

And Equal (Tax) Justice for All? (Part 5 of 8)

Part Five: The Inconsistent Measure of Progressivity in Tax and Expenditure Systems

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Roughly speaking, a tax or expenditure system is more progressive if it tends to redistribute more from those who are better off to those who are worse off. Beyond that crude understanding, however, progressivity can mean different things to different people. Inconsistencies permeate not just in the general press but in the academic literature as well—often with powerful effects on the development of policy.

One of the most arbitrary distinctions arises from the separate treatment of progressivity in tax systems and expenditure systems. Pick up even the most sophisticated of newspapers or magazines, and taxes are likely to be covered by different reporters in different sections than expenditures. Sometimes whole publications are devoted only to taxes or to expenditures. (Hmm. What's the name of this magazine?) Legislatures separate their expenditure authorization and appropriations committees from their tax committees. When running for office, politicians prey on the public's tendency to want it all by separating their advocacy for lower taxes from their support of more spending.

This neat compartmentalization of taxes from expenditures dominates textbooks as well. On the tax side of the ledger, modern public finance texts usually examine the progressivity, horizontal equity, efficiency, and simplicity of tax systems. When it comes to expenditures, the approach is very different—often focusing on cost-benefit analysis and how it might be applied to different programs.

Tax progressivity is normally defined relative to a proportional tax system. Take the case of an income tax. If the tax rate is constant, then the same percentage of income is owed to the government by all individuals, no matter what their income. Such a system is said to be proportional. If tax rates rise as income increases, the system is said to be progressive; and if they fall with income, then it is said to be regressive. (Of course, many systems are progressive in some ranges and regressive in others.) Note, however, that higher taxes (not tax rates) are still paid by those with higher levels of income in proportional systems and even in many that are regressive.

When it comes to expenditures, usually a different analysis is applied. In welfare and other income-tested programs, benefits fall as income rises. A system is often said to be regressive when middle-class or rich individuals get more benefits per person than poor individuals. In effect, progressivity here is defined as the granting of more dollars to those with less ability or income or other measure of well-being. If a public education or highway system provided the same level of benefit to everyone, for instance, then few would claim it was progressive. When an expenditure system (for example, educational grants) gives more to those with higher levels of income, it is often attacked as being regressive.

When legislators or parliaments display distributional tables analyzing policy changes, a somewhat similar division applies. Tax cuts and tax increases are usually compared by the percentage change in tax liability, while expenditures are usually compared by how many dollars go to an individual in each income class.

The two measures of progressivity are inconsistent. The tax measure is defined with respect to rates, the expenditure measure with respect to dollars. What that means is a regressive tax system and a regressive expenditure system can together be progressive. Indeed, when expenditures and taxes are considered together, most government programs—including those drawing resources from proportional and even regressive taxes—end up redistributing from those who are better off to those who are worse off.

To see this, assume a world with only two taxpayers, one of whom has an income of \$10,000 and one with an income of \$50,000 (see table). Let us impose a "regressive" tax system in which rates are 20 percent for the first \$10,000 of income and 10 percent for any additional income, so that the poorer taxpayer pays an average tax rate of 20 percent, and the richer taxpayer pays an average rate of only 12 percent.

Simultaneously, let us set up a "regressive" expenditure system under which the taxpayer with \$10,000 of income gets \$3,000 in benefits and the taxpayer with \$50,000 of income gets \$5,000 in benefits. Total taxes paid equal total expenditures received in this example, and so it is easy to see the net effect of the total tax and expenditure system. The net gain for the taxpayer with \$10,000 of income is \$1,000, and the net loss for the taxpayer with \$50,000 in income is \$1,000. The overall system, therefore, is progressive.

When it comes to combined systems where taxes are dedicated to specific programs, the relationship between taxes and expenditures is better understood. Most individuals consider social security and Medicare to be progressive systems even though taxes and expenditures in each are regressive under the inconsistent definitions discussed above. The tax rate is constant up to a maximum earnings level, then falls to zero. Therefore, taxes are slightly less than proportional. Meanwhile, benefits are larger for those with higher levels of earnings and, in most cases, with higher levels of income. Yet it is clear that these systems are intended to be redistributive to those with lower levels of earnings and, hence, progressive in an overall sense.

In sum, it is limiting and often misleading to define progressivity of a tax system independently of what is done with those taxes, or as a corollary, to measure the progressivity of an expenditure system without considering how the necessary revenues are raised.

The Inconsistent Measure of Progressivity*

	Taxpayer A	Taxpayer B	Total
Income	\$10,000	\$50,000	
Taxes	\$2,000	\$6,000	\$8,000
Average Tax Rate Under So-Called "Regressive" Tax System	20%	12%	
Average Tax Rate Under So-Called "Regressive" Benefits System	\$3,000	\$5,000	\$8,000
Average Benefit Rate	30%	10%	
Benefits Less Taxes in Overall Progressive Structure	+\$1,000	-\$1,000	\$0

* Taxpayer B is richer than Taxpayer A, pays a lower rate of tax, receives more in benefits, and yet still redistributes to A.

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