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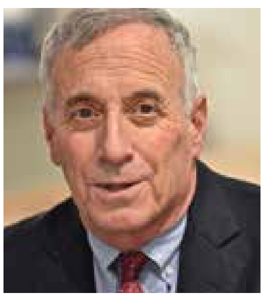
Turning Ideas Into Policy

Who Benefits From Tax Reform?

The Tax Cut and Jobs Act of 2017 (TCJA) represents the most significant change in U.S. taxation policy since 1986. The bill's fairness has been studied and debated, with some studies suggesting the reform is regressive.

All income groups will enjoy the same percentage gain from tax reform.



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An example is the Tax Policy Center, which reports that "higher income households receive larger average tax cuts as a percentage of after-tax income, with the largest cuts as a share of income going to taxpayers in the 95th to 99th percentiles of the income distribution." The Congressional Budget Office and the Joint Committee on Taxation reach similar conclusions.

But the methodology underlying these studies suffers from three major shortcomings. First, it examines current, not remaining lifetime, taxes for each household. Second, it lumps together the young and the old, mixing households in very different positions relative to their lifetime incomes. Third, it ignores the reform's impact on wages and, via this channel, on welfare and progressivity.

A new study by Alan J. Auerbach (University of California, Berkeley), Laurence J. Kotlikoff (Boston University) and Darryl Koehler (The Fiscal Analysis Center) rectifies these problems, using the most sophisticated modeling available to economists. Unlike other analyses, the study considers the lifetime effects of the new tax law, instead of the effects over the next few years. It also includes the interaction of the new tax law with state and local taxes and more than 30 entitlement programs, including Social Security and Medicare. It reflects an average 5.5 percent increase in real wages – based on simulations of the Global Gaidar Model. It shows, for each age group, how the new law alters inequality in remaining household lifetime spending.

Kotlikoff and Auerbach are sometimes called the "deans of dynamic forecasting" because of their pioneering work in the field. For example, the Auerbach-Kotlikoff life-cycle model is used by the Congressional Budget Office, the Joint Committee on Taxation and other economists around the world. Their measurement of progressivity uses sophisticated tools that are not replicated by any other model.

The study was produced with funding from a number of sources, including the Goodman Institute for Public Policy Research.

The Winding Road to Tax Reform

The TCJA was the culmination of a year and a half of fiscal reform debate among House and Senate Republicans, beginning with *The Better Way Tax Plan* released in June 2016. That plan envisioned replacing the corporate income tax with a 20 percent destination-based business cash-flow tax, reducing taxation of pass-through businesses, streamlining personal-income taxation by eliminating the Alternative Minimum Tax (AMT), unifying the tax treatment of personal asset income (taxing half of personal asset income), eliminating exemptions and the deductibility of state income and property taxes, raising the standard deduction, raising the child tax credit, reducing the number of income-tax brackets from seven to three (with the top rate lowered from 39.6 percent to 33.0 percent), using a chain CPI to index tax brackets, and eliminating the estate tax.

The Unified Framework was the reform's second incarnation, differing from The Better Way Tax Plan primarily in its corporate tax reform. Specifically, it eliminated border tax adjustment, eliminated expensing of long-lived investments, and permitted net interest deductions up to a limit.

The TCJA retained most of The Unified Framework's business provisions. But it set a 21 percent corporate tax rate (compared with the then-current rate of 35 percent) and introduced a variety of international tax provisions aimed at limiting corporate tax avoidance. It also placed restrictions on the nature and extent of pass-through income that can receive favorable tax treatment.

On the personal side, the TCJA retains seven tax brackets, with a top rate of 37 percent. The mortgage interest deduction on old mortgages up to $1 million was grandfathered. For new mortgages, the limit for allowing interest rate deductions was reduced to $750,000. State and local tax and property tax deductions were restored, but only up to a combined total of $10,000.

The top marginal rate was set at 37 percent. The individual Alternative Minimum Tax (AMT) was retained in modified form. There were also some minor changes to capital gains tax brackets. Finally, the estate tax was retained, but the exemption level was doubled.

Many of TCJA's tax provisions become less favorable over the course of the 10-year budget period. In addition, many of its individual tax cut provisions are set to expire by the end of the decade. These features appear to have been included to meet artificial budget targets within the budget period and to limit the growth in projected deficits beyond the budget period.

Meeting the budget targets and limiting future projected deficits were needed to permit passage of the bill with a simple majority in the Senate. However, there was no coherent policy reason for such temporary provisions. Consequently, this analysis assumes the TCJA's provisions are permanent.

Results of the Auerbach-Kotlikoff-Koehler Study

The study finds very modest and generally similar reductions at all ages in average remaining lifetime net tax rates (measured as an individual's remaining lifetime net taxes divided by his or her remaining lifetime resources), regardless of an individual's resource level (the person's non-human wealth plus the present value of future wages and salaries). In the case of current 40- to 49-year-olds, the average net tax rate of the top 1 percent falls from 27.6 percent to 27.0 percent. For the poorest 20 percent, the average net rate rises from -47.4 percent to -43.7 percent.

An alternative indicator of fiscal progressivity is the share of remaining lifetime net taxes paid by the richest 1 percent. This too shows very little change due to the reform. In the case of 40- to 49-year-olds, the share is 13.6 percent under the old tax system. Under the reform, it is unchanged at 13.6 percent. The top 1 percent of taxpayers experience a small decline in their average net tax rate, but the decline is somewhat larger for other percentile groups, which explains why the tax share of the top 1 percent actually rises slightly. By this measure, the tax reform is slightly progressive.

The tax share of the middle quintile of 40- to 49-year-olds is 12.5 percent under the old law and 12.7 percent under the reform. For the bottom quintile of 40- to 49-year-olds, the tax share remains constant at 2.7 percent.

Arguably, changes in the shares of remaining lifetime spending are the best measure of the reform's fiscal progressivity. The reform produces very little change in spending shares, regardless of age. Take 40- to 49-year-olds. The pre-reform spending share of the top 1 percent is 12.8 percent; and it remains there under the reform. For the middle quintile, the share stays constant at 14.0 percent. As to the poorest quintile, their spending share drops from 5.9 percent to 5.7 percent. Here again, the TCJA has only a small impact on inequality.

Reform in Dollars and Cents

The study shows that the rich will receive many more dollars of tax relief, because their tax burden was so much higher to begin with. But the percentage gain in tax relief is about the same across all income groups. Among the findings:

- For middle-class households in their 20s, the lifetime benefits of tax reform average $68,952 in present value.
- For the average middle class 30-year-old household, tax reform is worth $75,233.
- For the average middle class 40-year-old household, reform is worth $67,932.

Roughly 30 percent of these gains are from lower taxes. The remainder is the result of higher wages and a larger economy. The study predicts an increase in average wages of about $4,000 per household per year, because of a large inflow of capital from abroad, which will occur over time.

Elderly retirees don't benefit as much because they are no longer receiving wages and they have fewer years of life remaining. Even so, 60-year-old households can expect a gain of more than $12,000 in lifetime benefits from lower taxes alone.

All in all, there is virtually no change in the progressivity of the tax system, either from the tax cuts directly or from the effects of a larger economy paying higher wages.

How Conventional Forecasting Goes Wrong

As noted, the conventional approach makes three major errors in estimating the costs and benefits of tax reform, as well as other fiscal measures. In particular, it (1) fails to analyze fiscal progressivity on a remaining-lifetime, rather than current-year basis, (2) fails to make comparisons within the same age groups, and (3) fails to consider the interaction of taxes and entitlement income.

Because of these errors, the conventional approach tends to underestimate the current tax rate faced by those at the bottom of the income ladder and overestimate the tax rate faced by those at the top. It also tends to underestimate the extent to which tax reform reduces the lifetime tax rate for low-income families and overestimate the extent to which rates have been cut for those with high incomes.

The table to the right compares expected tax rates, using the estimation method used by the Joint Committee on Taxation (JCT) with the more accurate method used by Auerbach, Kotlikoff and Koehler (AKK). As the table shows:

- People with incomes below $10,000 can expect to receive about twice the tax relief as what is predicted using the JCT method.
- Those earning $10,000 to $20,000 can expect about 50 percent more tax relief.
- For those in the $20,000 to $30,000 range, the tax reduction is, again, about twice what the JCT method predicts.

At the other end of the income scale:

- The JCT method overstates tax relief for millionaires by about half again and there is a similar over-estimate for those in the $500,000 to $1 million range.
- For those who earn $200,000 to $500,000, the JCT method overestimates tax relief by about one third.

Distributional Effects of Tax Reform

	AKK Estimates			JCT Estimates		
Income Category	Avg. Tax Rate Under Present Law	Avg. Tax Rate Under TJCA change	Change	Avg. Tax Rate Under Present Law	Avg. Tax Rate Under TJCA change	Change
Less than 10,000	12.40%	11.42%	-0.99%	9.10%	8.60%	-0.50%
10,000 to 20,000	2.90%	2.16%	-0.74%	-0.70%	-1.20%	-0.50%
20,000 to 30,000	2.85%	1.88%	-0.97%	3.90%	3.40%	-0.50%
30,000 to 40,000	6.34%	5.21%	-1.14%	7.90%	7.00%	-0.90%
40,000 to 50,000	9.24%	8.01%	-1.23%	10.90%	9.90%	-1.00%
50,000 to 75,000	10.56%	9.37%	-1.19%	14.80%	13.50%	-1.30%
75,000 to 100,000	12.61%	11.38%	-1.23%	17.00%	15.60%	-1.40%
100,000 to 200,000	16.19%	14.75%	-1.44%	20.90%	19.40%	-1.50%
200,000 to 500,000	20.89%	19.05%	-1.84%	26.40%	23.90%	-2.50%
500,000 to 1,000,000	26.24%	24.13%	-2.12%	30.90%	27.80%	-3.10%
1,000,000 and over	30.17%	28.67%	-1.49%	32.50%	30.20%	-2.30%

Conclusion

The AKK study finds that tax reform did not materially alter the fiscal system's progressivity within age groups, whether one measures progressivity in terms of the share of spending by the rich or the share of taxes paid by the rich. If the reform succeeds in producing the predicted increase in wages, there will be a small, but meaningful increase in remaining lifetime spending, i.e., in economic welfare.

The study estimates that the ratio of government debt to GDP will be unaffected by the new law. However, the current and future level of debt will require major future tax increases and/or government spending cuts, which will have their own, very significant distributional effects.

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