Policy Forum: Business Tax Reform in the United States and Canada

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PRÉCIS
Les auteurs examinent certains des aspects clés de la Tax Cuts and Jobs Act (TCJA) des États-Unis, et discutent de leurs effets sur les revenus des sociétés et des gouvernements canadiens. Ils montrent que l’avantage fiscal dont jouissait le Canada avant la TCJA a grandement diminué, tant en ce qui a trait aux taux d’imposition (marginaux et moyens) prévus par la loi qu’aux taux d’imposition réels. Ils examinent les effets économiques que pourront avoir les réactions possibles des gouvernements canadiens à la TCJA, y compris la réduction des taux prévus par la loi et l’accélération des déductions pour amortissement fiscal. En ce qui concerne l’avenir, les auteurs soutiennent qu’il serait préférable de se concentrer sur une réforme fiscale plus fondamentale reposant sur l'imposition des rentes économiques.

ABSTRACT
The authors examine some of the key features of the US Tax Cuts and Jobs Act (TCJA) and discuss the implications for Canadian corporations and government revenues. They show that the tax advantage that Canada enjoyed prior to the TCJA has declined significantly, in terms of both statutory and effective (marginal and average) tax rates. They discuss the economic effects of possible responses to the TCJA by Canadian governments, including cutting statutory rates and accelerating tax depreciation deductions. Looking ahead, the authors argue that it would be preferable to focus on a more fundamental tax reform based on the taxation of economic rents.

KEYWORDS: TAX REFORM ■ CORPORATE TAXES ■ INVESTMENT ■ TAX RATES

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INTRODUCTION
In 2018, following the passage of the Tax Cuts and Jobs Act (TCJA), the United States embarked on a major tax reform. Since embarking on its own corporate tax reforms in 2000, Canada has long imposed lower corporate tax rates than the United States, whether measured on the basis of statutory rates or marginal effective tax rates (METRs) on new investment. While there is considerable uncertainty regarding the impact of the TCJA, it is clear that those tax differentials have now disappeared.

In this short article, we summarize the key corporate tax provisions of the TCJA. According to our calculations, it is likely that, absent a Canadian response, both business investment and corporate tax revenues in Canada would fall. The federal government announced its initial response to the TCJA in November 2018, choosing to adopt some of the investment incentives of the TCJA but eschewing changes to the statutory corporate tax rate. Given the magnitude of the changes in the TCJA, however, some further response is likely required in the future. But what should it be?

Some commentators have called for a significant statutory tax rate cut to restore Canada’s “tax advantage” in terms of the rate differential with the United States. We argue that such a response would be a mistake. The revenue cost of a comparable rate cut is simply too large relative to the anticipated economic benefits. As we discuss below, this reflects the windfall gain that a tax cut would imply for existing capital owners, as well as certain international provisions of the TCJA, which make rate cuts an especially ineffective tool for reducing the effective tax rate on Canadian investment by US-owned multinational corporations (MNCs).

The call for rate reductions in this case reflects the “low rates, broad base” dictum that is commonly heard from tax economists. In most instances, this is a sensible guide to effective and efficient tax policy, but corporate taxation—and taxes on business investment in particular—are one area where the standard advice may fail. Instead, in our view, an optimal business tax system should use investment deductions that narrow the tax base in order to reduce the effective tax rate on new investment, while preserving relatively high average taxation of corporate profits overall, most particularly on “above-normal” profits (so-called economic rents). In some respects, the changes announced in the November 2018 economic statement can be viewed as a move in this direction, although we think that more could be done.

IMPACTS OF THE TCJA
The TCJA is a complex tax reform, and many aspects of the Act await clarification. Nevertheless, some key changes can be highlighted and their implications for US...
and cross-border corporate decision making can be sketched. In particular, statutory tax rates have fallen substantially: with the TCJA, the federal statutory corporate income tax rate has dropped from 35 percent to 21 percent. While the total statutory rate depends on the location (the US state) of business operations and other factors, headline rates in the United States are for the first time in two decades about as low as they are in Canada. Moreover, writeoffs for new investments in machinery and equipment have increased: there is immediate (100 percent) expensing of investment in equipment. As well, there are new restrictions on interest deductions, which are now limited to 30 percent of adjusted taxable income.

To capture how the TCJA affects business choices, we focus on changes in the METR and the average effective tax rate (AETR). The METR measures how taxes increase the required minimum rate of return on a marginal investment—the so-called hurdle rate of return. It is a summary measure of how tax rates, tax deductions and credits, and other taxes on capital affect the level of corporate investment. The AETR is a summary measure of the extent to which the tax system affects the economic income, or economic rent, generated by a discrete investment project. It measures the present value of the taxes associated with an investment project relative to the present value of the pre-tax revenue stream from the project. Since investment location decisions are discrete by nature, the AETR is often viewed as being a key determinant of the location of investments across various jurisdictions.

Prior to the TCJA, Canada enjoyed a substantial METR advantage over the United States (see figure 1). By our calculations, the aggregate METR in Canada was 19.9 percent in 2018, before November 21, substantially lower than the 33.2 percent rate for the United States prior to the TCJA, and 15.7 percent in manufacturing, compared to 30.7 percent for the United States pre-reform. These rates fall dramatically with the TCJA, but the precise details depend on specific features of the reform. Where the interest limitation is not binding, and assuming that bonus depreciation remains in place for equipment, the METR in the United States falls to 17.0 percent in aggregate and 13.1 percent in manufacturing, just lower than the corresponding rates for Canada.

Other aspects of the TCJA push against this development. For firms for which the interest limitation is binding, the US METR is 24.2 percent in aggregate and

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3 Bonus depreciation drops to 80 percent in 2023, 60 percent in 2024, 40 percent in 2025, and 20 percent in 2026.

4 Adjusted taxable income is similar to earnings before interest, taxes, depreciation, and amortization (EBITDA) through 2021 and earnings before interest and taxes (EBIT) thereafter. Beginning in 2022, the rules therefore become tighter, so that many more US corporations will subject to the limits.

5 Our METR calculations will no doubt differ somewhat from those reported by others because of differences in the underlying parameters employed in the model, but they are of the same order of magnitude.

6 Here we focus on the EBIT rule for interest limitations, which is to become effective after 2021, and which are likely to apply to a much higher proportion of firms than the current EBITDA rule.
20.6 percent for manufacturing, both remaining higher than current Canadian rates. This shows how the interest limitation lowers the effective rate at which capital expenses may be deducted against income, raising the portion of marginal investment returns that are subject to taxation, even under bonus depreciation.

This brief summary masks the sharp differences in US METRs across assets and industries, and over time as the parameters of the TCJA change in future years. Bonus expensing of expenditures on equipment is temporary. Moreover, since bonus depreciation applies only to equipment, it lowers the METR for equipment relative to buildings and other assets such as inventories and land. Thus, inter-asset distortions increase significantly under the TCJA when bonus depreciation is in place. This is then reflected in differences in sectoral METRs because of differences in asset shares. The interest limitation will be binding for some firms and not others, depending on their reliance on debt financing as it relates to adjusted taxable income. This introduces further distortions and variation in the METR across firms and sectors, depending on their underlying circumstances.

The AETR in the United States declines from 34.7 percent to 22.1 percent in aggregate under the TCJA, roughly equivalent to the Canadian average of 22.5 percent. In contrast to the METRs, there is little variation across sectors and scenarios.
This reflects the fact that the AETR is in fact a weighted average of the statutory tax rate and the METR—with the weight on the former rising in the assumed rate of return to the investment project.\(^7\) For this reason, the AETR is relatively unaffected by the base-specific features of the TCJA reform, such as whether bonus depreciation is paid or whether the interest limitation is binding.

It is an open question how much these changes are likely to affect business investment in the United States. A study of earlier episodes of bonus depreciation in the United States found that expenditures on eligible capital assets fell by 10 percent to 17 percent, relative to contemporaneous changes for ineligible assets.\(^8\) This suggests a rather large elasticity of investment with respect to METRs. However, previous episodes occurred in periods of weak economic performance (2001-2004 and 2008-2011), when more firms faced cash flow and other pressures that would increase the importance of tax incentives. The impact of bonus depreciation might well be smaller in the current period of strong economic growth in the United States.

Whatever its implications for business investment, the TCJA will affect tax revenues in Canada. MNCs use a variety of tax-planning strategies to exploit tax rate differences between countries, shifting profits from high-tax to low-tax jurisdictions. Corporations may, for example, manipulate transfer prices for cross-border trade between affiliates; they may lend to affiliates in high-tax countries to generate tax-deductible interest payments; and they may locate intellectual property and other intangible assets in low-tax countries to reduce worldwide total tax payments.

Thus, the statutory rate reduction under the TCJA is likely to affect profit shifting and tax revenues in Canada.\(^9\) Majority-owned US affiliates in Canada paid Cdn$8.9 billion in federal and provincial income taxes on average during 2014-2016.\(^10\) A recent survey of empirical research concludes that a 1 percentage point increase in a country’s statutory corporate tax rate relative to the rates of its trading partners

\(\text{\footnotesize \(7\) We assume a rate of return in the AETR calculations of 20 percent, which is approximately four times the hurdle rate of return. Results are fairly robust to this assumption. With an assumed return of 10 percent, the average AETR falls by approximately 2 percentage points, and it remains quite uniform across sectors.}\)


\(\text{\footnotesize \(9\) Our calculations in this section focus on profit-shifting responses by US affiliates in Canada and ignore possible profit shifting by Canadian-resident MNCs with affiliates in the United States. While there might be some increase in profit shifting to the United States through transfer pricing and other tax-planning strategies, there are reasons to expect the response of Canadian MNCs to be more muted than for inbound investment by US MNCs.}\)

\(\text{\footnotesize \(10\) The data are from United States, Bureau of Economic Analysis, “Comprehensive Data on Activities of Foreign Affiliates” (www.bea.gov/international/di1usdop). We exclude corporations in the mining and the oil and gas sectors, where different tax rules and far lower effective tax rates apply, and where taxable income is highly variable from year to year. The data are converted to 2016 real Canadian dollars at annual average exchange rates, deflated by the consumer price index.}\)
partners decreases reported taxable income by 1.5 percent owing to profit shifting.\textsuperscript{11} But this survey includes multinational foreign affiliates in tax havens, where income is typically more sensitive to tax differentials; another recent study of US foreign affiliates found that responsiveness to tax differentials with high-tax countries was only half as large.\textsuperscript{12} Taking these results as our range of estimates for the semi-elasticity, this would imply that the 12 percentage point tax rate reduction under the TCJA would cause annual revenue losses to Canadian governments of Cdn$800 million-$1.6 billion.

This analysis considers the effects of US rate reductions alone. But other features of the TCJA will exert an influence too. The new and tighter earnings-stripping rules (interest limitations) will be binding for some US MNCs, reducing leverage of US parents and, absent any policy response in Canada, possibly leading to some additional shifting of debt to Canadian affiliates. Some perspective on these issues can be gleaned from examining the experience of Germany, which introduced a similar earnings-stripping rule in 2008. A recent study found that this measure led German MNCs to substitute toward other, unregulated forms of debt, leaving group-total leverage largely unchanged.\textsuperscript{13} In particular, borrowing by foreign affiliates unaffected by the rules may rise. A response to the TCJA by Canadian affiliates of US MNCs of a similar magnitude to that suggested by these studies would result in tax revenue losses of several hundred million dollars annually, in the absence of any change in tax rules in Canada.

\textbf{INTERNATIONAL TAX PROVISIONS OF THE TCJA}

The TCJA also incorporates fundamental reforms to the system of international taxation. The traditional US system of “worldwide” income taxation, levied on repatriated dividends of foreign subsidiaries with credits of foreign taxes paid, has been abandoned. In this sense, the United States has joined Canada and most other high-income countries in adopting territorial taxation, excluding from the tax base most active business income that is earned abroad. But other aspects of the TCJA are far from territorial, and could have significant implications for investment in Canada.

Most notably, the TCJA applies a new minimum tax rate on offshore income of US MNCs through the global intangible low-taxed income (GILTI) provisions. (Despite its name, GILTI has nothing to do with intangible assets per se.) Because


the new tax on GILTI is applied to subsidiary income as it accrues, and not merely on repatriation, US taxation of foreign subsidiaries is arguably even more important than before. GILTI tax applies at a rate of 10.5 percent of the grossed-up net tested income (NTI) of controlled foreign corporations in excess of 10 percent of qualified business assets (QBAs).\footnote{NTI is essentially EBITDA, and QBAs are essentially book value of tangible capital assets based on the alternate depreciation system (ADS), generally depreciated at slower than the standard rates in the US tax system.} A credit is then given for 80 percent of foreign taxes paid by affiliates. The upshot is that GILTI taxes will be paid when the average foreign tax rate on US MNCs is less than 13.125 percent (10.5 percent divided by the 80 percent credit rate).\footnote{The GILTI tax rate is scheduled to rise to 13.125 percent in 2026, so that GILTI taxes will apply where the effective foreign tax rate is less than 16.4 percent.}

For the purposes of the GILTI calculation, NTI, foreign taxes paid, QBAs, etc., are pooled on a worldwide basis. This means that the relevant foreign tax rate is the average across all countries in which the US parent has subsidiaries. While Canada may not appear, at first glance, to be a low-tax jurisdiction in the sense of GILTI, because of worldwide pooling it is quite possible that many or even most US MNCs operating in Canada will pay tax on GILTI, even in respect of Canadian-source income.

Even absent pooling, the average tax rate facing businesses in Canada can be quite low in some circumstances. The average tax rate for US-controlled affiliates in Canada reported in official US government statistics is about 15 percent, far below the average statutory tax rate on taxable income of about 26.5 percent. This reflects the various deductions and credits available under Canadian tax rules, such as accelerated capital cost allowances; tax credits for research and development, and other tax-favoured expenditures; the exemption of corporate dividends received, and so on. So even a US MNC without tax-haven affiliates might be subject to the GILTI tax on its Canadian operations. Recent research, while admittedly speculative at this stage, suggests that one-half or more of US MNCs are likely to be subject to GILTI taxes.\footnote{Kimberly A. Clausing, “Profit Shifting Before and After the Tax Cuts and Jobs Act,” October 29, 2018 (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3274827).}

All this suggests that GILTI has become an important part of tax-planning decisions for US MNCs, and it presents new challenges for Canadian policy makers. US tax policy has become extraterritorial in ways that the previous system was not, particularly because GILTI taxes are due on accrual of foreign income rather than on repatriation of foreign dividends—which were frequently long deferred or “permanently reinvested” under the old system.

However, even when a Canadian affiliate becomes subject to GILTI, the direction of distortions to investment decisions is ambiguous. First, because GILTI is computed on a worldwide basis, taxes paid in Canada contribute to foreign tax credits
that offset (80 percent of) GILTI taxes that would otherwise be due on tax-haven income of US MNCs. In this sense, the GILTI provisions create an incentive to shift business activity and profits to Canada that is at least as strong as the intended effect of substitution toward US operations. Second, the deduction for 10 percent of QBA creates a new tax shield that may induce US MNCs to acquire (relatively low-return) tangible assets abroad as a means of reducing GILTI tax liabilities.

**Canada’s Reform Options**

As a part of the fall economic statement released on November 21, 2018 the federal government indicated that in response to the TCJA, it is introducing accelerated tax depreciation for capital expenditures. By our calculations, this will lower the aggregate METR in Canada by about 4 percentage points, from 19.9 percent to 15.8 percent, which is slightly lower than the 17.0 percent US METR with the TCJA under one scenario (figure 1). The effect is uneven across sectors, with manufacturing and forestry enjoying a substantially greater reduction than the other sectors.

While accelerated depreciation strikes us as a relatively measured initial response to the TCJA, we think that further reforms are needed in the future. Next we consider two alternative and more far-reaching reforms that Canada might adopt in response to the US tax reform.

First, consider the impact of a 10 percentage point statutory tax cut, lowering the combined federal-provincial average statutory corporate income tax rate from about 27 percent to 17 percent. This would nearly match the magnitude of the US rate reduction and keep the rate differential almost unchanged. Our calculations show that the aggregate METR in this case would fall to 12.7 percent (figure 1). Moreover, the reduction is more uniform across sectors than in the post-November 2018 scenario, because the reduction in the statutory tax rate benefits all types of capital relatively equally. The aggregate AETR falls substantially, to 14 percent.

A statutory rate cut of this magnitude could be achieved only at very substantial revenue cost. Using 2016 data on federal corporate income tax revenue, a mechanical calculation of the immediate impact of a 10 percentage point reduction in the federal statutory rate, with no associated change in the tax base, suggests a reduction in revenue of about $22 billion per year. The disproportionately high fiscal cost of
achieving METR reductions in this way reflects the fact that statutory tax rate reductions result in windfall capital gains for owners of existing assets, as well as tax reductions for future investments. Only the latter affects business decisions or productivity in the long run, but both cost the government revenues.

Revenues forgone do not represent a social cost per se, since they might be replaced by other taxes with a lower social cost. Economic studies have shown that as much as one-third to one-half of the burden of corporate taxes is ultimately borne by workers in the form of lower wages, presumably owing to the effects of the tax on business investment and labour productivity, which would lower the social cost of corporate tax cuts. But there are reasons to believe that the effects on labour income in Canada are smaller than these estimates would suggest. In particular, many recent estimates are derived from studying corporate income taxes that are levied at the local or regional level,21 which are apt to have stronger effects on flows of capital and labour than a Canada-wide tax change would have.

Another approach would be to abandon the corporate income tax structure altogether and replace it with a tax on “economic rents,” which is corporate income generated in excess of that suggested by the hurdle rate of return on capital. In a forthcoming paper, we examine this alternative in more detail, focusing on a simple variant of the approach, a cash flow tax.22 Our calculations show that the aggregate METR under this scenario declines substantially, to just under 2 percent, with very little variation across assets and sectors; however, the METR on manufacturing is actually negative at −6.2 percent because of some tax credits, which we assume would be maintained (figure 1). The AETR falls only slightly because it depends largely on the statutory tax rate, which does not change in our simulations. This approach results in a tax system that is virtually “neutral” or non-distortionary. While a rent-based tax on corporations would result in some revenue losses over time, the losses would be lower than those associated with a statutory rate cut, because the tax would apply to new investment only and would not result in a windfall gain to past investments.23

calculation may be somewhat excessive, however, because of the effect of tax losses carried forward and other ways in which the statutory tax rate does not apply to all taxable income. We assume commensurate reductions to the dividend tax credit, which we estimate would reduce its revenue cost by approximately $3 billion annually.


22 Ken McKenzie and Michael Smart, Tax Policy Next to the Elephant: Business Tax Reform in the Wake of the Tax Cuts and Jobs Act (Toronto: C.D. Howe Institute, forthcoming). A cash flow tax involves the immediate expensing of all capital expenditures coupled with the complete elimination of interest deductibility. Other approaches to rent taxation include the capital allowance account (CAA) approach and the allowance for corporate equity (ACE) approach; see Robin Boadway and Jean-François Tremblay, Modernizing Business Taxation, C.D. Howe Institute Commentary no. 452 (Toronto: C.D. Howe Institute, June 2016).

23 McKenzie and Smart, supra note 22.
The new global minimum tax imposed on US-resident MNCs under the GILTI provisions of the TCJA also changes the calculus of rate cuts in Canada. Because of the worldwide pooling approach of GILTI, reductions in Canadian taxes would lower foreign tax credits of a US MNC that is subject to the GILTI tax. In such circumstances, 80 percent of any reduction in Canadian taxes could be offset by increased taxes on GILTI. This is a variation of the so-called treasury transfer effect that existed under the previous US worldwide approach to international taxation. But previously the offsetting effects applied only on repatriation of dividends to the US parent, and were absent entirely in the case of permanently reinvested dividends. Under the new accrual-based approach to worldwide taxation, the logic of the treasury transfer effect assumes greater importance for host-country governments like Canada’s.

Both METRs and AETRs decline under all three of the reform scenarios. Thus there might be additional behavioural responses on the part of firms that would lead to an increase in real domestic investment and in the corporate tax base in the long run, moderating the projected revenue losses to some extent.

CONCLUDING REMARKS

We have argued that the TCJA is likely to have significant impacts on business investment and corporate tax revenues in Canada. Given the close integration of the Canadian and US economies, commensurate responses in Canadian tax policy are required. The federal government has thus far adopted a measured approach, but we think that more is required. On balance, taking account of the potential effects on real investment, profit shifting, and revenues, we come down on the side of a fundamental tax reform in the nature of a rent-based tax, such as a cash flow tax. A fundamental tax reform of this nature would require more analysis, and would no doubt give rise to legal and administrative challenges associated with any major reform.24 However, the US move to bonus expensing and the elimination of interest deductibility in certain circumstances, which is consistent with the cash flow approach, does provide some precedent.

While the TCJA poses significant challenges for Canada, it also provides an opportunity to make a bold move toward a corporate tax system that is grounded in sound tax-policy principles, is less distortionary, promotes economic growth and prosperity, and restores Canada’s tax competitiveness on a worldwide basis.

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24 It should be noted that since a cash flow tax involves a change in the tax base, it would directly affect provincial revenues from corporate taxation.