

Public Company Corporate Tax Under the TCJA and Sales Factor Apportionment

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In this article, Ferry and Parks analyze the corporate tax paid by public companies following the Tax Cuts and Jobs Act, propose a progressive sliding scale with tax rates from 10 percent to 45 percent, and examine the effect that would have on revenue as well as its economic and competitive benefits.

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The Tax Cuts and Jobs Act had two main objectives when it was passed in December 2017. The first was to reduce the headline rate of corporate tax, from 35 percent to 21 percent, more in keeping with other advanced nations. This was achieved. The second was to add more coherence to our confused system of international taxation. Under the pre-2017 system, worldwide profits

were subject to U.S. corporate income tax, but profit earned by foreign affiliates was exempt from tax until repatriated. This led to about \$4 trillion in cash stranded overseas — about \$3 trillion of which was in very low tax countries — and a large and growing problem of base erosion and profit shifting as companies used a range of tax strategies and structures to shift profits out of reach of the IRS.

The TCJA attempted to improve that situation by limiting U.S. taxation to profits linked to U.S. activities, while adding several innovations to reduce the incentive to shift profit out of the country to low-tax or zero-tax jurisdictions. The United States moved from worldwide taxation to a form of territorial taxation but with many new bells and whistles piled on top of preexisting bells and whistles, making it hard to predict how the new tax system would affect taxes paid, the tax burden on foreign income, corporate tax strategies, and total revenue received by the government. Economists have estimated these effects by various means over recent years, typically using regression analysis of anonymized data from the Bureau of Economic Analysis, the IRS, and country-by-country tax receipts data.

In this article, we use a different approach to look at the effects of the TCJA. Using corporate filings recorded with the federal government's Securities and Exchange Commission, we analyze data from the United States' 500 largest public companies to evaluate the effects of the TCJA for 2019. Financial information firm Standard and Poor's maintains a list of the so-called S&P 500, which are the 500 largest public companies quoted on U.S. stock exchanges. The S&P 500 is widely followed in the investment community, with indexes tracking its stock performance and investment funds investing billions of dollars in

Table 1. S&P 500 Totals vs. U.S. Corporate Sector for 2019

| | Number of Companies | Revenue (millions of dollars) | Pretax Profit (millions of dollars) | Pretax Margin (percentage) | Federal Cash Tax Payment (millions of dollars) | Tax Rate | Average Payment per Company (millions of dollars) |
|---------------------------|---------------------|-------------------------------|-------------------------------------|----------------------------|--|----------|---|
| S&P 500 | 500 | \$12,185,831 | \$1,569,970 | 12.9% | \$136,599 | 8.7% | \$273.20 |
| U.S. corporate tax base | 2,146,904 | N/A | N/A | N/A | \$230,000 | N/A | \$0.107 |
| S&P 500 as share of total | 0.02% | | | | 59.39% | | |

Source: Company reports, IRS Data Book 2019, CBO Monthly Budget Review for FY 2019.

the S&P 500's companies. Using custom software, we downloaded key financial data for 2019 for all the S&P 500 companies. We checked the results and added some data manually as the SEC's system for coding and tagging the data is not foolproof and some fields were missing.

The broad results are shown in Table 1.

The S&P 500 companies accounted for just 0.02 percent of the corporate tax returns filed with the IRS for 2019 but 59.4 percent of the \$230 billion in total corporate tax receipts. Therefore, examining the S&P 500 in detail provides useful insight into the majority of federal corporate tax receipts.

The S&P 500's federal tax payment rate for 2019 of just 8.7 percent¹ shows that large U.S. companies are as a group paying far less than the headline 21 percent corporate tax rate. Corporations' effective tax rates (ETR) are often quoted by the corporations and the media as an indicator of the tax they paid. However, ETR can be a misleading indicator for two important reasons. First, ETR includes taxes expected to be paid to three groups: the federal government, state and local governments, and foreign governments. It therefore does not reflect the taxes or the tax rates paid specifically to the federal government. Secondly, ETR is not a tax payment but a tax provision. Its purpose is to provide investors with a general guideline of what tax rate the company expects to pay each year. Companies typically defer a significant portion of that tax provision each year, and pay

less than anticipated. A prudent chief financial officer often keeps the ETR low but not too low, so he has room to continuously "surprise" investors by paying slightly less tax than they expected.

For all these reasons, the current federal tax payment rate, which is the actual cash payment each year and published in the company's Form 10-K, is a much better indicator than the ETR of tax actually paid to the federal government.

Table 2 shows the levels of federal tax the S&P 500 companies paid in 2019. Ninety out of the 500 corporations paid no tax or received a tax credit on total pretax profit of \$82.5 billion. One-hundred thirty-five companies paid between 0 and 5 percent. Only 27 companies out of 500 paid 21 percent or more.

Table 2. S&P 500 Companies by Federal Tax Payment Rate 2019

| | Number of Companies | Pretax Profit (millions of dollars) |
|-----------------------------|---------------------|-------------------------------------|
| 0% or negative (tax credit) | 90 | \$82,500 |
| 0.01%-5% | 135 | \$385,851 |
| 5.1%-10% | 86 | \$499,040 |
| 10.1%-15% | 91 | \$339,231 |
| 15.1%-20.9% | 71 | \$181,682 |
| 21% or above | 27 | \$81,677 |
| Total | 500 | \$1,569,981 |

Source: Company reports, authors' calculations.

¹ See Table 1, *supra*.

The actual federal tax paid by most S&P 500 companies is far below 21 percent for a number of reasons. When corporations prepare their taxes, they have many opportunities for tax deductions and credits, such as tax loss carryforwards, which allow companies to reduce their tax bill with losses from previous years or by using past losses of companies they acquire. However, there is overwhelming evidence that profit shifting has become the largest single source of tax avoidance. Economist Kimberly Clausing recently estimated² that profit shifting to low-tax jurisdictions (tax havens) led to a revenue loss of between \$79 billion and \$141 billion for 2017, with \$100 billion as a reasonable yearly estimate. That would work out to a 30 percent revenue loss to the IRS last year.

While profit shifting has been attacked by bodies including the OECD, the European Commission, and many national governments, as well as many economists and some members of the U.S. Congress, it has also been strongly defended by corporate groups and tax havens themselves, such as the government of Ireland in its recent European court case on Apple's special tax agreement. Profit shifting is entirely legal. Bermuda is one haven that aggressively attracts profit shifting through its 0 percent corporate tax rate.³ A quote from the Form 10-K of insurance multinational Chubb gives a flavor of the lengths that tax haven governments go to attract profits from multinationals: "The Bermuda Minister of Finance . . . has given Chubb Limited and its Bermuda insurance subsidiaries a written assurance that if any legislation is enacted in Bermuda that would impose tax computed on profits of income, or computed on any capital asset, gain, or appreciation . . . then the imposition of any such tax would not be applicable to those companies . . . until March 31, 2035."⁴ In plain English, Chubb has a 15-year guarantee of no taxes on any profit attributed to its Bermudan affiliates. Some 63 percent of Chubb's worldwide revenue comes from the United States.

Table 3 shows the 10 most profitable S&P 500 companies and the federal tax they paid. These 10 companies collectively earned over \$400 billion in pretax profit and paid federal tax at a rate of 8.1 percent. Indeed, that 8.1 percent rate is high because several of the members of this "Top 10" club paid abnormally high taxes last year. Wells Fargo paid \$998 million on top of its usual federal tax for interest and penalties⁵ related to earlier litigation over a false accounts banking scandal.

The Facebook case is more complicated. Facebook is in the midst of a Tax Court case in which the IRS is seeking additional taxes of up to \$9 billion because, the IRS claims, Facebook undervalued its software assets in 2010 when it sold them to its Irish subsidiary, Facebook Ireland. The federal government is attempting to claim tax dollars from Facebook by charging the company with additional capital gains tax on the sale of intellectual property assets to its Irish subsidiary in 2010.

Facebook's high \$4.3 billion federal tax payment in 2019 was likely partly a public relations effort to present itself as a generous corporate taxpayer before the case comes to court. An article in *MarketWatch* provides a glimpse of the government's PR campaign at work: Documents cited by MarketWatch claim that Facebook's sale of the assets to Facebook Ireland was purely a tax maneuver. The article quotes a 2009 Facebook presentation as stating: "Reducing taxes is key to preserving profits given Facebook's trajectory toward significant pretax income in 2010 and beyond. . . . Shifting international profits to Ireland — this will be the largest source of long-term tax benefits."⁶ Facebook's defense in the case, according to the article, will be that the value of those software assets was low at the time of transfer because Facebook was much less successful than it is today. Facebook's sale of the assets is legal. The payment of high-cash tax in 2019 is not directly related to the dispute over the tax liability of the 2010 sale. But it appears to be a maneuver by Facebook to win IRS support ahead of this controversy. The TCJA has implemented a

²Kimberly A. Clausing, "Profit Shifting Before and After the Tax Cuts and Jobs Act," SSRN (June 3, 2020).

³KPMG, "Corporate Tax Rate Table."

⁴Chubb, 2019 SEC Form 10-K, at 28. Available at the SEC website.

⁵See Wells Fargo, Exhibit 13 (Financials) of the 2019 Annual Report, Note 24: Income Taxes.

⁶Richard Rubin, "Facebook and IRS Ready for \$9 bln Tax Court Fight," *MarketWatch* (Feb. 8, 2020).

Table 3. Federal Tax Paid by Most Profitable S&P 500 Members 2019

| Rank | Company | Revenue (millions of dollars) | Pretax Income (millions of dollars) | Pretax Margin | Federal Cash Tax Paid | Federal Tax Rate |
|--------|-------------------------|-------------------------------------|---|------------------|--------------------------|---------------------|
| 1 | Berkshire Hathaway Inc. | \$254,616 | \$102,696 | 40.3% | \$5,307 | 5.2% |
| 2 | Apple | \$260,174 | \$65,737 | 25.3% | \$6,384 | 9.7% |
| 3 | JPMorgan Chase & Co. | \$115,627 | \$44,545 | 38.5% | \$3,284 | 7.4% |
| 4 | Microsoft | \$125,843 | \$43,688 | 34.7% | \$4,718 | 10.8% |
| 5 | Alphabet Inc. Class A | \$161,857 | \$39,625 | 24.5% | \$2,424 | 6.1% |
| 6 | Bank of America | \$71,236 | \$32,754 | 46.0% | \$1,136 | 3.5% |
| 7 | Facebook Inc. Class A | \$70,697 | \$24,812 | 35.1% | \$4,321 | 17.4% |
| 8 | Wells Fargo & Co. | \$66,083 | \$24,198 | 36.6% | \$5,244 | 21.7% |
| 9 | Intel | \$71,965 | \$24,058 | 33.4% | \$1,391 | 5.8% |
| 10 | Citigroup Inc. | \$76,510 | \$23,901 | 31.2% | \$365 | 1.5% |
| Totals | | \$1,274,608 | \$426,014 | 33.4% | \$34,574 | 8.1% |

tax on intangible earnings in foreign jurisdictions: global intangible low-taxed income. The Facebook Form 10-K for 2019 makes no mention of whether any of the 2019 tax provisions resulted from GILTI.⁷

Critics of the current system of corporate taxation generally favor tough measures to stem profit shifting. It seems clear that the scale of profit shifting is growing over time. The “race to the bottom” phenomenon drives more corporations to launch and then intensify tax-minimization strategies to compete with their peers and maintain competitiveness with investors. Profit shifting is sometimes thought to be the preserve of intellectual-property-intensive industries such as technology and pharmaceuticals. However, law professor Edward Kleinbard, a respected tax expert (sadly, recently deceased) showed in his well-known 2013 study how Starbucks successfully used profit shifting to avoid paying corporate tax in the U.K. for many years, despite claims by Starbucks executives to U.S. investors that the U.K. business was profitable. “If Starbucks can organize itself as

a successful stateless income generator, any multinational company can,”⁸ Kleinbard wrote in his article.

The battle among nations to attract corporations continues, to the detriment of all large, advanced economies. While sponsors of the U.S. corporate tax cut from 35 percent to 21 percent saw themselves as catching up with current international norms, other nations have not stood still. For example, the U.K. cut its corporate tax rate from 20 percent to 19 percent in 2017 and from 19 percent to 17 percent in April 2020. The U.K. is competing for tax revenue with the “pure” tax havens like Bermuda and the Cayman Islands, as well as with the more complex tax havens like Ireland and the Netherlands, which can offer low tax rates along with the ability to locate operations within the European Union. The United States must compete with both “pure” tax havens and advanced economies for corporate location decisions and the related tax revenue.

Critics have suggested that nations work together to seek reforms, such as agreeing to a global minimum corporate tax or to common standards for taxing digital businesses (that is,

⁷ It may not be surprising that GILTI is not affecting tax provisions since it is a global minimum tax, and companies can avoid liability on their tax haven operations by using tax credits from higher-tax countries. Also, the first 10 percent return on assets is tax free.

⁸ Edward D. Kleinbard, “Through a Latte Darkly: Starbucks’s Stateless Income Planning,” *Tax Notes*, June 24, 2013, p. 1515.

online businesses that can engage in business with no physical presence within a country). All these reform proposals suffer from the difficulty of gaining agreement from diverse nations with different and often opposed interests, as well as the lobbying power of the multinational corporations that benefit from the present system.

The OECD is trying to achieve a consensus on corporate tax reform with a group of 137 nations. As of July 2020, the OECD is proposing two “pillars” of reform. Pillar 1 aims to extend corporate tax liability to companies doing business in a national market, even if they have no physical presence. This pillar is designed for online (digital) businesses like Amazon and Google, although there are some who want to extend it to all consumer-facing businesses. Pillar 2 focuses on establishing a global minimum tax level to reduce the tax lost to tax havens with very low corporate tax rates. The Trump administration has publicly criticized the OECD approach and suggested any tax reform should be optional. Tax haven countries have also expressed reluctance about some of the proposed reforms. The OECD admitted in its July report that adoption of its reforms, once they are finalized, depends on “strong leadership and clear political support” from the G-20 group of national governments.⁹

Formulary Apportionment

We support a fundamentally different approach. The current corporate tax system taxes corporate activities based on the origin of the production that created the value in the product, evaluated as if a product’s components were purchased at so-called arm’s-length prices, that is, as if in a free market. Yet in today’s globalized world, many of the transactions involved in creating a product are between related parties owned by the same parent company. This system of valuation and allocation of profit, sometimes called the arm’s-length standard or ALS, is obsolete. The transfer prices between related entities are set by corporations not to reflect costs of production fairly, but to minimize tax liability.

The very concept of a national origin of production is close to meaningless today. Starbucks’s tax practices illustrate the problem. Starbucks is able to charge multiples of the price of other coffee shops for a cup of coffee or a latte. As Kleinbard showed, it used subsidiaries in Switzerland and the Netherlands to effectively zero out its U.K. tax liability by claiming the value was added via Starbucks’s recipes, ostensibly located in the other two countries. It’s true that intellectual property, that is, the investment in establishing the Starbucks brand and developing the formulas for its beverages, makes its high prices possible. Corporations can sell the ownership in their intellectual property to affiliates in low-tax jurisdictions, pay high royalties to those affiliates, and thereby shift profit to the low-tax jurisdictions.

A corporate tax system based on formulary apportionment would use destination of sales instead of location of production to determine corporate tax liability. Corporations keep good records of their sales in each national market, and public corporations usually disclose this information in investor communications. A system based on sales factor apportionment (SFA) would tax corporations based on the pretax profit associated with sales in each national market. The pretax profit would be calculated based on the national sales as a share of global sales applied to the corporation’s global pretax profit.

An SFA system for corporate taxation in the United States would be more fair and equitable. Corporations of similar levels of profitability would pay similar rates, instead of rates varying widely — dependent on the creative tax avoidance skills of each corporation’s finance department. By eliminating profit shifting, SFA would increase the corporate tax revenue realized by the United States and other advanced economies. The system would be more transparent, since it relies on corporate measures that are for the most part already disclosed by public companies and can be calculated more easily than intragroup transfers. Finally, it would end international conflicts over jurisdiction for multinational profits. If many nations embraced

⁹ See OECD, “OECD Secretary-General Tax Report to G20 Finance Ministers and Central Bank Governors,” at 5 (July 2020).

SFA, each one would be free to tax the profit linked to its national market.¹⁰

We can see how that system might work by looking at the S&P 500 database. Using published data, we can establish what share of each company's revenue is derived from the U.S. market. The majority of companies publish that figure in their Forms 10-K. Others publish a regional breakdown of their worldwide revenue, which includes the United States in one category, such as "Americas" or "North America." Using World Bank data on GDP, we calculate the United States' GDP share in the relevant region. We then estimate the U.S. revenue for each company. By applying the U.S. revenue share to worldwide pretax income, we calculate the U.S. pretax income. We then apply the tax rate of 21 percent to that tax base.

Table 4 shows the results. Based on our estimates, U.S. revenue in 2019 was 65.5 percent of worldwide revenue for the S&P 500. Applying the current tax rate of 21 percent to the just over \$1 trillion of U.S.-linked pretax income yields corporate tax revenue of \$216 billion for the S&P 500. That is a 58.7 percent uplift from the actual tax received from the S&P 500 in 2019.

To apply our estimates to the entire U.S. corporate universe, we must make some assumption of the actual tax paid by the corporations below S&P 500 size, which accounted for 41 percent of U.S. corporate tax revenue in 2019. Anecdotal evidence suggests that smaller corporations and private corporations pay higher tax rates than the 8.7 percent average paid by the S&P 500. We make what we believe are conservative estimates that, last year as a group, 85 percent of their revenue was in the United States and they paid an actual federal tax rate of 15 percent on average.

Our estimates show that by replacing the current system with an SFA system at 21 percent, the United States could have expected to earn an additional \$97.8 billion or 42.5 percent in total

corporate tax receipts for 2019. Another way to look at it is that the United States could introduce an SFA system and cut the corporate tax rate by 6 percentage points to 15 percent and still receive the same \$230 billion as it did in 2019.

While our \$97.8 billion estimate of additional tax received is similar to other estimates such as the Clausing estimate cited earlier, there is an important difference. The Clausing \$100 billion estimate refers to all profit shifting of U.S. multinationals, including shifting from other high-tax countries to low-tax countries. Our SFA model focuses exclusively on U.S. profits. Because 35 percent of the profits of the S&P 500 are associated with foreign markets, those countries have a claim on taxing those profits. The SFA model enables foreign governments to tax the profits associated with their markets. This is relevant today as some two dozen governments around the world are focused on what they see as tax avoidance, notoriously by large American technology companies. Those companies, with Amazon and Microsoft as prominent examples, tend to be more international than the average S&P 500 company and therefore make more of an impact in foreign markets. The SFA system explicitly targets only U.S. profits as taxable by the IRS, leaving the profits in each foreign market to be taxed by the relevant national government. It can also be implemented unilaterally by the U.S. government, potentially with a suggestion to other countries to follow our example and implement SFA in their market. It thus provides a path for international consensus that has eluded nations and international bodies thus far.

Progressive Corporate Tax Schedule

An SFA corporate tax regime can build on the fairness and predictability in the tax charged to each company to add one additional feature: a progressive schedule for tax rates. In that regime, tax rates rise with the level of profits. This would ease the burden on smaller companies, while putting a tax "penalty" on excessively large companies, which are the ones that dominate their industry in an oligopolistic or even monopolistic form.

¹⁰ Corporate tax reform is often criticized for leading to double taxation (or double nontaxation) if one country adopts a new tax system while others do not. The SFA system avoids this problem because it only seeks to tax profit associated with the home market — in our case, the United States. Other nations can follow the United States' lead and implement SFA tax in their own home markets. The ultimate solution is a world in which all nations use SFA and there is no double taxation.

Table 4. SFA Corporate Tax Revenue Compared With Current Tax System

| | S&P 500 | Non-S&P 500 U.S. Corporate Sector | Total U.S. Corporate Sector |
|--|--------------|-----------------------------------|-----------------------------|
| Worldwide revenue (millions of dollars) | \$12,097,167 | | |
| Worldwide pretax income (millions of dollars) | \$1,547,751 | | |
| U.S. revenue (millions of dollars) | \$8,510,216 | | |
| U.S. pretax income (millions of dollars) | \$1,014,025 | \$529,270 | \$1,543,295 |
| SFA corp tax revenue (at 21%) | \$216,615 | \$111,147 | \$327,761 |
| Actual corp tax revenue 2019 | \$136,523 | \$93,477 | \$230,000 |
| Additional tax revenue (millions of dollars) | \$80,091 | \$17,670 | \$97,761 |
| Additional tax revenue (%) | 58.7% | 18.9% | 42.5% |
| SFA Corp tax revenue (at 15%) | \$152,104 | \$79,391 | \$231,494 |
| <i>Source:</i> Company reports, authors' calculations. | | | |

In recent years, economists, legal scholars, and other commentators have grown concerned over increasing concentration in the U.S. economy, leading to a reduction in competition and a greater share of national income going to profits instead of wages and salaries. According to a recent study by economists Robert Atkinson and Caleb Foote, despite the growing U.S. population, the number of start-ups in the United States fell by 84,853 in the two decades up to 2016, or from 12.9 percent to 10.2 percent measured as a share of all business establishments.¹¹ Another important anti-competitive trend is the declining number of small public companies and the growing dominance in the U.S. stock market by a handful of very large companies, mostly in technology or banking. A 2016 study by three economists found that the number of U.S. public companies peaked in 1997 at 7,428, but fell to 4,400 in 2019. Today, China has more public companies than the United States.¹² While the media continues to celebrate the American entrepreneurial spirit with

adulatory coverage of figures like Elon Musk, the data tell us there are fewer start-ups than before, and it is now harder to take a growing company public than it once was.

An important driver of concentration is the high level of merger and acquisition activity. According to tech analysis firm CB Insights, the top five tech companies (Facebook, Amazon, Apple, Google, and Microsoft) have between them acquired 770 companies in the past three decades.¹³ Instead of competing against rivals, many large companies today opt to acquire them, enabling them to raise prices and profits as they reduce customer choice. This pattern is supported by the federal government's restrained approach to antitrust action.

A progressive tax schedule would act as a brake on merger activity because companies (and their investors) would be aware that growth in size could raise the annual tax burden. Fewer mergers and more competition are likely to support increased innovation, as well as a fairer distribution of income.

Table 5 presents a proposed progressive tax schedule. Note that the top rate is 45 percent, payable on any U.S. pretax profit a company earns over \$4 billion. Using our 2019 data, only 60

¹¹Robert D. Atkinson and Caleb Foote, "Monopoly Myths: Is Concentration Leading to Fewer Startups?" Information Technology and Innovation Foundation (Aug. 2020).

¹²Alexander Ljungqvist, Lars Persson, and Joacim Tåg, "The Incredible Shrinking Stock Market: On the Political Economy Consequences of Excessive Delistings," Working Paper Series 1115, Research Institute of Industrial Economics, revised Feb. 1, 2018 (2016). See also Merryn Somerset Webb, "Grasp This Chance to Revive Public Markets," *Financial Times*, Aug. 1, 2020.

¹³CB Insights, "Visualizing Tech Giants' Billion-Dollar Acquisitions" (May 5, 2020).

Table 5. Progressive SFA Corporate Tax Scale

| Bracket Number | U.S. Pretax Income Over (millions of dollars) | ... But Not Over (millions of dollars) | Tax Rate | Number S&P 500 Companies |
|----------------|--|---|----------|-----------------------------|
| 1 | \$0 | \$1 | 10% | 23 |
| 2 | \$1 | \$10 | 15% | 0 |
| 3 | \$10 | \$100 | 20% | 13 |
| 4 | \$100 | \$1,000 | 25% | 248 |
| 5 | \$1,000 | \$4,000 | 35% | 156 |
| 6 | \$4,000 | | 45% | 60 |

Source: Company reports, authors' calculations.

companies would incur the top-rate tax. In this illustration, Apple, with U.S. pretax profit of \$21.6 billion, would pay \$9.2 billion in tax for a rate of 42.7 percent. Google (Alphabet) would pay \$7.7 billion in tax on its \$18.3 billion of U.S. pretax profit, for a rate of 42.2 percent. However, the median tax rate paid by all 500 companies comes to 24.3 percent; in other words, just as many companies pay less than 24.3 percent as pay more. Because this tax would be levied on an SFA basis, it would apply to the U.S. subsidiaries of foreign parent companies as well as U.S.-based companies. The higher tax brackets would not encourage inversions, because the tax would be levied on profits associated with U.S. revenue wherever the parent company's headquarters was located.

Total U.S. corporate tax revenue from the S&P 500 on this progressive schedule would come to \$369.3 billion, an increase of 70.5 percent over the tax revenue from the S&P 500 under the 21 percent flat-rate SFA plan, and a 172 percent increase over the \$136 billion of actual federal tax revenue reported by the S&P 500 last year. The tax bands in a progressive schedule could be adjusted to enhance the benefits for smaller companies, or to achieve revenue objectives.

Conclusion

An analysis of financial reports for 2019 by the 500 largest public companies in the United States shows that the actual corporate tax paid by large corporations is far less than the headline rate of 21 percent introduced by the 2017 tax reform. The actual rate, as a share of worldwide pretax profit,

is 8.8 percent. This demonstrates that loopholes, including profit shifting to low-tax jurisdictions, continue to be widespread.

A system of sales factor apportionment would bring greater fairness and transparency to corporate taxation and generate more revenue for the federal government. Our analysis shows that such a system, with a tax rate at 21 percent would generate an additional \$97.8 billion for the U.S. Treasury, or a 42.5 percent uplift in corporate tax revenue. Alternatively, it would enable Congress to maintain current tax revenue levels while slashing the headline rate to 15 percent.

An SFA system could be further enhanced with a progressive tax schedule that would discourage companies from growing to enormous size. It could also increase the total corporate tax revenue while ensuring that the majority of companies would pay either the same or less tax as today. ■