How to Improve Pennsylvania's Tax System

Pavel A. Yakovlev

MERCATUS CENTER
George Mason University

3434 Washington Blvd., 4th Floor, Arlington, Virginia 22201
www.mercatus.org

Pavel A. Yakovlev. "How to Improve Pennsylvania's Tax System." Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, 2017.

ABSTRACT

Pennsylvania ranks near the top in tax burden and near the bottom in business friendliness in the nation. While much good can be said about the state's flat personal income tax rate and relatively low sales tax rate, Pennsylvania's business taxes are in serious need of reform. The state government took a step in the right direction by phasing out its archaic capital stock and foreign franchise tax, but Pennsylvania's economy is still being held back by its high corporate income and unemployment insurance taxes. Pennsylvania's 9.99 percent corporate income tax rate, the second highest in the nation, puts the state at a significant competitive disadvantage while generating less than 7 percent of total tax revenue. A combination of business tax cuts and tax base broadening could make Pennsylvania's economy grow faster without jeopardizing its public finances.

JEL codes: H2, H3, O4

Keywords: taxation, equity, efficiency, burden, corporate income tax, Laffer Curve

This paper can be accessed at https://www.mercatus.org/publications/pennsylvania-tax-system-improvements

A popular economic model developed by Charles Tiebout postulates that society prospers when the government provides the desired level of public goods at a competitive tax price.[1] While taxes do pay for valuable public services, they also distort economic decisions and slow down economic growth. Therefore, a sound tax system must raise enough revenue without causing too many economic distortions. Generally speaking, this requires keeping the tax base wide, tax rates low, and tax rules simple. Some features of Pennsylvania's tax code do not meet these basic conditions. This study reviews the state's tax system and offers specific recommendations on how to improve its efficiency.

Pennsylvania's tax burden is one of the highest in the nation, and it is particularly burdensome for businesses. An ambitious 2015 study by the Tax Foundation found that Pennsylvania is ranked 49th in the nation for tax burden on corporate headquarters, 48th for tax burden on retail stores, and 46th for tax burden on distribution centers.[2] A major factor in the state's modest business climate ranking is its high corporate income tax (CIT) of 9.99 percent, which is the second highest in the nation. The evidence presented in this study shows that Pennsylvania's current CIT rate is inefficiently high. Lowering the state CIT rate to a more competitive level could increase state economic activity without jeopardizing state tax

1. Charles M. Tiebout, "A Pure Theory of Local Expenditures," *Journal of Political Economy* 64, no. 5 (1956): 416–24. For studies on the Tiebout hypothesis, migration, and competition, see, for example, Wallace E. Oates, "On Local Finance and the Tiebout Model," *American Economic Review* 71, no. 2 (1981): 93–98; J. Vernon Henderson, "The Tiebout Model: Bring Back the Entrepreneurs," *Journal of Political Economy* 93, no. 2 (1985): 248–64; Stratford Douglas and Howard J. Wall, "'Voting with Your Feet' and the Quality of Life Index: A Simple Non-Parametric Approach Applied to Canada," *Economics Letters* 42 (1993): 229–36; Pavel Yakovlev and Arzu Sen, "Beauty and the Beast: An Empirical Tale of City Attributes," *Economics Bulletin* 18, no. 9 (2007): 1–9; Nathan J. Ashby, "Economic Freedom and Migration Flows between US States," *Southern Economic Journal* 73, no. 3 (2007): 677–97; and M. S. Tosun, C. R. Williamson, and Pavel Yakovlev, "Elderly Migration and Education Spending: Intergenerational Conflict Revisited," *Public Budgeting & Finance* 32, no. 2 (2012): 25–39.
2. Tax Foundation, *Location Matters: The State Tax Costs of Doing Business* (Washington, DC: Tax Foundation, 2015).

revenues. The state could also benefit from lowering its very high unemployment insurance tax. A wider sales tax base and a small severance tax could make up for the potential loss in tax revenues with fewer economic distortions.

OVERVIEW OF PENNSYLVANIA'S TAX SYSTEM

Pennsylvania has the 15th-highest tax burden in the nation, with a per capita tax burden of $4,589, or 10.2 percent of state income.[3] In 2016, Pennsylvania taxpayers had to work until April 22 to pay off their federal, state, and local tax bill, making Pennsylvania the 32nd state to pay off these bills. While much good can be said about the state's flat income tax rate and relatively low sales taxes, the state's high property, corporate income, and unemployment insurance taxes contribute significantly to its relatively high tax burden ranking.

Although taxes do pay for valuable government services, such as law enforcement and public infrastructure, they come at a cost to society in terms of lower private output and employment. Several studies show that high taxes distort economic activity and slow down economic growth.[4] A sound tax system, on the other hand, raises sufficient revenue without jeopardizing economic prosperity.

Figure 1 shows that Pennsylvania, like many other states, raises most of its revenue through consumption (sales, excise, etc.) and income taxes. A notable and rather unique feature of Pennsylvania's tax system is its relatively high CIT and the absence of a state severance tax.

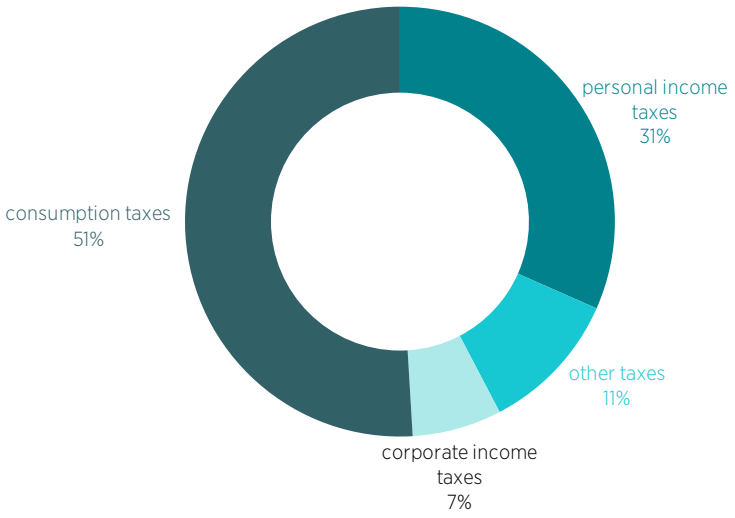
Having a combined 6.34 percent average state and local sales tax rate, Pennsylvania ranks 20th nationally in sales tax burden and 17th nationally in personal income tax burden, owing to its single tax rate of 3.07 percent.[5] However, Pennsylvania's abysmal rankings on corporate income taxes (44th) and unemployment

3. Morgan Scarboro, ed., *Facts & Figures: How Does Your State Compare?* (Washington, DC: Tax Foundation, 2017).

4. See, for example, Edward C. Prescott, "Why Do Americans Work So Much More Than Europeans?" (NBER Working Paper No. w10316, National Bureau of Economic Research, Cambridge, MA, July 2004); W. R. Reed, "The Robust Relationship between Taxes and US State Income Growth," *National Tax Journal* 61, no. 1 (2008): 57–80; W. R. Reed, "The Determinants of US State Economic Growth: A Less Extreme Bounds Analysis," *Economic Inquiry* 47, no. 4 (2009): 685–700; Pavel A. Yakovlev, "State Economic Prosperity and Taxation" (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, July 2014), 14–19; and Pavel A. Yakovlev and Antony Davies, "How Does the Estate Tax Affect the Number of Firms?," *Journal of Entrepreneurship and Public Policy* 3, no. 1 (2014): 96–117.

5. Jared Walcak, Scott Drenkard, and Joseph Henchman, *2017 State Business Tax Climate Index* (Washington, DC: Tax Foundation, 2016).

FIGURE 1. COMPOSITION OF PENNSYLVANIA'S TOTAL TAX REVENUE



Source: US Census Bureau, *2015 Annual Survey of State Government Tax Collections*, September 2016, https://www.census.gov/programs-surveys/stc.html.

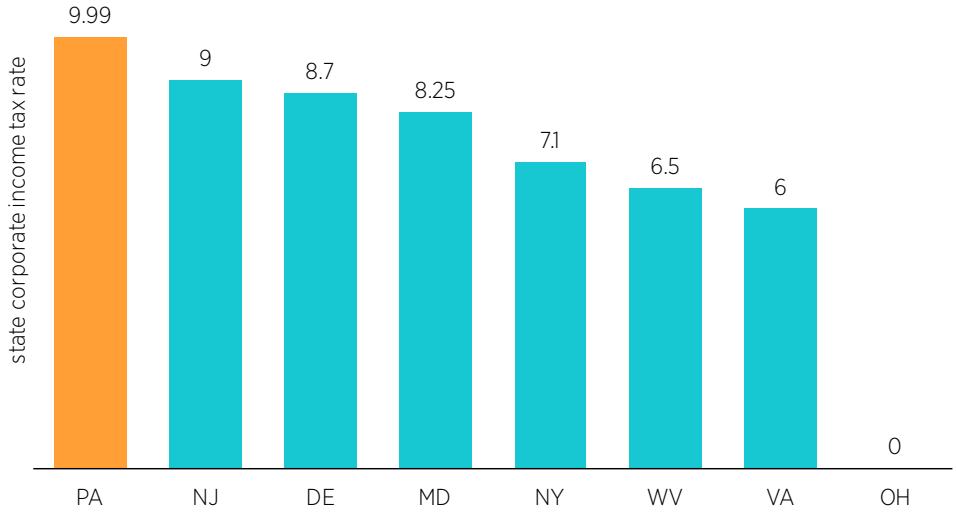
insurance taxes (45th) more than offset its relatively favorable rankings on individual income and sales taxes, pushing the state toward the middle of the Tax Foundation's 2017 *State Business Tax Climate Index*.[6]

A key factor contributing to Pennsylvania's modest business tax ranking is its high CIT rate, which is 48 percent above the median. At 9.99 percent, the state's CIT rate is the highest in the region (see figure 2) and the second highest in the nation. Only Iowa has a higher CIT rate, which ranges from 6 to 12 percent.[7] Even so, Iowa's top rate of 12 percent applies only to corporate income over $100,000. Meanwhile, Pennsylvania's 9.99 percent rate applies to all levels of income. When making an apples-to-apples comparison of the 30 single-bracket states, Pennsylvania's 9.99 rate pushes it all the way to the top of the list, as figure 3 shows.

Yet despite having the highest flat CIT rate in the country, Pennsylvania's 2015 CIT revenue amounts to only 6.7 percent of its total tax revenue and 0.35 percent of its state GDP, compared to the average of 6.3 and 0.31 percent, respectively, for all other states that have lower CIT rates. This is not a large difference

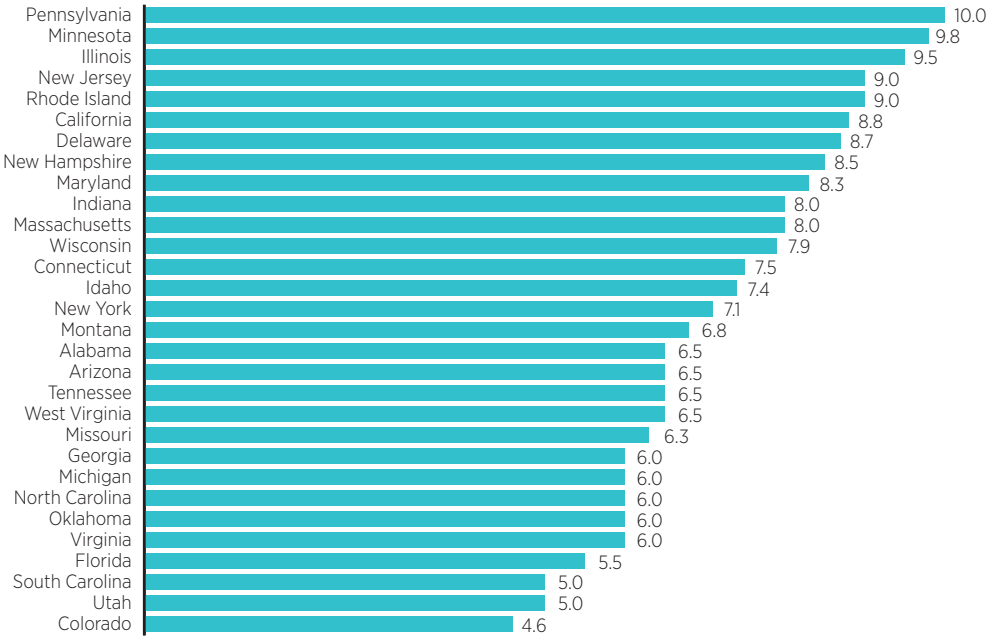
6. Walcak, Drenkard, and Henchman, *2017 State Business Tax Climate Index*.
7. Morgan Scarboro, *State Corporate Income Tax Rates and Brackets for 2017* (Washington, DC: Tax Foundation, 2017).

FIGURE 2. 2015 STATE CORPORATE INCOME TAX RATES IN PENNSYLVANIA AND ITS NEIGHBORING STATES



Source: Tax Foundation, *State Corporate Income Tax Rates and Brackets for 2015*, October 2017.

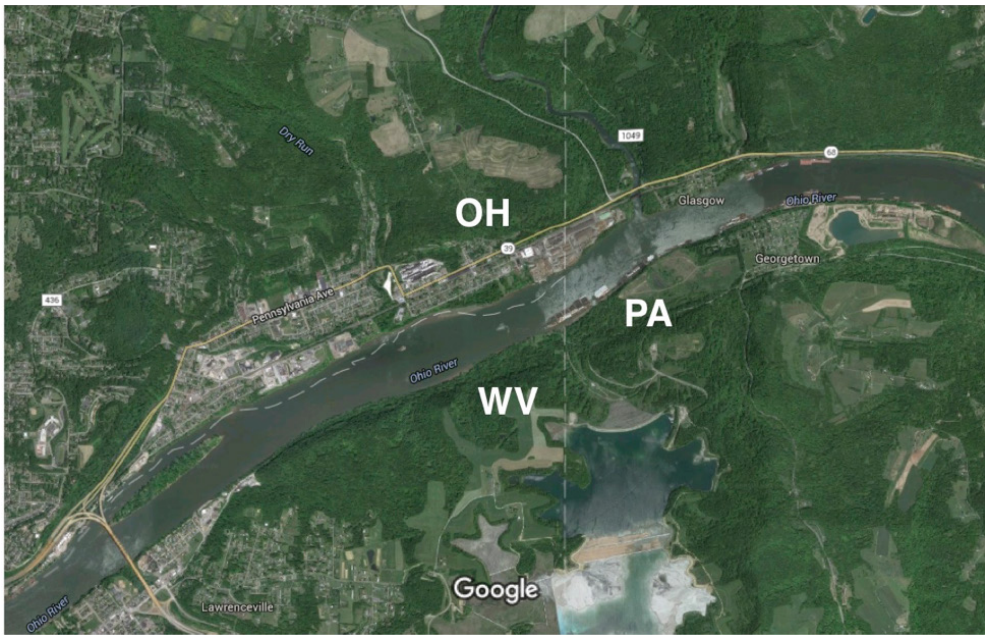
FIGURE 3. STATES WITH SINGLE-BRACKET CORPORATE INCOME TAX RATES IN 2015



Note: This histogram is based on 30 states with a single-bracket or flat CIT rate. States with multiple CIT rates are excluded from the figure to avoid arbitrariness in selection of tax rates across brackets.

Source: Tax Foundation, *State Corporate Income Tax Rates and Brackets for 2015*, October 2017.

FIGURE 4. SATELLITE VIEW OF ECONOMIC ACTIVITY IN THE TRISTATE BORDER AREA



Source: Google Maps, February 4, 2016.

in revenues considering that Pennsylvania's CIT rate exceeds the average state flat CIT rate by about 3 percentage points.

Having the highest CIT rate in the region tends to squeeze economic activity out of Pennsylvania. As can be seen in the satellite image of the tristate border area in figure 4, there is visibly more economic activity in Ohio, with a CIT rate of 0, and in West Virginia, with a CIT rate of 6.5, than in Pennsylvania, with a CIT rate of 9.99. While this type of evidence does not conclusively prove the above assertion, it is consistent with the satellite imagery presented by Russell S. Sobel, who also finds visibly more economic activity just across the state border in Ohio compared with West Virginia and Pennsylvania.[8] This anecdotal evidence is consistent with a study by J. William Harden and William H. Hoyt, who find that higher corporate income taxes have a significant negative effect on employment.[9]

8. Russell S. Sobel, *Unleashing Capitalism: Why Prosperity Stops at the West Virginia Border and How to Fix It* (Morgantown, WV: Public Policy Foundation of West Virginia, 2007).
9. J. William Harden and William H. Hoyt, "Do States Choose Their Mix of Taxes to Minimize Employment Losses?," *National Tax Journal* 56, no. 1 (2003): 7–26.

THE CIT IS VERY INEFFICIENT

Economists have long known that local, state, and national governments compete for businesses with one another. The number of business enterprises and the amount of employment they generate are crucial for the health of a state's economy. States compete to attract the largest number of corporate employers and taxpayers.[10] Harry Grubert and John Mutti find that average effective tax rates have a significant negative effect on capital investment.[11] Recent studies by Pavel Yakovlev and by Yakovlev and Antony Davies show that states with higher taxes tend to grow more slowly because they lose people and businesses.[12]

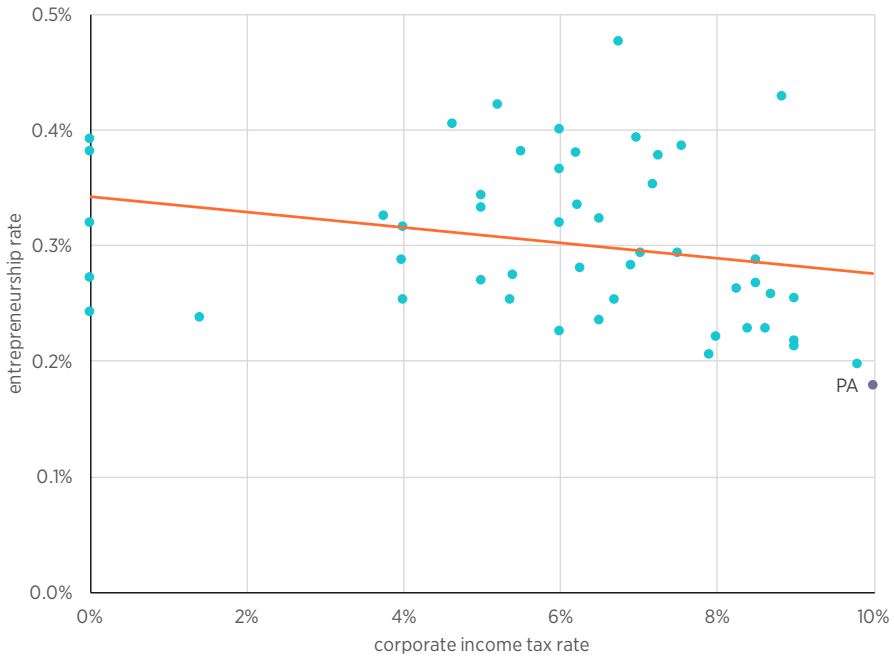
The CIT is one of the most inefficient taxes for multiple reasons. Maximilian Baylor surveys dynamic computable general equilibrium studies of tax distortions and finds that capital taxes, at both the corporate and individual levels, are the most distortionary, followed by taxes on labor and consumption.[13] A pioneering study by Arnold C. Harberger showed that the distortions created by the federal CIT can amount to about 24 percent of its revenues, while later studies put that estimate at over half of CIT revenues.[14] Another study finds that it may cost society $0.45 for every additional dollar raised in CIT revenue, a rather steep price for extra revenue that could be generated by far less distortionary consumption taxes or user fees.[15]

According to Rob Norton, the CIT gives rise to two main types of inefficiencies.[16] First, the CIT amounts to another tax on income because it taxes corporate profits, which are then taxed again when they are paid out as dividends. This tax treatment may discourage firms from conducting their business as corporations and push them toward alternative forms of business organization, such as LLCs and partnerships. The second source of inefficiency arises from the fact that the

---

10. Robert J. Newman, "Industry Migration and Growth in the South," *Review of Economics and Statistics* 65, no. 1 (1983): 76–86.
11. Harry Grubert and John Mutti, "Do Taxes Influence Where U.S. Corporations Invest?," *National Tax Journal* 53, no. 4 (2000): 825–40.
12. Yakovlev, "Prosperity and Taxation," and Yakovlev and Davies, "Estate Tax."
13. Maximilian Baylor, "Ranking Tax Distortions in Dynamic General Equilibrium Models: A Survey" (Working Paper 2005-06, Canadian Department of Finance, Ottawa, Ontario, April 2005).
14. Arnold C. Harberger, "Efficiency Effects of Taxes on Income from Capital," in *Effects of the Corporate Income Tax*, ed. Marian Krzyzaniak (Detroit, MI: Wayne State University Press, 1966), 107–17; Jane C. Gravelle, *The Economic Effects of Taxing Capital Income* (Cambridge, MA: MIT Press, 1994); and Don Fullerton and Diane Lim Rogers, *Who Bears the Lifetime Tax Burden?* (Washington, DC: Brookings Institution, 1993).
15. Dale W. Jorgensen and Kun-Young Yun, "The Excess Burden of Taxation in the United States," *Journal of Accounting and Finance* 6, no. 4 (1991): 487–508.
16. Rob Norton, "Corporate Taxation," in *The Concise Encyclopedia of Economics*, Library of Economics and Liberty, 2008, http://www.econlib.org/library/Enc/CorporateTaxation.html.

FIGURE 5. KAUFFMAN ENTREPRENEURSHIP INDEX AND STATE CORPORATE INCOME TAX RATES, 2008–2013 AVERAGES



Sources: Robert W. Fairlie, "The Kauffman Index of Entrepreneurial Activity: 1996–2013" (Kansas City, MO: The Ewing Marion Kauffman Foundation, 2014); Tax Foundation, *State Corporate Income Tax Rates and Brackets for 2015*, October 2017.

CIT incentivizes the use of debt over equity financing since interest payments on debt are tax deductible. This distortion leads to a misallocation of capital by diverting investments from projects that are typically financed by equity, such as R&D, to projects that are typically financed by debt, such as buildings and structures that can be used as debt collateral.

Another distortion from the CIT is its negative effect on entrepreneurial activity. Startup firms have less access to debt financing than large, established firms. Therefore, the preferential treatment of debt financing by the CIT places small startups at a competitive disadvantage compared with their established counterparts. Simeon Djankov and his coauthors find that corporate taxes have a substantial adverse effect on investment and entrepreneurship.[17] Figure 5 shows a negative correlation between entrepreneurship and the state CIT rate. Pennsylvania, not accidentally, ranks dead last on Kauffman's index of entrepreneurial activity.

17. Simeon Djankov et al., "The Effect of Corporate Taxes on Investment and Entrepreneurship" (NBER Working Paper No. 13756, National Bureau of Economic Research, Cambridge, MA, January 2008).

Yet another distortion of the CIT is its adverse effect on the allocation of human capital. Corporations are known to invest heavily in attracting the best talent away from economically productive activities and channeling it toward tax avoidance and evasion schemes, such as accounting loopholes and nexus selection optimization software, as well as political lobbying and clientelism. The *New York Times* reports that the high CIT rate forces companies to devote enormous resources to finding loopholes, with some companies, like General Electric, hiring the best lawyers and accountants to become experts in tax avoidance.[18]

THE CIT BURDEN FALLS ON INVESTORS, CONSUMERS, AND WORKERS

In addition to efficiency, fairness is an important element to consider when discussing the advantages and disadvantages of a tax. Despite the commonly held view that the CIT is a tax on affluent business owners, the true burden (incidence) of this tax is likely to fall on a wide variety of people. A thorough assessment of the literature by Alan J. Auerbach shows that the CIT burden may fall not only on capital owners but also on workers and consumers.[19] Why would that be? Marion Krzyzaniak and Richard A. Musgrave's seminal work shows that corporations can pass the corporate tax burden on to consumers by reducing production and increasing product prices, leading to lower real wages.[20] This shift of the tax burden occurs because lower capital stock makes workers less productive, which in turn leads to lower wages and higher consumer prices.[21] Several empirical studies confirm that higher CIT rates reduce real wages.[22] Rising globalization is likely to shrink the CIT burden on capital owners even further. Some models suggest that the CIT burden might be shifted

18. David Leonhardt, "The Paradox of Corporate Taxes," *New York Times*, February 1, 2011.
19. Alan J. Auerbach, "Who Bears the Corporate Tax? A Review of What We Know" (NBER Working Paper No. 11686, National Bureau of Economic Research, Cambridge, MA, October 2005).
20. Marion Krzyzaniak and Richard A. Musgrave, *The Shifting of the Corporation Income Tax* (Baltimore: Johns Hopkins Press, 1963).
21. Mihir A. Desai, "A Better Way to Tax US Businesses," *Harvard Business Review*, July/August 2012, https://hbr.org/2012/07/a-better-way-to-tax-us-businesses.
22. Joseph Gyourko and Joseph Tracy, "The Importance of Local Fiscal Conditions in Analyzing Local Labor Markets," *Journal of Political Economy* 97, no. 5 (1989): 1208–1231; R. Alison Felix, "Do State Corporate Income Taxes Reduce Wages?," in *Economic Review* (Kansas City, MO: Federal Reserve Bank of Kansas City, Second Quarter 2009), 77–102; Robert Carroll, "Corporate Taxes and Wages: Evidence from the 50 States" (Working Paper No. 8, Tax Foundation, Washington, DC, August 2009).

almost entirely onto workers in the long term because capital is much more mobile than labor.[23]

The CIT burden also tends to be unequally distributed among corporations. Larger firms are often in a better position than smaller firms to take advantage of tax avoidance schemes. Estimated to be around 6 percent of firm tax expenses, the federal CIT compliance costs are high and tend to be most burdensome for small corporations.[24] Furthermore, because capital is more mobile in larger firms, smaller firms are less capable of escaping to lower-tax jurisdictions. Thus, if any CIT burden does fall on capital owners, it is more likely to fall heavily on the owners of small corporations. For these reasons, economists tend to rate the CIT rather low on fairness.

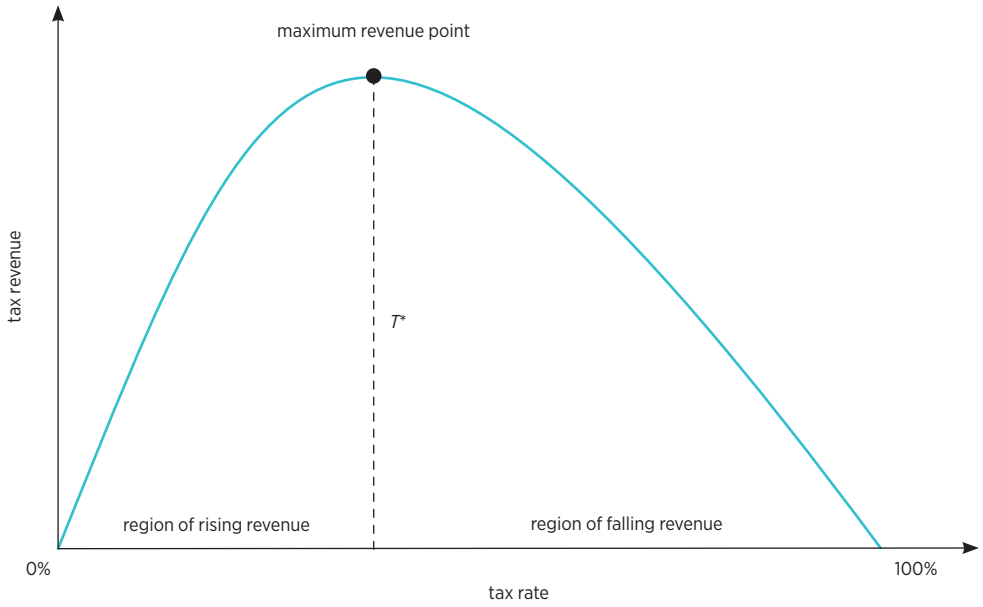
PENNSYLVANIA'S CIT IS INEFFICIENTLY HIGH

The tax revenue curve, popularly known as the Laffer Curve, is an inverted parabola that shows how tax revenue changes with the tax rate. When the tax rate is low, additional revenue can be obtained by simply increasing the tax rate, as shown in figure 6. This is known as the region of rising revenue. However, as the tax rate continues to rise, additional revenue becomes harder to collect because people work less or hide their incomes. Eventually, the revenue peaks at the top of the Laffer Curve at the revenue-maximizing tax rate (T^*). After that, additional increases in the tax rate actually lower revenue. This region of falling tax revenue is known as the "wrong" side of the Laffer Curve because excessively high taxes decrease economic activity and sabotage tax collections. If a tax happens to be on the wrong side of the curve, then lowering the tax rate can "pay for itself" through higher economic activity and tax revenue. Policymakers interested in maximizing economic growth and broad economic prosperity would want to choose a tax rate somewhere to the left of T^*.

While economists disagree on the exact shape of the Laffer Curve, and some may even question its existence, the empirical evidence supporting the Laffer Curve has been mounting.[25] The widely cited studies by Alex Brill and

23. Gregory N. Mankiw, Kristin Forbes, and Harvey Rosen, "Economic Report of the President" (Testimony before the Joint Economic Committee, Council of Economic Advisers, Washington, DC, February 10, 2004).
24. Joel B. Slemrod and Marsha Blumenthal, "The Income Tax Compliance Cost of Big Business," *Public Finance Review* 24, no. 4 (1996): 411–38.
25. Studies finding evidence in favor of the Laffer Curve include Yu Hsing, "Estimating the Laffer Curve and Policy Implications," *Journal of Socio-Economics* 25, no. 3 (1996): 395–401; Kimberly A. Clausing, "Corporate Tax Revenues in OECD Countries," *International Tax and Public Finance* 14,

FIGURE 6. HYPOTHETICAL TAX REVENUE (LAFFER) CURVE



Note: *T** is the revenue-maximizing tax rate.

Source: Author's rendering.

Kevin Hassett and by Kimberly A. Clausing find strong statistical evidence in favor of the Laffer Curve in the international corporate tax data.[26] Brill and Hassett also find that the revenue-maximizing CIT rate has declined steadily from 34 percent in the 1980s to 26 percent in the first decade of the 21st century

no. 2 (2007): 115–33; Alex Brill and Kevin Hassett, "Revenue-Maximizing Corporate Income Taxes: The Laffer Curve in OECD Countries" (AEI Working Paper No. 137, American Enterprise Institute, Washington, DC, July 2007); Chris Edwards, "Corporate Tax Laffer Curve," *Cato Institute Tax and Budget Bulletin* 49 (November 2007); Jack M. Mintz, "2007 Tax Competitiveness Report: A Call for Comprehensive Tax Reform," *C. D. Howe Institute Commentary* 254 (September 2007): 1; Mathias Trabandt and Harald Uhlig, "The Laffer Curve Revisited," *Journal of Monetary Economics* 58, no. 4 (2011): 305–27; Trabandt and Uhlig, "How Do Laffer Curves Differ across Countries?" (International Finance Discussion Papers No. 1048, Board of Governors of the Federal Reserve System, Washington, DC, May 2012); Duanjie Chen and Jack M. Mintz, "Corporate Tax Competitiveness Rankings for 2012," *Cato Institute Tax and Budget Bulletin* 65 (September 2012); and Michael Schuyler, "Growth Dividend from a Lower Corporate Tax Rate," *Tax Foundation Special Report* 208, March 12, 2013. Evidence against it: Jane G. Gravelle and Thomas L. Hungerford, "Corporate Tax Reform: Issues for Congress," Congressional Research Service, April 2008.

26. Alex Brill and Kevin Hassett, "Revenue-Maximizing Corporate Income Taxes," and Clausing, "Corporate Tax Revenues in OECD Countries."

as the world's economy has become more competitive.[27] Clausing estimates that the revenue-maximizing CIT rate was 33 percent in Organisation for Economic Co-operation and Development (OECD) countries during the 1979–2002 period. She argues that the revenue-maximizing rate is likely to be even lower in smaller and more globally integrated countries.[28]

Michael Devereux's analysis of 20 OECD countries from 1965 to 2004 suggests that the revenue-maximizing national CIT rate is between 18 and 37 percent.[29] Consistent with this range is Chris Edwards's finding that CIT revenue soared from 2.6 percent to 3.7 percent of GDP when the average CIT rate in OECD countries fell from 45 to 29 percent.[30] Jack Mintz's 2007 estimates put the revenue-maximizing CIT rate for Canada within a similar range, at 28 percent.[31] Chen and Mintz also observe that despite a 31 percent cut in the Canadian CIT and the 2009 recession, tax revenues as a share of GDP have remained roughly constant owing to rising corporate taxable incomes.[32]

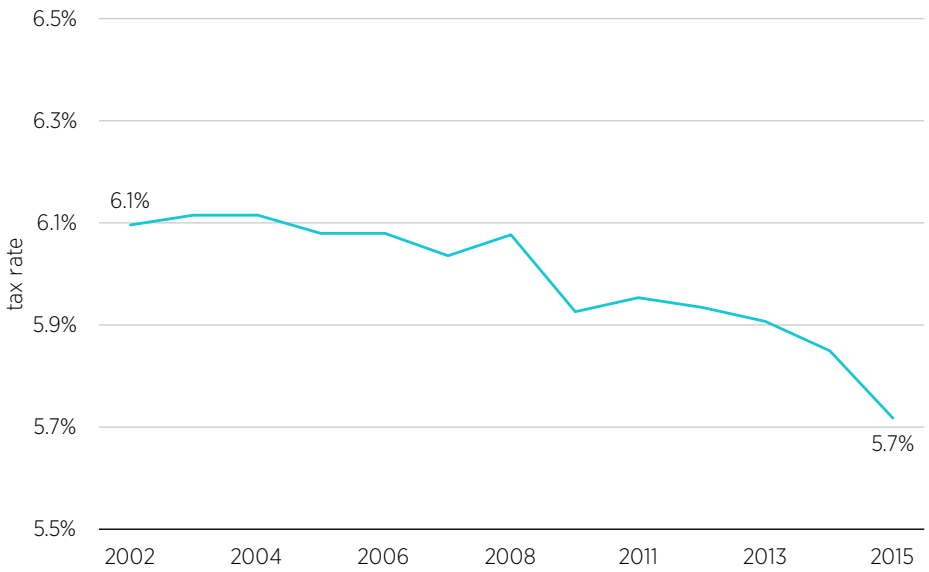
So far, there is only one published study on the state CIT Laffer Curve, and it finds that the average revenue-maximizing CIT rate is likely to be around 6 percent.[33] Interestingly, the average state CIT rate has declined over the last decade from 6.09 to 5.72 percent, as can be seen in figure 7. This trend is consistent with the idea that states are lowering their CIT rates in order to prevent their tax base and revenue from shrinking in the increasingly competitive tax environment.

The evidence presented above suggests that Pennsylvania's current CIT rate of 9.99 percent is inefficiently high, making it difficult for this state to compete for businesses. Lowering the state CIT rate to about 6 percent can increase corporate investment and employment in Pennsylvania without jeopardizing government finances since the CIT currently generates only about 7 percent of total tax revenue. In fact, state CIT revenue could actually rise over time if the tax cut makes Pennsylvania more competitive.

---

27. Brill and Hassett, "Revenue-Maximizing Corporate Income Taxes."
28. Clausing, "Corporate Tax Revenues in OECD Countries."
29. Michael P. Devereux, "Developments in the Taxation of Corporate Profit in the OECD since 1965: Rates, Bases, and Revenues" (Working Paper No. 07/04, Oxford University Centre for Business Taxation, Oxford, UK, May 2006).
30. Edwards, "Corporate Tax Laffer Curve."
31. Mintz, "2007 Tax Competitiveness."
32. Chen and Mintz, "Corporate Tax Competitiveness Rankings for 2012."
33. Pavel A. Yakovlev and Kanybek Nur-tegin, *A Case for Lowering Maryland's Corporate Income Tax* (Rockville, MD: Maryland Public Policy Institute, 2015).

FIGURE 7. AVERAGE STATE CORPORATE INCOME TAX RATE, 2002–2015



Note: A simple average of the highest and lowest state corporate income tax rates was used for states with multiple tax brackets. The average based on the 38 single-bracket states also coincides nearly perfectly with the 50-state average shown in this figure.

Source: Tax Foundation, *State Corporate Income Tax Rates and Brackets for 2015*, October 2017.

CONCLUSION

The evidence presented in this study shows that Pennsylvania's business tax climate could be more competitive if not for the high corporate income and unemployment insurance taxes. Pennsylvania's CIT rate of 9.99 percent is the highest among the flat-rate states and the second highest, overall, in the nation. In addition to the state tax, US corporations have to pay the federal CIT, which is also one of the highest in the world. In an increasingly competitive global economy, the combined federal and state CIT burden puts Pennsylvania at a significant competitive disadvantage not only domestically but also internationally.

By lowering the state CIT rate, Pennsylvania can substantially improve its business climate without reducing its long-term tax revenue stream. Some studies suggest that lowering the corporate income tax rate may actually increase both long-term tax revenues and economic growth. However, it is important to note that the desired effects of this tax cut may not come to fruition immediately. Simulations by Michael Schuyler (2013), for example, show that a tax cut may

lead to revenue losses in the short term because it takes time for incentives to affect economic behavior.[34]

The state would also benefit from lowering its high unemployment insurance tax. If revenue neutrality is a priority, policymakers should be prepared to supplement potential revenue shortfalls by widening a tax base or increasing consumption taxes. Pennsylvania can raise sufficient revenue with greater efficiency by expanding its sales tax base, relying more on user fees, and adding severance taxes to its revenue mix.

34. Schuyler, "Growth Dividend from a Lower Corporate Tax Rate."

ABOUT THE AUTHOR

Pavel A. Yakovlev is an associate professor of economics at Duquesne University, where he teaches microeconomics, macroeconomics, and public economics courses. Yakovlev has written more than a dozen journal articles, several book chapters, and numerous working papers. He joined Duquesne University in 2007, after earning his doctorate degree from West Virginia University in 2006 and completing a year of postdoctoral research in the Bureau of Business and Economic Research at WVU. Yakovlev also has an MA in economics from West Virginia University and a BS in economics and business administration from Shepherd College. He is a recipient of the WVU Foundation Distinguished Doctoral Fellowship in Social Sciences.

ACKNOWLEDGMENTS

I would like to thank Kanybek Nur-tegin from Florida Atlantic University for his contributions to the joint study for the Maryland Public Policy Institute, which this paper builds upon. I also gratefully acknowledge the financial support of, and helpful comments and suggestions from the anonymous reviewers at, the Mercatus Center at George Mason University.

ABOUT THE MERCATUS CENTER AT GEORGE MASON UNIVERSITY

The Mercatus Center at George Mason University is the world's premier university source for market-oriented ideas—bridging the gap between academic ideas and real-world problems.

A university-based research center, Mercatus advances knowledge about how markets work to improve people's lives by training graduate students, conducting research, and applying economics to offer solutions to society's most pressing problems.

Our mission is to generate knowledge and understanding of the institutions that affect the freedom to prosper and to find sustainable solutions that overcome the barriers preventing individuals from living free, prosperous, and peaceful lives.

Founded in 1980, the Mercatus Center is located on George Mason University's Arlington and Fairfax campuses.