



Economic Letter

Corporate Tax Reform: Potential Gains at a Price to Some

by Evan F. Koenig and Jason L. Saving

ABSTRACT: Corporate tax reform has become a high-profile issue amid fears that firms are increasingly taking their headquarters and production facilities offshore and booking profits abroad. Adjustments to the tax system can help address these factors, though not without potentially introducing new issues.

Corporate tax reform has recently attracted greater public attention. Existing U.S. tax rates are said to encourage tax avoidance and motivate firms to move overseas, reducing revenue and eliminating opportunities for U.S. workers.

Moreover, some view the tax code as discouraging saving and investment while incentivizing firms to use debt rather than equity financing, distorting resource allocation and slowing economic growth. The corporate tax system is even said to put the U.S. at a competitive disadvantage vis-à-vis the country's major trading partners.

That the U.S. corporate rate is high is undeniable. The U.S. rate of 39.1 percent is easily the highest among developed-world competitors and almost double the rate that prevails in the U.K. (*Chart 1*). Such a rate provides an incentive for firms to locate elsewhere.

It's true that many firms pay a lower rate because of exemptions, deductions and loopholes (*Chart 2*). However, the tax-avoidance strategies necessary to do so consume resources that could be used more efficiently elsewhere while penalizing firms that don't or can't use these tactics.

Some issues with the U.S. corporate tax system could be addressed with relatively simple changes. To raise the return

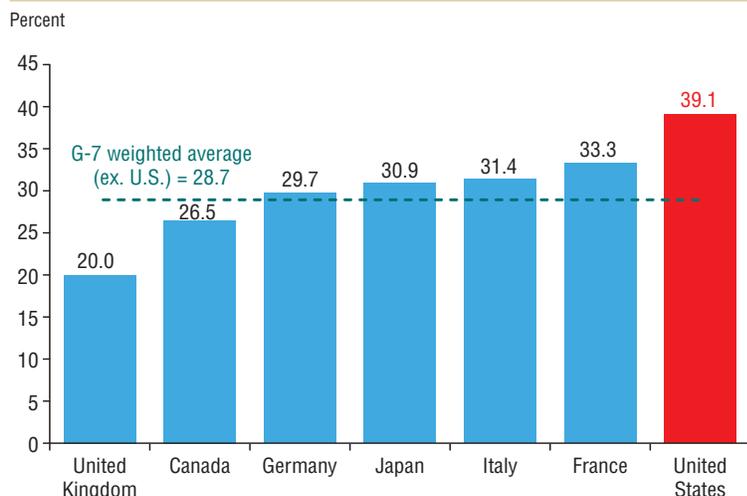
on saving, a firm's capital investments, for example, could be depreciated over a shorter period (or fully expensed in the first year). Interest deductibility could be limited (or even eliminated) to place debt and equity financing on a more level playing field. And, of course, the corporate tax rate could be lowered, though this would increase the nation's fiscal imbalance unless coupled with revenue-raising measures such as a broadening of the tax base.

But these measures would only address in piecemeal fashion broader issues inherent to income taxation. For this reason, many have proposed far-reaching tax reforms that would fundamentally change the U.S. tax system. One such measure is the destination-based cash-flow tax (DBCFT), a variation on the consumption taxation commonly used elsewhere in the developed world.

Destination-Based Cash-Flow Tax

Simply put, a DBCFT taxes domestic sales minus domestic expenses. Under this regime, goods or services purchased within the U.S. would be taxed by the U.S. regardless of the producer's location; and a purchaser acquiring goods or services outside the U.S. would not be taxed by the U.S., even if the goods or services were produced entirely within the U.S.

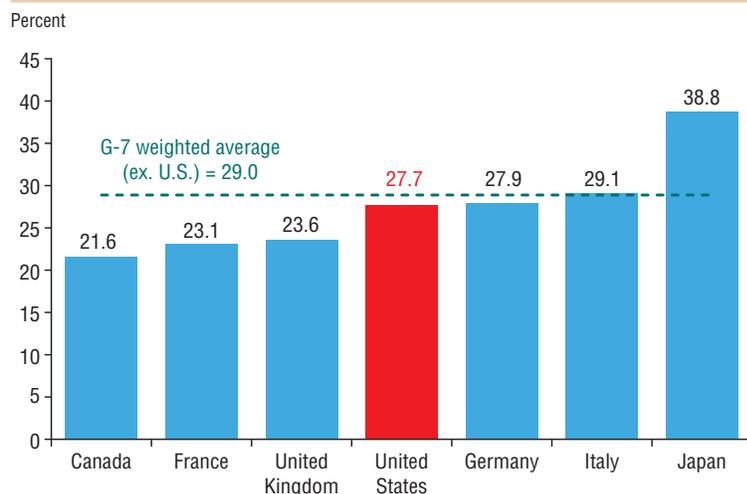
Chart 1 | U.S. Statutory Corporate Income Tax Rate Highest Among G-7



NOTE: The weighted average is calculated using each Group of Seven (G-7) country's share of total G-7 gross domestic product (ex. U.S.).

SOURCES: "Lessons for U.S. Business Tax Reform from International Tax Rates," by Gary Clyde Hufbauer and Zhiyao (Lucy) Lu, Policy Brief, Peterson Institute for International Economics, January 2017; authors' calculations.

Chart 2 | Tax Avoidance Depresses Average Effective U.S. Tax Rate



NOTE: The weighted average is calculated using each G-7 country's share of total G-7 gross domestic product (ex. U.S.).

SOURCES: Annual Report of the Council of Economic Advisers, 2015; authors' calculations.

This is at odds with the current corporate code that taxes all sales by U.S. companies regardless of the purchaser's location. The current code is an issue for U.S. exporters because the "destination" countries generally also tax those sales, potentially placing U.S. firms at a competitive disadvantage. U.S. firms can generally deduct the cost of foreign

taxes paid, but because U.S. rates are higher than those of developed-world competitors, U.S. companies often face a higher tax liability than foreign firms when selling similar products to similar customers.

Whether a DBCFT would reduce corporate tax revenue depends on the country's trade balance. Given that

imports are taxed and exports are not, overall corporate tax revenue will rise in situations where a country has a negative trade balance but fall in situations where a country has a positive trade balance. Because the U.S. imports more than it exports, a cash-flow tax would generally be expected to generate revenue for the government—about \$1.2 trillion more over 10 years, according to one Congressional Budget Office estimate—while shifting some of the country's tax burden to foreign exporters.

Fundamentally, a DBCFT taxes consumption (sales) rather than income, making it very similar to the value-added taxes (VATs) used almost universally outside the U.S. VATs tax domestic revenue minus materials and capital equipment purchased from domestic suppliers, which roughly corresponds to the "value added" a firm provides in the production process. DBCFTs do the same thing except that wages paid to workers in the home country are deductible from domestic revenue, to avoid double taxation.

There are several reasons consumption taxation has gained popularity worldwide. One is that consumption is much easier to calculate than income.¹ Another is that taxing consumption encourages investment, which ultimately raises a country's standard of living.² A third is that taxing consumption eliminates a potential incentive for firms to locate elsewhere.

Taken together, analyses suggest the U.S. standard of living might be 6 to 9 percent higher over the long run with a consumption tax relative to where it would be if the country stayed with the current tax system, though the actual figure could turn out to be higher or lower than this depending on the precise formulation of the tax and accompanying changes.³

Assessing Trade Implications

Because imports are taxed by a DBCFT and exports are not, the immediate impact of a DBCFT would be a more advantageous business environment for exporters and a less advantageous one for importers. Thus, some observers have likened the DBCFT to a tariff and asserted it will strengthen American

manufacturing and improve the country's trade balance over the long run. Such an analysis is only partially correct.

When a tariff is imposed, standard economic theory suggests import volumes will fall on impact and then partially recover over time. On impact, imports suddenly become more expensive, which causes fewer of them to be purchased. Subsequently, fewer imports reduce U.S. demand for foreign currency to buy those imports. This currency effect—via a reduced exchange rate—makes imports somewhat more affordable and partially, though not completely, offsets the initial decrease in import volumes.

Exempting exports from taxation produces a mirror image of the tariff analysis, with export volumes rising on impact and then partially receding over time. In this situation, exports suddenly become less expensive to foreign customers, which in turn causes more of the exports to be purchased. Subsequently, however, foreigners need more dollars to purchase these exports, which causes the U.S. dollar to appreciate. This dollar appreciation makes exports somewhat less affordable abroad and partially, though not completely, offsets the initial increase in export volumes.

When both of these measures are undertaken at once, as they would with a DBCFT, there is substantially more dollar appreciation than would have occurred

if either were done alone—and therefore, a substantially greater diminution of exporters' cost advantage and importers' cost disadvantage.

Theoretical Behaviors

In fact, economic theory suggests the combined effect should be just enough to return import and export flows to pre-DBCFT levels.⁴ A 20 percent DBCFT, for example, would in principle produce a 25 percent appreciation of the dollar (Chart 3). Some—though not all—empirical work in this area finds that a complete exchange-rate adjustment is likely.⁵

Were this to occur, exporters would find their tax savings exactly offset by an erosion in the purchasing power of foreigners, whereas importers would find their additional tax burden exactly offset by the stronger dollars they can now use to obtain their merchandise.

Even if trade flows return to normal eventually, there remains the question of how quickly that would happen. Exporters would very likely experience a temporary surge, while importers would experience a temporary lull, creating winners and losers in the U.S. economy.

While dollar appreciation would eventually cause this effect to ebb, the appreciation would itself create windfall gains for Americans whose debt is denominated in foreign currencies, such as the euro or the yen—and windfall

▶ Analyses suggest the U.S. standard of living might be 6 to 9 percent higher over the long run with a consumption tax relative to where it would be if the country stayed with the current tax system.

Chart 3

Dollar Would Approach '80s High After 25 Percent Appreciation



NOTE: Shaded bars indicate U.S. recessions.

SOURCES: Federal Reserve Board; National Bureau of Economic Research; authors' calculations.

losses for Americans whose assets are denominated in now-weaker foreign currencies. Because the latter category is larger than the former, estimates of this phenomenon suggest Americans could suffer a one-time net capital loss of 3 to 11 percent of gross domestic product, a potentially sizable adjustment.⁶

Alternative Taxing Methods

A destination, or border-adjusted, cash-flow tax would have a significant impact on both the macroeconomy and the well-being of firms and individuals.

On one hand, it would be expected to increase U.S. investment, remove artificial distortions that influence where U.S. firms locate production facilities (and book profits) and bring U.S. tax treatment of corporations more into line with the rest of the world. On the other hand, it would bring about a one-time capital loss in Americans' asset portfolios and might usher in a temporary period during which U.S. exporters would have a competitive advantage and U.S. importers a corresponding disadvantage.

Of course, it would be possible to adopt more limited piecemeal tax reforms rather than the entire DBCFT package. Lowering the corporate tax rate and exempting business investment from taxation, for example, would be an alternative way to potentially boost economic growth and encourage firms to locate production facilities in the U.S. without uprooting the entire corporate tax code. It would risk enlarging the federal deficit both directly through lower rates and indirectly because there would be no border-adjustment revenue.

Offering firms a temporarily lower rate or partial amnesty on profits currently "parked" abroad could be an alternative way to encourage the repatriation of those profits, providing a one-time revenue boost for the U.S. government. However, it would leave intact the long-run distortions of the current corporate tax code.

A border-adjustment mechanism might be possible without switching to a cash-flow tax, by simply grafting an import tax and export subsidy onto the current corporate income tax code, though such a possibility would address neither the high statutory rate on corporate profits nor the current bias against corporate investment.

In short, there is no miracle cure for all of the issues people might have with the corporate tax code. Proposed solutions either enlarge the deficit or create winners and losers. Of course, compensation could in theory be paid from winners to losers to offset the harmful side effects of whatever tax reform is adopted, but history suggests that such payment is unlikely.

Koenig is senior vice president and principal policy advisor and Saving is a senior research economist and advisor in the Research Department at the Federal Reserve Bank of Dallas.

Notes

¹ One key reason for this is that, under consumption taxation, it is unnecessary to calculate the cost basis for investments because selling or trading an investment would no longer be a taxable event. Of course, if the

proceeds were used to make purchases, those proceeds would become cash flow and be subject to tax.

² An analysis done by William McBride at the Tax Foundation, for example, recently found that full expensing of investment would boost long-run gross domestic product by about 5 percent, <https://taxfoundation.org/economic-and-budgetary-effects-full-expensing-investment>.

³ See "A Summary of the Dynamic Analysis of the Tax Reform Options Prepared for the President's Advisory Panel on Federal Tax Reform," by Robert Carroll, John Diamond, Craig Johnson, James Mackie III, Office of Tax Analysis, U.S. Department of the Treasury, May 2006. The increase would be closer to 6 percent, according to "Economic Effects of a Personal Capital Income Tax Add-On to a Consumption Tax," by John Diamond and George Zodrow, International Center for Public Policy (Andrew Young School of Policy Studies, Georgia State University), Working Paper no. 07-15, June 2007.

⁴ See "Border Adjustment and the Dollar," by Alan J. Auerbach, *Economic Perspectives*, American Enterprise Institute, February 2017, <https://eml.berkeley.edu/~auerbach/Borderadjustmentandthedollar.pdf>.

⁵ A 2017 study by Caroline Freund and Joseph Gagnon finds that, in countries with economically similar tax systems, currencies do typically fully appreciate in relatively short order ("Effects of Consumption Taxes on Real Exchange Rates and Trade Balances," Peterson Institute for International Economics, Working Paper no. 17-5). Less-recent work by the World Bank in 2005 points toward a substantial but not fully offsetting currency appreciation, which could mean exporters would enjoy a modest competitive advantage (and importers a modest competitive disadvantage) over the medium to long run.

⁶ See "Notes on the U.S. Wealth Effect of Border Adjustment," by Alan J. Auerbach, February 2017, <http://eml.berkeley.edu/~auerbach/NotesontheUSWealthEffectofBorderAdjustment.pdf>.

DALLAS FED



Economic Letter

is published by the Federal Reserve Bank of Dallas. The views expressed are those of the authors and should not be attributed to the Federal Reserve Bank of Dallas or the Federal Reserve System.

Articles may be reprinted on the condition that the source is credited to the Federal Reserve Bank of Dallas.

Economic Letter is available on the Dallas Fed website, www.dallasfed.org.

Mine Yücel, Senior Vice President and Director of Research

Jim Dolmas, Executive Editor

Michael Weiss, Editor

Kathy Thacker, Associate Editor

Ellah Piña, Graphic Designer

Federal Reserve Bank of Dallas
2200 N. Pearl St., Dallas, TX 75201