

APPENDIX 21.—ESTIMATES ON THE VOLUME AND INCIDENCE OF BORROWING AND TAXING FOR THE PURPOSES OF PUBLIC-AID FINANCING

In the section of Chapter XI which discussed the influence of public-aid disbursements and collections upon purchasing power, and the compatibility of the taxes utilized with the broad objectives of public-aid policy, reference was made to the techniques applied in the attempt to estimate the volume and incidence of the two methods of public-aid financing, *i. e.* taxing and borrowing, on both the Federal and the State-local levels. It was noted that these estimates are highly tentative, especially in the case of State and local financing, where data are lacking, and must be regarded as suggestive rather than definitive.

General Assumptions

Preliminary to making estimates and allocations of public-aid expenditures, certain general assumptions were made as to Federal and State-local expenditures.

Federal Public-Aid Expenditures

It was assumed that ordinary receipts of the Federal Government were first of all used for financing regular civilian and military functions, while the various emergency relief programs were presumably financed by borrowing. Inasmuch as the total expenditures for the various emergency programs were larger than the deficits of the years under consideration, some part of these expenditures must be assumed to have been financed out of ordinary tax receipts.

Thus the problem arises of attributing deficits hypothetically to certain types of emergency expenditures; the remainder of these emergency expenditures would then presumably have been financed out of ordinary tax receipts of the Federal Government.

For the purpose of allocating Federal public-aid expenditures to the tax-financed or the deficit-financed category, it was assumed that expenditures through which loans were made or assets such as public works created were wholly debt-financed. Furthermore, it was assumed that the Veterans' Bonus of the year 1936 was deficit-financed because Congress failed to make any specific provision for financing it. The remaining amount of deficits was treated as proportionately distributed between expenditures for agricultural assistance (except those financed by processing taxes) and all other forms of public aid (except appropriations made from revenues of the employment taxes for unemployment and old-age insurance under the Social Security Act and railroad legislation). The excess of public-aid expenditures over and above this amount assumed to be deficit-financed was regarded as tax-financed. Table

1 shows the detailed allocations obtained by this procedure:

TABLE 1.—Federal expenditures for public-aid programs, exclusive of the social insurances, financed by borrowing and by taxation, fiscal years 1933-1940

[In millions of dollars]

Fiscal year ended June 30—	Federal deficits		Federal expenditures for public-aid programs ¹			
	Total	Attributable to public aid and net agricultural aid ²	Total	Tax-financed ³	Deficit-financed	
					Amount	Percent of total
1933.....	1,784	1,192	4384	0	384	100.0
1934.....	2,896	1,941	1,845	153	1,692	91.7
1935.....	3,209	2,173	2,267	660	1,607	70.9
1936.....	4,550	1,964	2,340	930	1,410	60.3
1937.....	3,149	1,469	2,583	1,504	1,079	41.8
1938.....	1,384	533	2,169	1,783	386	17.8
1939.....	3,542	2,523	2,952	1,160	1,792	60.7
1940.....	3,611	2,647	2,305	712	1,593	69.1

Sources: Total Federal deficits are calculated from *Annual Report of the Secretary of the Treasury on the State of the Finances for Fiscal Year ended June 30, 1940*, Washington, 1941, pp. 650-653; Federal deficits attributable to public-aid and net agricultural-aid expenditures are calculated in the manner indicated in the text of this appendix and in footnote 2 of this table, on the basis of *ibid.*, pp. 652-653; Federal expenditures for public-aid programs were calculated from *ibid.* (Because of the difference in sources and somewhat different methods that had to be applied in the calculation of public-aid expenditures for the purposes of this table, the totals are not directly comparable to those given in Appendix 19.)

¹ The total consists of Federal expenditures for relief and work relief (RFC, FERA, CWA, WPA, NYA, CCC, and certain miscellaneous expenditures), grants to States under the Social Security Act, and Farm Security grants.

² As indicated in the text, these amounts were arrived at by subtracting the expenditures through which loans were made or assets, such as public works, created. Subtracted from the total Federal deficits were such items as expenditures for public works, veterans' bonus, transfers to the Federal Loan Agency and the USHA. The balance is shown in the second column as Federal deficits attributable to public-aid and net agricultural-aid expenditures. Net aid to agriculture is the balance after subtracting the revenue from the processing taxes from the total of all types of aid to agriculture.

³ Calculated as the difference between total Federal expenditures for public aid and agricultural aid on the one hand, and the net deficit shown in column 5 of this table.

⁴ Includes \$34 million representing wheat and cotton distribution by the Farm Credit Administration.

State and Local Public-Aid Expenditures

State and local public-aid financing can be analyzed in a fashion similar to the method applied in estimating the allocation of Federal public-aid expenditures to borrowing or taxation. However, because fewer data are available, more hypothetical assumptions had to be made, with the result that the figures arrived at are subject to more serious qualifications. Difficulties arise especially when over-all computations are attempted, because large debt retirements of one State or local government unit may cover the increased indebtedness of another unit and thus conceal differences and changes of some import. In view of the information available at present, only rather crude methods of allocation can be applied to a year-by-year survey, based on gross amounts. However, for three years—1932, 1937, and 1939—a more precise analysis

is possible, and such an analysis has been made for the year 1939.

Inasmuch as the State and local tax systems are quite diverse, while data on public-aid expenditures were available only for the two levels of government combined, the first necessary step was to segregate State public-aid expenditures from those incurred by the local governments.

Segregation of State and local public-aid expenditures.—In the process of separating State from local financing, all those items which with a fair degree of certainty could be regarded as having been financed by a specific governmental unit or a specified form of financing were subtracted. Thus the use of less reliable estimating methods based on hypothesis was limited to a considerably reduced volume and proportion of public-aid expenditures. In the first place, nongovernmental expenditures for workmen's compensation were deducted; and second, social-insurance payments were eliminated.¹ Net public-aid payments thus derived were assumed to have been financed both by borrowing and by taxation. The debt-financed public-aid expenditures, calculated from Department of Commerce figures,² were subtracted to arrive at the amounts of net tax-financed public-aid cost. All debt incurred by States and localities for public aid was assumed to cover WPA and NYA expenditures, for which no break-down as between State and local shares is available. After 1936, these expenditures were larger than the public-aid debt, and consequently the balance was assumed to have been tax-financed.

Tax-financed public-aid expenditures were distributed as between States and localities as follows. Governmental workmen's compensation payments are largely State expenditures and were assumed to have been wholly so. Allocation of expenditures for the special public assistances (including cost of administration) and for general relief was made on the basis of data in the *Social Security Bulletin* and from information supplied by the Social Security Board for the year 1939.³

The percentage distribution thus found was also applied to the residual tax-financed WPA and NYA expenditures referred to in the preceding paragraph. The same percentage relationship (after deducting

debt-financed work-relief expenditures) was applied to the years 1937 and 1938, inasmuch as few changes occurred in these years in State and local tax systems whose general characteristics had been established in the middle thirties.

For the years prior to 1937, the estimating procedure was slightly reversed, with emphasis on local financing, for which more reliable data are available. Information is available on the major proportion of the locally financed public-aid expenditures.⁴

The amount financed by local taxes (after deduction of debt-financed aid) was subtracted from the combined State-local tax-financed expenditures and the remainder assumed to be financed out of State taxes. The amount left in the two years 1933 and 1934 was rather small, which is in line with the general early tendency to regard relief as a local matter. The State proportion rapidly increased, however, so that it was felt safe to interpolate from 1934 to 1937 in order to get the State-local shares of public-aid expenditures. Data for 1935 and 1936 are extremely sketchy. While interpolation assumes a smoother pattern of development than may have been true (especially since the 1937 distribution itself is based on a later year), it is doubtful whether any precision could have been gained from an attempt to extend sparse data for a very few localities, not necessarily representative, to national totals.

Distribution by method of financing.—After the approximate segregation of public-aid expenditures on the State and on the local levels, it became possible to analyze roughly their method of financing. An early special study of the Federal Emergency Relief Administration furnished information regarding the amount of debt incurred by localities and, to a somewhat lesser extent, by States, in financing their share of public-aid expenditures during the period 1933-35.⁵ In view of the fact that the total State and local indebtedness decreased and did not exceed the 1933 level until 1939, it might be assumed that no further borrowing for public-aid purposes occurred in the States and localities between 1934 and 1936. But such a generalization would overlook the fact that some individual States, notably California and Connecticut, did increase their gross debt considerably between 1932 and 1940, even though these increases are concealed by compensating decreases in the debt of other States; and that even while other debt was being liquidated, a fair proportion of new debt was incurred for public-aid purposes.

¹ These payments are treated separately below.

² Contained in Sternberg, Wesley J., *Indebtedness in the United States*, U. S. Department of Commerce, Bureau of Foreign and Domestic Commerce (forthcoming). An article, based on this material is available in Bangs, Robert B., "Public and Private Debt in the United States, 1929-40," *Survey of Current Business*, XXI (November 1941), 18-21.

³ Data referring to payments to recipients are from *Social Security Bulletin*, III (January 1940), 65-72; data referring to cost of administration were supplied by the Social Security Board from reports by States to the Bureau of Research and Statistics.

⁴ Cf., *Statistical Abstract of the United States, 1940*, Washington, 1941, tables 220 and 236, pp. 219 and 232-5.

⁵ Ecker—R., L. Laszlo, "Sources of Local Emergency Relief Funds," in *Monthly Report of the Federal Emergency Relief Administration, December 1 through December 31, 1935*, Washington, 1936, pp. 34-58, especially p. 46.

More precise data on the issue of securities have recently been made available by the Department of Commerce⁶ which show a sizable amount of debt incurred annually for public aid by States and municipalities.

The resulting allocation of State and local public-aid expenditures on the basis of debt or tax financing is shown in table 1a.

TABLE 1a.—State and local expenditures for public-aid programs, exclusive of the social insurances, financed by borrowing and by taxation, fiscal years 1933–1939

Fiscal year	State and local ¹ new capital issues		State and local expenditures for public-aid programs					
	Total	Attributable to public aid	Total ²	Tax-financed				Debt-financed
				State ³	Local	State ³	Local		State and local
In millions of dollars			Percent of total					
1933.....	483	173	357	38	146	10.6	40.9	48.5
1934.....	803	241	538	134	163	24.9	30.3	44.8
1935.....	855	242	636	207	187	32.5	29.4	38.1
1936.....	735	190	782	354	238	45.3	30.4	24.3
1937.....	712	154	981	532	295	54.2	30.1	15.7
1938.....	971	175	1,202	670	357	55.7	29.7	14.6
1939.....	938	242	1,410	768	400	54.5	28.4	17.2

¹ Only municipalities are included in the new capital issues. Refunding is excluded.

² Excludes unemployment compensation and nongovernmental workmen's compensation.

³ Includes State portion of workmen's compensation.

Specific Taxes Allocated to Public-Aid Financing

Somewhat different procedures were used in allocating specific Federal, State, and local taxes to public-aid financing.

Federal Taxes

In Chapter XI the types of Federal taxes presumably used for public-aid financing have been discussed in some detail. The estimates were made on an identical historical basis for all the years under consideration. The resulting distribution is shown in Table 2.

State and Local Taxes

State taxes.—State taxes used for public-aid financing were estimated on the basis of various sources for the several years. For 1933, a year in which new types of taxes in response to revenue needs were barely beginning to develop, the 1932 tax system was assumed to continue, and tax ratios of 1932⁷ were extended to total State tax-financed public aid. For 1934 and 1935, figures and general information in *Tax Systems of the World*,⁸ while by no means wholly adequate for

⁶ Sternberg, *op. cit.*

⁷ *Statistical Abstract of the United States, 1939*, Washington, 1940, p. 214, table 216.

⁸ The Tax Research Foundation, *Tax Systems of the World*, Chicago, Commerce Clearing House, Inc. (6th ed., 1935, and 7th ed., 1938).

TABLE 2.—Tax sources of Federal funds available for public-aid financing, fiscal years 1934–1940, exclusive of social-insurance taxes

[In millions of dollars]

Type of tax	1934	1935	1936	1937	1938	1939	1940
Dividends.....	50	1	(1)	0	0	0	0
Soft drinks.....	5	(1)	(1)	0	0	0	0
Pleasure boats.....	181	0	0	0	0	0	0
Manufacturers' excises.....	385	342	383	451	417	397	447
Admissions and safe-deposit boxes.....	17	18	19	22	23	21	24
Checks.....	41	26	0	0	0	0	0
Transportation and communication.....	30	29	31	36	36	35	38
Death.....		212	379	306	417	361	360
Excess profits and capital stock.....		98	109	163	176	154	151
Liquor.....			462	551	568	545	
Income (individual).....					1,286		

Source: Based on *Annual Report of the Secretary of the Treasury on the State of the Finances for Fiscal Year Ended June 30, 1940*, pp. 664–667. Because all Federal public-aid expenditures in 1933 were financed by borrowing, this year is not shown in the table. It is to be noted that the various tax items listed in this table cannot be added to show a total for Federal tax-financed expenditures; they represent amounts available but not necessarily or wholly used for public-aid purposes.

¹ Less than \$500,000.

² Receipts from the source in excess of 1933 receipts from it, assumed used for general purposes.

the purpose, gave indications on tax assignment, prohibitions against "diversion," and the like. Sales taxes alone were found adequate to have financed the rather low tax-financed State aid expenditures in 1934, while in 1935 certain other taxes were included in line with tax assignment practice (*e. g.* poll taxes in New England), "diversion" practices (automotive taxes),⁹ and the appearance of new taxes simultaneously with increases in public-aid payments. The *Statistical Abstract, 1939*, again provided useful data on State finances in 1937. The ratios of various taxes in the tax system¹⁰ after assignment of sales tax to public aid, were assumed to hold for public-aid taxes as well. These ratios, however, were used only for 1936, while 1937 was assumed to be financed in the same way as 1939. The year 1938 was also assumed to have had approximately the same financing pattern as 1939.

State public-aid taxes for 1939 were estimated in greater detail State by State, on the basis of tax data in *Tax Yields: 1939*¹¹ and supplementary information

⁹ Automotive taxes (on gasoline, motor-vehicle registration, and driver licenses) are a major problem, since they are by law earmarked for highway development in nearly every State. But, as they are by far the major source of State revenue, they have also been an important source of relief revenue, through what became known as "diversion," and by means ranging from borrowing from the Highway Fund to judicial decision. Since both earmarking and "diversion" vary from year to year and from State to State, depending on developments in the tax system, in relief and highway needs, in court decisions, and in pressure by interested groups, it was concluded that the most efficient procedure would be an arbitrary splitting of motor-vehicle taxes, excluding three-quarters of their yield from the relief-tax base and including the remainder with other general revenues used in part for relief. (To include the remainder *in toto* as public-aid taxes would be incorrect because large reappropriations were made to schools and other activities.) For 1939, gasoline and motor-vehicle taxes were attributed to public aid for each State in line with its actual legal provisions.

¹⁰ After deduction of property, "death," and most automotive taxes. The first two were deducted because their yield was steadily decreasing as revenue needs grew; the last, because a very large part of them are in practice and law devoted to highway purposes and reappropriated mostly to schools.

¹¹ Tax Policy League, *Tax Yields: 1939*, New York, 1940.

there and in *Tax Systems of the World* and special tax studies on the use of particular taxes to finance aid. The taxes assigned or presumably assigned to public aid in each State were totaled and deducted from total taxes of the same type. Taxes earmarked for non-public-aid purposes and levies (such as "death" and property taxes) whose yield had been declining and was presumably used for general purposes, were excluded. The amount of decline in the yield of property taxes in each State from the last available year was assumed covered out of sales taxes—if levied in the particular State—and the compensatory amount was also ruled out of consideration, the rest of the sales tax being presumed to be used wholly for public aid, in the absence of specific information to the contrary. Then the ratios of the net remaining taxes (for each of the 48 States) were computed and applied to the amount of public-aid financing in that State not covered by specifically earmarked taxes. The final totals were added to get national figures for 1939 and the percentages applied to 1938 and 1937.

Local taxes.—Local emergency relief taxes used for public aid have been calculated in detail for 1933–35.¹² The percentages derived from the figures were extended in the present computation to cover all locally financed public aid in 1933 and 1934. FERA expenditures amounted to perhaps three-quarters of such aid. For 1939, combined use of several sources gave a fairly accurate estimate of public-aid financing.

Inasmuch as New York City public-aid expenditures overshadow those of any other local subdivision, they were estimated separately by using detailed data on relief financing published by the Comptroller-General of New York City. Deducting New York City relief expenditures from total local tax-financed public aid left four-fifths of it still to be analyzed. Since property taxes approximate 90 percent of local revenue, it was assumed that 90 percent of unspecified public-aid taxes also came from property taxes, and the rest from miscellaneous sources.¹³ These last totaled \$32 million in 1939. The amount financed out of particular taxes was derived from an analysis of *Financial Statistics of Cities over 100,000*.¹⁴ Cities levying sales taxes¹⁵ were assumed to use their yield for public aid. Poll taxes in four cities in Connecticut were by law assigned to relief purposes. All kinds of business taxes used for public aid in 11 cities were totaled, and the rest of the \$32 million was regarded as coming out of miscellaneous levies. The ratio of relief expendi-

tures and nonproperty taxes in even the largest cities indicated continuing reliance on the property tax for all financing.

Although localities derive a considerable portion of their receipts from nontax sources, this type of receipts is unimportant in public-aid financing. Grants from States must be excluded from consideration, since they have been treated as State-financed public aid. Receipts from enterprises and from special assessments are largely earmarked, unless they are placed in the category of miscellaneous receipts.

The percentage ratios of public-aid taxes were then interpolated between 1934 and 1939. The residue was assumed to come from "miscellaneous" taxes, since the extension of trend lines left varying percentages of tax-financed aid unaccounted for by any specific tax. (It may be noted that the highest of these percentages was under 8 percent.) The results of these computations are shown in Table 3.

TABLE 3.—State and local taxes assumed to have been used for public-aid financing, fiscal years 1933–1939,¹ exclusive of social-insurance taxes

Type of tax	[Millions of dollars]						
	1933	1934	1935	1936	1937	1938	1939
Total.....	184	297	394	592	827	1,027	1,168
Property.....	120	121	140	176	226	276	306
General sales.....	15	151	205	248	247	312	361
Alcoholic beverages.....			3	23	99	125	143
Tobacco.....				5	24	30	36
Utilities and business.....	22	8	16	54	124	155	178
Income.....	9	1	6	32	33	42	49
Automotive.....	4	5	8	30	43	54	62
Miscellaneous.....	14	11	16	24	31	33	33

¹ Data for 1940 were not available at the time this study was completed; sources for the years 1933–39 are indicated in the text of this appendix.

Incidence of Public-Aid Taxes Upon Income Groups

Income classes and their aggregate income were taken from a monograph of the Temporary National Economic Committee¹⁶ which based 1938–39 income distribution on data of the National Resources Committee consumer income studies.¹⁷ The National Resources Committee definition of consumers and income was adopted with a slight modification in order to include all personal taxes. The "consumer unit" means a family or an individual living "alone" in an economic sense, *i. e.*, not pooling his income with that of any group. (Thus individuals living in institutions are completely excluded.) "Income" covers all current receipts, both in money and kind, less business

¹² On the basis of data in Ecker—R., *op. cit.*, p. 46.

¹³ Property taxes accounted for nearly three-quarters of public-aid taxes in 1933–35 and in 1939, even when New York City and other cities which levy special taxes are included.

¹⁴ U. S. Department of Commerce, Bureau of the Census, *Financial Statistics of Cities, over 100,000*, Washington, 1941.

¹⁵ Philadelphia, St. Louis, Kansas City, and New Orleans.

¹⁶ Colm, Gerhard and Tarasov, Helen, *Who Pays the Taxes?* Temporary National Economic Committee, Monograph No. 3, Washington, 1940.

¹⁷ National Resources Committee, *Consumer Incomes in the United States*, Washington, 1938, and *Consumer Expenditures in the United States*, Washington, 1939.

operating expenses. The National Resources Committee study excluded a portion of personal property taxes and all corporate income and profits taxes and gift and estate taxes. These amounts were added back to income in the TNEC study, under the assumption that they had to be paid, either directly or indirectly, out of individual receipts. They are listed as "imputed income" in Table 83 in Chapter XI.

Data on the relationship between income levels and taxes paid are meagre and involve considerable reliance on hypothetical assumptions.¹⁸ Since the purposes of making such distributions vary, income classification and tax coverage diverge in the analyses so far attempted. In the present study, Federal, State, and local taxes had to be included, since public-aid payments of all three levels were being considered. The final tax distribution is shown in Table 4.

TABLE 4.—Taxes assumed to have been used for financing public aid: estimated distribution, fiscal year 1939

[In millions of dollars]

Tax ¹	Federal	State	Local	Total	Percent of total
Total.....	1,160.0	767.9	400.7	2,328.6	100
Progressive taxes.....	515.0	54.6	.....	569.6	24.5
Individual income.....	.....	47.6	.....	47.6	2.1
Death ²	360.7	7.0	.....	367.7	15.8
Excess profits and capital stock.....	154.3	.....	.....	154.3	6.6
Generally regressive taxes.....	607.9	539.4	70.7	1,218.0	52.3
Admissions.....	19.5	2.7	.....	22.2	.9
Alcoholic beverages.....	191.4	143.1	.....	334.5	14.4
Automotive.....	.....	62.1	.....	62.1	2.7
General sales.....	.....	297.1	64.4	361.5	15.5
Manufacturers' excises.....	397.0	.....	.....	397.0	17.1
Poll.....	.....	4.8	.8	5.6	.2
Tobacco.....	.....	29.6	5.5	35.1	1.5
Taxes with variable effect.....	37.1	173.9	330.0	541.0	23.2
General property.....	.....	14.9	290.7	305.6	13.1
Utilities.....	35.1	(9)	5.8	40.9	1.8
Business, various.....	.....	152.7	18.6	171.3	7.3
Safe deposit boxes.....	2.0	.....	.....	2.0	.1
Miscellaneous.....	.....	6.3	14.9	21.2	.9

¹ The classification of taxes as progressive, regressive, or with variable effect is not identical with that used in Table 82 of Chapter XI; nor are the subclassifications in this table comparable to those in the text table just mentioned.

² Estate, inheritance, and gift taxes.

³ Included in "various business taxes" immediately below.

Sources: Tables 2 and 3 of this appendix, and the various sources and documents mentioned in the text of this appendix. Tables 2 and 3 show sources available for tax financing of public aid over a period of several years. Precision in accounting for very small revenues allocated to public aid in some locality or a particular year has been sacrificed in favor of a broad consistency in general practice. In Table 4, however, which is limited to one year only, it was possible to search out constitutional and legislative allocations of specific revenues to public-aid programs in each State and in some localities. The procedure was to add up actually all the revenues allotted specifically to public-aid purposes, and make hypothetical assumptions only with regard to the remainder.

Chapter XI has described why particular taxes were regarded as used to finance public aid. Their selection in itself gives no clue as to which income groups paid them. However, the broad classifications of Table 4 are useful in determining incidence, and this in turn

¹⁸ See Colm and Tarasov, *op. cit.*, particularly pp. 36-37. For Federal taxes and all benefits, see Stauffacher, Charles, "The Effect of Governmental Expenditures and Tax Withdrawals upon Income Distribution, 1930-39," in *Public Policy* (Friedrich, C. J. and Mason, E. S., eds.), Cambridge, Harvard University Graduate School of Public Administration, 1941, pp. 232-61.

makes possible a rough allocation of public-aid tax burdens.

The assumptions as to shifting and incidence require further elucidation. The first segregation¹⁹ grouped taxes into personal, specific consumption, and general business levies. The personal taxes were assumed not to be passed on. Specific consumption taxes are usually included in the price of goods. General business taxes can be shifted forward in the form of higher prices, or backward as lower wages or lower prices for material supplies, or they may be absorbed by the original taxpayer, who may pay them out of the additional profit margin gained from a previous (or even simultaneous) increase in the price. Several taxes used to finance public aid may be in this category. Each of the three major groups was divided into progressive, regressive, and proportionate, according to whether the tax burden increases or decreases with income or remains in direct ratio to it. It may be noted that most, but not all, consumption taxes tend to be regressive or proportionate and that most, but not all, personal taxes tend to be progressive. Corporate income and profits taxes are progressive, and their final incidence can be treated as progressive to the extent that they may be attributed to dividend-receivers, most of whom are found in the higher income brackets.

The allocation of public-aid taxes to income groups does not differ from the hypotheses established for all taxes.²⁰ Here it will suffice briefly to state the assumptions as to the listed public-aid taxes, as analyzed for the fiscal year 1939.

Federal and State estate, inheritance, and gift taxes ("death" taxes) have been treated as paid by consumers with family incomes of over \$5,000. Any windfall taxable legacy falling to a relief family would automatically raise that family far out of public-aid status, for estates below \$40,000 are exempt from the Federal tax. The State tax involved (\$7 million) is too small to permit separate computation in line with the practices of various States.

State individual income taxes are generally less progressive than similar Federal taxes (*i. e.*, they start at a lower level and rise less steeply on higher incomes). However, they have been here allocated in proportion to the distribution among income classes of Federal income taxes. (This was done in estimating imputed income, as shown in Table 83 in Chapter XI.)

Poll taxes are levied without regard to income and in effect are regressive, since the same absolute amount per voting person is paid out of an income under \$1,000 as one of \$5,000. In the present study, this tax has been

¹⁹ Cf. Table 82, Ch. XI.

²⁰ See Colm and Tarasov, *op. cit.*

distributed in proportion to the number of persons in each income class, modified to allow for a greater proportion of persons in the lowest income group who do not choose to pay this tax.²¹ Direct personal (nonbusiness) taxes assumed used for public aid were under \$10 million in 1939 and comprised a very small proportion of State and local personal property levies. All other property levies have been regarded either as direct consumption taxes (home-owners' real property assessments) or indirect taxes levied on business and shifted, usually by inclusion in a higher price.

Since data on general property-tax yields are seldom segregated as between real and personal property, and never with regard to the types of real property from which they are derived, certain assumptions as to the sources of total property-tax yields have been adopted and the same proportions applied to the amount estimated used for public aid. The proportions are as follows:

Tax on—	Percent
General property.....	100
Personal property.....	20
Nonbusiness.....	²² 10
Business.....	²² 10
Real property.....	80
Business.....	40
Residential.....	40

Rented houses have not been treated here as business property. In thus assimilating them to owned homes, it is the assumption that taxes on such property are included in rent charged. In view of the gaps of information, this simple method was used despite its shortcomings. The complicated problems of tax capitalization were thus avoided.²³

The percentages developed above have been applied to the \$305.6 million of general-property taxes assumed to have been spent for public aid in 1939. The method of allocating by income brackets nonbusiness personal-property taxes has already been indicated. All business-property taxes (except residential, imputed to the final renter) have been regarded as eventually passed on to consumers, together with a miscellany of other indirect taxes which will be listed below. Residential real-property taxes have been distributed in accordance with

(revised) consumer expenditure data, as proportionate to rent paid by each of the income groups considered. Since rent forms a major outlay for low-income groups, this portion of the tax is especially regressive and burdensome to public-aid recipients.

The flaws of such a rough estimate would not be eliminated by attempting to estimate the unknown differences in assessments with relation to rent levels, the extent to which owners absorbed the tax in some communities, and the like. Data on these points are so sporadic that they must be ignored for the purposes of an over-all study.

The same method was applied to the other consumer taxes assumed to have been used for financing public aid. Gasoline and other automotive taxes have been lumped together and allocated in proportion to automobile expenditures in the consumer expenditures study.²⁴ Since only a very small portion of gross automotive taxes is assigned to relief or even trickles into and out of the general fund, no allowance has been made for the considerable share of automotive taxes paid by trucks, buses, and other business auto traffic.

Alcoholic beverage taxes have been split, half being allocated in proportion to food expenditures (in line with the National Resources Committee budget form used for the original sample study) and half to recreation expenditures, to correct the absurdity of assuming liquor spending to be proportionate to all food expenditures, regardless of size, age, poverty, and religious beliefs of the family. Tobacco, included among miscellaneous direct taxes in the table, is among the most reliable allocations, since the consumer expenditure publications present spending on tobacco as an integral and independent item. Admission taxes have been apportioned in ratio to spending on recreation. The Federal levy on safe-deposit boxes (\$2 million) has been assumed to fall on persons in the top-income bracket, as were excess profits and capital stock taxes. Manufacturers' excises, like all miscellaneous indirect (*i. e.*, business) taxes have been distributed, in the absence of more precise data, proportionately to total expenditures (not income) of each consumer group.

Excess-profits and capital-stock taxes have been im-

²¹ The correction was very slight, since such nonpayment predominates in the southern States, where poll taxes are not assigned to public-aid purposes.

²² From data which have become available only very recently it appears that the one-half ratio overstates the proportion of nonbusiness personal-property taxes. The proportion is closer to one-third, with the remaining two-thirds of personal-property taxes paid on business property. No revision of the figures in this appendix was made, however, in view of the very small amounts of the yield of the taxes concerned used for public-aid purposes. When distributed among income groups, the amounts involved in the revision on the basis of the one-to-two ratio, may be so insignificant that it would not be perceptible at all.

²³ For a discussion of this problem, see Colm and Tarasov, *op cit.*, p. 38.

²⁴ It is to be noted that this procedure magnified the distortion produced by the combination of gasoline and car expenditures in the National Resources Committee study. Expenditures for gasoline bulk larger in the low-income group's automotive spending, and the tax on gasoline is likewise far heavier than that on the car. Thus, there is an incorrect weighting of the apparent tax payments upwards. More recently, a study by the National Resources Planning Board on family expenditures in the United States furnished the breakdown between purchases of cars and running expenses which bears out this statement. The statistical data of the National Resources Planning Board's study are not applicable for the purposes of this appendix, however, because they relate only to families of 2 or more persons. Cf. National Resources Planning Board, *Family Expenditures in the United States*, Washington, 1941, p. 4, Tables 11 and 12, and p. 145.

puted to consumers on the assumption that the dividends they receive on their investments are diminished by the amount of the tax. These taxes were attributed to the highest income bracket.^{24a}

Social-insurance taxes are of two kinds; the smaller part is paid directly by the employee and is equivalent to a proportionate tax on gross income coming largely out of low and middle incomes. The rest, paid by the employer, may act to depress wages in a stagnant period; during expansion, it is more likely to be included in the price. It has been treated by the latter method in the present study. In actual fact, little difference in the burden of the indirect tax would result from the use of either method, since low-income groups must spend most of their income (or even more than their income as witness the dissavings of groups under \$1,000), so that, whether their wages are lower or their living costs higher than they would be without the tax, the incidence is about the same. The portion paid directly by workers was distributed in this study as previously described, in proportion to wages.

Allocation of Public-Aid Payments to Consumer Income Groups

The National Resources Committee consumer studies could not be used for estimating the income-group classification of recipients of public-aid payments, as the classification of "relief recipients" included consumer units who at any time during the year received any sort of public-aid payment, however small and discontinuous. No figures on relief amounts paid were furnished. For the purposes of this study a more precise determination of the distribution of public aid was required.

There are no comprehensive data available on the total family income of public-aid recipients and the proportion of their income derived from public-aid payments. Therefore the known gross amounts of each form of public aid had to be allocated directly to income groups on the basis of whatever relevant information was found. The materials included the average amount and type of aid, scattered data with regard to the extent to which other support was received, legal limitations on eligibility of recipients, and other supplementary data that would indicate in what level of income public-aid recipients and their families would be. Since family incomes are being used in this analysis, the receipt of several kinds of aid or the presence of even part-time wage earners in the same family may raise its income above the level suggested by public-aid payments.

^{24a} See, for example, Goldsmith, R. W., and Parmelee, R. C., *The Distribution of Ownership in the Twenty Largest Non-financial Corporations*, Temporary National Economic Committee, Monograph No. 29, Washington, 1940.

All recipients of special assistance payments (old-age assistance, aid to dependent children, and aid to the blind) were estimated to be in the group of consumers with incomes under \$1,000. It is known that nearly 74 percent of old-age assistance recipients and almost 78 percent of the blind receiving assistance had no other source of income. Since payments averaged \$18 a month for the aged and about \$20 for the blind, and since maximum payments were apparently made to recipients with the smallest amount of other income, it is evident that total maximum income would be under \$1,000 a year for practically all assistance recipients.²⁵ The conditions for payments to dependent children made it highly probable that families with such children were also in the bracket under \$1,000 (bracket I in Table 5). Even though as many as a quarter of such families received other forms of aid as well, the fact that they were eligible for additional help bears out the supposition as to their income classification.²⁶

The means requirements for eligibility to general relief and the submerged status of Farm Security Administration grantees undoubtedly put them in the same income range, even though a few isolated cases may be in the next higher category on account of private or WPA earnings during part of the year and the considerably higher than average monthly relief allowances²⁷ for larger families in some localities, as in New York. CCC earnings must be classed with general-relief income, as preference in enrollment was given to boys from relief families.

Persons on the student-aid program of NYA were assumed to be in bracket I in Table 5. Although the legal limitation on earnings under the program would make it almost imperative that they have some other source of income, the earnings themselves were so limited that no significant error results from imputing all of them to bracket I. In any case, a study of some 475,000 youth on the student work program during the school year 1938-39 found that three-quarters of the families had incomes of less than \$1,000 a year, while the average family income was \$667 a year.²⁸ In the absence of other data, youth on the out-of-school work

²⁵ Data on other income and on average payments are from Social Security Board, Bureau of Research and Statistics, *Social Data on Recipients of Public Assistance Accepted in 1938-1939*, Bureau Memorandum No. 42, pt. 1, Washington, 1939, pp. 2 and 11, and pt. 3, Washington, 1940, pp. 2 and 11.

²⁶ Average payments per family were about \$30 per month in 1938-39, (*Fourth Annual Report of the Social Security Board, 1939*, Washington, 1940, p. 292); 26.8 percent of all families receiving aid to dependent children also received some other assistance, in the majority of cases general relief (Social Security Board, Bureau of Research and Statistics, *Social Data on Recipients of Public Assistance Accepted in 1938-1939*, pt. 2, Washington, 1939, p. 9).

²⁷ Cf. averages of relief payments published in the *Social Security Bulletin* by States. It is to be noted that these amounts may not at all be paid throughout the whole year.

²⁸ Data supplied by National Youth Administration.

program, including considerably fewer youth and paying out considerably more money per recipient, were assumed to fall in bracket I as well.

It was assumed that 7.5 percent of WPA work relief payments went to the \$1,000-\$2,000 income group, and the rest to the low-income group. There are several reasons for assigning a certain portion upward. In the first place, the assumption of an annual income means that members of some families on WPA at the beginning of the year may have found private employment shortly after the start of the year, so that the total annual income might be well over the \$1,000 limit. (There is less probability of the converse being the case, since a person losing his job during the year would first have to apply for certification to relief authorities and await WPA assignments, all of which might require some time, seriously cutting the total annual income.) Since WPA monthly payments averaged about \$50, sporadic private employment of other members of the family, especially if the family was large, might easily raise the family income into the second bracket.²⁹ In addition, some WPA workers received the highest rate of pay (\$94). Although not all of them received it during the whole year, they were probably the very ones who, because of their skills, had the greatest likelihood of getting better-paid private employment. In the week of June 26, 1940, when a special analysis was made, 10.6 percent of WPA workers received over \$80 monthly. The percentage for skilled work and supervision in this month is high, since the total employment is low; but, even if the percentage fell off, the absolute number in the higher level might remain unchanged. In view of all of these factors and the duplication of aid already referred to,³⁰ the assumption was made that 7.5 percent of WPA workers and their families were in the second income bracket. The percentage was based on the meagre data available, such as the June 1940 figures, the percentages of families with more than one type of aid, and rates of separation from project employment and the like.

Payments under old-age and survivors insurance under the Social Security Act consisted wholly of lump-sum payments. Out of the total amount of \$14.3 million, about 55 percent, or some \$7.8 million, were paid to survivors, the balance being paid to workers upon reaching the age of 65 before becoming eligible for monthly benefits, which did not commence until

January 1, 1940. From the average amount of lump-sum payments during the fiscal year 1939 which was about \$68 for the two types of lump-sum payments combined, it appears that a substantial proportion of the workers on whose wages the lump-sum payments were based belonged to the income bracket over \$1,000. As the lump-sum payments were equal to 4.5 percent of total wages from covered employment since January 1, 1937, the average wages of these workers must have been at least \$1,900 between January 1, 1937 and the time they retired or died. For example, lump-sum payments in July 1938, the first month of the fiscal year, averaged \$52.41, corresponding to an average monthly wage of some \$83 or almost \$1,000 per year. Similarly, average lump-sum payments in June 1939, the last month of the fiscal year, averaged \$83.24, corresponding to an average annual wage from covered employment of only slightly less than \$1,000.³¹ In view of the lack of detailed data it may be assumed that about half of the lump-sum beneficiaries should be classified as belonging in bracket I, and the other half in bracket II of Table 5 of this appendix.

Railroad retirement benefits can be allocated with more precision than other public-aid payments. In the fiscal year 1939 they totalled over \$106 million, of which \$75.2 million was for employee annuities (age or disability), \$28.9 million for pensions, and some \$2.8 million for lump-sum payments and survivors' benefits.³² On the basis of the known percentage distribution of monthly payments by \$10 intervals, the allocation to brackets I and II in Table 5 of this appendix has been effected as follows. The number of annuities for retired or disabled railroad workers in each \$10 interval, starting with the interval \$80-\$89.99, was multiplied by the mean figure for the interval to arrive at the total monthly payment for each interval; the results were then totaled and multiplied by 12, which gave the annual total of all payments over \$960, amounting to some \$37.5 million. The same method was applied to the amount of pension payments, with data on the pensions in force as of June 30, 1939, and resulted in a total of some \$11.5 million being allocated to bracket II in Table 5 of this appendix.³³ Thus the total amount of pension and annuity payments to be allocated to the income bracket \$1,000 and over is about \$50 million. This is probably an understatement because no account is taken of recipients of lump-sum

²⁹ See Humphrey, Don D., *Family Unemployment*, Work Projects Administration, Washington, 1940.

³⁰ See Sanders, Barkev S. and Kantor, Anne G., "Income of Urban Families and Individuals in Single-Family Households," *Social Security Bulletin*, III (September 1939), 25-36, and monthly tables in *Social Security Bulletin*, showing unduplicated cases of public aid as compared to the total number aided; cf. appendix 9 and ch. V.

³¹ Average lump-sum payments from *Fourth Annual Report of the Social Security Board, 1939*, Washington, 1940, p. 230, Table B-14.

³² *Annual Report of the Railroad Retirement Board for the Fiscal Year Ended June 30, 1939*, Washington, 1940, p. 42, table 9.

³³ *Ibid.*, p. 98 for employee annuities and p. 117 for pensioners. It is to be noted that there may be some margin of error in the pension figures stemming from the use of the year-end distribution by payment interval which covered fewer pensioners.

payments and survivors' benefits, an unknown proportion of whom would undoubtedly fall into bracket II. The balance of railroad retirement benefits is classified as falling into bracket I and amounts to about \$56 million.

For unemployment compensation no family income data were available, and an estimate was made on the following basis. Rather more than 50 percent of the benefits paid in 1939 were for weekly amounts of \$10 or over. This fact might suggest that a corresponding percentage of workers must have been earning at least \$1,040 in the preceding year and would, therefore, be members of the higher income bracket. This, however, is not the case because the method of calculating benefits on the basis of highest quarterly earnings would make it possible for a worker to receive a \$10 weekly benefit if he had earned as little as \$260, provided these earnings were concentrated in one quarter. In fact, it is known that in 1938, only 34 percent of the workers covered by old-age and survivors insurance were earning more than \$1,000. The proportion of unemployment compensation beneficiaries receiving incomes of \$1,000 or more in the year 1939 must have been smaller than this figure because their earnings would have been reduced by the unemployment in respect of which benefits were paid. The extent of the reduction is difficult to determine, but it must have been substantial in view of the fact that the average duration of benefit payment in that year was 7.7 to 12.2 weeks and was likely to be highest for the group receiving benefits of \$10 or over, since the highest paid

TABLE 5.—Estimated public-aid disbursements by income groups with annual incomes of less than \$1,000, and \$1,000 to \$2,000, fiscal year 1939, by program

[Millions of dollars]

Program	Total disbursements	Consumers with less than \$1,000 income (bracket I)		Consumers with incomes of \$1,000-2,000 (bracket II)	
		Amount	Percent of total	Amount	Percent of total
General relief.....	472	472	100.0	0	0
Surplus commodities.....	144	144	100.0	0	0
Farm Security Administration grants.....	51	51	100.0	0	0
Special public assistances.....	529	529	100.0	0	0
Work Projects Administration.....	2,557	2,365	92.5	192	7.5
Civilian Conservation Corps.....	284	284	100.0	0	0
National Youth Administration.....	85	85	100.0	0	0
Old-age insurance under the Social Security Act.....	14	7	50.0	7	50.0
Railroad retirement.....	106	56	53.8	50	47.2
Workmen's Compensation.....	21	21	100.0	0	0
Unemployment compensation.....	444	355	80.0	89	20.0
Total.....	4,707	4,369	92.8	338	7.2

Sources: Public-aid disbursements, with the exception of governmental workmen's compensation and unemployment compensation payments, from Appendix 20; figures exclude cost of administration. Unemployment compensation and workmen's compensation payments, including cost of medical care, hospitalization and burial, but excluding cost of administration, from Appendix 19.

workers are usually those entitled to the longest duration. In addition, all beneficiaries would have served at least a 2-week waiting period, while it is known that substantial proportions of workers remained unemployed after exhausting benefit rights. Against this must be set the fact that some beneficiaries undoubtedly add to their incomes through ownership of property or other family earnings. In these circumstances it is probably justifiable to assume that about 20 percent of the unemployment compensation payments were made to persons in the \$1,000-\$2,000 income group.