TAX BURDENS AND
PUBLIC EXPENDITURES

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FOREWORD

Although, during the past two years, wider diffusion of knowledge concerning taxation and public expenditures has awakened a clearer realization of their importance in economic and social welfare, and led to a more earnest consideration of their wise administration, certain basic problems involved are still far from solution and are likely to be of continuing interest and concern to the public and to industry. A prerequisite of any sound solution of these problems is accurate and comprehensive information, made widely available, bearing on the growth and nature of taxation, public expenditures and indebtedness, and their relation to national income.

For this reason the Conference Board has been engaged in continuous studies of federal, state and local tax problems and has issued, among other publications in this field, two reports entitled, "Taxation and National Income" and "Tax Burdens and Exemptions," which set forth the results of its original investigations of the growth in taxation, expenditures and indebtedness and their relation to tax exemptions and to national income in the United States and other countries up to the year 1923. The present volume carries these studies forward through the latest year for which data are available. The concise and comprehensive picture of the fiscal situation in the United States which it affords should prove to be of general interest and educational value in current discussions of this important problem.

In utilizing this and earlier studies of the Conference Board which have sought to set forth the facts that are basic in discussion of the tax problem a word of caution may not be amiss. A recital of the facts regarding the phenomenal growth of taxation and public expenditures in recent decades does not carry with it any conclusive judgment as to the significance for good or for evil of this modern development. Such judgment involves insight into complex problems of social and economic progress which cannot be achieved without careful and painstaking study of such questions as those of the distribution, shifting, incidence and effects of taxation, the productivity of public expenditures, the scope and efficiency of public as contrasted with private services, and the problem of international relations, which has had so great a bearing on public finance. Neither the facts presented in the present report or earlier ones, nor any emphasis given in the presentation to special features of taxation and expenditures, should be taken to imply any judgment by the Conference Board on the difficult questions to which reference has been made.

This report is the result of an investigation conducted by Mr. L. R. Gottlieb and assistants, of the Conference Board's Research Staff, under the supervision of the Board's Staff Economic Council.

In the preparation of its studies, the National Industrial Conference Board avails itself of the experience and judgment of the business executives who compose its membership, and of recognized authorities in special fields, in addition to the scientific knowledge and equipment of its Research Staff. The publications of the Board thus finally represent the result of scientific investigation and broad business experience, and the conclusions expressed therein are those of the Conference Board as a body.

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INTRODUCTION

Not many decades ago, a number of leading economic writers of the day viewed with alarm the growth of governmental activity and condemned public expenditures as a waste of national resources. This attitude is best exemplified in the golden maxim of Léon Say, the noted French economist, that "the very best of all plans of finance is to spend very little and the best of all taxes is that which is least in amount." Collective activities were considered unproductive in the economic sense and placed in a category separate from those performed by individuals in their private capacities. Expansion in governmental disbursements was almost universally deplored and in some instances was considered an omen of impending disaster and national decadence.

As the prevailing economic theories of any given period are in a sense the product of or are largely influenced by contemporaneous economic environment, the explanation for this rather narrow conception of public finance is not difficult to trace. When monarchies flourished and royalty controlled the destinies of nations, as in practically all history up to the seventeenth and eighteenth centuries, the principal objects of disbursement were maintenance of luxurious courts, with their costly entourages, and continuous warfare among nations with imperialistic designs. The royal purse was insatiable; maldistribution of taxation was proverbial; the nobility and the clergy enjoyed greater and greater exemption while the main burden fell on the masses, i. e., the peasantry, the artisans and the large body of urban dwellers. In a period when the act of taxation was defined as "plucking the goose with

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As the democratic spirit develops and as control over society begins to be vested in the masses on a larger and larger scale, a change is manifested in the nature, composition and totality of the public outgo. Luxurious court expenditures give place to outlays for objects that benefit larger numbers. As the industrial revolution extends its influence and commerce increases, population grows rapidly and becomes more and more concentrated in large urban centers. This circumstance in itself makes for increase in tax burdens beyond the levels that existed theretofore. Paved streets and roads, piped water, extensive sewerage systems, street sprinkling and lighting, snow removal, police and fire protection, traffic regulation, care of the homeless and sick, and general health and sanitation measures become more and more customary adjuncts of an industrialized society. Along with these benefits, attention is given in increasing measure to the mental, cultural and intellectual development of all the members of the nation through compulsory elementary education, through adequate provision for secondary and advanced education to all those who wish to avail themselves of the opportunity, through the establishment of libraries, museums, biological and zoological gardens, parks, art galleries and the like. In the United States, opportunities for cultural unfolding of the more advanced type have been made available in large measure through private generosity and benevolence rather than by taxation. Thus, in the school year 1919–1920, out of a total of 670 universities, colleges and professional schools in this country only 109 were under public control, while 561 were under private control. The number of students in the universities, colleges and professional schools under public control numbered 198,876, as compared with 325,878 in those under private control.[1]

Increase in governmental functions and growing populations are not, however, the sole causes for the growth in public expenditures. Better quality as well as larger quantity in public services is demanded. It is not only necessary to provide roads but it is required that they furnish smooth riding by means of concrete or asphalt surfaces. The demand is not only for public school education in any sort of building, improvised or otherwise, but for well-ventilated, well-lighted structures that make an appeal to the artistic sense of the community, and for adequate equipment and a well-trained staff of instructors. As wealth and income of nations rise on the great scale witnessed in the four or five decades preceding the World War, individuals begin to translate into their conceptions of public service the grade and quality of services received in their private capacities. Extreme prosperity breeds recklessness, extravagance and wastefulness in private economy. These influences readily infect the public economy, and once they take hold they are difficult to dislodge. The political system that has grown up since the introduction of democracy among Western peoples does not readily countenance violent changes in public functions and does not easily yield to such pressure as operates in a private business enterprise, where the condition of the ledger immediately determines expenditure policies, and profit is a dominating consideration.

Still another important factor, albeit insidious and persistent, which explains the rising level of public outgo over a long period of time, is the falling purchasing power of money. The increase in supply of gold and credit media

[1]U. S. Department of Interior, Bureau of Education, Bulletin No. 28, 1922.

has operated to reduce the value of gold and hence to raise all prices in terms of the common standard. Certain isolated commodities or services have resisted this tendency and extensive improvements in technology have more than offset the depreciation of money;[1] but the general price level, as regards the vast bulk of commodities or services exchanged, has nevertheless been greatly influenced by changes in supply of gold and credit media. Since governments are purchasers of materials and services, human and otherwise, it is inevitable that the decline in the purchasing power of money be reflected in the fiscal accounts, although the effect shows a considerable lag.

TABLE 1: ALLOCATED COST OF AMERICAN WARS (1775–1921)

	Including prior peace time disbursements[1]	Excluding prior peace time disbursements[2]
Revolution	$504,288,328	$504,288,328
War of 1812	309,605,729	246,785,373
Mexican	497,916,983	195,087,436
Civil—Union	12,322,186,601	11,667,533,483
Civil—Confederate	1,520,033,632	1,520,033,632
Spanish	3,521,776,681	1,015,554,728
World	33,131,968,757	28,831,689,982
	$51,807,776,711	$43,980,972,963

[1]Exclusive of costs of Indian wars, which bring up the total to $52.6 billions, as indicated in the text.
[2]That is excluding the cost of preparing for war in the interval between wars.

Finally, there is the factor of national defense, which is by far the largest single source of governmental expense in most countries of the world. In the United States defense expenditures by the Federal Government amounted to $52.6 billions or 78.9% of a total expenditure of $66.7 billions in the 131 years between 1789 and 1920.[2] Excluding the cost of Indian wars and minor insurrections, the total expenditures of the Federal Government on account of defense are as shown in Table 1.

As far as all civilized nations are concerned, the cost of

[1]As is illustrated in the price of electricity, for example.
[2]World Peace Foundation, "A League of Nations," Vol. IV, No. 4, p. 309. Includes foreign government debts owing to the United States.

waging wars alone from 1793 to 1913 (a period of 120 years), aside from defense expenses in peace years and interest on war debts, amounted to $24 billions, for which Europe itself was responsible to the extent of $18.4 billions.[1] The World War was very nearly nine times as costly in actual outlay as all the wars in the previous 120 years.[2] The cost to the principal nations of maintaining their armies and navies, exclusive of payment of war expenditures, war debt charges, pensions, annuities, etc., is $2.5 billions annually on a peace basis.[3] These figures all refer to national governments and do not include budgets of local governments which are not primarily concerned with national defense, although in some cases local governments spend part of their funds for military purposes.

[1]U. S. Treasury Dept., Statement of Liberty Loan Bureau, Nov. 10, 1917.

[2]The cost of the World War, on a net basis, was $211 billions. E. R. A. Seligman, "Essays in Taxation," ninth edition, 1921, p. 757. This figure represents the cost in terms of "current" dollars, with foreign currencies converted at par. In terms of "1913" American dollars, the cost was $81 billions. Cf. H. E. Fisk, "The Inter-Ally Debts," Bankers Trust Co., 1924, p. 16.

[3]E. W. Sells, "The Natural Business Year, etc.," A. W. Shaw Co., Chicago, 1924, pp. 194-195. For the proportion of total expenditures absorbed by war charges for individual countries, see Handwörterbuch der Staatswissenchaften (Conrad) Vol. 4, Jena, 1909, pp. 270 ff.

CHAPTER II

THE TAX BURDEN IN 1923

In a previous report of the Conference Board,[1] data were furnished which showed the increase in the volume and burden of taxation in the United States up to and including the year 1922. These figures embraced the taxes levied not only by the Federal Government but also by state governments and all their instrumentalities and subdivisions, such as counties, cities, towns, villages, school districts, magisterial districts, road districts, sanitary districts, park districts, etc. In the present report, these data are brought up to date so as to include taxation figures for 1923, which have recently become available to the Board as a result of an extensive investigation by its tax expert both through personal visit and study at the offices of state and local comptrollers and auditors, state tax commissions, state equalization boards, etc., and through correspondence.

Method of Estimation

Official figures of an exact nature, which would indicate the totality of taxes raised in this country by all governmental authorities, are not made available except at intervals. Data relating to the Federal Government are published from day to day in the Daily Treasury Statement; the day-to-day figures are, however, more general and hence less useful than the monthly summaries which furnish full detailed information. Tax data for all states and for municipalities with a population of 30,000 and over are published annually or biennially by the United States Bureau of the Census, which collects them by field agents and by correspondence; but in some recent years cooperation between the bureau and all state and local

[1]National Industrial Conference Board, "Tax Burdens and Exemptions," Research Report No. 64, New York, 1923, pp. 7 ff.

disbursing authorities has not been secured. Aside from the circumstance that such data become available a long time after the year to which they have reference, they by no means cover the whole range of public finance. All cities with a population of less than 30,000, all county governments, villages, towns, townships, and taxing districts of every other description that possess the power to levy taxes are not covered in the annual or biennial surveys of taxation made by the United States Bureau of the Census. In 1902, the Census Bureau had included in its study of wealth, debt and taxation data for these smaller governmental units not embraced in the annual or biennial surveys, with estimates wherever data were lacking, but in 1913 the Census investigation was limited to states, to cities over 2,500 in population and to counties. In 1922, the Bureau of the Census again presented complete information as to taxes raised by all governmental authorities in this country, including counties, all towns, cities, villages and local taxing districts. While in the 1922 census the bureau thus extended the scope of its tax data as compared with 1913, it made a step backward in failing to secure any data whatever bearing on revenues other than from tax sources, or on expenditures for county governments and municipalities of over 2,500 in population, which had been covered in the 1913 census of wealth, debt and taxation. In other words, there have been no data collected since 1913, as to non-tax revenues and total expenditures of county governments and cities having a population ranging between 2,500 and 30,000, and no data since 1902 for the multitude of important taxing districts with a population of less than 2,500.

It is clear, therefore, that the investigator who attempts to obtain a comprehensive and complete picture of federal, state and local finance embarks upon a rather difficult and extensive task, since he must secure his data from hundreds of sources through his own efforts. In some states, as in Wisconsin, Massachusetts, New York, Connecticut, etc., the task is lightened by the collection by a central authority of such information either annually or periodically from all the local bodies, but such information appears rather belatedly and cannot be of full service to those who desire to keep abreast of current developments. In most states, however, no data are collected by any official body, and hence even this measure of assistance is not available. It is essential, therefore, to pursue an independent method in order to arrive at figures that will be reasonably accurate and that will afford an idea of the status of taxation from year to year.

If local finance is to be covered adequately, it is apparent that main reliance should be placed on the amount of taxes levied by these agencies under the general property tax, since the major portion of their revenues, averaging 90% to 95% in recent years, is derived from this source. General property tax levies for local government purposes were secured for 37 states, accounting for 88.9% of the total levies in 1922 as reported by the Census Bureau. Tax revenues, other than from the general property tax, can be reliably secured from the annual reports of state auditors, comptrollers, etc., which are published with reasonable promptness. Various public and private agencies publish data regarding certain tax revenues, such as the United States Bureau of Public Roads and the National Automobile Chamber of Commerce with respect to license taxes on automobiles and to gasoline taxes. In using the figures of taxes levied it is realized, of course, that not all taxes are necessarily paid in the year of levy, but it should not be overlooked that as far as the real estate tax is concerned these levies constitute or put a lien on the property subject to taxation, and that, if the tax is not paid within the statutory period, the liability to the municipality or state is liquidated by forced sale of the property. It is believed that difficulties due to this factor will in the long run cancel and offset each other. As far as possible, an attempt was made to have the tax figures dovetail with the calendar year.

Local General Property Tax Levies

From Table 2 it is possible to observe the rather large

Table 2: General Property Tax Levies for Local Government Purposes, 37 States

(National Industrial Conference Board)

State	Total		
	1923	1922[1]	Per cent increase
Arizona[2]	$12,203,416	$10,883,855	12.1
California[3]	147,248,218	120,609,678	22.1
Colorado[4]	36,148,042	35,008,592	3.3
Dist. of Columbia[5]	13,961,902	12,712,754	9.8
Florida[6]	20,443,285	17,279,660	18.3
Georgia[7]	30,467,469	29,715,000	2.5
Illinois[8]	266,890,722	247,659,237	7.8
Indiana[9]	112,755,278	103,789,859	8.6
Iowa[10]	94,358,720	93,284,878	1.2
Kansas[11]	67,272,920	63,470,973	6.0
Kentucky[12]	15,947,439	15,133,743	5.4
Louisiana[13]	33,817,759	31,348,150	7.9
Maine[14]	19,780,506	18,575,606	6.5
Maryland[15]	36,840,578	34,518,984	6.7
Massachusetts[16]	155,673,316	150,779,795	3.2
Michigan[17]	154,091,831	142,917,440	7.8
Minnesota[18]	102,804,419	98,723,056	4.1
Missouri[19]	63,632,769	60,702,567	4.8
Montana[20]	25,865,053	25,106,030	3.0
Nebraska[21]	46,875,667	46,091,368	1.7
Nevada[22]	3,851,565	3,817,768	0.9
New Hampshire[23]	14,120,913	13,559,801	4.1
New Jersey[24]	131,217,188	121,581,109	7.9
New York[25]	456,272,126	428,890,823	6.4
North Carolina[26]	11,818,280	10,964,738	7.8
North Dakota[27]	26,035,377	26,536,130	-1.9*
Ohio[28]	229,541,868	208,266,358	10.2
Oregon[29]	32,201,891	31,097,717	3.6
Pennsylvania[30]	243,410,833	234,709,754	3.7
Rhose Island[31]	18,327,746	17,398,876	5.3
South Carolina[32]	14,351,528	12,915,683	11.1
Utah[33]	16,516,380	12,063,516	36.9
Vermont[34]	8,769,129	7,652,478	14.6
Washington[35]	52,709,919	49[illegible],650	6.4
West Virginia[36]	42,346,018	37,610,324	12.6
Wisconsin[37]	94,897,776	90,893,562	4.4
Wyoming[38]	7,992,820	8,419,820	-5.1*
Total, 37 states	$2,861,460,666	$2,674,239,332	7.0

Footnotes to Table 2

[1]The figures in this column are taken from the National Industrial Conference Board, Research Report No. 64, "Tax Burdens and Exemptions," page 10. Some figures have been revised in accordance with final data as received from official sources.

[2]Letter of State Tax Commission dated Dec. 12, 1923.

[3]Letter of State Controller, dated Feb. 5, 1924. County and special district taxes only.

increase in taxes levied in 1923 for local government purposes under the general property tax, exclusive of the amount for state purposes. Taking the leading manufacturing states, it is found that in New York the local general property taxes levied increased from $428.9 millions

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Footnotes to Table 2—continued

[4]Letters of the State Tax Commission dated May 20, 1924, and Nov. 20, 1924.
[5]Letter of Commissioner of District of Columbia, dated Oct. 30, 1924.
[6]Report of the State Comptroller, Year Ending Dec. 31, 1923, pp. 160–161. Includes county and special district taxes only.
[7]Tenth Annual Report of State Tax Commission 1923, p. 11 and U. S. Census Bureau releases on tax levies for 1922.
[8]Letter of State Auditor dated Oct. 30, 1924. Figures for 1922 as ascertained in person by the Board's tax expert.
[9]Inclusive of taxes collected by 12 cities that do not report to the auditor. Letter of State Board of Tax Commissioners dated May 19, 1924.
[10]Compilations furnished by the State Auditor, "Valuation and Taxes, 1924."
[11]Compilation furnished with letter of State Tax Commission dated Jan. 29, 1924.
[12]From a blueprint chart prepared by the State Tax Commission, Jan. 15, 1924. Data for county governments only.
[13]Includes parish, road, school, levee, drainage and miscellaneous levies but no municipal taxes other than those of the City of New Orleans. Seventh Annual Report of the Louisiana Tax Commission for 1923, p. 283.
[14]Letters of the Board of State Assessors, dated Jan. 23 and 26, 1924.
[15]On the basis of figures collected by the Board's investigator in connection with the forthcoming report on "The Tax Problem in West Virginia."
[16]Letters of the Commissioner of Corporations and Taxation of Dec. 12, 1923 and June 6, 1924.
[17]Compilation furnished in letter of State Board of Tax Commissioners dated Feb. 19, 1924.
[18]Data furnished by the State Tax Commission.
[19]County governments only, including City of St. Louis. Letter of State Auditor dated Dec. 12, 1923.
[20]Letter of State Board of Equalization, June 27, 1924.
[21]Annual Report of State Tax Commissioner, 1923.
[22]Letter of State Tax Commission dated Jan. 9, 1924.
[23]Letter of State Tax Commission dated Dec. 11, 1923.
[24]Including bank, poll and dog taxes. "Summary of Taxes Levied for the Year 1923," issued by the State Board of Taxes and Assessments.
[25]Annual Report of State Tax Commission 1922, pp. 398-9, and letter of State Tax Commission, dated Sept. 25, 1924.
[26]Annual Reports of State Auditor, 1922, p. 192 and 1923, p. 204. Data for county governments only.
[27]Letter of State Tax Commissioner dated Feb. 26, 1924.
[28]Compilations furnished by State Tax Commission.
[29]Data furnished with letter of State Tax Commission dated Jan. 26, 1924.
[30]Data enclosed with letter of the Director of the Bureau of Statistics and Information, Department of Internal Affairs, dated Dec. 12, 1923. Includes licenses.
[31]Letter of the Board of Tax Commissioners dated Dec. 13, 1923.
[32]Includes county and school district taxes only and polls. Report of the Comptroller General of South Carolina, fiscal year 1923, pp. 67–68 and 1922, pp. 59–61.
[33]Letter of the State Board of Equalization and Assessment dated May 20, 1924.
[34]Letter of State Commissioner of Taxes dated Dec. 13, 1923.
[35]Compilation furnished in letter of Division of Municipal Corporations, Feb. 11, 1924.
[36]Data furnished by State Tax Commissioner.
[37]Data furnished in letter of State Tax Commission dated Dec. 14, 1923, and bulletins of the Tax Commission.
[38]Letter of the Public Service Commission dated May 20, 1924.
*Per cent decrease.

in 1922 to $456.3 millions in 1923, or 6.4%; in Pennsylvania, from $234.7 millions to $243.4 millions, or 3.7%;[1] in Illinois, from $247.7 millions to $266.9 millions, or 7.8%; in Massachusetts, from $150.8 millions to $155.7 millions, or 3.2%; in Ohio, from $208.3 millions to $229.5 millions or 10.2%; in New Jersey, from $121.6 millions to $131.2 millions, or 7.9%; in Michigan, from $142.9 millions to $154.1 millions, or 7.8%; and in Indiana, from $103.8 millions to $112.8 millions, or 8.6%. More striking is the fact that the levies of general property taxes showed an increase in agricultural states in 1923, whereas a decrease or a stationary situation was reported in most such states in 1922, as compared with 1921. This condition is mainly found in Kansas, California, Washington, Oregon, Florida, Iowa, Minnesota, North Dakota, Utah, Colorado, Louisiana, Kentucky, North Carolina, South Carolina and Georgia.

Volume of Taxation in 1923

The volume of taxes raised in the year 1923 reached $7,716 millions, as against $6,961 millions[2] in 1922, an increase of $755 millions or 10.8%. On a per capita basis, the contribution of each man, woman and child for the support of federal, state and local governments in this country was $69.72 in 1923, as compared with $63.72 in 1922. The average amount of taxes paid per family was $298.74 in 1923, as compared with $273.98 in 1922, and the average amount of taxes paid per person gainfully employed, sixteen years of age and over, was $183.14 in 1923, as against $167.01 in 1922. The absolute and per capita figures are indicated in Tables 3 and 4, respectively.

In the calendar year 1923, the Federal Government raised $3,223 millions in taxes, as against $2,802 millions in the preceding year, an increase of 15%. In arriving at the net tax figures, additional assessments were included, and refunds, abatements and credits granted during the year were deducted. To be sure, the additional assessments and refunds are on account of previous years' taxes,

[1]Includes licenses collected by county officers.
[2]Revised figures, after taking cognizance of federal tax refunds.

TABLE 3: TAXATION AND NATIONAL INCOME, UNITED STATES[1]

(National Industrial Conference Board)

(Figures in millions of dollars)

	1890	1903	1913	1919	1921	1922	1923
Federal taxes	$374	$521	$668	$5,069	$4,430	$2,802	$3,223
State taxes	96	155	307	570	783	858	892
Local taxes	405	706	1,219	2,395	3,150	3,301	3,601
All taxes	$875	$1,382	$2,194	$8,034	$8,363	$6,961	$7,716
National income	$12,082	$20,500	$34,400	$66,251	$50,000	$58,500	$67,000
Taxes as per cent of national income	7.2%	6.7%	6.4%	12.1%	16.7%	11.9%	11.5%

[1]Figures for 1903–1922 taken from National Industrial Conference Board Research Report No. 64, "Tax Burdens and Exemptions," p. 13, with 1922 federal figures revised to take cognizance of refunds of taxes. Figures for 1890 represent those of the U. S. Census Bureau, "Wealth, Debt and Taxation," Part II, 1890, p. 409.

National income figures for 1890 taken from W. I. King, "Wealth and Income of the American People," 1915, p. 129; and 1902 estimated on the basis of the figures for 1900 and 1910; income figures for 1913 and 1919 taken from National Bureau of Economic Research, "Income in the United States," Vol. I, p. 64 ff.; remaining income figures represent estimates of the Board.

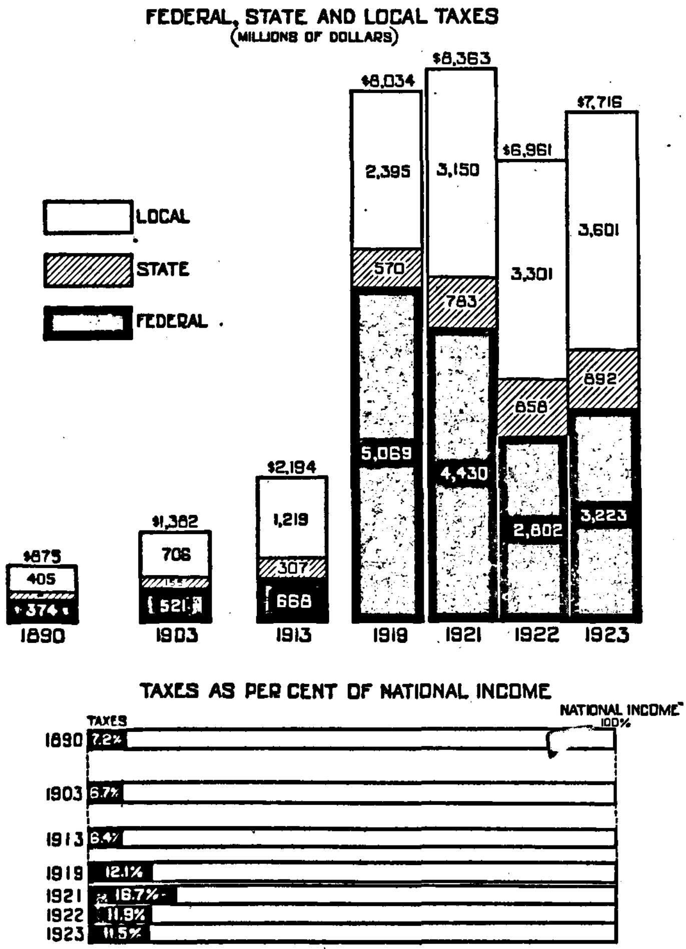
TABLE 4: TAXES PER CAPITA, UNITED STATES

(National Industrial Conference Board)

	1890	1903	1913	1919	1921	1922	1923
Federal	$5.93	$6.43	$6.92	$48.27	$41.08	$25.65	$29.12
State	1.52	1.91	3.18	5.43	7.26	7.85	8.06
Local	6.42	8.72	12.63	22.81	29.21	30.22	32.54
Total	$13.88	$17.07	$22.73	$76.51	$77.55	$63.72	$69.72
National income	$191.61	$253.14	$356.43	$630.94	$463.68	$535.48	$605.44
Taxes as per cent of national income	7.2%	6.7%	6.4%	12.1%	16.7%	11.9%	11.5%

but they must nevertheless be taken into consideration in the year in which they appear as an actual debit or credit on the tax collector's books in order to arrive at the net amount which the American people contributed in taxes toward the maintenance of the Federal Government.

CHART 1: VOLUME AND BURDEN OF TOTAL TAXATION, UNITED STATES



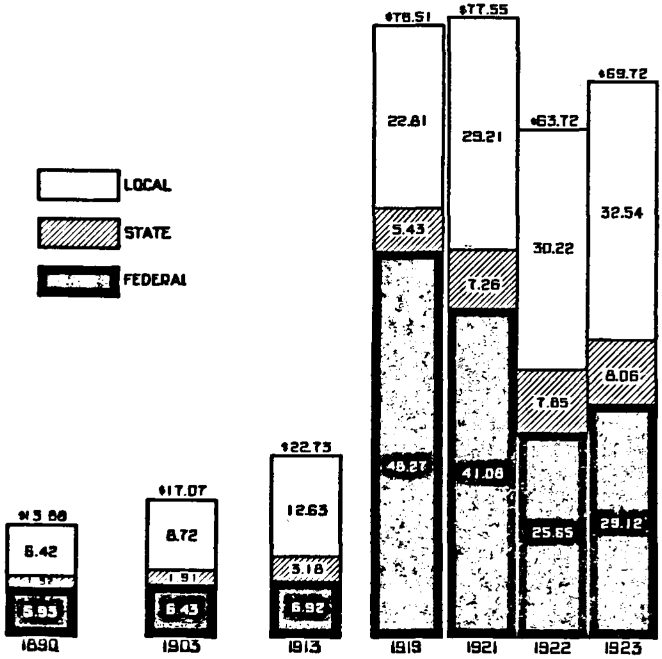
From $374 millions or $5.94 per capita in 1890, taxes collected by the Federal Government had increased to $668 millions in 1913 or $6.92 per capita, an increase of less than 80% in the absolute amounts. Thereafter, federal taxes rose rather slowly at first but more rapidly after we entered into the World War, until, in 1919, the amount was $5,069 millions and in 1921, $4,430 millions.

More important than federal taxes, however, are the amounts exacted annually for the support of state and local governments, since the latter now constitute the larger proportion of the total tax bill of the nation. Taxes raised for state governmental purposes increased from $96 millions in 1890 to $307 millions in 1913, more than a two-fold increase. In 1919, taxes collected by states for their own use rose to $570 millions, in 1921 to $783 millions, in 1922 to $858 millions, and in 1923 to $882 millions. The increase between 1922 and 1923 was 2.8%. Taxes raised by all other authorities having the power to levy taxes and disburse public funds, termed "local," amounted to $405 millions in 1890, rising to $1,219 millions in 1913, a two-fold increase. By 1919, the local tax burden had grown to $2,395 millions, by 1921 to $3,150 millions, by 1922 to $3,301 millions and by 1923 to $3,601 millions. Thus state and local taxes have continued to rise steadily.

The total tax bill of the nation increased from $875 millions in 1890 to $2,194 millions in 1913, $8,034 millions in 1919, $8,363 millions in 1921, $6,961 millions in 1922 and $7,716 millions in 1923. The volume of taxation for federal, state and local purposes was three and one-half times as high in 1923 as ten years earlier, while population increased approximately only one-seventh in this period, the value of wealth rose about four-fifths and the wholesale price level rose only one-half.

Taking the year 1913 as the standard and expressing all figures in terms of dollars of the common purchasing power in that year (on the basis of the index number of wholesale prices), it is found that the total amount of taxes raised by all government authorities in this country has grown from $1,080 millions in 1890 to $2,194 millions

CHART 2: PER CAPITA TOTAL TAXATION, UNITED STATES



in 1913, $3,900 millions in 1919, $5,689 millions in 1921, $4,739 millions in 1922, and $5,010 millions in 1923. It thus appears again, even on this basis, that the recession in the volume of taxation in 1922 was short-lived, and that an upward tendency was again indicated in 1923 which, from preliminary figures at hand, is likely to continue in 1924.

IMPORTANCE OF LOCAL TAXATION

Before the war, state and local taxation in bulk had played a more important rôle in the total tax bill of the nation than federal taxation, but during the war state and local government needs were submerged beneath the huge requirements of the Federal Government, with the result that the former assumed a subordinate position. After the Armistice, federal taxation continued to rise, but two years later, especially after the adoption of the budget system, the axe of economy was applied, and this, coupled with the depression in business in 1920 and 1921 and a reduction in earning power on a basis of which the revenues of the Federal Government are largely determined, served to lower the tax burden considerably. Meanwhile, state and local governments, no longer feeling the urgency of restricting their outlays and somewhat stimulated by favorable borrowing rates, embarked on elaborate road-building programs. Ambitious improvement projects have also been undertaken on no small scale, causing not only an increase in current tax burdens but large accretions in bonded indebtedness. With rents at a high level, due primarily to the scarcity of housing facilities, assessed valuations of municipal real estate have been considerably raised, which circumstance has enabled local governments to increase tax burdens beyond the point which would have been permitted by means of increased tax rates alone.

Before the war the amount of taxes raised by state and local governments constituted about seven-tenths of the total tax bill. During the war this ratio had declined, but by 1921 the percentage raised by state and local governments represented one-half of the total. In 1922, the ratio of taxes levied by state and local governments to the total taxes was 60% and in 1923 it was 58%, thus indicating the importance of state and local tax burdens in recent years.

Relation of Taxes to National Income

Inasmuch as all taxes must ultimately be paid out of the national income, either of past or current origin, it is clear that the best index of the burdensomeness of taxation is its relationship to national income. By national income is meant the aggregate value of all commodities and services produced in the country by all persons, physical and juridical, or obtained from abroad for their use, including products of the farm consumed by farmers and rental value of homes occupied by their owners, but excluding goods or services for which no price is commonly paid, as for example, the services of housewives. This aggregate is a net amount after duplications have been eliminated and maintenance and depreciation charges have been deducted. The estimate of national income in 1923 was based on the figure reported for 1922 in a previous report,[1] with changes as indicated, group by group, by new data.

According to these computations, as shown in Table 3, the national income in 1923 was $67 billions, as compared with $58.5 billions in 1922, an increase of 14.5%. On the basis of scattered data already available for portions of the year 1924, it appears likely that the national income in the latter year will show a recession as compared with 1923. Taxes of federal, state and local governments represented, therefore, 11.5% of the national income in 1923, as compared with 11.9%[2] in 1922, 16.7% in 1921, 12.1% in 1919, and 6.4% in 1913.

Thus about one-eighth of the national income now goes toward the support of governmental authorities in this country as compared with one-sixteenth before the war. Because of the likelihood that national income in 1924 will be lower than in 1923 and in view of the continued rise in the volume of state and local taxation which is likely to offset the amelioration in federal tax burdens, it is probable that the ratio of taxes to national income will be higher in 1924 than in the year immediately preceding.

It may be contended that a materially larger portion of our entire tax revenue is now devoted to the payment of pensions and of interest on the public debt than in prewar years. These latter items go to swell the totality of national income and hence do not detract from the funds available for industrial uses. Investigations indicate that

[1]Research Report No. 64, *op. cit.*, 1923, p. 13.
[2]Revised figures.

the rates of increase in the gross and net burden of taxation do not differ widely. In 1913, the federal, state and local governments disbursed $208 millions on account of pensions and $224 millions for interest on public indebtedness. In 1923, these amounts were respectively $330 millions and $1,447 millions. After deducting these respective amounts from the national tax burden for the years in question, it is found that the increase in the revenue taken away from industrial uses was 237%, compared with a growth of 252% in the gross amount of taxation during the same period. The facts indicate, therefore, that measured in terms of dollars, the volume of taxation on industry, using this term in its widest sense, was in 1923 three and one-half times as high as it was in 1913 and, measured in terms of comparable purchasing power, this burden was two and one-half times as high as it was in 1913.

In 1890, all taxes represented 7.2% of the national income; in 1903, 6.7% and in 1913, 6.4%. This declining tendency was more or less discernible throughout the industrial world, for national wealth and income had been growing faster than the volume of taxation. Increased application of the engineering sciences to industry, large-scale production and rapid substitution of machinery for man-power, coupled with the slow but continuous rise in prices, had all operated to unlock the natural resources of nations, enhance productivity per man and increase the national income more rapidly than the growth in requirements of government. No writer has perhaps stated this phenomenon in more picturesque language than Macaulay, who quotes British statesmen as follows:

" 'A million a year will beggar us,' said the patriots of 1640. 'Two millions a year will grind the country to powder,' was the cry in 1660. 'Six millions a year and a debt of ten millions!' exclaimed Swift; 'the high allies have been the ruin of us.' 'A hundred and forty millions of debt!' said Junius: 'well may we say that we owe Lord Chatham more than we shall ever pay, if we owe him such a load as this.' 'Two hundred and forty millions of debt,' cried all the statesmen of 1783 in chorus; 'what abilities or what economy on the part of ministers can save a country so burdened?' . . .

"Such was the origin of that debt which since has become the greatest prodigy that ever perplexed the sagacity and confounded the pride of statesmen and philosophers. At every stage in the growth of that debt the nation has set up the same cry of anguish and despair. At every stage in the growth of that debt it has been seriously asserted by wise men that bankruptcy and ruin were at hand. Yet still the debt went on growing; and still bankruptcy and ruin were as remote as ever . . . .

"The prophets of evil were under a double delusion. They made no allowance for the effect produced by the incessant progress of every experimental science and by the incessant efforts of every man to get on in life. They saw the debt grow, but they forgot that other things grew as well as the debt. They greatly overrated the pressure of the burden. They greatly underrated the strength by which the burden was to be borne."[1]

Whether or not past experience is always a reliable guide for what may be expected in the future, is an open question. The powers of man are so impossible to measure and yet so prodigious as to defy any attempts at prophecy. It suffices that the burden of taxation is on a much higher level than before the war in this country as well as practically all over the world, and that it will take a generation or so before any hope of material reductions in these burdens can reasonably be entertained. Current observation and analysis would not appear to support such a sanguine view of the probable trend of national income and prosperity in the near future as was possible in the decades immediately preceding the World War. In the measure that nations of the world in which the industrial revolution had made headway quickly recover from the terrific shock to their economic structure caused by the recent world conflagration, their burden of taxation will be correspond-

[1]Macaulay, "History of England," edited by C. H. Firth, London, 1914, Vol. V, Chapter 19, pp. 2, 283-6.

ingly mitigated; but whether or not this improvement will be nullified by another conflict, time alone will tell.

INTERNATIONAL TAX COMPARISONS

In Table 5 below, the fiscal effort of the United States is compared with that of Great Britain and France. These figures show the relationship between national and local taxation in each of the three countries and their respective national incomes. The list was not extended to embrace other countries because of the lack of local tax data or reliable income figures, and in some cases because of unstable currency conditions. All figures of taxes and national income are expressed in terms of native currencies, because no valid method exists whereby they may be translated into a common currency.[1]

From the compilation below it may be ascertained that the real burden of taxation, as measured by the relation of all taxation to national income, was twice as heavy in Great Britain as in the United States in the latest fiscal

TABLE 5: COMPARISON OF TAXATION AND NATIONAL INCOME, UNITED STATES, GREAT BRITAIN AND FRANCE
(National Industrial Conference Board)
(Figures in millions)

Country and unit of currency	1913-1914[1]			1923-1924[1]		
	Taxes	National income	Ratio of taxes to national income	Taxes	National income	Ratio of taxes to national income
1. United States (dollars)..						
Federal.............	668	....	1.94	3,223	....	4.81
State...............	307	....	.89	892	....	1.33
Local...............	1,219	....	3.54	3,601	....	5.37
Total..........	2,194	34,400	6.37	7,716	67,000	11.51
2. Great Britain (pounds).						
National.........	164.1	....	7.13	718.1[2]	....	18.90
Local............	92.7	....	4.03	163.0[3]	....	4.29
Total..........	256.8	2,300	11.16	881.1	3,800[4]	23.19
3. France (francs)........						
National...........	4,005[5]	....	10.54	20,491[5]	....	14.64
Local...............	1,059	....	2.79	2,732[6]	....	1.95
Total............	5,064	38,000	13.33	23,223	140,000[7]	16.59

[1] *Cf.* L. R. Gottlieb, "A Tax Paradox," *Journal of Political Economy*, Vol. XXXI, No. 5, October, 1923, p. 744 ff.

period, and that of France was one-half heavier. Great Britain and France had, however, a much heavier burden of taxation before the war than the United States, the ratio of taxes to national income being 6.4% for the latter as compared with 11.2% for Great Britain and 13.3% for France. This circumstance was largely due to the relatively high debts with which the latter two countries were burdened, and the slower rate of growth in national income. The increase in the real burden of taxation since the war has been 80% for the United States, 107% for Great Britain and 25% for France.

Footnotes to Table 5

[1]Fiscal year March 31, 1914, and March 31, 1924, for United Kingdom and calendar year 1913 and 1923 for France and United States. Unless otherwise indicated, figures for the pre-war year are taken from the Board's Research Report No. 55, "Taxation and National Income," pp. 29, 30, 36 and 77.

[2]As per British Treasury returns.

[3]Parliamentary Debates, May 27, 1924, p. 214. In 1923, the amount of licenses not passing through Local Taxation Account was £1,210,000 for England and Wales only. In Scotland the revenue from this source was negligible. Cf. Fourth Annual Report of the Ministry of Health, 1922-1923, Cmd. 1944 (S.P.C.), p. 146. Pre-war figures refer to United Kingdom, including all of Ireland; post-war figures refer to United Kingdom, excluding Irish Free State.

[4]Estimate of the (*London*) *Economist*, Oct. 4, 1924, p. 520. The net national income, after deduction of interest on internal debt and of pensions, was placed at £3,470 millions, which appears to be close to Mr. Edgar Crammond's estimate of £3,300 millions. Cf. (*London*) *Economist*, Nov. 1, 1924, p. 692.

[5]Ministre des Finances, Bulletin de Statistique et de Législation Comparée, Dec. 1923. From the amount thus reported there was deducted 38 million francs, estimated to be the amount representing essentially fees and included in "taxes assimilées" for state purposes. Cf. Bulletin de Statistique, *ibid.*, January, 1924, pp. 61 ff. Net receipts from monopolies in 1913 were secured from Bulletin de Statistique, *ibid.*, Vol. 83, June, 1918. In "Project de Budget pour 1923," the coefficient of exploitation (i. e., ratio of operating expenses to income) was stated for the tobacco monopoly at 20.0% in 1913 and 38.1% in 1921, and for the match monopoly, respectively, 28.2% and 50.5%. No details were furnished as to the gunpowder monopoly. Cf. Bulletin de Statistique et de Législation Comparée, Vol. 91. p. 855. No audited figures as to monopolies have been available since 1913. Hence, the coefficient of exploitation for 1921 was applied to the gross receipts in 1923 to arrive at the net profit from the monopolies which assume the form of a tax upon consumers. The profit is probably less than the figures seem to indicate, since government accounting fails to take into con[illegible]ion depreciation of equipment and structures, but in the absence of specific data th[illegible]ove ratios were employed. The coefficient of exploitation of the match monopoly was applied also to the gunpowder monopoly, in the absence of specific data, but the probable error on this account is not serious since the total gross receipts from this source were only 61,000,000 francs in 1923.

[6]Direct taxes as levied. Comparison of levies with actual collections for previous years indicates that uncollected taxes, if any, are a negligible proportion of the total amount levied. Bulletin de Statistique, *op. cit.*, Dec. 1923. Gross receipts from the octrois duties in 1922 were 500,319,945 francs, Bulletin de Statistique et de Législation Comparée, Jan. 1924, p. 39. Receipts from this source in 1923 were estimated on the basis of the increase shown over 1922 for ten cities, including Paris (collecting two-fifths of the total), which collected approximately one-half of the total reported for 1922. Cf. Bulletin de Statistique Générale de la France, July and October, 1923, and January and April, 1924.

[7](*London*) *Economist*, March 15, 1924, p. 576.

CHAPTER III

EXEMPTIONS FROM TAXATION

Closely intertwined and correlated with the problems arising out of the growth in burdens of taxation is the matter of their equitable distribution. A given volume of taxation may at one time bear more heavily on those least able to pay than the same volume of taxation at another period, thus reducing the standard of living of the majority, while the relationship with other economic factors remains undisturbed. If, in raising a given amount by taxation, the alternative were between a highly graduated personal income tax and a general sales tax, it is clear that the burden of taxation resting on the political unit as a whole would be the same under either proposal, other things being equal, but it is also patent that the distribution of the tax burden would be different under the two plans. If means of avoiding the higher surtax rates of the personal income tax did not exist, such as through investment in tax-exempt securities or the creation of trusts, and the tax were universal, sound economic theory supports the view that it would not ordinarily be shifted to others. On the other hand, a general sales tax would most likely be shifted either entirely or in greater part, depending upon certain factors. Thus, knowledge of conditions affecting the distribution of taxation is of ranking importance with quantitative facts relating to the volume of taxation.

Among other factors, exemption from taxation vitally affects the distribution of the tax burden. It will be found in income tax systems as well as under the general property tax; in the one case, certain incomes are exempt and in the other case the income-producing asset, i. e., wealth, is freed from the obligation to contribute toward the support of the state. Some of these exemption measures may be desirable from the practical and administrative point of view. They may be politically expedient and may be the outgrowth of the clash between certain social and political forces. Other exemptions may be accorded on the grounds of general social and cultural utility. In all such cases it should nevertheless be borne in mind that government must receive its support from the members of the nation year in and year out and that in so far as the owners of certain kinds of property and recipients of certain amounts or forms of income are exempt from the obligation to contribute regularly toward the support of the state, the burden of maintaining government falls upon the remaining property and incomes.

Property Exemptions

According to the U. S. Census Bureau figures, in Table 6, the true value of real property and improvements exempt from taxation in this country reached $20.5 billions in 1922, as compared with $12.3 billions in 1912, $6.8 billions in 1904 and $6.2 billions in 1900. The larger part of the increase probably represents additions of new property exempted rather than enhanced valuation of property already enjoying this privilege. It is highly probable that the values of exempt property err on the side of understatement, since there is little incentive on the part of local assessors to bring these figures in line with up-to-date valuations. The list embraces real property of federal, state and local governments; that held by charitable, religious, benevolent, eleemosynary, humanitarian and educational institutions; the property of scientific, literary, historical and temperance societies, public and private libraries, credit unions, building and loan associations, medical societies, cooperative associations, fraternal organizations, cemeteries, observatories, vessels in ocean trade, hotels, dwelling houses, buildings, household personalty, property of ministers, widows, orphans, etc. The condition and

TABLE 6: REAL PROPERTY AND IMPROVEMENTS, TAXED AND EXEMPT, 1922[1]

State	Taxed (thousands)	Exempt (thousands)	Ratio of exempt to taxed property (per cent)
United States, total	$155,908,625	$20,505,819	13.15
Alabama	1,308,247	111,625	8.53
Arizona	659,158	156,436	23.73
Arkansas	1,401,328	79,829	5.70
California	7,378,687	982,035	13.31
Colorado	1,388,818	369,628	26.61
Connecticut	2,580,042	444,441	17.23
Delaware	290,241	38,134	13.14
District of Columbia	796,475	478,424	60.07
Florida	1,440,203	111,510	7.74
Georgia	1,783,798	170,938	9.58
Idaho	621,819	276,356	44.44
Illinois	11,526,881	1,041,845	9.04
Indiana	4,161,777	493,012	11.85
Iowa	6,858,269	315,282	4.60
Kansas	3,527,241	269,233	7.63
Kentucky	1,683,911	181,028	10.75
Louisiana	1,351,902	179,333	13.27
Maine	932,221	87,725	9.41
Maryland	1,719,338	248,951	14.48
Massachusetts	6,070,427	1,085,683	17.88
Michigan	5,275,505	514,974	9.76
Minnesota	4,893,375	310,833	6.35
Mississippi	1,042,435	96,524	9.26
Missouri	5,426,340	369,966	6.82
Montana	990,777	233,158	23.53
Nebraska	3,338,929	191,726	5.74
Nevada	154,865	100,604	64.96
New Hampshire	574,145	90,823	15.82
New Jersey	5,225,946	624,621	11.95
New Mexico	326,232	114,540	35.11
New York	16,741,770	4,016,064	23.99
North Carolina	2,209,432	161,933	7.33
North Dakota	1,325,430	300,533	22.67
Ohio	9,239,962	936,335	10.13
Oklahoma	1,706,556	366,399	21.47
Oregon	1,729,357	360,154	20.83
Pennsylvania	13,249,458	1,664,665	12.56
Rhode Island	801,799	110,620	13.80
South Carolina	1,073,758	116,186	10.82
South Dakota	1,890,843	181,775	9.61
Tennessee	2,246,710	252,668	11.25
Texas	5,564,437	398,169	7.16
Utah	620,856	174,191	28.06
Vermont	352,521	42,849	12.16
Virginia	2,422,957	349,416	14.42
Washington	2,831,228	426,071	15.05
West Virginia	3,019,133	231,560	7.67
Wisconsin	3,889,870	320,484	8.24
Wyoming	263,216	326,530	124.05

[1]Figures of United States Bureau of the Census. Preliminary figures.

degree of exemptions varies from state to state, as indicated in a previous report.[1]

As of 1921, the Conference Board had independently estimated the value of exempt real property and improvements at $18.4 billions, exclusive of exempt property in the District of Columbia and of the national forests.[2] The ratio of the value of exempt to taxed real property and improvements rose from 11.7% in 1912 to 13.2% in 1922. The average annual increase in the value of legally exempt property between 1912 and 1922 was 6.7%.

The significance of real property exemptions differs in the various states; in some this problem is more acute than in others. In western states, where the national forests of the Federal Government are especially to be found, the ratio of exempt to total real property is by this circumstance enhanced to an extraordinary degree, amounting to 124% in Wyoming, 44% in Idaho, 65% in Nevada, 35% in New Mexico, 28% in Utah and 21% in Oregon, as will be observed from Table 6. The land and timber of the national forests have recently been appraised by the U. S. Forest Service at above a billion dollars, exclusive of intangible values. While technically the national forests are exempt from the annual levy upon all other property in the states where the forest preserves are located, it must nevertheless be remembered that the Federal Government contributes to the local coffers voluntarily, which should be construed as a subvention or grant in lieu of taxes. Congress has provided, since the inception of its conservation policy, that 25% of the gross revenues from the sales of timber, privilege of raising live stock on the land and other uses is to be paid to the separate states in which the national forests are respectively situated, for the benefit of school and road funds. Furthermore, an additional 10% is appropriated under permanent legislation for con-

[1]National Industrial Conference Board, "Tax Burdens and Exemptions," Research Report No 64, Chapter V, and Appendices A and B.

[2]National Industrial Conference Board, "Tax Burdens and Exemptions," Research Report No. 64, p. 71. The two were excluded because the Federal Government contributes toward the support of local governments within whose jurisdiction the federal property is located.

struction and maintenance of roads and trails in the national forests, thereby providing a means of communication which would otherwise have had to be maintained by local governments or would not exist at all. These contributions are held to be greater than any local community could have hoped to secure permanently under the general property tax, were the land held under private ownership.[1]

A similar situation exists in the District of Columbia, where the ratio of exempt to taxable property is high, viz., 60% in 1922. By far the larger portion of exempt property in the District of Columbia represents real estate, improvements and personal property of the Federal Government, and while the latter is legally exempt from taxation, the Federal Government nevertheless makes due compensation for this privilege, defraying a fixed proportion of the District's expenses through regular appropriations.

Barring the states in which this peculiar situation prevails, it is found that New York ranks highest among all the states in the ratio of exempt to taxable property, with 24.0%. Other states whose ratio of exempt to taxable property is high are: Massachusetts, 17.9%; Connecticut, 17.2%; Delaware, 13.1%; Louisiana, 13.3%; Maryland, 14.5%; New Hampshire, 15.8%; Pennsylvania, 12.6%; Rhode Island, 13.8%; and Virginia, 14.4%.

Real estate and improvements do not, however, exhaust the list of property legally freed from the burdens of state. A vast amount of personal property is by law exempted from taxation, such as securities issued by federal, state and local governments and personal property of institutions, associations, organizations, etc., whose real property is exempt, whether in the form of intangibles or otherwise. The practice with respect to the taxation of public securities varies considerably with the issuing authority. Federal Government securities are exempt from state and local taxation and vice versa; yet the Federal Government now taxes the bulk of its own securities for federal revenue purposes, while some of the states, such as Pennsylvania,

[1]Letter of the U. S. Forest Service, dated March 28, 1923.

tax the securities of local governments within their jurisdiction for state revenue purposes.

If to the total of real property exempt from taxation were added the vast amount of personal property represented in the security holdings of foundations and endowments and in government securities, it may be estimated that the value of property legally exempt from taxation reaches the stupendous figure of $55.5 billions, the principal and income of which are beyond the reach of the tax collector of state and local governments. This figure is net, after cognizance is taken of duplications in the case of individuals and institutions and in that of government securities held in public sinking funds.

What portion does this total of exempt property bear to our wealth? It would be interesting and instructive to relate exempt property to wealth as viewed by the taxing power, but the available estimates refer only to tangible wealth. Under the original general property tax law,[1] a home valued at $10,000 and mortgaged for $5,000 affords a taxable base of $15,000 for taxation purposes, i.e., the home is taxed to the owner at $10,000 and the mortgage is taxed in the hands of the mortgagor at $5,000. The value of the tangible wealth is only $10,000; the value of the wealth from the taxing standpoint is, however, $15,000. Only a portion of *intangible* property (i.e., bonds, stocks, notes, mortgages, etc.), is predicated on *tangible* property, such as mortgage bonds of railroads, public utilities and real estate generally. It is believed, however, that a material portion of intangible property is based on considerations that bear no definite relationship to tangible property, such as patents, good will, capitalization of earning power, franchises and the like. Issues of public authorities are by no means always based on tangible property; the preponderance of bonds issued by the Federal Government as well as by most national governments abroad has been for war purposes, i.e., for the most part for the destruction rather than the creation of wealth.

A comparison of exempt *tangible and intangible* property

[1]As existing in most states today.

with only *tangible* wealth is, therefore, not strictly valid; but in view of the fact that there are no data which afford an estimate of the total wealth from the taxing standpoint, a useful purpose is nevertheless served to a limited extent in comparing such data as exist.

Federal Income Tax Exemptions

Another form of exemption that requires careful analysis is that found in the federal income tax system. The law permits a deduction from taxable net income on account of personal exemptions, amounting to $1,000 in the case of an unmarried person, $2,000 in the case of a married person and $400 additional for each child or dependent. An additional $500 exemption is granted to married persons whose net income is less than $5,000. Since the vast majority of those filing a return report an income of less than $5,000, it may be estimated that the average exemption to married men works out approximately at $3,500, on the basis of the size of the average family according to the United States Census of Population.

What has been the result of these provisions? Out of a total of 6,787,481 persons who filed an income tax return in 1923 (applying to 1922 incomes), 3,106,232 or 46% did not have to pay a tax at all, largely as a result of the personal exemptions. Out of a total of 6,662,176 persons who submitted a return to the Federal Government in 1922 (applying to 1921 incomes), 3,072,191 or 46% had no income tax to pay because the specific exemptions, largely personal, exceeded their taxable net incomes.

Compilations of the United States Bureau of Internal Revenue indicate that in the tax year 1922 (returns filed in 1923), $14.7 billions out of the total net income of the nation of $21.3 billions were exempted from income taxation by virtue of personal exemptions and credits for dependents. This was 69% of the total income. In the tax year 1920 (returns filed in 1921) this ratio had been only 54%. More than 89% of total normal tax and surtax on individuals was collected in 1923 from those whose income in 1922 exceeded $5,000, as compared with 87% in 1922 for 1921 incomes. Those whose incomes in 1922 were \$2,000 or less paid 3.2% of the total amount collected; those between \$2,000 and \$3,000, 2.4% and those between \$3,000 and \$5,000, 5.5%. In 1923 (applicable to incomes of 1922), more than 28% of the total collections was secured from what constitutes the middle class, i. e., with incomes from \$3,000 to \$25,000, and more than 31% was collected from the group with incomes from \$25,000 to \$100,000.

Still more striking is the comparison of those who paid an income with the number of persons gainfully employed. If the number of gainfully employed over 16 years of age is taken as the base, instead of the total over 10 years of age as reported by the United States Census Bureau, an approximation to the total number of independent workers and taxpayers of the nation is thus ascertained, since the gainfully employed from 10 to 15 years of age are mostly children working on their parents' farms or in their parents' businesses. Those who paid an income tax in 1922 on 1921 incomes represented less than 9% of the total number of gainfully employed sixteen years of age and over, and in 1923 returns, based on 1922 incomes, this percentage was identical.

The Census of 1920 disclosed that out of 24.3 million families 12.9 millions or more than half lived in rented houses. The latter group feels for the most part that it is not paying state and municipal taxes on real estate,[1] although these are in large part shifted in the form of higher rents and to the extent that they are shifted, they become just as real a burden as if a separate bill for taxes were rendered each tenant instead of being concealed in the rents paid to the landlord. Invisible taxation of this nature, coupled with the widespread exemptions accorded under the federal income tax law, lull the vast bulk of taxpayers into the belief that governmental costs are of little concern to them. They are not conscious of

[1]In 1922, 83% of all tax revenues collected by state and local governments in this country was derived from the general property tax, which is principally a burden on land and improvements.

having paid a tax indirectly and hence, enjoying the preponderance of voting power, do not hesitate to approve without much thought projects that involve heavy expenditures on the part of the community, on the assumption that these improvements will benefit the majority without cost to them. This pernicious fallacy gives rise to civic indifference and fiscal laxity that is of serious concern in their effects on the economic and social structure of the country. Under our democratic system of government, the judgment of the electorate determines in the last analysis the fiscal, economic, and social policies to be pursued by governmental authority; but if the electorate is deceived as to the true nature of the burdens being imposed upon the minority in ever-increasing amount and fails to appreciate in full measure the significance of the shifting and final incidence of taxation, the results can only be disastrous from every point of view. The overwhelming majorities by which proposals for bond issues are everywhere carried offer eloquent testimony to this increasing lack of adequate consideration on the part of the electorate.

CHAPTER IV

TOTAL GOVERNMENTAL EXPENDITURES

The amount raised in taxes in any given year and the amount disbursed in the same period are not identical, although in the long run the one must govern or control the other. Governments receive revenues from sources other than through taxation. There are fines and penalties which governments impose upon legal and physical persons by virtue of their sovereign powers; there are forfeits which accrue to public authorities by virtue of non-fulfillment of contracts and by escheats, which represent the amounts received from the disposal of property whose owners cannot be located. There are subventions and grants from one civil unit to another for the support of specified functions, such as federal aid to states for constructing highways. Also to be included in non-tax revenue are donations and gifts from private individuals to public authorities and special assessments for the purpose of defraying the cost of specific public improvements which are in the general interest of the community but which inure to the special benefit of the individual whose property adjoins the improvement. This list would also include assessments for pension and retirement funds, payments for highway privileges such as the use of streets and alleys of cities, maintenance of private sewers, drains or vaults, stands and extension of structures, signs and conveniences beyond the building line, rentals from investment properties, interest on public funds, the large amount of fees and charges exacted by various departments for specific services and the earnings of enterprises operated by governmental authorities, such as the supply of water, gas, electricity, railway transportation, markets and the like.

In addition to the revenues received from taxation and from the miscellaneous non-tax sources enumerated above, disbursing authorities have another lucrative means of meeting their annual expenditures and that is through the exercise of their right to borrow. That state and local authorities have availed themselves freely of public credit will be clearly seen in the following chapter.[1] In the last few years, new issues of securities by state, municipal, county and other local government units have averaged considerably above a billion dollars annually. The net proceeds from loans are seldom equal to the face value; in some cases premiums are secured, a circumstance that is especially true of the larger cities, while in other cases bonds are sometimes sold at a discount. The deductions from, or additions to, the face value of public bonds on account of discounts, premiums and commission are, however, relatively unimportant considerations when taken in the aggregate.

Knowledge of tax and non-tax revenues and proceeds from loans will not, however, suffice to afford a complete basis for estimating total public disbursements. A political unit may spend less than its total receipts and thus roll up a surplus which it can utilize at some later period for reduction of taxation or to meet extraordinary expenditures. It is therefore essential to examine changes in cash balances at the beginning and at the end of any period with which the investigation is concerned.

Expenditures in 1923

In accordance with the above-described method of procedure, it is estimated that total governmental expenditures, including capital outlays, totaled $10,045 millions in the year 1923. This huge total represents the sum of $91 for every man, woman and child in the United States. These figures compare with $1,570 millions in 1902[2], or

[1]Chapter V.
[2]U. S. Census Bureau, "Wealth, Debt and Taxation, 1902-1903," Washington, 1907, pp. 963 ff.

CHART 3: VOLUME AND BURDEN OF TOTAL GOVERNMENTAL EXPENDITURES, UNITED STATES

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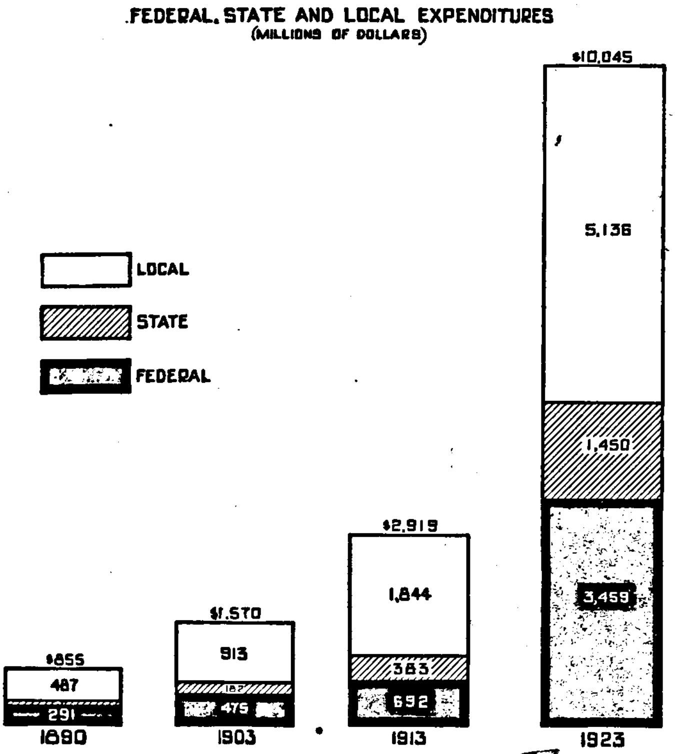
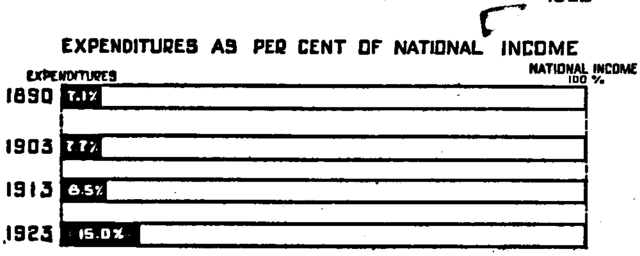
New York City





$19.40 per capita, and $855 millions in 1890,[1] or $13.56 per capita, as may be observed from Table 7.

TABLE 7: TOTAL GOVERNMENTAL EXPENDITURES, UNITED STATES

	Total (millions)				Per capita			
	1890	1903[1]	1913	1923	1890	1903[1]	1913	1923
Federal.........	$291	$475	$692	$3,459	$4.61	$5.87	$7.17	$31.26
State...........	77	182	383	1,450	1.22	2.26	3.97	13.10
Local...........	487	913	1,844	5,136	7.72	11.27	19.10	46.41
Total......	$855	$1,570	$2,919	$10,045	$13.56	$19.40	$30.24	$90.77
National income.	$12,082	$20,500	$34,400	$67,000	$191.61	$253.14	$356.43	$605.44
Ratio of total expenditures to national income	7.1%	7.7%	8.5%	15.0%	7.1%	7.7%	8.5%	15.0%

[1]Some expenditures are for 1902 and in others for 1903. U. S. Census Bureau figures for 1890 and 1902.

Only one-third of all public expenditures in 1923 were attributable to the Federal Government, namely, $3,459 millions. Only the net result, i. e., the deficit of the opera-

[1]U. S. Census Bureau, Eleventh Census, "Valuation and Taxation," Part II, p. 409 ff.

CHART 4: PER CAPITA TOTAL GOVERNMENTAL EXPENDITURES, UNITED STATES

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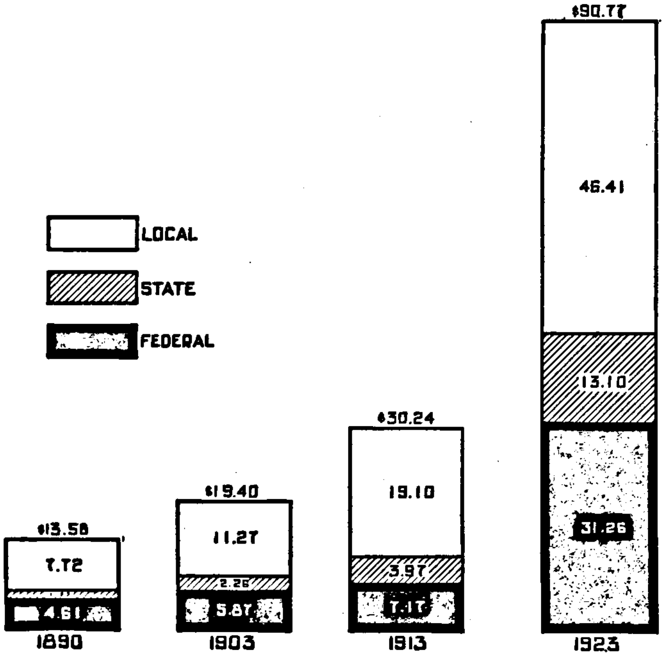
New York City



tion of the postal service, is included in this figure. State governments spent, in 1923, $1,450 millions, and all local governments disbursed $5,136 millions. An idea of the magnitude of these figures may be gleaned from the fact that the combined disbursements of all governmental units in this country in 1923 was equivalent to 93% of the total amount paid out in wages and salaries by all the manufacturing plants in the country covered in the last Census of Manufactures, that taken in 1921.

It is significant that total governmental expenditures represented 15% of the national income in 1923, as compared with 8.5% in 1913, 7.7% in 1903 and 7.1% in 1890. Part of this increase is attributable to extension of public ownership and to increased costs of operation due to changes in price levels, but the larger part undoubtedly reflects enhanced functions and outlays and increased costs of running government itself. If due cognizance is taken of changes in price levels, it is found that, in terms of dollars of 1913 purchasing power, the combined disbursements of all governmental authorities in this country amounted to $6,523 millions in 1923, or $59 per capita, against $2,919 millions, or $23 per capita in 1903 and $1,056 millions, or $17 per capita, in 1890.

Expenditures of the Federal Government

Taking the fiscal year 1924, which is the latest period for which the complete details of actual transactions are available, it will be observed from Tables 8 and 9 that general administration accounted for only 3.4% of all expenditures from the Federal Treasury, embracing legislative, judicial, executive and general administrative disbursements. Civil functions accounted for 12.5% of the total. In the latter subdivision are grouped:

(1) Public works, 5.8%;

(2) Promotion, regulation and operation of marine transportation, i. e., Shipping Board and related expenditures, 2.4%;

(3) Promotion and regulation of land transportation, credit, 1.7%.

(4) Postal service and deficits of war-time operation of telephone and telegraph system, 0.4%;

(5) Promotion and regulation of agriculture, 0.9%;

(6) Aid to local governments, 0.9%;

(7) General law enforcement, 0.6%;

(8) Promotion of public health, 0.4%;

(9) Administration of public domain, 0.5%;

(10) Foreign relations and protection of American interests abroad, 0.4%;

(11) Promotion and regulation of commerce and industry, 0.5%;

(12) Administration of Indian affairs, 0.4%;

(13) Promotion of public education, 0.3%;

(14) Miscellaneous, 0.7%.

Out of a total of $424 millions for civil functions in a grand total of $3,404 millions, less than $9.3 millions were devoted to science and research as such, or one-fourth of one per cent.

Military functions accounted for 35.5% of the total of governmental expenditures from the Federal Treasury, of which 16.6% was directly for national defense and 18.9% for military pensions, retirement pay, annuities, World War allowances and life insurance claims. Interest on the public debt, which was incurred in greater part for war purposes, accounted for 27.6%, and amortization of the debt required an additional 13.5% of the total. Thus, approximately three-fourths of the Federal Government expenditures relate to past wars or to general national defense. The expenditures for interest on the public debt and its amortization are, however, offset by receipts from interest on and repayments of loans made to foreign countries and to railroads in this country. Thus from preliminary figures for the fiscal year ended June 30, 1924, it is found that $1,399 millions were spent for interest and amortization out of ordinary receipts, while the receipts from foreign governments were $222 millions and from the railroads and others, $104 millions. The public debt is being retired at the rate of approximately a billion dollars annually, and as the foreign governments proceed to fund their indebtedness to the United States, the net expenditures on account of our public debt will rapidly decline.

TABLE 8: FEDERAL GOVERNMENT EXPENDITURES,

(Figures in millions of dollars)

Functions	1925	1924	1923
General functions			
1. Legislative	$8.7	$8.8	$9.0
2. Judicial	11.2	10.4	12.2
3. Executive	.4	.4	.4
4. Administrative	87.8	96.6	96.1
Military functions			
1. Pensions[2]	656.3	642.6	729.3
2. Others	548.8	566.9	599.3
Civil functions			
1. Foreign relations	14.7	13.7	13.9
2. General law enforcement	21.3	19.3	19.3
3. Control of currency and banking	6.6	6.9	7.5
4. Administration of Indian affairs	12.0	13.0	11.3
5. Administration of public domain	16.5	17.8	17.0
6. Commerce and industry	14.5	15.2	13.2
7. Marine transportation	48.9	81.5	101.8
8. Land transportation	4.1	57.5[3]	66.7
9. Postal service, telegraph and telephone	2.1	12.8	32.8
10. Agriculture	25.9	31.2	28.2
11. Fisheries	1.3	1.1	1.3
12. Labor interests	4.8	5.2	6.4
13. Immigration and naturalization	3.8	4.2	3.9
14. Public health	15.8	14.2	15.1
15. Public education	10.4	9.2	9.8
16. Science and research	13.3	9.3	8.9
17. Public works	166.7	196.4	156.3
18. Revenue producing enterprises	.2	.2	.2
19. Local governments	32.2	30.8	29.7
20. Relief expenditures	.2	.1	.2
Nonfunctional			
1. Public debt retirements	482.3	457.9	403.0
2. Interest on the public debt	890.0	938.7	1,055.1
3. Trust funds	81.6	86.4	75.4
4. Refunds, losses, etc.	111.7	159.5	157.9
5. Miscellaneous	4.0	11.4	33.6[4]
Total expenditures from treasury	$3,298.1	$3,404.3	$3,647.6
Add postal service	611.2	572.9	532.9
Total expenditures	$3,909.3	$3,977.2	$4,180.5
Recapitulation			
General functions	$108.1	$116.3	$117.7
Military functions	1,205.1	1,209.5	1,328.6
Civil functions	415.3	424.5	543.5
Interest and amortization of debt	1,372.3	1,396.6	1,458.1
Other nonfunctional expenditures	197.3	257.4	199.7
Postal service	611.2	572.9	532.9
Total	$3,909.3	$3,977.2	$4,180.5

*Footnotes for this Table on page 42.

CLASSIFIED BY FUNCTIONS, 1915–1925[1]*

(Figures in millions of dollars)

1922	1921	1920	1919	1918	1917	1916	1915
$8.4	$9.1	$9.7	$7.3	$7.3	$7.4	$6.7	$6.9
9.3	8.6	8.6	7.0	6.5	6.3	6.3	6.4
.2	.3	.3	.3	.3	.3	.3	.3
96.8	109.8	111.8	96.9	60.4	41.0	38.5	37.9
738.3	645.8	331.6	323.8	234.9	171.3	171.0	176.1
790.6	1,140.6	2,028.0	11,403.1	7,117.9	669.6	279.1	260.3
9.5	8.1	10.4	8.6	8.8	5.1	5.1	4.6
16.1	16.1	10.2	7.0	5.5	4.3	4.4	4.1
6.9	9.6	6.8	6.0	5.1	3.9	2.4	2.7
12.2	13.6	13.7	12.5	12.6	12.9	12.3	12.8
16.2	18.7	18.5	11.2	13.5	11.5	11.1	11.4
10.2	8.4	9.6	7.3	5.8	4.4	3.5	2.9
113.3	124.7	495.4[6]	1,898.4[6]	848.4[6]	20.0	15.6	16.6
134.4[3]	535.0	1,038.4	354.9	155.4	5.2	5.0	3.8
67.8	135.3	50.4	2.3	4.1	1.9	7.3	8.5
26.9	34.8	20.0	15.5	29.2	14.2	12.6	14.5
1.2	1.3	1.4	1.0	1.1	1.1	1.1	1.0
5.8	5.8	2.3	79.3[4]	1.8	.7	.5	.8
4.4	5.0	3.5	3.6	4.2	3.2	2.9	3.3
14.9	21.0	24.9	12.5	7.6	6.8	7.4	7.1
7.5	7.2	5.9	4.8	4.7	3.4	3.1	3.2
11.5	13.9	21.4	8.0	8.0	6.6	6.8	7.1
168.8	158.9	92.6	72.3	76.0	73.2	69.0	98.9
.1	....	....	....	....	....	....	....
29.5	29.9	24.0	20.9	18.1	15.5	14.8	14.5
.3	1.9	93.5	.4	.3	1.2	....	3.2
422.3	422.4	....	....	....	....	....	....
989.5	996.7	1,024.0	615.9	197.5	24.7	22.9	22.9
69.8	58.6	34.3	25.0	21.7	21.1	10.1	14.0
88.0	54.3	45.8	66.8	35.0	24.2	21.2	14.8
16.1	294.3	602.7	3,879.5	4,903.6	924.9[6]	....	....
$3,618.0	$4,889.7	$6,139.7	$18,952.1	$13,795.3	$2,085.9	$741.0	$760.6
484.8	463.5	418.8	362.5	324.8	319.9	306.2	287.2
$4,102.8	$5,353.2	$6,558.5	$19,314.6	$14,120.1	$2,405.8	$1,047.2	$1,047.8
$114.7	$127.8	$130.4	$111.5	$74.5	$55.0	$51.8	$51.5
1,528.9	1,786.4	2,359.6	11,726.9	7,352.8	840.9	450.1	436.4
388.7	1,149.2	1,942.9	2,526.5	1,210.2	195.1	184.9	221.0
1,411.8	1,419.1	1,024.0	615.9	197.5	24.7	22.9	22.9
173.9	407.2	682.8	3,971.3	4,960.3	970.2[5]	31.3	28.8
484.8	463.5	418.8	362.5	324.8	319.9	306.2	287.2
$4,102.8	$5,353.2	$6,558.5	$19,314.6	$14,120.1	$2,405.8	$1,047.2	$1,047.8

TABLE 9: PERCENTAGE DISTRIBUTION OF FEDERAL

Functions	1925	1924	1923
General functions			
1. Legislative	0.26%	0.26%	0.25%
2. Judicial	.34	.31	.34
3. Executive	.01	.01	.01
4. Administrative	2.67	2.84	2.63
Military functions			
1. Pensions[2]	19.90	19.88	19.99
2. Others	16.64	14.65	16.43
Civil functions			
1. Foreign relations	.45	.40	.38
2. General law enforcement	.65	.57	.53
3. Control of currency and banking	.20	.20	.20
4. Administration of Indian affairs	.37	.38	.31
5. Administration of public domain	.50	.52	.47
6. Commerce and industry	.44	.45	.36
7. Marine transportation	1.48	2.39	2.76
8. Land transportation	.13	1.69[3]	1.83
9. Postal service, telegraph and telephone	.06	.38	.93
10. Agriculture	.79	.92	.77
11. Fisheries	.04	.03	.04
12. Labor interests	.14	.15	.18
13. Immigration and naturalization	.11	.13	.11
14. Public health	.48	.42	.41
15. Public education	.32	.27	.27
16. Science and research	.40	.27	.24
17. Public works	5.05	5.77	4.29
18. Revenue producing enterprises	.00	.00	.00
19. Local governments	.98	.90	.81
20. Relief expenditures	.00	.00	.01
Nonfunctional			
1. Public debt retirement	14.62	13.45	11.05
2. Interest on the public debt	26.99	27.58	28.92
3. Trust funds	2.47	2.54	2.07
4. Refunds, losses, etc.	3.39	4.69	4.33
5. Miscellaneous	.12	.28	.92[4]
Total expenditures from treasury	100.00%	100.00%	100.00%
Recapitulation			
General functions	3.28%	3.42%	3.23%
Military functions	36.54	35.53	36.42
Civil functions	12.59	12.46	14.90
Interest and amortization of debt	41.61	41.08	39.97
Other nonfunctional expenditures	5.98	7.51	5.48
Total expenditures from treasury	100.00%	100.00%	100.00%

[1]Figures for 1925 represent budget estimates; all others, actual transactions as published by the U. S. Bureau of the Budget.

Government Expenditures from Treasury, 1915–1925[1]

1922	1921	1920	1919	1918	1917	1916	1915
0.23%	0.19%	0.16%	0.04%	0.05%	0.35%	0.90%	0.91%
.25	.18	.14	.04	.05	.32	.90	.86
.01	.00	.00	.00	.00	.00	.00	.00
2.68	2.24	1.82	.15	.44	1.97	5.19	4.97
20.41	13.21	5.40	1.70	1.70	8.21	23.07	23.14
21.84	23.32	33.03	60.17	51.61	32.07	37.65	34.18
.26	.17	.17	.05	.06	.25	.69	.60
.45	.33	.17	.04	.04	.22	.59	.60
.19	.20	.11	.03	.04	.21	.32	.40
.34	.29	.23	.07	.09	.61	1.66	1.69
.44	.39	.29	.06	.10	.55	1.60	1.49
.28	.17	.16	.04	.04	.22	.48	.40
3.14	2.56	8.06	10.02	6.15	.86	2.15	2.20
3.70[a]	10.90	16.94	1.87	1.13	.25	.67	.49
1.87	2.78	.82	.01	.03	.09	1.00	1.12
.74	.72	.33	.08	.21	.68	1.70	1.90
.03	.03	.02	.01	.01	.10	.17	.14
.15	.12	.04	.42	.01	.00	.00	.10
.12	.10	.06	.02	.03	.15	.35	.43
.41	.43	.41	.06	.06	.34	1.00	.93
.21	.15	.09	.03	.03	.15	.40	.42
.32	.28	.35	.04	.06	.35	.90	.94
4.67	3.25	1.51	.38	.55	3.55	9.30	12.97
.00	...	...	...	...	...	...	...
.82	.61	.39	.11	.13	.75	2.00	1.90
.01	.04	1.51	.00	.00	.05	.00	.42
11.68	8.64	...	...	...	...	...	...
27.35	20.38	16.67	3.25	1.43	1.19	3.20	3.00
1.93	1.19	.56	.13	.15	1.00	1.40	1.85
2.43	1.11	.74	.35	.25	1.18	2.80	1.95
.44	6.02	9.82	20.47	35.55	44.33	...	...
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
3.17%	2.61%	2.12%	0.59%	0.54%	2.64%	6.90%	6.74%
42.25	36.53	38.43	61.87	53.31	40.28	60.72	57.32
10.75	23.52	31.66	13.34	8.77	9.38	24.98	29.14
39.03	29.02	16.67	3.25	1.43	1.19	3.20	3.00
4.80	8.32	11.12	20.95	35.95	46.51	4.20	3.80
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

[1]Includes military pensions, retirement pay, annuities, World War allowances, and life insurance claims.
[a]Credit.

Expenditures for Education

Education constitutes the principal object of expenditure in local government budgets. As an indication of this position, figures relating to New York and Wisconsin may be cited. Out of a total of $632.2 millions raised in taxes for state and local purposes in New York in 1922-1923, $179.4 millions or 28.4% were expended for education, as against $109 millions or 17.3% for debt service, $68.9 millions or 10.9% for highways, $76.8 millions or 12.2% for general government, $74.7 millions or 11.8% for protection to persons and property, and $61.7 millions or 9.8% for charities, hospitals, and correction.[1] In Wisconsin, out of a total of $173.6 millions expended by state and local authorities in the fiscal year 1923, $53.3 millions or 30.7% went for education, as compared with $47.1 millions or 27.1% for highways and bridges, $20.5 millions or 11.8% for public debt, $10.6 millions or 6.1% for protection of persons and property, $10.4 millions or 6.0% for health and sanitation, $9.8 millions or 5.6% for general government, and $9.6 millions or 5.5% for charities and corrections.[2]

This country is definitely committed to universal education, compulsory for certain ages, and open to all those who wish to avail themselves of the opportunity. Not only has there been an improvement in the curricula offered, in quantity as well as quality, but notable advances have been made in securing better trained teachers and superior equipment, facilities and buildings. These advantages

[1]Annual Report of New York State Tax Commission, Legislative Document No. 25, 1923, pp. 54-55.
[2]Wisconsin Tax Commission, Bulletin No. 21, July, 1924, p. 000.

Footnotes to Table 8

[1]Figures for 1925 represent the budget estimates; all others, actual transactions as published by the U. S. Bureau of the Budget.
[2]Includes military pensions, retirement pay, annuities, World War allowances, and life insurance claims.
[3]Credit..
[4]Includes housing for war needs.
[5]Includes $25 millions paid to Denmark for Danish West Indian Islands (Virgin Islands).
[6]Largely deficits from government control of railroads during war emergency up to and including 1920.

and others similar in character are costly and place an increasing burden on the community that desires them. In private finance the wishes of the individual are circumscribed by his income realities and possibilities; the same thought, although perhaps in a somewhat more flexible form, should govern public action. It may be highly desirable to undertake a certain project of improvement at any given moment of time, but if the income of the community is already heavily burdened with annual fixed charges and if the ability of the taxpayers has been seriously impaired, it may be necessary to postpone installation to a more propitious period. At any rate, patience and deliberative action are virtues in matters concerned with public finance, just as they are in private life.

That the cost of education has risen rapidly in recent years is confirmed by abundant statistical evidence of an official nature. As shown in Table 9, expenditures on elementary and secondary schools that are publicly supported had practically doubled themselves in some decades even before the drastic upheaval in prices which occurred since the outbreak of the World War. In 1870, the total cost of elementary and high schools, *exclusive of debt service*, was $63 millions; in 1880, $78 millions; in 1890, $141 millions; in 1900, $215 millions; and in 1910, $426 millions. In 1915, there was an increase to $605 millions; in 1918, to $764 millions; in 1920, to $1,036 millions; and the latest figures, appertaining to 1922, show a total of $1,581 millions. Between 1920 and 1922, the cost thus showed an increase of 53%, and in all probability the total expenditure for elementary and high school education in 1924 will exceed $2 billions. The cost per pupil in average attendance has grown from $16 in 1870 to $20 in 1890, $33 in 1910, $49 in 1918, $64 in 1920 and $86 in 1922, as may be observed from Table 10.

The cost of elementary and high school education represents, however, only a part of the total cost of education in this country. There are private, elementary and high schools, business schools, public and private universities and colleges, teachers' colleges, public and private normal

TABLE 10: EXPENDITURES FOR PUBLIC SCHOOL EDUCATION[1]

(National Industrial Conference Board)

Year	Amount[2]	Per pupil in average attendance	Value of school property[2]
1870	$63,397	$15.55	$130,383
1880	78,095	12.71	209,572
1890	140,507	17.23	342,532
1900	214,965	20.21	550,069
1905	291,617	25.40	733,447
1910	426,250	33.23	1,091,008
1915	605,461	40.43	1,567,391
1918	763,678	49.12	1,983,509
1920	1,036,151	64.16	2,409,719
1922	1,580,671	85.76	....

[1]United States Department of the Interior, Bureau of Education, Bulletin 1919, No. 90, Vol. III, pp. 54–55; Bulletin 1923, No. 16, p. 2; Bulletin 1922, No. 29. Figures appertain to elementary and secondary schools and do not include debt service.
[2]Figures in thousands.

schools, industrial schools for delinquents, blind and deaf, feeble-minded and subnormal, nurse training schools, Indian schools, etc. In 1902, the aggregate expenditure for all public and private education of every nature was approximately $375 millions. By 1918, this amount had grown to $1,060 millions; by 1920, this figure was $1,450 millions, and in 1922, which is the latest year for which detailed data are available, this cost was $2,145 millions. Between 1920 and 1922 the total cost of education, public and private, increased 48%. In 1924, it may safely be estimated that this figure will reach in excess of $2,750 millions, even on the most conservative basis.[1]

The increase in population from about 39 millions in 1870 to 76 millions in 1900 and 106 millions in 1920 had in itself resulted in increased costs of education through the continued gain in number of children that have to go through the schooling process. Between 1890 and 1920 the number of children in average daily attendance in public schools had doubled. Even if this factor of population be taken into account, it will still be found that the

[1]For sources of earlier figures, see Research Report No. 64, *op. cit.*, p. 26 ff. Figures for 1922 represent a special compilation from data in the office of the U. S. Bureau of Education.

expenditure per child increased three times as rapidly as the growth in the number of children in average daily attendance, between 1890 and 1920. The explanation for these increased expenditures is succinctly stated in a recent bulletin of the United States Bureau of Education, in the following language:

"The number of children attending public school and, consequently, school costs have greatly increased during the last quarter of a century, due to the enactment of compulsory school laws and by the extension of the school age. In 1894-95, according to the Commissioner of Education, there were 19 states which had no compulsory school law. In 1920 there was not a single state in the Union which did not have included among its statutes a compulsory school law. It is scarcely necessary to add that the degree of effectiveness with which these laws have been enforced has steadily increased throughout the past 25 years, with the result that a larger and larger percentage of children of school age has been found within the public schools. Not only is this true, but a comparison of the compulsory school age in those states, which in the year 1895 had a compulsory school law, with the compulsory school age in these same states for the year 1918 shows that while in New Hampshire the compulsory school age had decreased two years and in New Mexico one year and in five states it had remained unchanged, in 18 states it had increased all the way from one to four years. In this connection attention should be called to the fact that the length of the average school year in the United States increased from 130 days in 1880 to 135 days in 1890 and 162 days in 1920.

"Another factor which has played a large part in the increase of school costs in the United States is the multiplication of high schools and an unprecedented growth of high school attendance. How important these factors are can be better understood by a comparison of what it costs to educate a high school pupil with what it costs to educate an elementary school pupil. In 1918 the average cost in the United States per elementary school pupil enrolled was \$31.65; per high school pupil enrolled, \$84.48. It should be borne in mind that in 1918 the United States was in a period of retrenchment due to the World War, and although this period of retrenchment was by no means past in 1920, yet the expenditure per elementary pupil and per high school pupil was approximately double that of the year 1918, being, in fact, \$64.03 per elementary pupil enrolled and \$158.21 per high school pupil enrolled. From these facts we see that it costs approximately two and one-half times as much to educate pupils attending high schools as pupils attending elementary schools. These facts became of great significance in attempting to determine the reasons for mounting costs in education when we discover that seven times as large a proportion of our total population was attending high school in 1920 as was attending high school in 1890. More specifically, in 1890 three-tenths of 1% of the total population in the United States was enrolled in high school, whereas in 1920 2.1% was enrolled. In the year 1890 approximately 3 persons out of every 1,000 individuals in the United States were enrolled in high school; in 1920, 21 persons out of every 1,000. The trend becomes even more impressive when we turn our consideration from the total population to that portion of it actually enrolled in school. In 1890, out of every 1,000 children enrolled in school, only 16 were in high school; in 1920, out of every 1,000 children enrolled, 102 were enrolled in high school. Finally, we discover that, whereas in 1890 the United States was spending \$4,759,065, in 1920 her expenditure on public high schools, excluding all cities of less than 10,000 population, and excluding also costs of administration, capital outlay, and debt service, was \$66,024,307. . . . .

"Reference was made in a previous paragraph to the expansion of the course of study, to the development of vocational education and the establishment of continuation classes, and to the fact that a great number of new projects and new responsibilities have been assumed by the public schools. New conceptions of what our public schools must endeavor to do for the millions of children who, year after year, pass in and out of their schoolrooms have led to an expansion of the course of study and to the attempt on the part of our public schools not only to provide new types of instruction but to provide many types of physical care almost undreamed of by the directors of public education a quarter of a century ago. Some of the projects wellnigh unthought of at that time but which the public schools of today are undertaking are suggested by the following list: School doctors, nurses, dental clinics, psychological clinics, open air schools, supervised play, special schools and classes for blind, deaf, crippled, and mentally backward or deficient children, truant officers, home-visiting teachers, city systems of public kindergartens, extensive programs of physical and health education, free textbooks, and continuation classes for minors engaged in industry.

"To these causes must be added three others: A steady rise in the educational and professional qualifications demanded of public-school teachers, necessitating a steady increase in the salaries paid, and a similar continual rise in building and equipment standards. A final cause, and one which is frequently overlooked by the public, is the depreciation of the purchasing power of the dollar."[1]

The total cost of education represented 3.7% of the national income in 1922, as compared with 2.0% in 1920, 1.8% in 1902 and 1.4% in 1890. In the earlier stages it was necessary to devote an increasing proportion of the national income to educational purposes because of the relatively low standards then existing, but this process cannot continue indefinitely. The increasing cost of education is clearly a serious problem and one that needs to be faced with an open mind and with courage and foresight.

In some states, the problem of raising sufficient revenue for education is more pressing than in others. In New York State, there were raised in 1921 about $182 millions

[1]F. H. Swift, "A Biennial Survey of Public School Finance in the United States, 1920-1922," United States Bureau of Education, Bulletin No. 47, 1923, pp. 4-7.

TABLE 11: SCHOOL ENROLLMENT AND ESTIMATED COST OF EDUCATION IN 1922*

Classification	Enrollment	Estimated per capita of enrollment cost	Estimated total cost (including outlays)
Public elementary schools (including kindergartens)	20,366,218	$57.12	$1,163,374,074
Public high schools	2,873,009	145.25	417,297,222
Private elementary schools (including kindergartens)	1,355,000[1]	57.12	77,397,600[2]
Private high schools	225,873[1]	145.25	32,808,053[2]
Elementary and secondary schools in cities (included above)	10,280,987	93.73	963,674,904
Private business schools	337,130[1]	93.73[2]	31,599,195
Universities and colleges (includes preparatory students)			
Public	220,523	585.83	129,190,955[3]
Private	398,032	495.80	197,344,349[3]
State teachers colleges	129,237	141.06	18,229,601[3]
Normal schools:			
State	76,556	214.45	16,417,482[3]
City (included in city schools)	8,882	173.34	1,539,648
County	4,243	193.70	821,857
Private	12,083	352.19	4,255,525[3]
Industrial schools for delinquents	65,550	289.00	18,952,835
Schools for the deaf:			
State	10,738	618.00	6,636,084
City (included in city schools)	2,911	......	....
Private	716	846.00	605,736
Schools for the blind	4,947	585.00	2,893,995
Schools for the feeble-minded and subnormal:			
State	38,761	357.00	13,837,677
City (included in city schools)	23,252	......	....
Private	1,386	906.00	1,255,716
Nurse training schools (1920)	54,953	93.73[2]	5,150,745
City evening schools (included in city schools)	842,863	7.61	6,413,420
Government Indian schools	24,568	239.91	5,894,230
Schools in Alaska supported by the government	3,679	88.32	324,947
Other public schools in Alaska	3,654	99.12	362,190
Totals and average, excluding duplicates	$26,206,856	$81.84	$2,144,650,068
Per capita of population, (112,078,611) total cost			$19.13

*Data furnished by the U. S. Bureau of Education.
[1]Partly estimated.
[2]Estimated same as cost of public schools.
[3]Receipts, including endowments.

for educational purposes, of which $147 millions was by taxation, $23 millions by bond sales and the remaining $12 millions from miscellaneous sources. The total cost of education in 1921 was $219 millions, of which $168 millions represented the expenditures by tax-supported institutions. From 1910 to 1921, the cost of public education increased 190%, while the number of pupils enrolled in public elementary schools increased about 19%, the number of pupils enrolled in public high schools showed a gain of 72% and the entire population increased only 15%. From 1920 to 1922, expenditures for public education per child of school age increased almost five times as rapidly as real estate values, which constitute the principal basis of school taxation, and more than twice as rapidly as the total income of the people of New York State.[1]

Expenditures for Roads

Another important item in the list of objects of state and local government expenditure is that of roads. In 1904, the total amount spent on rural roads, exclusive of city streets, was only $79.7 millions;[2] in 1921, which is the latest year for which complete data are available, the total was $1,036.6 millions.[3] It is estimated from preliminary results that expenditures in 1922 and 1923 were approximately the same as in 1921.[4]

It is interesting to analyze the expenditures for rural roads in 1921. Of the total of $1,037 millions spent for this purpose, $413 millions or roughly two-fifths was defrayed by or under the supervision of state highway departments, i.e., under state government control, and $624 millions was contributed by counties, townships and districts. A total of $627 millions or 60.5% represented expenditures for new construction; maintenance absorbed $249 millions or 24% of the aggregate disbursements for

[1] Educational Finance Inquiry Commission, "The Financing of Education in the State of New York," prepared by G. D. Strayer and R. M. Haig, 1923, pp. 6, 7, and 11.

[2] U. S. Dept. of Agriculture, Office of Public Roads, Bulletin No. 32, August, 1907, p. 9.

[3] *Idem.*, "Public Roads," Vol. V, No. 4, June, 1924, pp. 7-8.

[4] From correspondence with the Bureau of Public Roads.

TABLE 12: TOTAL RURAL HIGHWAY EXPENDITURES, STATE AND LOCAL GOVERNMENTS, 1921[1]

State	Expenditures by state governments	Expenditures by local governments	Total expenditures	Expenditures per capita	Expenditure per person per mile of road (cents)
Total U. S.	$413,241,664	$623,346,108	$1,036,587,772	$9.65	.01976
Alabama	1,035,880	4,571,955	5,607,835	2.36	.00403
Arizona	2,948,482	7,700,003	10,648,485	30.06	.14162
Arkansas	7,055,000	14,156,014	21,211,014	11.92	.01592
California	11,379,601	30,443,371	41,822,972	11.65	.01536
Colorado	4,155,945	4,892,876	9,048,821	9.41	.01955
Connecticut	5,997,849	2,447,867	8,445,716	5.94	.04889
Delaware	3,765,283	2,270,354	6,035,637	26.68	.67843
Florida	2,103,277	7,484,856	9,588,133	9.57	.03462
Georgia	9,663,597	6,152,997	15,816,594	5.38	.00568
Idaho	4,862,715	6,944,668	11,807,383	26.34	.08469
Illinois	15,693,330	23,926,118	39,619,448	5.99	.00622
Indiana	8,110,045	46,392,287	54,502,332	18.38	.02410
Iowa	18,275,771	21,048,782	39,324,553	16.17	.01554
Kansas	6,057,609	16,612,498	22,670,107	12.73	.00990
Kentucky	5,756,950	6,865,713	12,622,663	5.18	.00754
Louisiana	5,347,042	8,674,961	14,022,003	7.70	.01935
Maine	7,371,591	1,330,320	8,701,911	11.27	.05247
Maryland	7,616,427	2,681,709	10,298,136	6.99	.04731
Massachusetts	7,864,223	11,671,408	19,535,631	4.97	.02636
Michigan	16,744,343	38,828,275	55,572,618	14.62	.01892
Minnesota	7,480,019	31,299,541	38,779,560	15.92	.01487
Mississippi	3,500,000	16,808,289	20,308,289	11.34	.02136
Missouri	4,726,795	11,400,864	16,127,659	4.74	.00423
Montana	3,640,461	6,742,696	10,383,157	18.04	.02787
Nebraska	4,835,774	5,691,835	10,527,609	8.02	.00927
Nevada	1,589,506	521,446	2,110,952	27.27	.10465
New Hampshire	2,360,229	1,339,192	3,699,421	8.31	.06006
New Jersey	15,608,234	12,487,836	28,096,070	8.64	.06145
New Mexico	3,712,662	546,343	4,259,005	11.65	.02558
New York	36,856,998	20,168,013	57,025,011	5.39	.00658
North Carolina	15,099,797	14,223,903	29,323,700	11.22	.01645
North Dakota	1,030,003	6,217,228	7,247,231	11.02	.01034
Ohio	15,547,460	61,032,527	76,579,987	12.95	.01538
Oklahoma	4,774,869	9,905,022	14,679,891	7.04	.00521
Oregon	18,245,821	9,723,092	27,968,913	34.94	.07683
Pennsylvania	49,011,856	26,337,697	75,349,553	8.48	.00932
Rhode Island	2,212,508	615,726	2,828,234	4.61	.20238
South Carolina	3,941,158	6,108,123	10,049,281	5.88	.00950
South Dakota	4,737,690	9,451,277	14,188,967	22.01	.01906
Tennessee	6,327,901	6,369,546	12,697,447	5.38	.00860
Texas	16,775,000	37,132,271	53,907,271	11.27	.00672
Utah	3,391,315	1,783,399	5,174,714	11.22	.04869
Vermont	951,290	1,199,194	2,150,484	6.10	.04157
Virginia	7,114,247	8,371,145	15,485,392	6.60	.01117
Washington	9,970,087	14,268,642	24,238,729	17.44	.03807
West Virginia	1,877,371	8,182,702	10,060,073	6.70	.01905
Wisconsin	12,416,876	29,296,892	41,713,768	15.58	.01980
Wyoming	3,700,777	1,024,635	4,725,412	23.41	.05031

[1]From data furnished by the U. S. Bureau of Public Roads.

TABLE 13: TOTAL RURAL HIGHWAY INCOME, BY STATES, 1904, 1914 AND 1921

State	Total rural highway income			Per capita			Index (1914=100)	
	1904[1]	1914[1]	1921[2]	1904	1914	1921	1904	1921
Total U. S.	$79,623,616	$240,263,784	$1,149,437,896	$0.98	$2.46	$10.70	40	435
Alabama	1,576,434	3,949,019	6,569,567	.81	1.77	2.76	46	156
Arizona	109,309	982,721	10,299,916	.80	3.77	29.08	21	771
Arkansas	1,395,343	1,522,696	22,886,970	1.01	.92	12.86	110	1398
California	2,157,396	19,171,985	49,691,895	1.35	6.77	13.85	20	205
Colorado	707 224	1,937,546	8,765,443	1.20	1.04	9.12	115	877
Connecticut	1,195,125	3,640,963	9,945,627	1.23	2.96	7.00	41	236
Delaware	90,803	511,628	5,487,318	.47	2.42	24.26	19	1002
Florida	577,577	2,280,255	11,939,922	.98	2.69	11.92	36	443
Georgia	2,080,872	3,688,172	17,332,046	.88	1.35	5.89	65	436
Idaho	311,588	1,371,469	13,113,443	1.63	3.69	29.25	44	793
Illinois	4,210,950	8,734,713	43,664,784	.81	1.45	6.60	56	455
Indiana	4,335,108	14,233,986	57,807,614	1.64	5.08	19.49	32	384
Iowa	3,106,608	10,187,507	37,991,782	1.40	4.42	15.62	32	353
Kansas	1,232,817	5,544,048	23,387,620	.80	3.21	13.13	25	409
Kentucky	2,148,689	2,474,621	11,528,264	.95	1.06	4.73	90	446
Louisiana	951,873	1,777 572	23,230,916	.64	1.03	12.76	62	1239
Maine	1,472,394	2,642,007	7,890,840	2.08	3.51	10.22	59	291
Maryland	873,471	6,000,652	10,725,960	.70	4.40	7.28	16	165
Massachusetts	2,871,222	6,091,875	19,269,069	.97	1.70	4.91	57	289
Michigan	3,179,788	9,261,998	55,662,357	1.26	2.91	14.64	43	503
Minnesota	1,961,629	6,458,940	40,357,925	1.01	2.92	16.57	35	567
Mississippi	1,675,485	3,960,377	25,738,917	1.01	2.21	14.37	46	650
Missouri	2,368,973	5,513,049	16,494,975	.72	1.65	4.82	44	292
Montana	404,098	2,888,401	10,031,901	1.43	6.40	17.43	22	272
Nebraska	878,547	1,796,278	13,446,782	.82	1.45	10.25	57	707
Nevada	46,876	245,014	2,291,344	1.11	3.06	29.60	36	967
New Hampshire	872,606	1,590,464	3,882,388	2.05	3.65	8.72	56	239
New Jersey	3,274,811	7,208,287	21,657,834	1.57	2.57	6.66	61	259
New Mexico	165,652	556,399	4,896,667	.79	1.63	13.40	48	822
New York	5,692,515	23,231,964	67,359,330	.72	2.40	6.37	30	265
North Carolina	1,358,687	5,215,491	32,841,625	.68	2.21	12.57	31	569
North Dakota	550,341	2,402,383	6,715,400	1.32	3.96	10.21	33	258
Ohio	5,706,084	14,334,246	82,275,668	1.31	2.76	13.92	47	504
Oklahoma	774,776	2,112,681	19,516,915	.77	1.16	9.36	66	807
Oregon	796,376	5,310,467	28,532,824	1.76	7.37	35.64	24	484
Pennsylvania	4,887,266	10,424,580	79,288,269	.73	1.28	8.93	57	698
Rhode Island	405,011	446,496	3,324,007	.86	.78	5.41	110	694
South Carolina	745,702	1,024,480	14,261,209	.53	.64	8.34	83	1303
South Dakota	383,283	1,217,809	15,248,232	.86	2.01	23.65	43	1177
Tennessee	1,621,777	2,370,560	16,443,936	.76	1.[illegible]	6.96	72	663
Texas	4,138,157	9,920,079	72,869,359	1.23	2.[illegible]	15.24	52	649
Utah	218,676	803,071	6,560,366	.72	1.98	14.23	36	719
Vermont	567,397	1,023,941	2,143,353	1.63	2.89	6.08	56	210
Virginia	687,751	3,224,529	17,832,143	.36	1.49	7.60	24	510
Washington	1,436,070	7,944,717	23,860,219	2.47	6.43	17.17	38	267
West Virginia	893,285	2,483,747	27,237,475	.86	1.87	18.14	46	970
Wisconsin	2,181,262	9,880,240	41,728,601	.99	4.01	15.58	25	389
Wyoming	345,932	669,661	5,408,879	3.46	4.01	26.79	86	668

[1]Figures for 1904 and 1914 are taken from Bulletin No. 390 of the U. S. Department of Agriculture, p. 6.
[2]1921 figures are taken from data furnished by the U. S. Bureau of Public Roads.

roads; payment of interest and principal of highway bonds accounted for $89 millions or 8.6% of the total; administration and engineering required an expenditure of $36 millions or 3.5%; and miscellaneous items amounted to $36 millions or 3.4% of the total. Thus, three-fifths of all expenditures for roads went for building new roads and one-fourth went for maintenance, as may be seen from Table 12. In the New England and Middle Atlantic and East North Central States, the proportion of expenditures devoted to new roads is smaller than in the South, Middle West and along the Pacific. On the other hand, maintenance charges are relatively much higher in the former groups of states.

The total rural highway income of state and local governments amounted to $79.6 millions in 1904, as compared with $240.3 millions in 1914 and $1,149.4 millions in 1921. As may be observed from Table 13, the rural highway income per capita was $0.98 in 1904, $2.46 in 1914 and $10.70 in 1921. Thus, the figure for 1921 was four times as high as for 1914.

Of the total rural highway income of state and local governments in 1921, $123 millions or 10.6% was derived from motor vehicle revenues representing special license taxes on the owners of automobiles, trucks and other automotive equipment, $438 millions or 38.1% was secured by sale of bonds, $79 millions or 6.9% was obtained in highway aid from the Federal Government, $416 millions or 36.2% represented general property tax receipts and $94 millions or 8.2% was obtained from miscellaneous sources.[1]

What has been the contribution of motor vehicle owners toward the increased road costs of recent years? The United States Government collected $158 millions in 1923 by a special excise tax on purchase of automobiles, trucks, automotive equipment and accessories. Only part of the excise collected by the Federal Government is retained for its own purposes, since it distributes federal aid to states in building roads. From 1917 to 1923, $589 millions was collected from this source, while the Federal Treasury

[1]See Table 14.

distributed in aid about $264 millions or 45% of the former sum. Special registration fees on motor vehicle owners totaled $189 millions in 1923; gasoline taxes, $37 millions; personal property taxes, estimated, $75 millions; and special municipal taxes, $13 millions. The total sum was $472 millions collected in taxes from automobile owners, which was probably almost equal to the direct cost of maintenance and debt charges for rural roads in that year. It is estimated on the basis of data as to revenues collected by the U. S. Bureau of Public Roads in the first half of 1924 that registration licenses will exceed $225 millions in the full year of 1924, as compared with $189 millions in 1923, and that the gasoline tax will produce $65 millions as against $37 millions in 1923. Increased registration and higher license taxes explain the increased revenue from this source.

The total amount of highway bonds outstanding at the end of 1914 was $345 millions,[1] and at the end of 1921 it was officially stated that this amount reached $1,222 millions.[2] In 1922, there were issued road bonds to the extent of $344 millions and in 1923, $314 millions. In the present year, road bond issues have been fairly heavy. After allowing for amortization and sinking fund, it may be safely estimated that highway bonds outstanding now exceed $2 billions, or roughly, one-fifth of total state and local indebtedness. At 5½% for annual interest and sinking fund, the burden of this debt amounts to $110 millions or 2.4% of the state and local tax bill in 1923. The latter percentage excludes, of course, annual maintenance, construction and supervision costs of rural highways and refers only to the charges on the road debt. Omitting the expenditures for new construction, which is largely financed by bond issues, the cost of maintaining rural roads and of debt charges on highway bonds was 10% of state and local taxes raised in that year. In the finances of local governments as distinct from state gov-

[1]U. S. Department of Agriculture, Bulletin No. 390, p. 8.
[2]U. S. Bureau of Public Roads, "Public Roads," Vol. V, No. 3, May, 1924, p. 19.

TABLE 14: TOTAL RURAL HIGHWAY INCOME,

State	Sources			
	Proceeds of bonds sold[2]	Federal and forest road aid[3]	Motor vehicle revenues, including gasoline taxes	General property taxes
Total United States	$438,109,273	$79,333,226	$122,626,166	$415,680,010
Alabama	1,878,316	477,590	893,136	2,419,786
Arizona	5,504,825	816,681	180,633	2,434,201
Arkansas	16,060,289	1,372,205	1,026,544	4,266,391
California	23,018,539	2,533,354	4,869,600	15,432,565
Colorado	250 000	1,493,369	1,379,788	5,545,743
Connecticut	293,824	656,455	3,405,085	2,854,062
Delaware	3,157,776	244,313	375,471	179,729
Florida	6,142,433	490,308	899,591	3,964,043
Georgia	4,500,281	3,610,524	1,600 000	7,358,512
Idaho	6,221 802	1 539 045	811,398	4,463,160
Illinois	11 297,671	3,802,430	6,862,126	18,350,639
Indiana	28,709,037	1,446,623	2,305,312	23,455,017
Iowa	9,406,869	4,308,079	7,211,922	14,878,638
Kansas	7,476 611	1,601 565	1,354,095	12,315,864
Kentucky	485,000	1,482,066	2,123,885	5,380,814
Louisiana	15,831,986	1,424,114	453,276	4,237,084
Maine	1,766,960	852,192	1,004,750	2,279,722
Maryland	3,524,299	850,000	1,600 000	4,498,312
Massachusetts	3,335 013	661,594	5,023,963	9,139,616
Michigan	20,669,626	599 854	7,795,926	20,228,619
Minnesota	8,731 150	2,986,920	5,616,114	20,892,168
Mississippi	14,741,678	1,636,366	704,988	8,078,082
Missouri	3,426,420	2,304,790	2,505,354	5,139,186
Montana	3,330,829	2,041,172	546,150	2,392,404
Nebraska	2,242,484	1,200,000	2,820,000	6,448,008
Nevada	575,000	566,591	97,200	648,439
New Hampshire	107 316	240,782	790,118	1,231,877
New Jersey	7,183,444	509,372	4,029,971	8,742,624
New Mexico	830,000	1,093,208	521,881	2,427,209
New York	18,355,231	2,398,461	9,000,000[4]	36,300,000[4]
North Carolina	17,640,534	2,674,070	2,828,649	8,357,346
North Dakota	....	584,685	418,525	5,349,252
Ohio	32,869,752	3,595,383	7,044,751	32,268,341
Oklahoma	5,273,327	2,345,354	2,263,006	9,348,121
Oregon	13,908,032	2,181,957	3,132,784	6,260,046
Pennsylvania	34,004,583	4,533,682	9,310,447	14,731,187
Rhode Island	286,160	358,374	777,587	866,867
South Carolina	8,146,630	1,359,453	692,663	3,749,525
South Dakota	3,007,644	1,650,130	648,528	9,379,484
Tennessee	8,446,353	1,685,453	1,386,378	4,276,784
Texas	44,962,149	5,788,048	3,754,139	13,610,393
Utah	2,495,580	862,712	478,474	2,421,823
Vermont	100,472	135,289	627,588	1,055,941
Virginia	5,519,711	980,806	1,926,624	5,687,720
Washington	4,914,339	537,794	3,875,600	12,718,071
West Virginia	18,775,066	1,057,652	1,938,000	5,418,257
Wisconsin	8,004,232	2,443,597	3,424,146	22,238,675
Wyoming	700,000	1,318,764	290,000	1,959,663

*Footnotes for this Table on page 58

BY STATES AND SOURCES, 1921[1]

All other revenues	Total	Per capita	Percentage distribution: Bonds	Federal aid	Motor vehicle revenues	General property taxes	All other	Total
$93,689,221	$1,149,437,896	$10.70	38.1	6.9	10.6	36.2	8.2	100.0
900,739	6,569,567	2.76	28.3	7.3	13.6	37.0	13.8	100.0
1,363,576	10,299,916	29.08	53.4	7.9	1.8	23.6	13.3	100.0
161,541	22,886,970	12.86	70.2	6.0	4.5	18.6	0.7	100.0
3,837,837	49,691,895	13.85	46.3	5.1	9.8	31.1	7.7	100.0
96,543	8,765,443	9.12	2.9	17.0	15.7	63.3	1.1	100.0
2,736,201	9,945,627	7.00	3.0	6.6	34.2	28.7	27.5	100.0
1,530,029	5,487,318	24.26	57.6	4.4	6.8	3.3	27.9	100.0
443,547	11,939,922	11.92	51.5	4.1	7.5	33.2	3.7	100.0
262,729	17,332,046	5.89	26.1	20.4	9.3	42.7	1.5	100.0
78,038	13,113,443	29.25	47.4	11.8	6.2	34.0	0.6	100.0
3,351,918	43,664,784	6.60	25.9	8.7	15.7	42.0	7.7	100.0
1,891,625	57,807,614	19.49	49.7	2.5	4.0	40.6	3.2	100.0
2,186,274	37,991,782	15.62	24.8	11.3	19.0	39.2	5.7	100.0
639,485	23,387,620	13.13	32.0	6.8	5.8	52.7	2.7	100.0
2,056,499	11,528,264	4.73	4.2	12.9	18.4	46.7	17.8	100.0
1,284,456	23,230,916	12.76	68.1	6.1	2.0	18.3	5.5	100.0
1,987,216	7,890,840	10.22	22.4	10.8	12.7	28.9	25.2	100.0
253,349	10,725,960	7.28	32.9	7.9	14.9	42.0	2.3	100.0
1,108,883	19,269,069	4.91	17.3	3.4	26.1	47.5	5.7	100.0
6,368,332	55,662,357	14.64	37.1	1.1	14.0	36.4	11.4	100.0
2,131,573	40,357,925	16.57	21.6	7.4	13.9	51.8	5.3	100.0
577,803	25,738,917	14.37	57.3	6.3	2.7	31.4	2.3	100.0
3,119,225	16,494,975	4.82	20.8	14.0	15.2	31.1	18.9	100.0
1,721,346	10,031,901	17.43	33.2	20.4	5.4	23.8	17.2	100.0
736,290	13,446,782	10.25	16.6	9.0	21.0	47.9	5.5	100.0
404,114	2,291,344	29.60	25.0	24.8	4.2	28.4	17.6	100.0
1,512,295	3,882,388	8.72	2.8	6.2	20.4	31.7	38.9	100.0
1,192,423	21,657,834	6.66	33.2	2.4	18.6	40.2	5.6	100.0
24,369	4,896,667	13.40	17.0	22.3	10.6	49.6	0.5	100.0
1,305,638	67,359,330	6.37	27.2	3.6	13.4	53.9	1.9	100.0
1,341,026	32,841,625	12.57	53.6	8.1	8.6	25.6	4.1	100.0
362,938	6,715,400	10.21	0.0	8.7	6.2	79.7	5.4	100.0
6,497,441	82,275,668	13.92	39.9	4.4	8.6	39.2	7.9	100.0
287,107	19,516,915	9.36	27.0	12.0	11.6	47.9	1.5	100.0
3,050,005	28,532,824	35.64	48.8	7.6	11.0	21.9	10.7	100.0
16,708,370	79,288,269	8.93	42.9	5.7	11.7	[illegible].6	21.1	100.0
1,035,019	3,324,007	5.41	8.6	10.7	23.4	26.1	31.2	100.0
312,938	14,261,209	8.34	57.2	9.5	4.8	26.3	2.2	100.0
562,446	15,248,232	23.65	19.7	10.8	4.3	61.5	3.7	100.0
648,968	16,443,936	6.96	51.4	10.3	8.4	26.0	3.9	100.0
4,754,630	72,969,359	15.24	61.7	8.0	5.1	18.7	6.5	100.0
301,777	6,560,366	14.23	38.1	13.2	7.3	36.8	4.6	100.0
224,063	2,143,353	6.08	4.7	6.3	29.3	49.3	10.4	100.0
3,717,282[5]	17,832,143	7.60	30.9	5.5	10.7	32.0	20.9	100.0
1,814,415	23,860,219	17.17	20.6	2.3	16.2	53.3	7.6	100.0
48,500	27,237,475	18.14	69.1	3.8	7.1	19.8	0.2	100.0
5,617,951	41,728,601	15.58	19.2	5.8	8.2	53.3	13.5	100.0
1,140,452	5,408,879	26.79	12.9	24.4	5.4	36.2	21.1	100.0

TABLE 15: ANALYSIS OF RURAL HIGHWAY

State	Objects			
	Construction of roads and bridges	Maintenance of roads and bridges	Administration and engineering	Principal and interest payments on highway bonds
Total United States	$626,965,373	$248,593,169	$36,031,353	$89,280,946
Alabama	2,935,461	1,488,065	210,476	726,134
Arizona	8,480,916	671,967	490,237	443,673[7]
Arkansas	14,397,819	3,196,665	1,279,374	1,857,208[8]
California	21,329,275	10,987,776	1,910,576	5,208,277
Colorado	5,144,480	2,651,055	544,328	145,543
Connecticut	4,189,517	3,973,616	251,624	....
Delaware	4,561,348	535,610	240,976	465,588
Florida	6,287,424	1,569,354	280,771	1,046,466
Georgia	10,029,427	2,853,167	779,485	1,245,083
Idaho	8,263,361	1,467,630	226,705	1,020,946
Illinois	21,850,575	12,392,158	1,515,864	1,979,717
Indiana	27,606,442	14,732,391	1,236,659	10,360,184
Iowa	26,084,193	10,442,776	1,132,859	........[9]
Kansas	16,068,282	4,715,845	461,474	615,327
Kentucky	7,622,488	3,666,942	393,730	789,585[10]
Louisiana	10,479,570	875,883	293,494[2]	2,183,843
Maine	6,582,554	1,308,342	73,064[3]	442,186
Maryland	5,337,456	3,324,353	196,952	1,329,552
Massachusetts	9,062,104	8,318,549	817,458	901,294
Michigan	36,244,828	10,550,568	2,153,616	4,864,124
Minnesota	23,816,054	10,736,693	909,334	1,634,658
Mississippi	12,887,000	3,659,108	443,893	3,051,833
Missouri	8,588,306	5,461,213	759,311	886,770
Montana	6,619,129	1,509,797	648,167	1,106,241
Nebraska	6,291,375	3,677,566	184,565	166,478
Nevada	1,304,665	258,116	115,908	139,057
New Hampshire	1,248,618	2,291,486	16,158[3]	85,500[11]
New Jersey	15,973,807	8,657,498	951,063	1,761,120
New Mexico	2,635,933	510,302	111,667[4]	889,541
New York	31,732,971	14,031,131	2,345,952	6,111,269
North Carolina	16,734,431	5,989,437	782,257[5]	3,705,965
North Dakota	4,328,985	2,577,366	264,213	....
Ohio	42,955,743	19,780,152	2,213,498	10,802,307
Oklahoma	9,068,249	3,576,748	837,330	748,413
Oregon	23,891,963	1,756,103	659,990	1,492,792
Pennsylvania	44,958,763	17,733,042	3,288,993	5,768,740
Rhode Island	2,028,813	439,757	112,642	134,700
South Carolina	7,280,309	1,259,289	504,021	154,413[12]
South Dakota	7,889,272	4,959,012	356,484[6]	436,802
Tennessee	8,160,059	2,715,290	723,784	650,654[13]
Texas	30,191,076	12,133,177	1,870,528	8,191,819
Utah	3,462,964	787,730	137,418	610,475
Vermont	1,048,747	1,092,998	8,739[3]	....
Virginia	8,254,486	5,045,909	931,949	1,101,970
Washington	17,344,669	3,384,970	732,835	2,009,679
West Virginia	7,274,371	1,426,626	493,987	679,232[14]
Wisconsin	25,239,698	12,806,971	902,037	939,588
Wyoming	3,197,397	612,970	234,908	396,200

*Footnotes for this Table on page 58

EXPENDITURES, BY STATES, 1921[1]*

Machinery, equipment and repairs, and miscellaneous	Total	Per capita	Percentage distribution: Construction	Maintenance	Administration and engineering	Debt charges	All other	Total
$35,716,931	$1,036,587,772	$9.65	60.5	24.0	3.5	8.6	3.4	100.0
247,699	5,607,835	2.36	52.3	26.5	3.8	13.0	4.4	100.0
561,692	10,648,485	30.06	79.7	6.3	4.6	4.2	5.2	100.0
479,948	21,211,014	11.92	67.9	15.1	6.0	8.8	2.2	100.0
2,387,068	41,822,972	11.65	51.0	26.3	4.6	12.4	5.7	100.0
563,415	9,048,821	9.41	56.8	29.4	6.0	1.6	6.2	100.0
30,959	8,445,716	5.94	49.5	47.1	3.0	0.0	0.4	100.0
232,115	6,035,637	26.68	75.6	8.9	4.0	7.7	3.8	100.0
404,118	9,588,133	9.57	65.6	16.4	2.9	10.9	4.2	100.0
909,432	15,816,594	5.38	63.5	18.0	4.9	7.9	5.7	100.0
828,741	11,807,383	26.34	70.0	12.4	1.9	8.7	7.0	100.0
1,881,134	39,619,448	5.99	55.2	31.3	3.8	5.0	4.7	100.0
566,656	54,502,332	18.38	50.7	27.0	2.3	19.0	1.0	100.0
1,664,725[15]	39,324,553	16.17	66.3	26.6	2.9	0.0	4.2	100.0
809,179	22,670,107	12.73	70.9	20.8	2.0	2.7	3.6	100.0
149,918	12,622,663	5.18	60.4	29.0	3.1	6.3	1.2	100.0
189,213	14,022,003	7.70	74.8	6.2	2.1	15.6	1.3	100.0
295,765	8,701,911	11.27	75.6	15.1	0.8	5.1	3.4	100.0
109,823	10,298,136	6.99	51.8	32.3	1.9	12.9	1.1	100.0
436,226	19,535,631	4.97	46.4	42.6	4.2	4.6	2.2	100.0
1,759,482	55,572,618	14.62	65.2	19.0	3.9	8.7	3.2	100.0
1,682,821	38,779,560	15.92	61.5	27.7	2.3	4.2	4.3	100.0
266,455	20,308,289	11.34	63.3	18.1	2.2	15.1	1.3	100.0
432,059	16,127,659	4.74	53.3	33.8	4.7	5.5	2.7	100.0
499,823	10,383,157	18.04	63.8	14.5	6.2	10.7	4.8	100.0
207,625	10,527,609	8.02	59.8	34.9	1.8	1.6	1.9	100.0
293,206	2,110,952	27.27	61.8	12.2	5.5	6.6	13.9	100.0
57,659	3,699,421	8.31	33.8	62.0	0.3	2.3	1.6	100.0
752,582	28,096,070	8.64	56.8	30.8	3.4	6.3	2.7	100.0
111,562	4,259,005	11.65	61.9	11.9	2.6	21.0	2.6	100.0
2,803,688[16]	57,025,011	5.39	55.6	24.6	4.2	10.7	4.9	100.0
2,111,610	29,323,700	11.22	57.1	20.4	2.7	12.6	7.2	100.0
76,667	7,247,231	11.02	59.6	35.6	3.7	0.0	1.1	100.0
828,287	76,579,987	12.95	56.0	25.9	2.9	14.1	1.1	100.0
449,151	14,679,891	7.04	61.8	24.3	5.7	5.1	3.1	100.0
168,065	27,968,913	34.94	85.4	6.3	2.4	5.3	0.6	100.0
3,600,015	75,349,553	8.48	59.6	23.6	4.4	.6	4.8	100.0
112,322	2,828,234	4.61	71.9	15.5	4.0	4.7	3.9	100.0
851,249	10,049,281	5.88	72.6	12.5	5.0	1.5	8.4	100.0
547,397	14,188,967	22.01	55.6	34.9	2.5	3.1	3.9	100.0
447,660	12,697,447	5.38	64.3	21.4	5.7	5.1	3.5	100.0
1,520,671	53,907,271	11.27	56.1	22.5	3.5	15.1	2.8	100.0
176,127	5,174,714	11.22	66.9	15.2	2.7	11.8	3.4	100.0
....	2,150,484	6.10	48.7	50.8	0.5	0.0	0.0	100.0
151,078	15,485,392	6.60	53.4	32.5	6.1	7.1	0.9	100.0
766,576	24,238,729	17.44	71.5	14.0	3.0	8.3	3.2	100.0
185,857	10,060,073	6.70	72.3	14.2	4.9	6.8	1.8	100.0
1,825,474	41,713,768	15.58	60.5	30.7	2.1	2.3	4.4	100.0
283,937	4,725,412	23.41	67.7	13.0	5.0	8.3	6.0	100.0

ernments, road expenditures play a much more important rôle than the combined percentage for the two seems to indicate at first sight.[1]

In considering the significance of these figures of road expenditures, as in the case of all other public expenditures, it is of course necessary to go far beyond the actual statistics into difficult questions of social and economic policy on which the judgment of no individual or not even any single generation is conclusive. Expenditures for roads, for instance, as well as those for education and for national defense, may be considered investments in capital equipment for common use of the community. The wisdom and productiveness of such investment depends upon, among other factors, the uses to which they are put, the rapidity with which they are used up, and the distribution of the burden they impose upon present or future generations—all of which are not easily to be determined.

[1]See Table 15.

Footnotes to Table 14

[1]From data furnished by the U. S. Bureau of Public Roads.

[2]Includes all receipts from sale of highway bonds during 1921 and all cash from previous bond sales on hand at beginning of the year.

[3]Includes only federal aid and national forest payments received by the states and credited by them to their respective highway funds during the fiscal year in question.

[4]Approximate.

[5]Includes $1,846,310 state appropriations.

Footnotes to Table 15

[1]From data furnished by the U. S. Bureau of Public Roads.

[2]Cost of state engineering and inspection charged to construction.

[3]General administration only. Cost of engineering charged to construction.

[4]State engineering amounting to approximately $140,000 charged to construction.

[5]State engineering charged to construction and maintenance.

[6]State administration and engineering. Local engineering and administration charged to construction and maintenance.

[7]Does not include approximately $400,000 of interest payments charged to construction.

[8]Complete data for principal and interest payments not available.

[9]Interest and principal payments on road and bridge bonds and warrants amounting to approximately $1,000,000 for interest and $750,000 for principal were paid from county and township general funds. Data for bonds alone not available.

[10]Does not include approximately $150,000 of interest payments charged to construction.

[11]Does not include approximately $15,000 of interest and principal on town bonds charged to construction.

[12]Does not include approximately $450,000 interest and principal payments charged to "miscellaneous."

[13]Complete data not available. Total interest and principal payments on highway bonds estimated to have been approximately $2,000,000 during 1921.

[14]Does not include approximately $270,000 of interest charged to construction.

[15]Includes cost of gravel pits and railroad crossings.

[16]Includes interest and principal payments on county and town highway bonds.

CHAPTER V

PUBLIC INDEBTEDNESS

Public credit is a comparatively recent development in the history of finance. It is essentially an institution or product of democracy. Public borrowing in the nineteenth century appeared to assume such large proportions that contemporary writers predicted universal bankruptcy; yet, this prognostication did not materialize. The industrial revolution caused such a large increase in capital and wealth generally that wealth outstripped the enhancement of public debt, which circumstance increasingly lightened the relative burden of the debt.

Incurrence of indebtedness on the part of governmental authority should not *ipso facto* become an object of condemnation. This method of financing the needs of a community or nation may, in fact, be just as commendable and defensible as in the case of private economy. It would appear, for example, preferable to finance by bond issues a project of improvement the benefits from which are continuous over a long period of time than to place the entire burden on the present generation of taxpayers and raise the funds by taxation. In fact, the existing burden of taxation may be so high that the only alternative is the utilization of the borrowing power of the community if a necessary improvement is to be installed. In either case, the cost must be defrayed out of taxes in the long run, but the distribution of the expenditure assumes a more equitable form if all those who enjoy the facilities afforded by the outlay share equally in its cost, other things being equal. The natural corollary of this proposition is that it would be wholly unwise to extend the term of a bond issue beyond the potential life of the improvement; otherwise, the annual benefit derived from it by a future generation of taxpayers will involve a double cost, if the improvement is replaced.

In the last analysis, therefore, the growth of public indebtedness in and by itself should neither be deplored nor inspire fear and anxiety as to the outcome. The only matters to be considered are whether the object of the expenditure itself is a wise one in serving a distinct public need, whether the project is well-conceived and efficiently and economically executed, whether it is undertaken at a propitious time, all things considered, and whether the community is not overexerting itself in incurring the indebtedness. There may be periods when a community, just as an individual, may be so heavily loaded down with its usual recurring charges that it ought not to undertake fresh burdens, no matter how laudable or desirable may be the purpose of the contemplated expenditure. In private economy it is not considered desirable to borrow for consumption needs, but only for capital purposes; in public economy, it is equally unwise for the collective authority to meet operating deficits by bond issues, although this principle is not infrequently violated, despite constitutional or statutory provisions prohibiting this course.

Why, therefore, has the popular mind been so averse to public indebtedness? What are the factors that have made the average man view with concern the continuous use of the borrowing power by governmental authority? First is the fact that the vast bulk of public indebtedness of national or central governments in the past has been incurred for war, the benefits or the necessity of which have sometimes been difficult to realize on the part of the generation that suffers immediately from them. Second, in so far as debts have been incurred by governments for railways, canals, waterworks, harbors, roads and a myriad of other beneficial objects, the average man is inclined to feel either that the expenditure has not always been a wise one or else that the community does not usually receive a full *quid pro quo*. Opportunities for fraud, waste, chicanery, overcharging and nepotism are believed to exist on a much wider scale in public life than elsewhere; hence, there is the constant fear that the cost of an improvement undertaken by governmental authority is often much higher than it need be, thus benefiting a certain element of the community that thrives on public inefficiency and recklessness.

Third, it is felt that public bodies do not always exhibit the proper degree of business foresight and wisdom in disbursing public funds at the propitious time. This situation is particularly true of public construction in recent years. There are periods when sound public policy demands that new construction contemplated by the community be postponed to some later date. Students of the unemployment problem everywhere are agreed that one of the means of alleviating distress in the depression periods of the business cycle, when factories are shut down and employment is severely curtailed, is public construction. They have repeatedly urged that governmental bodies arrange their improvement programs in such a way as to take up the slack in private industry whenever it manifests itself. In this wise, two noteworthy objects would be achieved. First, this procedure would obviate the necessity of governments bidding for labor and materials against private industry in a period of intense business activity in general or in construction lines in particular, thus tending to increase wages and prices and enhancing the cost of the improvement to the community at large. Second, public construction work at such times would relieve acute conditions of unemployment which ordinarily follow in the wake of industrial depression. That governmental authorities have not, however, given sufficient attention to this important consideration is evident. Bonded indebtedness of state and local governments is rapidly mounting and new projects, financed by bond issues and running into hundreds of millions annually, are undertaken irrespective of conditions in the construction industry and in business generally.

Finally, the preponderance of revenue derived by state and local authorities in this country is derived from the general property tax, which is principally a tax on real estate. Increasing indebtedness of state and local authorities, therefore, connotes higher and higher taxes on owners of homes, factories, stores and other real property, which tend to aggravate the maldistribution of the existing tax burden. To be sure, part of the real estate tax may be shifted to tenants and to consumers of products and services manufactured and sold, but in so far as part is not shifted and remains as a permanent burden on the person who pays the tax initially (as, for example, home owners), the financial implications and ramifications of the growing volume of indebtedness are serious enough to cause concern.

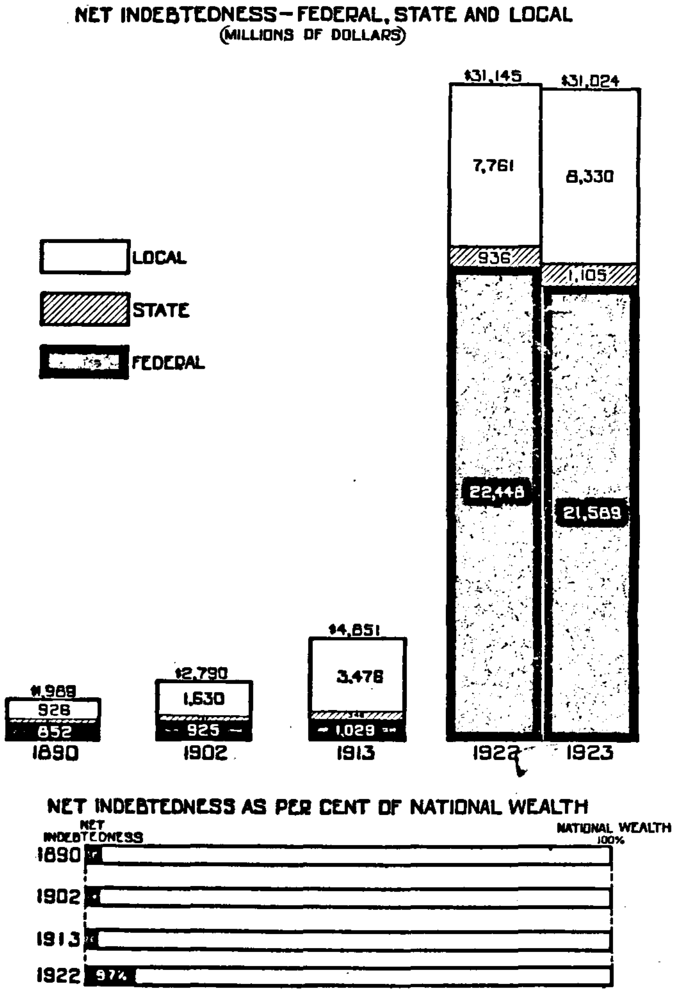
Facts as to Indebtedness

According to figures compiled by the U. S. Census Bureau in its survey of wealth, debt and taxation, the total net indebtedness of state and local governments increased from $3,822 millions in 1912 to $8,697 millions in 1922, an increase of 128% in the ten-year period, or an average of 12.8% annually. These figures comprehend all funded or fixed debt, special assessment bonds, temporary loans, outstanding warrants and other debt of every character, *less* the amount held in sinking funds and other assets held for the retirement of these obligations. Special assessment loans, reported by local governments only, are essentially a temporary obligation of the issuing authority, for which the latter is usually reimbursed by the owner of property adjoining the improvement. The gross aggregate of special assessment loans was $755 millions or 8.7% of the net debt and 7.4% of the gross debt.

The net debt of state governments increased from $346 millions in 1912 to $936 millions in 1922, a gain of 171%, while the net indebtedness of all local governments, including counties, cities, towns, villages, school districts, road districts, etc., rose from $3,476 to $7,761 millions, an increase of 123%. The net debt per capita of state and local governments was $79.99 in 1922, as compared with $39.37 in 1912, an increase of 103%.

That the debt of the Federal Government is today many times what it was in 1912 occasions, of course, no surprise.

Chart 5: Net Public Indebtedness and Tangible National Wealth, United States



Before the war, the net federal debt was approximately $1 billion; today, it is slightly in excess of $21 billions. The World War was the most costly conflict that man has ever engaged in, and despite the unprecedented amount raised by war taxation, the Federal Government had to defray three-fourths of its war expenditures by borrowing.[1] In August, 1919, the federal debt had reached $26.5 billions but since then the trend had been downward. As of October 31, 1924, the net federal debt stood at $21 billions, a decrease of 21% from the peak figure. The latter figure includes indebtedness of foreign governments amounting to $11 billions. Congress has provided that receipts of interest and principal payments on account of foreign indebtedness should be applied to retirement of the public debt, in addition to the amounts appropriated annually for the sinking fund against the war issues.

While the debt of the Federal Government is being constantly reduced, state and local governments continue to pile up fresh indebtedness from month to month in an apparently endless fashion. It appears from present indications that the amount of bonds sold by state and local authorities in this country in 1924 will exceed the figures of 1921, which was the record year heretofore. In the first eleven months of the present year, long-term bonds totalled $1,289 millions in value, compared with $999 millions in the same period of 1923, $1,186 millions in 1922 and $1,070 millions in 1921.[2] Roads, bridges, schools and soldiers' bonus represent the principal objects for which indebtedness has been incurred in recent years, as may be observed from Table 16. It was estimated that plans for new financing which received popular approval at the recent election call for additional issues of $500 millions. Details of the bond issues by states in recent years, as compared with 1913, are furnished in Table 17.

How far exemption from taxation has stimulated the incurrence of indebtedness on the part of state and local

[1]Cf. L. R. Gottlieb, "Taxation and War Strains," *Annalist*, August 27, 1923, pp. 271 ff.

[2]*Daily Bond Buyer* figures, *New York Times*, December 3, 1924.

TABLE 16: TOTAL BORROWINGS OF STATE AND LOCAL GOVERNMENTS, 1913 AND 1919–1923[1]

	1923	1922	1921	1920	1919	1913
United States Total	$1,063,119,823	$1,101,917,313	$1,208,768,274	$683,188,255	$691,518,914	$403,246,818
Alabama	7,675,800	8,807,500	5,955,500	4,898,500	2,081,000	1,221,000
Arizona	3,041,000	6,958,853	13,058,500	3,090,500	13,140,600	2,522,000
Arkansas	5,441,700	10,875,782	7,999,500	21,932,500	29,766,000	4,214,700
California	86,479,390	66,035,065	89,104,534	47,479,093	53,310,331	42,489,702
Colorado	19,969,092	14,385,650	9,141,217	7,042,972	4,353,000	2,952,300
Connecticut	6,564,888	11,324,000	11,912,000	7,788,000	7,919,000	7,225,000
Delaware	3,010,000	5,117,000	4,990,000	1,636,000	2,540,000	697,000
Florida	31,712,500	21,640,500	10,054,500	11,396,000	6,858,439	5,241,550
Georgia	6,228,000	10,494,000	9,063,500	5,850,111	10,817,609	1,939,000
Idaho	3,028,063	4,872,493	6,231,422	6,170,122	18,171,190	1,316,704
Illinois	92,876,100	42,976,500	54,564,500	25,017,000	10,640,500	6,800,597
Indiana	24,074,471	28,143,218	18,746,563	18,127,280	9,572,752	8,304,988
Iowa	35,065,075	14,096,100	15,804,824	9,971,811	8,084,286	3,367,687
Kansas	38,878,642	10,742,269	6,547,361	6,978,183	6,901,340	2,735,639
Kentucky	5,105,000	5,370,702	4,075,042	1,057,000	1,203,246	789,607
Louisiana	18,626,300	16,479,500	15,591,000	8,109,500	31,068,500	13,080,522
Maine	2,833,000	5,429,000	2,800,000	6,604,000	690,700	676,800
Maryland	16,731,500	19,078,275	14,441,775	2,953,775	3,541,000	13,120,000
Massachusetts	28,589,175	31,453,950	29,018,232	26,352,600	17,727,991	25,640,023
Michigan	56,545,807	70,897,050	120,907,400	29,201,167	18,478,027	6,833,675
Minnesota	37,464,319	30,742,466	46,419,829	34,584,476	18,006,564	11,680,599
Mississippi	8,795,100	9,335,811	8,124,600	7,853,300	10,110,332	3,745,000
Missouri	19,233,742	38,069,856	11,661,912	9,357,194	9,285,812	6,220,608
Montana	4,638,448	6,548,694	11,029,449	8,701,246	6,815,492	1,943,743
Nebraska	9,231,290	15,438,194	14,665,278	11,362,831	7,075,717	2,389,550
Nevada	342,000	721,500	1,120,000	366,000	990,000	324,000
New Hampshire	3,055,000	2,767,000	2,057,000	868,000	2,030,000	725,000
New Jersey	56,201,135	55,272,288	60,267,928	31,928,438	17,874,101	13,267,729
New Mexico	2,401,679	2,858,100	2,649,126	1,465,560	1,719,200	819,900
New York	54,214,247	104,709,993	137,273,319	31,461,165	31,272,316	89,440,777
North Carolina	64,394,500	60,490,500	53,073,900	9,628,000	17,385,000	6,080,500
North Dakota	12,288,230	4,400,750	4,979,581	2,074,200	1,571,530	1,258,072
Ohio	79,920,013	84,986,445	105,127,112	91,401,606	78,495,651	35,032,344
Oklahoma	9,963,800	12,017,240	7,116,500	5,655,000	13,372,668	3,231,916
Oregon	20,232,740	31,987,204	24,382,848	20,763,196	26,445,761	9,380,965
Pennsylvania	49,027,000	85,267,300	76,083,500	53,505,600	46,793,300	26,215,700
Rhode Island	3,385,000	10,024,000	2,128,000	5,205,000	975,000	818,000
South Carolina	9,444,500	8,439,000	10,151,600	4,511,938	3,889,000	773,700
South Dakota	5,552,000	7,983,500	24,231,000	14,155,000	14,618,500	459,000
Tennessee	13,123,524	11,142,508	16,716,315	8,485,564	11,459,121	4,636,440
Texas	39,067,202	47,967,000	42,613,984	19,365,750	66,923,275	13,300,211
Utah	3,169,500	1,748,900	6,218,339	7,247,500	9,156,400	853,000
Vermont	537,000	465,100	487,000	309,000	1,505,000	143,000
Virginia	18,303,000	22,702,775	14,127,000	8,514,500	3,825,600	1,594,000
Washington	12,470,844	9,747,878	31,926,809	12,331,918	18,866,863	11,308,468
West Virginia	11,974,000	4,885,000	18,062,000	16,321,200	4,239,500	1,908,000
Wisconsin	19,193,507	23,221,700	18,513,175	13,081,839	8,148,450	4,290,302
Wyoming	3,021,000	2,799,204	7,553,800	1,027,120	1,806,250	237,500

[1]Compiled from the *Commercial and Financial Chronicle*, State and City Section, Part I.

TABLE 17: STATE AND MUNICIPAL BOND ISSUES, CLASSIFIED BY OBJECTS, 1910–1923[1]

(Figures in millions of dollars)

Year	Re-funding	Water	Streets, roads, bridges, etc.	Sewers	Schools	Build-ings	Parks	Light and gas	Fund-ing and im-prove-ment	Miscel-laneous	Total[2]
1910..	$19	$55	$66	$28	$41	$34	$5	$2	$12	$57	$320
1911..	18	75	88	34	47	38	17	3	18	58	397
1912..	15	60	89	26	46	31	13	8	18	81	387
1913..	27	49	108	26	55	42	9	3	20	63	403
1914..	9	57	147	33	63	44	8	4	16	95	474
1915..	32	44	136	31	80	33	10	8	25	98	499
1916	23	39	142	23	70	28	9	3	18	101	457
1917..	15	28	131	33	60	26	11	7	22	118	451
1918..	10	39	64	34	40	12	2	4	25	67	297
1919..	13	55	296	39	103	25	8	10	48	94	692
1920..	11	54	216	40	130	25	18	12	50	144[3]	683
1921..	9	80	393	73	217	42	22	14	96	262[4]	1209
1922..	30	94	344	91	237	40	19	28	76	143[5]	1102
1923..	20	87	314	89	208	47	30	16	83	169[6]	1063

[1]Compiled from the *Commercial and Financial Chronicle*, State and City Section, Part I.
[2]These figures differ considerably in later years from those compiled by the *Daily Bond Buyer*.
[3]Includes soldier bonus, $18 millions.
[4]Includes soldier bonus, $168 millions.
[5]Includes soldier bonus, $41 millions.
[6]Includes soldier bonus, $92 millions.

governments is a matter concerning which it is difficult to ascertain the facts or even to venture an opinion. That the high surtax rates of the federal income tax have operated to make it advantageous for recipients of large incomes to invest in state and municipal issues, was clearly brought out in a previous report of the Conference Board.[1] Nevertheless it will be observed from Table 18 that the cost of borrowing, as measured by the interest rate, has been considerably higher in recent years than before the war, although it cannot be gainsaid that the rate of interest would undoubtedly have been even higher were it not for the federal income tax exemption which state and local issues enjoy. This privilege undoubtedly results in a net loss in revenue, for while state and local governments derive a definite benefit from federal income tax exemp-

[1]National Industrial Conference Board, "Tax Burdens and Exemptions," Research Report No. 64, 1923, pp. 114.

TABLE 18: STATE AND MUNICIPAL BOND ISSUES, CLASSIFIED BY RATE OF INTEREST, 1910-1923[1]

(Figures in millions of dollars)

Year	3 per cent	3½ per cent	4 per cent	4¼ per cent	4½ per cent	5 per cent	Above 5 per cent	Unknown and unusual	Total
1910.......	$2	$17	$95	..	$53	$45	$31	$63	$307
1911.......	..	7	127	$70	89	65	29	8	395
1912.......	..	5	101	80	87	68	32	10	383
1913.......	2	4	80	20	132	108	31	10	386
1914.......	..	..	70	77	153	107	40	11	458
1915.......	..	..	85	46	192	117	44	12	496
1916.......	..	1	125	80	105	92	38	13	455
1917.......	..	1	96	16	150	120	42	18	442
1918.......	..	..	19	4	69	98	74	30	294
1919.......	..	..	17	22	131	278	150	86	684
1920.......	..	14	24	3	67	193	333	43	677
1921.......	..	..	33	3	125	330	656	62[2]	1209
1922.......	..	..	105	131	219	307	252	88[2]	1102
1923.......	..	..	98	102	272	237	203	151[2]	1063

[1]Exclusive of New York City sinking fund takings. Source: *Commercial and Financial Chronicle*, State and City Section, Part I.

[2]Includes $36 millions bearing 4¾ per cent interest in 1921, $56 millions in 1922 and $138 millions in 1923.

tion through better terms of financing, the Federal Government's loss in income tax revenue probably more than offsets the gain of state and local governments.

Eliminating duplications and allowing for retirements and sinking fund assets, it may be estimated that the net indebtedness of state and local governments now exceeds $10,500 millions, as compared with $8,697 millions in 1922.

TABLE 19: NET PUBLIC INDEBTEDNESS AND TANGIBLE NATIONAL WEALTH

(National Industrial Conference Board)

(Figures in millions of dollars)

Year	Net public indebtedness				Tangible national wealth	Ratio of net indebtedness to tangible national wealth
	Federal	State	Local	Total		
1890.....	$852	$211	$926	$1,989	$65,037	3.1%
1902.....	925	235	1,630	2,790	97,810	2.9%
1913.....	1,029	346	3,476	4,851	187,739	2.6%
1922.....	22,448	936	7,761	31,145	320,804	9.7%
1923.....	21,589	1,105	8,330	31,024	....	....
1924*....	20,906	10,550		31,456	....	....

*As of October 31, 1924.

CHAPTER VI

SUMMARY

In summarizing this discussion, it is possible only to state the main thought of each section of the report, and in lifting these thoughts from the text, qualifications and determining circumstances embodied in the report itself are necessarily omitted. In order to obtain a clear and complete understanding of the significance of the main points as outlined below, it is advisable that the summary should be read in conjunction with the full text of the report as a whole. With this in mind, the outstanding conclusions may be summarized as follows:

(1) The large increase in the volume of taxation in recent decades has been due to many factors. Growing populations and concentration in large urban centers have served to enhance tax burdens. In democratic countries increasing attention is being given to the mental, cultural and intellectual development of the masses. Better quality as well as greater quantity in public services is demanded. Increased individual prosperity in itself gives rise to extravagance and wastefulness in public economy. The falling purchasing power of money has tended to raise the level of prices. Finally, the frequency and growing costliness of wars have considerably raised the level of public expenditures.

(2) General property taxation for local purposes showed an increase of 7.0% in 1923 over 1922. It is significant to note that agricultural states show increases along with industrial states.

(3) The volume of federal, state and local taxes raised in 1923 reached $7,716 millions as against $6,961 millions in 1922, an increase of $755 millions, or 10.8%. Per capita taxes were $69.72 in 1923 as compared with $63.72 in 1922. Federal taxes increased 15% in 1923, state taxes 2.8% and all local taxes 9.9%.

(4) State and local taxes represented 58% of the total tax bill of the nation in 1923 as compared with 60% in 1922 and 47% in 1921.

(5) Total taxes represented 11.5% of the national income in 1923 as compared with 11.9% in 1922 and 6.4% in 1913.

(6) The ratio of the value of exempt to taxed real property and improvements in this country rose from 11.7% in 1912 to 13.2% in 1922. The average annual increase in the value of legally exempt property between 1912 and 1922 was 6.7%.

(7) The value of tangible and intangible property exempt from taxation amounts to $55,500 millions.

(8) Approximately 6% of the total population filed a federal income tax return in 1923, applied to 1922 incomes, and of this number 46% did not have to pay a tax at all, largely as a result of personal exemptions. Concealed burdens tend to give rise to civic indifference and fiscal laxity.

(9) Total governmental expenditures were $10,045 millions in the year 1923 or $90.77 for every man, woman and child in this country. These figures compare with $2,919 millions in 1913 or $30.20 per capita, with $1,571 millions in 1902 or $19.40 per capita, and with $855 millions in 1890 or $13.56 per capita. Of the total for 1923, only $3,459 millions represented the expenditures of the federal government and the remainder constituted expenditures of state and local governments. The combined disbursements of all governmental units in this county in 1923 was equivalent to 93% of the total amount paid out in wages and salaries by all the manufacturing plants in the country covered in the last Census of Manufactures, namely, that taken in 1921.

(10) Total governmental expenditures represented 15% of the national income in 1923 as compared with 8.5% in 1913, 7.7% in 1903 and 7.1% in 1890.

(11) Almost three-fourths of the Federal Government expenditures related to national defense. As the war debt is reduced and foreign loans are repaid, net expenditures on account of wars will decline.

(12) The total cost of elementary and high school education increased from $426 millions in 1910 to $605 millions in 1915, $764 millions in 1918, $1,036 millions in 1920 and $1,581 millions in 1922. The cost per pupil in average attendance has grown from $33 in 1910 to $49 in 1918, $64 in 1920 and $86 in 1922. The total cost of public and private education has increased from $375 millions in 1902 to $1,060 millions in 1918, $1,450 millions in 1920 and $2,145 millions in 1922. Total cost of education represented 3.7% of the national income in 1922 as against 2.0% in 1920, 1.8% in 1902 and 1.4% in 1890.

(13) The total amount spent on rural roads, exclusive of city streets, increased from $78 millions in 1904 to $1,037 millions in 1921. Three-fifths of this amount for 1921 went for building new roads and one-fourth for maintenance of existing roads. Roughly, one-fifth of the total state and local indebtedness now outstanding is represented by highway bonds.

(14) Total net indebtedness of state and local governments increased from $3,822 millions in 1912 to $8,697 millions in 1922, and to roughly $10,500 millions at the present time. While the debt of the Federal Government is rapidly being reduced at an approximate rate of one billion dollars annually, state and local governments continue to pile up fresh indebtedness from month to month.