PRIMER

How Lowering Corporate Tax Rates Encourages Economic Growth

Scott A. Hodge
Tax Foundation President

Bryan Hickman
Adjunct Scholar

Key Points

- Over the past three decades, most industrialized countries have reduced corporate income tax rates, in varying degrees, to attract investment and stimulate economic growth and raise the level of output.
- The current consensus among economists and researchers is that the corporate income tax restricts capital formation, and seriously hampers productivity growth, employment levels, wages, and economic output.
- In fact, of all the most common forms of taxation–corporate and individual income taxes, payroll taxes, consumption taxes, property taxes, and so forth–the corporate tax is considered the most harmful in terms of collateral economic damage per dollar of revenue raised.
- ***Bottom Line:** Cutting corporate tax rates leads to increased investment, productivity gains, and, in turn, increased economic growth, output, and higher standards of living.*

Tax Foundation
1325 G Street, NW, Suite 950
Washington, DC 20005

202.464.6200

taxfoundation.org

Introduction

As the international debate over corporate tax rates among advocates and policymakers rages on, prominent activists continually insist on maintaining or increasing taxes on corporations. Of course, those arguments tend to be based more on populist rhetoric than on sound economic data or research. Those who argue in favor of reducing corporate tax rates to encourage economic growth stand on much firmer ground.

Over the past three decades, most industrialized countries have opted to lower, to some degree, their corporate tax rates in order to attract investment and stimulate growth. Canada, Germany, Belgium, Ireland, the U.K., Denmark, Japan, and, most recently, the United States, among many others, have all significantly lowered their corporate tax rates, often multiple times, in the last 30 or 40 years.[1] At this point, when it comes to the international discussion of corporate tax rates, the most glaring question is: Why haven't more countries followed suit?

The argument in favor of reducing corporate tax rates can be boiled down to two relatively simple and related premises: 1) The corporate income tax limits capital formation, growth, and output, and 2) cutting corporate tax rates can stimulate growth and lift the level of economic activity. We will discuss both premises in turn.

Premise #1: The Corporate Income Tax Stymies Growth and Output

While the precise relationships between specific tax policies and economic growth are complicated and multifaceted, there is little disagreement among economists about the negative impact of the corporate income tax. Perhaps surprisingly, the explanation for this connection is not all that complicated. Some potential investment projects have projected pretax returns that are too low for them to be worth doing, because, after heavy taxes are imposed, there is too low an after-tax return. Productivity, wages, and economic output suffer from the discouraged capital formation.

By contrast, a lower tax rate makes some of these projects attractive, because it lowers the required pretax return needed to yield an acceptable after-tax return. Additional capital can meet the required after-tax hurdle rate, and the projects are undertaken. The additional capital makes the workforce more productive, so output, employment, and wages rise. As the capital stock and output expand to new higher levels, growth exceeds its normal pace. Ultimately, growth rates return to a more normal level, but thereafter, the economy is growing from a higher base, keeping economic output on a permanently higher path. Similar improvements in entrepreneurial effort, innovation, and risk-taking can be stimulated by a lower corporate tax rate, further improving the level of economic activity.[2]

1 Organisation of Economic Co-operation and Development, "OECD Tax Database," 2018, http://www.oecd.org/tax/tax-policy/tax-database.htm#C_CorporateCaptial.

2 Other changes to business taxes may also lower the required return on new investment. Expensing, allowing the immediate write-off of capital investment in the year made instead of requiring lengthy depreciation, is a good example. "The Economic Survey of the United States 2018," issued recently by the Organisation for Economic Co-operation and Development, recommended that the temporary business investment in the 2017 U.S. tax law, which allowed expensing of equipment, be made permanent to sustain economic growth. The report estimates permanent investment incentives would boost GDP by 0.8 percent over a decade, and 2.2 percent over the longer term. (Table 1.4.) Note the gradual rise in the forecast GDP versus the baseline, reaching an ultimate level adjustment in the long term. The report is available at https://read.oecd-ilibrary.org/economics/oecd-economic-surveys-united-states-2018_eco_surveys-usa-2018-en/#page1.

Virtually all taxes, to one degree or another, have a negative impact on economic growth.[3] However, by directly burdening the main drivers of economic growth–investment in capital formation, entrepreneurship, and productivity–the negatives associated with the corporate income tax are larger than those resulting from essentially all other forms of taxation.

***Bottom Line:** While economists have reached different conclusions about the size of the corporate tax's negative impact, there is an overwhelming agreement, going back at least 35 years, on the negative relationship among the corporate tax, capital formation, and economic output.*

Premise #2: Lowering Corporate Rates Will Encourage Growth and Output

This second premise follows logically from the first: If corporate income taxes hinder a country's economic activity, it is only logical to conclude cutting corporate tax rates will likely do the opposite. By directly easing burdens on productivity and investment, governments can encourage new businesses to form and existing businesses to expand in their jurisdictions. And, at the international level, lowering corporate tax rates can encourage outside businesses to shift investments, and discourage domestic business from relocating elsewhere. All these factors–individually or combined–would lift the economy to a new, higher level of output.

***Bottom Line:** Reducing the tax burden on businesses increases capital formation, productivity, and the willingness to innovate, which, in turn, drive economic growth.*

Hypothetical: A Tale of Two Countries

Economists tell us that, over time, the burden of the corporate tax is shared unequally among three groups: businesses which face the direct tax liability, customers who purchase the businesses' goods and services, and employees who work for the businesses. Companies paying the corporate tax initially see a reduction in profit. To some extent, they may be able to pass the tax along to customers in the form of higher prices, though, in a competitive international market, price hikes may not always be possible. If not, the companies may have to reduce wages or output. Therefore, it is often the workers who end up bearing a large percentage of the economic burden of the corporate tax in the form of lower wages or lost income.

To illustrate, let us consider two hypothetical countries–Country A and Country B–taking two different courses regarding corporate taxes. Suppose that, to address various fiscal and economic needs, Country A imposes a 10 percentage-point corporate tax hike. What will be the growth effects? How will that impact businesses in that country? What about their customers and employees?

Immediately after the corporate tax rate goes up, businesses will see a drop in after-tax earnings from their current activities. Future investment will look less profitable, and some projects will become unaffordable. Businesses in Country A may attempt to raise prices on their domestic and foreign

3 William McBride, "What is the Evidence on Taxes and Growth?" Tax Foundation, December 18, 2012, 2.

customers. However, in today's global marketplace, customers' purchases are very mobile, as lower-priced products from other countries are readily available. They may switch to other sources, or other products less impacted by the tax hike, or reduce their total spending.

Experience tells us that companies are unlikely to simply absorb a tax hike and live with losses over the long term. Like a customer base, capital and investments are extremely flexible and mobile. It would not be difficult for a business in Country A to avoid replacing capital as it becomes obsolete or worn out, and start relocating activities and investments in search of more favorable conditions. Workers in Country A are less able to follow capital if it moves abroad. The loss of capital and investment in Country A means that its workers will bear the brunt of the tax hike in the form of lower wages, lost income, and reduced standards of living.

Now, suppose that, in response to the same problems, the government of Country B opts to lower corporate rates by 10 percent. How will that impact growth, businesses, consumers, and workers in that country?

Basically, we'll see a mirror image. Businesses across the board will see an immediate increase in profits in Country B, and, as a result, will have more flexibility to lower prices and compete more strongly for consumers. They could pay large dividends to investors, or, more likely, they will respond positively to the new incentives to invest more in Country B. With more investment projects appearing affordable and profitable at the lower tax rate, they will put more capital in place, requiring more labor. The added capital will boost labor productivity, making it possible for companies to raise workers' wages to attract the needed employees.

Bottom Line: *The positive growth effects of lower corporate rates are felt throughout a nation's economy. Regardless of what path a business takes when their taxes go down–whether it's lowering prices to be more competitive, or investing in additional capital to increase productivity and paying higher wages for workers–the growth impact on the country's overall economy will be positive.*

Literature Review

While methods and data samples vary, researchers have consistently acknowledged both the negative impact of corporate taxes as well as the positive impact of corporate tax cuts. One set of findings that stands out came in 2008 when economists at the Organisation for Economic Co-operation and Development (OECD) released a series of working papers on the impact of various forms of taxation in 21 member countries. One of the papers, titled "Tax and Economic Growth," concluded that, when compared to other types of taxation, "corporate taxes are found to be the most harmful for growth," exceeding the harms resulting from personal income taxes and consumption taxes.[4] In addition, the OECD authors posited that "lowering statutory corporate tax rates can lead to particularly large productivity gains in firms that are dynamic and profitable, i.e. those that can make the largest contribution to GDP growth."[5] The explanation for these effects was spelled out directly

4 Åsa Johansson, Christopher Heady, Jens Arnold, Bert Brys, Cyrille Schwellnus, and Laura Vartia, "Tax and Economic Growth," OECD Economics Department Working Papers No. 620, July 2008, 2.

5 Id., 9.

in a 2011 academic article from the same OECD economists, who specifically noted that corporate income taxes are "most harmful for growth as they discourage the activities of firms that are most important for growth: investment in capital and in productivity improvements."[6]

These findings were not outliers or even altogether remarkable in context. Indeed, in the years before and since the OECD's findings, researchers have reached similar conclusions in numerous studies and reports.[7] For example, a 2010 study published in the *American Economic Journal* reviewed a database of corporate income tax rates in 85 countries, ultimately finding that "effective corporate tax rates have a large and significant adverse effect on corporate investment and entrepreneurship,"[8] the main drivers of economic growth.

Focusing more directly on the positive impact of cutting rates, a 2005 study of cross-country tax data by Young Lee and Robert Gordon showed that a one-point reduction in the corporate tax rate could increase a country's annual GDP growth by as much two-tenths of a point, meaning a more significant reduction of 10 percent could provide yearly gains of one to two GDP percentage points.[9] These findings were updated and confirmed in a 2012 study of tax rates in Canadian provinces over three decades.[10]

Notably, in 2014, Ireland's Department of Finance released an impact assessment of the country's corporate tax policy, which is a frequently cited example in the ongoing international debate over corporate tax rates. Ireland famously began reducing its corporate tax rate in the 1990s, starting from a high of 40 percent and moving continually downward to the current 12.5 percent. The 2014 assessment cited economic models showing that, in 2005, Ireland's GNP was 3.7 percentage points larger than it would have been absent the corporate tax rate reductions.[11]

Conclusion

As many countries continue to compete with one another for foreign investment, cutting corporate income tax rates will almost certainly continue to be an attractive option. Therefore, opponents of this approach will almost certainly continue to decry the proverbial "race to the bottom" among countries that are continually lowering their corporate rates. However, if economic growth is a primary objective, no one should be mourning the downward rate trends or even the eventual demise of the corporate income tax. Indeed, as this debate moves forward, and countries seek to reinforce or expand their respective tax bases, advocates and stakeholders should demand that policymakers look for answers outside of the corporate income tax as the evidence clearly shows that, from a growth perspective, virtually *any* other type of tax would be better.

6 Jens Matthias Arnold, Bert Brys, Christopher Heady, Åsa Johansson, Cyrille Shwellius, and Laura Vartia, "Tax Policy for Economic Growth," *The Economic Journal* 121:550 (February 2011), F59-F80, F71.

7 See an aggregation of such studies at William McBride, "What is the Evidence on Taxes and Growth?"

8 Simeon Djankov, Tim Ganser, Caralee McLiesh, Rita Ramalho, and Andrei Schleifer, "The Effects of Corporate Taxes on Investment and Entrepreneurship," *American Economic Journal: Macroeconomics*, 2:3 (July 2010), 31-64, 59.

9 Young Lee and Roger H. Gordon, "Tax Structure and Economic Growth," *Journal of Public Economics*, 89:5-6 (June 2005), 1027-1043.

10 Ergete Ferede and Bev Dahlby, "The Impact of Tax Cuts on Economic Growth: Evidence from the Canadian Provinces," *National Tax Journal*, 65:3 (September 2012), 563-594.

11 Terence Hynes and Brendan O'Connor, "Literature Review of the Economic Effects of Corporation Tax: Part of the Economic Impact Assessment Ireland's Corporation Tax Policy," Ireland Department of Finance, October 2014, http://www.budget.gov.ie/Budgets/2015/Documents/Literature_Review_Economic_Effects_Corporation.pdf.