

**Table 9-1 Tax burden/benefits as a percentage of total income—United States, 1968**

Taxation	Lower limit of brackets (\$) total income (including transfers)										Average
	under \$4000	\$4000–\$4999	\$5000–\$5999	\$6000–\$6999	\$7000–\$7999	\$10,000–\$12,499	\$12,500–\$17,499	\$17,500–\$22,499	\$22,500–\$35,499	\$35,500–\$92,000–	
<b>Federal</b>											
<b>Total</b>	15.2	17.9	20.9	21.6	21.6	23.4	22.6	23.8	24.5	29.1	22.7
Income and estate tax*	2.0	2.8	5.9	7.1	7.9	10.1	10.6	13.3	16.8	21.2	10.3
Excise and customs	2.5	2.8	3.1	3.0	2.9	2.7	2.1	1.1	0.9	0.6	2.3
Corporation income tax	5.1	6.1	5.0	4.6	4.3	4.6	4.8	5.1	5.3	6.6	5.0
Social security payroll tax	5.5	6.3	7.0	6.9	6.7	6.1	5.2	4.2	1.5	0.6	5.2
State and local											
<b>Total</b>	13.4	12.6	11.9	11.6	11.1	10.6	9.7	9.1	7.1	6.9	10.3
<b>Total</b>	<b>28.5</b>	<b>30.5</b>	<b>32.8</b>	<b>33.1</b>	<b>32.8</b>	<b>33.9</b>	<b>32.4</b>	<b>32.9</b>	<b>31.6</b>	<b>35.9</b>	<b>33.0</b>
<b>Expenditure</b>											
<b>Allocable</b>											
Federal total	83.5	25.7	13.3	7.6	5.3	4.7	4.3	5.3	5.5	7.5	10.0
State and local total	27.1	18.7	15.8	12.2	9.4	7.4	4.8	3.6	2.2	0.9	8.4
Education } Federal	6.1	11.0	11.5	9.7	7.4	6.0	3.5	3.0	1.7	0.6	5.8
Highways } and	1.8	2.4	2.8	2.6	2.5	2.2	1.8	0.9	0.7	0.4	1.9
Medical } state and	7.6	7.4	3.9	2.0	1.2	0.7	0.5	0.3	0.1	0.0	1.5
Transfers } local	92.8	21.4	9.4	4.5	2.7	2.1	1.5	1.2	0.2	0.2	6.9
<b>Total allocable</b>	<b>110.6</b>	<b>44.4</b>	<b>29.1</b>	<b>19.8</b>	<b>14.7</b>	<b>12.0</b>	<b>9.1</b>	<b>8.9</b>	<b>7.7</b>	<b>8.4</b>	<b>18.4</b>
<b>Total including non-allocable</b>	<b>127.3</b>	<b>61.1</b>	<b>45.8</b>	<b>36.5</b>	<b>31.4</b>	<b>28.8</b>	<b>25.8</b>	<b>25.6</b>	<b>24.4</b>	<b>25.1</b>	<b>35.1</b>

Source: Musgrave, Case and Leonard (1974, Tables 2, 6, 7) based on "benchmark" assumptions and assumption (a) about public goods allocation. Reproduced by courtesy of Sage Publications, Inc.  
 \* Including gift tax.

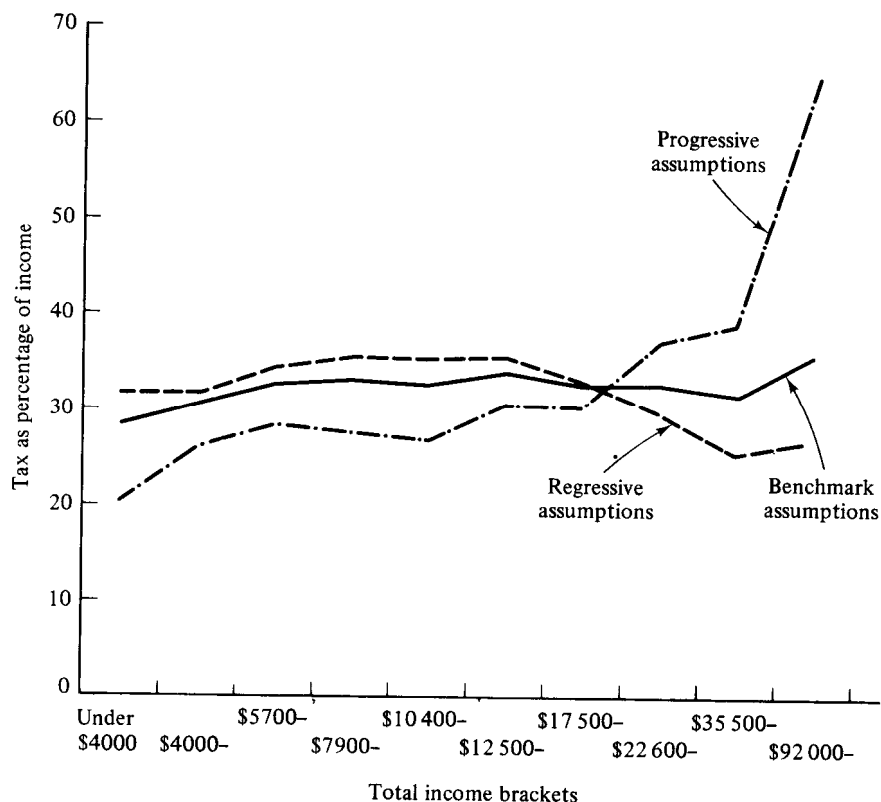


Figure 9-2 Redistributive effect of taxation under different assumptions about incidence: United States. (Source: Based on estimates given in Musgrave *et al.* (1974, p. 264.)

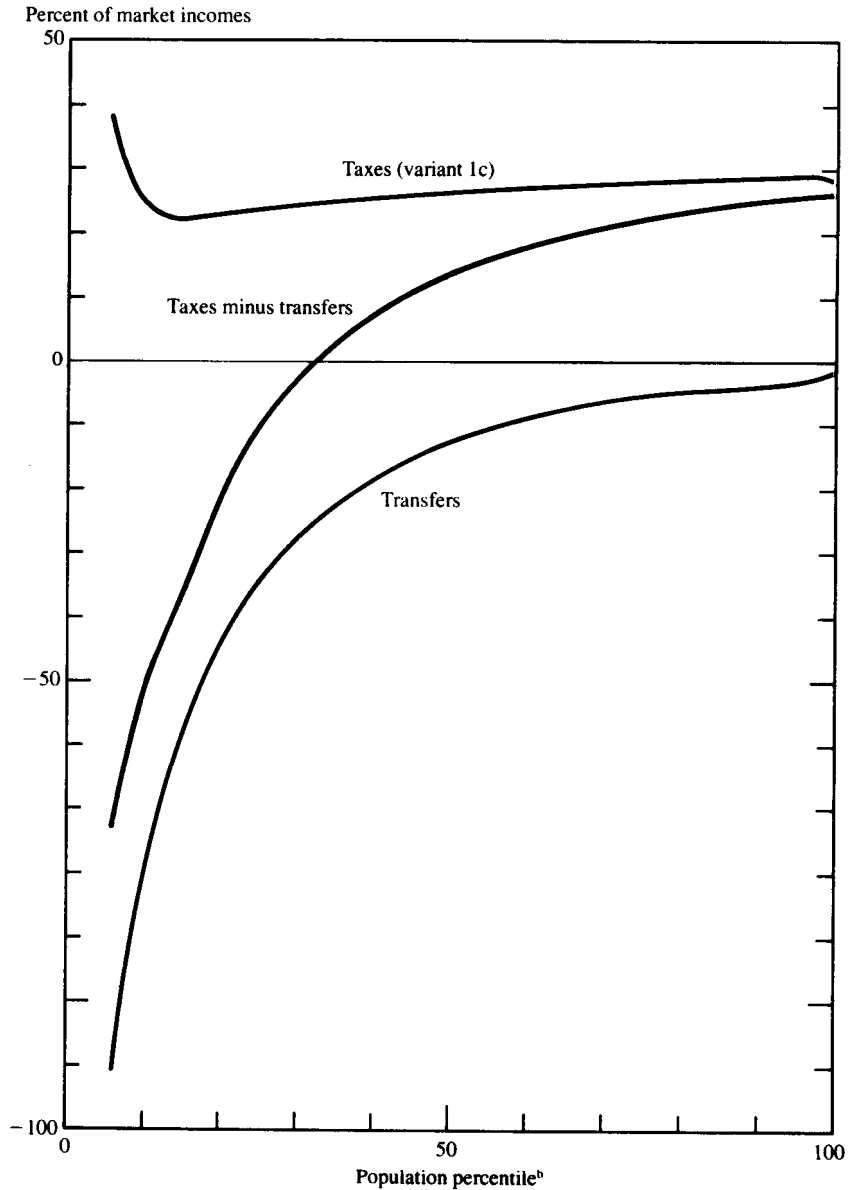
are two classes of consumer (with homothetic utility functions). This allows us in particular to consider the criticisms made by Prest.<sup>21</sup> Suppose that we consider an infinitesimal excise tax,  $T_X$ , on sector  $X$ ; the other sector,  $Y$ , is untaxed and there are no other taxes. (The assumptions about government revenue are those in Lecture 6.) In general, the tax leads to a change in relative consumer prices ( $q_X/q_Y$ ). From the analysis of Lecture 6, this is given by (from Eq. (6-11''))

$$\hat{q}_X - \hat{q}_Y = \theta^*(\hat{w} - \hat{r}) + \hat{T}_X \quad (9-41)$$

<sup>21</sup> In part these are directed at the use of the approach to calculate the effects of large changes in taxes and spending. Thus, Prest (1968, p. 84) refers to the index number problem of choosing between original and final prices. Although the studies described above have been concerned with the total effect of the budget, it is marginal changes that are of particular relevance in policy-making, and it is on these that we focus.

Pechman, Joseph A. Who Paid the Taxes 1966-85?

Figure 4-2. *Federal, State, and Local Transfers and Taxes as a Percent of Market Income, by Population Percentile, 1980<sup>a</sup>*



Source: Brookings MERGE file. For an explanation of the incidence variants see table 3-1.  
a. Market income equals adjusted family income minus transfers.  
b. Arrayed by size of market incomes.