



Using a VAT to Reform the Income Tax

Executive Summary

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The federal tax system has grown increasingly complex over the past several decades with the introduction of the Alternative Minimum Tax (AMT), new and expanded corporate and individual tax expenditures, and other special provisions. Policy makers and economists have discussed how a value-added tax (VAT) could be used to both raise revenue and simplify the tax system. Meanwhile, the United States is the only member of the Organization for Economic Co-operation and Development (OECD) that does not employ a VAT.

This paper, written by the Tax Policy Center (TPC) and sponsored by the Pew Fiscal Analysis Initiative, is designed to help policy makers better understand the impact of a VAT if used to simplify the tax system. It analyzes a proposal by Michael Graetz, a Columbia University law professor and tax expert, that would introduce a VAT and reform the individual and corporate income tax systems. Graetz's plan is one of the few proposals that include a VAT as part of a more comprehensive tax reform that is currently being discussed by policy makers and tax policy experts. The paper analyzes the effect the proposal, if fully implemented in 2015, would have on federal revenues and spending, the deficit, the distribution of the tax burden, and the new system's compliance costs.

This is the third in a series of papers that analyzes different components of a VAT. The first proposed a new methodology for analyzing the distributional burden of a VAT. The second compared the impact of using a VAT with that of using an income tax rate increase to raise revenues for deficit reduction. The next paper will analyze how exempting certain types of consumption could impact a VAT's distributional burden. This series will provide analysis and facts to inform the debate as policy makers consider options for a new consumption tax over the next several years.

As with all papers in this series, *Using a VAT to Reform the Income Tax* makes no recommendations and its purpose is purely to inform the public debate. The insights from this paper should prove useful to policy makers as they consider how to simplify the tax system.

Summary of Major Findings

Graetz's proposal would introduce a federal VAT to the United States, accompanied by a 15 percent corporate income tax rate and other changes to the individual and corporate income tax systems. The VAT would be introduced to offset revenue reductions from income tax reforms that would simplify the income tax system. The proposal would significantly reduce the top individual and corporate income tax rates, remove many current taxpayers from the income tax rolls, and replace the lost revenue resulting from those changes with revenue raised from a VAT.

TPC analyzed the Graetz proposal assuming implementation in 2015 and while ensuring distributional and deficit neutrality. TPC used a Current Policy baseline for the analysis, which assumes certain previously-extended policies are renewed, such as items in the December 2010 tax legislation. TPC found that fully implementing a VAT in 2015, with a corporate income tax rate of 15 percent, that leaves both the deficit and the distribution of the tax burden among income groups substantially unchanged would require:

- A broad-based VAT with a rate of 12.3 percent.
- A marginal income tax rate of 16 percent for single filers making between \$50,000 and \$100,000 and joint filers with incomes between \$100,000 and \$200,000.
- A marginal income tax rate of 25.5 percent for single filers earning more than \$100,000 and joint filers with income greater than \$200,000.

To help maintain distributional neutrality, the Graetz proposal includes per-worker and per-child tax rebates that would be administered through the payroll tax system and would increase until an individual reaches a specific income. They would remain constant for some time, and begin to decrease as the individual earns additional income. The per-child rebate is intended to replace both the Earned Income Tax Credit (EITC) and child tax credit, while offsetting the burden of the VAT on low-income households. TPC found that:

- For a single worker, the rebate would increase as income approaches \$9,000 and be fully exhausted when income reaches \$49,000.
- The per-child rebate phases in with a family's earnings at a 15 percent rate, up to a maximum of \$1,590 per child. The rebate is phased out at a 5 percent rate for joint filers with income over \$110,000.

What is a VAT?

A VAT is a tax levied on household consumption and is similar in concept to many states' retail sales taxes, though different in implementation. A VAT is applied incrementally at each stage of the production process, whereas a sales tax is levied only at the final retail stage. For example, the production of a loaf of bread involves contributions from the farmer who grows the wheat, the baker who bakes the bread, and the grocer who sells it to the consumer. Under a VAT, each party pays a tax on the increase in the value of the product resulting from each stage of the process, with the consumer paying a price that includes the tax on the full value of the bread. By contrast, a retail sales tax does not apply to the intermediate stages of production. Consumers still pay a tax on the full value of the bread, but only the grocer makes tax payments.

Some economists favor a VAT over the current U.S. individual and corporate income tax system because a VAT does not affect a person's choice between spending and saving. By contrast, an income tax, because it also generally applies to returns to savings and investment, does affect this choice.

Parameters for Analysis

For this paper, TPC uses a Current Policy baseline, which reflects the costs of policies Congress and the president extended in the past. The 2001/2003 tax cuts, for example, were renewed by the December 2010 tax law, so the Current Policy baseline assumes that they will continue to be extended in the future. The baseline also assumes that Congress will continue to index the AMT to inflation and override planned cuts to Medicare Part B physician reimbursements, as it has done in the past.

The Graetz proposal modeled in this paper sets the corporate income tax rate at 15 percent and introduces a new family allowance of \$50,000 for single income tax filers and \$100,000 for joint income tax filers. It is designed to be deficit neutral, meaning that the increase in revenues and related changes in spending from adopting a VAT will offset the loss in revenue from reforming the individual and corporate income taxes. The proposal also is designed to be distributionally neutral. A concern with a VAT is that it could prove more burdensome as a share of income on low-income households than on high-income households. Thus, a key consideration for any VAT proposal is how its burden would be borne by people of different ages and income levels, especially when compared with alternative plans.

Assuming that the Graetz plan for a VAT and income tax changes would take effect in 2015, TPC calculates the VAT rate, individual/family income tax rates, and the amount and thresholds for certain rebates in order to maintain overall deficit and distributional neutrality.

The Value-Added Tax

Graetz proposes a credit-invoice VAT similar to those used in the European Union and most countries. Under this method, a business keeps track of the VAT included on invoices for its purchases from other businesses and the amount it collects on sales to customers. It pays to the government the difference between the VAT it collected from customers and the credit it receives for the VAT included in its purchases. The credit-invoice VAT is in principle easier to administer than an income tax, because each business has an incentive to ensure that its suppliers paid the correct amount of the VAT.

Although a VAT is a consumption tax similar to a retail sales tax, it generally has a broader base than retail sales taxes, applying to consumer spending on services and some other items that are typically excluded from retail sales taxes. Economists generally consider broader bases to be more efficient than narrow ones, because they are less likely to influence consumption decisions. The VAT modeled in this paper would have a comprehensive base, but for administrative reasons (measurement and enforcement) would exclude several consumption items, including imputed rent on owner-occupied housing and rents for tenant-occupied housing, spending abroad by U.S. citizens, and state and local general sales taxes.

Graetz suggests a VAT rate of between 10 and 15 percent to offset the cost of the income and corporate tax reforms. TPC calculates that a rate of 12.3 percent would be necessary for the VAT to be deficit neutral in 2015. The rate can be chosen to make the entire proposal deficit neutral in any year or period. If the VAT's base were narrower, the rate would need to be increased to maintain deficit neutrality.

Individual Income Tax Rates

In addition to instituting a VAT, Graetz's proposal would make several changes designed to simplify the individual income tax system. It introduces a "family allowance" of \$50,000 for unmarried taxpayers and \$100,000 for families that would replace the current standard deductions and personal exemptions. Taxable income would be computed by subtracting the new family allowance and certain itemized deductions from adjusted gross income (AGI). Single and joint filers who make up to \$50,000 and \$100,000 in taxable income, respectively, would pay no income tax, according to Graetz's plan. The proposal also would eliminate many existing income tax benefits for families and childless workers, such as the EITC and the child tax credit, but these benefits would be replaced with a new rebate (discussed below). The AMT also would be repealed. Under the Graetz proposal, TPC calculates that the number of individual income tax filers in 2015 would decrease from 147.5 million to 36.6 million, a reduction of 110.9 million filers.

TPC calculates income tax rates for both single and joint filers under Graetz's proposal that would be necessary to achieve deficit and distributional neutrality. The marginal income tax rate

would be 16 percent for single filers making between \$50,000 and \$100,000 and 25.5 percent for income over \$100,000. For joint filers, the 16 percent rate would apply for incomes between \$100,000 and \$200,000 and the 25.5 percent rate would apply to income greater than \$200,000.

Tax Rebate

Graetz would put in place tax rebates designed to offset the VAT's regressivity and replace the value of the EITC and child tax credit.

These rebates would be administered through the payroll tax system. They would be based on earnings from wages and self-employment, and would change depending on household income and number of children. By administering the rebates through the payroll tax system, low-income workers would not need to file a tax return to receive the rebates.

The per-worker rebate would increase until a person reaches a specific income, remain constant for some time, and then decrease as more income is earned. TPC computed that for a single worker, the rebate would increase as income approaches \$9,000 and then be fully exhausted once income reaches \$49,000.

The per-child rebate, intended to replace the EITC and child tax credit, phases in with a family's earnings at a 15 percent rate up to a maximum of \$1,590 per child. The rebate then begins to phase out at a rate of 5 percent after earnings reach \$110,000 for joint filers.

Corporate Income Tax

Graetz's proposal would replace the current corporate income rate tax structure with a single rate of 15 percent. Graetz chose this rate because he thinks it would be the most effective in stimulating the U.S. economy and making it more competitive by encouraging savings and investment, as well as creating additional jobs for American workers.

The TPC analysis assumes such reforms would repeal the corporate AMT and all corporate tax credits except the foreign tax credit. The Graetz plan would eliminate or restrict several deductions, including repealing the deduction for domestic production activities and repealing the inventory property sales source rule exception.

Conclusion

The Graetz proposal is one option being discussed by policy makers to reform and simplify the tax system. This proposal would introduce a VAT while simultaneously reforming the individual and corporate income tax structures, including a simplified rate structure with fewer special deductions and credits. Although this paper does not make any recommendations, its insights should prove useful as Congress considers changes to the tax system over the next several years that would maintain both distributional and deficit neutrality.

Methodology

Using a VAT to Reform the Income Tax employs distributional methodology described in a TPC paper published in March 2011 entitled *Methodology for Distributing a VAT*. It combines two separate approaches: one for estimating the long-run distributional impact of a VAT after its transitional effects have been fully realized and it has become a permanent part of the tax system, and another for estimating the transitional effects of a VAT when it is first imposed.

The long-run methodology is designed to be consistent with existing practices for estimating the distributional effects of changes in the individual income, corporate income and payroll taxes so that a VAT can be directly compared with other taxes, while also making improvements on previous long-run methods. The methodology for estimating transitional burdens is designed to address policy makers' concerns about the short-term effects of introducing a national VAT on certain populations, particularly older individuals who might be spending down their wealth and therefore paying a VAT on consumption out of prior income that has already borne income tax. This approach has four key improvements over past methodologies:

1. It separates the analysis between fully phased-in effects and transitional effects;
2. It recognizes the fact that wage-indexed cash transfer payments, such as Social Security and unemployment compensation also bear VAT burden in the long-run;
3. In the transition, it provides a new way of estimating the burden on existing wealth that captures how it varies with an individual's age and the projected spend down of this wealth; and,
4. It holds real government spending constant after a VAT is implemented so that the net effects of the VAT on the federal deficit are properly measured.