A PROGRESSIVE CONSUMPTION TAX: PAIRING A VAT WITH A UBI

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The future fiscal and economic health of the United States depends on its ability to increase revenues. With high and rising public debt, an aging population that will place increasing demands on federal spending, and a need for new investments in infrastructure, research and development, and human capital, the federal government requires more funding to improve its finances and promote future economic growth and opportunity. Recent fiscal actions that raised current and future budget deficits have made these long-term concerns even more salient. One way to collect more revenue is to reform existing taxes. Instead, or in addition, policymakers could create new revenue sources.

This policy brief proposes a new progressive, national consumption tax: a broad-based, credit-invoice value-added tax (VAT), sometimes referred to as a "goods and services" tax. The most intuitive way to understand the VAT is that it is like a retail sales tax, but with tax revenue that is collected in parts at each stage of production rather than all at once at the retail level.[1] Table 1 compares transactions completed without taxes, with a retail sales tax, and a credit-invoice VAT. Similar to a comparable tax imposed in New Zealand, this VAT would tax a broad base of goods and services that includes items that many other countries' taxes typically omit: education, health care, financial services, and nonprofits. To maintain parity with the private sector, federal, state, and local government spending would be taxed too, but this taxation of government spending would not raise net revenues, because the federal government cannot raise net revenue by taxing itself and because the proposal would reimburse subnational governments for the VAT they pay. Coupled with a universal basic income that varies with family size and composition, the VAT can raise substantial amounts of revenue in a progressive fashion.

[1] The formal equivalence between a VAT and a retail sales tax requires a few additional conditions, namely that the VAT expenses current investment and provides border tax adjustments. In practice, virtually all VATs in existence satisfy these requirements.

TABLE 1

Taxes, Sales, and Value Added Under Alternative Taxes

		(1) Value added	(2) Tax collected on sales	(3) Total sales (including tax)	(4) Tax credits	(5) Net tax payments (2) - (4)	(6) Net recipts
No taxes	Farmer	40	0	40	0	0	40
	Baker	60	0	100	0	0	60 (i.e., 100 - 40)
Retail sales tax	Farmer	40	0	40	0	0	40
	Baker	60	10	110	0	10	60 (i.e., 110 - 40 - 10)
Credit-invoice VAT	Farmer	40	4	44	0	4	40 (i.e., 44 - 4)
	Baker	60	10	110	4	6	60 (i.e., 110 - 44 - 10 + 4)

The proposal comes with five important provisions and considerations. First, the VAT proposed here is intended to work in conjunction with other, highly progressive policies, like making the income tax more progressive, creating an ongoing direct wealth tax, enacting capital gains reforms, or implementing other policy changes that raise taxes on well-to-do households. There are important reasons to raise tax burdens on high-income and high-wealth households relative to others, so this proposal should be read as a complement to—not a substitute for—other ways to raise taxes on the rich.[2] This is because taxes on high-income and high-wealth households, by themselves, are not likely to raise sufficient revenue to allow the federal government to control stabilize the amount of outstanding debt, invest in the economy, and provide payments to the elderly (Gale 2019). In addition, pairing a VAT with these policies is likely to make them more effective. One of the easiest ways for higher-income households to avoid wealth taxes or income taxes is to consume more—an avenue that a VAT makes less attractive. Finally, and perhaps most importantly, in light of secular increases in income and wealth inequality, it is inappropriate to ask the middle class to pay the higher taxes a VAT entails without also enacting substantially higher levies on high-income and high-wealth households.

Second, to ensure that the VAT is on balance a progressive reform, it should be coupled with several policies that relieve the burdens on low- and middle-income households. Means-tested government transfers should be adjusted for any increase in the price level (including the VAT) so that the real after-tax value of these benefits remains unchanged. In addition, Congress should stipulate a one-time change in how Social Security benefits are calculated to counteract what would otherwise be an after-tax benefit reduction imposed on new generations of beneficiaries by the VAT. A VAT with these two adjustments is progressive—it reduces after-tax income of lower-income households by a smaller proportion than it does for higher-income households. The reason is that protected forms of income—Social Security and means-tested transfers—constitute a much larger share of income for lower-income groups.

This policy package can be made even more progressive by using a portion of VAT revenues to provide each household with a universal basic income (UBI) based on family size and composition. This benefit would be provided through quarterly payments to each family, for an annual reimbursement equal to two times the poverty line times the consumption tax rate. For example, with a 10 percent VAT, a family of four would receive about $5,200 back each year, compensating them for taxes paid on about $52,000 of consumption.[3] Families that spend less than two times the

[2] See Batchelder and Kamin (2019), Gale (2019), and Saez and Zucman (2019a, 2019b) for further discussion of taxing the rich.

[3] These payments would not be considered in determining eligibility for federal, state, or local government means-tested programs.

poverty line would receive more from the UBI than they would pay in VAT. Families with higher spending would only face a net tax burden when they consume goods and services that aggregate to more than two times the poverty line. Including the UBI, the VAT is remarkably progressive by conventional standards: after-tax income would rise by almost 17 percent in the lowest income quintile, remain virtually unchanged in the middle quintile, and fall by 5.5 percent among the top 1 percent of households (see Table 2).

TABLE 2

Distribution of 10 Percent VAT by Income Percentiles, with and without Universal Basic Income (UBI)

Expanded cash income percentile[a,b]	Percent change in after-tax income[c]		Share of total federal tax change[d]	
	No UBI	UBI	No UBI	UBI
Lowest quintile	-3.7	16.9	2.9	-46.0
Second quintile	-4.5	4.6	7.4	-26.0
Middle quintile	-5.3	0.1	14.1	-0.8
Fourth quintile	-5.9	-2.4	21.9	30.6
Top quintile	-6.1	-4.7	53.3	142.6
Total	-5.7	-1.7	100.0	100.0
80th-90th percentiles	-6.3	-3.8	15.6	32.9
90th-95th percentiles	-6.3	-4.5	10.6	26.3
95th-99th percentiles	-6.2	-5.1	13.3	37.6
Top 1 percent	-5.8	-5.5	13.8	45.8
Top 0.1 percent	-5.4	-5.3	6.0	20.4

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).

Notes:

(a) Includes both filing and non-filing units but excludes those that are dependents of other tax units. Tax units with negative adjusted gross income are excluded from their respective income class but are included in the totals. For a description of expanded cash income, see Urban-Brookings Tax Policy Center (2019).

(b) The income percentile classes used in this table are based on the income distribution for the entire population and contain an equal number of people, not tax units. The breaks are as follows (in 2019 dollars, based on tax year 2020): 20%, $25,700; 40%, $51,300; 60%, $92,300; 80%, $167,000; 90%, $245,000; 95%, $348,000; 99%, $828,000; and 99.9%, $3,708,100.

(c) After-tax income is expanded cash income less the following: individual income tax (net of refundable credits), corporate income tax, payroll taxes (Social Security and Medicare), estate tax, and excise taxes.

(d) The sum shares figures may not add to 100 percent because of rounding errors and other factors.

Third, to avoid the VAT depressing the economy in the short run, most or all of the revenues collected in the years immediately following enactment should be spent on programs that stimulate the economy. For example, revenue from a VAT (after the adjustments described above) could be used to expand the UBI, restructure or reduce other taxes, pay for health care (Burman 2009), fund work incentives (Burman 2019), boost necessary government investments, or provide temporary stimulus, all of which would help offset any demand reduction from the introduction of the VAT. Over time, some of those uses could be scaled back so that revenues from the VAT should be used to reduce the federal debt.

Fourth, in the enabling legislation, Congress should direct the Federal Reserve to accommodate the VAT by allowing the nominal price level to rise by the full extent of the tax. If the price level rises by less than this amount, some of the adjustment to a VAT would take place through declines in nominal wages, which could be a costly and lengthy process.

Fifth, while I am not wedded to a particular tax rate, I use a 10 percent federal VAT in this proposal. If states converted their existing retail sales taxes to conform with a federal VAT base, they would need to set a VAT rate of 6.6 percent, on average, to raise current levels of revenue in a manner that is more generous to the bottom 40 percent of the income distribution than current sales taxes. The average combined federal-state VAT, 16.6 percent, would be significantly below the 2018 OECD average VAT rate of 19.3 percent.

Taking these five considerations into account, the broad-based credit- invoice VAT this chapter proposes would bring to the United States a progressive and growth-friendly version of the revenue source that so many other nations rely upon. America has never had a national broad-based consumption tax of any kind, but the VAT is the world's most common consumption tax, used by more than 160 countries, including every economically advanced nation except the United States. In 2016, consumption tax revenues were just 3.7 percent of GDP in the United States, mainly through state and local sales taxes, compared with 10.5 percent in other OECD countries, mostly through VATs.[4]

VATs are popular for many reasons. First, and most importantly, VATs raise a lot of money. Asked why he robbed banks, Willie Sutton supposedly said, "Because that's where the money is" (Federal Bureau of Investigation 2015). As a tax on a broad measure of consumption, VATs are "where the money is" in tax reform. In other OECD countries, VATs are the third largest revenue source, behind social security and personal income taxes.[5]

A VAT initiated in 2020 at a 10 percent rate would raise $247 billion, or 1.1 percent of GDP, even after funding a UBI that provides families payments equal to the VAT rate times twice the poverty line (Table 3). Over the course of 2020–29, the policy would raise $2.9 trillion. If a UBI were not implemented, the VAT would raise revenue by a whopping $842 billion in 2020, or about 3.8 percent of GDP.[6] The 10-year revenue total from the stand-alone VAT is about $10 trillion. The net revenue generated by a stand-alone VAT would provide an enormous pool of resources to address social and economic problems.

[4] All references to VAT data from OECD countries are from OECD (2016, 2017, 2018) and are weighted by GDP, unless otherwise noted.

[5] OECD (2019) defines social security contributions as "compulsory payments paid to general government that confer entitlement to receive a (contingent) future social benefit. They include unemployment insurance benefits and supplements, accident, injury and sickness benefits, old- age, disability and survivors' pensions, family allowances, reimbursements for medical and hospital expenses or provision of hospital or medical services. Contributions may be levied on both employees and employers. Such payments are usually earmarked to finance social benefits and are often paid to those institutions of general government that provide such benefits."

[6] The proposed tax rates are equivalent to a markup at the cash register, in the same way that retail sales taxes are typically quoted. In technical terms, the proposed VAT rate is a tax-exclusive rate (Gale 2005).

TABLE 3

Effect of VAT on Federal Revenue, Spending, and Deficit in 2020 with and without Universal Basic Income (UBI)

	VAT (no UBI) (billions of $)	VAT (with UBI) (billions of $)
Gross VAT revenues	979.6	979.6
Less : Increase in federal cash transfer payments	137.2	137.2
Less: Rebate (rate x 2 x FPL)	-	595.8
Net revenue, 2020	842.4	246.6
Net revenue, 2020-29	10,023.3	2,934.4

Source: Urban-Brookings Tax Policy Center Microsimulation Model (version 0319-2).
Notes: The proposal would introduce a VAT of 10 percent and provide a rebate in the form of a universal basic income for each household equal to 10 percent times twice the federal poverty level. The analysis shows the long-run impact on revenues and spending at 2020 levels of income and consumption. The analysis assumes that the Federal Reserve allows consumer prices to rise and that federal cash transfer benefits are increased to maintain real purchasing power.

Second, VATs are consistent with an efficient and prosperous economy. Future consumption is funded by existing wealth, future wages, or future excess returns on investments. As a result, a consumption tax effectively imposes a one-time implicit lump-sum tax on a broad measure of wealth existing at the time of implementation. The burden of this component of the VAT is imposed immediately upon enactment because the value of wealth changes. This outcome is easiest to see if the consumer price level, which includes the VAT, rises by the full VAT rate. In that case, existing assets can then be exchanged for less after-tax consumption than would have been the case had the VAT not been imposed.[7]

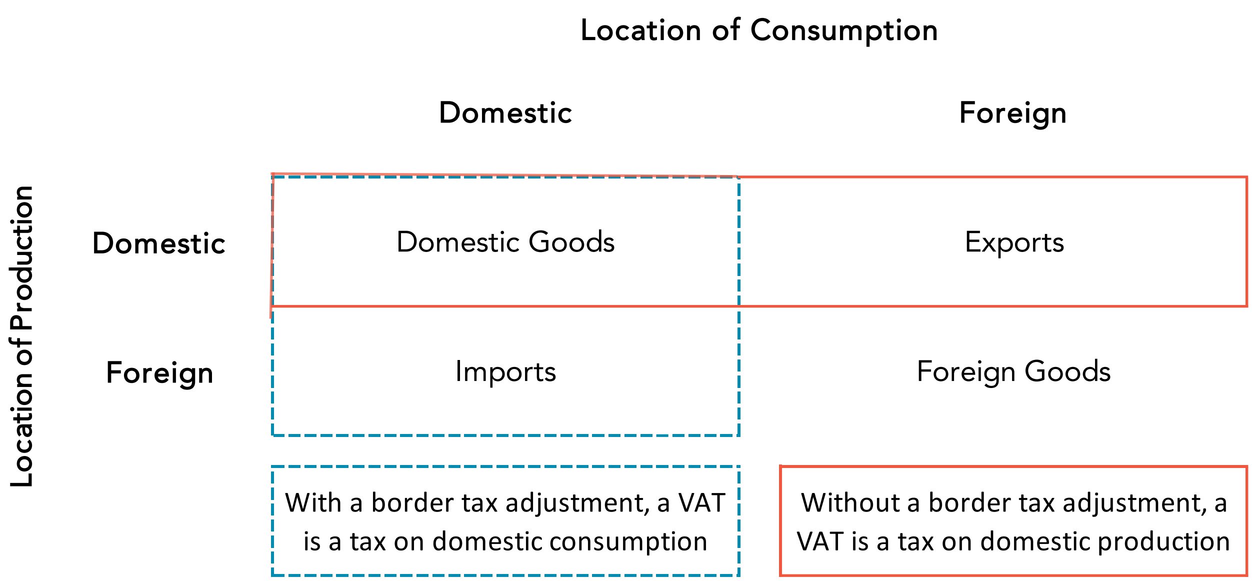
The burden a VAT places on existing wealth avoids three key pitfalls of a direct wealth tax: The VAT's wealth tax is extremely efficient because it is very difficult to avoid or evade; it does not require explicit valuation of particular assets; and it taxes excess returns, which is not distortionary, rather than taxing all returns, which is. But while this wealth tax is progressive by conventional standards because the distribution of wealth is skewed toward the top, the burden imposed by the VAT is substantially less progressive than that of a direct wealth tax with a high exemption. While the burden of a VAT on existing wealth is imposed immediately upon enactment through a decline in the purchasing power of existing assets, the explicit tax payments arising from future consumption of existing wealth accrue only over potentially long periods. Still, the present value of long-term revenue from the burden a VAT imposes on wealth is at least equal to—and may well exceed, under plausible assumptions—the 10-year (undiscounted) revenue yield of the wealth tax proposed by Senator Elizabeth Warren.

[7] If the price level, including the VAT, did not rise, equity holders would bear the full burden of the wealth tax. Holders of nominal debt would not see any change in the value of their assets.

A VAT also has important efficiency advantages over other types of taxes. Because VATs do not distort saving, investment, or financial decisions, they are more conducive to economic growth than income taxes or wealth taxes are. Because of the unique crediting structure that they employ, VATs are easier to administer and enforce than retail sales taxes. And by using border adjustments that remove taxes on exports but impose taxes on imports, VATs tax consumption, are consistent with other countries' tax systems and avoid creating distortions in international trade (Figure 1).

FIGURE 1

Border Tax Adjustments Convert a Production Tax to a Consumption Tax



Critics argue that a VAT could hurt small businesses, low-income households, the elderly, and state and local governments. These concerns are easily addressed:

- The United States should exempt small businesses from the tax as most countries do; the administrative burdens of taxing small businesses under a VAT may not be worth the revenue gains.
- Concerns about low-income and elderly households should be addressed by the UBI and by the adjustments to Social Security benefit calculations and means-tested transfers described above.
- No state would have to convert its sales tax to a VAT, but states that convert to a base that conforms with a federal VAT could more effectively tax services and interstate consumer purchases and avoid taxing business purchases, all with reduced administrative costs.

Critics also assert that a VAT would increase government revenues and thus inappropriately raise government spending. Yet in European countries, VATs did not boost government spending much, even when long-term debt was not an issue. Instead, the vast share of VAT revenue went to reducing outdated or poorly working sales and turnover taxes (the latter defined as taxes on transactions of intermediate goods rather than on value added). The United States is most likely to adopt a VAT in the context of a long- term debt reduction agreement that would presumably also impose limits on federal government spending.

Fears about the United States adopting a VAT can be further assuaged by looking at Canada's experience. The Canadian VAT has features to provide progressivity, and it has not swelled the government. Some of the provinces have kept their previous sales taxes, and some have conformed their provincial tax base with the federal VAT; all of the provinces retain the power to set their own rates.

So why don't we already have a VAT? More than 30 years ago Larry Summers summarized the VAT's political prospects by saying that "liberals think it's regressive and conservatives think it's a money machine," predicting that policymakers will enact a VAT only when liberals realize that it is a money machine and conservatives realize that it is regressive (Rosen 1988).[8] There is no better description of the political problem.

But Summers' statement also holds the key to reaching a political accord. Although liberals fear it would be regressive, a VAT can be part of a progressive strategy. For example, European countries impose VATs but also spend more generously than the United States on social policy priorities like universal health care, paid family leave, assistance for low-income households, and investments in children. And though conservatives fear it is a money machine, the VAT is efficient and can be part of a compromise with liberals that limits spending and highlights the need to pay for any new spending increases (as in Gale 2019).

In recent years, the VAT has received support from a variety of quarters. More than 20 years ago, leading legal scholar Michael Graetz proposed a VAT as part of a broader restructuring of the tax system, a proposal recently endorsed by Benjamin Cardin, the Democratic senator from Maryland (Graetz 1997, 2008, 2013; Cardin 2015). Numerous Republican political leaders—including Paul Ryan, Rand Paul, and Ted Cruz—have proposed that the United States adopt a VAT (though they do not call it that) as a way of reforming taxes (Ryan 2008; Paul 2015; Cruz Campaign 2015). The Domenici-Rivlin commission proposed a VAT (called a "debt reduction sales tax") for the purpose of paying down the federal debt (Debt Reduction Task Force 2010).

The key point is that—regardless of how political leaders would like to use the revenue—there is widespread agreement on the benefits of the VAT: it raises revenue in an efficient, equitable, and administrable manner that is consistent with an open economy. As noted, I do not specify the use of VAT revenues, but to make sure the VAT does not restrict aggregate demand in the short run, a sensible approach would use the revenues to fund economic stimulus, government investment or tax reform in the early years, and would only phase in federal debt reduction over longer horizons.

As America begins to confront the long-term impact of the COVID pandemic on the economy and the budget, a VAT-UBI combination has much to offer – higher revenues, a more equal distribution of income, and minimal economic disincentives.

[8] Keen (2001, 198) notes that both the liberal and conservative views "are probably wrong."

REFERENCES

Batchelder, Lily, and David Kamin. 2019. "Taxing the Rich: Issues and Options." The Aspen Institute Economic Strategy Group.

Burman, Leonard. 2009. "A Blueprint for Tax Reform and Health Reform." Urban-Brookings Tax Policy Center, Washington, DC.

Burman, Leonard. 2019. "A Universal EITC: Sharing the Gains from Economic Growth, Encouraging Work, and Supporting Families." Urban-Brookings Tax Policy Center, Washington, DC.

Cardin, Ben. 2015. "Progressive Consumption Tax Act."

Cruz Campaign. 2015. "The Simple Flat Tax Plan." Web page. https://www.tedcruz.org/tax_plan/ index.html.

Debt Reduction Task Force. 2010. "Restoring America's Future: Reviving the Economy, Cutting Spending and Debt, and Creating a Simple, Pro-Growth Tax System." Bipartisan Policy Center, Washington, DC.

Federal Bureau of Investigation. 2015. "Famous Cases & Criminals: Willie Sutton." https://www.fbi. gov/about-us/history/famous-cases/willie-sutton.

Gale, William G. 2005. "The National Retail Sales Tax: What Would the Rate Have to Be?" Tax Notes 107 (7): 889–911.

Gale, William G. 2019. Fiscal Therapy: Curing America's Debt Addiction and Investing in the Future. New York, NY: Oxford University Press.

Graetz, Michael. 1997. The Decline (and Fall?) of the Income Tax. New York: W.W. Norton.

Graetz, Michael. 2008. 100 Million Unnecessary Returns: A Simple, Fair, and Competitive Tax Plan for the United States. New Haven, CT: Yale University Press.

Graetz, Michael. 2013. "The 'Competitive Tax Plan' Updated for 2015." Presentation at the National Tax Association, Tampa, FL.

Keen, Michael. 2001. "Preferential Regimes Can Make Tax Competition Less Harmful" National Tax Journal 54 (4): 757–62.

OECD. 2019. Social Security Contributions. Retrieved from https://data.oecd.org/tax/social- security-contributions.htm.

Paul, Rand. 2015. "Blow Up the Tax Code and Start Over." Fair and Flat Tax Plan. Retrieved from https://www.randpaul.com/news/rand-pauls-fair-and-flat-tax.

Rosen, Jan M. 1988. "Tax Watch: The Likely New Forms of Taxes." New York Times, December 19.

Ryan, Paul. 2008. Roadmap for America's Future Act of 2008. 110th Congress, 2nd Session.

Saez, Emmanuel, and Gabriel Zucman. 2019a. "Progress Wealth Taxation." Conference Draft. Brookings Papers on Economic Activities, Fall 2019.

Saez, Emmanuel, and Gabriel Zucman. 2019b. The Triumph of Injustice: How the Rich Dodge Taxes and How to Make them Pay. New York, NY: W.W. Norton & Co.

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