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PART I

Income Received in Wisconsin, 1936

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PART I PRESENTS an estimate of the income received in Wisconsin in 1936 and its distribution by both size and type (Table 1).

The estimate was prepared in an effort to find out how feasible was the preparation of such an estimate for a noncensus year and from state sources; what kinds of data are available that can be used for this purpose; and what problems are encountered in the process. Wisconsin's income tax yielded income data for 32 percent of the state's income recipients, or more than three and one-half times the coverage then provided by federal income tax returns. This body of data provided an excellent starting point for such an experiment. Many data were also available from the state's unemployment compensation system and various licensing provisions. Furthermore, estimates of the number of recipients and the total income received in Wisconsin were needed as background for analytical studies based almost wholly on income tax data (Parts II and III).[1]

Since there was no single body of data covering all phases of Wisconsin's economic activity, it was necessary to tap a number of sources and prepare separate estimates, first for farmers, then for nonagricultural entrepreneurs, and then for wage earners. Once these estimates were available, they had to be combined into a single series. Since a person may during a year be, e.g., both a farmer and a wage earner, any duplication between the various estimates had to be removed. In combining the estimates, and in estimating the income from property of those engaged neither in farm or nonfarm businesses nor working for wages or salaries, considerable reliance was placed on the income tax data. Finally, the estimates thus prepared are compared with the Department

[1] The income tax statistics referred to throughout this book, unless otherwise stated, are those prepared from Wisconsin returns for 1929-36 and published by the Wisconsin Tax Commission under the general title, *Wisconsin Individual Income Tax Statistics*. For definitions of the terms relating to income and deductions, and for a statement of the filing requirements, see the Appendix to Part I.

of Commerce's "income payments" series, and their reliability appraised.

Income received was estimated by several methods. Aggregate wages were estimated mainly from wage payments. The income of farmers (including income from labor and property as well as from farm operation) was estimated from a small sample of farm operating accounts, supplemented by data from the Wisconsin Department of Agriculture and the Consumer Purchases Study. The average income of business and professional persons not filing returns was assumed to be the same as the average income of filers in the same industrial groups who reported less than $2,000 total income. Property incomes of nonfiling wage earners and nonfarm business men were estimated on the basis of income tax data.

The wages of domestic servants, farm laborers, employees of charitable, religious, educational and scientific institutions, and of local units of government had to be estimated indirectly; also of employees of firms in industries covered by the Social Security Board's Old Age and Survivors Insurance benefits with fewer than eight employees, the nonwage income of wage earners not filing tax returns, and the total income of nonfiling business and professional persons. While there is evidence that many nonfilers who received property income but not earnings are excluded, data are not available to correct for their omission. The only adjustment for nonreporting above $2,000 was for federal employees who did not file returns. Estimates of nonreporting for other groups and for underreporting on income tax returns were not attempted.

The individual rather than the family is considered the income receiving unit because of the form of the income tax statistics and the absence of data requisite to convert a distribution by individuals into a distribution by families. The number of wage earners, of business and professional persons, and of farmers had to be estimated separately. Census data, more or less suitable, could be used for both farm and nonfarm business groups, but for wage earners rather doubtful relationships had to be assumed in order to avoid double counting. Similarly, and to the same end, doubtful expedients were resorted to in combining the various groups into a single distribution.

TABLE 1

Estimated Income Received, Wisconsin, 1936[a]

TOTAL INCOME GROUP	NO. OF RECIPIENTS	TOTAL INCOME ($000)	WAGES & SALARIES NUMBER	WAGES & SALARIES AMOUNT ($000)	BUSINESS INCOME[b] NUMBER	BUSINESS INCOME[b] AMOUNT ($000)	INTEREST	DIVIDENDS	NET RENTS	CAPITAL GAINS	OTHER SOURCES
							(thousands of dollars)				
$1-2,000											
Reported on tax returns	335,309	386,365	279,536	314,167	45,233	38,745	9,976	4,993	8,404	1,303	8,777
Nonfilers											
Wage earners[c]	717,112	347,520	713,724	316,329			3,502	2,527	4,006	628	20,528
Business & professional persons[d]	37,535	41,159	2,458	864	37,535	35,654	820	424	884	212	2,301
Farmers	189,320	237,584	60,963	9,489	189,320	169,139[e]	1,339	693	1,293	346	55,285
Subtotal	1,279,276	1,012,628	1,056,681	640,849	272,088	243,538	15,637	8,637	14,587	2,489	86,891
$2,000- 2,999	70,967	167,577	59,353	129,960	11,194	22,635	4,079	3,340	3,067	1,284	3,212
3,000- 3,999	18,260	62,067	13,803	41,784	4,375	11,788	2,287	2,385	1,323	1,256	1,244
4,000- 4,999	7,395	32,773	5,279	20,005	1,964	6,770	1,570	1,949	770	1,052	657
5,000- 5,999	4,053	22,011	2,835	12,738	1,114	4,657	1,122	1,688	533	882	391
6,000- 7,999	4,137	28,371	2,766	15,121	1,136	6,103	1,583	2,758	692	1,416	698
8,000- 9,999	2,031	18,036	1,341	9,214	541	3,739	1,154	2,069	451	1,066	343
10,000-14,999	2,281	27,403	1,440	12,343	565	5,240	1,915	4,691	606	2,011	597
15,000-19,999	891	15,254	606	6,709	180	2,224	1,034	3,156	268	1,367	496
20,000-24,999	421	9,391	270	3,539	101	1,637	648	2,119	81	1,075	292
25,000-49,999	692	23,387	439	7,453	112	2,502	1,777	7,659	307	2,908	781
50,000-99,999	206	13,929	142	3,478	17	582	921	6,062	82	2,180	624
100,000 & over	74	16,569	45	1,688	5	220	1,338	7,782	136	4,515	890
Total	1,390,684	1,449,396	1,145,000	904,881	293,392	311,635	35,065	54,295	22,903	23,501	97,116

[a] For definitions of income items see Appendix to Part I.

[b] Includes $135,385,000 nonfarm and $176,250,000 farm net business income only, and ignores approximately $5,134,000 nonfarm and $1,018,000 farm net business losses.

[c] Not engaged in business or farming. Includes 3,388 clergymen receiving maintenance only.

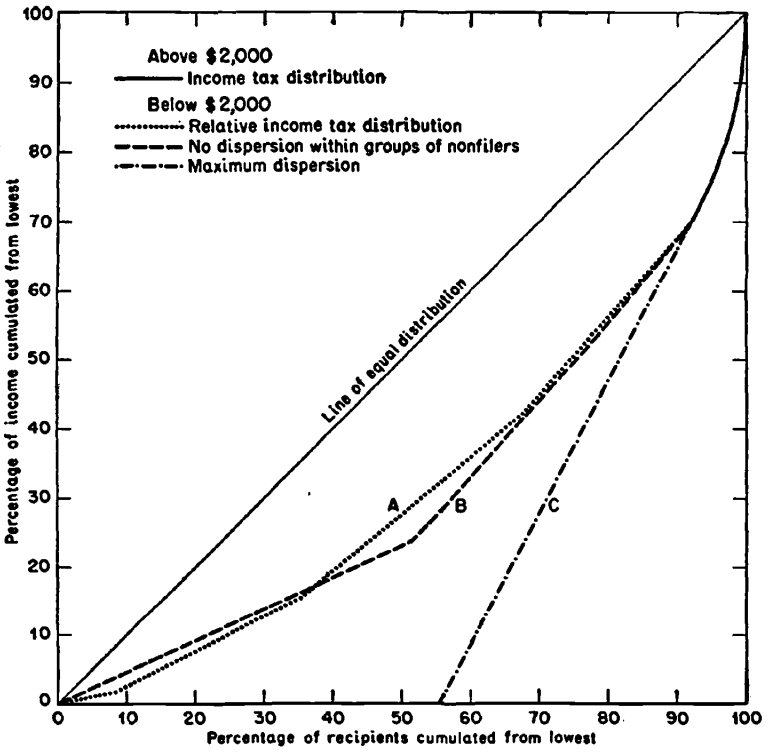
[d] Not engaged in farming.

[e] Includes $1,663,000 nonagricultural business income.

In Chart 1 the segment of the Lorenz curve that can be constructed from Table 1 is shown by a heavy black line; the fragmentary nature of the data made it difficult to determine the position of the remaining segment of the curve. Line A is drawn on the assumption that the incomes of the nonfilers for whom estimates were prepared are distributed in the same way as those of

CHART 1

Lorenz Curves for the Distribution of Total Income among Individuals, Wisconsin, 1936



filers. But the low average income of the 717,000 nonfiling wage earners (about three-fourths of all nonfiling recipients) suffices to indicate that the distribution of tax returns is not representative of this broad interval. An alternative assumption is that all persons in the $0-2,000 group received $793, the average for the group. However, even our meager data contradict this extreme assumption. Line B is based on a modification of this assumption,

namely, that there is no dispersion within any of the four groups with incomes of less than $2,000, i.e., each individual receives the mean income of the group to which he belongs. But even this modified assumption underestimates dispersion. Line C, drawn from 55,0 to 92,70, the end of the heavy black line, adequately represents the limiting assumption of maximum dispersion: the situation when 507,000 in the lowest group each receives almost $2,000 while the others receive negligible amounts. The area within which the lower end of the Lorenz curve lies is far too large for even a reasonable approximation in the absence of considerable additional data.

A Income of Farmers

The estimate of farm income is based upon gross income data developed by the Wisconsin Department of Agriculture and upon a sample of Wisconsin farmers; of nonfarm income of farmers, primarily upon data from the Study of Consumer Purchases (Table 2). The estimate of the number of farmers is from the 1935 Census, which lists 199,877 farms. According to the Census definition, the number of farmers is the same as the number of farms.[2] A person owning a farm operated by a tenant or manager is, for our purposes, considered a recipient of rent rather than of farm income. So far as farms are operated by partners, the Census definition tends to underenumerate farm entrepreneurs.[3]

1 *Net Farm Income*

Net farm income was obtained by applying to gross cash receipts from farming in the state an estimated ratio of net to gross income. Gross cash receipts were obtained from the Wisconsin De-

[2] *U. S. Census of Agriculture, 1935,* 'Wisconsin Farms and Farm Acreage by Size, etc.', p. 8. A farm, according to the Census definition, p. 3, ". . . is all the land which is directly farmed by one person either by his own labor alone or with the assistance of members of his household or hired employees. The enumerator was instructed not to report as a farm any tract of land of less than three acres unless its agricultural products in 1934 were valued at $250 or more."

[3] Income tax statistics indicate that 688 farmers (or almost 7 percent of the farmers filing) filed returns as partners. The degree to which these 'partners' were members of one household is not known.

TABLE 2

Estimated Number of Farmers and their Income, Wisconsin, 1936

	ALL FARMERS	FILING FARMERS	NONFILING FARMERS[a]
Number of farmers with:			
Farm profits	198,227	8,907	189,320
Farm losses	1,650	1,125	525
Total	199,877	10,032	189,845
Farm income ($000)			
Farm business profits	176,250	8,774	167,476
Wages	10,267	778	9,489
Nonfarm business income[b]	1,799	136	1,663
Net rents	1,399	106	1,293
Interest	1,449	110	1,339
Dividends	750	57	693
Other income			
Value of products consumed	55,542	4,206	51,336
Gov. agr. payments	3,372	256	3,116
Roomers & boarders	600	45	555
Capital gains	374	28	346
Unclassified	300	22	278
Total income	252,102	14,518	237,584
Farm business losses	1,018	698	320
Total income minus losses	251,084	13,820	237,264
Interest payable	32,600		

[a] Amounts computed by substracting data for filers from totals. For filers nonfarm income was allocated by type in the same proportions as the nonfarm income of all farmers.

[b] Certain limitations of the Census are specially applicable to businesses operated by farmers; namely, underenumeration of seasonal industries, Census definitions of proprietor and firm member, and omission of firms with small receipts. Hence, it is assumed that the estimated 2,019 farmers who received nonfarm business income are not included in the estimate of nonfarm entrepreneurs.

partment of Agriculture.[4] The net-gross ratio is based on data from a sample group of farms collected by the University of Wisconsin, College of Agriculture, Farm and Dairy Records Office, hereafter designated the sample survey.[5] Except for the Con-

[4] The Wisconsin Department of Agriculture estimates annually 'gross income', equivalent to 'value of product' (including the estimated value of farm goods consumed on the farm) and gross cash receipts (excluding the estimated value of farm goods consumed on the farm); it does not estimate farm expenses. See, e.g., Wisconsin Agriculture, Bulletin 243, Wisconsin Department of Agriculture, 1944.

[5] Data for 1936 were collected from about 750 farmers whose cooperation was obtained with the assistance of county agricultural agents, farm improvement organizations, the U. S. Farm Security Administration, and the U. S. Soil Conservation Service. Of the 750 original schedules, 724 reported the information required for estimating the net-gross ratio.

sumer Purchases Study, which provides data for only one county, Dane, the sample survey is the sole source of information on the business expenses of Wisconsin farmers.

Net farm income, estimated for each farm in the sample survey, equals cash receipts from farming operations adjusted for the value of changes in inventory, minus depreciation on productive capital and the cash expended in operating the farm as a business enterprise. To make the farm income concept comparable with the income tax definition, the value of farm products consumed on the farm is not included, and interest paid or payable is not deducted as a business expense. Taxes paid and depreciation were apportioned between the farm dwelling and the productive part of the farm according to the ratio of the value of the dwelling to the value of the farm; rent paid, when not reported, was assumed to be the same as rent per acre paid by the other sample farms of the same size. Owing to absence of information, expenses for insurance and maintenance of the farm dwelling and utility charges attributable to family use could not be excluded, or costs incurred in furnishing perquisites to farm hired help included.

The sample farms were classified into six total acreage groups: fewer than 50 total acres; 50-99; 100-174; 175-259; 260-499; and 500 and over. The net-gross ratios for each size group in the sample were weighted by the total number of farms in each group in 1935. The resulting weighted average ratio was then applied to gross cash receipts as estimated by the Wisconsin Department of Agriculture for 1936 to obtain the final estimate of net farm profit, $176,250,000. The estimated number of farms sustaining losses, 1,650, was based upon the proportion of sample farms in each size group reporting losses; the average loss per farm was taken as $617, the average reported by farmers filing tax returns. Total losses were thus estimated to be $1,018,000.

The reliability of the estimate of aggregate net farm income depends primarily upon the accuracy of the estimate of the net-gross ratio computed for each of the six total acreage groups from the sample farms. Table 3 indicates that the average farm in the sample is larger and more valuable than the average farm in the Census of Agriculture. The same difference seems to exist between the farms in the sample and the Dane County farms cov-

ered in the Consumer Purchases Study. Unfortunately, Table 3 provides no direct evidence on the main point at issue, namely, whether the sample farms in each total acreage group are representative of all farms of the same size with respect to the ratio of net to gross income. However, the relatively small difference in this ratio for the sample farms between 50 and 500 acres suggests that the method is reasonable.

2 *Nonfarm Income of Farmers*

VALUE OF PRODUCE CONSUMED ON THE FARM

The sample survey did not collect data on the value of farm commodities produced and consumed on the farm. An estimate was therefore based on several Wisconsin income surveys showing net farm income and farm goods consumed on the farm.[6] For each source of information used we plotted the relation between net farm income, X, and the ratio of farm products consumed on the farm to net farm income, Y, and obtained the following equation by the method of least squares: $\text{Log } Y = 2.01216 - .85355 (\text{Log } X)$. For each level of net farm income this formula was used to estimate the average value of farm produce consumed on the farm, valued at farm prices; the total for all farmers is $55,542,000.[7]

NUMBER RECEIVING WAGES AND WAGES RECEIVED

In 1935, 62,987 farmers received earnings for work off the operator's farm.[8] It was assumed that the same number received

6 College of Agriculture, Office of Farm Accounts and Dairy Records: Third Annual Farm Business Record Report, March 1936 to March 1937, Vernon, Monroe, and La Crosse Counties; Fifth Annual Farm Business Record Report, March 1938 to March 1939, Vernon, Monroe and La Crosse Counties. How Farm Families Meet the Emergency (Research Bulletin 126, Jan. 1935, Wisconsin Agricultural Experiment Station). Farm Family Living in Wisconsin (Research Bulletin 114, Jan. 1933, Wisconsin Agricultural Experiment Station). Distribution of Farm Families in Dane County, Wisconsin, by Income and Family Type, 1935-1936 (Preliminary Release, March 30, 1938, Bureau of Home Economics, U. S. Department of Agriculture, Consumer Purchases Study).

7 The average value of farm produce consumed by farmers sustaining business losses was assumed equal to that of farmers receiving less than $2,000 net farm profits.

8 U. S. Census of Agriculture, 1935, Wisconsin Abstract, Farms and Farm Acreage by Size, etc., p. 7.

TABLE 3

Characteristics of Farms Covered by Sample Survey, Census of Agriculture, and Consumer Purchases Study

	Sample Survey 1936	*Census of Agriculture 1935*	*Consumer Purchases Study*[a] *1935-36*
Farms, number	724	199,877	795
Counties, number	52[b]	71	1
Av. acres per farm			
State	150	117.4	
Dane County	183	117.8	134
Av. crop acres per farm	78	49.6	
Av. value of farm			
State	$11,808	$6,238	
Dane County	$15,983	$8,838	$10,032
Av. value per acre	$78	$53	
% distribution of farms by total acreage group			
Fewer than 49	2.06	19.15	5.62
50- 99	24.31	30.22	27.46
100-174	47.53	33.74	45.59
175-259	17.58	11.46	16.73
260-499	7.83	4.90	4.60
500 & over	.69	.53	0
Ratio of net to gross farm income by total acreage group			
Fewer than 49	.484		
50- 99	.551		
100-174	.545		
175-259	.537		
260-499	.531		
500 & over	.469		
% of farmers with nonfarm earnings	48.7	31.5	13.8
Av. nonfarm earnings[c]			
State	$163		
Dane County	$245		$200

[a] U.S. Department of Agriculture, Bureau of Home Economics: Consumer Purchases Study—farm series, Family Income and Expenditures; Middle Atlantic, North Central, and New England regions; Part 1, Family Income (Miscellaneous Bulletin 383), 1940. These data cover Dane County only.

[b] 19 counties were not represented in the survey. Fewer than 10 farms each were included in the survey for 30 counties; more than 10, for 22 counties. The sample included more than 1 percent of the farmers for 6 of these 22 counties, and between .8 and 1.0 percent for 2 counties.

[c] Average nonfarm earnings of farmers working off the farm (excl. nonfarm business income).

wages in 1936. Since the Census of Agriculture provides no information on wages received, the average wage received by the farmers in the sample survey, $163, was used; this yields an estimate of $10,267,000.

OTHER SOURCES OF INCOME

The only information on income from other sources is from the Consumer Purchases Study for Dane County. It was assumed that the average receipts of farmers in that Study can be used for all farmers in the state.

AVERAGE AND ESTIMATED RECEIPTS, WISCONSIN

TYPE OF INCOME	AVERAGE RECEIPT	ESTIMATED TOTAL
Nonfarm business income	$ 9.00	$1,799,000
Net rents	7.00	1,399,000
Interest and dividends	11.00	2,199,000
Income from roomers and boarders	3.00	600,000
Unclassified income	1.50	300,000

The Wisconsin Department of Agriculture found that total payments during 1936 under the various agricultural programs were $4,081,000, of which $709,000 was allotted for administrative expenses under the Agricultural Conservation Program, leaving $3,372,000 to be included in the total income of farmers.[9]

INTEREST PAID BY FARMERS AS A BUSINESS EXPENSE

The Bureau of Agricultural Economics estimates the total farm mortgage debt in Wisconsin to have been $416.6 million as of January 1, 1936, and $410.7 million as of January 1, 1937. Applying the average interest rate paid on mortgages, we estimate the total annual charges to have been $21.7 million on the debt owed as

TYPE OF FARM LOAN	% DISTRIBUTION	1936 INTEREST RATE PAID BY CROP REPORTERS
Real estate mortgages, land contracts, & other real estate debts	70	5.2
Chattel mortgages	16	6.2
Notes & other unsecured debts	14	6.5

of January 1, 1936, and $21.4 million on the debt owed as of January 1, 1937.[10]

Since the farm mortgage debt is estimated to be only 70 percent of total farm indebtedness, total farm indebtedness in Wisconsin in 1936 is estimated to be $587 million, of which $411 million were real estate mortgages, $94 million, chattel mortgages, and $82 million, notes and other unsecured debts. According to state

9 *Wisconsin Agriculture*, Bulletin 188, p. 23.
10 *Agricultural Finance Review*, Vol. 2, No. 2, Nov. 1939, p. 13.

data on interest rates paid by crop reporters, the interest charges, classified by type of loan, are $21.5 million for farm mortgages, $5.8 million for chattel mortgages, and $5.3 million for notes and other unsecured debts, making a total of $32.6 million.

B Income of Nonagricultural Entrepreneurs

'Nonagricultural entrepreneurs' comprise all individuals who received profits (or suffered losses) during 1936 from the operation of an unincorporated business enterprise or from the practice of a profession.[11] Their income was estimated in four steps: (1) the number of entrepreneurs in each of several industries or professions was estimated; (2) the entrepreneurs in each group who filed returns were separated from those who did not; (3) the business profits of the nonfilers in each group were estimated by attributing to them the average profits of those filers in the same group whose profits were less than $2,000 (a few exceptions to this procedure are noted below); (4) these estimates of business profits were converted into estimates of total income from all sources on the basis of data for filers.

1 *Number of Entrepreneurs*

The estimated number of entrepreneurs is classified in Table 4 by industrial categories.[12] Almost 60 percent of all entrepreneurs were in subgroups for which Census data were used; another 31 percent were in subgroups for which state data were used. The Census data were relied on almost exclusively for the manufacturing, wholesale and retail industries; state and Census data, about equally for the service industries. More than two-fifths of all entrepreneurs were in service industries, more than one-

[11] Net business income is assumed to be on an accrual basis, before the distribution of any payments to the owner (see *A Critical Analysis of Wisconsin Individual Income Tax Statistics*, pp. 88-91, for a discussion of the accounting methods). As the above statement implies, our estimates include both sole proprietors and members of partnerships.

[12] These categories are broader than those for which the original estimates were made; hence the number presented for each industry is the sum of the number for each original subgroup included in the industry.

TABLE 4

Nonagricultural Entrepreneurs, by Number, Source of Data, and Industry, Wisconsin, 1936

INDUSTRY GROUP[b]	SOURCE OF DATA[a] State[c]	Census[d]	Income Tax[e]	Other	TOTAL
		NUMBER			
Manufacturing	1,662[f]	7,981[g]			9,643
Wholesale		2,016			2,016
Retail	3,064[f]	25,793[g]			28,857
Service	20,052	21,675	239	49	42,015
Professions	3,906	1,527	152	5,289	10,874
Other[h]	2,501	261	5,569		8,331
All industries	31,185	59,253	5,960	5,338	101,736
	PERCENTAGE DISTRIBUTION BY SOURCE				
Manufacturing	17.2	82.8			100.0
Wholesale		100.0			100.0
Retail	10.6	89.4			100.0
Service	47.7	51.6	.6	.1	100.0
Professions	35.9	14.1	1.4	48.6	100.0
Other[h]	30.0	3.1	66.9		100.0
All industries	30.7	58.2	5.9	5.2	100.0
	PERCENTAGE DISTRIBUTION BY INDUSTRY				
Manufacturing	5.3	13.5			9.5
Wholesale		3.4			2.0
Retail	9.9	43.5			28.3
Service	64.3	36.6	4.0	.9	41.3
Professions	12.5	2.6	2.6	99.1	10.7
Other[h]	8.0	.4	93.4		8.2
All industries	100.0	100.0	100.0	100.0	100.0

[a] When more than one type of source was used, the estimate was attributed to the principal source. Consequently, the columns are free of duplication.

[b] The industrial classifications are not necessarily identical with Census classifications.

[c] Statistics from state departments and local governments.

[d] *1937 Census of Manufacturers, 1935 Census of Business,* and *1930 Census of Occupations.*

[e] When information was not available, the income tax statistics were used without adjustment.

[f] Manufacturing and retail bakeries classified under retail.

[g] Manufacturing and retailing of textiles, clothing, iron, steel, machinery, and vehicles classified under retail.

[h] Mining, fishing, forestry, hunting and trapping, and unclassified.

fourth in retailing, about one-tenth in manufacturing, and another one-tenth in the professions.

CENSUS DATA

For our purposes, Census data have serious limitations, which tend to make for an underenumeration of entrepreneurial income recipients:

1) Except for manufacturing and a few service and miscellaneous industries, the Census data (in all industries) are for 1935.

2) The Census enumerations were made in the early part of 1936 (or 1938 for manufacturing) to obtain information for the preceding year. The Census thus omits entrepreneurs who were in business during the Census year but not at the time of enumeration, either because their business was seasonal or because they had gone out of business. Many entrepreneurs in the amusement industries and some in other industries must have been omitted for the first reason and state statistics indicate that a substanial number must have been omitted for the second.[13]

3) In some lines of activity proprietors do not have a business address; e.g., insurance agents, wholesale agents, and distributors and special kinds of contract carriers. Such businesses, usually small and unincorporated, are likely to be overlooked by the Census.

4) It is often difficult to distinguish between proprietors and employees; e.g., wholesale agents and brokers, operators of leased gasoline stations, insurance agents, truckers, taxicab drivers, musicians, gasoline and petroleum tank car operators, and operators of concessions or leased departments in retail and service establishments. According to the 1939 Census 'Instructions to Enumerators' (pp. 31-2), leased departments are treated as separate establishments only if the general reporting firm itself excludes the statistics of the leased departments. The Census probably counted too few as proprietors.

5) The Census enumerates as a proprietor or firm member only those who devote the major portion of their time to the operation of a business.[14] For our purposes any individual receiving profits or suffering losses from an unincorporated enterprise or profession should be included.

6) The 1935 Census of Business, e.g., of 'Advertising Agencies', and in part of the 'Construction Industry', was conducted by mail questionnaire. The Census Bureau acknowledges inade-

[13] Data on the number of licenses issued and canceled for trucking concerns and restaurants indicate that many concerns operate only part of the year.

[14] The owner of an establishment managed by a salaried employee is not included; and partners not devoting a major portion of their time to the business are not 'active firm members'. The income tax statistics include 9,202 returns with nonfarm partnership income.

quacies due to the omission of firms not replying and other reasons;[15] moreover, it deliberately excluded many firms reporting sales of a few hundred dollars.[16]

The importance of these limitations is shown in Table 5 for the few industries for which state data also are available. For these

TABLE 5

Entrepreneurs in Selected Industries, Census and State Data

INDUSTRY[a]	SOURCE OF STATE DATA	NUMBER Census[b]	NUMBER State
Shoe repair shops	Trade Practice Dept.	1,223	1,574
Bakeries, manufacturing & retailing	Dept. of Agriculture	908	1,233
Automobile dealers	Banking Commission	1,367	1,831
Cleaning, dyeing & laundering establishments[c]	Trade Practice Dept.	109	159
Hotels[d]	Board of Health	728	820
Barber & beauty shops	Trade Practice Dept.	4,131	5,222
Trucking firms, contracte	Public Service Comm.	2,644	6,672
Other service establishments			
Real estate firms	Real Estate Board	794	2,194
Finance & credit companies	Banking Commission	22	57
Milk & dairy products, mfg.[f]	Dept. of Agriculture	1,509	1,653
Total		13,435	21,415

[a] The industrial classification is that of income tax statistics.

[b] For 1935 except data for cleaning, dyeing, and laundering establishments, and manufacturing bakeries, which are for 1937.

[c] In both Census and state data only establishments doing more than a $5,000 gross business are included; these statistics are on an 'establishment' rather than a 'proprietor' basis.

[d] Hotels and tourist camps are combined. Only proprietors of establishments with more than 10 rooms are included under the state definition.

[e] The Census acknowledges incompleteness of data.

[f] Ice cream manufacturers are excluded since state data are not available.

industries state data yield an estimate nearly 60 percent larger than the Census. Even if the group acknowledged to be incomplete by the Census is eliminated, the estimate based on state data is 50 percent larger than that based on Census data. While state data were used for these industries, the Census data for other

[15] *U.S. Census of Business,* 1935, Personnel and Payroll in Industry and Business and Farm Personnel by Counties, p. x; Financial Institutions other than Banks, p. ii: "For various reasons—the absence of legislation which during regular census years makes reporting mandatory, the difficulty experienced by enumerators in identifying establishments subject to canvass and other obstacles usually encountered in a first survey—the figures presented must be regarded as presenting only a partial survey of . . . non-financial banking institutions."

[16] *Ibid.,* Motor Trucking for Hire; Service Establishments; Construction Industry.

industries were not adjusted, since the relations in Table 5 may not be representative. State data are superior in that (1) usually they can be obtained for 1936; (2) they give the number of entrepreneurs operating at any time during 1936 although there is a possibility that one entrepreneur may engage in several lines of business, and thus be counted twice; and (3) they include inactive proprietors and partners.

Professional directories and data from federal agencies other than the Census Bureau were used for a few groups. In addition, data from a wide variety of sources were used to check the reasonableness and limitations of the Census data.

FILERS AND NONFILERS

The Wisconsin income tax statistics give the number of entrepreneurial income recipients filing returns; the number of nonfilers is the difference between total entrepreneurs and the number filing. Of the 57,624 nonfarm returns reporting business profits, only 48,029 could be classified by industry.[17] In estimating income by industry the remaining 9,595 business men who filed returns had to be treated as nonfilers; the total income for all industries was adjusted for this error.

It was assumed that all business men sustaining losses filed income tax returns; [18] but of the 6,577 who filed, only 2,821 could be classified by industry.

2 *Entrepreneurial Income*

Nonfarm business men filing returns reported $97,932,000 as business profits. It was assumed that each of the 37,535 nonfiling entrepreneurs received less than $2,000 business and total income, and that their average business profit was equal to the average profit of entrepreneurs in the same industry who received

17 Returns were coded by industry only if the nature of the business could be determined, or if the income recipient reported wages.

18 Most of those reporting losses also reported substantial total incomes. Comparison of the percentage of returns with losses, 6.5, with unpublished Wisconsin corporation statistics and the federal partnership statistics (*U.S. Treasury Department Bulletin,* June 1940, pp.1-2) indicates that this assumption does not lead to unreasonable results.

less than $2,000 business income but filed a return.[19] Estimated total business profits of nonfilers computed in this way for each industrial group in the income tax statistics aggregated $33,511,000. This estimate of profits received by nonfilers was raised to $35,654,000 by adding $2,143,000, the difference between the actual profits received by those filing returns not coded by industry (and hence considered to be nonfilers) and the profits attributed to them as nonfilers. Aggregate profits of all business men were estimated to be $133,586,000; business losses to be the $5,134,000 reported on tax returns.

3 *Other Income of Nonagricultural Entrepreneurs not Filing Returns*

The nonbusiness income of nonfilers was estimated from income tax data for filers who had less than $2,000 total income and whose largest source was entrepreneurial activity. It was assumed that the ratio of each source to entrepreneurial income was the same for nonfilers as for this group of filers. The total income of business and professional persons not filing returns was $41,159,000 (Table 1).

4 *Interest Paid or Payable by Entrepreneurs*

The income tax statistics show that 92,636 individuals claimed statutory deductions of $22,191,000 for interest paid for consumer and business purposes. It is estimated in the *Critical Anal-*

[19] A departure from this assumption was made for shoe repair shops, hardware and agricultural implement stores, sugar and confectionery stores, rooming and boarding houses, trucking firms, maintenance service establishments, n.e.c., and chiropractors and other healers. On the basis of a comparison of the distributions of business income and of the average and modal incomes of these groups with other industrial groups, it was assumed that the nonfilers in these groups had the same average profits as the filers who reported less than $1,500 profits. The distribution of these filers was so highly concentrated in the lower income groups that a modication of the basic assumption was believed warranted. For trained nurses the frequency of part-time employment and a high concentration of filers at the lower income levels led to the use of an even lower average for nonfilers, i.e., the average profits of filers reporting less than $1,000 business income. For fishing, mining, forestry, animal farms and trapping, aggregate income was estimated for all entrepreneurs, based on information from state departments and university experts.

ysis of Wisconsin Individual Income Tax Statistics (p. 107) that interest paid as a business expense (either by business men or by farmers who filed returns) amounted to $4,418,000,[20] an average of $60 for each entrepreneur who filed a return. Deducting an estimated $1,636,000 interest paid by farmers filing returns, the interest paid by nonagricultural entrepreneurs was $2,782,000. If we assume that the 37,535 nonfilers paid the same average interest as a business expense as the filers, the estimated interest paid by nonfilers was $2,252,000. The estimated total interest paid by all nonagricultural entrepreneurs, $5,034,000, cannot be distributed by entrepreneurial income groups.

C Income of Wage Earners

Table 6 summarizes the methods by which the number of wage earners and their cash wages in 1936 were estimated. The classification of wage earners by industry merely indicates the categories used in making the estimates. Estimates of total wage earners employed in each industry at some time during the year are not available. The industrial classification of cash wages paid shows total wages paid Wisconsin residents by each industry.

1 *Number of Wage Earners*

The number of individuals receiving wages in 1936 is the sum of the number of wage earners employed in 'covered' industries at some time during the year, and the number not employed in covered industries at any time during the year.[21]

COVERED INDUSTRIES

The basic data for firms in covered industries employing eight or more persons are from a tabulation of the 1936 Employers'

[20] Since the tax returns combined all interest items—consumer and business—it was assumed, in estimating interest paid for business purposes, that all interest paid by business men was a business expense.

[21] In this study the Social Security Board 'old age' classification of 'covered' and 'noncovered' industries is used. 'Noncovered' industries include railroads, all regular and emergency federal agencies, departments of the state government, local units of government, charitable, religious, scientific and non-profit institutions, domestic service, and farm labor. All other industries are 'covered'.

TABLE 6

Estimated Wage Earners and Cash Wages, Wisconsin, 1936

NUMBER	
Wage earners in covered industries	
Firms employing more than 8 persons	548,000
Firms employing fewer than 8 persons	173,000
Wage earners in noncovered industries	
Estimated on the basis of monthly maximum employment	
Railroads	23,000
Federal agencies	147,000
State government departments	13,000
Farm labor	90,000
Charitable, religious, scientific, and nonprofit organizations	11,000
Independent estimate of wage earners not counted elsewhere	
Domestic service	41,000
Local units of government	99,000
Total wage earners	1,145,000
CASH WAGES	
Firms in covered industries employing more than 8 persons	$528,171,000
Firms in covered industries employing fewer than 8 persons	112,079,000
Railroads	39,403,000
Federal agencies	82,985,000
State government departments	15,825,000
Farm labor	15,448,000
Charitable, religious, scientific and nonprofit organizations	9,477,000
Domestic service	19,244,000
Local units of government	82,249,000
Total cash wages	$904,881,000

Contribution reports to the Wisconsin Unemployment Compensation Division.[22] A separate estimate was made for firms in covered industries employing fewer than eight persons.

Total wage earners employed by firms in covered industries employing eight or more persons are estimated as the sum of the number employed by reporting firms in the month of maximum employment.[23] For a given firm, employment in the month of maximum employment may be less than its total annual employment, since employees who do not work during the maximum month are necessarily omitted. The sum of maximum employment figures for a large number of firms (say, firms in one industry or a group of industries) may either under- or overestimate their

22 Prepared jointly by the Wisconsin Income Study and the Wisconsin Unemployment Compensation Department.

23 The actual method was to transcribe for each firm the larger number of wage earners appearing on the payroll reports during the two months with the highest payrolls in 1936.

total employment, depending upon the relative number of workers employed (1) during the year but not employed by any firm in its peak month; and (2) by more than one firm and counted in their maximum figures. Both will be small when there is little shifting among firms, and large when there is much shifting. We assumed that the underenumeration due to the existence of the first group will exactly balance the overenumeration due to the existence of the second. While there is no reason to suppose this assumption is correct, data released by the Social Security Board suggest that our estimate of 721,000 is reasonable.[24]

The number of wage earners employed in November 1936 by firms with fewer than eight employees was obtained from employers' applications for Social Security Board numbers, tabulated by the Wisconsin Unemployment Compensation Department.[25] Total employment in 1936 was estimated from November employment by using the ratio between the corresponding figures for firms employing eight or more persons.

NONCOVERED INDUSTRIES

For railroads, federal agencies, departments of the state government, charitable and nonprofit institutions, and farm labor, the sum of maximum monthly employment in each industry is used as an estimate of the number of wage earners in noncovered industries. This procedure, admittedly rough and adopted only for lack of better data, assumes implicitly that the difference be-

[24] The number of wage earners in covered industries in 1937 (including firms employing fewer than eight persons), according to Social Security Board old age data ('Employment and Wage Statistics, Old Age and Survivors Insurance, 1937, Table 48; multilithed), were 23,372 fewer than our estimate of 721,000 for 1936, though actual employment was presumably greater in 1937. Part of the discrepancy may be explained by the omission of employees over 65 years from the old age but not from the unemployment compensation data. Part of the remaining difference (less than 20,000 or approximately 3 percent) may be attributable to the necessity of correcting old age data for underenumeration. The correction factor was based on data for the United States as a whole, and may be seriously in error for an individual state. Minnesota data show similar discrepancies: old age data yield an estimate for 1937 that is 27,584 smaller than an estimate for 1938 from Minnesota unemployment compensation data, though actual employment was presumably greater in 1937.

[25] While the coverage of these data is suspect, the Wisconsin Unemployment Compensation Department estimated fairly accurately the increase in the number of firms and employees covered when firms employing 7 persons became subject to the Act.

tween the maximum monthly employment in any one of the non-covered industries and total wage earners employed in it at any time during the year is equal to the overenumeration due to counting some wage earners in the month of maximum employment of more than one industry. For domestic service and local units of government, the number of wage earners not counted in other industries was estimated independently. The detailed procedures used in each industry follow:

Railroads: The total number of Wisconsin wage earners on Class I railroads in 1937 (obtained from the Midwest Railway Association) was extrapolated to 1936 on the basis of total employment of railroads operating in Wisconsin (obtained from the Wisconsin Public Service Commission).

The total number of wage earners on Class II and III railroads, estimated on the basis of Wisconsin Public Service Commission data, was converted to an estimate of employment in the month of maximum employment by using the ratio of the corresponding 1938 Minnesota railroad figures, estimated from monthly employment data (*Second Annual report of the Minnesota Unemployment Compensation Department, 1938,* pp. 64 and 67), and from an unpublished tabulation of the Minnesota Unemployment Compensation Department for the third quarter of 1938.

Federal, including Emergency Agencies: The U. S. Civil Service Commission tabulated employment in the executive service in Wisconsin for December 1936. Employment each month in 1936 was estimated from an index of employment for the year for the entire executive service outside the District of Columbia (*Monthly Labor Review,* April 1936–March 1937).

The number of individuals in the military services stationed in Wisconsin was obtained from the registers and directories of the army, navy, marine corps and coast guard and from the *Census of Occupations, 1930.* It was assumed that monthly employment in the military services in Wisconsin was the same throughout the year. Members of the national guard were not included since it was assumed that they were counted elsewhere. Monthly employment in the U.S. Department of Justice and in the federal emergency agencies was obtained from the U.S. Marshal stationed in Madison, Wisconsin, and from the Wisconsin Division of Public Assistance and the Works Progress Administration in Wisconsin, respectively.

State Government Departments: Employment in the month of maximum employment was obtained from the Wisconsin Industrial Commission.

Charitable, Religious, Scientific, and Nonprofit Organizations: Monthly employment in all hospitals in 1936 was estimated by multiplying the number of beds in Wisconsin in 1936 by the estimated average number of employees per hospital bed in October 1935 (made from a sample of hospitals for which data were furnished by the National Institute of Public Health). The number of clergymen who received cash wages was obtained from the yearbooks of some 20 church denominations. Total employment in social welfare agencies was estimated by weighting by population the replies to a questionnaire from a sample of community chests and local chapters of national welfare organizations.

Farm Labor: The number of farm laborers in January 1935 (*Census of Agriculture, 1935*) was extrapolated to 1936 on the basis of a monthly index of employment of farm labor (*Wisconson's Agriculture,* Wisconsin Crop Reporting Service, Bulletin 188, p. 15).

Domestic Service: The total number of domestic servants in Wisconsin in 1936 was assumed to be the same as in 1930 (obtained from a special tabulation prepared by the Census Bureau). The number of casual and part-time domestic servants is unknown and was not estimated.

Local Units of Government: All counties and cities with populations of 6,000 or more (and some with populations under 6,000) reported employment (in all departments other than the school system) to the Unemployment Compensation Department. Employment in the month of maximum employment was estimated for cities with populations under 6,000 by dividing total payrolls by the weighted annual average earnings computed on the basis of cities in the sample; for villages and towns, by dividing total payrolls by the weighted annual average earnings of employees in cities of under 2,000.

Employment in the state school system was obtained from the Wisconsin Department of Public Instruction. Total employment in local units of government was classified into three groups: (1) permanent full-time employees; (2) elected public officials; (3) temporary employees. It was assumed that perma-

nent full-time employees and elected public officials are not counted in the estimates for other industries, and that temporary employees had some employment in other industries and are counted there.

2 *Wages*

COVERED INDUSTRIES

Data on wages paid by firms in covered industries employing more than eight persons, from the tabulation of Wisconsin unemployment compensation reports, are reasonably accurate. Wages paid by firms employing fewer than eight persons, estimated on the basis of relations shown by Minnesota data,[26] are considerably less accurate. The estimated wages paid by firms employing fewer than eight persons are only $112 million of the $640 million paid workers by all firms in covered industries.

NONCOVERED INDUSTRIES

Wages paid in each noncovered industry were estimated separately. Those for railroads, federal agencies, and the state government are based on comprehensive and accurate data. The estimate for local units of government, based on somewhat less accurate data, is only slightly less reliable. On the other hand, the estimates for farm labor, domestic service, and charitable, religious, scientific, and nonprofit institutions are based on inadequate data and in some instances are little more than informed guesses. However, total wages paid by these groups aggregate only $44 million of the $265 million for all noncovered industries. The methods and the sources of data used were:

Railroads: For Class I railroads, wages paid Wisconsin residents in 1937 (obtained from the Midwest Railway Association) were

26 The average monthly wage paid by firms employing fewer than eight persons in November 1936 was estimated by multiplying the corresponding figure for firms employing more than eight persons by the ratio, in Minnesota, of the average wage of firms employing fewer than eight persons to the average wage of firms employing more than eight persons (shown in a tabulation of Minnesota payrolls, by size of firm, in covered industries for the third quarter of 1938 prepared by the Minnesota Unemployment Compensation Department). The total payrolls of firms employing fewer than eight persons in November 1936 was then computed by multiplying the number of wage earners employed by them in November 1936 by the average monthly wage. Finally, the annual payroll was estimated by multiplying the November 1936 payroll by the ratio of the total annual payroll to the November 1936 payroll of firms employing more than eight persons in Wisconsin.

multiplied by the ratio of total wages paid in 1936 to total wages paid in 1937 by the railroads operating in Wisconsin. For Class II and III railroads, 1936 data were obtained from the Wisconsin Public Service Commission.

Federal, including Emergency Agencies: Total payrolls for the executive service were calculated by multiplying the estimated monthly employment by the average monthly wage (computed from December data furnished by the U.S. Civil Service Commission), on the assumption that the average monthly wage was stable throughout the year.

Payrolls for the army, navy, marine corps, and coast guard were estimated from data in the annual registers and reports of the military services for 1936 and 1937.

The payroll for the Department of Justice was obtained from the Marshal stationed in Madison and from the *Annual Report of the Attorney General of the United States, 1936 and 1937.*

Total payments to the national guard, listed for each state in the *Annual Report of the Chief of the National Guard,* 1936 and 1937, are included in the aggregate payrolls for the military services.

Payrolls for the federal emergency works programs during each month of 1936 were obtained from the Wisconsin Division of Public Assistance and from the Works Progress Administration in Wisconsin.

State Government Departments: Total payrolls for 1936 were obtained from the Wisconsin Industrial Commission.

Farm Labor: Total wage payments to farm labor were estimated by extrapolating the *1930 Census of Agriculture* figure by an index of wage payments computed from data published in *Wisconsin's Agriculture* (Bulletin 188), p. 15.

Charitable, Religious, Scientific, and Nonprofit Institutions: Payrolls of Wisconsin hospitals were estimated by multiplying the average monthly wage, obtained from hospitals reporting to the National Institute of Public Health, by the average monthly employment. Payrolls of clergymen were based on the assumption that all clergymen receiving more than $2,000 per year filed tax returns and that those not filing received the same average wage as clergymen filing but receiving less than $2,000. The distribution by wage groups of clergymen filing returns in 1936 was based on Wisconsin income tax statistics. Total payrolls for

social welfare agencies were estimated by applying, to employment as estimated above, the average wage computed for a sample of community chests and national welfare organizations that returned questionnaires.

Domestic Service: Cash wages of domestic servants were estimated by multiplying the number by the average annual earnings computed from data on prevailing cash wage rates in various cities in Wisconsin, supplied by the Wisconsin Industrial Commission.

Local Units of Government: For cities with populations over 6,000, payrolls (for all departments other than the school system) were obtained from the Unemployment Compensation Department. For cities of less than 6,000, a regression line of wages on population was obtained for a sample of cities in this population group reporting to the Wisconsin Unemployment Compensation Department. The payrolls of each city not reporting were estimated by substituting its population in the regression equation. For villages and towns payrolls (for all departments other than the school system) were estimated by multiplying total operating expenditures of all villages and towns by the ratio of payrolls to total operating expenditures for cities of less than 2,000 (obtained from the Wisconsin Department of Taxation and from the Local Government Finance Study). Payrolls of school systems were obtained from the Wisconsin Department of Public Instruction.

3 *Total Income of Wage Earners*

The estimated 1,145,000 individuals who received wages during 1936 include 62,987 who received also farm income and 10,143 who received also business income from nonfarm enterprises.[27] The total income of these two groups is included in the estimates for farmers and other entrepreneurs described in preceding sections. Of the 1,071,870 wage earners who received neither farm nor business income, 358,146 filed income tax returns.[28]

Since it was assumed that all persons who received total incomes of $2,000 or more filed returns, each of the remaining

[27] The number of individuals who received wages and farm and nonfarm business income is probably negligible and was disregarded.

[28] This figure includes also an estimate of the number of federal employees who received more than $2,000 total income and did not file returns.

713,724 wage earners was assumed to have received less than $2,000. Their cash wages were estimated by subtracting the cash wages of wage earners who filed returns from the aggregates in Table 6. Their nonwage income was estimated as follows: (1) their cash wages were classified into one of two size groups: $1-500 or $500-2,000; [29] (2) for each group, the amount of each type of receipt was computed by multiplying wages by the ratio of each type to wages estimated from income tax statistics; [30] (3) the amounts of each type of receipt in the two wage groups were summed to obtain the aggregates (Table 1).

The estimate of the total income of wage earners is thus based upon a sample of wage earners who filed tax returns.[31] While the representativeness of the sample cannot be tested adequately, little or no weight is given to farm laborers, persons in CCC camps, and clergymen who receive only maintenance, all of whom

[29] The absence of direct data makes this estimate extremely arbitrary. It was obtained as follows: (1) The number and wages of farmers who received wages and wage earners who received more than $2,000 in wages were subtracted from the aggregate; (2) the average wage of the remaining wage earners was computed; (3) minimum estimates of the number and wages of wage earners with wages between $1,000 and $2,000 were obtained from the 1937 distribution of wages by size (Employment and Wage Statistics, 1937, Old Age and Survivors Insurance, Table 48, Social Security Board); (4) the average wage was assumed to be $200 for the $1-500 group, and close to $700 for the $500-1,000 group; (5) the estimated number of wage earners with wages less than $1,000 was distributed between the $1-500 and $500-1,000 wage groups in the ratio that yields an average wage for all wage earners (with wages less than $2,000) equal to the average obtained in step (2). Our estimate of the number of wage earners with wages less than $500 seemed fairly reasonable when compared with total wage earners who could reasonably be supposed to receive less than $500 (individuals employed on federal emergency works programs, farm laborers, domestic servants, elected public officials, and temporary employees of local governmental units); (6) the number and wages of wage earners filing returns and of wage earners receiving nonfarm business income were deducted from the total number and wages of wage earners (other than those receiving farm income) receiving less than $2,000.

[30] The three wage groups, $500-1,000, $1,000-1,500, and $1,500-2,000, were combined into a single set of ratios. This procedure seemed justified in the absence of a dependable distribution because the differences among the ratios for the three groups are small. The ratios for the $1-500 group, obtained from the income tax returns of filing wage earners who received neither farm nor nonfarm business income, and whose major source of income was wages, were used separately because they differed considerably from the corresponding ratios for the next three groups.

[31] In the $1-500 wage group the estimates are based upon a 5 percent sample; in the $500-2,000 wage group, on a 30 percent sample.

have relatively large nonmoney incomes. To correct for the underestimate of this type of income, we added independent estimates of the value of nonmoney income received by farm laborers and persons in CCC camps, and the number of clergymen receiving only maintenance (Table 1, line 2).[32]

D Method of Combining Estimates

Total income was distributed by size by adjusting the income tax groups above $2,000 for federal employees who did not file returns and adding the incomes of all other nonfilers to the $1-2,000 group (Table 1).

Since separate estimates of nonfiling wage earners, farmers, and nonfarm business and professional persons would have led to some double counting of recipients, the estimates for the three groups were made mutually exclusive before they were added. It was assumed that farm and nonfarm business groups were mutually exclusive,[33] and that the number of nonfarm business and professional persons with an interest in more than one business was small.[34] The remaining double counting was eliminated from the distribution of wages by subtracting the wages received by farmers and nonfarm business men. The number of farmers receiving wages is from the 1935 Census and the wages they received is based on the sample used for our estimates of farm profits. The number and wages of nonfarm business and professional persons were estimated from income tax statistics.

[32] Nonmoney wages received by farm laborers were estimated on the assumption that they equal the differences between cash wages paid with and without board (Wisconsin Crop Reporting Service, Bulletin 90, Supplement 1, pp. 34-5).

The estimate of nonmoney wages received by persons in CCC camps was obtained from the Chief Statistician of the Civilian Conservation Corps.

The number of clergymen was estimated on the basis of data from the Superintendent of Schools, Archdiocese of Milwaukee; their maintenance, on the assumption that the value of maintenance is $35 per month.

[33] That is, that the nonfarm business enterprises conducted by farmers were of a type that would be counted by neither the Census nor state government agencies.

[34] Of the 58,000 nonfarm business returns filed, only 418 reported both business and partnership profits.

E Reliability of Estimates

1 *Amount of Income*

Inadequacy of data led to the omission of the income of nonfiling 'investors', interest from federal obligations, and interest paid as a business expense, and gave rise to considerable error in many items. Only 62 percent of the estimated income—wages paid by firms in covered industries employing more than eight persons, railroads, federal agencies, and departments of the state government; and business and property income reported on tax returns —was derived directly. Another 26 percent of the total—wages paid by firms in covered industries employing fewer than eight persons, and by local units of government; also the entire income of farmers—was estimated indirectly by using relationships in whose existence some confidence can be placed, but whose numerical accuracy is questionable. Estimates of the wages of farm labor, domestic servants, and employees of charitable, religious, and scientific and nonprofit institutions; the nonfarm entrepreneurial income of nonfilers; and the entire property income of nonfilers other than farmers was based on assumed relationships whose very existence is subject to considerable doubt. The estimated property income of nonfilers other than farmers was based on income tax statistics even though the characteristics the returns display may be due to peculiarities of the income tax law and the assessors' practices and therefore different from those of nonfiling groups.

Interest on obligations of the federal government or federal agencies received by Wisconsin residents in 1936 aggregated $6-14 million.[35] Both figures are based on tenuous data and were

[35] The lower estimate was obtained by apportioning the 'direct and guaranteed obligations of the federal government held by individuals', as estimated in the *Treasury Bulletin* on the basis of population, and multiplying the result by the Treasury's 'computed rate of interest'. The higher estimate was obtained by apportioning the total direct and guaranteed obligations of the federal government on the basis of the 'wholly and partially exempt federal obligations owned at end of year' reported on federal income tax returns; and multiplying the result by the average yield obtained by dividing the interest reported on Wisconsin federal income tax returns by the amount of obligations reported on these returns as owned at the end of the year. Generally, these data are not considered a very dependable basis for computing an average yield, since income tax returns exclude, by definition and by limited coverage, unknown amounts of both interest and year-end capital.

obtained indirectly; in neither can much confidence be placed. Even less confidence could be placed in a single figure. Moreover, once chosen, it could be distributed by income groups (and the distribution adjusted for its inclusion) only by using the income tax statistics on taxable interest. Since the assumption that nontaxable interest is distributed in the same manner as taxable is open to question, it was not thought worthwhile to make this adjustment.

The only available data, other than income tax statistics, indicating the number of persons whose entire income is from property are those of the Consumer Purchases Study, which show that 9-12 percent of the families with incomes under $1,000, and 1-3 percent in the $1,000-2,000 group had no labor income. These data, however, are on a family rather than an individual basis. Using a family unit tends, on the one hand, to reduce the percentage of all recipients classified as investors, since many individual investors are members of families with at least one earner; and on the other, to increase the percentage since the total number of units is smaller, and several earners are frequently members of one family. Without additional knowledge of the relative importance of these tendencies there is no indication of the error in the Wisconsin estimates, which show that property was the sole source of income for 2 percent of all recipients.

The State Tax Commission does not require that business and property income received in other states be reported and the information is not available elsewhere. The Bureau of Internal Revenue classification of returns by place of filing does not yield very useful data for ascertaining whether a person's residence is the same as the source of his income. While state tax statistics prevent a clear-cut definition of residents, the error introduced thereby is probably small even for capital gains on real property in other states. Data for 1936 are not available, but for 1935, 37 nonresidents filing Wisconsin returns reported income from Wisconsin businesses and 128 nonresidents reported net rents from Wisconsin property.

Only one large group of residents, federal employees, were not required to file Wisconsin income tax returns for 1936. Both the aggregate income and the size distribution were adjusted for their exclusion. Though every year the Tax Commission finds

several persons with substantial incomes who did not file returns, there are no data to indicate the extent of nonreporting.

While underreporting of income on tax returns affects primarily the classification of individuals by size of income, it may affect aggregates too. Several fragmentary sources of information indicate something of the extent of underreporting. (1) Among more than 400 field audit reports surprisingly few were adjusted for underreporting even though the criterion for selecting returns for field auditing was usually information in excess of that on the return, or an inconsistency on the return. As in office auditing, many field auditing adjustments are made because deductions claimed by the taxpayer have been disallowed, rather than because additional income has been discovered; but this may reflect a weakness of field auditing. The item most frequently adjusted is business income; capital gains and losses are second. (2) While as many as a fifth of the returns filed are questioned after office auditing, adjustments in the amount of total income reported are small. By and large, office auditors can work most effectively with the deduction items; information that would lead to the discovery of additional income is seldom on the face of the return. Disallowing deductions affects primarily net taxable income, although business income is affected if the disallowed deduction has been claimed as a business expense. (3) *Statistics of Income, 1936* shows a greater amount of dividends reported on the 124,000 federal returns than on the 443,000 state returns; however, the reverse is shown by the tabulation of all returns made by the Federal Income Study.[36] In part the difference may arise because the Bureau of Internal Revenue classified the components of income from fiduciaries and trustees by type of income, while both the Wisconsin and the Federal Income Tax studies made fiduciary income a separate classification. Nevertheless, there may be considerable underreporting of dividends on the Wisconsin income tax returns. Dividends from Wisconsin corporations (corporations paying income taxes on more than 50 percent of their net income) are tax exempt. Although they are supposed to be reported, many taxpayers probably do not report them, simply because they are not taxed.

[36] *Statistics of Income Supplement compiled from Income Tax Returns for 1936, Individual Incomes,* Section I.

While there is considerable evidence that net taxable income, as computed by taxpayers, is altered considerably by office and field auditing, there is little evidence that total income is greatly affected. The meagerness of the evidence may reflect merely the inability of auditors to find what the taxpayers have hidden, but probably those filing returns in 1936 did not receive over $40 million in excess of the reported $810 million total income. The extent to which inclusion of underreported income would cause the reclassification of individuals was not estimated.

COMPARISON WITH 'INCOME PAYMENTS'

The present estimate differs from that of the Department of Commerce for the state in that it counts wages before the deduction of $2.5 million social security and retirement fund contributions; includes $23.5 million capital gains and $55.5 million of farm produce consumed on the farm as income; does not deduct the $37.6 million interest paid as a business expense (since it could not be allocated by income group); omits $6-14 million interest on federal obligations, $25.3 million direct relief, and $33.9 million soldiers' bonuses. When these differences are taken into account, the Commerce Department estimate is 6 percent higher than the present estimate.

The two sets of estimates by type of income can be compared only roughly; included in 'other sources of income' of the present estimate are $18.8 million that cannot be further classified by type, and for many of the items only approximate adjustments can be made. The Commerce Department estimates are larger for every type of income; for wages, $25.4 million; for agriculture, $12.9 million; for nonagricultural business income, $5.4 million; for interest, $39.0 million; for dividends, $11.7 million; and for rents and royalties, $9.1 million. In percentage terms, our estimates of earned incomes are close to those of the Commerce Department: the difference for wages is 4 percent, for agricultural income 9 percent, and for nonfarm business income 4 percent. However, the Commerce Department estimates of property incomes are 80 percent larger for interest, 39 percent larger for rents and royalties, and 21 percent larger for dividends. The deficiencies in the present estimates of property income are not sufficient to explain such large differences; they must be attributed,

at least in part, to the Commerce Department's inclusion of payments to banks, building and loan associations, and insurance companies as payments to 'aggregates of individuals' in the national and state aggregates.

2 *Number of Recipients*

The relationships on which the number of recipients was estimated, as well as the methods used to combine these estimates into a single distribution, have been discussed and some of their limitations mentioned. In many ways these estimates are of greater interest than estimates of income, since income estimates by states were available. For this reason it is especially unfortunate that their reliability cannot be tested adequately. The only relevant data are the Census figures on the gainfully occupied in 1930, on the number unemployed and partly employed in 1937, and on the labor force in 1940. These data must be reconciled for differences in definition and extrapolated to 1936, and the spot Census enumeration converted to one covering the entire year. Estimates of the gainfully occupied on December 31, 1936 range from 1,200,000 to 1,230,000; of the employed and partly employed, from 1,220,000 to 1,250,000; and of the labor force, from 1,180,000 to 1,210,000. The number of income recipients in Table 1 is 11 percent larger than the highest of these estimates and 18 percent larger than the lowest, although presumably all except the 28,000 investors should be included in all.

A large part of this difference may be accounted for by differences in concepts. The present estimate counts as recipients all who received some income during the year, regardless of the amount. For example, 23,000 elected members of school boards, each of whom receives approximately $15 per year, were counted as wage earners, though many were probably housewives who did not consider themselves gainfully occupied. Further, our estimate includes persons who consider themselves in the labor force only during peak periods of certain industries; so far as these peak periods do not coincide with the date of the Census enumeration, many of these persons are probably not counted as gainfully occupied. Many students and other part-time workers are probably not included by the Census, especially if they are not usually

employed during the short interval when Census enumerators collect their data. Finally, persons who die or who leave the state before the Census date and who become employed for the first time, or who enter the state after the Census date, presumably are included in our estimate but not in the Census figures.

On the other hand, we may not have succeeded in eliminating all the double counting in the estimate for wage recipients by the rough methods used. More than 82 percent received some wages and it is in this area that the estimates are especially suspect. Few data were available to indicate the number receiving more than one type of income. We corrected for the double counting between recipients of wages and farm and nonfarm business income; but some double counting, though small, remains between farm and nonfarm entrepreneurs and within the nonfarm entrepreneurial group. In the absence of an adequate test, these estimates should not be used when errors of 15-20 percent are not tolerable.

APPENDIX

1 *Definition of Terms*

The terms relating to income, deductions, and aggregates of income and deductions, used in this book are here defined. They follow the definitions used in *Wisconsin Individual Income Tax Statistics,* which should be consulted for more detailed descriptions and a facsimile of the income tax form. For a detailed description of the tabulations prepared (published and unpublished), see *Studies in Income and Wealth,* Vol. Five, Part II, Chapter 5, The Wisconsin Income Tax Study.

INCOME

Wages and Salaries: Since the income tax return describes this item as including "commissions, fees, etc.," some income which might better be classified as business or professional income is probably included.

All Wages and Salaries received by residents of Wisconsin were taxable except wages and salaries of "regular employees of the United States". Salaries and other compensation for special services received from United States agencies, e.g., joint stock

land banks are not exempt. Employees of the following organizations were held to be "regular employees of the United States" and the wages and salaries thus received to be nontaxable: Farm Credit Administration, National Emergency Council, National Reemployment Service, National Youth Administration, Civilian Conservation Corps, Public Works Administration, Works Progress Administration, Federal Emergency Relief Administration, Resettlement Administration, and the Emergency Crop and Feed Loan Office. Salaries from these agencies were transcribed and accumulated, but since they are not taxable have been deducted as other deductions.

Salaries paid partners by partnerships, under regulations of the tax commission should be included in partnership income. However, the practice adopted by the taxpayer has been followed in this instance, and salaries paid partners when reported as such have been so treated. This is compensated for by an equivalent reduction of partnership income.

Tips, fees received for officiating at ceremonies and all other cash compensation such as bonuses, profit sharing, etc., are included in this item. Compensation in property or services is also taxable, but is shown separately as other labor income.

Other Labor Income: This item contains only compensation for labor received in property or services.

Business Income: Represents the gross income of the business less the expenses incurred in obtaining the income. It may be reported either on a cash or an accrual basis and the statistics herein contained make no distinction between these methods of reporting. Interest paid by the business is treated separately, so that the figures shown as business profit or business loss are net before the payment of interest. When the expenses exceed the gross income of the business the difference is treated as a business loss and is shown in the deduction schedule.

Business conducted from offices within Wisconsin is taxable, regardless of the residence of the taxpayer; while non-Wisconsin business is not taxable, even to Wisconsin residents.

Value of Merchandise: These data may relate to the value of merchandise taken by a merchant from his stock for family use, or farm products consumed by the farm family. Unless a farmer

keeps reasonable records setting forth the 'estimated value' of the products consumed on the farm, he is required to report $90 for each adult, and $60 for each child under 18 who are members of the farm family. Merchants report the 'cost value' of stock taken for family use. No distinction between farm products at their estimated value or as statutory amounts and merchandise at its cost value is made in the statistics.

Partnership Profits: Represents the distributive share accruing to the taxpayer whether or not distributed by the partnership. Only the distributive share is shown on the individual income tax return; the income and expenses of the partnership being shown only on a partnership information return. Interest paid as an obligation of the partnership is included in the expenses of the partnership so that the distributive share is net after the payment of interest. Salaries paid partners should be included in the distributive share, but the statistics herein presented follow the practice adopted by the taxpayer. If a partner reported wages as wages rather than as a distributive share, they are treated in that manner.

Partnership income like business income follows the situs of the business, and only profits from business conducted in Wisconsin is taxable.

Dividends Received: Dividends received by Wisconsin residents must be reported even when they are not taxable. Dividends may be received either in cash or property, and are considered as received when either paid to or available to the taxpayer. Stock dividends are not taxable when received, but affect the cost per share of the stock in determining the profit or loss from the subsequent sale of such stock. Dividends received from Wisconsin corporations are not taxable and may be deducted (see Dividends Deductible).

Interest Received: Only interest taxable in Wisconsin is reported in this item. Interest received from the United States Government or from instrumentalities or agencies of the United States Government is not taxable. Interest received by a Wisconsin resident on a mortgage secured by real estate or tangible personal property located in other states, is taxable. Interest becomes taxable to a taxpayer when it is made available to him, whether ac-

tually received or not. However, accrued interest paid on bonds purchased between interest payment dates may be treated as a deduction from the interest received thereon.

Rents and Royalties Received from Property in Wisconsin: Rents are net after the deduction of such expenses as taxes, depreciation, insurance, and minor repairs, but before the deduction of interest. Expenses for maintaining property are deductible only where the property is devoted to income producing purposes. Where a property is partially occupied by the taxpayer, and partially used for income purposes, expenses are allowed only in proportion to the amount of the total property used for income purposes. When the allowable deductions exceed the gross income from the property the difference is treated as rent loss, and is deducted from other income in arriving at total income. Income from real estate or tangible personal property follows the situs of the property. Income received from property located outside of Wisconsin is not taxable to Wisconsin residents, but income from property located in Wisconsin is taxable to the recipient regardless of his residence. Income from non-Wisconsin property need not be reported.

Royalties from Copyrights and Patents: All royalties received from patents, copyrights and other legalized privileges are taxable income to residents of Wisconsin regardless of the location of the firm exercising the privileges for which the royalties are paid. This appeared as a separate item on the income tax return for the first time in 1932.

Fiduciary Income: This item is net after the deduction of expenses incurred in obtaining the income. Assessable trusteeships, usually management contracts for the care of property, may result in a loss to the beneficiary. Such a loss is deductible and is included in other negative income.

Insurance Received by the Insured: Taxable income from life insurance may arise in the following circumstances:

1) Conversion of policy to cash by surrender of policy.
2) Conversion to cash on maturity of policy in the case of annuity or special purposes policies.
3) Dividends received on paid-up life insurance policies.

4) Insurance carried by partnerships on a customer against loss on account or on the life of partners or employees.

In each case the cash surrender value on January 1, 1911, and the premium paid thereafter are deductible. The dividends mentioned in (3) above should be reported as dividends and not as insurance. The insurance received under (4) above will appear only on the partnership information return, and will be reflected in the income of partners on the individual return. When the insured receives the cash surrender value of the policy, a loss may occur where the cash surrender value is less than the amount of premiums paid. Such a loss is treated as a negative income item and is deducted from the sum of other income items to determine income. These losses are included in other negative income. Cash received on the maturity of the policy is taxable only after the amount received is in excess of the amount of premiums paid.

Capital Gains: The Net Profit (or Loss) from the sale of securities, Wisconsin real estate, or personal property, are shown in these statistics without adjustment for the length of time the assets were held. Capital gains are treated separately from capital losses rather than the one being offset against the other, so that it is possible from one return to show both capital gains and capital losses. While it is customary for taxpayers to report involuntary conversions and bad debts in the space provided for capital gains or losses these items have been separated and shown as 'Other Deductions' and 'Bad Debts', respectively. Profits or losses realized from the sale of real property or tangible personal property located within the state of Wisconsin only are taxable, or need be reported by Wisconsin residents. Income received from the sale of intangible assets follow the situs of the taxpayer. Income from the sale of real property or tangible personal property follow the situs of the property, and are taxable regardless of the residence of the taxpayer.

Other Income, Unclassified: In addition to the nonlabor income such as income from keeping roomers and boarders, income received by dependents, cash or property received as a dividend from cooperative societies, there is also included in this item income which could not properly be classified under any of the

other items. Among income items which cannot elsewhere be classified are such things as strike benefits, prizes, damages recovered for libel of business reputation, mileage and per diem received.

DEDUCTIONS

Labor Expenses: Included in this item is that part of the deductions claimed which were incurred in obtaining the labor income reported as wages and salaries or other labor income. These expenses consist of union dues, traveling expenses, including necessary automobile upkeep, cost of professional publications, etc. Dues to fraternal organizations, social clubs, expenses of teachers in attending summer schools, election and campaign expenses of candidates for public office, expenses of transportation from residence to place of employment, cost of uniforms or special clothing required by the taxpayer's vocation, and laundry charges are not considered proper deductions.

Bad Debts: These data are customarily reported in the space provided for capital losses. Included under this heading are only those debts of a personal, nonbusiness character which have been written off by the taxpayer. A reasonable effort must have been made to collect the amount due. Debts written off of the books of business firms are deducted from the gross income of the business in arriving at net business profit, and do not appear separately in these data.

Dividends Deductible: Dividends received from Wisconsin corporations, i.e., corporations paying Wisconsin income taxes on 50 percent or more of their entire net income, are deductible from the gross income of the recipient.

Interest Paid: In general, all interest paid on existing indebtedness is deductible, except interest paid on indebtedness created for the purchase, maintenance, or improvement of property, or for the conduct of business, the income from which would not be taxable. Businesses conducted, or property located outside the state, and obligations of the federal government constitute the chief sources of income for which the payment of interest is not deductible. All interest paid on indebtedness created for the purpose of consumers' purchases, such as acquiring a home, ac-

quiring other consumers' goods, family obligations, education, etc., is deductible. These statistics carry no distinction between consumers' and producers' interest payments.

Capital Losses: See Capital Gains.

Other Deductions: Included under this heading are those necessary expenses of obtaining nonlabor income, such as legal and financial service costs, and deductions not properly classifiable elsewhere, such as involuntary conversions. Wages reported by employees of the federal government are treated as wages and salaries in these statistics and, because they are not taxable, deducted under other deductions. Involuntary conversions are customarily reported in the space provided for capital losses on the return, but have been separated on the basis of the data in Schedule G and treated as other deductions in these statistics.

Donations: The deduction of donations is limited to ten percent of the net income, as calculated before the deduction of donations. Contributions are deductible, within the above limits, only if made to or for the use of (a) the State or any political subdivision thereof for exclusively public purposes, and (b) corporations, community chest funds, foundations, or associations operated within this State [of Wisconsin] organized and operated exclusively for religious, charitable, scientific, or educational purposes, or for the prevention of cruelty to children or animals, no part of the net income of which inures to the benefit of any private stockholder or individual.

Federal Taxes Paid: Only federal income taxes and surtaxes on net income taxable under the Wisconsin Law and paid within the income year are allowed as deductions from gross income.

Wisconsin Taxes Paid: These data include only income and surtaxes assessed by the state of Wisconsin during the income year. Payments of delinquent income taxes made during the income year are not deductible. Property taxes are deductible only when they are paid on income property, and represent a deduction from the gross rents or gross business income in arriving at the net income from these sources, and so do not appear separately in these statistics.

AGGREGATES

Total Income: The statutory definition of gross income, as modified by the practices imposed by the design of the income tax return, is used here. In this book total income is used to designate both (1) the sum of all income items, and (2) the sum of all income items, less the sum of losses from rental property, losses from insurance received by the insured, losses from trustees and fiduciaries, and losses experienced in keeping lodgers for profit. The text makes clear which use is intended. These deductions from the income items in arriving at total income are occasioned by the lack of a specific space for them in the deductions schedule. The practice is for these items to be entered as 'negative' figures in the income schedule.

Outstanding among the income items which are not taxable under the Wisconsin law, and which taxpayers are not required to report in their returns, are income from property located out of the state, business conducted outside of Wisconsin, capital gains realized on real property located outside of Wisconsin, and interest received from tax exempt securities.

Net Taxable Income or Net Statutory Loss: The amount used is the base for Taxes. It is Total Income less the sum of all deductions.

Economic Income: Economic income was computed in the following manner: From total income there were deducted business losses, partnership losses, labor expenses, and (in the case of business or professional persons and partners) interest paid. The resulting amount was used only for purposes of classification. If the sum of the deductions was greater than total income, the amount was coded as a deficit. The code provided the following intervals for both income and deficit brackets:

$100	intervals	from	$0	to	$5,000
$1,000	"	"	$5,000	to	$16,000
$2,000	"	"	$16,000	to	$80,000
		with a break at			$25,000
$10,000	"	from	$80,000	to	$100,000

All amounts over $100,000 were grouped together.

2 *Filing Requirements*

During the period studied, 1929-36, married couples with annual incomes of $1,600 or more, and single persons with annual incomes of $800 or more, were required to file returns. In addition anyone asked to do so, i.e., sent a blank form, was also required to file. Mailing lists containing the names of those filing for the previous year, to which were added new names obtained from a variety of information sources, and from which ordinarily were removed the names of those who obviously would not be liable to further taxes, i.e., those who moved out of the state or died, were maintained and used for distributing income tax forms. Consequently, an increasing number of persons were required to file year after year even though their incomes were well below the limits covered by personal exemptions. One exception to this procedure should be noted. In 1932, a systematic effort was made to eliminate from the mailing lists those unlikely to have incomes above the $1,600 and $800 levels where filing was required by statute.

For a more detailed description of the filing requirements and effects of administrative practices on filing, see *Studies in Income and Wealth,* Vol. Five, Part II, pp. 5-36 to 5-39.