaxable amounts of interest received from partially tax-exempt obligations were added to the above totals at each income level, and the value of net capital gains subtracted. The resulting aggregate amounts were then distributed among the six groups of returns, at each income level above $5,000, according to the proportions of aggregate net income received by each group at the various levels.

From the aggregate amounts assigned to each group of returns it was possible to calculate the average amount to be added to the returns at each income level in order to adjust the income distribution from a net income basis to one which would correspond with the definition of income used in the study. This adjustment, made separately for each group of returns listed above,[7] involved the shifting of part of the returns and of the aggregate income in each income class into the next higher income class. Such shifting was necessary because the addition of the average amount of deductions and tax-exempt interest to those returns that were already near the upper limit of a given income interval brought their incomes within the range of the next higher interval. For example, if an average amount of $746 in deductions and tax-exempt interest were added to the returns in net income class $10,000 to $15,000, all those returns which had net incomes of $14,255 or more would shift upward into the class interval of $15,000 to $20,000. In order to determine the actual number of returns to be shifted from each net income class, a cumulative frequency curve was drawn, from which it was possible to read off the number of returns which would be sufficiently affected by the addition of the average amount of deductions and tax-exempt interest for the class to move out of one income class into another. Thus in the example given above, it was possi-

[4] See Statistics of Income for 1934, pt. I, p. 7.

[5] A few other items of income—e. g., compensation for injuries and sickness and rental value of a dwelling house furnished to a minister of the gospel—are excluded from gross income as defined by the Revenue Act of 1934 but included in income as defined for this study. These items are relatively negligible in amount and no attempt was made to adjust the data specifically to include them. The adjustments for nonreporting and for understatement of income, described on pp. 84-85 below, are intended to include the incomes of State and local government officials whose salaries are exempt from Federal taxation.

[6] Deductions for business loss and partnership loss were not included in this total, since these items had also been deducted from gross income as reported in the sample income data used in the study.

[7] With the exception, of course, of the returns for estates and trusts, which were not to be included in either the family or the single individual estimates.

ble to read off the number of returns falling between $14,255 and $15,000, and to shift that number to the next higher income class. In this manner, a new frequency distribution was obtained, in which the income classification corresponded closely—although not exactly—with the definition of income used in the study.[8]

The addition of deductions and tax-exempt interest at each income level caused, of course, an increase in the aggregate income and necessitated an adjustment of the aggregate income distribution to correspond with the adjustment of the distribution of returns. This involved adding, at each income interval, the additional aggregate income from deductions and tax-exempt interest accruing to those returns remaining in the class,[9] plus the aggregate net income and the income from deductions and tax-exempt interest of those returns shifted into the class,[10] minus the aggregate net income of those shifted out of the class.[11]

Combining Incomes of Husbands and Wives Making Separate Returns

After the adjustments for deductions and tax-exempt interest had been completed for each group of returns, the income distribution for husbands making separate returns (including the community property returns of husbands) was combined with the distribution for wives making separate returns (including the community property returns of wives). This combination was made in accordance with the general assumption that at the high income levels husbands and wives making separate returns would endeavor to divide the family income as evenly as possible in order to avoid the surtax charges.

Beginning at the top of the income scale, husbands and wives were paired into "family" units. Insofar as possible, husbands in the highest income bracket were assigned wives in the same bracket, but since the number of husbands reporting high incomes was considerably greater than the number of wives it was necsary to pair some of the husbands with wives in lower income brackets. Proceeding down the income scale in this fashion, every husband was paired with a wife, and the husband-wife units were distributed by income level according to the combined income of the two returns.[12] The number of husband-wife units with incomes above $5,000 was somewhat greater than the number of husbands filing separate returns of incomes over $5,000, because some husbands with incomes below $5,000 were paired with wives whose incomes were also below $5,000, but sufficient to bring the combined income above $5,000.

The new distribution of husband-wife units was now combined with the distribution of other family units by adding the frequencies and the aggregate income at each income level.

Adjustment from 1935 to 1935–36 Basis

The resulting family distribution, which was based on income tax data for the calendar year 1935, was next adjusted to allow for an increased number of family incomes of $5,000 and over in the fiscal year 1935–36, when the national income was considerably greater than in 1935. This adjustment was made by relating the differences in the aggregate gross income reported for the year 1935 and for the year 1936, on all types of individual returns with net incomes of $5,000 and over, to differences in the size of the national income paid out during this period, as estimated by the Department of Commerce.[13]

National income paid out in 1936 was estimated at $62,441 million, representing a 13.6 percent rise over the estimated amount paid out during 1935. An estimate for 1935–36, based on monthly estimates for the last 6 months of 1935 and the first 6 months of 1936, showed a 5.5 percent rise over the 1935 figure, or 40.3 percent of the total rise from 1935 to 1936.

The aggregate gross income (net income plus deductions for capital loss, interest paid, taxes paid, contributions and "other deductions," and minus capital gain) for all income tax returns for net incomes of $5,000 and over showed a total rise of 36.5 percent from 1935 to 1936. It was assumed that the increase in aggregate gross income from 1935 to 1935–36 bore the same proportionate relationship to this total increase that the rise in national income from 1935 to 1935–36 bore to the total rise from 1935 to 1936. Accordingly, 40.3 percent of the increase in aggregate gross income for all types of returns with net incomes of $5,000 and over between 1935 and 1936 was taken to represent the increase in aggregate gross income from 1935 to 1935–36.

Since only part of this increase accrued to those income recipients who belonged to family units, it was

[8] It was still necessary to add the income of supplementary earners over 18 who were not covered by the joint income tax returns or the returns of the heads of family units, and also the imputed value of nonmoney income. See pp. 84-85 below.

[9] Calculated by multiplying the number of returns remaining in the class by the average amount of deductions and tax-exempt interest added to these returns.

[10] Aggregate net income calculated by multiplying the number of returns shifting by the average amount of their incomes—i. e., the midpoint between the net income figure above which the returns were shifted and the upper limit of the income class from which they were moved. Thus, in the example given above, the midpoint between $14,255 and $15,000. The resulting amount of aggregate income was subtracted from income class $10,000–$15,000 and added to income class $15,000–$20,000. Income from deductions and tax-exempt interest calculated by multiplying the number of returns shifting by the average amount of deductions and tax-exempt interest that was added to their returns.

[11] Calculated in the same way as the aggregate net income for those shifting into the class. See footnote 10 above. Thus in the example given, the amount of aggregate net income added at income interval $15,000–$20,000 was subtracted from income interval $10,000–$15,000.

[12] The husband's income was assumed to equal the average income of the income class to which he belonged and the wife's income, in most cases, to equal the average income of the income class to which she belonged. The sum of the two determined the income class of the new family unit.

[13] See Nathan, Robert R., and Cone, Frederick M., *Monthly Income Payments in the United States, 1929–37*, Survey of Current Business, February 1938.

necessary to divide it among the various groups of returns on some proportionate basis. The percentage distribution of aggregate gross income among the various groups of returns in 1935 was used as the basis for this division.[14]

The portion of the increased amount of gross income accruing to those types of returns which had been combined into family units was now distributed, by income level, according to the percentage distribution of aggregate income shown by the family distribution for 1935.[14] The additional amount of aggregate income at each income level was then added to the aggregate income shown in the 1935 family distribution at that income level to obtain a distribution of aggregate income for 1935–36. It was assumed that the average income within the various income classes remained the same as the average in 1935. Accordingly, the number of family units in the 1935–36 distribution was determined by dividing the 1935–36 aggregate income at each income interval by the average income within that interval shown by the 1935 family distribution.

Adjustment for Nonreporting

Having obtained an estimated 1935–36 income distribution for those families that would have filed Federal income tax returns of $5,000 or more gross income, it was necessary to increase the number of family units and the aggregate income at various levels to account for those families that are legally required to file returns but fail to do so, and for families—such as those of State and municipal officials—whose salaries are not subject to Federal income taxation. The adjustment for nonreporting was based on arbitrary assumptions concerning the probable percentage increase in income tax returns if all families with incomes of $5,000 and over had actually filed income tax returns for the year 1935–36.

It was assumed that nonreporting was most prevalent in the income classes $5,000 to $10,000 and tended to be negligible at income levels above $20,000. Specifically, it was decided that the number of families with incomes between $5,000 and $10,000 should be increased by 25 percent; that the number with incomes between $10,000 and $15,000 should be increased by 15 percent; and the number between $15,000 and $20,000 increased by 5 percent.[15] The 1935–36 distribution was corrected for nonreporting by increasing the number of families and the aggregate income at these income levels in accordance with the above assumptions.

[14] Available income tax data for 1936 were not classified by type of return so that it was necessary either to accept the 1935 percentage relationships among groups of returns and among income classes as representative of 1935–36, or to attempt some arbitrary correction of the data. Comparisons of the 1935 and 1936 relationships, made on the basis of net income data for all types of returns combined, indicated that percentage relationships were so little changed between 1935 and 1936 that it would not be worth while to attempt any adjustment for 1935–36.

Adjustment for Understatement of Income

A further adjustment was made in the 1935–36 family distribution to allow for the understatement of certain types of income by families actually filing returns. Understatement was considered most likely to occur in the reporting of income from the following sources: (1) Business profits; (2) partnership profits; (3) rents and royalties; and (4) "other income" (including income from all sources not specifically reported). Like nonreporting, understatement was assumed to vary by income level and to be proportionately greater at the lower income levels. Specifically, it was decided that the aggregate income of families with incomes between $5,000 and $10,000 should be increased by 15 percent, that of families between $10,000 and $20,000 by 15 percent, that of families between $20,000 and $25,000 by 10 percent, and that of families between $25,000 and $50,000 by 5 percent.[15] These assumptions resulted in an overall estimate of understatement equal to 10 percent of the aggregate income of families with incomes of $5,000 and over after the correction for nonreporting had been made.

The total amount of income to be added at each income level of the family distribution to correct for the understatement of income was calculated by applying the appropriate percentages to the aggregate income figures shown by the 1935–36 distribution after the correction for nonreporting had been completed.[16]

The aggregate amount of income to be added at each income level to allow for understatement was then divided by the number of family units in order to determine the average amount to be added to the incomes of families at that level. Addition of such an average amount of income at each level resulted, of course, in a shifting of some families from each income interval to the next higher interval. This shift and the corresponding shift in aggregate income were accomplished by the same methods described above for adding deductions and tax-exempt interest to the net income distributions.[17]

Addition of Income of Supplementary Earners

In combining the data for various types of income tax returns to obtain a distribution of the incomes received by family units, no account was then taken of the income received by those members of economic families, other than wives, whose incomes were not covered by

[15] These percentages, of course, are essentially arbitrary but were arrived at after considering the tentative estimates advanced by several authorities who were consulted.

[16] The sequence of the adjustments for nonreporting and for understatement implies that families added to the distribution to allow for nonreporting would have understated their incomes to the same extent as did the families that actually filed income tax returns.

[17] See pp. 82–83.

the joint family return or by the return of the head of the family. Some of these family members, of course, had individual incomes exceeding the allowable personal exemption and filed separate income tax returns, but it was not possible to utilize these returns in adjusting the income distribution for families, since no basis was available for separating such returns from those filed by individuals maintaining independent economic status.[17a] The majority of family members with "supplementary" incomes, however, had incomes too small to require the filing of tax returns.

Inasmuch as the Study of Consumer Purchases was the only available source of information concerning the relative importance of such incomes at different income levels, this particular adjustment of the income tax data was postponed until the data had been made to correspond, as closely as possible, with the sample income data collected from the families interviewed in that study. Even so, the information available from the income schedules collected in the Study of Consumer Purchases related only to the supplementary income from earnings, and hence offered no adequate basis for estimating the total amount of income received by supplementary income recipients. For this reason, and also because the available data tended, as explained below, toward an overestimate of the average number of supplementary earners at the various income levels, it was decided to make no specific adjustment for supplementary income other than earnings.

Available tabulations of the data from the Study of Consumer Purchases showed for families at each income level, in each sample community, the number of supplementary earners of four different types—husbands, wives, others 16 years and over, and others under 16 years—and the average earnings of each type. Since the earnings of husbands, wives, and dependent children under 18 are, according to the reporting requirements of the income-tax law, included as part of the family income, either in a joint family return, in separate returns of husband and wife, or in a single return by the head of the family, it was presumably only the supplementary earnings of part of those in the third group—those 18 years and over—that were omitted from the 1935–36 family distribution built up on the basis of income tax data.

However, the data from the Study of Consumer Purchases were not available in a form to permit the exclusion from the group of those supplementary earners between 16 and 18 years, so that the adjustment was made on the basis of the data for the entire group of supplementary earners (other than husbands and wives) over 16. The upward bias introduced by this procedure was, as observed earlier in the discussion, at least partially compensated for by the lack of any adjustment for supplementary income other than earnings.

From the tabulations for eight large cities, it was possible to calculate the average number of supplementary earners of 16 years and over for families in each income class up to $10,000 and over, and the average earnings per supplementary earner in each class.[18]

By multiplying the average number of supplementary earners per family by the average earnings per supplementary earner, there was obtained, for each income class up to $10,000, an average amount of supplementary earnings per family to be added to the incomes of the families in the 1935–36 family distribution. The average amounts to be added at income classes above $10,000 were obtained by plotting the data for the classes below $10,000 and extending the curve freehand to read off the extrapolated values. Once having determined by the above means the average amount of supplementary earnings to be added at each income level, it was possible to carry forward the adjustment by using the same methods used in adding average deductions and tax-exempt interest, and in adding the estimated average amounts necessary to correct for understatement of income.[19]

Addition of Imputed Value of Nonmoney Income

The estimated income distributions based on sample data from the Study of Consumer Purchases included in family income the imputed values of certain kinds of nonmoney income—e. g., the occupancy of an owned home and, for farm and village families, home-produced food. To render the distribution based on income tax data more nearly comparable with respect to the items included in income, it was necessary to add the estimated value of these forms of nonmoney income.

The average value of such nonmoney income at each income level was estimated on the basis of the average value of these nonmoney items in the national expenditure patterns built up from consumption data collected in the Study of Consumer Purchases.[20]

These average amounts of nonmoney income were added at each income level, and the distribution of families and aggregate income shifted upward—as in previous adjustments—to allow for those families whose incomes were sufficiently increased by the added income to cause them to move into a higher income class.

Final Adjustment of National Distribution for Families

The series of adjustments of the income tax data resulted finally in a distribution of family units and of

[17a] The utilization of these individual returns in adjusting the income distribution for single individuals is explained below.

[18] Data for the eight cities were averaged, each city being given equal weight.

[19] See pp. 82–83.

[20] These patterns have been prepared by the National Resources Committee in a study of consumer expenditures and savings in 1935–36.

aggregate income for income levels above $7,500 which was on a comparable basis with the estimated national distribution built up from the sample income data from the Study of Consumer Purchases. The latter distribution, which was known to be deficient in the high income levels, was corrected by adding at each income interval above $7,500 the additional number of families and amount of aggregate income shown by the adjusted income tax data to belong in those income intervals.

Since the population weights used in building up the estimated national distribution from sample data had included all families in the United States, it was necessary to reduce the number of families in the income intervals below $7,500 to allow for the increased number of families in the higher income intervals. On the assumption that the sample data below $7,500 reflected correctly the relative proportions of families at the different income levels, the total reduction in number of families below $7,500 was distributed among the various income intervals in proportion to the relative number of families in each interval before the correction was made.[21]

Adjustment of Regional Distributions for Families

Adjustments of the estimated national income distribution in accordance with income tax data were extended to the estimated distributions for families in each of the five geographic regions, and for other component groups of families.

The adjustments of the regional distributions were made on the basis of Federal income tax data on the number of individual returns and the aggregate net income reported from each State. These data were classified by net income classes but not by type of return, and no information was given concerning deductions and sources of income. It was obviously not possible, therefore, to carry through for each State the series of adjustments that were made in the income tax data for the total United States.

The data on individual returns and aggregate net income for the several States were combined, for net income classes above $5,000, to yield separate distributions of returns and of aggregate net income for each of the five regions defined in this study. Since data for all types of individual returns were included in these regional distributions, it was necessary to estimate the proportion of returns and of aggregate income belonging to members of family units. This was done by applying to the data for each region the percentages that were calculated from the national data, showing at each income level the proportions of total individual returns and total aggregate net income in the United States reported by members of family units.[22]

The resulting regional distributions of the returns and of aggregate net income were now comparable to the combined national data for the various types of family returns before any adjustments had been made in those data.

The unadjusted national data for these types of returns were compared with the data in the final family distribution for 1935–36, and calculations made of the percentage increase in the number of returns and in the aggregate income at each income level that had resulted from the series of adjustments.

In the absence of any evidence as to how these percentage increases might have varied among regions if the adjustments had been carried out independently, it was assumed that the data from the various regions were equally affected by the adjustments. Accordingly the number of returns and the aggregate net income in the unadjusted regional distributions were increased at each income level by the same percentage amounts shown by the national data, to effect an over-all correction of the income tax data for each region.

The resulting regional family distributions for income levels above $7,500 were used to adjust the estimated income distributions that had been derived from the sample income data from the Study of Consumer Purchases. These final adjustments of the regional distributions were made in the same way as the final adjustment of the national distribution.[23]

Adjustments of Distributions for Other Component Groups of Families

Available tabulations of the Federal income tax data do not classify number of returns or aggregate net income by such factors as type of community, family size, color-nativity, and occupational grouping. Accordingly, it was necessary to adopt some arbitrary method of distributing among the component groups of families the increased number of families and aggregate amount of income that had been added to the national and to the regional distributions to allow for underrepresentation of high income families in the sample data.

The general basis accepted for allocating these families was the relative number of families in income classes $7,500–$10,000, and $10,000 and over, shown by the uncorrected income distributions for the component groups in each type of classification.[24] Thus, the total number of families added at income class $7,500–$10,000 would be distributed among the four

[21] These proportions were obtained by calculating a percentage distribution, by income level, for the total number of families below the $7,500 level. These percentages were applied to the total number of families to be subtracted from the distribution below $7,500 in order to obtain the number of families to be subtracted from the various income intervals.

[22] See p. 81.

[23] See above.

[24] The income class $10,000 and over included the families in all of the income classes above $10,000.

family-size groups according to the proportionate numbers of families of each group in that income class shown by the family-size distributions built up from the sample data.

The implied assumption underlying this general procedure was that the sample data from the Study of Consumer Purchases represented correctly the proportions of families of each component group in the high income classes although they underrepresented the total number of high income families.[25] This assumption probably introduced a degree of error into the final distributions, for if the very high income families had been properly represented in the sample the proportions shown in the component groups in income class $10,000 and over would probably have been somewhat altered. However, the procedure did not involve the assumption that the same proportionate relationship between component groups would prevail at every income level above $10,000. It is obvious, for instance, that the ratio of clerical families to independent business families at the income level $10,000 to $15,000 would be considerably higher than the ratio of clerical families to independent business families at the income level $15,000 to $20,000. An allowance for such variations was made in estimating the average and aggregate incomes of families with incomes of $10,000 and over belonging to different occupational groups and living in different types of community.[26]

The income distribution for each component group of families was adjusted below $7,500, in the same way that the national and regional distributions were adjusted, to allow for the number of families added at the higher income levels.

Adjustment of National Distribution for Single Individuals

The estimated income distribution for single individuals was also corrected for underrepresentation of the high income classes by means of Federal income-tax data.

The adjustment, carried through separately for the estimated distributions of single men and of single women, was made for income classes over $3,000 on the basis of income tax data for two types of returns—single and married men not heads of families, and single and married women not heads of families—after these data had been adjusted to correspond with the study definition and classification of income.[27]

It was recognized that some of the individuals whose returns were classified under these headings were probably not maintaining a separate economic status, and hence were not single individuals as defined by this study. But it was assumed that the majority of those with net incomes of $3,000 and over would not be pooling their incomes in a common family fund, even though they shared a household with others. Accordingly, no reduction was made in the number of returns above $3,000 to allow for the few individuals that might be members of economic family groups.

The following series of adjustments, similar to those made in the income tax data for family returns, were carried through for the data from each group of returns: (1) Adjustment of net income to correspond with income as defined in the study, (2) adjustment from a 1935 to a 1935–36 basis, (3) adjustment for nonreporting, (4) adjustment for understatement of income, (5) addition of the imputed value of nonmoney income.

The new income distribution for single men was plotted on the same scale with the distribution for single men which was derived from earnings data. The latter curve was then smoothed above $3,000 to conform more closely with the curve shown by the adjusted income tax data. The frequency distribution read off from this curve for income classes above $3,000 was then spliced to the distribution for income classes below $3,000—which had been adjusted to allow for the greater number of single men with incomes of $3,000 and over.[28]

The distribution for single women was adjusted in the same manner as the distribution for single men, and the two distributions were finally combined, by adding the frequencies and the aggregate income at each income level, to obtain the final distribution for all single individuals.

[25] The sample data obtained from the Study of Consumer Purchases included data for 952 families with incomes between $7,500 and $10,000, and 924 families with incomes of $10,000 and over.

[26] For discussion of this point, see pp. 88–89.

[27] The income tax data for returns with net incomes below $5,000 are estimated by the Bureau of Internal Revenue and hence are somewhat less reliable than the data above $5,000. Nevertheless, it seemed desirable, in view of the limitations of earnings data as a basis for estimating the income distributions of single men and single women, to use the income tax data for net incomes of $3,000 and over as a check against the distributions based on earnings data.

[28] For explanation of this adjustment, see discussion on p. 86.

SECTION 8. ESTIMATES OF AGGREGATE AND AVERAGE INCOMES

Estimates of the aggregate income of each group of families for which income distributions are presented in Parts I and II were obtained by multiplying the frequencies in each income interval by the average income for the families within that income interval.

The average (mean) income at each income interval was derived, in most cases, from the data from the Study of Consumer Purchases. These data indicated for nonrelief families in each color-nativity group within each sample community the average income in each income interval. For broad groups of families the average income within any given income interval was calculated by weighting the averages for the finer groups in the sample data according to the relative importance of these finer groups at that income interval in the 1935–36 population.

Thus, for example, the average income of all nonrelief families living in small cities in the United States and receiving incomes between $3,000 and $3,500 was obtained by weighting the averages for this income interval shown in the regular and in the clipped samples for small cities in each region. The weights used were the total number of native-white normal families and the total number of families belonging to all other color-nativity groups living in small cities in each region and receiving incomes between $3,000 and $3,500. The aggregates for nonrelief families in each region, type of community, and color-nativity group were calculated similarly.

Sample data on average incomes within each income interval were not available from the Consumer Purchases Study with the necessary detail for each occupational and for each family-size group. For these groups, therefore, the average income at each income interval was determined by correcting the midpoint of the interval on the basis of the relative magnitudes of the frequencies in that interval and in the income intervals immediately above and below it.[1] The average income was thus assumed to be higher than the midpoint in those income intervals where the income curve was rising, and lower than the midpoint where the curve was falling. The aggregates for relief families and for all single individuals were also obtained by this method.

The aggregate incomes of families with incomes of $7,500 and over were in every case derived from the adjusted income tax data, rather than from the Consumer Purchases sample data.[2] The aggregate incomes received by families in each region with incomes of $7,500 or more, and by all families in the United States in these income classes, were obtained directly from the adjusted income tax data, as was the aggregate for single individuals with incomes above $5,000.

The aggregate incomes of families in each region with incomes between $7,500 and $10,000 and with incomes above $10,000 were divided, respectively, by the numbers of families in the region receiving these incomes, in order to obtain the average income in each interval. The regional average at the income interval $7,500 to $10,000 was assumed to prevail for families living in each type of community. An adjustment was made, however, in the division of the aggregate income among families receiving $10,000 or more, so that families living in middle-sized cities, in small cities, in rural nonfarm communities, and on farms, were assigned progressively smaller proportions of the aggregate income of the region than their relative numbers indicated. This adjustment was made on the assumption that the average income of families receiving over $10,000 was higher in metropolises and large cities than in middle-sized and small cities, and higher in middle-sized and small cities than in rural nonfarm communities and farms, because the number of very wealthy families tends to increase with increasing urbanization.

---

[1] The procedure used was to add (algebraically) to the midpoint a correction given by the formula $\frac{(f''-f')}{24f}c$ where f = frequency in class for which mean is being estimated; f'' = frequency of class immediately above; f' = frequency of class immediately below, and c = class interval of class for which average is being computed. The formula was slightly different for the lowest income interval and for those income classes where the width of the class interval was changed. The formula gives the correction which would be required on the assumption that the distribution of frequencies within a class interval is accurately represented by a straight line passing through the point determined by centering the frequencies at the midpoint and parallel to a line joining similar points for the immediately preceding and following class intervals. The validity of the formula was checked by using it, in several cases, to compute averages for class intervals for which the correct averages were available from the Study of Consumer Purchases. The two figures agreed well in practically all instances.

[2] For method of obtaining these aggregates from the income-tax data, see sec. 7.

A similar adjustment was made in estimating the aggregate income for the occupational groups. The relatively few families in the wage-earning and in the clerical groups that received incomes of more than $10,000 for the year were assumed to have been concentrated within the income intervals just above $10,000. Families with incomes above $10,000 that belonged to the business and professional groups and those classified as the independent unemployed were assigned a correspondingly higher share of the aggregate income.

The income distributions based on data from the Study of Consumer Purchases included a negative income class for nonrelief farm families. The aggregate negative income was estimated by multiplying the number of nonrelief farm families in each region that received negative incomes by the average amount of negative incomes shown by the Consumer Purchases sample for farm areas in the region.

Having obtained the aggregate income at each income level for the various groups, the aggregates for related groups could be summed by income level. For example, the aggregate incomes of all families and of all single individuals were summed by income level to obtain the distribution of aggregate income of all families and single individuals presented in table 2. For any one group of families, the aggregate incomes of families at the various income levels could be summed to obtain the aggregate income of all families in the group—e. g., to obtain the aggregate income of all wage-earning families presented in table 9.[3]

The mean income for each component group of families and for each of the broader groups was obtained by dividing the estimated aggregate income by the number of families in the group. The median income for each group was calculated roughly by assuming a regular distribution of cases within the median income class; each median was rounded to the nearest $5. Both the mean and the median incomes for single individuals and for major groups of families are presented in the text tables for purposes of comparison.

[3] Due to the differences in method explained above, the aggregate income of all nonrelief families in the United States, obtained by using the data on average income by income level from the Study of Consumer Purchases, did not agree exactly with the aggregate for the same group of families obtained by summing the estimated aggregates for nonrelief families in each of the eight occupational groups, or in each of the four family-size groups. A small adjustment was therefore required in the aggregates for these latter groups so that the aggregate income of nonrelief families in all occupational groups and in all family-size groups corresponded, as they should, with the aggregate for the same group of families classified by region and type of community.

SECTION 9. ESTIMATES OF THE INCOMES OF THE INSTITUTIONAL POPULATION

Estimates of the incomes of the institutional population are necessary to complete the estimates of consumer incomes for all of the American people. As indicated in Part I of the report, the institutional group constitutes a distinctive type of consumer unit which is not readily comparable to the family and single individual units, because of the number of members it includes and because of the collective aspects of institutional income and expenditures.

Component Groups of the Institutional Population

The classification of the two million institutional residents by type of institutional group was described briefly in Part II of the report.[1] Residents of institutions "proper", whose incomes are to a large extent received from the institution in the form of subsistence and care, have been classified according to the general type of institution, as follows:[2]

1. Mental defectives confined in insane asylums, homes for feeble-minded, hospitals for epileptics, etc.
2. Physical defectives living in tuberculosis hospitals and sanitaria, schools for the deaf and blind, crippled children's hospitals, etc.
3. Prisoners and adult delinquents confined to jails, penitentiaries, workhouses, and reformatories for men and women,
4. Dependent and delinquent children living in orphan asylums and reformatories for juvenile delinquents,
5. Dependent adults living in almshouses and homes for the aged.

The quasi-institutional population, defined to include all individuals who live in collectively-supported groups because of the nature of their employment, has been divided into four groups:

1. Members of Civilian Conservation Corps camps,
2. Employees of general labor camps, such as lumbering, railroad, canal, and construction camps of various types,
3. Enlisted men in the Army and Navy stationed within the continental United States,
4. Members of crews on vessels.

Persons belonging to such groups receive subsistence in partial payment for their services, but they also receive money wages which they may spend as they choose.

Sample Data on Per Capita Incomes

No statistical information was available concerning the personal incomes of the members of these various types of institutional groups, so that it was necessary to estimate their incomes on the basis of a heterogeneous body of data on institutional expenditures obtained from various Federal and State reports.

Estimates of the per capita incomes received by members of the five types of institutions proper were based on per capita subsistence costs in State institutions, in seventeen States for which reasonably detailed and complete expenditure data were available. State institutions were accepted as typical units for analysis largely because of the available statistical information. Although it was recognized that per capita expenditures for subsistence might vary widely according to the source of support—i. e., private, Federal, State, or local funds—adequate statistical data were found for State institutions only. It appeared, from such fragmentary information as was available on other institutions, that per capita expenditures in State institutions tend to be somewhat lower than those in private and Federal institutions, and somewhat higher than those in municipal and county institutions. This circumstance, together with the fact that the bulk of the institutional population is cared for in State institutions, seemed to justify the acceptance of State data as fairly representative of all institutions regardless of the source of financial support.

The following official reports, from the seventeen States selected to represent the five geographic regions used in this study, were consulted for data on the per capita subsistence costs for residents of institutions:

1. Connecticut:
   (*a*) Report of the Department of Public Welfare, 1936.
   (*b*) Report of the Public Welfare Council.
   (*c*) Budget Report, 1937.
2. Massachusetts: (*a*) Budget Recommendations, 1936.
3. Iowa: (*a*) Report of the State Board of Control, 1934–36.
4. Michigan: (*a*) State Budget, 1936–37.

[1] See p. 32 and table 16.

[2] Persons living in monasteries, convents and similar religious institutions might properly constitute a small additional institutional group, but since they are grouped by the census with members of other small quasi-family groups, most of whom are unattached persons, they have been included in the estimates for single individuals.

5. Minnesota: (*a*) 18th Biennial Report, State Board of Control, June 30, 1936.
6. New York:
   (*a*) Financial Report of the Comptroller, 1936.
   (*b*) The Executive Budget, vol. I, 1937–38.
   (*c*) 69th Annual Report of the State Board of Social Welfare, June 30, 1935.
   (*d*) Report of Administration of State Institutions, 1935.
   (*e*) County, City, and Town Homes, 1936.
7. Ohio: (*a*) Report of the Department of Public Welfare, 1936.
8. District of Columbia: (*a*) Report of the Government of the District of Columbia, 1936.
9. Florida: (*a*) State Budget, 1936.
10. Kentucky: (*a*) Report of the Department of Public Welfare, 1936.
11. Maryland: (*a*) 13th Annual Report of the Board of Welfare, 1935.
12. North Carolina:
   (*a*) Biennial Report of the State Board of Charities and Public Welfare, 1934–36.
   (*b*) The Budget, 1937–39.
13. South Carolina: (*a*) Budget Report, 1936.
14. New Mexico: (*a*) State Budget, 1936.
15. South Dakota:
   (*a*) Annual Report of the Auditor, 1936.
   (*b*) Report of the Board of Charities and Corrections, 1934.
16. Wyoming: (*a*) State Budget, 1937–39.
17. California:
   (*a*) State Institutions of Social Welfare, 1936.
   (*b*) Statistical Report of Department of Institutions, 1935.
   (*c*) State Budget, 1937–39.

The institutions within each State were grouped according to the five institutional types, and the expenditure data for each type classified under three main categories:

1. Expenditures for personal subsistence, consisting of food, clothing, housing, household operation, equipment and supplies, and medical equipment and supplies,[3]

2. Group expenditures, consisting of administrative and supervisory costs, salaries and wages for attendants, education, recreation, protection, and transportation,[4] and

3. Savings, consisting of surplus and capital outlays for improvements of buildings and grounds.

The expenditures for personal subsistence have been considered synonymous with the aggregate personal incomes of the institutional residents. Regional per capita incomes for the sample institutions of each type were calculated by totalling the expenditures for personal subsistence of all institutions of a given type in the States sampled and dividing by the total number of residents in such institutions.

These average per capita figures, derived from the sample data, were later multiplied by population weights representing the total number of residents of each type within each region.[5]

Estimates of the per capita incomes of Army and Navy personnel were derived, by similar methods, from data on the subsistence costs and salaries of enlisted men. These data were obtained, for the fiscal year 1935–36, from the records of hearings on the military establishment appropriation bills for 1937 and 1938.[6] Comparable data for Civilian Conservation Corps enrollees were available in the Annual Report of the Director of Emergency Conservation Work, Fiscal Year Ending June 30, 1936.[7] For both groups, the data were on a national basis and hence did not reveal any regional variations in the per capita incomes of the members of these quasi-institutional groups.

Unfortunately, no sources of data on the incomes of residents of labor camps or of crews on vessels were discovered. It was assumed therefore—chiefly on the basis of occupational similarities—that the per capita incomes of the former group were similar to those of individuals in Civilian Conservation Corps camps, and of the latter group to those of enlisted men at Army and Navy posts.

The acceptance of per capita subsistence costs as a measure of the personal incomes received by residents of institutions probably results in some underestimation, inasmuch as income from outside sources is not included. It was recognized that many residents of such institutions receive some money income in the form of earnings, gifts from relatives, or annuities and pensions. However, the available data gave no information concerning such income and no attempt was made to account for it in the estimates.

The personal income estimates for the quasi-institutional groups, on the other hand, probably overstate the amount actually devoted to the personal use of the individuals, because part of the money income from salaries would undoubtedly go to the support of their families. To the extent that these amounts were not deducted from the incomes received by members of the

[3] The reports on institutional expenditures varied greatly with respect to the manner and detail in which expenditures were classified. The heterogeneity of the data inevitably influenced the items included and those excluded from expenditures for personal subsistence. In general, food included money expenditures for food and the imputed value of food produced by the institution. Clothing included only money expenditures for clothing material and supplies, with no imputed value for sewing and tailoring done by institutional residents. Housing included money outlay for rent, repair of buildings, ordinary repairs and replacements, insurance and fire protection. No attempt was made to impute a rental value for the occupancy of the owned institutional home, since there appeared no reasonable basis for such an estimate. Household operation, equipment and supplies is an inclusive category covering all expenses for fuel, light and water, furnishings, cleaning supplies, laundry, household equipment, and similar items. Medical supplies and equipment included in the personal subsistence category are limited to money outlays for hospital, medical and dental supplies and equipment.

[4] Expenses for such items as the salaries and wages for doctors, nurses and other attendants are included in group expenditures on the assumption that most of the medical care received by institutional residents was comparable—in its social origin and support although not in amount—to that available to families and single individuals through public clinics and health authorities. The same point of view led to the exclusion from personal subsistence costs of all administrative overhead, including expenses for education and recreation.

[5] Supervisory and administrative personnel were excluded from these population weights, because they were presumably included in the total number of families and single individuals in the region.

[6] Hearings before the Subcommittee of the Committee on Appropriations, House of Representatives.

[7] Appendix G, p. G1.

quasi-institutional groups they are counted twice in the national estimates.

Since the majority of the enrollees in the Civilian Conservation Corps are required to allocate a definite proportion of their monthly wages to their dependents, and since these amounts were specifically reported on the schedules collected from families interviewed in the Study of Consumer Purchases, the income estimates for Civilian Conservation Corps members have included only that portion of the wages retained by the enrollees. The estimates for Army and Navy personnel, however, include the total wages received. There appeared to be no adequate basis for estimating the portion of such income transferred to families, even if it had seemed desirable to exclude it from the estimates for these quasi-institutional groups.[8]

Population Weights

The population weights to be applied against the sample per capita income figures were obtained by estimating the total number of individuals in each type of institutional group in each geographic region, as of January 1, 1936.[9]

The regional population estimates for the residents of the five types of institutions proper were built up, by States, from the miscellaneous source materials listed below:

1. Patients in Hospitals for Mental Disease, 1931–32, 1934 and 1935, U. S. Bureau of the Census.
2. Mental Defectives and Epileptics in Institutions, 1929–32 and 1935, U. S. Bureau of the Census.
3. Children under Institutional Care and in Foster Homes, 1933, U. S. Bureau of the Census (p. 5).
4. Juvenile Delinquents in Public Institutions, 1933, U. S. Bureau of the Census (p. 3).
5. Care of Dependent and Neglected Children, 1932—Glenn Steele, U. S. Children's Bureau.
6. County and City Jails, 1933, U. S. Bureau of the Census (p. 2).
7. Prisoners in State and Federal Prisons and Reformatories, 1934 and 1935, U. S. Bureau of the Census (p. 3).
8. Care of Aged Persons in the United States, 1929, U. S. Bureau of Labor Statistics, Bulletin 489, Oct. 1929.
9. Number of Aged in Public and Private Institutions, 1930, Monthly Labor Review, Vol. 34, pp. 253–261.
10. Various State welfare and budget reports listed above.[10]

[8] It is a debatable question whether or not such duplication should be avoided in the national estimates. In one sense, the transfers of income to families are transfers from one consuming unit to another and hence are comparable to gifts for current consumption, which appear twice in the family income estimates based on the data from the Study of Consumer Purchases—i. e., they are not deducted from the incomes of the families that made the gifts yet they appear in the incomes of families that received them.

[9] See footnote 4, p. 71.

[10] See pp. 90–91.

Information on the number of enlisted men at Army posts within each geographic region as of January 1936 was available from the hearings on the military establishment appropriation bills for 1937 and 1938. The hearings on the Navy appropriation bills for 1937 and 1938 gave the number of enlisted men in the Navy, who were classified by region according to the port of call to which they were assigned. Data on the number of men working in labor camps and in crews on vessels were available only from the 1930 Census. Estimates for January 1936 were made by assuming a proportionate increase in their numbers corresponding to the increase that has occurred in the general population over the same period of time, and a regional distribution similar to that shown by the 1930 Census.

The final population weights for each type of institutional group within each region are shown in table 35B.

Aggregate and Average Incomes

No attempt was made to obtain a percentage distribution of the institutional population by income level, although it would have been possible to do so by determining the average per capita personal income for each institutional unit in the sample and distributing the residents of the individual units according to per capita income level, just as the families in the sample data from the Study of Consumer Purchases were distributed by income level. A percentage distribution by per capita income level could then have been calculated for each type of institutional group, and for the total institutional population. However, such distributions would have been of little or no value in themselves, and could not logically have been combined with the family distribution inasmuch as the latter was not on a per capita basis.

Estimates of the aggregate personal incomes of the members of the two quasi-institutional groups, shown in table 16, were obtained by multiplying the sample per capita income figure for each group by the population weight for that group in the total United States. For the five types of institutions proper, regional estimates were first obtained for each group. These regional estimates were then combined, by type, to obtain the national aggregates for each type and for the total institutional population. The average per capita incomes were calculated by dividing the national aggregates by the number of individuals in the respective groups and in the total institutional population.

APPENDIX B

STATISTICAL TABLES FOR REFERENCE USE

THE 35 tables presented in this section have been grouped under 4 general headings, which are largely self-explanatory.

In the first group, Tables Used as Basis for Charts in Parts I and II, are included seven tables containing the basic data for charts 3, 4, 5, 6, 7, 8, 9, 11, and 12. The basic data for other charts in the report have been presented in text tables.

The second group of tables, Frequency Distributions Corresponding to Percentage Distribution Tables in Part II, present the frequency distributions from which were calculated the percentage distributions given in text tables 5, 8, 10, and 12.

The third group, Percentage Distributions for Component Groups of Families and Single Individuals, includes the income distributions prepared for certain of the minor component groups of families, which were used in building up the income distributions for major groups of families but were not presented separately in the main body of the report. These distributions are, in many instances, based on sample data too scanty to insure estimates that are as reliable as those presented in the report itself. Accordingly, the distributions for these groups should not be used without careful attention to the limitations of the sample data, which are discussed in Appendix A. Particular attention is called to the limitations of the regional comparison of incomes, discussed on pages 18, 22–23, 36, 55, and 56.

The 12 tables included under the heading, Population Weights, show the numbers and percents of consumer units belonging to various component groups of the population for which income distributions have been prepared. Nonrelief families in the United States are classified by type of community and region, by color-nativity, by family-size groups, and by occupational groups; and relief families by type of community and region. Single individuals are classified by relief status and sex, and institutional residents by type of institutional group and region.

Additional tables, containing more detailed information on the population weights applied against the sample income distributions for various groups of families, are to be found in sections 3, 4, and 6 of Appendix A.

LIST OF APPENDIX TABLES

TABLE 1B.—*Share of aggregate income received by each tenth of Nation's consumer units and by upper 5 percent, 1935–36*

[Basis for charts 3 and 4]

Proportion of families and single individuals	Income range	Aggregate income		
		Amount (in millions)	Percent in each group	Cumulative percent
Highest 1 percent	$9,100 and over	$8,178	13.8	.....
Highest 2 percent	$5,881 and over	10,904	18.4	.....
Highest 3 percent	$4,425 and over	12,859	21.7	.....
Highest 4 percent	$3,480 and over	14,518	24.5	.....
Highest 5 percent	$3,100 and over	16,118	27.2	.....
Highest tenth	$2,600 and over	$21,452	36.2	100.0
Ninth tenth	$1,925–$2,600	8,593	14.5	63.8
Eighth tenth	$1,540–$1,925	6,815	11.5	49.3
Seventh tenth	$1,275–$1,540	5,511	9.3	37.8
Sixth tenth	$1,070–$1,275	4,444	7.5	28.5
Fifth tenth	$880–$1,070	3,911	6.6	21.0
Fourth tenth	$720–$880	3,259	5.5	14.4
Third tenth	$545–$720	2,548	4.3	8.9
Second tenth	$340–$545	1,719	2.9	4.6
Lowest tenth	Under $340	1,007	1.7	1.7
Total	.....	$59,259	100.0	.....

TABLE 2B.—*Proportion of Nation's consumer units receiving each tenth of aggregate income, 1935–36*

[Basis for chart 5]

Proportion of aggregate income	Income range	Families and single individuals		
		Number	Percent in each group	Cumulative percent
Highest tenth	$14,600 and over	197,000	0.5	100.0
Ninth tenth	$4,900–$14,600	750,000	1.9	99.5
Eighth tenth	$3,100–$4,900	1,618,000	4.1	97.6
Seventh tenth	$2,375–$3,100	2,249,000	5.7	93.5
Sixth tenth	$1,950–$2,375	2,801,000	7.1	87.8
Fifth tenth	$1,610–$1,950	3,433,000	8.7	80.7
Fourth tenth	$1,320–$1,610	3,985,000	10.1	72.0
Third tenth	$1,040–$1,320	5,130,000	13.0	61.9
Second tenth	$760–$1,040	6,550,000	16.6	48.9
Lowest tenth	Under $760	12,745,000	32.3	32.3
Total	.....	39,458,000	100.0	.....

TABLE 3B.—*Families and single individuals in each third of Nation, by type of consumer unit, 1935–36*

[Basis for chart 6]

Type of consumer unit	Number of consumer units in—				Percentage of consumer units in—				Percentage of group in—			
	All income classes	Lower third, incomes under $780	Middle third, incomes of $780 to $1,450	Upper third, incomes of $1,450 and over	All income classes	Lower third	Middle third	Upper third	All income classes	Lower third	Middle third	Upper third
Not receiving relief: [1]												
Single individuals:												
Men	5,500,262	1,714,138	2,176,205	1,618,910	13.9	13.0	16.5	12.3	100.0	31.1	39.5	29.4
Women	3,063,201	1,590,226	940,020	532,955	7.8	12.1	7.2	4.1	100.0	51.9	30.7	17.4
Total	8,572,463	3,304,364	3,116,225	2,151,874	21.7	25.1	23.7	16.4	100.0	38.5	36.4	25.1
Families of—												
2 persons	6,068,850	2,017,505	2,274,486	2,376,859	16.9	15.3	17.3	18.1	100.0	30.3	34.1	35.6
3–4 persons	11,170,365	2,314,794	3,699,034	5,156,537	28.3	17.6	28.1	39.2	100.0	20.7	33.1	46.2
5–6 persons	4,804,379	959,222	1,604,467	2,240,690	12.2	7.3	12.2	17.0	100.0	20.0	33.4	46.6
7 or more persons	2,269,583	501,885	780,180	927,518	5.7	4.3	5.9	7.0	100.0	24.7	34.4	40.9
Total	24,913,177	5,853,406	8,358,167	10,701,604	63.1	44.5	63.5	81.3	100.0	23.5	33.5	43.0
Receiving some relief: [1]												
Single individuals	1,485,572	1,383,313	102,259	.....	3.8	10.5	.8	.....	100.0	93.1	6.9	.....
Families	4,487,080	2,611,681	1,576,113	299,286	11.4	19.9	12.0	2.3	100.0	58.2	35.1	6.7
Total	5,972,652	3,994,994	1,678,372	299,286	15.2	30.4	12.8	2.3	100.0	66.9	28.1	5.0
All consumer units: [2]												
Single individuals	10,058,035	4,687,677	3,218,484	2,151,874	25.5	35.6	24.5	16.4	100.0	46.6	32.0	21.4
Families	29,400,257	8,465,087	9,934,280	11,000,890	74.5	64.4	75.5	83.6	100.0	28.8	33.8	37.4
Total	39,458,292	13,152,764	13,152,764	13,152,764	100.0	100.0	100.0	100.0	100.0	33.3	33.3	33.4

[1] Families are classified as receiving relief if they received any direct or work relief (however little) at any time during year. Many such families were dependent on relief for part of the year only, and then may have been only partially dependent. The incomes of the relief group therefore include earnings from regular employment and other nonrelief income as well as direct relief, in cash and kind, and work-relief earnings. For further explanation, see p. 42.

[2] Excludes institutional groups. See table 16.

TABLE 4B.—*Nonrelief families [1] in three income groups, by type of community and by occupational group,[2] 1935–36*

[Basis for charts 7 and 8]

Type of community and occupational group	Number of families in—				Percentage of families in—				Percentage of community or occupational group in—			
	All income groups	Lower group incomes under $780	Middle group incomes of $780 to $1,450	Upper group incomes of $1,450 and over	All income groups	Lower group	Middle group	Upper group	All income groups	Lower group	Middle group	Upper group
Metropolises: [3]												
1,500,000 population and over	2,806,916	297,372	762,362	1,747,182	11.3	5.1	9.1	16.3	100.0	10.6	27.2	62.2
Large cities:												
100,000 to 1,500,000 population	4,666,708	710,553	1,401,892	2,554,263	18.7	12.1	16.8	23.9	100.0	15.2	30.1	54.7
Middle-sized cities:												
25,000 to 100,000 population	2,607,589	493,383	914,581	1,199,625	10.4	8.4	10.9	11.2	100.0	18.9	35.1	46.0
Small cities:												
2,500 to 25,000 population	4,079,741	870,129	1,453,588	1,756,024	16.4	14.9	17.4	16.4	100.0	21.3	35.6	43.1
Rural nonfarm communities [4]	4,585,665	1,165,481	1,647,568	1,772,616	18.4	19.9	19.7	16.6	100.0	25.4	35.9	38.7
Farms	6,166,558	2,316,488	2,178,176	1,671,894	24.8	39.6	26.1	15.6	100.0	37.6	35.3	27.1
Total	24,913,177	5,853,406	8,358,167	10,701,604	100.0	100.0	100.0	100.0	100.0	23.5	33.5	43.0
Wage-earning	9,459,277	2,301,803	3,849,214	3,308,260	37.9	39.3	46.0	30.9	100.0	24.3	40.7	35.0
Farming	6,166,558	2,316,488	2,178,176	1,671,894	24.8	39.6	26.1	15.6	100.0	37.6	35.3	27.1
Clerical	3,626,225	284,694	1,066,106	2,275,425	14.5	4.9	12.8	21.3	100.0	7.9	29.4	62.7
Business	3,485,261	448,363	834,844	2,202,054	14.0	7.7	10.0	20.6	100.0	12.9	23.9	63.2
Professional	1,330,158	65,808	217,625	1,046,725	5.4	1.1	2.6	9.8	100.0	4.9	16.4	78.7
Other [5]	845,698	436,250	212,202	197,246	3.4	7.4	2.5	1.8	100.0	51.6	25.1	23.3
Total	24,913,177	5,853,406	8,358,167	10,701,604	100.0	100.0	100.0	100.0	100.0	23.5	33.5	43.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] Families are classified according to occupation from which largest amount of family earnings was derived, rather than according to occupation of the principal earner. For further explanation, see pp. 25 and 44.
[3] Metropolises of this size are in North Central Region only (New York, Chicago, Philadelphia, and Detroit).
[4] Includes families living in communities with population under 2,500, and families living in the open country but not on farms.
[5] Includes families with no income from earnings during the year, and village and city families with major earnings from farming.

TABLE 5B.—*Average incomes per consumer unit and per capita for each type of consumer unit, 1935–36*

[Basis for chart 9]

Type of consumer unit	Consumer units		Average income (mean)	
	Number	Percent	Per consumer unit	Per capita
Not receiving relief: [1]				
Single individuals:				
Men	5,509,262	13.9	$1,331	$1,331
Women	3,063,201	7.8	1,188	1,188
Total	8,572,463	21.7	$1,280	$1,280
Families of—				
2 persons	6,668,850	16.9	$1,549	$774
3–4 persons	11,170,365	28.3	1,864	542
5–6 persons	4,804,379	12.2	1,905	355
7 or more persons	2,269,583	5.7	1,787	221
Total	24,913,177	63.1	$1,781	$463
Receiving some relief: [1]				
Single individuals	1,485,572	3.8	$407	$407
Families	4,487,080	11.4	740	165
Total	5,972,652	15.2	$657	$182
All consumer units [2]	39,458,292	100.0	$1,502	$470

[1] Families are classified as receiving relief if they received any direct or work relief (however little) at any time during year. Many such families were dependent on relief for part of the year only, and then may have been only partially dependent. The incomes of the relief group therefore include earnings from regular employment and other nonrelief income as well as direct relief, in cash and kind, and work-relief earnings. For further explanation, see p. 42.
[2] Excludes institutional groups. See table 16.

TABLE 6B.—*Share of aggregate family income received by each tenth of Nation's families, 1935–36*

[Basis for chart 11]

Proportion of families	Income range	Aggregate income		
		Amount (in millions)	Percent in each group	Cumulative percent
Highest tenth	$2,800 and over	$17,164	36.0	100.0
Ninth tenth	$2,050–$2,800	7,009	14.7	64.0
Eighth tenth	$1,675–$2,050	5,102	10.7	49.3
Seventh tenth	$1,375–$1,675	4,577	9.6	38.6
Sixth tenth	$1,160–$1,375	3,624	7.6	29.0
Fifth tenth	$970–$1,160	3,194	6.7	21.4
Fourth tenth	$800–$970	2,527	5.3	14.7
Third tenth	$610–$800	2,163	4.6	9.4
Second tenth	$410–$610	1,383	2.9	4.8
Lowest tenth	Under $410	906	1.9	1.9
Total		$47,670	100.0	

TABLE 7B.—*Proportion of Nation's families receiving each tenth of aggregate family income, 1935–36*

[Basis for chart 12]

Proportion of aggregate income	Income range	Families		
		Number	Percent in each group	Cumulative percent
Highest tenth	$16,000 and over	147,000	0.5	100.0
Ninth tenth	$5,450–$16,000	588,000	2.0	99.5
Eighth tenth	$3,300–$5,450	1,205,000	4.1	97.5
Seventh tenth	$2,525–$3,300	1,705,000	5.8	93.4
Sixth tenth	$2,075–$2,525	2,117,000	7.2	87.6
Fifth tenth	$1,725–$2,075	2,499,000	8.5	80.4
Fourth tenth	$1,410–$1,725	3,116,000	10.6	71.9
Third tenth	$1,125–$1,410	3,793,000	12.9	61.3
Second tenth	$820–$1,125	4,969,000	16.9	48.4
Lowest tenth	Under $820	9,261,000	31.5	31.5
Total		29,400,000	100.0	

TABLE 8B.—*Frequency distributions of nonrelief families[1] of four sizes, by income level, 1935–36*

[Basis for table 5]

Income level	All families	Families of—			
		2 persons	3–4 persons	5–6 persons	7 or more persons
Under $250	703,765	341,075	235,503	83,255	43,932
$250–$500	1,950,545	713,209	755,452	301,704	180,180
$500–$750	2,818,654	855,371	1,163,131	500,679	299,473
$750–$1,000	3,337,160	946,034	1,409,705	645,466	335,955
$1,000–$1,250	3,277,862	903,707	1,473,399	609,354	291,402
$1,250–$1,500	2,689,634	674,560	1,236,963	536,044	242,067
$1,500–$1,750	2,255,358	548,830	1,071,380	437,188	197,960
$1,750–$2,000	1,829,835	420,428	896,221	370,306	142,880
$2,000–$2,250	1,361,403	311,750	652,304	284,180	113,169
$2,250–$2,500	1,006,568	230,806	488,890	207,051	79,821
$2,500–$3,000	1,304,010	251,036	648,614	283,347	121,013
$3,000–$3,500	743,559	149,381	360,775	165,442	67,961
$3,500–$4,000	438,428	80,397	216,657	103,455	37,919
$4,000–$4,500	249,948	46,378	108,864	68,793	25,913
$4,500–$5,000	152,647	33,208	69,582	32,186	17,671
$5,000–$7,500	322,950	61,912	152,821	77,487	30,730
$7,500–$10,000	187,060	41,995	93,941	39,470	11,654
$10,000 and over	283,791	58,773	136,163	58,972	29,883
All levels	24,913,177	6,668,850	11,170,365	4,804,379	2,269,583

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.

TABLE 9B.—*Frequency distributions of nonrelief families[1] in six types of community, by income level, 1935–36*

[Basis for table 8]

Income level	All families	Families living in—					
		Urban communities				Rural communities	
		Metropolises,[2] 1,500,000 population and over	Large cities, 100,000 to 1,500,000 population	Middle-sized cities, 25,000 to 100,000 population	Small cities, 2,500 to 25,000 population	Nonfarm[3]	Farm
Under $250	703,765	47,885	94,727	63,543	128,003	137,567	232,040
$250–$500	1,950,545	77,468	203,443	143,236	258,129	409,306	858,963
$500–$750	2,818,654	144,735	356,471	246,144	419,513	543,391	1,108,400
$750–$1,000	3,337,160	239,333	490,445	354,908	565,640	659,790	1,027,044
$1,000–$1,250	3,277,862	307,041	575,727	361,277	596,027	644,540	793,250
$1,250–$1,500	2,689,634	308,117	496,022	302,523	451,406	529,995	601,571
$1,500–$1,750	2,255,358	302,198	466,650	251,767	384,661	416,492	433,590
$1,750–$2,000	1,829,835	272,917	422,211	222,108	319,119	296,259	297,221
$2,000–$2,250	1,361,403	221,113	321,733	158,791	238,273	233,157	188,336
$2,250–$2,500	1,006,568	164,053	255,208	117,310	162,249	155,439	152,309
$2,500–$3,000	1,304,010	238,091	332,087	140,029	214,524	201,352	177,927
$3,000–$3,500	743,559	133,346	196,578	81,743	126,685	104,462	100,745
$3,500–$4,000	438,428	80,336	125,829	43,770	68,164	60,446	59,883
$4,000–$4,500	249,948	47,115	73,101	26,254	34,821	37,262	31,395
$4,500–$5,000	152,647	26,377	44,141	17,141	22,098	25,858	17,032
$5,000–$7,500	322,950	60,316	83,130	34,714	43,132	61,943	39,715
$7,500–$10,000	187,060	44,251	49,579	15,788	23,614	20,594	24,234
$10,000 and over	283,791	92,224	79,626	26,543	23,683	38,812	22,903
All levels	24,913,177	2,806,916	4,666,708	2,607,589	4,079,741	4,585,665	6,166,558

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] Metropolises of this size are in North Central Region only (New York, Chicago, Philadelphia, and Detroit).
[3] Includes families living in communities with population under 2,500, and families living in the open country but not on farms.

TABLE 10B.—*Frequency distributions of nonrelief families[1] in seven occupational groups,[2] by income level, 1935–36*

[Basis for table 10]

Income level	Families in—						
	Wage-earning group	Farming group[3]	Clerical group	Business group		Professional group	
				Salaried	Independent	Salaried	Independent
Under $250	280,697	232,040	17,710	1,545	35,124	6,493	599
$250–$500	712,252	858,963	62,218	3,684	145,151	16,403	1,377
$500–$750	1,133,992	1,108,400	166,746	14,380	216,255	30,333	4,248
$750–$1,000	1,533,853	1,027,044	333,501	31,780	250,884	47,036	8,713
$1,000–$1,250	1,543,175	793,250	426,946	56,371	293,496	67,407	17,422
$1,250–$1,500	1,199,484	601,571	435,289	64,723	232,330	89,832	15,801
$1,500–$1,750	926,302	433,590	441,478	101,111	214,801	94,511	13,002
$1,750–$2,000	699,752	297,221	399,800	103,375	181,611	104,179	16,809
$2,000–$2,250	450,567	188,336	341,101	99,274	149,140	98,322	14,415
$2,250–$2,500	301,608	152,309	256,873	86,085	104,183	77,077	17,718
$2,500–$3,000	368,421	177,927	322,217	130,848	147,450	105,256	31,309
$3,000–$3,500	159,137	100,745	180,624	101,998	89,834	69,435	27,556
$3,500–$4,000	79,918	59,883	97,815	68,234	56,589	50,962	17,050
$4,000–$4,500	35,029	31,395	50,373	40,004	42,693	28,019	14,786
$4,500–$5,000	15,831	17,032	27,369	27,748	28,096	19,727	13,121
$5,000 and over	19,259	86,852	66,165	181,454	185,010	84,233	127,007
All levels	9,459,277	6,166,558	3,626,225	1,112,614	2,372,647	989,225	340,933

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] Families are classified according to occupation from which largest amount of family earnings was derived, rather than according to occupation of the principal earner. For further explanation, see pp. 25 and 44.
[3] Includes families living on farms in rural areas only.

TABLE 11B.—*Frequency distributions of wage-earning families[1] (nonrelief)[2] in five types of community, by income level, 1935–36*

[Basis for table 12]

Income level	All families	Families living in—				
		Metropolises,[3] 1,500,000 population and over	Large cities, 100,000 to 1,500,000 population	Middle-sized cities, 25,000 to 100,000 population	Small cities, 2,500 to 25,000 population	Rural communities
Under $250	280,697	14,081	39,976	34,098	87,212	105,330
$250–$500	712,252	41,067	117,936	88,293	164,272	300,684
$500–$750	1,133,992	85,377	218,618	175,457	285,043	369,497
$750–$1,000	1,533,853	156,764	317,855	250,960	385,370	422,904
$1,000–$1,250	1,543,175	193,737	332,963	242,646	396,922	376,907
$1,250–$1,500	1,199,484	196,992	276,468	183,535	277,649	264,840
$1,500–$1,750	926,302	171,299	236,168	141,346	210,821	166,668
$1,750–$2,000	699,752	140,750	198,826	106,139	163,700	90,337
$2,000–$2,250	450,567	96,928	127,362	67,600	107,168	51,509
$2,250–$2,500	301,608	71,214	86,380	43,576	74,960	25,478
$2,500–$3,000	368,421	104,913	109,002	42,818	81,784	29,904
$3,000–$3,500	159,137	47,758	47,508	17,050	38,273	8,548
$3,500–$4,000	79,918	24,647	25,158	7,377	19,495	3,241
$4,000–$4,500	35,029	10,542	10,923	3,573	6,780	3,211
$4,500–$5,000	15,831	4,979	4,240	2,635	2,722	1,255
$5,000 and over	19,259	7,393	5,760	2,472	3,634	----------
All levels	9,459,277	1,368,441	2,155,143	1,409,575	2,305,805	2,220,313

[1] Families are classified according to occupation from which largest amount of family earnings was derived, rather than according to occupation of the principal earner. For further explanation, see pp. 25 and 44.
[2] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[3] Metropolises of this size are in North Central Region only (New York, Chicago, Philadelphia, and Detroit).

TABLE 12B.—*Percentage distributions of families[1] in five geographic regions,[2] by income level, 1935–36*

Income level	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region
Under $250	2.1	3.2	5.3	6.0	3.2
$250–$500	5.0	6.9	17.7	11.5	6.1
$500–$750	11.3	10.1	18.3	15.5	9.2
$750–$1,000	16.3	14.7	14.0	15.1	13.4
$1,000–$1,250	16.5	14.5	10.2	11.9	14.6
$1,250–$1,500	11.8	10.9	7.4	9.0	10.5
$1,500–$1,750	9.1	8.9	5.9	7.4	9.6
$1,750–$2,000	7.3	7.3	4.4	5.8	8.5
$2,000–$2,250	5.2	5.4	3.5	4.6	6.5
$2,250–$2,500	3.5	4.0	2.7	2.9	4.3
$2,500–$3,000	3.9	5.1	3.5	3.8	5.4
$3,000–$3,500	2.1	2.8	2.2	2.4	2.7
$3,500–$4,000	1.3	1.6	1.4	1.2	1.5
$4,000–$4,500	.7	.9	.9	.7	1.0
$4,500–$5,000	.4	.5	.6	.4	.6
$5,000–$7,500	1.0	1.1	1.2	1.0	1.0
$7,500–$10,000	1.0	.8	.4	.4	.8
$10,000–$25,000	1.2	1.1	.4	.4	.9
$25,000–$50,000	.2	.2	[3]	[3]	.2
$50,000–$100,000	.1	[3]	[3]	[3]	[3]
$100,000 and over	[3]	[3]	[3]	[3]	[3]
All levels	100.0	100.0	100.0	100.0	100.0

[1] Includes both relief and nonrelief families.
[2] For location of communities included in sample, see chart 10. For discussion of limitations of the regional comparison, see pp. 18, 22–23, 54 and 57.
[3] Less than 0.05 percent.

TABLE 13B.—*Percentage distributions of nonrelief families[1] in five geographic regions,[2] and of relief families,[1] by income level, 1935–36*

Income level	Nonrelief families[1] living in—					Relief families[1]
	New England region	North Central region	Southern region	Mountain and Plain region	Pacific region	
Under $250	1.1	1.9	4.3	5.5	2.1	10.2
$250–$500	3.5	4.3	15.3	7.6	4.2	23.7
$500–$750	8.4	8.5	17.4	11.6	7.6	21.9
$750–$1,000	14.6	13.2	13.8	13.8	11.2	21.0
$1,000–$1,250	16.2	14.2	10.5	12.9	14.1	13.5
$1,250–$1,500	13.3	12.1	8.0	10.8	11.5	3.9
$1,500–$1,750	10.3	10.2	6.5	8.9	10.9	2.0
$1,750–$2,000	8.3	8.4	4.9	7.0	9.7	1.5
$2,000–$2,250	6.0	6.1	3.9	5.4	7.4	1.3
$2,250–$2,500	4.0	4.6	3.1	3.6	4.9	.8
$2,500–$3,000	4.7	6.0	4.1	4.7	6.2	.2
$3,000–$3,500	2.5	3.3	2.5	3.0	3.1	
$3,500–$4,000	1.5	1.9	1.7	1.5	1.8	
$4,000–$4,500	.8	1.0	1.0	.9	1.1	
$4,500–$5,000	.5	.6	.7	.5	.7	
$5,000–$7,500	1.3	1.3	1.4	1.3	1.2	
$7,500–$10,000	1.2	.9	.4	.5	1.0	
$10,000–$25,000	1.5	1.2	.5	.5	1.1	
$25,000–$50,000	.2	.2	[3]	[3]	.2	
$50,000–$100,000	.1	.1	[3]	[3]	[3]	
$100,000 and over	[3]	[3]	[3]	[3]	[3]	
All levels	100.0	100.0	100.0	100.0	100.0	100.0

[1] The relief group includes all families receiving any direct or work relief (however little) at any time during year. The nonrelief group includes all other families. For further explanation, see p. 42.
[2] For location of communities included in sample, see chart 10. For discussion of limitations of the regional comparison, see pp. 18, 22–23, 54 and 57.
[3] Less than 0.05 percent.

TABLE 14B.—*Percentage distributions of nonrelief families[1] in large cities (100,000 to 1,500,000 population) in five geographic regions,[2] by income level, 1935–36*

Income level	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region
Under $250	1.6	1.5	3.2	1.4	2.0
$250–$500	4.8	2.7	7.7	2.8	3.9
$500–$750	9.3	5.7	11.2	6.4	6.8
$750–$1,000	13.6	9.7	10.8	10.8	10.4
$1,000–$1,250	15.4	12.5	9.6	13.5	13.9
$1,250–$1,500	11.9	11.6	8.0	10.7	11.1
$1,500–$1,750	9.5	10.8	8.3	10.3	10.8
$1,750–$2,000	8.2	9.7	7.5	8.5	10.2
$2,000–$2,250	5.4	7.2	6.3	7.7	7.7
$2,250–$2,500	3.6	5.6	6.1	5.1	5.4
$2,500–$3,000	4.8	7.7	7.0	7.5	7.0
$3,000–$3,500	2.7	4.7	4.6	4.5	3.2
$3,500–$4,000	1.7	2.7	3.6	2.9	1.9
$4,000–$4,500	.9	1.6	1.9	2.0	1.3
$4,500–$5,000	.5	.9	1.3	1.0	.7
$5,000–$7,500	1.3	1.9	2.1	2.7	1.1
$7,500–$10,000	1.8	1.4	.4	.6	.9
$10,000 and over	3.0	2.1	.4	1.6	1.7
All levels	100.0	100.0	100.0	100.0	100.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] For location of communities included in sample, see chart 10. For discussion of limitations of the regional comparison, see pp. 18, 22–23, 54 and 57.

TABLE 15B.—*Percentage distributions of nonrelief families[1] in middle-sized cities (25,000 to 100,000 population) in five geographic regions,[2] by income level, 1935–36*

Income level	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region
Under $250	1.1	1.6	5.8	0.8	2.1
$250–$500	3.7	4.0	11.2	3.1	4.0
$500–$750	8.6	8.6	13.2	6.7	7.6
$750–$1,000	16.2	14.7	10.4	9.3	12.5
$1,000–$1,250	16.2	15.1	8.8	12.0	16.6
$1,250–$1,500	13.9	12.5	7.0	14.7	12.7
$1,500–$1,750	10.1	10.1	7.4	11.9	10.9
$1,750–$2,000	8.6	8.7	7.5	11.2	9.1
$2,000–$2,250	6.1	6.2	5.3	8.0	6.7
$2,250–$2,500	3.9	4.6	4.3	6.2	4.6
$2,500–$3,000	4.5	5.3	5.7	6.6	5.6
$3,000–$3,500	2.5	2.7	4.4	3.7	3.2
$3,500–$4,000	1.1	1.5	2.4	1.9	1.3
$4,000–$4,500	.6	.9	1.6	1.0	.8
$4,500–$5,000	.5	.6	.9	.6	.4
$5,000–$7,500	.7	1.1	2.6	1.1	.7
$7,500–$10,000	.6	.7	.5	.6	.6
$10,000 and over	1.1	1.1	1.0	.6	.6
All levels	100.0	100.0	1000	100.0	100.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] For location of communities included in sample, see chart 10. For discussion of limitations of the regional comparison, see pp. 18, 22–23, 54 and 57.

TABLE 16B.—*Percentage distributions of nonrelief families [1] in small cities (2,500 to 25,000 population) in five geographic regions,[2] by income level, 1935–36*

Income level	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region
Under $250	0.6	2.7	5.9	1.2	1.7
$250–$500	1.6	4.9	12.4	3.5	3.2
$500–$750	6.9	9.6	14.7	7.9	6.4
$750–$1,000	14.3	15.4	12.4	12.3	10.1
$1,000–$1,250	17.0	15.4	12.3	14.4	14.8
$1,250–$1,500	14.2	11.6	8.7	11.0	11.7
$1,500–$1,750	10.1	10.0	7.0	11.2	11.7
$1,750–$2,000	7.8	8.3	5.8	8.6	10.5
$2,000–$2,250	6.3	5.8	4.5	7.7	8.3
$2,250–$2,500	4.4	4.1	3.0	4.6	5.4
$2,500–$3,000	4.7	5.1	5.0	6.6	6.4
$3,000–$3,500	2.4	3.1	2.6	4.9	4.1
$3,500–$4,000	2.5	1.4	1.8	1.7	1.8
$4,000–$4,500	.6	.7	1.1	1.2	1.2
$4,500–$5,000	.7	.4	.6	.7	.7
$5,000–$7,500	1.7	.8	1.1	1.5	1.2
$7,500–$10,000	1.5	.5	.4	.6	.5
$10,000 and over	2.7	.2	.7	.4	.3
All levels	100.0	100.0	100.0	100.0	100.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] For location of communities included in sample, see chart 10. For discussion of limitations of the regional comparison, see pp. 18, 22–23, 54 and 57.

TABLE 17B.—*Percentage distributions of rural nonfarm families [1] (nonrelief)[2] in five geographic regions,[3] by income level, 1935–36*

Income level	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region
Under $250	0.7	2.0	5.0	1.4	1.8
$250–$500	2.2	6.8	13.9	5.2	4.4
$500–$750	6.1	12.0	13.1	12.0	8.1
$750–$1,000	13.1	17.7	11.4	14.1	12.0
$1,000–$1,250	15.3	17.6	10.4	12.5	14.4
$1,250–$1,500	15.2	12.6	9.3	13.2	12.7
$1,500–$1,750	11.7	8.8	8.1	10.7	12.3
$1,750–$2,000	9.4	5.9	5.5	8.3	10.1
$2,000–$2,250	7.2	4.5	5.0	5.5	7.2
$2,250–$2,500	4.3	2.9	3.5	4.1	3.9
$2,500–$3,000	5.2	3.5	4.8	5.5	5.7
$3,000–$3,500	3.3	1.6	2.9	2.4	1.9
$3,500–$4,000	1.1	.8	1.9	1.5	1.2
$4,000–$4,500	1.5	.5	1.1	.8	.6
$4,500–$5,000	.6	.3	.9	.4	.5
$5,000–$7,500	1.8	.8	2.0	1.0	1.1
$7,500–$10,000	.5	.6	.7	.5	.7
$10,000 and over	.8	1.1	.5	.9	1.4
All levels	100.0	100.0	100.0	100.0	100.0

[1] Includes families living in communities with population under 2,500, and families living in the open country but not on farms.
[2] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[3] For location of communities included in sample, see chart 10. For discussion of limitations of the regional comparison, see pp. 18, 22–23, 54 and 57.

TABLE 18B.—*Percentage distributions of farm families [1] (nonrelief) [2] in five geographic regions,[3] by income level, 1935–36*

Income level	New England region	North Central region	Southern region			Mountain and Plains region	Pacific region
			Total	Operators [4]	Sharecroppers [4]		
Under $250	1.2	2.2	3.4	1.8	8.5	13.1	3.3
$250–$500	5.2	5.5	20.7	15.4	37.9	13.9	6.0
$500–$750	12.6	11.3	23.8	21.6	30.4	15.9	10.8
$750–$1,000	17.4	16.1	17.4	18.4	13.9	16.2	13.7
$1,000–$1,250	18.5	15.8	10.7	12.4	5.3	12.5	12.0
$1,250–$1,500	10.6	13.5	7.3	8.9	2.5	8.2	10.6
$1,500–$1,750	11.6	10.4	4.7	5.8	1.0	5.4	8.6
$1,750–$2,000	7.0	7.4	2.9	3.7	.5	3.8	7.4
$2,000–$2,250	5.0	4.3	1.9	2.5	-------	3.0	5.6
$2,250–$2,500	4.4	3.9	1.4	1.8	-------	1.9	3.9
$2,500–$3,000	3.5	4.2	1.9	2.5	-------	2.0	4.8
$3,000–$3,500	1.0	2.2	1.1	1.5	-------	1.8	3.1
$3,500–$4,000	.4	1.4	.7	.9	-------	.7	2.2
$4,000–$4,500	.4	.5	.5	.6	-------	.3	1.3
$4,500–$5,000	.1	.2	.3	.4	-------	.2	.9
$5,000–$7,500	.3	.6	.6	.8	-------	.8	1.7
$7,500–$10,000	.8	.4	.2	.3	-------	.3	2.3
$10,000 and over	-------	.1	.5	.7	-------	-------	1.8
All levels	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[1] Includes families living on farms in rural areas only.
[2] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[3] For location of communities included in sample, see chart 10. For discussion of limitations of the regional comparison, see pp. 18, 22–23, 54 and 57.
[4] For definitions of operator and sharecropper, see footnote 11, p. 43.

TABLE 19B.—*Percentage distributions of wage-earning families [1] (nonrelief)[2] in five geographic regions,[3] by income level, 1935–36*

Income level	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region
Under $250	0.6	1.3	8.4	1.4	1.2
$250–$500	3.2	4.3	18.6	6.0	3.8
$500–$750	9.4	9.6	19.4	13.1	8.4
$750–$1,000	18.4	16.5	15.0	18.1	13.8
$1,000–$1,250	19.9	17.4	11.4	16.5	18.7
$1,250–$1,500	16.0	13.7	7.9	14.8	14.6
$1,500–$1,750	10.6	10.8	6.3	10.8	12.5
$1,750–$2,000	8.6	8.3	4.3	6.6	10.4
$2,000–$2,250	5.1	5.4	2.7	4.8	6.3
$2,250–$2,500	3.0	3.8	1.9	2.6	3.5
$2,500–$3,000	2.7	4.8	2.2	3.0	4.4
$3,000–$3,500	1.3	2.1	.8	1.6	1.4
$3,500–$4,000	.7	1.0	.7	.5	.4
$4,000–$4,500	.3	.5	.2	.1	.3
$4,500–$5,000	.1	.2	.1	.1	.1
$5,000 and over	.1	.3	.1	(4)	.2
All levels	100.0	100.0	100.0	100.0	100.0

[1] Families are classified according to occupation from which largest amount of family earnings was derived, rather than according to occupation of the principal earner. For further explanation, see pp. 25 and 44.
[2] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[3] For location of communities included in sample, see chart 10. For discussion of limitations of the regional comparison, see pp. 18, 22–23, 54 and 57.
[4] Less than 0.05 percent.

TABLE 20B.—*Percentage distributions of white and Negro farm and rural nonfarm families [1] (nonrelief)[2] in the South,[3] by income level, 1935–36*

Income level	Farm families						Rural nonfarm families [1]	
	White			Negro				
	Total	Operators [4]	Sharecroppers [4]	Total	Operators [4]	Sharecroppers [4]	White	Negro
Under $250	1.0	0.7	2.6	8.5	5.4	12.4	0.8	21.6
$250–$500	12.5	10.2	27.0	38.4	33.0	45.1	5.0	48.4
$500–$750	21.7	19.5	34.7	28.5	29.3	27.6	11.6	19.3
$750–$1,000	19.1	19.0	19.4	13.7	16.5	10.3	12.9	5.6
$1,000–$1,250	13.3	14.1	8.4	5.1	6.5	3.2	12.4	2.7
$1,250–$1,500	9.4	10.1	4.8	3.0	4.7	.9	11.5	.9
$1,500–$1,750	6.1	6.8	2.0	1.5	2.4	.4	10.1	.3
$1,750–$2,000	3.9	4.4	1.1	.8	1.3	.1	6.9	.3
$2,000–$2,250	2.6	3.1	-------	.3	.5	-------	6.2	.1
$2,250–$2,500	2.0	2.3	-------	.1	.2	-------	4.4	.3
$2,500–$3,000	2.8	3.2	-------	.1	.1	-------	5.9	.3
$3,000–$3,500	1.6	1.9	-------	(5)	.1	-------	3.6	.1
$3,500–$4,000	1.0	1.1	-------	(5)	(5)	-------	2.3	.1
$4,000–$4,500	.7	.8	-------	(5)	(5)	-------	1.3	(5)
$4,500–$5,000	.4	.5	-------	(5)	(5)	-------	1.1	(5)
$5,000–$7,500	.9	1.0	-------	(5)	(5)	-------	2.5	(5)
$7,500–$10,000	.3	.4	-------	(5)	(5)	-------	.9	(5)
$10,000 and over	.7	.9	-------	-------	-------	-------	.6	(5)
All levels	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

[1] The rural nonfarm group includes families living in communities with population under 2,500, and families living in the open country but not on farms.
[2] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[3] For location of communities included in sample, see chart 10. For discussion of limitations of the sample data, see pp. 18, 54, and 57.
[4] For definitions of operator and sharecropper, see footnote 11, p. 43.
[5] Less than 0.05 percent.

TABLE 21B.—*Percentage distributions of white and Negro families (nonrelief)[1] in three sizes of cities in the South,[2] by income level, 1935–36*

Income level	Large cities, 100,000 population and over		Middle-sized cities, 25,000 to 100,000 population		Small cities, 2,500 to 25,000 population	
	White	Negro	White	Negro	White	Negro
Under $250	1.6	9.6	2.4	15.5	1.2	23.6
$250–$500	3.5	24.3	3.9	31.7	5.6	37.9
$500–$750	7.7	25.0	7.8	28.3	12.2	23.8
$750–$1,000	8.8	18.8	9.7	12.5	13.7	7.5
$1,000–$1,250	9.6	9.4	9.8	5.7	14.8	3.4
$1,250–$1,500	8.7	5.0	8.7	2.1	10.7	1.2
$1,500–$1,750	9.4	3.5	9.5	1.6	8.5	1.1
$1,750–$2,000	9.1	1.2	9.7	.9	7.2	.3
$2,000–$2,250	7.6	1.1	7.0	.6	5.7	.3
$2,250–$2,500	7.5	.7	5.6	.6	3.7	.5
$2,500–$3,000	8.6	.7	7.6	.3	6.2	.3
$3,000–$3,500	5.7	.3	6.0	.1	3.3	.1
$3,500–$4,000	4.5	.1	3.3	.1	2.2	(3)
$4,000–$4,500	2.4	.2	2.2	(3)	1.4	(3)
$4,500–$5,000	1.7	(3)	1.3	(3)	.8	(3)
$5,000–$7,500	2.6	.1	3.5	(3)	1.4	(3)
$7,500–$10,000	.5	(3)	.6	(3)	.5	-------
$10,000 and over	.5	(3)	1.4	(3)	.9	-------
All levels	100.0	100.0	100.0	100.0	100.0	100.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] For location of communities included in sample, see chart 10. For discussion of limitations of the sample data, see pp. 18, 54, and 57.
[3] Less than 0.05 percent.

TABLE 22B.—*Percentage distributions of white[1] and Negro families (nonrelief)[2] in North Central metropolises and large cities,[3] by income level, 1935–36*

Income level	Metropolises, 1,500,000 population and over			Large cities, 100,000 to 1,500,000 population	
	Native white [1]	Foreign-born white [1]	Negro	White	Negro
Under $250	1.4	2.0	2.1	1.5	1.6
$250–$500	2.0	3.7	4.5	2.6	5.1
$500–$750	3.8	6.3	12.0	5.4	16.1
$750–$1,000	6.0	10.8	19.7	9.1	26.6
$1,000–$1,250	9.0	12.7	19.3	12.2	21.6
$1,250–$1,500	9.3	12.9	13.5	11.6	11.8
$1,500–$1,750	10.2	11.5	9.9	10.9	6.1
$1,750–$2,000	9.8	9.9	6.6	9.9	5.0
$2,000–$2,250	8.8	7.0	4.7	7.4	2.4
$2,250–$2,500	6.5	5.3	2.9	5.7	1.9
$2,500–$3,000	9.7	7.5	2.2	8.0	1.0
$3,000–$3,500	5.6	3.9	1.5	4.8	.4
$3,500–$4,000	3.3	2.6	.4	2.8	.3
$4,000–$4,500	2.1	1.3	.2	1.6	.1
$4,500–$5,000	1.3	.5	.1	.9	(4)
$5,000–$7,500	3.1	1.1	.2	2.0	.1
$7,500–$10,000	2.5	.5	.2	1.4	.2
$10,000 and over	5.6	.5	(4)	2.2	(4)
All levels	100.0	100.0	100.0	100.0	100.0

[1] For explanation of native white and foreign-born white classification, see p. 43.
[2] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[3] For location of communities included in sample, see chart 10. For discussion of limitations of the sample data, see pp. 18, 54, and 57.
[4] Less than 0.05 percent.

TABLE 23B.—*Percentage distributions of single men and single women,[1] by income level, 1935–36*

Income level	Single men	Single women
Under $250	9.5	9.6
$250–$500	13.6	19.4
$500–$750	15.8	26.7
$750–$1,000	15.4	16.8
$1,000–$1,250	12.6	8.1
$1,250–$1,500	10.5	5.5
$1,500–$1,750	6.5	3.4
$1,750–$2,000	4.7	2.6
$2,000–$2,250	3.3	1.9
$2,250–$2,500	2.4	1.4
$2,500–$3,000	2.0	1.0
$3,000–$3,500	1.3	.7
$3,500–$4,000	.7	.6
$4,000–$4,500	.3	.4
$4,500–$5,000	.2	.2
$5,000–$7,500	.5	.7
$7,500–$10,000	.3	.3
$10,000–$25,000	.3	.5
$25,000–$50,000	.1	.1
$50,000–$100,000	(2)	(2)
$100,000 and over	(2)	(2)
All levels	100.0	100.0

[1] Includes both relief and nonrelief single individuals. For definition of single individuals, see p. 40.
[2] Less than 0.05 percent.

TABLE 24B.—*Number of nonrelief families [1] in six types of community within five geographic regions, 1935–36*

Type of community	All regions	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region
Metropolises, 1,500,000 population and over	2,806,916		2,806,916			
Large cities, 100,000 to 1,500,000 population	4,666,708	482,634	2,073,631	1,149,292	180,397	780,754
Middle-sized cities, 25,000 to 100,000 population	2,607,589	366,018	1,393,917	572,064	97,380	178,210
Small cities, 2,500 to 25,000 population	4,079,741	362,117	2,051,428	1,050,967	281,921	324,308
All urban communities	14,160,954	1,210,769	8,325,992	2,781,323	559,698	1,283,272
Rural nonfarm communities [2]	4,585,665	254,805	1,881,226	1,737,561	406,950	305,123
Farms	6,166,558	146,001	2,127,999	3,097,183	544,290	251,085
All rural communities	10,752,223	400,806	4,009,225	4,834,744	951,240	556,208
All communities	24,913,177	1,611,575	12,335,117	7,616,067	1,510,938	1,839,480

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] Includes families living in communities with population under 2,500, and families living in the open country but not on farms.

TABLE 25B.—*Percentage distributions of nonrelief families, [1] by type of community and region, 1935–36*

Type of community	Percentage distributions by type of community						Percentage distributions by region					
	All regions	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region	All regions	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region
Metropolises: 1,500,000 population and over	11.3		22.8				100.0		100.0			
Large cities: 100,000 to 1,500,000 population	18.7	29.9	16.8	15.1	11.9	42.5	100.0	10.3	44.5	24.6	3.9	16.7
Middle-sized cities: 25,000 to 100,000 population	10.4	22.7	11.3	7.5	6.4	9.7	100.0	14.1	53.5	21.9	3.7	6.8
Small cities: 2,500 to 25,000 population	16.4	22.5	16.6	13.9	18.7	17.6	100.0	8.9	50.3	26.0	6.9	7.9
All urban communities	56.8	75.1	67.5	36.5	37.0	69.8	100.0	8.5	58.8	19.6	4.0	9.1
Rural nonfarm communities [2]	18.4	15.8	15.3	22.8	27.0	16.6	100.0	5.6	41.0	37.9	8.9	6.6
Farms	24.8	9.1	17.2	40.7	36.0	13.6	100.0	2.4	34.5	50.2	8.8	4.1
All rural communities	43.2	24.9	32.5	63.5	63.0	30.2	100.0	3.7	37.3	45.0	8.9	5.2
All communities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	6.5	49.5	30.5	6.1	7.4

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] Includes families living in communities with population under 2,500, and families living in the open country but not on farms.

TABLE 26B.—*Number of relief families [1] in six types of community within five geographic regions, 1935–36*

Type of community	All regions	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region
Metropolises: 1,500,000 population and over	488,184		488,184			
Large cities: 100,000 to 1,500,000 population	912,622	92,199	462,027	205,461	36,895	116,040
Middle-sized cities: 25,000 to 100,000 population	582,841	95,183	300,706	105,579	31,359	50,014
Small cities: 2,500 to 25,000 population	808,482	77,476	455,847	150,797	87,656	36,706
All urban communities	2,792,129	264,858	1,706,764	461,837	155,910	202,760
Rural nonfarm communities [2]	1,094,305	67,203	497,062	344,952	106,746	78,342
Farms	600,646	8,236	62,762	359,006	118,297	22,345
All rural communities	1,694,951	75,439	559,824	733,958	225,043	100,687
All communities	4,487,080	340,297	2,266,588	1,195,795	380,953	303,447

[1] Includes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] Includes families living in communities with population under 2,500, and families living in the open country but not on farms.

TABLE 27B.—*Percentage distributions of relief families,[1] by type of community and region, 1935–36*

Type of community	Percentage distributions by type of community						Percentage distributions by region					
	All regions	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region	All regions	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region
Metropolises: 1,500,000 population and over	10.9		21.5				100.0		100.0			
Large cities: 100,000 to 1,500,000 population	20.3	27.1	20.4	17.2	9.7	38.2	100.0	10.1	50.7	22.5	4.0	12.7
Middle-sized cities: 25,000 to 100,000 population	13.0	27.9	13.3	8.8	8.2	16.5	100.0	16.3	51.6	18.1	5.4	8.6
Small cities: 2,500 to 25,000 population	18.0	22.8	20.1	12.6	23.0	12.1	100.0	9.6	56.4	18.7	10.8	4.5
All urban communities	62.2	77.8	75.3	38.6	40.9	66.8	100.0	9.5	61.1	16.5	5.6	7.3
Rural nonfarm communities[2]	24.4	19.8	21.9	28.9	28.0	25.8	100.0	6.1	45.4	31.5	9.8	7.2
Farms	13.4	2.4	2.8	32.5	31.1	7.4	100.0	1.4	10.4	64.8	19.7	3.7
All rural communities	37.8	22.2	24.7	61.4	59.1	33.2	100.0	4.5	33.0	43.3	13.3	5.9
All communities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	7.6	50.5	26.6	8.5	6.8

[1] Includes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] Includes families living in communities with population under 2,500, and families living in the open country but not on farms.

TABLE 28B.—*Number and percent of nonrelief families[1] in three color groups in five types of community in the South, 1935–36*

Type of community and color group	Number of families	Percent
Farm families:		
White:		
Operators[2]	1,822,567	58.9
Sharecroppers[2]	290,520	9.4
Total	2,113,087	68.3
Negro:		
Operators	511,092	16.5
Sharecroppers	416,101	13.4
Total	927,193	29.9
Other color:[3]		
Operators	31,366	1.0
Sharecroppers	25,537	.8
Total	56,903	1.8
Total farm families	3,097,183	100.0
Rural nonfarm families:[4]		
White	1,381,256	79.5
Negro	331,561	19.1
Other color[3]	24,744	1.4
Total	1,737,561	100.0
Small city families (2,500 to 25,000 population):		
White	838,111	79.1
Negro	202,048	19.0
Other color[3]	19,508	1.9
Total	1,059,907	100.0
Middle-sized city families (25,000 to 100,000 population):		
White	421,900	73.8
Negro	141,480	24.7
Other color[3]	8,684	1.5
Total	572,064	100.0
Large city families (100,000 population and over):		
White	915,902	79.7
Negro	207,562	18.1
Other color[3]	25,828	2.2
Total	1,149,292	100.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] For definitions of operator and sharecropper, see footnote 11, p. 43.
[3] For definition of other color, see p. 43.
[4] Includes families living in communities with population under 2,500, and families living in the open country but not on farms.

TABLE 29B.—*Number and percent of nonrelief families[1] in three color groups in North Central large cities and metropolises, 1935–36*

Type of community and color group	Number of families	Percent
Large city families (100,000 to 1,500,000 population):		
White	2,009,147	96.8
Negro	63,331	3.1
Other color[2]	1,153	.1
Total	2,073,631	100.0
Metropolis families (1,500,000 population and over):		
White:		
Native[3]	1,535,523	54.7
Foreign-born[3]	1,160,554	41.4
Total	2,696,077	96.1
Negro	107,145	3.8
Other color[2]	3,694	.1
Total	2,806,916	100.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] For definition of other color, see p. 43.
[3] For explanation of native white and foreign-born white classification, see p. 43.

TABLE 30B.—*Number of nonrelief families[1] of four sizes in six types of community and in five geographic regions, 1935–36*

Type of community and region	All families	Families of—			
		2 persons	3–4 persons	5–6 persons	7 and over persons
Metropolises:[2] 1,500,000 population and over	2,806,916	755,440	1,393,144	502,941	155,391
Large cities: 100,000 to 1,500,000 population	4,666,708	1,571,508	2,133,199	726,990	235,011
Middle-sized cities: 25,000 to 100,000 population	2,607,589	770,224	1,217,842	459,145	160,378
Small cities: 2,500 to 25,000 population	4,079,741	1,149,980	1,902,440	744,561	282,754
All urban communities	14,160,954	4,247,158	6,646,625	2,433,637	833,534
Rural nonfarm communities[3]	4,585,605	1,287,570	2,183,557	822,806	291,726
Farms	6,166,558	1,134,116	2,340,183	1,547,936	1,144,323
All rural communities	10,752,223	2,421,692	4,523,740	2,370,742	1,436,049
All communities	24,913,177	6,668,850	11,170,365	4,804,379	2,269,583
New England	1,611,576	457,287	726,563	300,486	121,230
North Central	12,335,117	3,583,435	5,710,579	2,223,433	817,670
South	7,016,067	1,578,229	3,139,857	1,730,321	1,167,660
Mountain and Plains	1,510,938	398,653	690,022	305,340	116,923
Pacific	1,839,480	651,246	903,344	238,799	46,091
All regions	24,913,177	6,668,850	11,170,365	4,804,379	2,269,583

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] Metropolises of this size are in North Central Region only (New York, Chicago, Philadelphia, and Detroit).
[3] Includes families living in communities with population under 2,500, and families living in the open country but not on farms.

Notes in opposite column.

TABLE 31B.—*Percentage distributions of nonrelief families [1] of four sizes, by type of community and region, 1935–36*

Type of community and region	Percentage distributions by size of family					Percentage distributions by type of community and region				
	All families	2 persons	3–4 persons	5–6 persons	7 and over persons	All families	2 persons	3–4 persons	5–6 persons	7 and over persons
Metropolises: [2]										
1,500,000 population and over	100.0	26.9	49.7	17.9	5.5	11.3	11.3	12.5	10.5	6.8
Large cities:										
100,000 to 1,500,000 population	100.0	33.7	45.7	15.6	5.0	18.7	23.6	19.1	15.1	10.4
Middle-sized cities:										
25,000 to 100,000 population	100.0	29.5	46.7	17.6	6.2	10.4	11.5	10.9	9.6	7.1
Small cities:										
2,500 to 25,000 population	100.0	28.2	46.6	18.3	6.9	16.4	17.3	17.0	15.5	12.4
All urban communities	100.0	30.0	46.9	17.2	5.9	56.8	63.7	59.5	50.7	36.7
Rural nonfarm communities [3]	100.0	28.1	47.6	17.9	6.4	18.4	19.3	19.6	17.1	12.9
Farms	100.0	18.4	37.9	25.1	18.6	24.8	17.0	20.9	32.2	50.4
All rural communities	100.0	22.5	42.1	22.0	13.4	43.2	36.3	40.5	49.3	63.3
All communities	100.0	26.8	44.8	19.3	9.1	100.0	100.0	100.0	100.0	100.0
New England	100.0	28.4	45.1	19.0	7.5	6.5	6.8	6.5	6.4	5.3
North Central	100.0	29.1	46.3	18.0	6.6	49.5	53.7	51.1	46.3	36.0
South	100.0	20.7	41.3	22.7	15.3	30.5	23.7	28.1	36.0	51.5
Mountain and Plains	100.0	26.4	45.7	20.2	7.7	6.1	6.0	6.2	6.3	5.2
Pacific	100.0	35.4	49.1	13.0	2.5	7.4	9.8	8.1	5.0	2.0
All regions	100.0	26.8	44.8	19.3	9.1	100.0	100.0	100.0	100.0	100.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] Metropolises of this size are in North Central Region only (New York, Chicago, Philadelphia, and Detroit).
[3] Includes families living in communities with population under 2,500, and families living in the open country but not on farms.

TABLE 32B.—*Number of nonrelief families [1] in eight occupational groups [2] in five types of community and in five geographic regions, 1935–36*

Type of community and region	All families	Wage-earning group	Farming group [3]	Clerical group	Business group		Professional group		Other occupational groups [4]
					Salaried	Independent	Salaried	Independent	
Metropolises: [5]									
1,500,000 population and over	2,806,916	1,368,441	----------	731,758	104,884	297,006	143,621	49,519	111,687
Large cities:									
100,000 to 1,500,000 population	4,666,708	2,155,143	----------	1,114,569	309,732	569,817	264,565	84,045	168,837
Middle-sized cities:									
25,000 to 100,000 population	2,607,589	1,409,575	----------	483,714	151,410	292,099	125,686	37,846	107,259
Small cities:									
2,500 to 25,000 population	4,079,741	2,305,805	----------	657,543	219,171	488,503	182,392	55,224	171,103
All urban communities	14,160,954	7,238,964	----------	2,987,584	785,197	1,647,425	716,264	226,634	558,886
Rural communities [6]	10,752,223	2,220,313	6,166,558	638,641	327,417	725,222	272,961	114,299	286,812
All communities	24,913,177	9,459,277	6,166,558	3,626,225	1,112,614	2,372,647	989,225	340,933	845,698
New England	1,611,575	857,401	146,001	234,036	80,422	158,065	60,978	18,472	56,200
North Central	12,335,117	5,294,084	2,127,999	2,016,594	485,127	1,228,807	531,105	174,015	477,386
South	7,616,067	2,198,435	3,097,183	862,209	359,090	599,302	236,145	90,418	173,285
Mountain and Plains	1,510,938	371,412	544,290	197,385	91,816	161,331	67,559	25,641	51,504
Pacific	1,839,480	737,945	251,085	316,001	96,159	225,142	93,438	32,387	87,323
All regions	24,913,177	9,459,277	6,166,558	3,626,225	1,112,614	2,372,647	989,225	340,933	845,698

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. For further explanation, see p. 42.
[2] Families are classified according to occupation from which largest amount of family earnings was derived, rather than according to occupation of the principal earner. For further explanation, see pp. 25 and 44.
[3] Includes families living on farms in rural areas only.
[4] Includes families with no income from earnings during the year, and village and city families with major earnings from farming.
[5] Metropolises of this size are in North Central Region only (New York, Chicago, Philadelphia, and Detroit).
[6] Includes, in addition to the 6,166,558 families living on farms, 4,585,665 families living in the open country but not on farms, or in communities with population under 2,500. The latter group includes 137,624 village families deriving the largest amount of family earnings from farming; these are classified as "other occupational groups."

TABLE 33B.—*Percentage distribution of nonrelief families[1] in eight occupational groups,[2] by type of community and region, 1935–36*

Type of community and region	Percentage distributions by occupational group: All families	Wage-earning group	Farming group[3]	Business group: Salaried	Business group: Independent	Professional group: Salaried	Professional group: Independent	Other occupational groups[4]	Percentage distributions by type of community and region: All families	Wage-earning group	Farming group[3]	Clerical group	Business group: Salaried	Business group: Independent	Professional group: Salaried	Professional group: Independent	Other occupational groups[4]
Metropolises:[5]																	
1,500,000 population and over	100.0	48.7	.....	26.1		10.6	5.1	1.8	4.0	11.3	14.5	.....	20.2	9.4	12.5	1	14.5	13.2
Large cities:																		
100,000 to 1,500,000 population	100.0	46.2	.....	23.9	6.		5.7	1.8	3.6	18.7	22.8	.....	30.8	27.9			4.7	20.0
Middle-sized cities:																		
25,000 to 100,000 population	100.0	54.1	.....	18.6	5.8	.2	4.8	1.4	4.1	10.4	14.9	.....	13.3			7	11.1	12.7
Small cities:																		
2,500 to 25,000 population	100.0	56.4	.....	16.1	5.4	12.0	4.5	1.4	4.2	16.4	24.3	.....			.6	18.4		
All urban communities	100.0	51.2	.....	21.1	5.5	11.6	5.1	1.6	3.9	56.8	76.5				69.4			
Rural communities[6]	100.0	20.7	57.4	5.9	3.0	6.7	2.5	1.1					17.6					
All communities	100.0	37.9	24.8	14.5	4.5	9.5	4.0	1.4										
New England	100.0	53.2	9.1	14.5	5.0	9.8	3.			.5	9.1							6.6
North Central	100.0	42.9	17.3	16.3	3.9	10.0	4.3	1.		49.5							.1.1	56.5
South	100.0	28.9	40.6	11.3	4.7	7.9	3.1	1.2	2.3	30							26.5	20.5
Mountain and Plains	100.0	24.5	36.0	13.1	6.1	10.7	4.5	1.7	3.4						.8	6.8	7.5	6.1
Pacific	100.0	40.1	13.7	17.2	5.2	12.2	5.1	1.8	4.7						9.5	9.4	9.5	10.3
All regions	100.0	37.9	24.8	14.5	4.5	9.5	4.0	1.4	3.					100.0	100.0	100.0	100.0	100.0

[1] Excludes all families receiving any direct or work relief (however little) at any time during year. F
[2] Families are classified according to occupation from which largest amount of family earnings w
For further explanation see, pp. 25 and 44.
[3] Includes families living on farms in rural areas only.
[4] Includes families with no income from earnings during the year, and village and city families with major gs from farming.
[5] Metropolises of this size are in North Central Region only (New York, Chicago, Philadelphia, and Detroit
[6] Includes, in addition to the 6,166,558 families living on farms, 4,585,665 families living in the open country but n farms, or in communities with population under 2,500. The latter group includes 137,624 village families deriving the largest amount of family earnings from farming; these lassified as "other occupational groups."

e p. 42.
according to occupation of the principal earner.

TABLE 34B.—*Number and percent of single individuals,[1] by relief status[2] and sex, 1935–36*

Relief status and sex	Number	Percent
Not receiving relief:[2]		
Men	5,509,262	64.3
Women	3,063,201	35.7
Total	8,572,463	100.0
Receiving some relief:[2]		
Men	1,028,461	69.2
Women	457,111	30.8
Total	1,485,572	100.0
All single individuals:		
Men	6,537,723	65.0
Women	3,520,312	35.0
Total	10,058,035	100.0

[1] For definition of single individuals, see p. 40.
[2] The relief group includes all single individuals receiving any direct or work relief (however little) at any time during year. The nonrelief group includes all other single individuals. For further explanation, see p. 42.

TABLE 35B.—*Number of institutional residents in nine types of institutional group in five geographic regions, 1935–36*

Type of institutional group	All regions	New England region	North Central region	Southern region	Mountain and Plains region	Pacific region
Institutions for—						
Mental defectives	563,000	52,000	314,000	124,000	32,(	41,000
Physical defectives	101,000	10,000	56,000	22,000	6,0	7,000
Prisoners and delinquent adults	207,000	10,000	93,000	71,000	10,(	17,000
Dependent and delinquent children	160,000	10,000	94,000	40,000	8,000	8,000
Dependent adults	169,000	17,000	100,000	27,000	10,000	15,000
Total	1,200,000	99,000	657,000	284,000	72,000	88,000
Quasi-institutional groups:						
Civilian Conservation Corps	412,000	25,000	139,000	145,000	67,000	[illegible]
Labor camps	103,000	2,000	22,000	33,000	14,000	[illegible]
Military and naval posts	213,000	11,000	50,000	98,000	25,000	29,000
Crews on vessels[1]	72,000	8,000	30,000	16,000		18,000
Total	800,000	46,000	241,000	292,000	106,000	115,000
All institutional groups	2,000,000	145,000	898,000	576,000	178,000	203,000

[1] Classified by region according to port of call.