Allocating Tax Burdens and Government Benefits By Income Class



30th Year

TAX FOUNDATION, INC.

This pamphlet summarizes Tax Foundation's study, Tax Burdens and Benefits of Government Expenditures by Income Class, 1961 and 1965. Copies of the full study are available at \$1.50 each.

Tax Foundation is a private, nonprofit organization founded in 1937 to engage in non-partisan research and public education on the fiscal and management aspects of government. It serves as a national information agency for individuals and organizations concerned with government fiscal problems.

> Government Finance Brief No. 8 January 1967

> > Copyright 1967
> > Tax Foundation, Inc.
> > 50 Rockefeller Plaza
> > New York, N. Y. 10020

Allocating Tax Burdens and Government Benefits By Income Class

How much do families at each income level pay, on the average, in taxes, hidden as well as direct? The much benefit do they get from government expenditures? These are questions of perennial interest and significance for public policy decisions.

This study provides some provisional answers to such questions. Because of the limitations of data, the study is confined to broad estimates of (1) the total tax burden — Federal and state-local — on families and unattached individuals by income class and by major type of tax, and (2) the benefits of government expenditures by major groups of programs.

Estimates of the distribution of the tax burden and expenditure benefits require assumptions about the incidence of taxation and the distribution of benefits. An element of judgment also appears in selecting appropriate definitions of income, taxes, and benefits. The methods used in this study are similar to those used in earlier studies by Tax Foundation and others. A brief discussion of methods and assumptions is given below following the summary of major findings.

Major Findings

As shown by Chart 1, the total effect of government taxing and spending is a substantial redistribution of income in favor of low income groups. In 1961 benefits exceeded the tax burden by a ratio of more than 4 to 1 for families in the under \$2,000 income class (Table 1). On the other hand, for families in the \$15,000 and over class estimated total taxes exceeded the benefits of government expenditures by about 160 percent. Benefits exceeded burdens up to a income level of about \$6,000 in 1961.

For the purpose of these estimates. government expenditures were divided into two broad groups: (1) general benefit expenditures - those for which benefits can be allocated to families only in very general ways, and (2) specific expenditures, such as veterans benefits, which can be attributed and allocated to identifiable groups of families by income class. The general benefit expenditures include those for national defense and international affairs, commerce and finance, health and sanitation, civilian safety, transportation other than streets and highways, and general government administration. The specific categories of expenditures include those for education, highways, veterans benefits, public welfare, labor and manpower, agriculture, social insurance, and interest.

It is evident from Table 1 that the redistribution resulting from government taxing and spending is not merely the result of the large amount of "general benefit expenditures," which can be attributed to all families in about the same measure. The redistribution through

Redistribution Through Public Finance for all Families

By Income Class — 1961

					Incom	e eless(e)	-55775			
RATIO	Under \$2,000	\$2,000 to 2,989	\$3,000 et 0,000	\$4,000 to 4,999	\$5,000 to 5,000	\$4,000 to 7,499	\$7,500 to 9,000	\$10,000 10 14,000	\$18,000 ac 8 ever	TOTAL
Total expenditures			Rati	o of govern	ment expen	diture bene	fits to tax	burdens .		
Total taxes					10	¥1				
(1) Standard assumptions	4.1	2.6	1.7	1.2	2.1	.9	.8	.7	.4	1.0
(2) General benefits allocated all on number of families	5.3	3.0	1.9	1.3	1.0	.9	.7	5	· .) ,2	1.0
(3) Excluding general benefits	4.8	3.1	1.8	1.2	1.0	.8	.7	.,6	,3	1.0
Federal expenditures	5.		x *	-		**				
Federal taxes	6.1	3.3	1.9	1.3	1.1	, ,9	.8	,6	.3	1.0
State-local expenditures					1				4 10	
State-local taxes	2.4	1.8	1.3	1.1	1.6	1.0	,9 "	1 8	,6	1,0
Social insurance benefits		١.		. 6	20			. 20		
Social insurance contributions	7.4	4.3	2.4	,9	.7	.5	4	.,3	.1	1.0

a. The income class limits are expressed in money income after personal taxes.

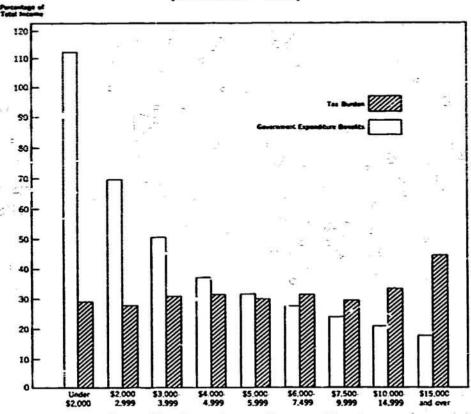
Source: Appendix Table . B-9 and B-10.

b. General benefit expenditures allocated half on the basis of number of families and half on the basis of family mr. say income; corporation taxes allocated half on the basis of consumption and half on the basis of dividends.

c. Ratio compares the tax distribution after adjustment of the aggregate amount to eq. at the total expenditures in the category shown.

d. After deduction of Federal grants-in-aid.

Chart 1
TOTAL TAX BURDEN AND EXPENDITURE
BENEFITS AS A PERCENT OF TOTAL INCOME
BY INCOME CLASS
(All Families — 1961)



Income Class (money income after personal taxes)

Source: Tables 3 and 5.

public finance is also very much in favor of low income groups if we consider only the specific benefit expenditures and the share of taxes required for such programs. Table 1 shows that if we exclude general benefit expenditures, and relate remaining expenditures to estimated tax burdens for these expenditures, benefits exceeded tax burdens by a ratio of 4.8 to 1 for families with incomes under \$2,000 in 1961. For the total of these specific expenditure programs also, benefits

exceeded tax burdens up to an income level of about \$6,000 in 1961.

The redistribution of income on the Federal level is greater than on the state and local level. On the basis of the standard assumption concerning general expenditure benefits (half allocated on number of families and half on family money income), families in the lowest income category received Federal benefits equal to about six times their Federal

Table 2
Federal, State, and Local Taxes as a Percentage of Total Income
For All Families by Income Class - 1961

3						Income al	ASS(A)				
TAX		Under \$2,000	\$2,000 te 2,999	\$3,900 ta 3,966	\$4,000 to 4,999	\$5,000 io 5,000	\$8,000 to 7,499	\$7,500 te 9,988	\$10,070 te 14,899	\$15,000 and ever	TOTAL
Federal:				_							
Individual income		2.0	3.4	4.9	7.0	7.5	8.4	9.6	10.9	17.6	9.0
Corporate income		4.4	4.3	5,3	3.6	3.9	3.3	3.4	5.2	10.7	4.6
Excise and customs		3.4	3.2	3.6	3.3	3.2	3.1	2.8	2.6	1.6	2.9
Estate and gift	90		-		A	10-1		-		4.2	.4
Social insurance contributions		3.0	3.2	3.5	3.9	3.8	3.6	3.4	3.1	1.7	3.3
Total		12.8	14.1	17.4	17.8	18.4	18.4	19.1	21.8	35.7	20.2
Total excluding social					0.200.000		(7.256.5)			,,,,,,,,,	N.111
insurance	4.1	9.8	10.9	13.9	13.9	14.6	14.8	15,7	18.7	34.0	16.9
State and Local:		94									
Individual income		.1	.2	.3	.4	.5	.5	,6	.7	1.1	6
Corporate income		.2	.2 .3	.4	,4 ,3	,5 ,3	.5 .2	,2	.3	.7	.3
Sales, excise, and other		5.7	5.3	5.3	4.9	4.9	4,5	4.2	3.8	2.5	4.3
Death and gift		-	-		-	•	1	-		1.1	.1
Property and personal property		6.7	5.1	4.7	4.2	4.0	3.8	3.5	3.1	2.4	3.8
Social insurance contributions		1.6	1.4	1.4	1.4	1.4	1.2	1,2	1.1	∘ ,7	1.2
Total		14.4	12.2	12.0	11.3	11.0	10.3	9.7	9.1	8.4	10.3
Total excluding social						200.00			3300 cm	17.75(E)	1200000
insurance		12.8	10.8	10.6	9.9	9.6	9.9	8.5	8.0	7.7	9.1
Total All Taxes		27.3	26.3	29.4	29.1	29.4	28.6	28.7	30.9	44.1	30,5

a. The income class limits are expressed in money income after personal taxes. The total income on which the percentages in the body of the table are based is a broad income concept equivalent in the aggregate to net national product. See text for discussion and Table 4 in the full study for average incomes by income class.
 b. Half of the burden of the corporate tax is assumed to be shifted forward to consumers and half is assumed to fall on shareholders.
 Note: For number of families by income class, see Appendix Table A-2.
 Source: Appendix Tables 8-9 and 8-11.

tax burden as compared with state and local benefits of only 2.4 times their state and local tax burden. A similar comparison in the highest income class shows Federal benefits of only threetenths of the tax burden and state and local benefits of only six-tenths of the tax Surden.

The Total Tax Burden. The total burden of Federal, state and local taxes is approximately proportional up to a familv income level of \$10,000. This range of income included about 91 percent of all families in 1961.

Above the \$10,000 income level the total tax burden shows a substantial degree of progression. The over-all effective rate for families in the \$15,000 and over clas. in 1961 was 44 percent as compared with an average for all families of 30.5 percent (Table 2). The fact that all families with incomes of \$15,000 and over (after personal taxes) are grouped in one class means that the nature of the tax structure at the upper end of the income scale is left unexplored in this study.

The Federal Tax Burden. The total Federal tax burden, including social insurance, shows a substantial degree of progression throughout the income scale. The individual income tax burden in 1961 rose from 2.0 percent for families in the under \$2,000 class to 17.6 percent for families in the \$15,000 and over class. (The average level of these rates is lower than would be expected on the basis of income tax data because of the broad definition of income used in this study. See below p. 11.)

The burden of the corporation income tax on the standard assumption (half allocated on consumption and half on the basis of dividends) was lowest in the income range from \$4,000 to \$10,000, and rose sharply at higher income levels because of the concentration there of dividend income.

On the other hand, the burden of sales, excises and social insurance taxes was heaviest at income levels of \$3,000 to \$5,000. The slight element of progression at low income levels in Federal sales and excise taxes reflected the rising importance of automobile sales and excise taxes over the lower portion of the income scale.1

The element of progression in the social insurance tax burden reflects in part the increased number of earners per family going from low to middle income levels =

The State and Local Tax Burden. The total state and local tax burden, including social insurance, declined from 14.4 percent for families in the under \$2,000 class to 8.4 percent in the \$15,000 and over class. Excluding social insurance (chiefly unemployment insurance), the state and local burden declined from 12.8 percent in the under \$2,000 class to 7.7 percent in the \$15,000 and over class. Excluding the lowest and highest income classes, the range in the over-all burden was from 12.2 percent in the \$2,000 to \$3,000 class to 9.1 percent in the \$10,000 to \$15,000 class.

The burden of the individual income, the corporation income, sales and excise taxes followed a pattern similar to that for the corresponding Federal taxes because the same bases of allocation were used in both cases. The data available were not sufficient in the case of income taxes to make a meaningful distinction in the estimates of these taxes at the Federal as compared with the state and local

. .

^{1.} For further analysis by type of tax, see Tax Foundation, Federal Non-Income Taxes, (New York: 1965).

pp. 36-40.

2. For further analysis see Tax Foundation, Economic Aspects of the Social Security Tax, (New York: 1966), pp. 43-46.

	Income class(a)											
EXPENDITURE	Under \$2,300	\$2,000 te 2,999	\$3,000 10 2,000	\$4,000 10 4,999	\$5,000 5,000	\$8,000 to 7,499	\$7,500 to 9,900	\$10,000 14,999	\$15,000 and ever	TOTAL		
Federal:												
General benefit expenditures National defense and international	37.9	22.0	.;·17.5	14.0	, 13,1	11.7	10,5	9.4	7.7	12.8		
affairs	32.1	18.6	14.8	12.5	11.1	9.9	0 8,9	7.9	6,5	10.8		
Other	5.8	3.4	2.7	2.3	2.0	1.8	1.6	1.5	1.2	2.0		
Total excluding general benefit items	40.8	25,0	15.7	7.9	6.4	5.1	4,3	4.3	4.2	7.8		
Total, standard assumptions	78.7	47.0	33.2	22.7	19.5	16.8	14.8	13.7	11.9	20.6		
Total, general benefits all allocated on number of families	103.6	56.0	37.7	24.5	19.8	15.8	12.6	10.2	7.0	20.6		
State and Local:d					172		Ť.	24.2		9 1		
General banefit expenditures b.c	11.0	6.4	5.1	4,3	ć' 3.8	O . 3.4	3.1	2.8	- 2.2	3.8		
Total excluding general benefit items	23.0	15.0	10.5	8.5	7.6	6,5	5,2	4.5	2.9	7.0		
Total, standard assumptions	34.0	21.4	15.6	12.8	11.4	9.9	8.3	7.3	5,1	10.8		
Total, general benefits all allocated on	0 110	6.4.03				5.5	0,0	7.3	, 5,1	10.0		
number of families	41.3	24.0	16.9	13.3	=11.5	9.6	7.6	6.3	3.7	10.8		
All Governments:	1			(5.37,133)		0.0		5	0.17			
Total, standard assumption	112.7	68.4	o48.9	35,5	30.9	26.6	23.1	20,9	17.1	31.4		
Total, general benefits all allocated on number of families	144.9	80.1	54.6	37.8	31.3	25.3	-20.2	16.5	10.7	31.4		
Total excluding general benefit items	63.8	40.0	26.3	16.4	14.0	11,6	9,5	8.7	7.2	14.8		
Total excluding social insurance	84.3	51.5	39.0	31.7	28.0	24.7	21.7	19.8	16.8	27.5		

a. The income class limits are expressed in money income after personal taxes, "Personal taxes" consists mainly of Federal, state and local income taxes. The total income on which the percentages are based is a broad income concept equivalent in the aggregate to net national product.

Source: Appendix Tables B-10 and B-11.

b. Consists of general government (excluding interest), transportation (excluding highways), commerce and finance, housing and community development, health and sanitation, civilian safety, and miscellaneous.

c. General benefit items allocated half on the basis of number of families and half on family months income.

d. After deduction of Federal grants-in-aid.

Federal, State, and Local Taxes as a Percentage of Total Income

3			=73.670	17	Income	(Assib)	1			
TAX	Under \$2,000	\$2,000 te 2,899	\$3,000 to 3,895	\$4,000 to 4,999	\$5,000 5,999	\$8,000 to 7,498	\$7,500 to 9,998	\$10,000 to 14,899	\$18,000 and eyer	TOTAL
Federal:				ži.	4-1	1	9 6 4	V	a.V	
Individual income	1.9	3.1	4.5	6,4	6.9	7.7	88	10.0	16.1	8.3
	4.5	4.3	5.5	3.6	3.5	3.4		5.3	10.9	4.0
Corporate income Excises and customs	3.3	3.1	3.3	3.1	3.0	2.8	2.6	2.4	1.5	2.7
Estate and gift		3.1	5.5	90.5.1	4	(*)		part y	4.6	.5
Social insurance	3.2	3.4	3.8	4.1	4.0	3.8	3.5	3.3	1.7	3.5
Total	13.0	14.0	17.1	17.3	17.9	17.8	18.4	21.1	34.9	19.6
Total excluding social insurance	9.8	10.6	13.3	13.2	13.9	14.0	14.9	17.8	33.2	16.1
Total excluding social insurance	., 9.0	10.6	10.0	13,2	13,3	6. 14.0	2.4.5	17.0	J.J.,	10.1
State and Local:	\$ H		200	17/5		1	(_)	-		. 3
Individual and corporate	.6	,C 5.5	. a.8	.9	,9	€9	1.1	1.2	. 2.2	1.4
Sales, excise, etc.	6.1	5.5	5,6	5.3	5.1	4.8	4.4	4.0	2.6	4.6
Property	6.9	5.2	4.7	4.2	4.2	3.8	3.5	3,3	2.4	3.8
Death and gift				-			901	-	1.3	.1
Social insurance	1.5	1.4	. 0 1.4	1.4	1.3	Tea: 1,3	1.2	1.1		1,2
Total	- 15.1	12.7	12.6	17.8	11.5	10.8	0 10.1	9.6	O 9.1	10.8
Total excluding social insurance	13.6	11.3	11.2	10.4	10.2	9.5	8.9	8.5	8.4	9.6
Total All Taxes	28.1	26.7	29.7	29.1	29.4	28.5	28.5	30.6	44.0	30.4

a. The 1965 estimates are based on total taxes and income shown in the national income accounts for 1965. However, they take no account of the shift in the distribution of income from 1961 to 1965.

Source: Appendix Tables 0-4, B-6, and B-8.

b. The income class limits are expressed in money income after personal taxes. "Personal taxes" consist mainly of Federal, state and local income taxes, The total income on which the precentages in the body of the table are based is a broad income concept equivalent in the aggregate to not national product.

Table 5

Benefits of Government Expenditures as a Percentage of Total Income

For all Families by Income Class — 1965

	Incomo class(n)									
EXPENDITURE	Under \$2,000	\$2,000 te 2,999	\$3,000 10 3,000	\$4,000 to 4,999	\$\$,000 to 5,999	\$5,000 te 7,499	\$7,500 to \$,989	\$10,000 (8 14,999	\$15,000 and over	TOTAL
Federal:				04.04	34.6	100	10 V2 900			72,500
General benefit expenditures b.c	34.5	19.9	15.8	13.3	11.9	10.7	9.5	8.4	7.0	11.6
National defense and international		Nanaginari Managinari	202000	on managerian	12120		202			11.000
affairs	26.2	15.1	12.0	10,1	9.0	8.1	7.2	6.4	5.3	8.8
Other	8.3	4.8	3.8	3.2	2.9	2.6	2.3	2.0	1.7	2.8
Total excluding general benefit items	44.8	26.1	15.8	7.9	6,3	4.9	4.3	4.3	4.0	7.9
Total, standard assumption	79.3	46.0	31.6	21.2	18.2	15.6	13.8	12.7	11.0	19.
Total, general benefits all allocated on number of families	102.0	54.2	35.7	22.9	18.5	14.7	11.7	9.6	6.6	19.
State and Local:4										
General banefit expenditures	11.7	6.8	5.4	4.6	4.1	3.6	3.3	2.9	2.3	4,0
Total excluding general benefit items	18.0	12.2	9.0	7.9	7.1	6.2	5.0	4.4	2.9	6.4
Total, standard assumption	29.7	19.0	14.4	12.5	11.2	. 9.8	8.3	7.3	5.2	10.4
Total, general benefits all allocated on				* 1	7.4	1000			1.0	1,3
number of families	37.4	21.8	15.8	13.1	11.3	9.5	7.6	6,3	3.7	10.4
All Governments:								3 ×		
Total, standard assumptions	109.0	65.0	46.0	33.7	29.5	25,4	22.1	20.0	16.3	29.9
Total, general benefits all allocated on	0.5.5.5.5.5		16.555			8			9.5	
number of families	139.5	76.0	51.5	35.9	29.8	24.2	19.3	15.9	10.3	29.9
Total excluding general benefit items	62.8	38.3	24.8	15.8	13.5	1.1.1	9.3	8.7	7.0	14.3
Total excluding social insurance	82.7	49.4	36.9	30.2	26.8	23.6	20.8	18.9	16.0	26.

a. The income class limits are expressed in money income after personal taxes. "Personal taxes" consist mainly of Federal, state and local income taxes. The total income on which the percentages are based is a broad income concept equivalent in the aggregate to net national product.

Source: Appendix Tables B-4, B-7, and B-8.

Consists of general government (excluding interest), transportation (excluding highways), commerce and finance, housing and community development, health and sanitation, civilian safety, and miscellaneous.

c. General benefits allocated half on the basis of number of families and half on family money income.

d. After deduction of Federal grants-in-aid.

Table 6

Bases for the Allocation of the Tax Burden by Income Class

Tax	Basis of Allocation(a)							
Individual income	Personal taxes	_						
Corporate income	Alternative methods on different assumptions of incidence: (1) total current consumption							
	(2) half total current consumption dividend income							
Excises, customs and sales:								
Alcoholic beverages	Alcoholic beverage expenditures							
Tobacco	Tobacco expenditures							
Telephone and telegraph	Telephone and telegraph expenditures	4						
Auto purchase	Automobile pr : chase expenditures							
Auto operation	Automobile operations expenditures							
Other excises, etc.	Total current consumption							
Estate and gift	Completely to the \$15,000 and over income class							
Property	Half housing expenditures and half total current consumption							
Social insurance:								
Persunal contributions	Social security, railroad and government retirement contributions							
Employer contributions	Total current consumption							

a. As reported in U. S. Department of Labor, Consumer Expenditures and Income, Survey of Consumer Expenditures 1960-61 (BLS Report No. 237-38, and Supplement 3, Washington, D. C.: U. S. Government Printing Office, 1965).

level. The national averages, of course, are not representative of states which rely heavily on the individual income tax

The property tax appears notably regressive because about half of the burden consists of taxes on business which are assumed to be shifted forward and are allocated on the basis of consumption expenditures. The portion consisting of taxes on residential property, and still more the portion on home owners, shows much less regression. Indeed, Internal Revenue Service data on property taxes deducted for Federal income tax purposes suggests approximate proportionality to income in the burden of this tax.

Benefits of Government Expenditures. As shown by Table 3 and Chart 1, the pattern of government expenditure benefits is very favorable to low income groups. This is true for nearly every major category of spending. The distribution of general expenditure benefits is most favorable to low income groups

because half of the total was allocated in proportion to the *number* of families at each income level. If all of these benefits are allocated in proportion to the number of families (rather than half in proportion to family money income, as in the standard assumption), the extent of redistribution becomes more pronounced.

The total of benefits attributable to particular categories of beneficiaries also favors the poor. These expenditures include social insurance and public welfare programs, as well as highway programs and net interest payments.

Estimates for 1965. Estimated tax burdens as a percentage of income showed very little change from 1961 to 1965. (Tables 2 and 4.) This was to be expected since the ratio of total taxes to net national product changed little, and the 1965 estimates take no account of shifts in the distribution of income (before tax) over this four-year period.

The basic estimates in this study are

Table 7

Bases for the Allocation of the Benefits of Government Expenditures by Income Class

Expenditures	Basis : f Allec stien(n)
ristional defense and international affairs	Alternative methods:
Other general benefit expenditures	(1) number of families and unrelated
General government	incividuals
Postal service	2000 TO 100 C-01 C-01 C-01 C-01 C-01 C-01 C-01
Civilian se'ety (police, fire, etc.)	(2) half family money income before taxes,
Transporation (excluding highways)	and half number of families and un-
Commerce and finance	related individuals
Health and sanitation	€
Other and miscellaneous	
Natural resources	÷
Public utilities	¥ 51
Education:	
Elementary and secondary	Number of children under 18
Higher education	Higher education expenditures of families
Public assistance relief and other welfare	Income from public social assistance and private relief
_ Labor and manpower	Wages and salaries
Veterans' benefits and services	Military allotments and pensions
Highways	Half auto operation expenditures and half total current consumption
Agriculture	Farm money income before taxes
Net interest	Interest income
Social insurance benefits	Public unemployment and social security benefits

a. As reported in U. S. Department of Labor, Consumer Expenditures and Income, Survey of Consumer Expenditures 1988-81 (BLS Report No. 237-22 and Supplement 3, Washington, D. C.: U. S. G. Wernment Printing Office, 1965).

for the calendar year 1961. Estimates for later years cannot be made with same reliability and detail because the most recent data on family expenditures by type and by income class are for 1961. In order to bring the estimates up to date on a provisional basis, the 1965 data for taxes, government expenditures, and national income were allocated by income class on the same bases used for 1961.

The changes in the over-all tax burden from 1961 to 1965 for each income class were very small. The total Federal tax burden declined by less than one percentage point in the aggregate and for each income class. A decline in the individual income tax and in excises was partially offset by an increase in social insurance taxes. The total state and local tax burden increased by less than one percentage point for each income class.

Total government expenditures as a percentage of total income were slightly lower in 1965 than in 1961. In relation to net national product, total defense expenditures had fallen (defense expenditures in 1965 had scarcely began to show the effects of the Vietnam escalation), while other general expenditure benefits increased substantiallly.

Methods and Assumptions

A full explanation of methods and assumptions is given in the Appendices to the full study. The following is a brief outline of the methods and sources used.

32

Akhough other studies of the tax burden by income class are available,2 this is the first to be done on a nation-wide basis using the comprehensive and detailed 1960-61 survey data on family income and consumption recently published by the Bureau of Labor Statistics.

The most complete survey data, however, could not remove the need for assumption, concerning tax incidence and the distribution of certain expenditure benefits. There is also a problem of determining the most appropriate income bases to which tax burdens and government expenditure benefits should be related.

The method of estimation is to allocate by income class the aggregate amounts of taxes and expenditures in proportion to selected items of family expenditures or income shown in the BLS survey and deemed to reflect the incidence of tax burdens or expenditure benefits.

Meaning of Income. For reasons set out in earber Tax Foundation publications; the most appropriate income base to which the burden of all taxes may be related appears to be the net national product as defined in the national income accounts.

The ouestion may be raised why total family money ancome is not an appropriate base for measuring effective tax rates. The reason is that we are attempting to estimate the burden of all taxes including those collected from business. Therefore, we must impute the burden of corporate taxes to families and individuals, and also make a corresponding imputation of income to families and individuals.

Incidence. The choice of assumptions on tax incidence is arbitrary but also conventional. Individual income taxes are assumed to fall on the people on whose income they are levied Sales taxes, excises, and the numerous taxes on business costs (including the property tax levied on business property) are assumed to be shifted forward to the consumer. In the case of the corporation income tax, estimates are made on two assumptions: (1) that the tax is fully shifted forward to consumers, and (2) that half of the tax falls on stockholders and half is shifted forward to consumers. The latter case is taken as the standard one, or the one most acceptable for general purposes. (Data in the appendice. make it possible to work out the results on other assumptions.)

The incidence of expenditure benefits is assamed to be entirely on the immediate recipients of transfer payments (e.g., veterans benefits may be assumed to benefit veterans exclusively), or persons easily identified as direct beneficiaries of other expenditures (e.g., a substantial portion of highway expenditures may be assumed to benefit motorists in a coportion to their automobile expenditures !

However, for a wide range of expendituresdefense, international affairs, general government administration, etc.-direct beneficiaries cannot be identified. In such cases, we have resorted to two alternative assumptions. The first is that the benefits of such general purpose expenditures may be allocated on a per family basis. In a democratic society of "equals," the protection of "life" provides an argument for a per capita basis of allocation of benefits. However, a per family basis seemed preferable to a per capita one when the basic reporting unit in the underlying statistical survey was the family.

The second basis used for allocation of general government expenditures that are not attributed to a specific category of beneficiary was family income. That is to say, families are assumed to benefit from general government expenditures, suc., as those for defense, international affair:, police and fire protection, general administration in proportion to the size of their incomes. The rationale for this assumption is that income may be taken as a rough index of protection and benefits received from general government services.

Definition of Taxes and Expenditures, Since the aggregate income base for purposes of this study is the net national product, the amounts alks ated to families on the tax and expenditure sides are total government receipts and expenditures as shown in the national income accounts. Nontax payments to government are included, so that the difference between government receipts and apenditures is equal to the total Federal-state-local surplus or deficit in the national income accounts.

Tax Foundation, Allocation of the Tax Burden and Expenditures Benefits by Income Class, tResearch Bibliography No. 15; New York; Resided April 1966.
 U. S. Bureau of Labor Statistic, Consumer Expenditures and Income. Survey of Consumer Expenditures 1960-61, (BLS Report No. 237-38 and various supplements, Washington, D. C.: 1965 and 1966).

It is assumed that tax burdens are measured by receipts and benefits by expenditures. Indirect costs (such as the cost to the consumer in higher prices resulting from agricultural support programs) are not taken into account.

Bases of Allocation. The bases used for allocating taxes are shown in Table 6. Those used for allocating expenditure benefits are shown in Table 7. These bases reflect the definitions and assumptions noted above.

The admittedly arbitrary assumptions in-

volved in the selection of the bases of allocation reflect the purpose of the study, namely to give a broad picture of the distribution of burdens and benefits. If the study were aimed at the burdens and benefits of particular programs, these assumptions and bases of allocation would be inadequate.

In the full study, estimates are included on alternative assumptions of incidence of taxes and expenditure benefits, as well as on different income bases.