Creating Policy Calling Cards to Attract Business to Ontario

2018

CONTRIBUTING EDITOR **BEN EISEN**

FRASER INSTITUTE

Contents

Executive Summary

On the campaign trail and since taking office as Premier, Doug Ford has spoken often about the need to make Ontario an attractive business investment destination. Specifically, Mr. Ford has repeatedly talked about the need to declare the province "open for business."

Mr. Ford's focus on restoring competitiveness and attracting business investment is appropriate. A recent Fraser Institute analysis by Phillip Cross found that as of the end of 2016, business investment in the province still had not recovered to pre-recession levels.

Weak business investment has been one cause of Ontario's comparatively weak economic performance over the past decade. A topical Fraser Institute report described Ontario as having experienced a "lost economic decade" from 2008–2017, as the province ranked near the bottom of the Canadian pack on a variety of economic measures.

Reversing these outcomes and getting Ontario back on track towards robust, long-term economic growth will, as Mr. Ford suggests, require the province to attract more business investment. Achieving this objective will likely require substantial policy change across several different areas of provincial public management.

In short, in recent years, Ontario's policy environment has undermined, rather than helped, Ontario's attractiveness as an investment destination. A large and growing public debt, uncompetitive taxes, high electricity prices, and restrictive labour regulations are some of the most important policy factors that have likely interfered with investment and growth.

This series of short essays examines five different areas of provincial policy and discusses how changes in these areas can help create a more attractive environment for business investment and accomplish the Ford government's stated goal of making Ontario's economy more competitive regionally and globally.

In the first essay, Livio Di Matteo and Ben Eisen look at the fiscal situation in Ontario and present both short- and long-term strategies for repairing provincial finances. Specifically, they show the importance of the Ford government acting quickly to eliminate the budget deficit and begin meaningfully shrinking Ontario's debt-to-GDP ratio within its first few years in office rather than taking the same "slow and steady" approach to deficit reduction that led to the big run-up in provincial debt over the past decade.

In the second essay, Charles Lammam, Hugh MacIntyre, and Milagros Palacios discuss corporate taxation in Ontario. They demonstrate that while the province once held a competitive advantage in this area as it had significantly lower corporate taxes than most of its US peers, that advantage has recently evaporated due to federal tax reform south of the border. The authors show that reducing Ontario's corporate income tax rate from 11.5 to 8 percent would represent a strong competitive response to tax policy changes in the US. The tax cut would be fiscally responsible if it were offset by reductions in corporate subsidies, which are currently delivered through over 100 programs and total approximately $5 billion annually.

In the third essay, Ben Eisen, Steve Lafleur, and Joel Emes examine the most uncompetitive dimension of Ontario's tax system—the taxation of personal income. They show that Ontario now has the second highest personal income tax rate in Canada or the United States. They discuss options for policy reform, including the introduction of a single-rate income tax set at 8 percent, with rebate payments used to ensure that no lower- or middle-income individuals experience a tax increase. In concert with the corporate income tax reform proposed in the second essay, this change would leave Ontario with one of the most attractive and pro-growth tax regimes in either Canada or the United States.

In the fourth essay, Elmira Aliakbari, Ashley Stedman, and Ross McKitrick look at the harmful role high electricity prices have had on Ontario's manufacturing sector and economic performance, and present ideas for policy reform. Among other options, they explain that the Ford government can lower electricity prices by using legislation to cancel or prompt the re-negotiation of existing contracts that require the province to purchase renewable electricity rates at above market prices.

In the fifth and final essay, Charles Lammam and Hugh MacIntyre assess the extent to which changes to existing labour laws and regulations could help drive growth and make Ontario's economy more attractive for investment. Specifically, they explain that Ontario is increasingly isolated in the region in that it does not have "right to work" rules that forbid union membership as a condition for employment. Further, they examine recent changes to the minimum wage in Ontario and show how these have brought the wage floor in Ontario out of step with competing jurisdictions nearby. They review the evidence showing that a minimum wage set at such a large fraction of the prevailing median wage is likely to reduce youth employment and encourage existing firms in certain industries to exit the market.

Making Ontario a more attractive destination for investment won't be easy, and no single policy solution (either presented here or elsewhere), can be expected on its own to do the job. Instead, the government should focus on identifying several areas where the province now suffers from a competitive disadvantage relative to peer states and provinces and implement policy reform ideas to reverse this situation and create a competitive advantage for Ontario. This collection of essays offers a number of ideas that can help achieve this goal across several different areas of public management.

1. Restoring Ontario's Public Finances

Livio Di Matteo and Ben Eisen

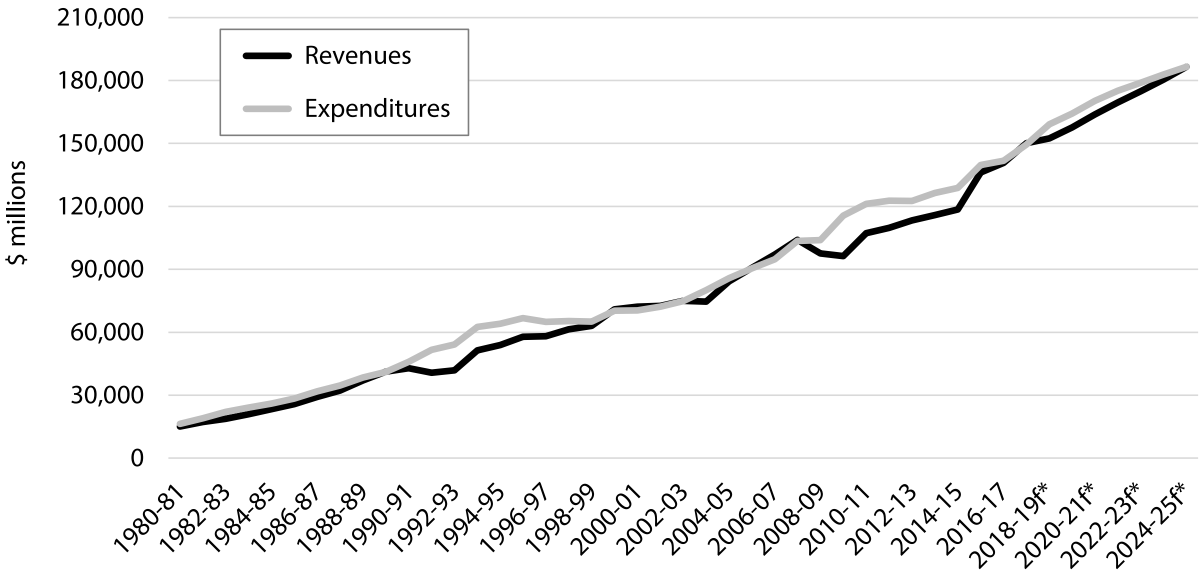
1. The Fiscal Situation

Ontario's public finances continue to be under pressure due to annual operating deficits. In 2018/19 the deficit is projected to be $6.7 billion, with deficits projected for the next five fiscal years. However, the recent Auditor-General's report indicates that the situation is even worse as it pegged the deficit at $11.7 billion as a result of a different accounting treatment of pensions and the financial impact of the province's electricity rate reduction. Furthermore, the Financial Accountability Office of Ontario (FAO) projects that higher spending and weak revenue growth will push Ontario's deficit to $12 billion. While different accounting measures produce different estimates of the current operating deficit, it is clear the deficit is substantial and that debt is mounting quickly.

Thanks in part to the forecasted deficits, Budget 2018 projected that Ontario's debt-to-GDP ratio will remain near 40 percent. The province continues to converge with Quebec in terms of its indebtedness relative to the size of its economy; current projections suggest that within five years the two provinces may even have similar debt-to-GDP ratios.

Restoring fiscal balance and reducing Ontario's large debt stock relative to provincial GDP should be an explicit priority with specific short- and medium-term milestones. In its 2017 budget, the previous government laid out a long-term path for returning Ontario to its pre-recession debt-to-GDP level of 27 percent. However, the timeline lacked an implementation plan or sustained follow-through and was quickly abandoned in the 2018 budget.

Figure 1: Ontario Revenues and Expenditures, 1980/81 to 2024f/25f (millions of dollars)



Note: f = forecast

Source: Federal Fiscal Reference Tables.
* = Source: Ontario 2018 budget, table 3.27, p. 228; table 3.1, p. 172; 2018 Ontario Budget. Expenditures include reserve of $700 million

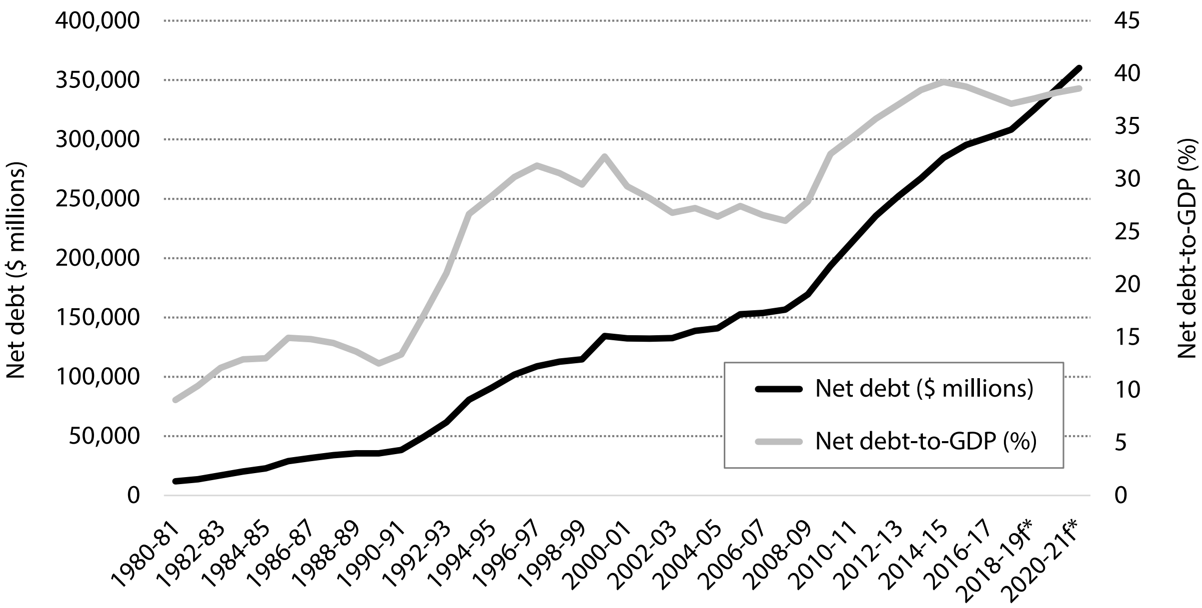
Moreover, the mounting debt is increasing the province's debt service costs, which is also diverting potential resources from important public programs.[1] Further, the province's weakened finances will have implications for tax rates, infrastructure investment, and growing uncertainty that will undermine Ontario's economic competitiveness.

Ontario's large public debt is the result of chronic, large deficits that began during major economic downturns. The province then continued to run deficits (albeit smaller ones) during the economic recoveries (see figure 1). Indeed, the worrying state of Ontario's finances has long been a topic of research and analysis.[2] Over the 37-year period from 1980–81 to 2016–17, Ontario ran a deficit nearly 80 percent of the time. Of course, these deficits were generally much larger immediately following recessions

[1] The 2018/19 budget forecast that debt charges for this fiscal year will be $12 billion, approximately 8 percent of total provincial government expenditure (see Ontario, 2018).

[2] See Clemens and Veldhuis (2013), Wen (2015), and Drummond (2012).

Figure 2: Ontario Net Debt and Debt-to-GDP Ratio, 1980-81 to 2020-21f



Note: f = forecast

Source: Federal Fiscal Reference Tables.
* = Source: Ontario 2018 budget, table 3.30, p. 246. Nominal GDP from Statistics Canada v62788002; GDP since 2017 estimated with GDP growth based on Ontario 2018 budget.

than deeper into recoveries, but the fact remains that deficits are chronic in Ontario: periods of smaller deficits punctuated by periods of much larger deficits and rapid debt accumulation have been Ontario's *modus operandi* in fiscal policy for decades.[3]

Primarily as a result of all these deficits, Ontario's public debt has climbed relentlessly over the past three and a half decades. In 1980–81, Ontario's net debt was $12 billion, which grew to $302 billion by 2016–17. The 2018 budget forecasts it to reach $360 billion by 2020–21 (see figure 2). However (using the accounting method the Auditor-General identifies as the correct one), the FAO suggests that the net debt could reach as high as $394 billion by 2020–21. Moreover, the Ontario government has also committed to spending more than $190 billion in public infrastructure over 13 years starting in 2014–15; as a result, even with balanced operating budgets, from 2017–18 to 2026–27 Ontario can be expected to add at least another $156 billion to its net debt, bringing it close to $500 billion

[3] For an overview of the history of Ontario's finances, see Di Matteo (2018).

dollars. The net debt-to-GDP ratio has grown from 9.1 percent in 1980-81 to just under 40 percent presently.

The debt situation is complicated by the fact that from 2004–05 to 2020–21, the 2018 budget estimates accumulated deficits to be $104.7 billion, but the total addition to the Ontario government net public debt is $221.3 billion—an addition to the net debt that exceeds accumulated deficits by $116.6 billion. The difference is due to government accounting practices whereby borrowing for new capital spending is added to the debt independently of program spending. Provincial governments, including Ontario, are using "capital budgeting" techniques whereby infrastructure expenditures are charged not against the operating budget, but capital depreciation—or the user cost of capital is treated as an expense in the spending of the applicable government ministry.[4] The result is an understatement of the fiscal effects of public borrowing on operating budgets.

That Ontario has racked up considerable capital debt should not distract from the fact that regular operating deficits have also been a major contributing factor to the province's high debt load. Since 2003/04, Ontario's net debt has increased by nearly $187 billion and is projected to continue growing over the next several years. It is important to recognize that day-to-day-spending—as well as capital expenditures—have driven debt accumulation in Ontario.

2. Dealing with the Fiscal Situation

Dealing with Ontario's deficit and debt situation requires the implementation of a series of immediate and longer-term measures. They should be designed to first close the deficit gap then ensure that balanced budgets persist and debt reduction follows in a manner that brings down both the absolute size of the debt and the debt-to-GDP ratio. These measures can be summarized as follows.

Short-term measures

Implement an expenditure review process and focus on deficit elimination

The provincial government should undertake a comprehensive review of all that it does with the aim of making significant changes as needed, and ensuring that public spending is done most efficiently. Key sectors to re-

[4] The result is an operating budget deficit (that is reported) and a capital budget deficit (that is not reported) in the operating budget, but is reflected by increases in the net debt. (For a discussion see Wen, 2015: 4-9.)

view include health, education, and social services, as well capital project financing and subsidies to the corporate sector. If the provincial government needs more explicit guidance for its expenditure review, a starting point is the 2012 Drummond Report, which contained many cost-saving suggestions that are still relevant today. Another model worth considering is the 1994 program review initiated by the federal government in response to the federal fiscal crisis of the early 1990s.[5] That review used a systematic process and set of questions to provide evidence and measurement to determine what spending should be sustained and what programs and services should be reformed or eliminated. The result was an era of federal budget surpluses that lasted until the Great Recession.[6]

Restrain expenditures

Given that Ontario's provincial budget was balanced in 2017–18 (despite a 6 percent annual spending increase) and the 2018 budget embarked on a substantial increase in expenditures, there is room for expenditure restraint, especially given that the forecast increases in the 2018 budget have yet to take effect. In this context, the elimination of Ontario's nearly $7 billion official budget deficit can reasonably be viewed as a short-term objective—not the multi-year journey envisioned by the previous government, which did not forecast a balanced budget until 2024–25 in its spring budget.

As an example, the Ontario government currently expects to collect $163.8 billion in 2020–21, but it forecasts total spending that year of $170.3 billion, for a deficit of $6.5 billion. Provincial spending for the last year of the Liberals' time in office—2017/18—was $149.5 billion. In other words, all else being equal, the deficit can be eliminated in just two years simply by preventing spending levels for 2020/21 from rising more than 10 percent higher (in nominal terms) than the Liberal government spent in its final year in office. Having spending grow only by about 10 percent over this period would see the budget balanced by 2020/21; having it grow by less could provide an even faster path to balance.

Given the modesty of this goal and the extent of Ontario's fiscal problems, much more ambitious short-term objectives could reasonably be considered. For instance, approximately $15 billion in fiscal room could be created in 2020–21 (compared to the 10 percent increase scenario described above), by holding spending in nominal terms at 2017–18 levels ($149.5 billion)—again, a year in which spending had grown by 6 percent. This would be sufficient to balance the budget while also creating room

---

[5] For a discussion of fiscal policy and federal and provincial debt in this period, see Clemens, Lau, Palacios, and Veldhuis (2017).

[6] For a discussion of federal budgets, debt, and deficits, see Di Matteo (2017).

for immediate growth-enhancing tax relief—and address the budgetary concerns of the FAO and the Auditor-General who warn the "true" deficit is larger than reported.

For an even more ambitious approach, if the government were willing to contemplate nominal spending reductions from the levels it inherited, fiscal room could be created both to address the "larger" deficits warned of by the FAO and provide further pro-growth tax reform for Ontarians. For example, given current revenue projections and using the government's current accounting standards, a 5 percent reduction in nominal spending from 2017–18 levels followed by a two-year expenditure freeze would leave Ontario with a surplus of approximately $21 billion by 2020-21. This would be sufficient to eliminate the larger deficits produced by FAO accounting standards while also providing substantial tax relief and/or debt reduction. Various options for pro-growth tax relief are discussed in other essays in this collection.

Between 2009–10 and 2017–18, the government of Ontario deliberately pursued an extremely slow deficit reduction strategy which did shrink the annual shortfall over time, but led to a massive run-up in debt over a decade and failed to create fiscal room for tax relief. A similar "slow and steady" approach with today's much smaller deficit is difficult to justify. Instead, the government should work quickly to return Ontario to fiscal balance so that it can begin to improve other areas of Ontario's fiscal situation—not just fighting deficits and other negatives, but building the fiscal foundations for prosperity.

Indeed, a more comprehensive review of the recent past suggests the historical evidence supports a faster-moving approach to fiscal consolidation. For example, during the 1990s, several different governments across Canada eliminated budget deficits primarily through spending reductions, in each case within just a few years of beginning the consolidation process. In all cases, these deficits were substantially larger as a share of GDP than Ontario's is today (Clemens et al., 2017).

Longer-term measures

As discussed, decisive, immediate action is needed to more rapidly address Ontario's short-term fiscal challenges. Just how much can be achieved and how quickly will depend on how ambitious the government is for its reform initiatives.

A further advantage of quickly eliminating the budget deficit and substantially slowing down the pace of debt accumulation is that achieving these goals would enable the province to then turn to a longer-term strategy of creating a sustainable, low-debt, pro-growth fiscal framework. The urgency of establishing such a framework is heightened by economic and demographic challenges that will be much harder to address in the presence of a large debt. For example, an aging population will put pressure on health care costs while leaving relatively fewer working-age residents in the workforce.

The development of a prudent framework to manage long-term spending growth can help reduce Ontario's debt burden in the short term, thus creating room for pro-growth tax relief while making the province's challenges more manageable, and ensure the sustainability of important government programs in health and education. The next section discusses such a framework.

3. Setting Expenditure Growth Targets

Government expenditures over the long-term are sustainable when expenditure growth does not exceed the growth of the revenue base. By setting an annual expenditure target growth rate equal to the annual rate of inflation (currently 2 percent) plus the rate of population growth (approximately 1 percent), expenditure sustainability will be assured; expenditure growth will be well below historical revenue growth rates which have averaged 4 percent.

Specifically, a prudent approach to fiscal management that produces a balanced budget with relatively modest long-term expenditure restraint combined with a growing economy will generate surpluses that, absent other changes, could be expected to grow over time, producing fiscal advantages for Ontario taxpayers. In time, the surpluses created by such an approach could be used either to offset planned capital deficits, thereby helping reduce Ontario's debt-to-GDP ratio over time, or for explicit debt reduction, or for further tax reduction designed to boost competitiveness.

Capital expenditure review process

A further option for the use of surplus funds generated by following the fiscal framework outlined above would be investment in long-term capital expenditures. However, to the extent this option is exercised it should be done with caution. Any use of surplus funds for capital expenditures—and indeed all capital programs—should be assessed through an explicit capital expenditure review process.

Efforts to renew infrastructure and stimulate the economy risk wasting tax dollars if the infrastructure built is poorly designed or unnecessary. Prior to any infrastructure program being undertaken, a list of priorities should be developed along with a process to choose the projects that can generate the highest rate of return. Establishing an independent project review panel consisting of an arms-length expert panel (accountants, economists, engineers, and business people) to economically evaluate the projects and determine whether or not they are needed is a good step towards more responsible provincial fiscal management and would reduce the political pressure on the selection process.

Create a sinking fund for future infrastructure debt

While operating deficits have been a source of Ontario's growing public debt, another factor is current government accounting practices whereby new borrowing for capital spending is being added to the debt independently of program spending. Provincial governments, including those in Ontario, are using "capital budgeting" techniques, which allow the provincial government to add to the debt while understating the size of its current operating deficit.

The provincial government needs to account for more than the user cost of capital when calculating the deficit and also make provisions for paying back an annual portion of the principal from capital project borrowing. This can be done through a sinking fund—an older concept from public finance.[7] Briefly, this approach means that whenever debt is issued to fund capital projects, it should be accompanied by a commitment to make payments on the principal over a 20- to 30-year period with those payments recorded as part of operating expenditure. For example, if the government were to borrow $12 billion to fund infrastructure spending, assuming a 25-year sinking fund was in place, $480 million a year would be added to operating budgets over the next 25 budget years to pay down the amount borrowed.

4. Conclusion

Ontario's public finances have deteriorated over the last few decades as chronic deficits have led to mounting public debt. Nevertheless, the situation can be repaired—and relatively more quickly than might be imagined—though macroeconomic forces and the international trade situation may adversely affect Ontario's revenue performance in coming years, making it more challenging to achieve budget balance. It is also unclear what the true size of Ontario's deficit really is, given the questions that have been raised by organizations such as the FAO.

[7] For more details, see Di Matteo (2018).

Nevertheless, restoring balance to Ontario's finances requires taking responsibility and making a commitment to prudent financial management and discipline. Barring an unexpected economic downturn or other shock, for the new government this should mean quickly eliminating the budget deficit and then establishing a longer-term fiscal framework based on affordable spending targets and the application of resulting surpluses for pro-growth purposes or debt reduction.

The benefits from such action will be increased business and investor confidence in the provincial economy and sustainable finances that will provide stability for important government programs in health, education, and infrastructure renewal.

References

Clemens, Jason, Matthew Lau, Milagros Palacios, and Niels Veldhuis (2017). *End of the Chrétien Consensus?* Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/Chretien_Consensus_Book.pdf>, as of August 13, 2018.

Clemens, Jason, and Niels Veldhuis, eds. (2013). *The State of Ontario's Indebtedness: Warning Signs to Act*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/state-of-ontarios-indebtedness-rev.pdf>, as of August 13, 2018.

Di Matteo, Livio (2018). *Fiscal Policy. Transition Briefing: Balancing Ontario's Long-term Fiscal Sustainability*. Ontario 360. School of Public Policy and Governance, University of Toronto.

Di Matteo, Livio (2017). *A Federal Fiscal History: Canada, 1867–2017*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/federal-fiscal-history-canada-1867-2017.pdf>, as of August 13, 2018.

Drummond, Don (2012). "Drummond Report." *Commission on the Reform of Ontario's Public Services*. Queen's Printer for Ontario. <https://www.fin.gov.on.ca/en/reformcommission/chapters/report.pdf>, as of August 13, 2018.

Financial Accountability Office of Ontario [FAO] (2018). *Economic and Budget Outlook. Assessing Ontario's Medium-term Budget Plan*. Financial Accountability Office of Ontario. <http://www.fao-on.org/web/default/

files/publications/EBO%20Spring%202018/EBO%20Spring%202018.pdf>, as of August 13, 2018.

Office of the Auditor General of Ontario (2017). *Annual Report 2017*. Vols. 1 and 2. Auditor General of Ontario. <http://www.auditor.on.ca/en/content/annualreports/arbyyear/ar2017.html>, as of August 13, 2018.

Ontario (2018). *2018 Ontario Budget: A Plan for Care and Opportunity*. Minister of Finance, Government of Ontario. <http://budget.ontario.ca/2018/budget2018-en.pdf>, as of August 13, 2018.

Ontario (2017). *2017 Ontario Budget: A Stronger, Healthier Ontario*. Minister of Finance, Government of Ontario. <https://www.fin.gov.on.ca/en/budget/ontariobudgets/2017/budget2017.pdf>, as of August 13, 2018.

Wen, Jean-François (2015). *Ontario's Debt Balloon: Source and Sustainability*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/ontarios-debt-balloon-source-and-sustainability-rev.pdf>, as of August 13, 2018.

About the authors

Livio Di Matteo

Livio Di Matteo is a Senior Fellow at the Fraser Institute and Professor of Economics at Lakehead University in Thunder Bay, Ontario, where he specializes in public policy, health economics, public finance, and economic history. His recent work examines health-care spending and its sustainability. As well, he conducts research on the historical evolution of economic inequality. Di Matteo is a member of the CIHI National Health Expenditure Advisory Panel, the Evidence Network (EvidenceNetwork.ca), and is a contributor to the economics blog, Worthwhile Canadian Initiative. He has been listed in Canadian *Who's Who* since 1995 and holds a PhD from McMaster University, an MA from the University of Western Ontario, and a BA from Lakehead University.

Ben Eisen

Ben Eisen is a Senior Fellow in Fiscal and Provincial Prosperity Studies and former Director of Provincial Prosperity Studies at the Fraser Institute. He holds a BA from the University of Toronto and an MPP from the University of Toronto's School of Public Policy and Governance. Prior to joining the Fraser Institute Mr. Eisen was the Director of Research and Programmes at the Atlantic Institute for Market Studies in Halifax. He also worked for the Citizens Budget Commission in New York City, and in Winnipeg as the Assistant Research Director for the Frontier Centre for Public Policy. Mr. Eisen has published influential studies on several policy topics, including intergovernmental relations, public finance, and higher education policy. He has been widely quoted in major newspapers including the *National Post, Chronicle Herald, Winnipeg Free Press* and *Calgary Herald*.

2. Opening Ontario Up for Business: The Case for Corporate Tax Reform

Charles Lammam, Hugh MacIntyre, and Milagros Palacios

Introduction

In his victory speech, newly elected Premier Doug Ford talked a good talk about the need to improve Ontario's investment climate, stating that "Ontario is open for business" (Ford, 2018). One crucial way Premier Ford can "walk the walk" is by reducing the province's corporate income tax rate. With the United States having recently dramatically improved its business tax regime through federal changes, Ontario has lost the significant corporate tax advantage it previously held over many competing states.

This essay discusses how cutting Ontario's provincial corporate income tax rate would make the province more competitive for investment and help drive economic growth. Given the precarious state of the province's public finances, it offers an idea for how the Ford government can offset the short-term revenue impact of enacting a corporate tax rate cut without adversely affecting average Ontarians.

The benefits of corporate tax cuts

It is important to first highlight the economic benefits that come from lowering corporate taxes. To begin with, it is people who ultimately pay corporate taxes. They do so as shareholders earning lower returns on their investment, as employees earning lower wages, or as consumers paying higher prices. Empirical research confirms that corporate taxes are particularly problematic because they impose much larger negative effects on the economy than other types of taxes such as consumption and property taxes (McBride, 2012; Arnold, 2008; Ferede and Dahlby; 2016).[1] So reducing the government's reliance on this economically damaging form of taxation is a way to improve Ontario's economic growth prospects.

The primary mechanism by which lower corporate taxes spark economic activity is through investment (Parsons, 2008; Djankov et al., 2010; Bazel et al., 2018).[2] Lower corporate taxes make a jurisdiction more attractive as a place to invest and for entrepreneurs to do business, which creates jobs and opportunities and leads to new and improved products and services. And when businesses invest in machinery, equipment, and technology, workers are able to produce more and create higher valued output for each hour they work, increasing their productivity. Increased productivity ultimately leads to higher wages and living standards.

Several studies confirm the positive impact of lower corporate taxes on the wages of ordinary workers. For example, consider the results from a recent Canadian study that analyzed individual-level data between 1998 and 2013 (Ebrahimi and Vaillancourt, 2016). It found that, after controlling for other factors (such as a worker's age, education, union status, firm size, occupation, industry, and a host of economic variables), lower corporate taxes increased average wages. Based on the statistical results, a one percentage point drop in the average combined corporate tax rate would increase the average wage of Canadian workers by between $254 and $390 the following year. Another study by McKenzie and Ferede (2017) found that a reduction in Ontario's corporate tax rate of $1 would increase total wages by $1.97 in the long run.

Moreover, reducing Ontario's corporate income tax rate would help improve the province's competitiveness, which, as we note in the next section, was weakened earlier this year following federal tax reform in the United States. The reforms in that country reduced the federal statutory corporate income tax rate from 35 percent to 21 percent,[3] allowed immediate expensing of capital investment, and created incentives to move

---

1 This is partly due to the fact that capital is more mobile than people and tends to flow to jurisdictions with the best after-tax rate of return, making investment and corporate profits highly sensitive to tax rate levels and changes.

2 Notably, business investment—particularly in manufacturing—has languished in Ontario in recent years compared to the rest of Canada (Cross, 2017), as has Ontario's overall economic performance (Eisen and Palacios, 2018). While there has been some economic rejuvenation in the past year, it is mostly concentrated in the GTA; other parts of the province remain economically depressed (see Lafleur and Eisen, 2017).

3 Though due to complexities in the tax code, most large corporations paid a lower effective rate than the statutory rate of 35 percent due to exemptions and other complexities.

overseas profits to the US.[4] Together, these changes dramatically reduced the combined corporate income tax rate in all states and the effective tax rate on new investment in the US broadly. In the global economy, jurisdictions compete for investment, so Ontario risks losing investment dollars to other jurisdictions in the absence of a significant policy response.[5]

How Ontario compares to other North American jurisdictions on business taxes

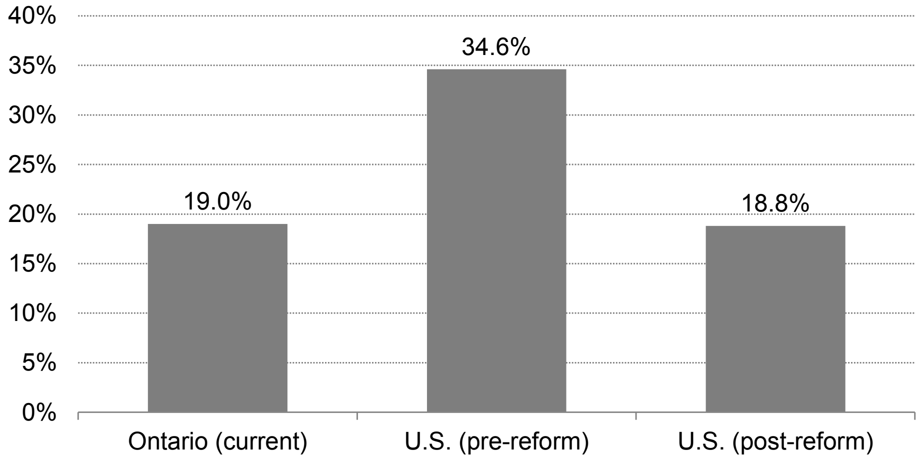
A comprehensive measure of a jurisdiction's business tax competiveness is the overall tax rate on new investment, or the marginal effective tax rate (METR). The METR accounts for corporate income taxes, capital taxes, and other investment-related taxes such as sales taxes on business inputs. This metric reveals the extent of the tax advantage Ontario enjoyed until recently (see figure 1). As of 2017, Ontario's METR was 19.0 percent, compared to an average METR of 34.6 percent in the United States (Bazel, Mintz, and Thompson, 2018). However, sweeping tax reform in the United States has significantly reduced the average METR in that country to 18.8 percent—a rate nearly identical to Ontario's (Bazel, Mintz, and Thompson, 2018). In other words, when competing with the United States for investment, Ontario no longer has an advantage on business taxes. This is particularly worrisome since the province has a number of disadvantages for attracting investment. These include high electricity prices, increasingly stringent labour regulations, and a highly uncompetitive personal income tax system (Eisen, Lafleur, and Emes, 2018).

There is no readily available data showing how US tax reform has changed METRs at the state level. However, it's clear that the transformation in the United States's overall competitive standing will have a sub-

4 For a more complete discussion on US business tax reform, see Bazel, Mintz, and Thompson (2018).

5 Of course, business taxes are not the only consideration for investors; other economic policies and structural features like the size of the market and access to skilled labour matter, too. On business taxes, Ontario's competitive position improved substantially over the years and until recently, the province enjoyed an advantage over virtually every US state. Part of this advantage was driven by marked reductions in the federal corporate income tax rate which began with the Chretien Liberals and continued with the Harper Conservatives. In addition, while initially raising Ontario's general corporate income tax, the McGuinty Liberals eventually cut the rate from 14 percent to the current 11.5 percent and introduced the pro-investment Harmonized Sales Tax (HST). However, there has been no change in Ontario's combined federal-provincial corporate income tax rate since 2012.

Figure 1: Marginal Effective Tax Rate on New Investment, Ontario and the US (pre and post tax reform)



Note: Excludes transfer taxes.

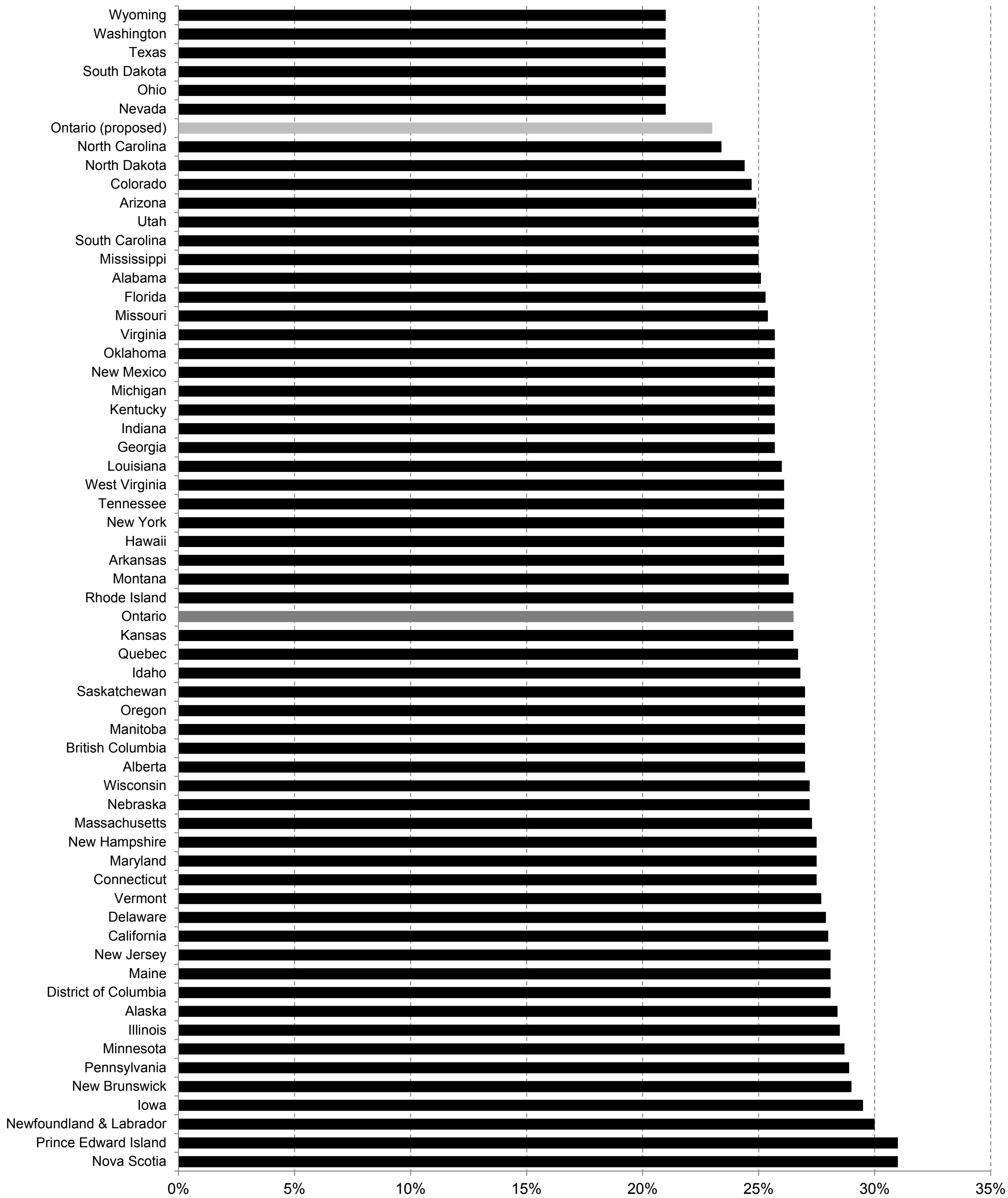
Source: Bazel, Mintz, and Thompson, 2018.

stantial impact on state-level competitiveness throughout the union. An illustration of one key way that Ontario has lost its tax advantage relative to specific American states is changes in the statutory corporate income tax rate that American firms face in various states. The statutory tax rate is an important contributing factor to the METR.

As of last year and prior to US tax reform, at 26.5 percent Ontario had the second lowest combined (federal-provincial or federal-state) general statutory corporate tax rate among all the Canadian provinces and US states. Only British Columbia had a lower rate at 26 percent (though BC raised its provincial rate this year, making its combined general corporate tax rate 27 percent).

Federal tax reform in the United States, which included a reduction in the statutory federal corporate income tax rate from 35 to 21 percent, changed the competitive dynamics between Ontario and the US states. Notably, on top of this federal change, some states, including nearby Michigan and Indiana, also recently reformed their business taxes and labour regulations, increasing the competitive pressure on Ontario. As figure 2 shows, Ontario's statutory corporate tax rate is now middling—ranking 31st out of 61 jurisdictions in the US and Canada. Moreover, with federal tax changes in the US, there has been substantial tax compression among the provinces and states. There are now states (those with no state-level corporate income tax) that have combined statutory corporate tax rates up

Figure 2: Combined Provincial/State and Federal General Corporate Income Tax Rate, 2018 (current and proposed for Ontario)



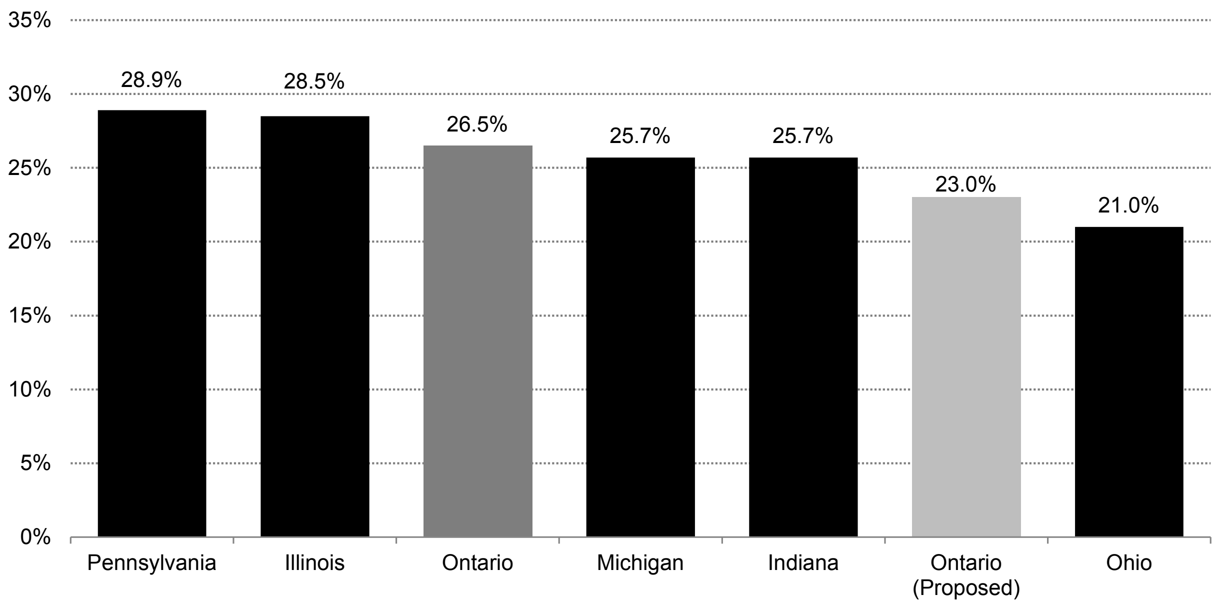
Notes: 1) These rates may change with the release of forthcoming budgets; 2) Nevada, Ohio, Texas, and Washington do not have a corporate income tax but do have a gross receipts tax with rates not strictly comparable to corporate income tax rates. Delaware and Virginia have gross receipts taxes in addition to corporate income taxes.
Sources: The Fraser Institute Tax Database; Scarboro, 2018.

to 5.5 percentage points lower than Ontario's. Indeed, what was Ontario's large tax advantage in this area in 2017 has shrunk to the point where it is negligible or completely gone in 2018.

Now consider how Ontario's combined corporate income tax rate compares to those of its main competitors for investment—nearby manufacturing states that are commonly known as "rust belt" states. These states—Michigan, Indiana, Ohio, Pennsylvania, and Illinois—are traditionally and currently manufacturing hubs similar to Ontario (Murphy, Clemens, Emes, and Veldhuis, 2015). The similarity in their respective economies makes rust belt states important competitors to Ontario for investment dollars.

In 2018, Ontario ceased to be the manufacturing jurisdiction with the lowest corporate tax rate. That position is now held by Ohio, which has no state level tax rate, and so corporations there face only the 21 percent statutory federal rate. (Comparisons with Ohio on this metric are complicated by the fact that state maintains an economically harmful "gross receipts" tax. Despite this complication, the broader picture is clear—Ontario once enjoyed a clear advantage on this metric, but no longer does.

Figure 3: Combined Corporate Income Tax Rate, Ontario and the Rust-Belt States, 2018 (Current and Proposed for Ontario)



Notes and Sources: See figure 2.

See figure 3). In 2018, Ontario's combined rate (26.5 percent) became slightly higher than the rate in both Michigan and Indiana (25.7 percent). Furthermore, these states have recently pursued pro-growth policy reforms absent in Ontario. Pennsylvania remains the rust belt jurisdiction with the highest combined corporate tax rate at 28.9 percent, but the gap between Pennsylvania and Ontario has closed significantly.

Overall, Ontario has lost its clear corporate tax advantage over nearby manufacturing jurisdictions and has seen its overall competitive position within North America undermined. Again, this is worrying because the province has a number of other issues that compromise its competiveness for attracting investment. The evaporation of Ontario's statutory corporate tax advantage over the jurisdictions with which it competes will necessarily also dramatically reduce the province's overall business competitiveness as measured through METRs. These competitive pressures and the loss of Ontario's corporate tax advantage relative to the United States make the consideration of corporate tax reductions in Ontario particularly urgent.

Proposed reduction in Ontario's corporate tax rate

As outlined above, Ontario has recently lost its big competitive advantage over the United States with respect to business taxes. To help spur investment and economic growth, and counteract a weakened competitive position, Ontario can enact business tax reforms.[6]

With a new government taking office in Ontario, the province has an opportunity to take steps to mitigate the effect of US tax reform on Ontario's business tax competiveness. In particular, it can reduce its provincial corporate tax rate by 3.5 percentage points from 11.5 percent to 8 percent. Such a move would be a clear sign to investors that Ontario is indeed "open for business." Under this scenario, Ontario's combined federal-provincial corporate income tax rate would go from 26.5 percent to 23 percent, or from middle-of-the-pack to the 7th lowest statutory rate among the provinces and states (see figure 2).

If this cut to the provincial corporate tax rate were to be enacted, Ontario's business tax regime would be in a better competitive position than it currently is, creating positive economic incentives for businesses and entrepreneurs. While Ohio's combined federal-state corporate tax rate would still be lower than Ontario's, the gap would only be two percentage points rather than a gap of 5.5 percentage points (see figure 3). Also, the

6 To be clear, corporate tax reductions are not a panacea. They are just one of many policy reforms needed to improve Ontario's overall investment climate.

new combined federal-provincial corporate tax rate would set Ontario apart from Michigan and Indiana (each with a rate of 25.7 percent). Finally, the gap between Pennsylvania and Ontario would widen from its current 2.4 to a full 5.9 percentage points.

Reducing Ontario's corporate tax rate to 8 percent would be a clear step towards making Ontario more competitive for attracting and retaining investment. It would signal the province is indeed open for business.

"Paying" for the corporate tax cut

Assuming no behavioural changes in response to a corporate tax rate cut, the policy change described above would cost roughly $3.4 billion in foregone revenue in 2018/19 (Eisen, Lafleur, and Emes, 2018). Given the precarious financial position of the Ontario government, which is burdened by large budget deficits and growing government debt (Ontario, Ministry of Finance, 2018), it is important to consider how it would afford a $3.4 billion tax cut. One way to offset the lost revenue is through broad spending restraint (Eisen, Lafleur, and Emes, 2018). However, given that the province needs to create fiscal room for personal income tax rate reductions (as discussed in another essay in this series) and deficit elimination, it is worthwhile considering more specific ways to "pay" for a corporate tax rate reduction.

Specifically, reductions could be made in the province's expansive system of business subsidies, which hands out grants and loans to select businesses chosen by the government. While politicians often claim business subsidies improve economic performance or provide well-paying jobs, the reality is that subsidies distort the economy by giving advantages to particular businesses or industries. This puts businesses that may otherwise be more innovative or productive (but lack the contacts or political clout to receive subsidies) at a disadvantage. Academic evidence finds that corporate welfare generally does not stimulate the overall economy (Milke, 2007). Instead, it redirects resources from particular businesses or industries to those favoured by the government.

According to the Financial Accountability Office of Ontario (FAO), there are more than 100 different provincial programs delivering subsidies to businesses (FAO, 2018). These subsidies include non-refundable and refundable tax credits, grants and loans, and equity. A recent report from the FAO pegged annual expenditures in this area at $4.9 billion—more than the cost of the proposed corporate tax rate reduction described above. Reducing corporate subsidies, while creating a more favourable investment environment by reducing the general corporate income tax rate, is a promising strategy for attracting business investment.

It should also be noted that the $3.4 billion cost estimate is conservative, as it is based on a "static model" that assumes no behavioural changes from firms or individuals as a result of the corporate tax rate reduction. There is strong evidence, however, suggesting that the implementation of such a tax policy change would in fact help spark investment, increasing the size of the tax base and thereby offsetting some of the revenue loss from a higher rate.

In short, the evidence presented here suggests that Ontario faces new competitive pressures from the United States and as a result has lost a key business taxation advantage it used to enjoy over many US states. A significant reduction in Ontario's general corporate tax rate would represent a meaningful response to these new challenges and, as we have seen, can be achieved at a manageable fiscal cost. That cost can be further reduced by thoroughly reviewing business subsidies with an eye to cancelling spending that does not drive growth or benefit the broader economy.

Conclusion

Until the start of 2018, Ontario had a clear business tax advantage over US states, particularly the competing rust belt states. As recently as 2017, Ontario's combined federal and provincial statutory corporate tax rate was lower than the equivalent rates in all five rust belt states. However, this advantage has evaporated due to federal tax reform in the US which has lowered the federal corporate tax rate, among other things. Premier Doug Ford's new government in Ontario has an opportunity to improve Ontario's competitive position on business taxes by lowering the province's corporate income tax rates to 8 percent. This $3.4 billion tax cut can be offset by reducing the $4.9 billion that the provincial government spends on ineffective business subsidies. Getting rid of unproductive policies that bestow privileges on the government's preferred companies or industries in exchange for a reduction in the general coprorate income tax would give the province a cost-neutral economic policy jolt.

References

Arnold, Jens (2008). *Do Tax Structures Affect Aggregate Economic Growth? Empirical Evidence from a Panel of OECD Countries*. Working Papers No. 643. Organisation for Economic Co-operation and Development. <http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?doclanguage=en&cote=eco/wkp(2008)51>, as of August 28, 2018.

Bazel, Philip, Jack Mintz, and Austin Thompson (2018). *2017 Tax Competiveness Report: The Calm Before the Storm*. SPP Research paper 11: 7. School of Public Policy, University of Calgary. https://www.policyschool.ca/wp-content/uploads/2018/02/2017-Tax-Competitiveness-Bazel-Mintz-Thompson-final.pdf >, as of August 28, 2018.

Cross, Philip (2017). *Ontario's One Cylinder Economy: Housing in Toronto and Weak Business Investment*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/ontarios-one-cylinder-economy-housing-in-toronto-and-weak-business-investment.pdf>, as of August 28, 2018.

Djankov, Simeon, Tim Ganser, Caralee McLiesh, Rita Ramalho, Andrei Shleifer (2010). The Effect of Corporate Taxes on Investment and Entrepreneurship. *American Economic Journal* 2, 3: 31–64.

Ebrahimi, Pouya, and Francois Vaillancourt (2016). *The Effect of Corporate Income and Payroll Taxes on the Wages of Canadian Workers*. Fraser Institute. <https://www.fraserinstitute.org/studies/the-effect-of-corporate-income-and-payroll-taxes-on-the-wages-of-canadian-workers>, as of August 28, 2018.

Eisen, Ben, Steve Lafleur, and Joel Emes (2018). *Time for Tax Reform in Ontario*. Fraser Institute. <https://www.fraserinstitute.org/studies/time-for-tax-reform-in-ontario>, as of August 28, 2018.

Eisen, Ben, and Milagros Palacios (2018). *Ontario's Lost Decade: 2007–2016*. The Fraser Institute. <https://www.fraserinstitute.org/studies/ontarios-lost-decade-2007-2016>, as of August 28, 2018.

Ferede, Ergete, and Bev Dahlby (2016). *The Costliest Tax of All: Raising Revenue Through Corporate Tax Hikes Can Be Counter-Productive for the Provinces*. SPP Research Papers 9, 11. School of Public Policy, University of Calgary. <https://www.policyschool.ca/wp-content/uploads/2016/05/estimating-tax-base-ferede-dahlby.pdf>, as of August 28, 2018.

Financial Accountability Office of Ontario [FAO] (2018). *Business Support Programs: The Effectiveness of Ontario's Business Support Programs.* Government of Ontario. <http://www.fao-on.org/en/Blog/Publications/business-support-0518>, as of August 28, 2018.

Ford, Doug (2018). Doug Ford's Victory Speech: "Ontario Is Open For Business"—Full Transcript. *Maclean's*. <https://www.macleans.ca/politics/doug-fords-victory-speech-ontario-is-open-for-business-full-transcript/>, as of August 28, 2018.

Lafleur, Steve, and Ben Eisen (2017). *Uneven Recovery: Much of Ontario Still Hasn't Fully Recovered from the 2008 Recession*. The Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/uneven-recovery-much-of-ontario-still-hasnt-fully-recovered-from-the-2008-recession.pdf>, as of August 28, 2018.

McBride, William (2012). *What Is the Evidence on Taxes and Growth?* Special Report. Tax Foundation. <https://files.taxfoundation.org/legacy/docs/sr207.pdf>, as of August 28, 2018.

McKenzie, Kenneth J., and Ergete Ferede (2017). *The Incidence of Corporate Income Tax on Wages: Evidence from Canadian Provinces*. SPP Research Papers 10, 7. The School of Public Policy, University of Calgary. <https://www.policyschool.ca/wp-content/uploads/2017/04/Incidence-CIT-on-Wages-McKenzie-Ferede.pdf >, as of August 28, 2018.

Milke, Mark (2007). *Corporate Welfare: A $144 Billion Addiction*. Fraser Institute. <https://www.fraserinstitute.org/studies/corporate-welfare-144-billion-addiction>, as of August 28, 2018.

Murphy, Robert P., Jason Clemens, Joel Emes, and Niels Veldhuis (2015). *Ontario vs. the US "Rust Belt": Coping with a Changing Economic World*. Fraser Institute. <https://www.fraserinstitute.org/studies/ontario-vs-us-rust-belt-coping-changing-economic-world>, as of August 28, 2018.

Ontario, Ministry of Finance (2018). *2018 Ontario Budget*. Government of Ontario. <http://budget.ontario.ca/2018/contents.html>, as of August 28, 2018.

Parsons, Mark (2008). *The Effect of Corporate Taxes on Canadian Investment: An Empirical Investigation.* Working Paper 2008-01. Department of Finance, Government of Canada. <https://www.fin.gc.ca/pub/pdfs/wp2008-01e.pdf>, as of August 28, 2018.

PriceWaterhouse Coopers [PwC] (2017). *Tax Facts and Figures, Canada 2017*. PwC. <https://www.pwc.com/ca/en/tax/publications/pwc-tax-facts-figures-2017-06-en.pdf>, as of August 28, 2018.

Pricewaterhouse Coopers [PwC] (2018). *Tax Facts and Figures, Canada 2018*. <https://www.pwc.com/ca/fr/tax/publications/pwc-tax-facts-figures-2018-07-en.pdf>, as of August 28, 2018.

Scarboro, Morgan (2017). *State Corporate Income Tax Rates and Brackets for 2017*. Tax Foundation. <https://taxfoundation.org/state-corporate-income-tax-rates-brackets-2017/>, as of August 28, 2018.

Scarboro, Morgan (2018). *State Corporate Income Tax Rates and Brackets for 2018*. Tax Foundation. <https://taxfoundation.org/state-corporate-income-tax-rates-brackets-2018/ >, as of August 28, 2018.

About the authors

Charles Lammam

Charles Lammam was formerly Director of Fiscal Studies at the Fraser Institute. He holds an M.A. in public policy and a B.A. in economics with a minor in business administration from Simon Fraser University.

Hugh MacIntyre

Hugh MacIntyre is a Senior Policy Analyst at the Fraser Institute. He holds an M.Sc. in Political Science from the University of Edinburgh, a Post Baccalaureate Diploma in Economics from Simon Fraser University, and an Honours B.A. from the University of Toronto. Mr. MacIntyre has published over 25 studies and has written over 80 original commentaries appearing in national and regional media outlets including the *Globe & Mail* and the *National Post*. His research covers a wide range of economic policy issues including taxation, government finances, government performance, public-private partnerships, labour policy, income mobility, poverty, and charitable giving.

Milagros Palacios

Milagros Palacios is the Associate Director for the Addington Centre for Measurement at the Fraser Institute. She holds a B.S. in Industrial Engineering from the Pontifical Catholic University of Peru and a M.Sc. in Economics from the University of Concepcion, Chile. Ms. Palacios has studied public policy involving taxation, government finances, investment, productivity, labour markets, and charitable giving, for nearly 15 years. Since joining the Institute, Ms. Palacios has authored or coauthored over 100 comprehensive research studies, 80 commentaries and four books. Her recent commentaries have appeared in major Canadian newspapers such as the *National Post, Toronto Sun, Windsor Star,* and *Vancouver Sun.*

3. Reducing Ontario's Uncompetitive Personal Income Tax Rates

Ben Eisen, Steve Lafleur, and Joel Emes

Introduction

Ontario's economy has struggled relative to that of other provinces over the course of more than a decade. In fact, between 2007 and 2016, Ontario finished 7th out of 10 provinces in its real per capita GDP growth, and 10th in median income growth (Eisen and Palacios, 2018).[1] Worse still, that meager economic growth was driven almost entirely by the Toronto and Ottawa Census metropolitan areas (CMAs). In fact, 11 of the province's 23 urban areas experienced net job losses between 2008 and 2016, meaning that much of the province has yet to recover from the Great Recession, let alone prosper (Lafleur and Eisen, 2017). With headwinds coming from both trade uncertainty and large reductions in the American personal and corporate income tax rates, the provincial government needs to address its lagging competitiveness if it wants to promote economic growth in the province.

The natural place to start is by reducing the province's uncompetitively high statutory personal income tax rates. This brief essay highlights the challenges posed by unusually high personal income tax rates, and makes the case for a move towards a lower, single personal income tax rate of 8 percent. The essay first demonstrates how such a change would enhance Ontario's competitive position in North America when it comes to the taxation of personal income before demonstrating that it would

1 See Eisen and Palacios (2018) for a detailed discussion.

be possible to "pay" for the foregone revenue simply by freezing program spending increases for a single year.[2] In short, transforming Ontario from having one of the most anti-growth personal income tax structures in North America to one of the most pro-growth structures is both feasible and affordable.

Ontario's tax disadvantage

Ontario's high personal income tax rates place the province at a competitive disadvantage relative to most provinces and US states.

High marginal personal income tax (PIT) rates are harmful because they are a powerful disincentive, discouraging professionals, entrepreneurs, investors, and business owners from expanding their activities or starting new businesses.[3] In fact, in Ontario, personal income tax rates are so high that Dahlby and Ferede (2018) estimate that the cost of raising funds from additional personal income taxes would be greater than from raising corporate taxes, which is notable given that corporate taxes are generally considered among the most economically harmful taxes.

Figure 1 highlights this problem by comparing Ontario's top combined provincial/federal income tax rate of 53.53 percent to other Canadian provinces, as well as to all US states.

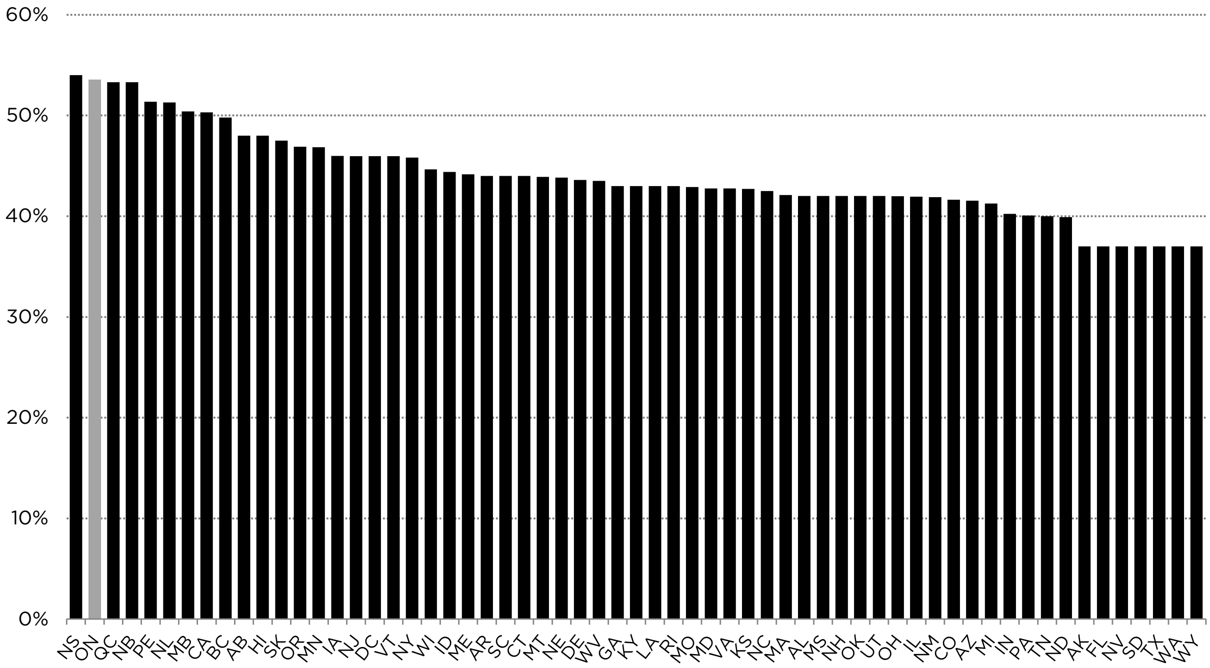
Ontario has the second highest top personal income tax rate of any Canadian province or US state. Top income earners will pay a higher marginal tax rate in Ontario than in any province other than Nova Scotia—including Quebec.[4] Ontario's top provincial rate is more than 25 per-

[2] The model presented in this essay uses projections from the 2017/18 budget and subsequent fiscal updates and does not include updates found in the 2018/19 budget. Of particular significance, the models presented here forecast changes relative to the pre-budget tax structure, and do not include the very minor changes to the organization of Ontario's tax system proposed in that budget. The replacement of existing surtaxes with higher base rates does not have a material impact on the marginal rates that higher earners face and which are the focus of our discussion of the PIT. Given the election of a new government, the measures in the 2018/19 budget are subject to revision, so analyzing them could be a moot point. As such, we have chosen to use the pre-budget status quo as our baseline of Ontario's existing tax structure.

[3] See Bazel, Mintz, and Thompson (2018) for a detailed discussion of how high marginal tax rates affect investment and economic growth.

[4] All of the tax rates are adjusted for surtaxes and the Quebec abatement where appropriate. The federal abatement means that Quebecers pay less in federal taxes than do other provinces. The abatement exists as part of an arrangement that allows provincial governments to opt out of certain federal-provincial programs. For more details, see Canada, Department of Finance (2015).

Figure 1: Combined Top Province/State and Federal Personal Income Tax Rate, 2018



Sources: The Fraser Institute Tax Database; Tax Foundation, 2018b; Tax Policy Center, 2018.

cent higher than it is in Alberta or Saskatchewan, giving both of the latter provinces a significant advantage in attracting highly skilled workers.

The problem is even more pronounced when Ontario is compared to the United States—and is especially challenging when Ontario is compared to nearby manufacturing jurisdictions with whom the province competes directly. Not only is Ontario's top statutory income tax rate higher than in every state, but it is higher than many by a substantial amount.[5] Jurisdictions with no state-level personal income tax have top personal income tax rates of 37 percent, which is 16.53 percentage points lower than Ontario's. Nearby Ohio and Michigan have rates of 42 percent and 41.25 percent, respectively, which gives them a substantial advantage over Ontario.

The top posted PIT rates aren't the only problem. Ontario's top combined tax rate applies to income above CA$220,000, which is less than half

[5] Technically speaking, the marginal rather than the statutory tax rate has the greatest impact for economic incentives. For income earned in the top bracket, we would assume statutory rates are basically the same as the marginal rates.

the US$500,000 threshold applicable in the US (Tax Foundation, 2018a). In other words, entrepreneurs, business owners, and highly skilled high-earning professionals start paying the top combined federal-provincial personal income tax rate in Ontario much sooner on their earnings than do their US counterparts. Generally speaking, the states have low thresholds for their top brackets compared to the federal government, which means that for the most part, the top combined rate in each state applies at US$500,000, which is the top federal rate. Nearby states with whom Ontario competes, including Michigan, Pennsylvania, and Indiana, all have top combined rates that are at least 10 percentage points below Ontario's combined federal/provincial rate.

Ontario is clearly not competitive in North America when it comes to the PIT. With the second highest top rate in North America, and a substantial disadvantage of upwards of ten percentage points relative to many neighbouring jurisdictions, Ontario's PIT system makes it more difficult for Ontario to attract and retain entrepreneurs, business owners, and skilled professionals. Reducing the top marginal personal income tax rate would significantly improve the province's competitive standing. In fact, a recent study estimated that the 2013 decision to raise the province's top provincial income tax rate by 3.1 percentage points may have cost the provincial government 2,158 new businesses (Ferede, 2018). A move in the opposite direction, towards lower, more competitive rates, would have the opposite effect, helping to encourage investment and business creation.

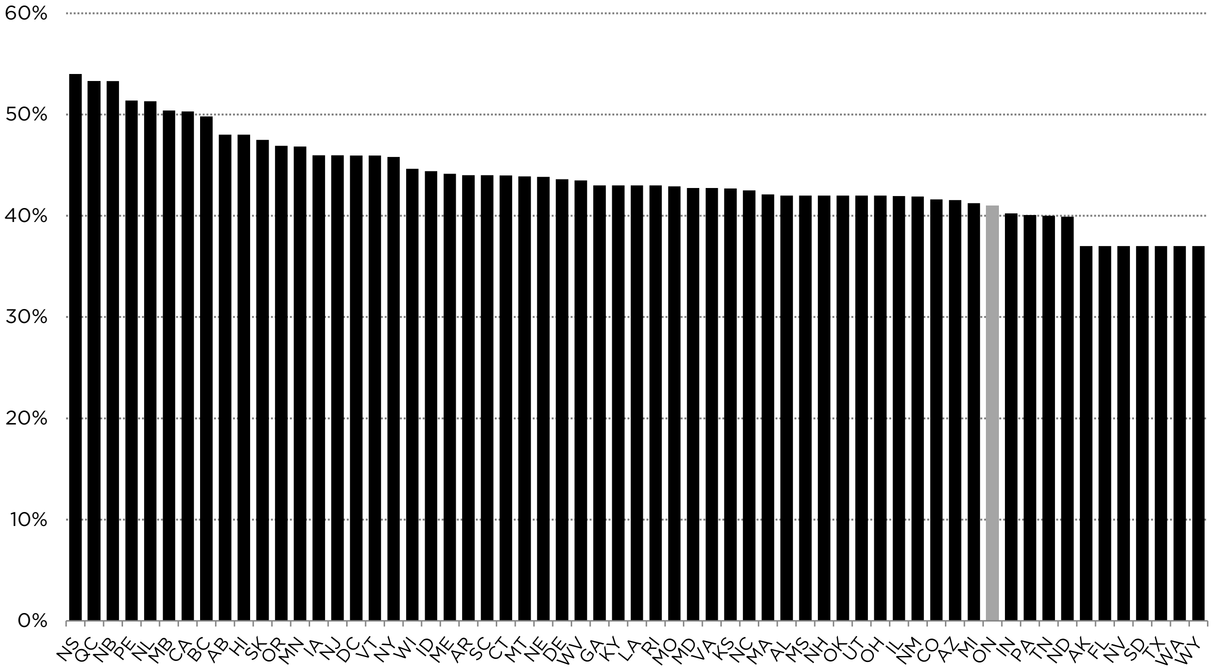
Proposal for reform

We propose reforming Ontario's PIT system by replacing Ontario's seven bracket personal income tax system with a single rate of 8 percent. This would transform Ontario's competitive standing both within Canada and compared to US states.

Figure 2 shows that the new top combined rate of 41 percent proposed here would move Ontario from having the second highest top personal income tax rate in North America to having the 12th lowest rate. This would significantly enhance the province's competitiveness, both overall and relative to key competing jurisdictions. For example, this reform would bring Ontario's top marginal statutory income tax rate slightly below that of neighbouring Michigan, which currently enjoys a roughly 12 percentage point advantage over Ontario. This would be a major boost for Ontario's competitiveness within North America.

Some might worry that a large reduction in personal income tax rates might balloon Ontario's already large planned deficits. Fortunat-

Figure 2: Combined Top Province/State and Federal Personal Income Tax Rate, 2018 (proposed)



Note: These rates may change with the release of forthcoming budgets.

Sources: The Fraser Institute Tax Database; Tax Foundation, 2018b; Tax Policy Center, 2018.

ely, this can be avoided with fairly modest spending restraint. In a recent paper, we estimated that the PIT reforms described above would reduce revenue from that tax source by $4.8 billion in 2018/19 (Eisen, Lafleur, and Emes, 2018).[6]

We further assumed that implementation would likely (and should) include some measure to offset increased PIT for lower and middle-income households resulting from increasing the first bracket from 5.05 percent. We estimate it would cost $2.8 billion to provide rebates that would offset higher PIT costs to all households experiencing an increase to ensure that no one's taxes go up.[7]

[6] Our estimates were arrived at using Version 26.0 of Statistics Canada's Social Policy Simulation Database and Model. In order to estimate the cost of this tax reform plan we use a "static" model, which assumes no "behavioural changes" will take place as a result of the tax changes. In other words, we assume that lower taxes won't increase economic activity at all, which is a very conservative assumption.

[7] There are many complementary policies that might be considered. For instance, the

Given the $4.8 billion revenue decline projected from the rate reduction and the $2.8 billion required to offset the cost for those who would face tax increases as a result of the implementation of the single-rate income tax, the total cost of the package would be roughly $7.6 billion. While recouping that amount may seem like it would require a large reduction in public spending, it could be achieved, in fact, simply by not proceeding with the $8.4 billion program spending increase in 2018/19 laid out in the most recent budget (Ontario Department of Finance, 2018). Taking this action is more challenging now that the fiscal year has started, but should the new government put out a revised budget in the near future, it would present an opportunity to change course and achieve this relatively modest goal. While holding spending flat for a year certainly requires some fiscal discipline (particularly if the province is to make progress on balancing the budget), it is relatively minor compared to what many Canadian provincial governments have had to implement in the past. In short, the step should be plausible and would greatly enhance Ontario's competitiveness. The modesty of the step required is particularly clear when one considers that spending went up 6 percent last year, which means a nominal freeze in 2017/18 would still result in a 6 percent increase over a two year period—approximately in line with the rate of inflation and population growth and just below the rate of economic growth.

Ontario's uncompetitive PIT system is a major barrier to provincial prosperity and Ontario's ability to attract investment and talent. Fortunately, it is not an intractable problem. Meaningful tax reform that would make Ontario's PIT system one of the most competitive in North America is feasible, and can be achieved at a relatively modest fiscal cost. Instead of tinkering at the margins, the provincial government is therefore in a position to consider a fundamental overhaul of the province's PIT system to help set Ontario on track to retake its place as one of the economic engines of Canada and North America.

Conclusion

Given the significant economic headwinds Ontario faces from US tax reductions and trade uncertainty, Ontario's new government will need to

province could enhance the Ontario Working Income Tax Benefit. Or it could simply maintain that first bracket at 5.05 percent. While it is beyond the scope of this paper to adjudicate between the various options, we note that using rebates to return all of the additional tax revenue raised from households that experience a tax increase under this proposal would cost $2.8 billion. For simplicity, we simply assume that offsetting policies will add $2.8 billion to the cost of our proposal.

take decisive action if it wants to improve the province's lagging competitiveness. We have laid out the case for the province to move from a seven bracket income tax system to a single rate of 8 percent, which would give Ontario the lowest top personal income tax rate in Canada, and one of the lowest of any jurisdiction in Canada or the United States. As we have shown, this could be funded by freezing program spending increases for a single year in 2018/19. This is a very achievable goal that would give Ontario's economy a much needed boost without increasing the provincial deficit.

References

Bazel, Philip, Jack Mintz, and Austin Thompson (2018). *2017 Tax Competitiveness Report: The Calm Before the Storm*. SPP Research Paper 11, 7. School of Public Policy, University of Calgary.

Dahlby, Bev, and Eregete Ferede (2018). The Marginal Cost of Public Funds and the Laffer Curve: Evidence from the Canadian Provinces. *FinanzArchiv* 74, 1.

Department of Finance (2010). *The Response of Individuals to Changes in Marginal Income Tax Rates*. Government of Canada. <https://www.fin.gc.ca/taxexp-depfisc/2010/taxexp1003-eng.asp>, as of March 19, 2018.

Department of Finance (2015). *Quebec Abatement*. Government of Canada. <http://www.fin.gc.ca/fedprov/altpay-eng.asp>, as of March 8, 2018.

Eisen, Ben, Steve Lafleur, Joel Emes (2018). *Time for Tax Reform in Ontario*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/time-for-tax-reform-in-ontario.pdf>, as of June 29, 2018.

Eisen, Ben, and Milagros Palacios (2018). *Ontario's Lost Decade: 2007-2016*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/ontarios-lost-decade-2007-2016.pdf>, as of April 4, 2018.

Ferede, Ergete (2018). *The Effects of Entrepreneurship of Increasing Provincial Top Personal Income Tax Rates in Canada*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/effects-of-personal-income-tax-on-entrepreneurship-in-canada.pdf>, as of July 17, 2018.

Lafleur, Steve, and Ben Eisen (2017). *Uneven Recovery: Much of Ontario Still Hasn't Fully Recovered from the 2008 Recession*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/uneven-recovery-much-of-ontario-still-hasnt-fully-recovered-from-the-2008-recession.pdf>, as of July 2, 2018.

Lammam, Charles, Joel Emes, Jason Clemens, and Niels Veldhuis (2015). *Reforming Federal Personal Income Taxes: A Pro-Growth Plan for Canada*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/reforming-federal-personal-income-taxes.pdf>, as of September 1, 2018.

Ontario Department of Finance (2018). *2018 Ontario Budget*. Government of Ontario. <http://budget.ontario.ca/2018/budget2018-en.pdf>, as of July 2, 2018.

Statistics Canada (2016). *Census in Brief: Household Contribution Rates for Selected Registered Savings Accounts*. Government of Canada. <http://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016013/98-200-x2016013-eng.cfm?wbdisable=true>, as of March 16, 2018.

Statistics Canada (2017a). *CANSIM Table 051-0001: Estimates of population, by age group and sex for July 1, Canada, provinces and territories, annual (persons)*. Government of Canada. <https://www150.statcan.gc.ca/n1/en/type/data?text=510001>, as of March 19, 2018.

Statistics Canada (2017b). *CANSIM Table 052-0005: Projected population, by projection scenario, age and sex, as of July 1, Canada, provinces and territories, annual (persons)*. Government of Canada. <http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=520005>, as of March 19, 2018.

Statistics Canada (2017c). *CANSIM Table 282-0012: Labour force survey estimates (LFS), employment by class of worker, North American Industry Classification System (NAICS) and sex, annual (persons)*. Government of Canada. <http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=2820012>, as of March 19, 2018.

Statistics Canada (2017d). *CANSIM Table 282-0078: Labour force survey estimates (LFS), employees by union coverage, North American Industry Classification System (NAICS), sex and age group, annual (persons)*. Government of Canada. <http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=2820078>, as of March 19, 2018.

Statistics Canada (2017e). *CANSIM Table 326-0021: Consumer Price Index (CPI), annual (2002=100)*. Government of Canada. <http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=3260021>, as of March 19, 2018.

Statistics Canada (2017f). *CANSIM Table 384-0037: Gross domestic product, income-based, provincial and territorial, annual (dollars x 1,000,000)*. Government of Canada. <http://www5.statcan.gc.ca/cansim/a26?lang=eng&id=3840037> as of March 19, 2018.

Tax Foundation (2018a). *2018 Tax Brackets*. Tax Foundation. <https://taxfoundation.org/2018-tax-brackets/>, as of March 20, 2018.

Tax Foundation (2018b). *State Individual Income Tax Rates and Brackets for 2018*. Tax Foundation. <https://files.taxfoundation.org/20180315173118/Tax-Foundation-FF576-1.pdf>, as of March 20, 2018.

Tax Policy Center (2018). *Detailed Individual Income Tax Parameters (Including Brackets), 1944–Present.* Tax Policy Center. <http://www.taxpolicycenter.org/statistics/detailed-individual-income-tax-parameters-including-brackets-1944-present>, as of March 20, 2018.

About the authors

Ben Eisen

Ben Eisen is a Senior Fellow in Fiscal and Provincial Prosperity Studies and former Director of Provincial Prosperity Studies at the Fraser Institute. He holds a BA from the University of Toronto and an MPP from the University of Toronto's School of Public Policy and Governance. Prior to joining the Fraser Institute Mr. Eisen was the Director of Research and Programmes at the Atlantic Institute for Market Studies in Halifax. He also worked for the Citizens Budget Commission in New York City, and in Winnipeg as the Assistant Research Director for the Frontier Centre for Public Policy. Mr. Eisen has published influential studies on several policy topics, including intergovernmental relations, public finance, and higher education policy. He has been widely quoted in major newspapers including the *National Post, Chronicle Herald, Winnipeg Free Press* and *Calgary Herald*.

Steve Lafleur is Senior Policy Analyst at the Fraser Institute. He holds an MA in Political Science from Wilfrid Laurier University and a BA from Laurentian University where he studied Political Science and Economics. He was previously a Senior Policy Analyst with the Frontier Centre for Public Policy in Winnipeg, and is a Contributing Editor to *New Geography*. His past work has focused primarily on housing, transportation, local government and inter-governmental fiscal relations. His current focus is on economic competitiveness of jurisdictions in the Prairie provinces. His writing has appeared in every major national and regional Canadian newspaper and his work has been cited by many sources including the Partnership for a New American Economy and the Reason Foundation.

Joel Emes is President of Abacus Economics and a Fraser Institute Senior Fellow who rejoined the Institute after a stint as a senior advisor to British Columbia's provincial government. He previously served as a senior analyst, then as acting executive director, at the BC Progress Board. Prior to that, Joel was a senior research economist at the Fraser Institute where he initiated and led several flagship projects in the areas of tax freedom and government performance, spending, debt, and unfunded liabilities. Joel holds a BA and an MA in economics from Simon Fraser University.

4. Reforming Ontario's Electricity System

Elmira Aliakbari, Ashley Stedman, and Ross McKitrick

Introduction

Policies that foster energy abundance and favour low energy costs play a major role in promoting economic growth and prosperity. Yet policy-makers in Ontario have made a number of poor energy policy decisions, resulting in rising electricity costs, lower overall employment, and reduced competitiveness. Many of these decisions have been motivated by objectives related to environmental protection, but the evidence suggests they have in fact achieved minimal environmental benefits. This essay summarizes the policy reforms needed to correct past mistakes and begin repairing Ontario's electricity market.[1]

How we got here: Policy mistakes have produced high power prices

Before discussing reform solutions we will briefly review the recent history of electricity policy in Ontario, discuss the stated rationale for various policy changes, and present evidence demonstrating the negative resulting long term consequences.

Ontario's approach to electricity policy underwent a fundamental shift around 2005 when the government decided to begin phasing out coal power. The next major step occurred in 2009 when the government

---

[1] This essay is based on the executive summary and individual essays included in the recent Fraser Institute collected essay series entitled *Understanding the Changes in Ontario's Electricity Markets and Their Effects*.

launched its Green Energy Act (GEA). The centerpiece of the GEA was a Feed-In-Tariff program, which provides long-term guaranteed contracts to generators with renewable energy sources (wind, solar, etc.) at a fixed price above market rates. In other words, generators with renewable sources received a fixed price without being subject to competition in the market. In fact, some of these generators were to be paid not for generating electricity, but merely for having generating capacity available on call. In order to fund these commitments, as well as the cost of conservation programs, Ontario levied a non-market surcharge on electricity called the Global Adjustment (GA).

Between 2008 and 2016, the GA grew more than 70 percent, causing a drastic increase in electricity prices. The GA's upward path and its subsequent pressure on electricity rates is a direct consequence of government intervention in the electricity market. A 2015 report by the Auditor General of Ontario concluded that the 20-year guaranteed-price renewable-energy contracts caused electricity consumers in Ontario to pay $9.2 billion more than they would have paid under the province's previous program. This report also found the guaranteed prices offered to wind and solar generators in Ontario were double the market price for wind and three-and-a-half times the market price for solar in 2014 (Auditor General of Ontario, 2015). The high cost associated with aggressively promoting renewable energy sources is particularly troubling given the relatively small amount of electricity generated by these sources. In 2016, for instance, renewable sources generated less than 7 percent of electricity in Ontario while accounting for almost 30 percent of the GA (Jackson et al., 2017).

In addition, as part of the GEA, Ontario consumers poured billions into conservation programs that promised to increase the efficient use of electricity and save consumers money. Many energy efficiency programs were justified on the basis they would save consumers money in the long run by encouraging them to make up-front investments in energy-saving upgrades to their homes. However, subsequent research took a critical look at these programs and found that these programs were costly and inefficient. In fact, the evidence indicates that conservation programs cost about two dollars of taxpayer money for every dollar they save for households (McKitrick and Adams, 2016).

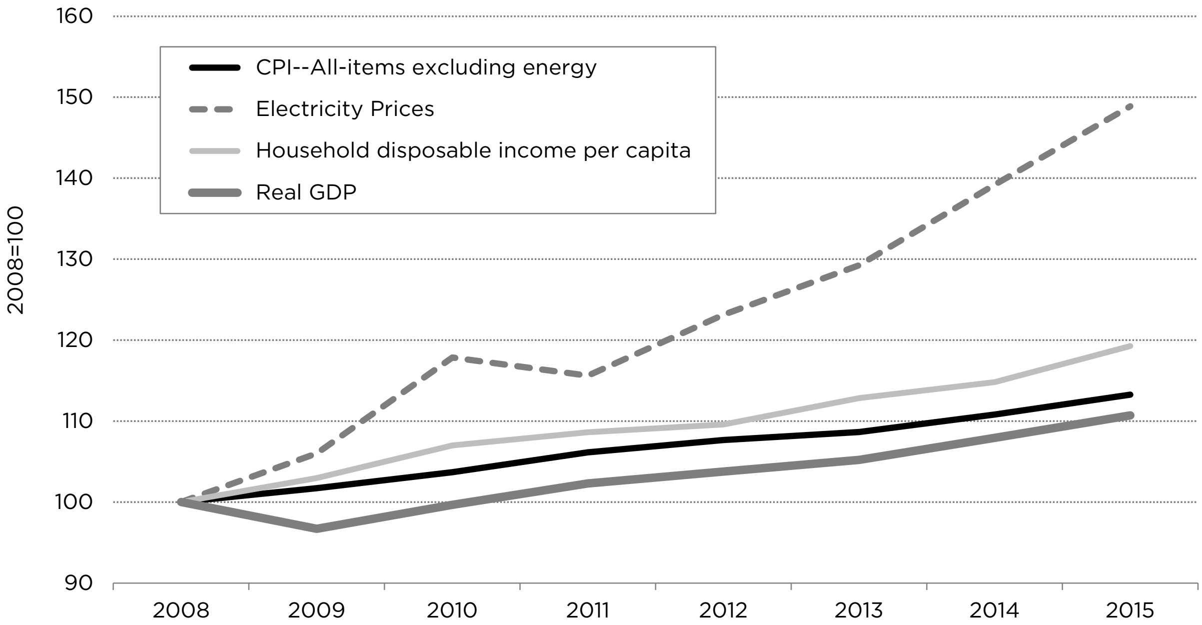
Ontario's decision to phase out coal also contributed to rising electricity costs in the province, a decision justified at the time with claims that it would yield large environmental and health benefits. The subsequent research showed that shuttering these power plants had very little effect on air pollution. Specifically, in the recent study *Did the Coal Phase-out Reduce Ontario Air Pollution?* the authors examined whether the removal of coal from the grid in Ontario explains changes in air pollution levels in Toronto, Hamilton, and Ottawa since 2002. The study found that reductions in fine particulate matter (a common measure of air pollution) were small and, in Hamilton and Toronto, statistically insignificant. The coal phase-out had no apparent effect on nitrogen oxide (NOx) levels, which instead were significantly improved by declining NOx emissions in the United States. The results show a statistically significant reduction in peak ozone levels from the coal phase-out. However, this was offset by a significant increase in those levels associated with natural gas plant emissions (McKitrick and Aliakbari, 2017a). In fact, had the province simply continued with retrofits to the coal plants then underway, the environmental benefits of the shift to renewables could have been achieved at one-tenth the cost (McKitrick, 2013; Aliakbari et al, 2018). This research suggests that Ontario's coal-phase out is another case of well-intentioned government intervention in the electricity sector resulting in higher prices with minimal benefits.

The issue of rising electricity costs in Ontario can also be partly attributed to the imbalances between the supply and demand of electricity. Between 2005 and 2015, the province decided to increase its renewable capacity to facilitate the coal phase-out. However, since renewable sources are not as reliable as traditional sources, the government contracted for more natural gas capacity as a back-up. Meanwhile, the demand for electricity declined, partly due to rising electricity costs. The increase in the total installed capacity, coupled with lower electricity demand, has resulted in excess production being exported to other jurisdictions at a significant loss. The Auditor of General of Ontario, for instance, concluded that from 2009 to 2014, Ontario exported 95.1 million megawatt hours of electricity to other jurisdictions and received about $3.1 billion less than the actual cost to generate that electricity.

Largely as a result of these structural shifts and poor governance, electricity costs have risen substantially in Ontario. Ontario's electricity costs are now the fastest growing in Canada and among the highest in North America. Between 2008 and 2016, Ontario's residential electricity costs increased by 71 percent, far outpacing the 34 percent average growth in electricity prices across Canada. In 2016, Toronto residents paid $60 more per month for electricity than did the average Canadian. Figure 1 displays and compares residential electricity price growth to other measures, including income, inflation (all-items CPI excluding energy), and real Gross Domestic Product (GDP) data in Ontario.

As figure 1 shows, Ontario's residential electricity prices increased by 49 percent between 2008 and 2015, while overall inflation in the province was only 13 percent. This means that between 2008 and 2015 the

Figure 1: Comparative Growth in Electricity Prices, Inflation, and Income, Ontario, 2008 to 2015 (2008=100)



Source: Statistics Canada, CANSIM Table 326-0021 and 384-0040; calculations by authors.

growth in residential electricity prices in Ontario was nearly four times the overall rate of inflation. Ontario's real economic growth between 2008 and 2015 was modest at 11 percent. Ontario experienced a gradual economic decline following the 2008 Great Recession. However, during the same period, residential electricity prices increased by 49 percent. This means that residential electricity price increases outpaced economic growth by 4.6 times between 2008 and 2015. Another helpful comparison is that between the growth in electricity prices and the growth in per-capita disposable income. From 2008 to 2015, nominal disposable income per person in Ontario grew by 19 percent. This means that residential electricity prices increased 2.5 times faster than household disposable income over that period.

Ontario's skyrocketing electricity rates also apply to the province's industrial sector. Between 2010 and 2016, large industrial users in Toronto and Ottawa experienced cost spikes of 53 percent and 46 percent, respectively, while the average increase in electricity costs for the rest of Canada was only 14 percent. In 2016, large industrial users paid almost three times more than competitors in Montreal and Calgary, and almost twice the prices paid by large consumers in Vancouver. Specifically, in 2016, large consumers in Toronto paid 14.7 cents per kilowatt hour while the same type of consumers in Calgary paid only 5.1 cents per kilowatt hour. Some select large industrial consumers were granted rate reductions but still paid higher rates than large electricity users in Quebec, Alberta, and British Columbia.

Soaring electricity costs in Ontario have placed a significant financial burden on the manufacturing sector (a generally energy-intensive sector) and hampered its competitiveness. Ontario used to be a jurisdiction with low electricity costs. This was a source of competitive advantage for the province, helping to attract and keep business and foster economic growth. The price increases described above, however, have fundamentally changed this situation and high electricity prices are now a substantial competitive disadvantage for Ontario firms.

Compared to multiple comparable American and Canadian jurisdictions, Ontario has exhibited the most substantial decline in its manufacturing sector over the past decade. Between 2005 and 2016, while some nearby US states, such as Michigan, boosted their manufacturing sector's share of GDP, Ontario's declined by five percentage points. Manufacturing in all Canadian provinces fell during the 2008 recession but recovered elsewhere in Canada. Only Ontario has failed to recover to pre-recession levels. Overall, Ontario's high electricity prices are responsible for approximately 75,000 job losses in the manufacturing sector from 2008 to 2015. Taking the provincial government's claims for its green energy, job creation initiative at face value, it is estimated that Ontario may have lost at least 1.8 permanent manufacturing jobs for every new job created under the green energy initiative since 2008 (McKitrick and Aliakbari, 2017b).

Policy options for reducing power prices and boosting competitiveness

Given the critically important role that affordable energy plays in economic growth and prosperity, meaningful policy reform aimed at lowering electricity costs for all Ontarians is one of the most important ways that Ontario's new government can help encourage economic growth and investment in the province.

If the government aims to reduce power prices, addressing the cost pressures resulting from the Feed-In-Tariff program and the above-market rates it guarantees to renewable generators is among the most promising avenues for reform. Specifically, similar to many European countries that made costly commitments to renewable energy but then rolled back such policies, Ontario could help contain power prices by cancelling or at least renegotiating these contracts.

In terms of the legalities surrounding the cancellation of the Feed-In-Tariff contracts, legal scholar and Queen's Law Professor Bruce Pardy concluded in a 2014 analysis, *Cancelling Contracts: The Power of Governments to Unilaterally Alter Agreements,* that the government of Ontario could pass laws to change or cancel legally binding agreements as long as they are within their constitutional jurisdiction. Pardy also pointed out that, in Canada, there is no constitutional right to compensation for expropriated property, which strengthens the case that legislatures have the legal authority to cancel or change contracts (Pardy, 2014).

Ontario's new government seems to be taking action on this file. On July 13, 2018, the government committed to putting an end to various new green energy projects in an attempt to reduce electricity bills in the province (Ontario, 2018). Specifically, the government cancelled 758 early stage renewable energy projects, which, according to the government's press release, "will save $790 million to help lower electricity bills." This is welcome news for Ontarians as the termination of these future contracts will prevent future price increases. However, it likely won't reduce electricity prices any time soon. All of the 758 cancelled renewable projects were in the early stages, meaning they had not reached specific milestones or received notice from the government to proceed—which means the government hasn't actually paid these companies for the cancelled projects. Therefore, terminating these contracts will only affect future electricity costs.

To fix existing cost problems and reduce today's high electricity prices for Ontarians, the government must reduce the current Global Adjustment surcharge on electricity. To do this, it should use its legislative powers to cancel existing contracts with renewable generators under the Green Energy Act's Feed-In-Tariff program. In the absence of such legislative action, simply cancelling the contracts may result in huge compensation costs for renewable generators.

Second, scrapping costly conservation programs that encourage consumers to use less electricity is another policy solution that could help lower electricity rates for Ontario. Again, as shown above, these programs are ineffective and impractical especially when the province has surplus electricity (McKitrick and Adams, 2016). Currently, Ontario is exporting vast amounts of electricity to US jurisdictions at a loss, and also paying a significant amount to generators to not generate. Therefore, scrapping conservation programs would be a positive reform as the benefits associated with these programs are not likely to outweigh the high costs. The new government seems to be on course to reverse past mistakes in this regard as it recently announced it was scrapping the so-called "GreenON" program, which offered incentives to households to make their homes more energy efficient.

In short, the Green Energy Act has drastically increased electricity prices in Ontario while producing only minimal environmental benefits. The new government has an opportunity to reverse the mistakes of the past and enact meaningful reforms to Ontario's energy policies. The government should use its legislative powers to nullify both future and existing contracts to reduce the province's artificially high electricity rates.

References

Aliakbari, Elmira, Kenneth P. Green, Ross McKitrick, and Ashley Stedman, eds. (2018). *Understanding the Changes in Ontario's Electricity Markets and Their Effects*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/understanding-the-changes-in-ontarios-electricity-markets-web-final_0.pdf>, as of September 2, 2018.

Auditor General of Ontario (2015). Chapter 3.05, Electricity Power System Planning. *2015 Annual Report*. Office of the Auditor General of Ontario. <http://www.auditor.on.ca/en/content/annualreports/arreports/en15/2015AR_en_final.pdf>, as of September 2, 2018.

Jackson, Taylor, Ashley Stedman, Elmira Aliakbari, and Kenneth P. Green (2017). *Evaluating Electricity Price Growth in Ontario*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/evaluating-electicity-price-growth-in-ontario.pdf>, as of September 2, 2018.

McKitrick, Ross, (2013). *Environmental and Economic Consequences of the Ontario Green Energy Act*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/environmental-and-economic-consequences-ontarios-green-energy-act.pdf>, as of September 7, 2018.

McKitrick, Ross, and Elmira Aliakbari (2017a). *Did the Coal Phase-Out Reduce Ontario Air Pollution?* Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/did-the-coal-phase-out-reduce-ontario-air-pollution.pdf>, as of September 2, 2018.

McKitrick, Ross, and Elmira Aliakbari (2017b). *Rising Electricity Costs and Declining Employment in Ontario's Manufacturing Sector*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/rising-electricity-costs-and-declining-employment-in-ontarios-manufacturing-sector.pdf>, as of September 2, 2018.

McKitrick, Ross, and Tom Adams (2016). *Demand-Side Mismanagement: How "Conservation" Became Waste*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/demand-side-mismanagement-how-conservation-became-waste.pdf>, as of September 2, 2018.

Ontario (2018). *Ontario to Cancel Energy Contracts to Bring Hydro Bills Down*. News release (July 13, 2018). Government of Ontario. <https://news.ontario.ca/mndmf/en/2018/07/ontario-to-cancel-energy-contracts-to-bring-hydro-bills-down.html>, as of July 20, 2018.

Pardy, Bruce (2014). *Cancelling Contracts: The Power of Governments to Unilaterally Alter Agreements*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/cancelling-contracts-power-of-governments-to-unilaterally-alter-agreements.pdf>, as of September 2, 2018..

About the authors

Elmira Aliakbari

Elmira Aliakbari is Associate Director of Natural Resource Studies at the Fraser Institute. She received a Ph.D. in Economics from the University of Guelph, and M.A. and B.S. degrees in Economics, both from the University of Tehran in Iran. She has studied public policy involving energy and the environment for nearly eight years. Prior to joining the Fraser Institute, Ms. Aliakbari was Director of Research, Energy, Ecology and Prosperity with the Frontier Center for Public Policy. She has presented her work at many academic conferences and has been published in the prestigious academic journal *Energy Economics.* Ms. Aliakbari's research has been discussed in prominent media outlets including *the Wall Street Journal*, and her commentaries have appeared in major Canadian and American newspapers such as the *Globe and Mail, Washington Times, National Post, and Financial Post*.

Ashley Stedman

Ashley Stedman is a policy analyst working in the Centre for Natural Resources. She holds a Bachelor of Arts from Carleton University and a Master of Public Policy from the University of Calgary. Prior to joining the Fraser Institute, she held positions with the Macdonald-Laurier Institute, Manning Centre, and the Canadian Federation of Independent Business. Her commentaries have appeared in major Canadian newspapers such as the *National Post, Financial Post, Vancouver Sun*, and *Edmonton Journal*.

Ross McKitrick

Ross McKitrick is a Professor of Economics and CBE Fellow in Sustainable Commerce at the University of Guelph where he specializes in environment, energy, and climate policy, and a Senior Fellow of the Fraser Institute. He has published widely on the economics of pollution, climate change and public policy. His book *Economic Analysis of Environmental Policy* was published by the University of Toronto Press in 2010. His background in applied statistics has also led him to collaborative work across a wide range of topics in the physical sciences including paleoclimate reconstruction, malaria transmission, surface temperature measurement, and climate model evaluation.

5. Ontario Needs to Rethink its Uncompetitive Labour Regulations

Charles Lammam and Hugh MacIntyre

Introduction

Ontario's new government led by Premier Doug Ford has indicated that it wants to make the province more attractive for entrepreneurs and businesses more generally. However, Ontario is hampered by several significant policies that hurt its competitiveness vis-à-vis other jurisdictions. One clear example is its system of labour regulations, which the previous government made more stringent and less competitive with the passage of the Fair Workplace, Better Jobs Act. Stringent and uncompetitive labour regulations not only discourage entrepreneurship, investment, and dynamism in the economy, they also lead to worse outcomes for workers.[1]

While labour regulations are numerous and cover a wide range of economic activity, Ontario stands out—in a bad way—from its main competitors in the United States by not guaranteeing workers choice about whether to join a union and pay union dues. This contributes to an imbalance in Ontario's labour relations laws, which reduces labour market flexibility and dampens economic activity. Premier Ford's government can improve the province's competitive position, particularly relative to nearby manufacturing states, by implementing a "worker choice" law similar to so-called Right-to-Work laws in the United States.

[1] See MacIntyre and Lammam (2014) for a discussion of the theoretical and empirical relationship between labour regulations and economic outcomes.

This essay first examines how Ontario compares to other jurisdictions on providing workers with choice about unionization and union dues, then describes why this is economically important and why worker choice reform would improve Ontario's competiveness. Finally, it considers other issues with Ontario's labour regulations, particularly related to changes made in the Fair Workplace, Better Jobs Act, including the minimum wage.

Worker choice in Ontario and the United States

There are two aspects to worker choice. The first is the choice to join a union that is already established in a workplace. The second is the choice to pay union dues, either in part or in full. Union contracts in Canada can contain a provision that requires a worker to join a union and/or pay full union dues as a condition of employment. In most provinces, including Ontario, this provision is not even a matter of negotiation between the employer and the union; it is included in the union contract either automatically or upon the request of the union.[2] Laws that guarantee workers choice prohibit such a provision from being included in a union contract. Under current law in Ontario, it is problematic to require workers to join a union and pay full dues as a condition of employment, partly because union dues are often spent on activities unrelated to representing workers with their employers—such as political causes—which workers may disagree with.

By contrast, in the United States, the minimum standard in the private sector is that workers are not required to join a union as a condition of employment and they can only be forced to pay partial dues related to union representation with their employer. Indeed, unionized US workers can opt out of dues allocated to political activities including donations to political parties and causes. Moreover, with so-called "Right-to-Work laws," states have the option of expanding this minimum standard and allowing workers to opt out of paying union dues altogether.

Recent expansion of worker choice in the United States

In recent years, there has been considerable expansion of Right-to-Work legislation in the United States. This expansion in worker choice has in-

[2] In four provinces (Alberta, New Brunswick, Nova Scotia, and Prince Edward Island), mandatory union dues can be included in the union contract only if it is agreed to by the employer during contract negotiations (Lammam and MacIntyre, 2015).

Table 1: The Extent of Workers Choice in Ontario and Rust Belt States

	Guarantee union membership opt-out?	Guarantee partial union dues opt-out?	Guarantee full union dues opt-out?
Ontario	No	No	No
Illinois	Yes	Yes	No
Ohio	Yes	Yes	No
Pennsylvania	Yes	Yes	No
Indiana	Yes	Yes	Yes
Michigan	Yes	Yes	Yes

creasingly put Ontario at odds with US jurisdictions including some with which they are in direct competition. Most recently, a US Supreme Court decision (*Janus v. AFSCME*) concluded that all government sector workers in the US have the right to fully opt out of union dues. While this decision does not apply to private sector workers, it constitutes a substantial increase in the number of US workers that have greater worker choice with regards to union dues.

Considerable progress has also been made in expanding worker choice for private sector workers in the US as a growing number of American states have enacted Right-to-Work laws that guarantee workers the choice to completely opt out of paying union dues. Currently 27 states have Right-to-Work laws and with five enacting this legislation since 2012.[3]

Ontario's competiveness is particularly challenged by Michigan and Indiana—two so-called "rust belt" states that are notable among states recently adopting Right-to-Work laws. Both states are not only close to Ontario, they are similar in that they are also traditionally manufacturing hubs (Murphy, Clemens, Emes, and Veldhuis, 2015). For this reason, Michigan and Indiana (along with other nearby rust belt states), are important comparators since they compete with Ontario for investment and general economic activity. So it is unfortunate to see Ontario stand out

3 Missouri was the latest state to pass a Right-to-Work law, but implementation did not occur because the law was voted down in a referendum in August 2018 (https://www.cnn.com/2018/08/07/politics/missouri-right-to-work-vote/index.html) .

among this group for having the lowest level of worker choice (see table 1). Illinois, Ohio, and Pennsylvania all maintain a minimum standard that guarantees workers the choice of opting out of union membership and partially opting out of union dues. Indiana and Michigan guarantee a full opt out of union dues.

Worker choice and economic performance

A considerable amount of research from the United States has shown that increased worker choice in a jurisdiction is associated with improved economic performance. This body of research focuses on the differences between Right-to-Work states and non-Right-to-Work states.[4] For example, one study found that from 1977 to 2010, Right-to-Work laws were associated with increased state-level economic output of 1.8 percent and higher employment of about 1 percent (Zycher, Clemens, and Veldhuis, 2013). Research has also found that Right-to-Work laws contribute to higher average income growth and population migration (Hicks and LaFaivie, 2013).

Importantly for Ontario, several studies have looked specifically at the effect of Right-to-Work on the manufacturing sector. For example, a prominent study published in the prestigious *Journal of Political Economy* found that manufacturing activity increases abruptly when crossing the border from a non-Right-to-Work state to a Right-to-Work state (Holmes, 1998). A more recent study found that the total factor productivity of manufacturing firms within Right-to-Work states is higher than non-Right-to-Work states (Hicks, LaFaive, and Deveraj, 2016). In other words, increased worker choice boosts manufacturing output and productivity. By restricting worker choice, Ontario is at a distinct disadvantage when it comes to attracting manufacturing investment.

Moreover, the US experience suggests that union leaders become more accountable and responsive to their members when workers have more choice. With increased worker choice, union leaders must convince workers the union provides value that justifies the cost of dues. In other words, union leaders can't take financial support of workers for granted, and they have a stronger incentive to be more accountable and responsive to dues-paying workers. A recent American study found that union workers in right-to-work states pay dues that are, on average, 14 to 15 percent less than union members in states with less worker choice (Sherk, 2015). It also found that salaries of union executives tend to be lower in right-to-work states.

[4] For a review of this literature, see Hicks, LaFaive, and Deveraj (2016).

Worker choice in the broader context of labour relations laws

Worker choice is one aspect of labour relations laws, the set of laws and regulations that govern the interactions between employees, unions, and employers. These laws have broad economic implications because they affect labour market flexibility. When a labour market is flexible, workers can more easily move from one employer to another in search of better pay or working conditions. At the same time, in such an environment, employers can reallocate resources to improve profitability or better serve consumers as market circumstances change. Put differently, a flexible labour market better enables both firms and workers to pursue opportunities that ultimately lead to a growing and more prosperous economy.[5]

Labour relations laws increase labour market flexibility when they balance the interests of workers, union representatives, and employers. However, when such laws favour one group over another, prevent innovation, or prescribe outcomes rather than foster negotiation, they can undermine the flexibility of labour markets. Numerous studies have found negative economic consequences associated with unbalanced and overly prescriptive labour relations laws.[6] The lack of worker choice in Ontario is a key reason why the province's labour relations laws are unbalanced and prescriptive compared to laws in the United States (MacIntyre and Lammam, 2014). Guaranteeing greater worker choice in Ontario would help to make provincial labour relations laws more balanced and contribute to greater labour market flexibility.

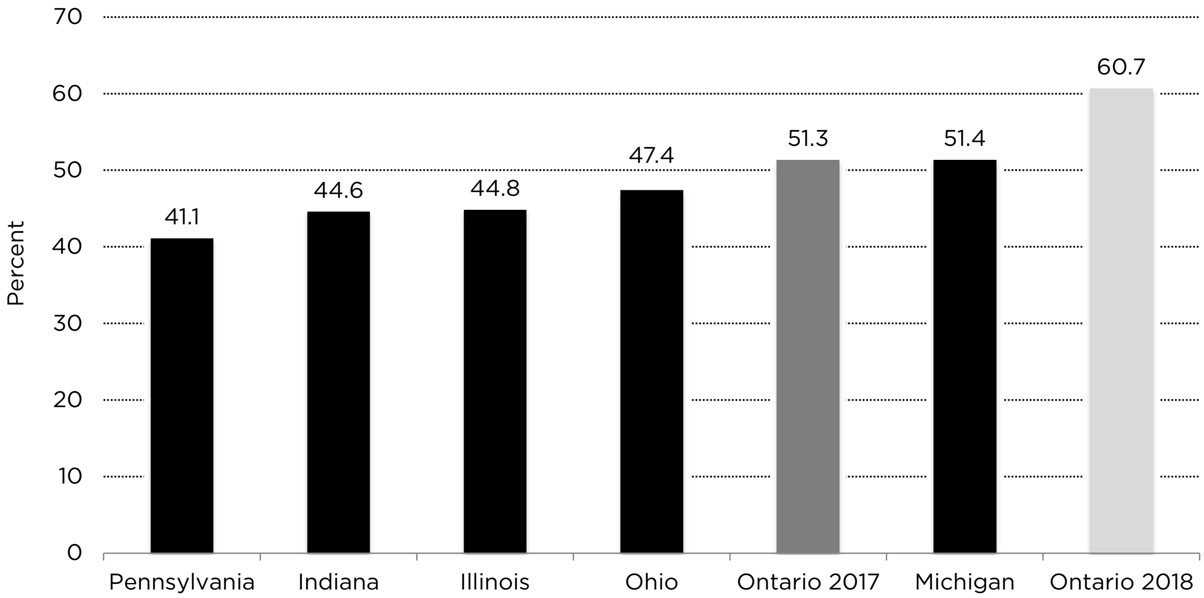
Other labour regulations related to the Fair Workplace, Better Jobs Act

In 2017, the Ontario government led by Kathleen Wynn passed a series of changes to labour market regulations under the banner of the Fair Workplace, Better Jobs Act. The most notable change was the substantial increase to the minimum wage, but the Act contained a number of other important changes. This section briefly discusses why undoing many of these changes would help boost Ontario's competitiveness and, more broadly, its economic performance.

[5] For a more complete discussion on the connection between labour relations laws and labour market flexibility, see MacIntyre and Lammam (2014).

[6] For a review of this literature, see Lammam and MacIntyre (2017)

Figure 1: Minimum Wage Relative to Median Wage in Ontario and Rust Belt States



Note: US figures from Eisen et al (2017) are for 2017, the latest available at the time of writing.

Source: Eisen, Lammam, and Watson (2017).

Ontario's uncompetitive minimum wage rate

On January 1, 2018, Ontario's minimum wage rate increased overnight by 21 percent, a significant increase from $11.60 to $14.00 per hour. However, evidence shows that increasing the minimum wage has many detrimental effects on the employment of young and inexperienced workers. Ontario's large and swift increase in the minimum wage, which put the province out of step with nearby competitors, has likely led to even greater adverse consequences than usual.

Comparing minimum wage rates across jurisdictions is not always a straightforward procedure. Similar minimum wage rates in different jurisdictions can have very different economic effects. For example, the adverse effects of a minimum wage in a jurisdiction with relatively high overall wages would be less than the effects of the same minimum wage in a jurisdiction with lower overall wages (Eisen, Lammam, and Watson, 2017). A common way to compare minimum wage rates across jurisdictions is to look at the ratio between the minimum wage and the median wage. Research has shown that when the ratio is higher (i.e., the minimum wage is closer to the median) the economic effects of the minimum wage are likely to be larger than if the ratio was lower (Eisen, Lammam, and Watson, 2017). In particular, the effects become more negative as the ratio surpasses 50 percent.

Figure 1 displays the minimum-wage-to-median-wage ratio for 2017 in the five rust belt states (Indiana, Michigan, Ohio, Pennsylvania, and Illinois) and Ontario. The figure also displays the ratio for Ontario in 2018, after the minimum wage rate increased to $14.00 per hour. The data for this figure is drawn from Eisen, Lammam, and Watson (2017) and was the latest available at the time it was published. In 2017, at 51.3, Ontario already had a minimum-to-median wage ratio that exceeded 50 and was high relative to most rust belt states. At 51.4, Michigan's ratio was the highest and close to Ontario's. Meanwhile, at 41.1, Pennsylvania had the lowest ratio of the group. As of 2018, however, Ontario's minimum-to-median wage ratio increased considerably, from 51.3 to 60.7. This has given Ontario the highest ratio by a wide margin, putting employers that employ large numbers of inexperienced and less-skilled workers at a competitive disadvantage.

With a high minimum-to-median wage ratio, the adverse consequences of Ontario's minimum wage policy are more severe than if the ratio were lower. For young and low-skilled workers, the adverse consequences include fewer job opportunities, decreased hours available for work, reduced non-wage compensation (fringe benefits), increased automation, and higher consumer prices for affected industries as employers pass along the higher labour costs.[7] Beyond the consequences that that workers face, there is evidence that businesses also suffer and are more likely to shut down when the minimum wage increases (Draca, Machin, and Van Reenen, 2011; Bell and Machin, 2018; Luca and Luca, 2017).

That Ontario's high minimum wage rate has contributed to the province's lack of competiveness is particularly unfortunate given that the policy is ineffective at achieving its primary end—reducing poverty among the working poor. This is primarily because the minimum wage does not efficiently target the poor. In 2015, the latest year of available data, 90.8 percent of workers earning the minimum wage in Ontario did not live in low income families as measured by Statistics Canada's low income cut-off (Lammam and MacIntyre, 2018). Though counterintuitive, it makes sense once we explore their age and family situation. The reality is that most minimum wage earners are not the primary or sole income-earner in their family.

[7] For further discussion on the adverse consequences of raising the minimum wage, see Lammam and MacIntyre (2018).

In 2017, the year before Ontario significantly increased its minimum wage, 59.2 percent of all minimum wage earners were under the age of 25 and the vast majority of them (86.3 percent) lived with a parent or other relative (Lammam and MacIntyre, 2018). Moreover, 17.8 percent of all minimum wage earners had an employed spouse. Of these, 95.7 percent had spouses that were either self-employed or earning more than the minimum wage. Just 2.1 percent of Ontario minimum wage earners were single parents with young children.

The fact that the minimum wage ineffectively targets the poor helps explain why Canadian studies have found that raising the minimum wage does not reduce poverty (Campolieti, Gunderson, and Lee, 2012; Sen, Rybczynski, and Van De Waal, 2011). In fact, Sen, Rybczynski, and Van De Waal (2011) found that raising the minimum wage by 10 percent could lead to a 4 percent to 6 percent *increase* in the percentage of families in low income.[8]

If Ontario's new government is truly interested in providing assistance to the working poor, there are more effective ways of doing so than raising the minimum wage (Lammam and MacIntyre, 2018). For example, the government could consider a work-based subsidy, which is a cash transfer directly from governments to low-income workers—similar to the federal government's Canada Workers Benefit. Such a policy would provide targeted benefits to those in need without producing the negative economic consequences of a minimum wage increase.

Other labour regulation changes

The Fair Workplace, Better Jobs Act included a number of other changes that made labour regulations more stringent. These should also be revoked by the new government. For example, the Act increased labour costs by mandating higher benefits for employees (more paid vacation, paid emergency leave). Research suggests that these policies will have negative economic consequences, particularly for low skilled workers. For instance, research from the International Monetary Fund (IMF) covering 97 countries from 1985 to 2008 finds that increasing the cost of hiring—including mandated increases to leave and paid vacation—contributes to higher unemployment (Bernal-Verdugo, Furceri, and Guillaume, 2012). The same study finds that more stringent and restrictive labour market regulations in general lead to higher unemployment, particularly among youth.

[8] The authors measure low income using Statistics Canada's low income cut-off.

Conclusion

Ontario's labour regulations have made the province increasingly unattractive for entrepreneurship and investment. The new Ontario government under Premier Doug Ford can improve economic outcomes in the province by increasing worker choice. Evidence from the United States indicates that doing so will increase employment, average wages, and economic output. Doing so would also greatly improve Ontario's competitive standing vis-a-vis nearby manufacturing hubs collectively known as the rust belt states.

References

Bell, Brian, and Stephen Machin (2018). Minimum Wages and Firm Value. *Journal of Labour Economics* 36, 1.

Bernal-Verdugo, Lorenzo E., Davide Furceri, and Dominique M. Guillaume (2012). *Labor Market Flexibility and Unemployment: New Empirical Evidence of Static and Dynamic Effects*. International Monetary Fund. <https://www.imf.org/en/Publications/WP/Issues/2016/12/31/Labor-Market-Flexibility-and-Unemployment-New-Empirical-Evidence-of-Static-and-Dynamic-25753>, as of September 2, 2018.

Campolieti, Michele, Morley Gunderson, and Byron Lee (2012). The (Non) Impact of Minimum Wages on Poverty: Regression and Simulation Evidence for Canada. *Journal of Labor Research* 33, 3: 287–302.

Draca, Mirko, Stephen Machin, and John Van Reenen (2011). Minimum Wages and Firm Profitability. *American Economic Journal: Applied Economics* 3, 1: 129–151.

Eisen, Ben, Charles Lammam, and David Watson (2017). *Ontario Enters Uncharted Waters with a $15 Minimum Wage*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/ontario-enters-uncharted-waters-with-a-15-dollar-minimum-wage.pdf>, as of September 2, 2018.

Hicks, Michael, and Michael LaFaive (2013). *Economic Growth and Right-to-Work Laws*. Mackinac Center. <https://www.mackinac.org/S2013-05>, as of September 2, 2018.

Hicks, Michael, Michael LaFaive, and Srikant Devaraj (2016). New Evidence on the Effect of Right-to-Work Laws on Productivity and Population Growth. *Cato Journal* 36, 1: 101–120.

Holmes, Thomas J. (1998). The Effect of State Policies on the Location of Manufacturing: Evidence from State Borders. J*ournal of Political Economy* 106, 4: 667–705.

Lammam, Charles, and Hugh MacIntyre (2014). *Labour Relations Laws in Canada and the United States*, 2014 Edition. Fraser Institute. <https://www.fraserinstitute.org/research/labour-relations-laws-canada-and-united-states-2014-edition>, as of September 2, 2018.

Lammam, Charles and Hugh MacIntyre (2015). *Improving Union Accountability with Worker Choice*. Fraser Institute. <https://www.fraserinstitute.org/studies/improving-union-accountability-worker-choice>, as of September 2, 2018.

Lammam, Charles, and Hugh MacIntyre (2017). *The Economic Effects of Banning Temporary Replacement Workers*. Fraser Institute. <https://www.fraserinstitute.org/studies/economic-effects-of-banning-temporary-replacement-workers>, as of September 2, 2018.

Lammam, Charles, and Hugh MacIntyre (2018). *Increasing the Minimum Wage in Ontario: A Flawed Anti-Poverty Policy.* Fraser Institute. <https://www.fraserinstitute.org/studies/increasing-the-minimum-wage-in-ontario-a-flawed-anti-poverty-policy>, as of September 2, 2018.

Luca, Dara Lee, and Michael Luca (2017). *Survival of the Fittest: The Impact of the Minimum Wage on Firm Exit.* Working Paper Number 17-088. Harvard Business School. <https://www.hbs.edu/faculty/Pages/item.aspx?num=52552>, as of September 2, 2018.

MacIntyre, Hugh, and Charles Lammam (2014). *Labour Relations Laws in Canada and the United States,* 2014 Edition. Fraser Institute. <https://www.fraserinstitute.org/research/labour-relations-laws-canada-and-united-states-2014-edition>, as of September 2, 2018.

Murphy, Robert P., Jason Clemens, Joel Emes, and Niels Veldhuis (2015). *Ontario vs. the US Rust Belt: Coping with a Changing Economic World.* Fraser Institute. <https://www.fraserinstitute.org/studies/ontario-vs-us-rust-belt-coping-changing-economic-world>, as of September 2, 2018.

Sen, Anindya, Kathleen Rybczynski, and Corey Van De Waal (2011). *Teen Employment, Poverty, and the Minimum Wage: Evidence from Canada*. Labour Economics 18, 1: 36–47.

Sherk, James (2015). *Unions Charge Higher Dues and Pay Their Officers Larger Salaries in Non–Right-to-Work State.* Backgrounder No. 2987. Heritage Foundation. <https://www.heritage.org/jobs-and-labor/report/unions-charge-higher-dues-and-pay-their-officers-larger-salaries-non-right>, as of September 3, 2018.

Zycher, Benjamin, Jason Clemens, and Niels Veldhuis (2013). *The Implications of US Worker Choice Laws for British Columbia and Ontario*. Fraser Institute. <https://www.fraserinstitute.org/sites/default/files/implications-for-US-worker-choice-laws-for-BC-and-ON.pdf>, as of September 2, 2018.

About the authors

Charles Lammam

Charles Lammam is the former Director of Fiscal Studies at the Fraser Institute. He holds an MA in public policy and a BA in economics with a minor in business administration from Simon Fraser University.

Hugh MacIntyre

Hugh MacIntyre is a Senior Policy Analyst at the Fraser Institute. He holds an M.Sc. in Political Science from the University of Edinburgh, a Post Baccalaureate Diploma in Economics from Simon Fraser University, and an Honours B.A. from the University of Toronto. Mr. MacIntyre has published over 25 studies and has written over 80 original commentaries appearing in national and regional media outlets including the *Globe & Mail* and the *National Post*. His research covers a wide range of economic policy issues including taxation, government finances, government performance, public-private partnerships, labour policy, income mobility, poverty, and charitable giving.

Acknowledgments for this series

The authors of these chapters thank the anonymous referees for their suggestions and comments. Any remaining errors or oversights are the sole responsibility of the authors. As the researchers have worked independently, the views and conclusions expressed in this paper do not necessarily reflect those of the Board of Directors of the Fraser Institute, the staff, or supporters.

Publishing information

Distribution

These publications are available from <http://www.fraserinstitute.org> in Portable Document Format (PDF) and can be read with Adobe Acrobat® or Adobe Reader®, versions 8 or later. Adobe Reader® DC, the most recent version, is available free of charge from Adobe Systems Inc. at <http://get.adobe.com/reader/>. Readers having trouble viewing or printing our PDF files using applications from other manufacturers (e.g., Apple's Preview) should use Reader® or Acrobat®.

Ordering publications

To order printed publications from the Fraser Institute, please contact:

- e-mail: sales@fraserinstitute.org
- telephone: 604.688.0221 ext. 580 or, toll free, 1.800.665.3558 ext. 580
- fax: 604.688.8539.

Media

For media enquiries, please contact our Communications Department:

- 604.714.4582
- e-mail: communications@fraserinstitute.org.

Copyright

Date of issue

September 2018

ISBN

978-0-88975-509-3

Citation

Ben Eisen, ed. (2018). *Creating Policy Calling Cards to Attract Business to Ontario. Fraser Institute.* <http://www.fraserinstitute.org>.

Supporting the Fraser Institute

To learn how to support the Fraser Institute, please contact

- Development Department, Fraser Institute
  Fourth Floor, 1770 Burrard Street
  Vancouver, British Columbia, V6J 3G7 Canada
- telephone, toll-free: 1.800.665.3558 ext. 548
- e-mail: development@fraserinstitute.org
- website: <http://www.fraserinstitute.org/donate>

Purpose, funding, and independence

The Fraser Institute provides a useful public service. We report objective information about the economic and social effects of current public policies, and we offer evidence-based research and education about policy options that can improve the quality of life.

The Institute is a non-profit organization. Our activities are funded by charitable donations, unrestricted grants, ticket sales, and sponsorships from events, the licensing of products for public distribution, and the sale of publications.

All research is subject to rigorous review by external experts, and is conducted and published separately from the Institute's Board of Trustees and its donors.

The opinions expressed by authors are their own, and do not necessarily reflect those of the Institute, its Board of Trustees, its donors and supporters, or its staff. This publication in no way implies that the Fraser Institute, its trustees, or staff are in favour of, or oppose the passage of, any bill; or that they support or oppose any particular political party or candidate.

As a healthy part of public discussion among fellow citizens who desire to improve the lives of people through better public policy, the Institute welcomes evidence-focused scrutiny of the research we publish, including verification of data sources, replication of analytical methods, and intelligent debate about the practical effects of policy recommendations.

About the Fraser Institute

Our mission is to improve the quality of life for Canadians, their families, and future generations by studying, measuring, and broadly communicating the effects of government policies, entrepreneurship, and choice on their well-being.

Notre mission consiste à améliorer la qualité de vie des Canadiens et des générations à venir en étudiant, en mesurant et en diffusant les effets des politiques gouvernementales, de l'entrepreneuriat et des choix sur leur bien-être.

Peer review—validating the accuracy of our research

The Fraser Institute maintains a rigorous peer review process for its research. New research, major research projects, and substantively modified research conducted by the Fraser Institute are reviewed by experts with a recognized expertise in the topic area being addressed. Whenever possible, external review is a blind process. Updates to previously reviewed research or new editions of previously reviewed research are not reviewed unless the update includes substantive or material changes in the methodology.

The review process is overseen by the directors of the Institute's research departments who are responsible for ensuring all research published by the Institute passes through the appropriate peer review. If a dispute about the recommendations of the reviewers should arise during the Institute's peer review process, the Institute has an Editorial Advisory Board, a panel of scholars from Canada, the United States, and Europe to whom it can turn for help in resolving the dispute.

Editorial Advisory Board