



## Research

# Corporate Tax Reform and How It Affects Economic Growth

GORDON GRAY | APRIL 18, 2017

## Executive Summary

- The U.S. is mired in a slow economic recovery, and is projected to continue growing at about a 2 percent annual rate for the next 10 years.
- The U.S. corporate tax is grossly out of step with the rates of its developed country competitors, and is the only nation to have *increased* its rate on net since 1988.
- A large body of economic research has documented the anti-growth effects of the U.S. corporate tax, with the Organization for Economic Cooperation and Development (OECD) concluding that it is the most harmful form of tax on per capita Gross Domestic Product (GDP).
- Reducing the corporate tax rate would lead to higher investment, faster productivity growth, faster economic growth and higher wages, which would offer a higher standard of living for U.S. workers.

## Introduction

U.S. economic growth has grown at an average annual rate of 2.1 percent for the past 7 years. In the most recent quarter for which the Bureau of Economic Analysis (BEA) has data, the U.S. economy grew at 2.1 percent.<sup>[1]</sup> The Congressional Budget Office recently projected that U.S. economic growth would remain intractably stuck at about 2 percent annually for the next 10 years.<sup>[2]</sup> The implications of this growth experience are deeply meaningful to every American. At that rate of growth, it takes about 70 years for the living standard of the average American to double, an achievement that used to happen over about 35 years or the span of a working career.<sup>[3]</sup> In short, the American Dream is imperiled by stagnant economic growth. Stubborn demographic trends will be a headwind against economic growth, but policy changes could materially improve the nation's economic trajectory. Among these needed policy changes, tax reform should be a priority – specifically tax reform that significantly lowers the U.S. corporate tax rate.

## The U.S. Corporate Tax in a Global Economy

The distinguishing characteristic of the U.S. corporate tax is that its rate is the highest among OECD nations, which represent most of the world's major economies. At present, the combined federal-state U.S. corporate tax rate is 38.9.<sup>[4]</sup> The high U.S. rate is seemingly not a matter of deliberate choice. Instead, it stems from a failure to acknowledge and keep abreast of broader global trends. Over the last three decades, the U.S. corporate tax has remained largely unchanged, while other global economies have pursued dramatic rate-reducing tax reforms.

The U.S. corporate tax rate has changed twice in the last three decades. Prior to the sweeping Tax Reform Act of 1986, the U.S. federal corporate rate was 46 percent, which was above the OECD average. The 1986 reform reduced that rate to 34 percent, which at the time was below the OECD average. Since then, other world

economies have reduced their corporate rates well below the U.S. headline rate. Indeed, since 1988, when the rate reduction enacted in 1986 had been fully implemented, all but two countries for which data is available, New Zealand and the U.S., have dramatically reduced their corporate rates. New Zealand, which currently maintains a 28 percent central government rate – the same as 1988 – is the other nation that did not keep up with global trends. The U.S. is the only OECD country that on net *increased* its corporate tax rate over the period 1988-2016, the result of a single percentage point increase enacted in 1993.

A corporate tax reform that lowered the U.S. tax rate would return the U.S. to international tax norms, ridding it of the dubious distinction of having the highest statutory tax rate in the world. U.S. firms are increasingly at a disadvantage competing for the vast majority of world consumers and international markets as other nations adopt more favorable tax treatment of foreign-source income.

## **Documenting the Harm of the Corporate Tax**

A large body of research has coalesced around the finding that a high corporate tax rate increases the user cost of capital, which slows investment, productivity growth, and economic growth. Among the more telling examples is a study by the OECD that notes that “corporate income taxes have the most negative effect on GDP per capita.”[\[5\]](#)

A more recent paper by Djankov *et al* assessed this broad literature and observed that, “this research finds adverse effects of corporate income taxes on investment.” The paper contributed to this literature by new findings based on a unique database of corporate income tax rates for 85 countries, that “effective corporate tax rates have a large and significant adverse effect on corporate investment and entrepreneurship.”[\[6\]](#)

Another sweeping literature review concluded that: “A vast analysis of the corporate income tax in countries around the world — both industrialized and developing countries — finds that the corporate income tax reduces gross domestic product (GDP) growth, reduces worker productivity, reduces domestic investment by domestic and foreign companies, and reduces entrepreneurship.”[\[7\]](#)

## **The Benefits of Rate Reduction**

The basic conclusion to draw from this literature is that reducing the statutory corporate tax rate should boost investment and output in the U.S. The literature and economic modeling support this conclusion. The OECD found that reducing the statutory corporate tax rate from 35 percent to 30 percent increases the ratio of investment to capital by approximately 1.9 percent over the long term.[\[8\]](#) This is also consistent with the finding from the Joint Committee on Taxation, which observed that reducing corporate income taxes have the greatest effect on long-term growth by increasing stock of productive capital, which leads to higher labor productivity.[\[9\]](#)

Perhaps the most clearly stated observation of the growth implications for corporate tax reform is from Gordon and Lee, who found that cutting the corporate tax rate by 10 percentage points can increase the annual growth rate by between 1.1 percent and 1.8 percentage points.[\[10\]](#) Work by the American Action Forum has also found that the U.S. economy would benefit from reforms to the current high marginal rates and anti-competitive international tax regime.[\[11\]](#)

In a seminal paper, David Altig, Alan Auerbach, Laurence Kotlikoff, Kent A. Smetters, and Jan Walliser, simulated multiple tax reforms and found GDP could increase by as much as 9.4 percent from tax reform. This high-growth estimate was from a highly efficient consumption-style tax. The study also examined a number of

less ambitious, and gradually less efficient tax reforms. But even these more modest approaches, which include rate reduction, can be highly pro-growth.<sup>[12]</sup>

The Tax Foundation has also published estimates of the potential growth effects from corporate rate reduction, finding that reducing the “federal corporate tax rate from 35 percent to 25 percent would raise GDP by 2.2 percent, increase the private-business capital stock by 6.2 percent, boost wages and hours of work by 1.9 percent and 0.3 percent, respectively, and increase total federal revenues by 0.8 percent.”<sup>[13]</sup>

These growth effects matter for workers. More investment raises productivity, and ultimately wages. A growing amount of research identifies a strong inverse relationship between corporate taxes and wages. Using data for 66 countries over 25 years, Hassett and Mathur found that, for every 1 percent increase in corporate tax rates, wages decrease by about 0.5 percent.<sup>[14]</sup> Using a separate approach with firm-level data, Arulampalam, Devereux, and Maffini found that \$1 in additional corporate tax reduces wages by 92 cents in the long run.<sup>[15]</sup> Using cohorts of data covering 1979 to 2000, Felix found that a 1 percent increase in the marginal corporate tax rate would decrease wages by 0.7 percent.<sup>[16]</sup> Another recent study concluded that labor bears 57 percent of the burden of the corporate income tax.<sup>[17]</sup>

## Conclusion

As policymakers consider how to improve the U.S. growth outlook, the easiest place to start would be to fix what is most obviously broken. The U.S. corporate income tax system would clearly qualify – distinguished by a tax rate that is grossly out of step with the rest of the world. The research literature draws a clear conclusion that corporate taxes harm investment, productivity and economic growth. Follow-on research documents this harm on individual workers. Reducing the corporate rate would mitigate these effects and improve investment and economic growth, which would ultimately benefit workers. Recent economic history, and the latest forecasts, present an America that is consigned to middling economic growth that jeopardizes the American Dream. Improving the growth outlook would make it possible again for living standards to double over the course of someone’s working life. Just one percentage point per year in higher economic growth would make this goal possible again. While pro-growth tax reform alone probably can’t bridge this gap entirely, the research suggests it could go a very long way.

[1] <https://www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm>

[2] <https://www.cbo.gov/sites/default/files/recurringdata/51135-2017-01-economicprojections.xlsx>

[3] <https://www.uschamberfoundation.org/sites/default/files/The%20Growth%20Imperative.pdf>

[4] [http://www.oecd.org/tax/tax-policy/tax-database.htm#C\\_CorporateCapital](http://www.oecd.org/tax/tax-policy/tax-database.htm#C_CorporateCapital)

[5] Jens Arnold, “Do Tax Structures Affect Aggregate Economic Growth? Empirical Evidence from a Panel of OECD Countries,” Organisation for Economic Co-operation and Development Economics Department Working Paper No. 643, October 14, 2008, p. 18, at [http://www.oecd.org/officialdocuments/displaydocumentpdf/?cote=eco/wkp\(2008\)51&doclanguage=en](http://www.oecd.org/officialdocuments/displaydocumentpdf/?cote=eco/wkp(2008)51&doclanguage=en)

[6] Djankov, Simeon, Tim Ganser, Caralee McLiesh, Rita Ramalho, and Andrei Schleifer. 2010. The effect of corporate taxes on investment and entrepreneurship. *American Economic Journal: Macroeconomics* 2(3): 31-64

[7] “Corporate Tax Reform – The Time Is Now,” Business Roundtable, April 15, 2013, at [http://usahomecourt.org/sites/default/files/BRT\\_HWM\\_Corp\\_Tax\\_Reform\\_Submission.pdf](http://usahomecourt.org/sites/default/files/BRT_HWM_Corp_Tax_Reform_Submission.pdf); this literature review based this conclusion on a number of studies conducted by OECD economists, including Åsa Johansson, Christopher Heady, Jens Arnold, Bert Brys and Laura Vartia, *Tax and Economic Growth*, OECD Economics Department Working Paper No. 620, July 11, 2008; Jens Arnold, *Do Tax Structures Affect Aggregate Economic Growth? Empirical Evidence from a Panel of OECD Countries*, OECD Economics Department Working Paper No. 643, October 14, 2008; Cyrille Schweltnus and Jens Arnold, *Do Corporate Taxes Reduce Productivity and Investment at the Firm Level? Cross-country Evidence from the Amadeus Dataset*, OECD Economics Department Working Paper No. 641, September 30, 2008; and Laura Vartia, *How Do Taxes Affect Investment and Productivity? An Industry-Level Analysis of OECD Countries*, OECD Economics Department Working Paper No. 656, December 19, 2008. Other studies include Simeon Djankov, Tim Ganser, Caralee McLiesh, Rita Ramalho and Andrei Shleifer, “The Effect of Corporate Taxes on Investment and Entrepreneurship,” *American Economic Journal: Macroeconomics*, July 2010.

[8] Asa Johansson, Christopher Heady, Jens Arnold, Bert Brys, and Laura Vartia, “Tax and Economic Growth,” Organisation for Economic Co-operation and Development Economics Department Working Paper No. 620, July 2008, at <http://www.oecd.org/dataoecd/58/3/41000592.pdf>

[9] Macroeconomic Analysis of Various Proposals to Provide \$500 Billion in Tax Relief.” Joint Committee on Taxation, JCX-4-05, 1 March 2005.

[10] Young Lee and Roger Gordon, “Tax Structure and Economic Growth,” *Journal of Public Economics*, Vol. 89, Issues 5-6 (June 2005), pp. 1027-1043

[11] John Diamond and George Zodrow, “The Case for Corporate Income Tax Reform,” May 2013, <http://americanactionforum.org/topic/case-corporate-income-tax-reform>

[12] Altig, David, Alan J. Auerbach, Laurence J. Kotlikoff, Kent A. Smetters and Jan Walliser, “Simulating Fundamental Tax Reform in the United States.” *American Economic Review*, Vol. 91, No. 3 (2001), pp. 574-595

[13] Michael Schuyler, “Growth Divided from a Lower Corporate Tax Rate,” Tax Foundation, March 12, 2013, at <http://taxfoundation.org/article/growth-dividend-lower-corporate-tax-rate>

[14] Hassett, Kevin A. and Aparna Mathur, “A spatial model of corporate tax incidence,” *Applied Economics* 47(13):1350-1365”

[15] Arulampalam, Wiji, Michael P. Devereux, and Giorgia Maffini, “The Direct Incidence of Corporate Income Tax on Wages.” Oxford University Centre for Business Taxation Working Paper No. 0707 April 2009 Web. <http://users.ox.ac.uk/~mast1732/RePEc/pdf/WP0707.pdf>

[16] Felix, R. Alison, “Passing the Burden: Corporate Tax Incidence in Open Economies,” Federal Reserve Bank of Kansas City Regional Research Working Paper No. 07-01 October 2007 Web. <http://www.kc.frb.org/Publicat/RegionalRWP/RRWP07-01.pdf>

[17] Desai, Mihir A., C. Fritz Foley and James R. Hines, Jr., “Labor and Capital Shares of the Corporate Tax Burden: International Evidence.” December 2007