



Tax Policy Center
Urban Institute and Brookings Institution

Updated Tables for “Using a VAT to Reform the Income Tax”

Eric Toder, Jim Nunns, and Joseph Rosenberg
Urban-Brookings Tax Policy Center
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In *100 Million Unnecessary Returns*, Michael Graetz, professor of law at Columbia University, proposed sweeping tax reform that would remove most current taxpayers from the income tax rolls, reform the corporate income tax, significantly reduce the top individual and corporate rates, and adopt a value-added tax (VAT) as the principal tax paid by most Americans. Under a contract with The Pew Charitable Trusts, TPC prepared a [detailed analysis of the Graetz proposal](#). Due to the effects of the American Taxpayer Relief Act of 2012 (ATRA) on baseline tax liabilities, professor Graetz has revised his proposal to maintain distributional and deficit neutrality. We have updated some of the tables from our previous analysis that reflect the revised proposal as well as updated economic assumptions and technical improvements.

Key changes to the proposal:

- The VAT rate is increased from 12.3 percent to 12.9 percent.
- A third individual income tax rate of 31 percent is added, and the other two rates are revised (the bottom rate is reduced from 16 percent to 14 percent, while the second rate is increased from 25.5 percent to 27 percent). (See Table A-1.)
- The per-child rebate is reduced somewhat (from \$1,590 to \$1,500), but made fully refundable and the phaseout begins at a higher level (\$150,000 instead of \$110,000) for joint filers.
- The per-worker rebate now phases in at the combined employer and employee payroll tax rate of 15.3 percent, and begins to phase out at a much higher income level (see Table 2A).
- The additional per-child rebate is revised in several respects (see Table 2B).

The corporate rate under the proposal remains 15 percent and business base broadening is retained. As in the previous version of the proposal, there are no changes to the payroll, estate and gift taxes.

Table 1
The VAT Base, 2015

	Level (\$billions)	Percent of Consumption	Percent of GDP
NIPA Consumption	12,555.7	100.0	69.1
<i>Less:</i> Imputed rent on owner-occupied housing	1,383.0	11.0	7.6
<i>Less:</i> Rental of tenant-occupied housing	499.3	4.0	2.7
<i>Plus:</i> New housing purchases	454.3	3.6	2.5
<i>Plus:</i> Improvements to existing housing	412.2	3.3	2.3
<i>Equals:</i> Net housing adjustment	-1,015.7	-8.1	-5.6
<i>Less:</i> Net foreign travel and expenditures abroad by U.S. residents	-23.1	-0.2	-0.1
<i>Less:</i> State and local general sales taxes	417.9	3.3	2.3
<i>Equals:</i> Household Consumption in VAT Base	11,145.2	88.8	61.3
<i>Plus:</i> Federal purchases of goods and services ¹	703.9	5.6	3.9
<i>Plus:</i> Federal employee compensation ²	491.7	3.9	2.7
<i>Equals:</i> Federal spending in the VAT base	1,195.6	9.5	6.6
<i>Plus:</i> State and local purchases of goods and services ¹	574.8	4.6	3.2
<i>Plus:</i> State and local employee compensation ²	1,318.2	10.5	7.3
<i>Equals:</i> State and local spending in the VAT base	1,893.0	15.1	10.4
<i>Less:</i> Adjustment for small business exemption and noncompliance	1,503.5	12.0	8.3
<i>Equals:</i> Effective VAT Base	12,730.3	101.4	70.1
ADDENDUM:			
Gross Domestic Product (GDP)	18,170.5	144.7	100.0

Source: U. S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts (NIPA); Congressional Budget Office, "The Budget and Economic Outlook: Fiscal Years 2013 to 2023" (2013); and TPC estimates.

¹ Excludes purchases for activities provided for a fee or charge and included in NIPA consumption.

² Excludes employee compensation to produce goods and services provided for a fee or charge and included in NIPA consumption.

Table 2A
Per Worker Rebate
(2015 dollars)

Single Worker and Two-Earner Married				Married Worker (Nonworking Spouse)				Head of Household Worker			
Earnings	Base Rebate	Phasein Rate	Phaseout Rate	Earnings	Base Rebate	Phasein Rate	Phaseout Rate	Earnings	Base Rebate	Phasein Rate	Phaseout Rate
0	0	15.3%	0%	0	0	15.3%	0.0%	0	0	15.3%	0.0%
10,000	1,530	0%	0%	20,000	3,060	0.0%	0.0%	10,000	1,530	0.0%	0.0%
40,000	1,530	0%	7.65%	80,000	3,060	0.0%	7.65%	60,000	1,530	0.0%	7.65%
60,000	0	0%	0%	120,000	0	0.0%	0.0%	80,000	0	0.0%	0.0%

Table 2B
Additional Per Child Rebate
(2015 dollars)

One Child				Two or More Children			
Earnings or AGI*	Base Rebate	Phasein Rate	Phaseout Rate	Earnings or AGI*	Base Rebate	Phasein Rate	Phaseout Rate
0	0	35%	0%	0	0	35%	0%
10,000	3,500	0%	0%	15,000	5,250	0%	0%
18,000	3,500	0%	12.5%	27,000	5,250	0%	12.5%
46,000	0	0%	0%	69,000	0	0%	0%

* The phaseout would be based on the higher of AGI or earnings for taxpayers with income (AGI) above the family allowance amount.

Table 3

Revenue Effects of the Income Tax Provisions and Revenue and Spending Effects
of the VAT Provisions of the Graetz Proposal Relative to Current Law in 2015

Provision	Amount in 2015 (\$billions)
<u>Individual Income Tax Provisions</u>	
Repeal the AMT	-43.9
Tax Rates of 14%, 27% and 31% (Repeal 3.8% Surtax on Investment Income)	-79.9
Replace Standard Deduction and Personal Exemption with Family Allowance	-697.6
Eliminate Deduction for State and Local Taxes	85.4
Floors of 2 Percent of AGI on Contributions and Mortgage Interest	29.1
Eliminate All Credits Except the Foreign Tax Credit	142.6
Total for Individual Income Tax Provisions (before Rebate)	-564.3
<u>Corporate and Non-Corporate Business Income Tax Provisions</u>	
Flat Corporate Income Tax Rate of 15%	-177.7
Other Corporate and Business Income Tax Provisions	63.3
Total for Corporate and Business Income Tax Provisions	-114.4
<u>Value-Added Tax (VAT) of 12.9%</u>	
Gross VAT Revenue	1,454.6
<i>Less: Individual Income Tax Offset</i>	142.3
<i>Less: Corporate Income Tax Offset</i>	21.5
<i>Less: Payroll Tax Offset</i>	104.0
<i>Equals: Total Revenue Offsets</i>	267.8
Net VAT Receipts (before Rebate)	1,186.8
Integrated Income Tax and VAT Rebate¹	-545.1
Change in Nominal Federal Spending:	
Cash Transfer Payments	139.1
Grant to State and Local Governments	-102.1
Net Change in Nominal Federal Spending	37.0
Change in Federal Deficit	0

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0613-2) and TPC estimates based on several sources (see text).

¹ The cost of the rebate also includes the adjustment of all cash transfer payments to pre-VAT levels.

Table 4
Distributional Analysis of the Graetz Proposal
Fully Phased-in Relative to Current Law at Income Levels in 2015¹
 (percentage change in after-tax income)

	Individual Income Tax Provisions (before rebate)	Corporate and Business Tax Provisions	VAT (before rebate)	Integrated Income Tax and VAT Rebate	Total Changes ²
Lowest Quintile	-4.9	0.3	-10.9	19.1	1.2
Second Quintile	-0.8	0.4	-11.2	13.1	0.0
Middle Quintile	4.3	0.5	-11.1	7.5	0.2
Fourth Quintile	6.7	0.6	-10.6	4.5	0.2
Top Quintile	6.2	1.4	-8.4	1.1	-0.4
All	4.7	0.9	-9.8	4.8	-0.1
Addendum					
80-90	7.3	0.7	-9.9	2.5	-0.2
90-95	7.2	1.0	-9.1	1.3	-0.4
95-99	6.5	1.2	-8.1	0.4	-0.5
Top 1 Percent	4.3	2.3	-6.8	0.1	-0.4
Top 0.1 Percent	3.2	2.9	-6.7	0.0	-0.9

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0613-2).

¹ Provisions are stacked in the order listed.

² Total changes are relative to current law and cumulative from left to right. For example, for the middle quintile the total change is $(1+.043) \times (1+.005) \times (1-.111) \times (1+.075) -$

Table 7

Number of Individual Income Tax Filers under Current Law and the Graetz Proposal in 2015

Filing Status ¹	All Tax Units (Filers ² and Nonfilers) (000)	Filers Under Current Law		Filers Under the Graetz Proposal ³		ADDENDUM: Nonfilers Who Owe SECA Under the Graetz Proposal	
		Number (000)	Percent of Tax Units	Number (000)	Percent of Tax Units	Number (000)	Percent of Tax Units
S	83,900	68,613	81.8	12,069	14.4	4,230	5.0
MFJ	62,259	58,361	93.7	16,799	27.0	7,271	11.7
HoH	24,016	23,518	97.9	1,345	5.6	2,099	8.7
MFS	3,056	3,056	100.0	869	28.5	260	8.5
Total	173,231	153,547	88.6	31,082	17.9	13,860	8.0

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0613-2).

¹ S is Single; MFJ is Married Filing Jointly; HoH is Head of Household; and MFS is Married Filing Separately.

² The 9.4 million dependents of another taxpayer who file income tax returns under the Current Law Baseline are included in the count of tax units.

³ Filers under the Graetz proposal include only those tax units that have AGI in excess of their family allowance.

Table A-1
Individual Income Tax Rates Under Current Law
and the Graetz Proposal, Tax Year 2015
(2015 dollars)

Taxable Income		Tax Rate Under:	
Over	But Not Over	Current Law	Graetz Proposal
<i>Single</i>			
\$0	\$9,225	10%	14%
\$9,225	\$37,500	15%	14%
\$37,500	\$50,000	15%	14%
\$50,000	\$90,850	25%	27%
\$90,850	\$189,500	28%	27%
\$189,500	\$250,000	33%	27%
\$250,000	\$412,000	33%	31%
\$412,000	\$415,050	35%	31%
\$415,050	--	39.6%	31%
<i>Married Filing Jointly</i>			
\$0	\$18,450	10%	14%
\$18,450	\$75,000	15%	14%
\$75,000	\$100,000	25%	14%
\$100,000	\$151,400	25%	27%
\$151,400	\$230,700	28%	27%
\$230,700	\$412,000	33%	27%
\$412,000	\$466,950	35%	27%
\$466,950	\$500,000	39.6%	27%
\$500,000	--	39.6%	31%
<i>Head of Household</i>			
\$0	\$13,200	10%	14%
\$13,200	\$50,000	15%	14%
\$50,000	\$50,250	15%	27%
\$50,250	\$129,750	25%	27%
\$129,750	\$210,100	28%	27%
\$210,100	\$250,000	33%	27%
\$250,000	\$412,000	33%	31%
\$412,000	\$441,000	35%	31%
\$441,000	--	39.6%	31%

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0613-2).