

from the Tax Policy Center

## Taxes and Income Volatility

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In a tax system with increasing marginal tax rates, the tax increase from a boost to income is at least equal to the tax reduction from a decline in income — and is larger if the change in income crosses a marginal tax bracket. As a result, people with volatile incomes may pay more tax than people with the same average income whose incomes do not fluctuate.

For example, consider a married couple whose taxable income is \$56,800, the top of the 15 percent marginal rate bracket for joint filers in 2003. If income increases to \$56,900, the additional \$100 will be subject to a 25 percent marginal rate — so the extra tax owed will be \$25. But if the couple's income declines to \$56,700, taxes will fall by only \$15. If each of these two possibilities has an equal chance of occurring, the family's expected tax is \$5 higher than a family whose income is \$56,800 with certainty.

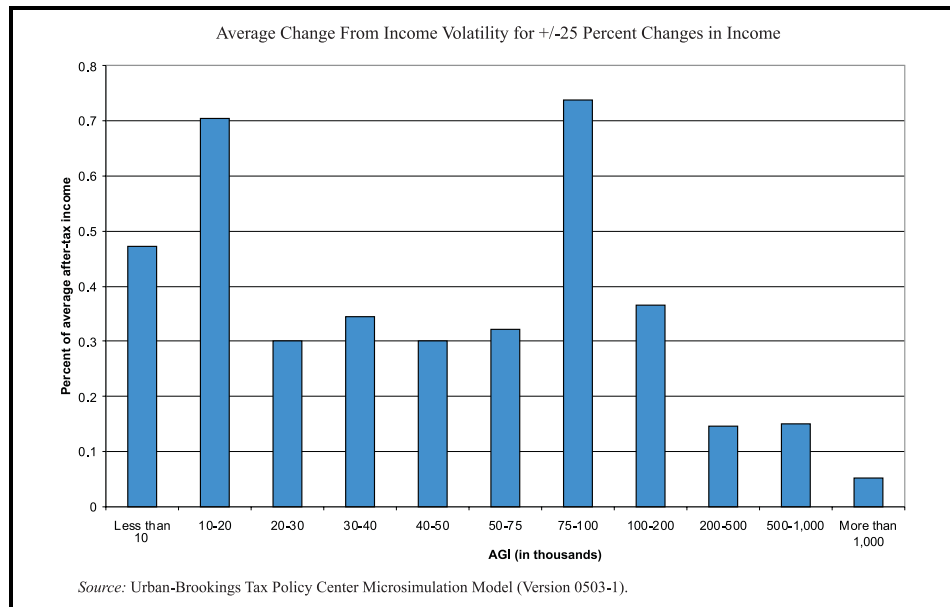
This Tax Fact uses the Tax Policy Center (TPC) model to compute an average tax effect from income volatility. This measure is equal to the average of the tax paid when income increases by a certain percentage and the tax paid when income declines by a certain percentage, minus the tax paid at the average income itself, all divided by the average after-tax income. This measure is highest in income ranges when marginal tax rates are increasing most rapidly; it is zero when marginal tax rates are constant.

The figure below shows the TPC model results by adjusted gross income, assuming that taxable income is increased and decreased by 25 percent. In general, the average tax change from even this degree

of income volatility is quite modest, averaging just 0.4 percent of after-tax income for tax filing units.

The relative tax changes are highest for tax filers with AGI between \$10,000 and \$20,000, and between \$75,000 and \$100,000. In both of these income ranges, marginal tax rates can increase rapidly. The effect is more modest for those with incomes of \$1 million or more, because they are unlikely to move between marginal tax brackets at such high incomes. (For heads of households with incomes between \$30,000 and \$40,000, the average tax change from income volatility is actually *negative*, because the phaseout of the EITC means that effective marginal tax rates decline as income increases.)

Finally, note that increasing marginal tax rates produce a progressive tax system, which provides a kind of insurance: Compared with a flat rate tax designed to raise the same amount of revenue, the extra tax paid in good years under a progressive system can be viewed as an insurance premium in exchange for a tax break in bad years. The average tax change from income volatility could thus be viewed as a measure of the effectiveness of the tax system in cushioning after-tax family incomes against fluctuations.



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