On May 21, Apple Inc. CEO Tim Cook appeared before the Senate Permanent Subcommittee on Investigations. Committee members praised the innovative products developed by the California-based computer giant, but they were less pleased with the achievements of its accounting department. They took turns grilling Cook on why the company had shifted billions of dollars in profits to its overseas subsidiaries, thereby avoiding payment of U.S. corporate taxes on those gains.

Concern over declining corporate tax revenues has been mounting for some time. In 2012, the corporate income tax brought in $242 billion in revenue, but as a share of federal revenue, it has fallen from about 30 percent in the 1950s to around 10 percent today — making it a distant third to the individual income tax and the payroll tax. It has also declined as a share of GDP, from 6 percent in the mid-1950s to about 2 percent (see chart). Some policymakers have argued that the income shifting practiced by multinational corporations is a major reason for the decline in corporate income tax revenue.

But others have said that U.S. companies have good reason to avoid the tax. After accounting for average state taxes, the United States has the highest corporate tax rate in the developed world at 30 percent, compared with a GDP-weighted average of about 30 percent among other developed nations. Thus, some argue the U.S. rate should be much lower. How much lower? According to many economists, it should be zero.

“The only reason not to eliminate the corporate tax would be if there were no way to raise the amount of revenue you need without it, and I personally believe it would be easy to raise as much revenue as we need without taxing things that don’t cause harm,” says Robert Frank, an economist at Cornell University. Frank has proposed replacing the tax on corporate income with taxes on things that cause externalities, such as pollution or traffic congestion.

Ultimately, analyzing the merits and flaws of the corporate income tax boils down to two questions: Who pays and at what cost?

Who Pays?

One reason economists have suggested abandoning the corporate income tax is that it’s not entirely clear who actually bears the burden. It’s tempting to say that the corporation pays. It is, after all, a tax on company profits. But a corporation is just a legal entity, and ultimately only people can pay taxes. So who pays the corporate tax?

There are a few possibilities. The shareholders, as owners of the corporate capital, could pay. Alternatively, the workers might pay if the tax is passed on in the form of lower wages. Finally, the consumers could pay if the tax is passed on in the form of higher prices. Early research on the subject by economist Arnold Harberger, now at the University of California, Los Angeles, seemed to suggest that capital owners were the ones who paid. In a 1962 paper, Harberger modeled a closed economy (one with no international trade) with two economic sectors, corporate and noncorporate. He found that the burden of the corporate income tax would fall entirely on capital. In response to the tax, capital would move from the corporate sector to the noncorporate sector seeking higher returns, which would reduce the productivity of capital in that sector. In this way, the tax would affect all capital in the economy. Since the owners of capital tended to be individuals with higher income, a corporate income tax was seen as making the tax code more progressive.

In the time since Harberger’s paper, commerce has become much more global, allowing capital to move not just within the domestic economy but across borders. According to a 2010 McKinsey Global Institute report, while less than 1 percent of all U.S. companies are multinational, they have accounted for 31 percent of growth in real private sector GDP since 1990. This has made it even trickier to determine who pays the corporate tax in the long run. If capital moves abroad to lower-tax jurisdictions in search of a higher return, workers in the home country are left with less capital, making them less productive. As a result, wages may decline.

R. Alison Felix, an economist at the Kansas City Fed, studied the effect of corporate taxes on wages at the state level. She found that a 1 percentage point increase in the marginal state corporate tax reduces wages by between
0.14 and 0.36 percent. Studies of international data have also indicated that labor may bear some of the burden of the corporate tax, but estimates of how much vary wildly from less than half of the tax to all of it. Moving to a larger scale, it becomes more difficult to accurately measure the effects of the corporate tax on wages because they make up vastly different proportions of the economy. Labor income makes up about 63 percent of GDP, while corporate income is only about 2 percent.

Jane Gravelle, a senior specialist in economic policy at the Congressional Research Service (CRS), says some of the empirical studies that found that labor bore a significant portion of the burden of the corporate tax yielded implausible results, suggesting that they suffered from statistical errors. In a paper with Thomas Hungerford, a public finance specialist at CRS, she reran the studies and found no conclusive evidence that wages suffered under higher corporate taxes.

**At What Cost?**

Although it is not entirely clear who pays the corporate tax, nearly all taxes create some market inefficiency in the form of deadweight loss. This inefficiency arises because taxes create a wedge between what buyers pay and what sellers receive, which leads to an outcome in which both parties would gain from more production. In the case of the corporate income tax, the effect of the tax can strongly influence the decisions companies make, such as how to finance growth.

In general, corporations raise funds in two ways, by issuing new stock (equity) or by borrowing money, and the corporate tax affects this choice. If a company raises money through debt, it can deduct the interest on that debt. But if a company raises money by issuing stock, any dividends paid out on the newly issued shares are not deductible. In fact, dividends are taxed twice: once at the corporate level, and once at the individual level when paid out to shareholders. As a result, the effective tax rate on equity financing ends up being much higher than the tax on debt. In a 2007 report, the Treasury Department estimated that equity financing has an effective marginal tax rate of about 40 percent, while debt has an effective rate of -2 percent.

“Debt financing ends up being much preferred,” says David Kautter, director of the Kogod Tax Center at American University.

This set of incentives has consequences: All else equal, firms that are highly leveraged have a greater risk of bankruptcy if they fall on hard times than companies that finance with equity.

“When the economy turns down, you’re carrying around all this weight with you, and your margin for error becomes narrower,” explains Kautter.

In addition to encouraging debt financing, the corporate tax may also incentivize companies to retain earnings rather than pay out dividends. Because dividends are taxed twice, a company may retain earnings to keep shareholders’ overall tax liability lower. This could deny shareholders the ability to reinvest those funds in other projects, potentially creating market inefficiencies.

In fact, because of the double taxation, one might expect that companies would not pay out any dividends at all. But that isn’t the case. In 2010, companies paid out 60 percent of post-tax profits in dividends. Economists are divided in explaining why so many corporations choose to pay dividends when the tax treatment is less favorable. It could be that dividends signal strength to investors, and not paying them out could make it difficult for a company to retain or attract investors.

Finally, the tax code gives multinational corporations an incentive to keep earnings abroad rather than bring them home. If a U.S.-based corporation has a subsidiary in another country, it pays taxes at that country’s rate on any profits made by that subsidiary. But unlike a company based in that country, U.S. corporations must also pay the U.S. tax on that income when it is “repatriated,” or paid out as dividends by the parent company. The companies are given a tax credit equal to the difference between the U.S. rate and the foreign rate, but they also have the option to defer paying the U.S. tax by keeping the money in foreign subsidiaries and investing it abroad. Many multinationals choose to do just that. According to estimates by the Joint Committee on Taxation, deferral is one of the largest sources of lost corporate tax revenue, equaling $36.8 billion in 2012. This behavior can lead to economically inefficient choices.

“It might be that your best investment of foreign earnings is back here in the United States. But when you factor in the cost of bringing the money back, it’s not. So this money gets trapped, basically,” says Kautter.

The data reveal the inefficiency of U.S. multinational profit shifting. In a 2013 CRS study, Gravelle looked at the profits of U.S. foreign subsidiaries in a variety of countries. In large developed nations, such as France or Germany, U.S. multinational profits constituted less than 1 percent of GDP on average. But in notable tax havens such as Bermuda or the Cayman Islands, profits were many times total GDP.

“These numbers clearly indicate that the profits in these countries do not appear to derive from economic motives related to productive inputs or markets,” wrote Gravelle.

One of the reasons such profit shifting has become a problem recently has to do with the growth of companies that derive much of their profit from intangibles, such as patents, trademarks, or advertising. U.S. tax law requires companies that transfer components to subsidiaries to pay the “arm’s length” price. This means the companies can’t charge their subsidiary a discounted price in order to

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**U.S. Company Foreign Profits Relative to GDP, 2008**

<table>
<thead>
<tr>
<th>Country</th>
<th>Profits as Percentage of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>2.6</td>
</tr>
<tr>
<td>France</td>
<td>0.3</td>
</tr>
<tr>
<td>Germany</td>
<td>0.2</td>
</tr>
<tr>
<td>Japan</td>
<td>0.3</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.3</td>
</tr>
<tr>
<td>Bahamas</td>
<td>4.13</td>
</tr>
<tr>
<td>Bermuda</td>
<td>64.7</td>
</tr>
<tr>
<td>British Virgin Islands</td>
<td>354.7</td>
</tr>
<tr>
<td>Cayman Islands</td>
<td>546.7</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>339.8</td>
</tr>
</tbody>
</table>

declare less taxable income from the sale; they have to charge the going market price. For physical goods, it is easy to come up with comparisons to ensure the company is playing by the rules. But with intangibles, it gets trickier. If Apple or Google sell a patent to their subsidiary, what is the going market price for that patent? Without easy market comparisons, companies can shift intangibles to tax-free countries at low prices, avoiding taxes in the United States.

“I have come to believe that the big problem is not the inefficient allocation of capital between domestic and foreign uses, but the profit shifting,” says Gravelle.

Repeal or Reform?

So how should the United States solve its corporate tax woes? Should the tax just be eliminated and replaced, as Frank and other economists suggest? That could create additional problems if other taxes remained unchanged.

Most businesses in the United States don’t pay corporate income tax directly; instead, their income is taxed at the individual level. These flow-through enterprises allocate their income among owners who include it in their individual income tax filings. But in the case of publicly traded corporations, Eric Toder, a co-director of the Urban Institute-Brookings Institution Tax Policy Center, argues that this method is difficult to apply because it is harder to allocate income among owners when shares change hands frequently. In this case, if there were no corporate income tax, shareholders would be able to escape tax by retaining profits within a corporation.

“If you want to have an income tax, you have to tax corporate income,” Toder says.

To address this problem, some have suggested combining the individual and corporate income taxes. In 1992, the U.S. Treasury Department released a report on a proposed Comprehensive Business Income Tax (CBIT). Under the CBIT, shareholders would exclude dividends and interest received from corporations from their individual taxable income. Corporations, on the other hand, would not be able to deduct interest and dividends from taxable income. This would, in theory, remove the incentive to finance using debt rather than equity and also avoid the double taxation of dividends. There have been other integration proposals as well, such as giving shareholders a tax credit for corporate taxes paid on dividends. Tax integration has thus far not had legislative success in the United States, however.

Regarding profit shifting overseas, some legislators have advocated switching from a worldwide corporate tax to a territorial tax, which means only domestic corporate income is taxed. As of 2012, more than 80 percent of Organization for Economic Cooperation and Development countries had a territorial tax. If corporations with foreign subsidiaries repatriate income, those profits are taxed only by the country where the subsidiary operates. In theory, this policy would lead multinational corporations to invest more of their income at home, since they don’t have to pay an additional tax when they bring the money back. In 2009, Japan became one of the latest developed nations to switch to a territorial tax system. But according to a 2013 research paper by the Research Institute of Economy, Trade, and Industry, a Japanese think tank, the change may not have had the desired effect. If corporations already repatriated earnings before the switch, they increased such activities after the territorial tax went into effect. But companies that did not repatriate earnings under the old system did not start doing so under the territorial tax.

Another proposal is to lower the U.S. corporate tax rate to something more in line with other developed nations, providing a greater incentive for corporations to repatriate foreign earnings. This might not change the behavior of companies interested in profit shifting purely to avoid taxation, though.

“If a company is trying to reduce its income tax rate from 35 percent to zero, I don’t know why it wouldn’t do the same at a 28 or 25 percent rate,” says Toder.

A 2010 Senate bill proposed financing a reduction in the tax rate by eliminating a number of deductions, including deferral. Under that system, companies headquartered in the United States would be taxed on income immediately, regardless of where that income is earned.

“If you eliminate deferral, you’d eliminate the repatriation problem and the profit shifting problem,” says Gravelle.

But Gravelle notes that even if the United States were to drastically lower its rate, other countries could respond by lowering theirs, minimizing the impact. In the end, solving corporate tax problems may take a team effort.

“It’s hard for one country to solve this problem on its own,” says Kautter. “But if you can get the global community to focus on it, then maybe you can keep the profit shifting to a minimum, which would allow you to compete without a lot of the complexity and distortion.”

Readings


