POLICY BRIEF • APRIL 2023

The Economic Implications of a Flat-Rate Income Tax for Wisconsin



By Donald Bruce, PhD,

Randy and Jenny Boyd Distinguished Professor, Haslam College of Business, and Director, Boyd Center for Business and Economic Research The University of Tennessee, Knoxville



The Economic Implications of a Flat-Rate Income Tax for Wisconsin

By Donald Bruce, PhD,

Randy and Jenny Boyd Distinguished Professor, Haslam College of Business, and Director, Boyd Center for Business and Economic Research The University of Tennessee, Knoxville

This report was commissioned by the Badger Institute and does not necessarily represent the opinions of the Institute or any of their employees or donors.

Executive summary

The individual income tax is a pillar of most state revenue systems in the United States, generating nearly a third of all state taxes. Wisconsin is one of numerous states with a graduated-rate progressive income tax, designed to raise the revenue necessary to fund public services while distributing the tax burden across the population in accordance with income. Progressive tax rates are often favored for their ability to reduce pre-tax differences in income between high-earning and low-earning households, which some view as unfair. Wisconsin's income tax has long been one of the most progressive, with a top rate of 7.65% that is eighth highest in the nation.

The world has changed in recent decades, as families have reevaluated the importance of work and income in their lives and have taken advantage of a very strong labor market to bargain for more flexible schedules and opportunities for remote work. Both the level and location of labor supply are more responsive to taxation than ever before. While steeply progressive marginal rates might be consistent with some definitions of fairness, they also distort economic activity if taxpayers work less, save less or move around to avoid high tax burdens. Policymakers must balance the need to achieve the desired degree of progressivity against the distortions to economic activity that result from taxation. Wisconsin's current income tax reflects a greater weight on progressivity, at the cost of potentially greater distortions to economic activity.

In the more than 100 years since Wisconsin enacted its first

individual income tax, the progressivity at both the state and federal levels has been increased gradually and then reduced in response to growing awareness of taxpayer reactions to high tax rates. Indeed, 13 states already have flat-rate individual income taxes, including two of Wisconsin's largest neighbors (Illinois and Michigan). Another 15 have only mildly progressive tax rate structures, and seven do not use an income tax at all.

The purpose of this report is to explore the economic impact of moving from Wisconsin's current progressive individual income tax (with a top rate of 7.65%) to a 5.1% flat-rate tax. A flat-rate tax could enhance economic efficiency by reducing top tax rates while adjusting standard deductions to ensure that taxpayers in lower tax brackets do not face a tax increase. Additionally, since most businesses are non-corporate entities, individual income tax policy is synonymous with business tax policy. A shift to a flat-rate individual income tax could represent a meaningful tax reduction for many Wisconsin businesses, potentially resulting in lower price growth, higher wage growth and more employment.

I estimate that a flat-rate income tax could generate nearly \$7.2 billion in additional gross domestic product (GDP), \$614 million in new investment and nearly 24,000 jobs over the next five years. These are substantial impacts, especially in light of the slow to negative projected growth in the next two years. As such, these are lower-bound estimates that would be even larger in more robust economic times.

Introduction

The individual income tax is a pillar of most state revenue systems, generating nearly a third of all state-level taxes in the U.S. Wisconsin has the distinction of having enacted the first broad-based state-level individual income tax in the nation in 1911, two years before the federal individual income tax took effect in 1913. That original Wisconsin income tax included 13 brackets, with marginal tax rates ranging from a low of 1% to a high of 6%.

This early tax was a prime example of a graduated-rate progressive income tax, designed to raise the revenue necessary to fund public services while distributing the tax burden across the taxpaying population in accordance with income.

Progressive tax rates are often favored for their ability to reduce pre-tax differences in income between high-earning and low-earning households, which some view as unfair. However, in the more than 100 years since Wisconsin enacted its first individual income tax, the progressivity at both the state and federal levels has been increased gradually and then reduced in response to growing awareness of taxpayer reactions to high tax rates. While steeply progressive marginal rates might improve fairness, according to some definitions, they also distort economic activity if taxpayers work less, save less or move around to avoid high tax burdens. This classic trade-off between progressivity and efficiency continues to influence the ongoing tax reform conversation at the state and federal levels.

The world has changed in recent decades, especially during and after the COVID-19 pandemic. Families have reevaluated the importance of work and income in their lives and have taken advantage of a very strong labor market to bargain for more flexible work schedules and opportunities for remote work. Agrawal and Stark (2022) provide evidence that labor supply and the physical location of labor are more responsive to

taxation than ever before. Workers have proven that they can easily and effectively work from home and are increasingly realizing that home can be anywhere on the planet with access to good internet service and other necessary infrastructure.

In the face of this growing mobility of taxpayers and tax bases, state governments are wise to take a closer look at their revenue systems. As discussed by Agrawal and Stark (2022), it is no longer safe to assume that high-income mobile taxpayers will simply remain in their current state of residence or that taxpayers from other states will choose to relocate in a way that is blind to tax differences across states. Policymakers are wise to consider the potential negative impact of having high tax rates on increasingly mobile income.

Wisconsin is no exception, and a serious conversation is already underway about the merits of moving to a flat-rate tax on individual income. A flat-rate tax could enhance economic efficiency by reducing top tax rates while adjusting standard deductions to ensure that taxpayers in lower tax brackets do not face a tax increase. The purpose of this report is to explore the economic impact of moving from Wisconsin's current progressive individual income tax (with a top rate of 7.65%) to a 5.1% flat-rate tax.

I begin with a brief overview of Wisconsin's tax system, including discussions of the important topics of tax progressivity and business taxation. I then turn to a detailed simulation of the effects of a flat-rate tax on GDP, investment and employment. These impacts are compared for illustration to a set of baseline forecasts. To summarize, I estimate that a flat-rate income tax could generate nearly \$7.2 billion in additional GDP, \$614 million in new investment and nearly 24,000 jobs over the next five years. The report concludes with a brief discussion of other potential impacts.

Wisconsin's tax structure

According to data collected by the U.S. Census Bureau and tabulated by the Federation of Tax Administrators, Wisconsin received 40.5% of its state taxes from the individual income tax in 2021.² This exceeds the U.S. average of 39.7% across all states (plus the District of Columbia) regardless of whether they have an individual income tax, and it ranks as the 17th-highest reliance on the individual income tax in the nation. Nine states do not use a broad-based individual income tax (Alaska, Florida, Nevada, New Hampshire, South Dakota, Tennessee, Texas, Washington and Wyoming), and most of those rely much more heavily on general sales taxes.

Looking at combined state and local tax revenues, Wisconsin's reliance on individual income taxes for 27.4% of state and local taxes exceeds the national average of 22.8%.³

The Federation of Tax Administrators also gathers and tabulates data on key features of state individual income taxes. Looking at tax rates for the 2023 tax year as of Jan. 1, 2023, Wisconsin's top marginal rate of 7.65% is the eighth highest among states. In four of the states with higher top marginal tax rates, the top rates take effect at much higher income levels than in Wisconsin: New York (10.9% starting

at income of \$25 million), New Jersey (10.75% starting at \$1 million), Massachusetts (9% starting at \$1 million) and California (12.3% starting at \$677,275). Wisconsin's 7.65% rate takes effect at \$304,170. The other four states with higher maximum marginal tax rates are Hawaii (11%), Minnesota (9.85%), Oregon (9.9%) and Vermont (8.75%), and those rates take effect at lower income levels than Wisconsin's top tax bracket. In sum, Wisconsin has one of the most progressive individual income tax systems in the nation.

Importantly, Wisconsin's top marginal income tax rate has been reduced since reaching historic highs in excess of 11% in the early 1970s. A shift to a 5.1% flat-rate income tax would not be a significant departure from this trend, representing the next step on a long path toward a flatter structure. While the series of statutory reductions in marginal tax rates and overall progressivity surely had many causes and goals, it is worth pausing to reflect on the optimality of progressive state taxation more broadly and state income taxation more specifically.

What about progressivity?

It is important to emphasize that while a shift to a flat-rate individual income tax in Wisconsin would represent a reduction in progressivity, it would not necessarily represent a reduction in fairness. To be sure, some concepts of fairness place greater weight on progressive tax structures. Others view progressive rates as inherently unfair, preferring tax structures where all taxpayers face a uniform marginal rate. Graduated marginal tax rates are only one method to build progressivity into a tax structure, however. One must also consider the size of standard deductions and other common deductions and credits that reduce tax burdens, especially for lower-income filers. And one must certainly consider the context of the entire fiscal system, including all tax and spending programs. It is not necessary for every single element of the fiscal system to reflect the broader progressivity goals as long as the entire system results in what is broadly viewed as a fair outcome.

A growing awareness of the sensitivity of economic activity to taxation has reignited the classic efficiency-progressivity debate in taxation. Specifically, while taxes need to generate revenue sufficient to fund the public programs demanded by voters, policymakers need to balance the need to achieve the desired degree of progressivity against the distortions to economic activity that result from taxation. Wisconsin's current income tax reflects a greater weight on progressivity at the cost of potentially greater distortions to economic activity.

To be sure, fairness is in the eye of the beholder. Some prefer graduated marginal tax rates as a way to link the tax burden to the individual's ability to pay as measured by their income.

While income is not a perfect proxy for ability to pay (for example, some low-income taxpayers have high wealth while some high-income taxpayers have little wealth), it is generally accepted as a basis for taxation along with other proxies such as property wealth and consumption of sales-taxable items. Regardless of the chosen proxy, some prefer flat-rate structures such that everyone pays the same percentage of their income in tax.

Policymakers in many states have recognized that, because of the greater mobility of taxpayers across states and regions, redistribution through individual income taxes is more difficult to accomplish at the state level and is best left to the national level, which features a highly progressive individual income tax. Indeed, 11 states already have flat-rate broadbased individual income taxes, including two of Wisconsin's largest neighbors (Illinois and Michigan). Another 15 states have less progressive tax rate structures, with top rates taking effect at incomes below \$100,000. And as noted, nine states do not even use a broad-based income tax at all. It seems that most income-taxing states value progressivity more at the lower end of the income distribution (that is, through lower tax rates and higher deductions) than at the higher end (through higher top tax rates).

To summarize, a shift to a flat-rate individual income tax in Wisconsin would represent an increase in fairness according to some definitions. And the fairness of a tax should certainly be evaluated within the context of the broader fiscal system, as many other tax and spending programs have effects on the distribution of economic resources in society.

What about business taxes?

This report is focused entirely on individual income taxes. That being said, it is critical to remember that most American businesses pay their income tax through the individual income tax. While corporations pay corporate income taxes, most businesses are non-corporate "pass-through" entities

that are organized as sole proprietorships, partnerships, limited liability corporations and a host of other legal forms. Income generated by these entities passes through to the owners of the business, who pay tax on the income as part of their individual income tax.

Bruce, Gurley-Calvez and Murray (2015) document that pass-through entities accounted for more than one-third of business income and over 90% of business tax returns.⁵ Loughead (2022) reports data from the IRS Statistics of Income showing that about 95% of Wisconsin businesses are pass-through entities taxed at the individual level. Individual income tax policy is synonymous with business tax policy for most types of businesses in Wisconsin.

To be sure, businesses do not pay taxes — people pay taxes. Businesses of all forms attempt to shift their tax burdens

forward to consumers (through higher prices) and backward to employees and input suppliers (through lower wages or employment, or lower input prices) before paying out of profits. And for publicly traded companies, reduced profits typically translate into lower shareholder value, negatively affecting anyone with a diversified retirement account or other savings that is invested in stocks and bonds. A shift to a flat-rate individual income tax in Wisconsin would represent a meaningful tax reduction for many Wisconsin businesses, which then should result in lower price growth, higher wage growth, more employment and higher shareholder value.

Simulating the economic impacts of a flat-rate income tax in Wisconsin

A shift to a 5.1% flat-rate individual income tax could have important economic benefits for Wisconsin. On the surface, reducing the top two marginal tax rates would have the direct effect of increasing the after-tax return to work effort and investment, which should result in greater economic activity, including business formation, investment and employment. Doing so in the proposed revenue-reducing fashion (that is, without simultaneously making up the lost income tax revenue elsewhere) would essentially return considerable funds to the taxpayers, potentially creating ripple effects throughout the state's economy.

I now turn to a detailed discussion of simulated effects of a shift to a flat-rate income tax on several major economic indicators: GDP, investment and employment. I motivate each of these with a brief overview of the available empirical literature, lessons from which guide the simulation analysis. Impacts are expressed in annual percentage terms and also converted into cumulative five-year effects in dollars and jobs.

For purposes of illustration, I compare simulated impacts to the best available macroeconomic forecasts for these series. I emphasize that economic forecasters are generally predicting slower growth in GDP and investment alongside outright declines in employment for the next two years before gradually returning to longer-term trends. As a result, my simulated impacts can be viewed as lower bounds; economic impacts would be much larger in a more robust expansionary environment. I provide additional discussion for each outcome measure below.

GDP

A vast literature has explored the impact of taxes on economic growth. To be sure, the impact of a tax reduction (or a revenue-reducing shift to a flat-rate income tax) on economic growth would depend critically on whether government spending would be reduced simultaneously by an equivalent amount. It is important to emphasize again that the simula-

tions in this report are not assumed to be revenue-neutral or budget-neutral. The specific shift to a flat-rate income tax that is the focus of the present analysis certainly would reduce tax revenues, and the emphasis here is on the economic impact of returning those dollars to the taxpayers.

Estimates from this literature are quite diverse, based on a variety of different underlying assumptions and contexts. For example, Dennis et al. (2004) provide a range of estimates from a 1.5% decrease to a 0.8% increase in GDP from a 10% cut in income tax rates, while Barro and Redlick (2011) estimate that a revenue-neutral reduction in average marginal tax rates of 1 percentage point would increase per capita GDP by 0.5%. Romer and Romer (2010) estimate much larger positive impacts, but Favero and Giavazzi (2009) have questioned their underlying assumptions.

I focus the analysis on two studies that are more directly related to the present context and fall in the middle of the wider set of available estimates. Specifically, Mertens and Ravn (2013) and Carroll et al. (2001) examine the impact of income tax rate changes on economic activity. Mertens and Ravn (2013) estimate that a 1 percentage point tax rate cut would increase the taxable base by 1.6%, while Carroll et al. (2001) provide an estimate that is about half as large (0.84%). Closely following Bruce, Gurley-Calvez and Murray (2015), I convert the Mertens and Ravn (2013) and Carroll et al. (2001) estimates into similarly defined elasticities and use the average of the two. The result is an average elasticity of 0.57, which I apply to a weighted-average tax rate reduction as described below.

To calculate the weighted average marginal tax rate reduction, I first examine the distribution of households by total income using distributional tables from the Wisconsin Department of Revenue (2019). While distributions across marginal income tax rate brackets are not available, I am able to approximate these distributions from the available data.

Projected distributions of households and incomes are shown in Table 1.

I use the bracket-specific changes in marginal tax rates along with the household or income weights to estimate weighted-average changes in marginal tax rates across the tax filing population. Using the household weights in the third column of Table 1, the weighted average tax rate change would be about 0.155 percentage points, since nearly half of the households are currently in lower mar-

ginal tax rate brackets and would not experience a tax cut. Of the remaining households, most would see a reduction of only 0.2 percentage points (from their current marginal tax rate of 5.3% down to the 5.1% flat rate). Only about 2% of households would experience the largest marginal tax rate reduction of 2.55 percentage points.

With this in mind, using income weights is more appropriate,

Table 1

Marginal tax rates and projected weights

Current marginal tax rate brackets	Change in marginal tax rate (to 5.1%)	Estimated distribution of households	Estimated distributio of income	
3.54	0.00*	29%	2%	\$0
4.65	0.00	17%	7%	\$13,810
5.30	0.20	52%	66%	\$27,630
7.65	2.55	2%	25%	\$304,170

*Note: Taxpayers in the bottom two marginal tax rate brackets would not experience a marginal tax rate increase because the proposed 5.1% flat tax includes a simultaneous adjustment to standard deductions.

since the roughly 46% of households in the bottom two tax brackets represent only about 9% of total income. With income shares as weights, the weighted average marginal tax rate reduction is about 0.64 percentage points. I use this income-weighted average change in tax rates for all simulations in this report.

This is consistent with the idea that the economic benefits from the flat-tax structure will be driven in large part by the tax reductions

among higher-income taxpayers, who have been shown in the prior empirical literature to be the most responsive to tax rate changes. Indeed, the economic impacts would be smaller if the tax rate reductions were smaller for higher-income taxpayers. As an extreme example, moving to a flat-rate tax at the current maximum rate would be harmful to economic growth, investment and employment because all taxpayers except those in the top bracket would face a tax increase.

Simulated impacts of a 5.1% flat tax on GDP

Baseline forecast*

Simulated with 5.1% flat tax

Year	GDP (\$ millions)	GDP growth	GDP (\$ millions)	GDP growth	Additional GDP (\$ millions)
2022	380,700				
2023	388,600	2.10	390,088	2.47	1,488
2024	398,900	2.60	400,126	2.97	1,226
2025	410,900	3.00	412,327	3.37	1,427
2026	424,951	3.42	426,454	3.79	1,504
2027	439,158	3.34	440,713	3.71	1,555
Cumulative impact:					7.2 billion

^{*}Forecast sources: Wisconsin Department of Revenue (2022) for 2022-2025. Forecasts for 2026 and 2027 are the author's estimates based on the February 2023 forecast of U.S. GDP from IHS Markit.

Table 2

Table 3

Simulated impacts of a 5.1% flat tax on investment

Baseline forecast*

Simulated with 5.1% flat tax

Year	Investment (\$ millions)	Investment growth	Investment (\$ millions)	Investment growth	Additional investment (\$ millions)
2022	49,937				
2023	49,853	-0.17	49,973	0.07	120
2024	50,554	1.41	50,674	1.65	120
2025	51,658	2.18	51,779	2.42	122
2026	53,309	3.20	53,433	3.44	124
2027	55,222	3.59	55,350	3.83	128
Cumulative impact:					\$614 million

^{*}Forecast sources: Author's estimates based on the February 2023 forecast of U.S. GDP from IHS Markit and Wisconsin Department of Revenue (2022). See text for additional details.

Applying this 0.64 percentage-point weighted average tax rate reduction to the average GDP elasticity of 0.57 results in an annual GDP impact of 0.366 percentage points. While this impact might appear to be small upon initial observation, it is quite substantial when compared to the average rate of growth of nominal Wisconsin GDP of 3.4% between 2010 and 2021. Shifting to a flat-rate income tax of 5.1% could result in annual growth that is more than 10% faster than historic trends. As shown in Table 2, this would translate into about \$1.2 billion to \$1.6 billion in additional GDP per year, totaling nearly \$7.2 billion over the next five years, relative to the most recent economic forecast from the Wisconsin Department of Revenue (2022).

INVESTMENT

Gauging the effects of a shift to a flat-rate income tax on business investment for a single state is complicated by the absence of useful state-level data in the GDP accounts. To provide a useful baseline for simulation purposes, I assume that Wisconsin's share of national investment equals the state's share of national GDP. To the extent that Wisconsin's investment share of GDP is higher than the nation's, this simulation will yield a lower bound on the effects of a flat-rate tax. All other steps in my simulation process follow those for GDP as outlined above.

For an elasticity, I rely exclusively on Carroll et al. (2000a), who estimate that a 5 percentage point increase in marginal tax rates would reduce investment by about 9.9%. This

converts to an average elasticity of about 0.376, which I apply to the above weighted average tax rate reduction. The impact from the shift to a flat-rate income tax would be on the order of about 0.241 percentage points per year (or about 5.5% faster growth in annual investment when compared to the 2010-2021 average annual growth of 4.38%). As shown in Table 3, this would represent additional investment of about \$120 million to \$130 million per year, or about \$614 million over the next five years.⁸

EMPLOYMENT

Several prior studies have examined the effects of tax rates on employment. As summarized by Chetty (2012), elasticities of work with respect to changes in tax rates center on 0.25 on the extensive (that is, participation) margin and 0.33 on the intensive (that is, hours or effort) margin. I focus again on Mertens and Ravn (2013) and Carroll et al. (2000b) for the purposes of my simulations. Specifically, Mertens and Ravn (2013) estimate that a 1 percentage point tax rate cut would increase per capita employment by about 0.8%, while Carroll et al. (2000b) estimate an elasticity of wage payments to tax prices of 0.37. Converting these to similar elasticity concepts yields an average elasticity of employment with respect to tax rates of 0.257, which I apply to the weighted average marginal tax rate change as before.

These calculations result in annual employment impacts from the shift to a flat-rate income tax of 0.165 percentage points,

Table 4

Simulated impacts of a 5.1% flat tax on employment

Baseline forecast*

Simulated with 5.1% flat tax

Year	Employment (1,000s)	Employment growth	Employment (1,000s)	Employment growth	Additional employment (1,000s)
2022	2,941				
2023	2,930	-0.40	2,934	-0.24	4.4
2024	2,909	-0.70	2,914	-0.54	4.9
2025	2,920	0.40	2,925	0.56	5.0
2026	2,928	0.25	2,933	0.42	4.8
2027	2,933	0.19	2,938	0.35	4.8
	Cumulative impact:			23,947 jobs	

^{*}Forecast sources: Wisconsin Department of Revenue (2022) for 2022-2025. Forecasts for 2026 and 2027 are the author's estimates based on the February 2023 forecast of U.S. employment from IHS Markit.

which is quite large when compared to the 2010-2021 average annual employment growth of 0.438%. Indeed, the annual impact of the shift to a flat-rate income tax would be on the order of 4,500 to 5,000 more jobs per year, or nearly 24,000 jobs over the next five years. It is important to note that the an-

nual impacts in 2023 and 2024 would only partially offset the decline in employment projected by the Wisconsin Department of Revenue (2022) in its most recent forecast. As with GDP and investment, employment impacts would be much more substantial in an expansionary environment.

Additional economic impacts

While not the focus of this study, I briefly consider two additional areas of potential economic impact: new firm formation and interstate migration. Beginning with new firm formation, Bruce, Gurley-Calvez and Norwood (2020) summarize the growing empirical literature and conclude that most studies have found little to no impact of state-level income taxes on various measures of entrepreneurial activity. However, the broader empirical literature has found important positive impacts of across-the-board tax rate reductions or reductions in progressivity, and those results could be important to the Wisconsin case.

Specifically, based on the findings of Gurley-Calvez and Bruce (2008 and 2013), it is reasonable to expect that a shift from the current graduated-rate income tax to a flat-rate structure would create important advantages to potential entrepreneurs, especially those in the top tax rate bracket. The two Gurley-Calvez and Bruce studies indicate that marginal tax rate reductions could increase small business formation (2013) and longevity (2008). I would anticipate similar effects in Wisconsin from a shift to a flat-rate income tax structure.

Turning to interstate migration, Kleven, Landais, Munoz and Stantcheva (2020) provide a recent summary of the large and growing literature that has explored the extent to which taxpayers relocate in response to tax rates. To be sure, the proposed Wisconsin flat-rate income tax might not appear to be large enough to generate a substantial migration response because the state's top marginal tax rate already has been reduced substantially from a high of 11.4% in the mid-1970s.

That said, while the proposed reduction of up to 2.55 percentage points from a flat tax would be smaller than the last substantial reduction experienced during the mid-1980s (from 10.0% to 6.77%), it would follow the more recent 2009 increase of one percentage point (from 6.75% to 7.75%) and would occur within the context of other states reducing their tax rates.

It is important to keep two significant factors in mind when assessing migration impacts, however. First, the COVID-19 pandemic has made it much easier to work remotely, breaking the linkage between one's place of work and place of

residence. Migration of income can be just as important as migration of taxpayers themselves. Second, there will continue to be a set of states that do not impose individual income taxes at all.

Bruce, Fox and Yang (2010) examine state-level data and show that state income tax rates can have meaningful impacts on how and where taxpayers report income. Specifically, they provide evidence suggesting that taxpayers might be engaging in tax planning by allocating income across the states to reduce overall taxes.

More importantly, the migration literature as summarized by Kleven et al. (2020) would indicate that the greatest migration response would be expected among the highest-income taxpayers in the top marginal tax rate bracket. Those taxpayers would enjoy the largest tax cut from the flat-rate tax, which certainly would reduce their incentives to relocate across state lines. If those taxpayers are the most likely to explore remote work opportunities in lower-tax (or no-tax) states, the shift to a flat-rate tax structure could have important impacts in terms of reducing the tax costs of remaining in — or keeping their income in — Wisconsin.

Discussion & conclusions

A shift to a 5.1% flat-rate individual income tax could have important economic impacts for Wisconsin. Primarily as a result of lowering the maximum marginal tax rate, the flat tax structure could generate nearly \$7.2 billion in additional GDP, \$614 million in additional investment and 24,000 additional jobs over the next five years. These are substantial impacts, especially in light of the slow to negative projected growth in the next two years. The impacts would certainly be even larger in more robust economic times.

The estimates in this report are consistent with the national-level estimates for a broader set of pro-business tax reform from Bruce, Gurley-Calvez and Murray (2015). While they are somewhat larger than the individual tax reform components in their earlier report, the Wisconsin flat tax would affect a broader range of taxpayers rather than the pass-through entities that are the focus of the Bruce, Gurley-Calvez and Murray (2015) estimates. Behavioral responses also are likely to be larger for state-level tax changes due to the additional across-state migration considerations in the face of varying state-level income taxes.

To be sure, this report only paints a partial picture of the economic impact from a shift to a flat-rate tax structure. Other outcomes of interest are not considered, and some are not as easily quantified (such as business formation and migration impacts as discussed above). Additionally, secondary spill-over effects such as multiplier effects that would be considered in a more traditional economic impact analysis are not estimated here. A more inclusive consideration of these and other factors would only serve to increase the overall impact above and beyond the estimates reported here.



About the author

Donald Bruce is the Randy and Jenny Boyd Distinguished Professor in the Haslam College of Business at the University of Tennessee, and he directs the Boyd Center for Business and Economic Research. He holds a Ph.D. in economics from Syracuse University.

Sources

Agrawal, David, and Kirk Stark. 2022. "Will the Remote Work Revolution Undermine Progressive State Income Taxes?" Virginia Tax Review 42(1).

Barro, Robert J. and Charles J. Redlick. 2011. "Macroeconomic Effects from Government Purchases and Taxes." *The Quarterly Journal of Economics* 126 (1): 51-102.

Bruce, Donald, William F. Fox, and Zhou Yang. 2010. "Base Mobility and State Personal Income Taxes." National Tax Journal 63 (4, Part 2): 945-966.

Bruce, Donald, Tami J. Gurley-Calvez, and Alex Norwood. 2020. "Taxes and Entrepreneurship: A Literature Review and Research Agenda." Foundations and Trends in Entrepreneurship 16(5): 393-443.

Bruce, Donald, Tami Gurley-Calvez, and Matthew Murray. 2015. "Missed Opportunity: The Economic Cost of Delaying Pro-Growth Tax Reform." Prepared for the National Association of Manufacturers. Available at https://documents.nam.org/Nam.org_Web_Archive/www.nam.org/Data-and-Reports/Reports/A-Missed-Opportunity/A%20Missed%20Opportunity_2015%20Tax%20Study_Full%20Report.pdf.

Carroll, Robert, Douglas Holtz-Eakin, Mark Rider and Harvey S. Rosen. 2000a. "Entrepreneurs, Income Taxes, and Investment," in Joel Slemrod, ed., Does Atlas Shrug? The Economic Consequences of Taxing the Rich, *Harvard University Press*.

Carroll, Robert, Douglas Holtz-Eakin, Mark Rider and Harvey S. Rosen. 2000b. "Income Taxes and Entrepreneurs' Use Of Labor." *Journal of Labor Economics* 18(2): 324-351.

Carroll, Robert, Douglas Holtz-Eakin, Mark Rider and Harvey S. Rosen. 2001. "Taxes and the Growth of Small Firms," in *Tax Policy and the Economy*, Vol. 15, pp. 121-47.

Chetty, Raj. 2012. "Bounds on Elasticities with Optimization Frictions: A Synthesis of Micro and Macro Evidence on Labor Supply." *Econometrica* 80(3): 969-1018.

Dennis, Robert, et al. 2004. "Macroeconomic Analysis of a 10 Percent Cut in Income Tax Rates." Technical Paper Series. Washington, D.C: Congressional Budget Office.

Favero, Carlo, and Francesco Giavazzi. 2009. "How Large Are The Effects of Tax Changes?" Cambridge: National Bureau of Economic Research Working Paper 15303.

Gale, William G., and Andrew A. Samwick. 2014. Effects of Income Tax Changes on Economic Growth. Brookings Institution. http://www.brookings.edu/~/media/research/files/papers/2014/09/09%20effects%20income%20tax%20changes%20economic%20growth%20gale%20 samwick/09_effects_income_tax_changes_economic_growth_gale_samwick.pdf

Gurley-Calvez, Tami, and Donald Bruce. 2008. "Do tax cuts promote entrepreneurial longevity?" National Tax Journal 61(2): 225–250.

Gurley-Calvez, Tami, and Donald Bruce. 2013. "Do tax rate cuts encourage entrepreneurial entry?" *Journal of Entrepreneurship and Public Policy* 2(2): 178–202.

Kleven, Henrik, Camille Landais, Mathilde Munoz, and Stefanie Stantcheva. 2020. "Taxation and Migration: Evidence and Policy Implications." *Journal of Economic Perspectives* 34(2): 119-142.

Loughead, Katherine. 2022. Tax Reform Options to Improve Wisconsin's Competitiveness. *Tax Foundation* and the *Badger Institute*. Available at https://www.badgerinstitute.org/wp-content/uploads/2022/08/TaxReform_finalbook.pdf.

McBride, William. 2012. What is the Evidence on Taxes and Growth? *Tax Foundation Special Report No. 207.* http://taxfoundation.org/sites/default/files/docs/sr207.pdf

Mertens, Karel and Morten O. Ravn. 2013. The Dynamic Effects of Personal and Corporate Income Tax Changes in the United States. *American Economic Review* 103(4): 1212–1247.

Romer, Christina D., and David H. Romer. 2010. "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks." American Economic Review. 100 (3): 763-801.

Wisconsin Department of Revenue. 2022. Wisconsin Economic Forecast Update: November 2022. Available at https://www.revenue.wi.gov/dorreports/2022-11-wi-forecast.pdf.

Wisconsin Department of Revenue. 2019. Individual Income Tax Statistics for Tax Year 2017. Available at https://www.revenue.wi.gov/DOR Reports/17intxst.pdf.

Endnotes

- ¹ While eleven of these apply to broad income concepts, two apply only to capital income. New Hampshire has a flat-rate tax on interest and dividend income and Washington has a flat-rate tax on capital gains income of high earners. Two states, Georgia and Iowa, are currently transitioning towards flat-rate income tax structures.
- ² Data are available at https://taxadmin.memberclicks.net/2021-state-tax-collection-by-source. The Wisconsin Department of Revenue reports that individual income taxes were a higher percentage (44.8%) of state revenues in 2022. Those data can be found at https://public.tableau.com/app/profile/research.policy/viz/Act66StateFiscalDashboard/Story1. We use FTA data for its comparability across states.
- ³ Data are available at https://taxadmin.memberclicks.net/2020-state-and-local-revenues-by-source.
- ⁴The most recent table can be found at https://taxadmin.memberclicks.net/assets/docs/Research/Rates/ind_inc.pdf.
- FIRS Integrated Business Statistics. http://www.irs.gov/uac/SOI-Tax-Stats-Integrated-Business-Data.
- ⁶ See McBride (2012) or Gale and Samwick (2014) for an exhaustive and useful survey.
- ⁷The Wisconsin DOR (2022) projects GDP through 2025. For the purposes of these illustrations, I extend their projections through 2027 by adjusting IHS Markit's national GDP growth forecast for the 2011-2019 ratio of Wisconsin GDP growth to U.S. GDP growth.
- ⁸ For illustration purposes, I construct a baseline forecast of Wisconsin investment by applying the same GDP ratios to the IHS Markit forecast of U.S. investment growth. Where necessary, inflation-adjusted forecasts are converted to current-year nominal dollars because I do not forecast inflation-adjusted impacts in this report.