

Tax Policy Center
Urban Institute and Brookings Institution

THE TAX POLICY

BRIEFING BOOK

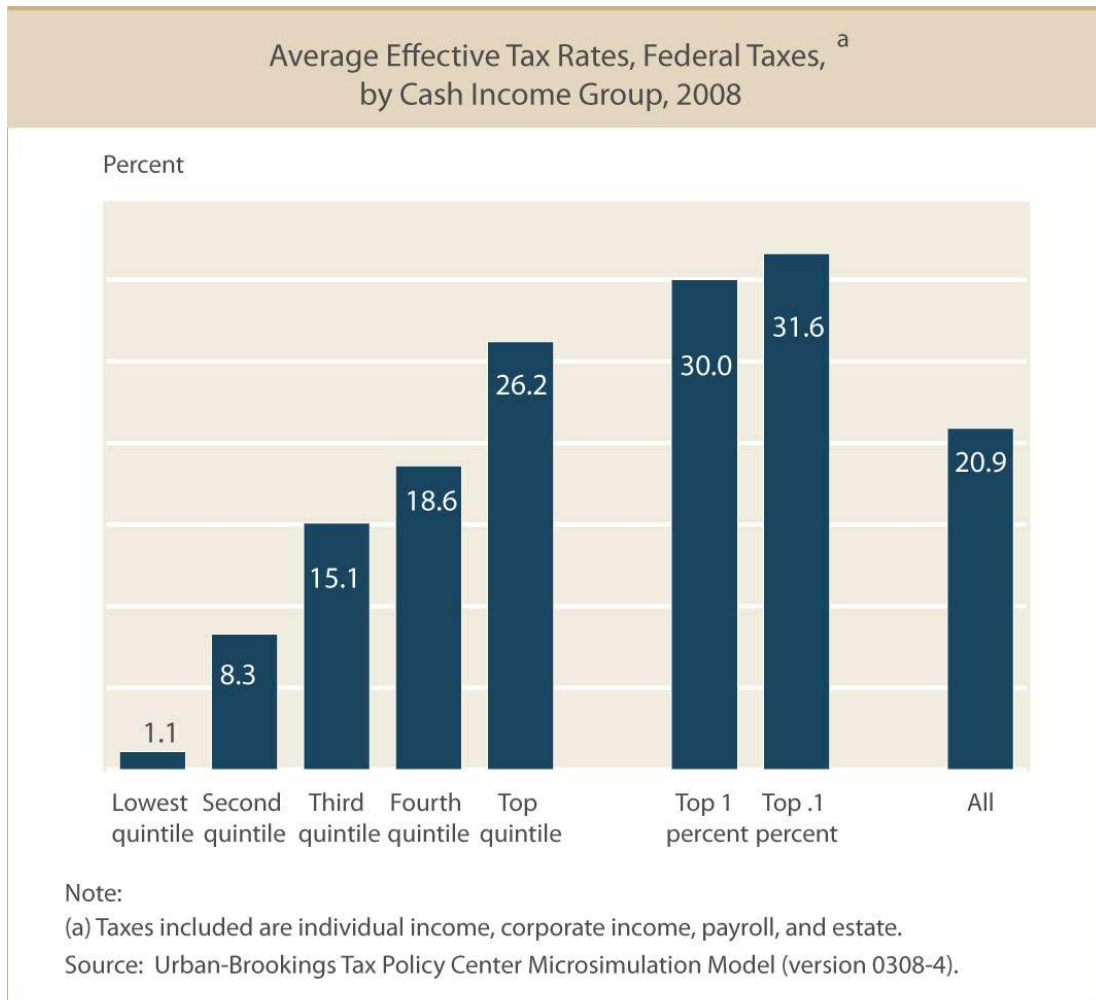
*A Citizens' Guide for the
2008 Election and Beyond*

DISTRIBUTION AND TAX BURDENS

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Distribution: Are federal taxes progressive?

Taken as a whole, the federal tax system is progressive: on average, households with higher incomes pay a larger share of their income in federal tax than do those with lower incomes. In other words, the overall average effective tax rate-total tax paid as a percentage of income-rises as income rises. But not all taxes within the federal system are equally progressive. The estate tax is the most progressive federal tax. The individual and corporate income taxes are also progressive. In contrast, payroll taxes for Social Security and Medicare are regressive, claiming a larger share of income from lower-income than from higher-income households.



- We estimate that the average effective individual income tax rate across all tax units in 2008 will be 9.5 percent. About 40 percent of tax units will pay no individual income tax or will receive a net subsidy for 2008; the 1 percent of tax units with the highest incomes will pay an estimated 18.3 percent of their income in individual income tax on average.
 - Individual income tax averages 15.0 percent of income for the top-earning fifth, compared with -8.1 percent for the bottom 20 percent of earners.
 - At very high incomes, the average effective individual income tax rate actually declines, primarily because much of these taxpayers' income is in the form of capital gains, which are lightly taxed.

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- The corporate income tax is also progressive. Average effective corporate tax rates are roughly the same for the bottom 80 percent of the income distribution but rise substantially for those at or near the top of the scale.
 - The average effective corporate tax rate for the top fifth of households, 5.1 percent, is more than five times the 0.9 percent average for those in the middle fifth of the income spectrum.
 - Households in the top 1 percent, who tend to get a much larger share of their income from capital, pay an average effective corporate tax rate of 9.6 percent (using the Tax Policy Center's method of imputing corporate income tax to households based on their receipt of capital income).
- In 2008 about 90 percent of estate tax revenue will come from the top 10 percent of cash income earners.
 - The average effective estate tax rate is essentially zero for the bottom 80 percent of the income distribution. The top 20 percent pay an average of 0.4 percent of their income, the top 1 percent pay 0.7 percent, and the top 0.1 percent – the richest 1 in 1,000 -- pay 0.8 percent.
 - Many estate taxpayers whose cash incomes appear low actually have substantial unrealized wealth. When taxpayers are categorized by a more comprehensive measure of income that includes this unrealized wealth, the top 10 percent pay virtually all the estate tax.
- For 2008 average effective payroll tax rates are estimated at 8.4 percent for the bottom fifth of income earners, and 10.4 percent for the next fifth, but only 5.7 percent for the top fifth. Households in the top 1 percent will pay an estimated average of only 1.5 percent of their income in payroll taxes.
 - This regressivity of payroll taxes stems from two factors. First, the Social Security portion of payroll taxes is subject to a cap: in 2008 individuals pay Social Security tax on only their first \$102,000 in earnings. Second, higher-income households tend to receive more of their income from sources other than wages, such as capital gains and dividends, which are not subject to the payroll tax.

For the latest on the distribution of federal tax burdens, see <http://www.taxpolicycenter.org/taxtopics/currentdistribution.cfm>

See Also

Distribution of Tax Burdens: How Should Progressivity Be Measured?

Data Sources

[TPC Table T08-0078](#). Current-Law Distribution of Federal Taxes by Cash Income Level, 2008.

[TPC Table T08-0079](#). Current-Law Distribution of Federal Taxes by Cash Income Percentile, 2008.

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Further Reading

Burman, Leonard E., "Fairness in Tax Policy: Testimony Before the Subcommittee on Financial Services and General Government, House Appropriations Committee" (Washington: Urban Institute, 2007).

Leiserson, Greg, and Jeffrey Rohaly, "The Distribution of the 2001-2006 Tax Cuts: Updated Projections, November 2006" (Washington: Urban Institute, 2006).

Rohaly, Jeffrey, "[The Distribution of Federal Taxes, 2008-11](#)" (Washington: Urban Institute, 2008).

Distribution: How should progressivity be measured?

A tax system is considered progressive if, on average, households with higher incomes pay taxes that are a larger share of that income. Thus, in a progressive tax system, the average effective tax rate—tax paid as a percentage of income—rises as income rises. This implies that, under such a system, the ratio of after-tax income to pre-tax income falls as income rises. Hence a natural measure of the impact on progressivity of a change in tax policy is the percentage change in after-tax income. A tax cut that gives all households the same percentage increase in after-tax income is neither progressive nor regressive but distributionally neutral; it leaves the relative distribution of after-tax income unchanged. A tax cut that increases after-tax income proportionately more for lower-income households makes the tax system more progressive. One that increases after-tax income more for higher-income households makes the system less progressive.

Combined Effect of the 2001-06 Tax Cuts Distribution of Federal Tax Change by Cash Income Percentile, 2010				
Cash income percentile	Percent change in after-tax income	Share of total federal tax change	Average federal tax change	
			Dollars	Percent
Lowest quintile	0.4	0.4	-37	-9.8
Second quintile	2.1	5.2	-437	-19.1
Middle quintile	2.3	9.7	-814	-11.6
Fourth quintile	2.3	15.5	-1,305	-8.4
Top quintile	3.6	68.9	-5,809	-9.1
All	3.0	100.0	-1,686	-9.4
<u>Addendum</u>				
Top 10 percent	4.0	56.1	-9,457	-9.5
Top 5 percent	4.7	48.1	-16,223	-10.4
Top 1 percent	6.7	36.8	-62,007	-13.4
Top 0.5 percent	7.3	31.1	-104,678	-13.9
Top 0.1 percent	7.8	18.6	-314,150	-13.7
Share of federal taxes				
Cash income percentile	Change (% points)	Under the proposal		
Lowest quintile	0.0	0.4		
Second quintile	-0.3	2.3		
Middle quintile	-0.2	7.7		
Fourth quintile	2.0	17.6		
Top quintile	0.3	71.9		
All	0.0	100.0		
<u>Addendum</u>				
Top 10 percent	0.0	55.9		
Top 5 percent	-0.5	43.2		
Top 1 percent	-1.1	24.8		
Top 0.5 percent	-1.0	20.0		
Top 0.1 percent	-0.6	12.3		

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 1006-1).

- Although the percentage change in after-tax income is likely the most informative measure of the distributional impact of a tax change, the Tax Policy Center also reports several other measures in its distribution tables, each of which can be useful but can also be misleading if interpreted incorrectly.
- Comparison of the shares of a tax cut received by each income group can be misleading because the individual income tax is highly progressive. High-income households may receive what appears to be a large share of an income tax cut, but the tax system could still end up more progressive if their share of the tax cut is much smaller than their share of overall tax liability.
- The average tax cut in dollar terms is another often-used measure of who benefits from a tax cut. For example, in 2010, as a result of the 2001-06 tax cuts, households in the middle of the income distribution will receive an average tax cut of \$814 (see table). Those in the top one-tenth of 1 percent will receive an average cut that is almost 400 times larger (\$314,150). These numbers alone, however, do not tell us who benefited proportionately more, since those at the top of the income scale have significantly more income-but also pay significantly more tax-than those in the middle.
- An alternative distributional measure is the change in tax as a percentage of the household's total tax liability. This measure can be extremely misleading. Because low-income households pay less tax than high-income households under a progressive tax system, a small tax cut in dollar terms for low-income households can be a large percentage cut, and thus can appear to be a huge reduction in tax liability.
- For example, consider a family earning \$20,000 that pays \$1 in taxes and another family earning \$2 million that pays \$500,000. Now suppose that legislation provides a \$1 tax cut for the low-income family and a \$100,000 tax cut for the high-income one. Using the percentage change in tax liability makes it appear that the cut is tilted toward the low-income family: its taxes fall by 100 percent while those of the high-income family fall "only" 20 percent. In fact, the cut increases the after-tax income of the poor family by just 0.005 percent while increasing that of the wealthy family by 5 percent, or 1,000 times more as a percentage of income.
- Thus it would be extremely misleading to characterize the 2001-06 tax cuts as benefiting the middle class more than the wealthy simply because the percentage change in tax is, on average, higher for those in the middle quintile. For example, in 2010 federal taxes fall by an average of 11.6 percent for those in the middle quintile and 9.1 percent for those in the top quintile. But in terms of what really matters-economic resources as measured by after-tax income-those in the top quintile benefit proportionately more. They see an increase in after-tax income of 3.6 percent, while those in the middle of the spectrum receive only a 2.3 percent increase.
- Another measure of the impact of a tax policy is the change in the share of the overall tax burden paid by different income classes. This concept can also be misleading as a measure of the progressivity of a tax cut if the tax burden is changing at the same time.
- Consider the example discussed above. After the tax legislation that provides the low-income family with a \$1 tax cut and the high-income family with a \$100,000 cut, the high-income family pays 100 percent of the total tax burden, since the other family has had its tax liability completely eliminated. But just because the high-income family now pays a larger share of the tax burden, it does not mean that it did not benefit the most from the tax cut. As already shown, in

percentage terms its after-tax income went up 1,000 times more than did that of the lower-income family.

- The problem with using the change in the share of the tax burden can be seen when examining the 2001-06 tax cuts. As a result of the cuts, the share of the federal tax burden paid by the top income quintile rises by 0.3 percentage point in 2010, whereas the share paid by the middle quintile falls by 0.2 percentage point. But, again, that does not imply that the 2001-06 tax cuts made the tax system more progressive, nor does it mean that those in the middle quintile benefited more than those at the top.

See Also

Distribution of Tax Burdens: Are federal taxes progressive?

Data Sources

TPC Table T06-0282. Combined Effect of the 2001-2006 Tax Cuts, Distribution of Federal Tax Change by Cash Income Class, 2010.

TPC Table T06-0283. Combined Effect of the 2001-2006 Tax Cuts, Distribution of Federal Tax Change by Cash Income Percentile, 2010.

TPC Table T06-0307. Current-Law Distribution of Federal Taxes by Cash Income Class, 2007.

TPC Table T06-0308. Current-Law Distribution of Federal Taxes by Cash Income Percentile, 2007

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Further Reading

Burman, Leonard E., "Fairness in Tax Policy: Testimony Before the Subcommittee on Financial Services and General Government, House Appropriations Committee" (Washington: Urban Institute, 2007).

Leiserson, Greg, and Jeffrey Rohaly. "The Distribution of the 2001-2006 Tax Cuts: Updated Projections, November 2006" (Washington: Urban Institute, 2006).

Tax Policy Center, "Is a Fair Tax System an Oxymoron?" Tax Policy Center Event Transcript. (Washington: Urban Institute, 2004)