



THE SCHOOL OF PUBLIC POLICY

SPP Research Papers

Volume 8 • Issue 24 • May 2015

THE PROBLEM WITH THE LOW-TAX BACKLASH: RETHINKING CORPORATE TAX POLICIES TO ADJUST FOR UNEVEN REPUTATIONAL RISKS

Jack M. Mintz and V. Balaji Venkatachalam[†]

SUMMARY

When a major corporation is found to be paying little or no taxes, public backlash and media furor over the issue may ensue. Some governments may well be just fine with it, while others like U.S. may take steps to ensure companies pay more tax. Sometimes, companies being in a non-taxpaying position properly reflects appropriate tax policy. That explanation, however, does not sell lattes, which is why in 2012, after the British public grew outraged over the discovery that Starbucks was paying no corporate taxes in the U.K., the coffee retailer actually volunteered to just write a cheque to the government. The reputational damage to Starbucks' brand, the company calculated, was not worth the money it was saving in avoiding taxes, even if it was doing so perfectly legally.

The fear of this kind of reputational damage can foil the very taxation policies that governments design specifically as a means to tax corporations fairly, efficiently and competitively. It may be good tax policy to allow corporations various deductions, or the ability to carry forward or carry back losses, but it can be politically vexatious. U.S. President Barack Obama demonstrated that explicitly when he suggested certain American companies using so-called tax inversions to relocate their headquarters to low-tax jurisdictions, were failing in their "economic patriotism."

Yet more multinationals than ever are legally and quite appropriately using tax strategies to minimize their taxes in various jurisdictions to the point where they are paying little to no corporate tax. For some corporations, the risk of public backlash is greater than it is for others: Starbucks and Facebook, being consumer-facing companies with a great deal of brand goodwill, have a lot more at risk than do Pfizer and Oracle. This risk makes the playing field for taxation less level, jeopardizing the fundamental tax principle of horizontal equity — that those of similar means should pay similar taxes. If Starbucks feels pressured to pay extra taxes, then the tax system is not functioning optimally.

This emerging reputational risk is a new dimension governments are going to have to take into account when designing tax policy. Understanding that there is more to consider than the financial implications of a tax policy should and will have an effect on the way policies are designed. One important approach that governments should take is to avoid the practice of targeted tax incentives, such as tax holidays or accelerated depreciation. The reputational risk will see some companies willing to take the government up on tax breaks, but others may prefer to pass. Better to focus on more general corporate tax reductions, which will be less distortive and unfair to those companies at greater risk of reputational damage.

In some jurisdictions, governments could also consider requiring some level of minimum taxation (as Ontario does), ensuring that every profitable company pays at least something every year. This will have an impact on economic efficiency, but it will help level the playing field for all corporations, regardless of their varying degrees of reputational risk.

The most effective measure still available to governments is one they should be pursuing anyway: tax levels that are internationally competitive and, therefore, broaden the corporate tax base while promoting neutrality. Canada's several targeted programs — such as accelerated depreciation for manufacturing equipment and a generous capital-cost allowance for liquefied natural gas plants — only hurt neutrality. They also make it more likely that a particular company may find itself in an uncomfortable controversy, as Starbucks did. Focusing on international tax competitiveness, rather than targeted tax breaks, is the way to build the fairest system for all companies, whether they are nervous about their reputation or not.

[†] Director and Palmer Chair, and Research Associate, respectively, at The School of Public Policy. A version of this paper was prepared for the PWC Tax Policy Roundtable on Reputational, Regulatory and Political Risk in Tax Evasion and Tax Avoidance, held in Calgary in March 2014 and Toronto in November 2014. We wish to thank participants as well as two anonymous referees, Tom Neubig (OECD), and the editor, Stephen Richardson, for their comments that helped improve the paper.

After the Great Recession of 2008–09, public concerns have been raised with respect to reports of large multinationals paying little or no corporate tax in their jurisdictions. A debate about tax fairness has been at the forefront in the United Kingdom and United States after several large multinationals were reported as paying little or no corporate income tax, including Starbucks, Bank of America, General Electric, Pfizer, Lilly, Oracle, Facebook, Apple, Microsoft, Verizon, and Federal Express. Starbucks, hurt by a negative impact on its brand image, subsequently volunteered to pay more corporate income tax to the U.K. government to quell criticism.¹

Controversies around companies paying little or no corporate tax are not new. For example, in 1993, the Ontario government implemented a minimum tax rate of four per cent on corporations in the interest of “fairness,” since several large corporations were paying little or no tax. The United States has invoked an Alternative Minimum Tax on corporations, individuals, estates and trusts as far back as 1969 (the current tax was introduced in 1982). Recently, U.S. President Barack Obama proposed a new one-time 14 per cent tax on accumulated multinational untaxed foreign earnings, as well as a 19 per cent tax on future foreign earnings (foreign corporate income taxes paid by U.S. foreign affiliates would be credited against the U.S. levy).

Of course, corporations pay other taxes, as pointed out by the Technical Committee on Business Taxation, which showed that business taxes relative to business net value added rose from 15 per cent in 1952 to 18 per cent in 1995.² Profit-sensitive taxes on businesses however, noticeably declined during this period, but were more than offset by profit-insensitive taxes such as sales taxes on business inputs, payroll and property taxes.³

Whether corporate taxes are “fair” or not is also subject to a longstanding debate. Economists point out that the corporate tax is passed on to workers, shareholders or consumers who benefit from corporate activities. As Canadian companies raise their capital from international markets, which determine the cost of funds, corporate taxes are largely shifted onto workers or domestic consumers, resulting in lower real wages. While economists might argue that corporate taxes might even be regressive under these circumstances, political debate ignores these arguments since corporations are perceived to be powerful and should pay their “fair” share.⁴ After all, “fairness is in the eye of the beholder.”

Fairness is also related to the division of revenues across nations. A country’s “fair share” of the worldwide tax base, which is a principle of inter-nation equity, is influenced by domestic and international factors. Today, companies operate in a global environment, where flow of capital and goods can move with ease. A country with an attractive environment for capital will have a larger share of the worldwide tax base.

¹ Tom Bergin, “Starbucks to move European base to London, pay more UK tax,” Reuters, April 16, 2014, <http://uk.reuters.com/article/2014/04/16/uk-starbucks-unitedkingdom-idUKBREA3F03820140416>.

² Canada. Technical Committee on Business Taxation, *Report* (Ottawa: Department of Finance, 1997), Chapter 1.

³ For a recent analysis of business tax payments and compliance time by country, see PWC, *Paying Taxes 2014*, <http://www.pwc.com/gx/en/paying-taxes/assets/pwc-paying-taxes-2014.pdf>. One important difference between the analyses of the Technical Committee and that of PWC is that the PWC tax rate is calculated as all forms of business taxes on capital and labour as a share of profits before deduction of taxes, instead of measuring these taxes as a share of business value added (the latter being the returns to capital and labour). The latter tax rate is preferable, since a profit-based tax rate incorporating labour taxes is biased against labour-intensive industries. See also K. McKenzie, J. Mintz and K. Scharf, “Measuring Effective Tax Rates in the Presence of Multiple Inputs: A Production Based Approach,” *International Tax and Public Finance* 4, 3 (1997): 337, 359.

⁴ See Richard Bird, “Why Tax Corporations,” Working Paper 96-2 (Ottawa: Technical Committee on Business Taxation, Department of Finance, 1996).

There is also a tendency in the mainstream discussion of corporate tax avoidance to have a generalist overtone, which lacks a clear understanding of tax practices of multinational corporations. Tax planning coupled with international interaction among economies can result in lower taxes for companies. Most of the debate around the study of base erosion and profit shifting (BEPS), promulgated by the G20 countries, has a populist angle. Yet, tax planning by companies arises from differences in tax policies among countries. And these countries use tax policy as a direct tool to secure relative economic advantage.

Taxation policy is therefore important to countries not just for revenues but also to encourage investment. As the Advisory Panel on Canada's System of International Taxation pointed out, a competitive country attracts⁵ new, innovative companies, which in turn fosters innovation and results in more employment opportunities.

This paper specifically examines effective tax rates on Canadian businesses, which have not been the subject of much analysis in recent years. Tax paid by Canadian corporations does not garner the same media coverage as corporate tax rates do in other countries. This is a result of several factors. Canadian governments in the past decade-and-a-half have looked to reduce the tax burden on capital and, to some extent, broaden the tax base.⁶ The high-profile media coverage of American companies parking income in low-tax jurisdictions is due to the U.S. corporate income tax on remitted earnings only. Income kept abroad in affiliates is not subject to the U.S. corporate tax rate, which is one of the highest in the world today. In Canada, dividends remitted from foreign affiliates to the parent are exempt from taxation.

This paper lays out three primary issues:

First, recent public reaction to companies paying little or no corporate income tax has created a reputational risk⁷ for multinational companies. This risk challenges managers and boards who have a fiduciary responsibility to maximize shareholder value. Companies have a choice of handling tax-reputational risks using various strategies, which will be discussed in more detail below. Tax-reputational risk introduces a new form of unlevel playing field among businesses, since some entities face higher reputational costs than others.

Second, there are many reasons for companies paying little or no tax and these arguments are complicated, which will be reviewed below. Tax evasion shall not be discussed below since it is illegal — corporations would typically comply with the tax system given the role of auditors and regulators. Instead, we focus on legal tax avoidance to lower corporate income taxes, which is consistent with domestic and international laws. It is important to understand sources of low corporate income taxation when considering the reputational risks faced by companies. At times, companies in a non-taxpaying position reflect appropriate public policy.

Third, governments, on the other hand, are looking to increase tax transparency including country-by-country reporting, which has already been legislated under the Dodd-Frank act in the United

⁵ Advisory Panel on Canada's System of International Taxation, *Report* (Ottawa: Department of Finance, 2008), 1.

⁶ See D. Chen and J. Mintz, "The 2014 Global Tax Competitiveness Report: A Proposed Business Tax Reform Agenda," University of Calgary School of Public Policy Research Paper 8, 4 (2015).

⁷ Institutions have developed frameworks to assess and manage risk, prominent among them being enterprise risk management (ERM) developed by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). There is no precise definition of reputational risk or how to measure reputational risk. Organizations can be exposed to three items of reputational risk: (1) reputation exceeds its true character; (2) how much external views and expectations change, which widen or narrow the gap; (3) quality of internal control, which can affect the gap. See, Robert G. Eccles, Scott C. Newquist and Roland Schatz, "Reputation and its Risks," *Harvard Business Review* 85, 2 (February 2007): 106.

States for extractive industries.⁸ Canada is also adopting similar legislation requiring extractive companies to report tax payments.

With the G20 countries requesting that the OECD develop proposals to improve tax transparency, combat tax evasion and reduce base erosion and profit shifting, various tax policy issues are being raised with respect to transfer pricing, financial transactions and information exchange. Our purpose is not to discuss these latter issues related to tax avoidance, which are covered by B. Arnold and J. Wilson in a related paper.⁹ Instead, we assess what governments should consider in choosing specific corporate tax incentives knowing that some businesses will react to reputational issues in different ways. For example, accelerated depreciation that drives tax payments to low amounts might be a less preferable tax incentive than a rate cut that leaves some tax to be paid by a business concerned with reputational risk.

REPUTATIONAL RISK AND TAX AVOIDANCE

It is not unusual for corporations to face challenges arising from public policies that impact on their reputations, such as those related to environmental degradation or worker safety. Although governments will regulate corporations with respect to various social concerns, businesses often question whether they should adopt practices that go beyond existing regulation. It is a matter of trading off reputational risks with other objectives to satisfy fiduciary responsibilities to shareholders.

With the recent public reactions to corporate tax minimization, corporations face tax-reputational risk. Compliance with tax law, leading to low or zero payments of corporate income tax, becomes a political issue, since voters believe that they become largely responsible for covering the cost of public services. With the move to greater transparency, with country-by-country reporting, political discussion will be heightened, making corporate tax policy a mind-numbing public issue.¹⁰

Transparency is typically looked at from a regulator perspective. However, from a corporate perspective, sharing tax-return data with the public may result in internal strategic policy being revealed in the public domain. Corporations are not comfortable sharing confidential information with their competitors.

Reputational effects from corporate income-tax minimization may, therefore, impact on the company's brand and sales, resulting in a loss of market value. Other factors might come into play, including the relationship between a company and government: low tax payments might invite other policies that are more severe in impact.

⁸ In 2006, the Financial Accounting Standard Board issued Interpretation 48 of FAS standard 107, known as "Fin 48," to eliminate the discrepancy in accounting for uncertain tax positions. The new rule mandates greater disclosure of the tax position in the term of tax risk. United States. IRS, "FASB Interpretation No.48: 'Accounting for Uncertainty in Income Taxes,'" <http://www.irs.gov/Businesses/Corporations/FASB-Interpretation-No.-48,-Accounting-for-Uncertainty-in-Income-Taxes>.

⁹ See also B. Arnold and J. Wilson, "Aggressive International Tax Planning by Multinationals: The Canadian Context and Possible Responses," University of Calgary School of Public Policy Research Paper 7, 29 (2014).

¹⁰ Recent corporate inversions in the United States, resulting in companies buying foreign corporations and shifting their residency to reduce U.S. taxes, have invoked President Obama to raise concerns about "economic patriotism." Cheryl K. Chumley, "Team Obama wants 'economic patriotism' — a ban on business HQ heading overseas," *The Washington Times*, July 16, 2014, <http://www.washingtontimes.com/news/2014/jul/16/team-obama-wants-economic-patriotism-ban-business-/>.

Some studies have arguably found that information on firms engaged in tax avoidance result in a lower stock market value, especially for retail firms.¹¹ Should companies be faced with reputational risks resulting from reported tax avoidance, the question is how they should react. Three specific strategies could be pursued:

Leave something on the table: When companies face significant reputational risks, they may choose to avoid reducing taxes to a minimum. Thus, a company might choose not to take full advantage of tax incentives, shelters and tax-planning opportunities to minimize public scrutiny.¹² While this will hurt after-tax earnings, the company avoids reputational risks that could be costly (these trade-offs would require careful evaluation by management and boards).

Educate the public: When reputational risks are manageable, companies might try to educate the public and governments about the economic reasons for low taxation. In this regard, corporations would likely work with other firms in representative organizations to economize on costs, as well as to provide a united voice. As part of this education of the public, companies may choose to explain their tax positions as lawful avoidance consistent with policies established by the government. They might point out that corporate taxes are a cost of doing business, and are therefore shifted onto consumers. Or they might explain that they pay many different types of taxes, such as sales taxes on business inputs, property taxes, payroll taxes, etc. The approach of listing amounts of other taxes besides the corporate income tax is not an unusual one to take, but it can be challenged. For example, payroll taxes are typically contributions for social security and health care in many countries — therefore, their payment provides benefits to workers, saving costs for businesses. Property taxes, development charges and various user fees can be related to public infrastructure. It could be argued that the absence of corporate income-tax payment undermines the overall income-tax system, since owners can avoid paying tax left at the corporate level.¹³ The most difficult problem for this approach is that tax law is complicated, and it takes time for the general public to understand complex answers. Why an individual company does not pay taxes is not simple to explain.

Batten down the hatches: Another strategy is simply to ignore or dismiss criticisms since the company is compliant with the law. This can be effective for companies that perceive little reputation risk. They would continue to take advantage of provisions that enable them to reduce tax as much as possible.

¹¹ The use of tax shelters has negative impacts on market value in initial periods, as shown by M. Hanlon and J. Slemrod in “What Does Tax Aggressiveness Signal? Evidence from Stock Price Reactions to News about Tax Shelter Involvement,” *Journal of Public Economics* 93 (2009): 126-141. A contrary result is found in J. Gallemlere, E. Maydew and J. Thornock, “The Reputational Costs of Tax Avoidance,” in *Contemporary Accounting Research*, presented at the Oxford Centre for Business Taxation 2012 conference. The latter study, based on data from 1995–2006, found that reputational effects of tax avoidance led to an initial decline in market values, but subsequently had little effect over time. More importantly, companies did not change tax-minimization practices.

¹² This has been referred to as the “under-sheltering hypothesis.” See, for example, M. Desai and D. Dharmapala, “Corporate Tax Avoidance and High-Powered Incentives,” *Journal of Financial Economics* 79 (2006): 145-179; and M. Hanlon and S. Heitzman, “A Review of Tax Research,” *Journal of Accounting and Economics* 50 (2010): 127-158.

¹³ One role of the corporate tax is to backstop the personal income tax, since income retained by corporations results in an increase in share value that is not taxed as a capital gain until the individual eventually disposes of the shares.

WHY DO PROFITABLE CORPORATIONS NOT PAY TAX?

In a particular year, a profitable corporation may pay little or no corporate income tax.¹⁴ The most common factors are the following:

1. *Loss carry-forward pools*: Economies go through booms and busts, resulting in periods in which profitable corporations during better times may not be paying taxes as they use up past losses created by recessions. To avoid penalizing risky firms and startup companies, governments typically enable companies to carry back losses to reduce past tax payments, or carry forward such losses to reduce future income taxes. In Canada, corporations that have losses and unused investment tax credits are permitted to carry forward operating losses and investment tax credits for 20 years (and carry back for three years); capital losses are carried forward indefinitely and carried back for three years and only written off capital gains. Unused deductions such as unclaimed capital-cost allowances,¹⁵ research and development expenditures, exploration and development expenditures and certain reserve deductions can be effectively carried forward indefinitely. In the wake of the 2008–09 recession, some corporations had significant pools of tax losses to reduce taxes paid in future years. From 2009–12, the average loss carry-forward across Canadian industries was equal to \$24 billion (see Table 1).
2. *Accelerated depreciation¹⁶ and investment tax credits*: Governments allow accelerated depreciation (such as for manufacturing and processing equipment) and investment tax credits (such as the Atlantic Investment Tax Credit) to encourage targeted investment activities. In some provinces, corporate tax holidays have also been given, resulting in profitable companies not paying income tax for several years. In 2012, Canadian corporations claimed \$95.2 billion in accelerated depreciation and investment tax credits. Such policies can lead to companies paying little or no cash tax. However, deferred taxes are included in accounts and deducted from income to arrive at net income.
3. *Inter-corporate dividend exemption*: To avoid double taxation of dividends paid from one corporation to another, Canadian corporations are exempt from paying tax on dividends received from other Canadian corporations and foreign affiliates, since such dividends already are subject to tax when a company decides to distribute its profits.¹⁷ This leads to some profitable corporations engaged in headquarters activities or financial activities to be in a tax-loss position, since a significant portion of income before deduction of expenses is not subject to tax. In the

¹⁴ The Technical Committee on Business Taxation *Report* suggested three primary reasons for low corporate taxation: carry forward of losses, the inter-corporate dividend exemption, and fast write-offs for investment such as accelerated depreciation and investment tax credits. See also Graham Glenday and Jack Mintz, “The Magnitude and Size of Corporate Tax Losses in Canada,” in *Policy Options for the Treatment of Tax Losses in Canada* (Toronto: Clarkson Gordon Foundation, 1991).

¹⁵ If capital-cost allowances are not fully claimed, the undepreciated capital-cost base is larger, enabling future deductions to be higher. In the case of the two-year write-off for certain classes, such as manufacturing equipment, the amounts can be claimed in any future year.

¹⁶ If a corporation purchases an asset (e.g., machinery), the asset is depreciated for accounting purposes according to its estimated expected life, such as an equal amount claimed each year (straight-line depreciation). The rate at which the assets are depreciated under accounting rules is not the same as depreciation claimed for tax purposes. Under the Income Tax Act, assets qualify for tax depreciation according to a schedule of “capital-cost allowances” (CCA). If the CCA rate is more than the book-depreciation rate, an asset is written off more quickly for tax purposes than for book purposes, giving rise to deferred tax liabilities in the future when CCA becomes less than book depreciation. This result is tax benefits for the corporation in the first few years, but results in higher tax payments in later periods.

¹⁷ Financial institutions may pay a minimum tax on dividends related to certain preferred shares to ensure corporate tax is paid on income prior to distribution. This was introduced about two decades ago to limit after-tax financing of corporations in tax-loss positions, since interest was taxable in the hands of the financial institution.

last eight years, Canadian corporations claimed \$74 billion in the inter-corporate dividend exemption related to unconsolidated profits, which was 36 per cent of pre-tax profit (see Table 1).

4. *International profit shifting*: Much of the recent concern over low taxation of corporations is related to international profit shifting. Multinational companies shift income from high- to low-tax jurisdictions using transfer pricing¹⁸ and financial structures.¹⁹ A simple strategy is to borrow in jurisdictions with high tax rates to finance operations in low-tax countries, resulting in fewer profits earned in the high-tax jurisdiction. Another is to establish conduit entities subject to little tax to park income in tax havens to avoid tax or establish opportunities for multiple deductions of costs. Companies may also move intellectual property to low-tax jurisdictions to reduce overall corporate payments. International profit shifting reduces effective tax rates on investments in high-tax jurisdictions (where costs might be deducted with income shifted to low-tax-rate jurisdictions).²⁰

TABLE 1 **SELECTED PROVISIONS USED TO REDUCE TAXABLE INCOME IN CANADIAN INDUSTRIES**

Figures in CAD\$ billions (rounded)

Year	2005	2006	2007	2008	2009	2010	2011	2012
<i>Loss carry-forward pools</i>	23.2	23.2	19.0	18.6	23.9	23.5	23.4	25.9
<i>Accelerated depreciation and Investment tax credit</i>	79.8	80.1	83.5	86.4	90.5	90.8	87.6	95.2
<i>Inter-corporate dividend exemption</i>	61.3	69.9	68.9	103.8	117.5	110.2	100.4	107.2
Profit Before Income Tax	220.1	257.3	268.3	228.2	189.1	256.2	299.0	297.7
Taxable Income (Tax Base)	144.2	172.3	172.5	184.2	190.7	198.3	226.6	242.5

Source: Statistics Canada.

Canadian corporations file tax returns following the Income Tax Act and provincial legislation administered by the Canada Revenue Agency. Profit before tax shown in Table 1 is income for financial reporting or accounting profit as referred to in IAS 12 Income Taxes. It is a pre-tax concept determined by General Accepted Accounting Principles (GAAP). Taxable income shown in Table 1 is a tax-accounting term and indicates the income on which income tax is payable.

Taxable income is also referred to as income for tax purposes. For example, in 2012, pre-tax profit stood at \$297.7 billion. However, taxable income was \$242.5 billion. One of the significant differences between tax law and accounting principles is that the tax liability reflected in a corporation's financial statement includes both current- and future-year tax liabilities, while the current-year basis determines cash taxes owed by a Canadian corporation.

¹⁸ Transfer pricing is subject to rules that require companies to provide documentation that their transaction prices between related companies are comparable to "arm's-length" prices between unrelated parties. A corporation cannot just choose any transfer price it wishes, even though judgment is required to determine comparable prices.

¹⁹ See Jack Mintz and Alfons Weichenrieder, *The Indirect Side of Direct Investment* (Boston: MIT Press, 2010). See also B. Arnold and J. Wilson, "Aggressive International Tax Planning by Multinationals: The Canadian Context and Possible Responses," University of Calgary School of Public Policy Research Paper 7, 29 (2014).

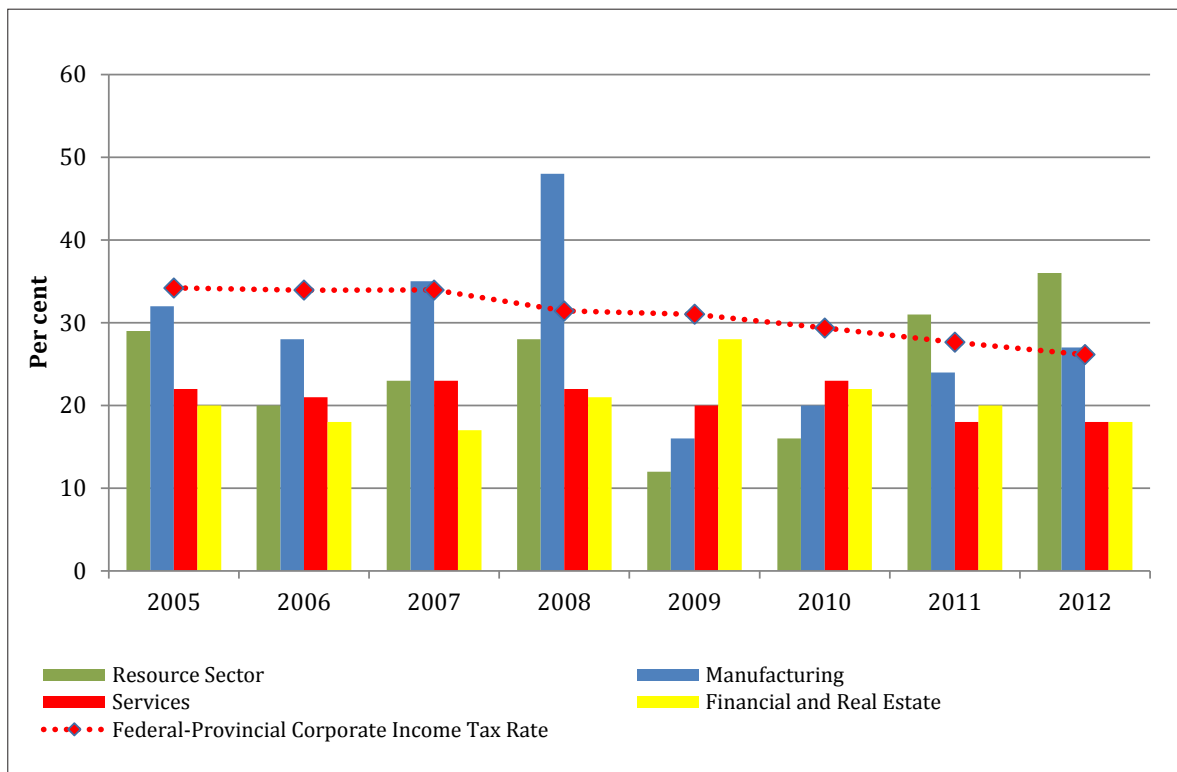
²⁰ D. Chen and J. Mintz, "Taxation of Canadian Inbound and Outbound Investment" (Ottawa: Finance Canada, Advisory Panel on Canada's System of International Taxation, 2008).

Simply observing that a company does not pay taxes in a year provides little explanation as to the reasons for companies paying little or no tax. No recent study has disaggregated the impact of various provisions on the incidence of tax losses. Here, we provide some estimates for Canada.

One source that can be used to calculate the reasons for differences between statutory and effective tax rates is data provided by Statistics Canada reconciling differences between book profit and taxable income of Canadian corporations (see Appendix for details). The limitation of these data is that they focus largely on domestic profits and taxes, as income and taxes paid by foreign subsidiaries are not included.

In Figure 1, we provide a comparison between federal-provincial statutory general corporate income-tax rates and effective cash tax rates (the latter being corporate tax paid as a share of pre-tax financial income).

FIGURE 1 EFFECTIVE CASH TAX RATES TO GENERAL CORPORATE-TAX RATES 2005-2012, VARIOUS SECTORS IN CANADA



Source: Authors' estimate.

In general, the effective cash tax rate is below the statutory tax rate, but not in all years. For 2008, for example, the effective cash tax rate is above the statutory rate for manufacturing. This reflects the financial losses incurred by corporations that are aggregated with financial income earned by others. While profit-earning corporations paid positive taxes, companies with losses would only be able to claim refunds if they could carry back losses to previous years — otherwise corporate tax payments are zero. It is therefore possible for the industry to have an effective cash tax rate above

the statutory tax rate if losses are significant enough — after all, governments fully share profits but not losses under existing corporate tax regimes.²¹

The important question is why effective cash tax rates are below the statutory tax rate. In Table 2, we provide different measures of average tax rates, taking into account the various reasons as to why effective tax rates are below statutory tax rates in Canada.

1. The first cash tax rate is calculated as cash taxes as a share of profits, adjusted for consolidation (which is not permitted under the corporate tax and therefore increases the profit-tax base) and net of financial income earned by exempt corporations. These effective tax rates are somewhat close to the values in Figure 1 with this adjustment. The effective tax rate across industries is equal to 24 per cent for the 2005–12 period, and somewhat below the average statutory corporate tax rate of 31 per cent in this period.
2. The second effective tax rate takes cash taxes as a share of adjusted financial income net of dividend received (dividends are exempt to avoid double taxation as discussed above). These dividends are those not consolidated in measuring financial income as in the first adjustment). The average effective tax rate across industries is equal to 43 per cent for the 2005–12 period, considerably above the first case where inter-corporate dividends should not be included to avoid double taxation of income.
3. The third effective tax rate is calculated as cash taxes as a share of adjusted financial income, net of dividends received and other base differences (such as accelerated depreciation, exempt income, etc.). The average effective tax rate, once taking into account base differences in a year, is 29 per cent for the 2005–12 period. In general, these rates are close to the average statutory tax rate.
4. The final adjustment is for the deduction of prior years' losses against financial income after the previous adjustments. Taking these adjustments into account, the average cash tax rate, as a share of domestic profits net of losses, is 30 per cent for the period 2005–12, not much different than the statutory tax rates.

We conclude that the even though accelerated depreciation and other tax relief results in effective cash tax rates that are lower than statutory tax rates, the dividend exemption and prior years' losses (both are proper to deduct from profits to measure effective tax rates) offset these base-erosion measures almost in their entirety on domestic income.

²¹ The data presented for the resource sector in Figure 1 clearly present the volatility and importance of the resource sector in the Canadian economy. Tax revenue raised from the resource sector has considerably fluctuated in the last eight years. Volatility is due to fluctuations in commodity prices as well as both income and resource-rent taxes, or royalties (provincial resource levies are not included in corporate taxes but they do reduce profits in measuring the effective tax rate, as would any fee paid to governments).

TABLE 2 CANADIAN INDUSTRY LEVEL: EFFECTIVE CASH TAX RATES, VARIOUS INDUSTRIES

Figures in percent (rounded)

Year	2005	2006	2007	2008	2009	2010	2011	2012	Average (2005-12)
Federal-Provincial Corporate Income Tax Rate									
	34.2	33.9	34.0	31.40	31.0	29.4	27.6	26.1	30.5
CASHETR₁									
Resource Sector	30	25	29	32	6	13	30	27	24
Manufacturing	31	28	32	43	12	17	23	26	27
Services	27	24	27	27	21	26	19	19	24
Financial and Real Estate	23	21	22	22	23	22	20	17	21
All Sectors	28	25	27	31	16	19	23	22	24
CASHETR₂									
Resource Sector	42	33	46	115	-6	27	110	-97	34
Manufacturing	50	39	61	91	56	22	30	179	66
Services	36	33	34	38	30	44	28	26	34
Financial and Real Estate	36	35	36	51	55	37	32	26	39
All Sectors	41	35	44	74	34	33	50	33	43
CASHETR₃									
Resource Sector	54	35	37	37	5	28	39	25	32
Manufacturing	29	27	44	27	14	19	29	51	30
Services	27	26	29	24	21	23	21	21	24
Financial and Real Estate	38	35	38	34	24	27	26	26	31
All Sectors	37	31	37	31	16	24	29	31	29
CASHETR₄									
Resource Sector	60	40	40	40	5	32	47	33	37
Manufacturing	33	30	50	29	16	21	32	67	35
Services	34	31	33	27	24	26	23	23	28
Financial and Real Estate	42	39	41	37	28	30	28	28	34
All Sectors	39	34	37	32	20	28	28	25	30
Effective Cash Tax Rate (CASHETR)									
Resource Sector	29	20	23	28	12	16	31	36	24
Manufacturing	32	28	35	48	16	20	24	27	29
Services	22	21	23	22	20	23	18	18	21
Financial and Real Estate	20	18	17	21	21	19	17	16	19
All Sectors	26	22	24	30	17	19	23	24	23
Tax Payable Effective Rate (AVRGETR)									
Resource Sector	15	18	18	21	66	15	17	28	25
Manufacturing	29	27	27	38	39	18	18	22	27
Services	20	21	19	21	22	23	20	20	21
Financial and Real Estate	22	20	18	21	28	22	20	18	21
All Sectors	22	22	21	25	39	19	19	22	24

Source: Authors' estimates.

Notes: Tax rates, industry classification, and other variables used to derive effective tax rate are defined as follows (see Appendix for further details):

- CASHETR₁ = refers to the ratio of cash tax paid to adjusted pre-tax financial-accounting (book) income. Accounting income is adjusted, by adding the consolidation and conceptual adjustments and deducting profits of tax-exempt corporations. **[Cash Tax ÷ Adjusted Accounting Income]**.
- CASHETR₂ = refers to the ratio of cash tax paid to adjusted accounting income, net of inter-corporate dividends. **[Cash Tax ÷ Adjusted Accounting Income, [Adjusted Accounting Income₁ = Adjusted Accounting Income (derived from number 1, net of inter-corporate unconsolidated dividends.)]**
- CASHETR₃ = refers to the ratio of cash tax paid to adjusted accounting income₂ taking into account accelerated depreciation and other timing differences. **[Cash Tax ÷ Adjusted Accounting Income₂]. Adjusted Accounting Income₂ = Adjusted Accounting Income₁ (derived from 2), other timing differences are added, and (a) accelerated depreciation and other exemptions and, (b) difference between taxable and financial net capital gains are subtracted.**
- CASHETR₄ = refers to the ratio of cash tax paid to adjusted accounting income₃ corrected for carry forward of losses: **[Cash Tax ÷ Adjusted Accounting Income₃]. Adjusted Accounting Income₃ = Adjusted Accounting Income₂ (derived from 3) net of carry forward pools of losses.**
- The effective cash tax rate (CASHETR) is the ratio of tax paid to pre-tax financial-accounting (book) income.
- The tax-payable effective rate (AVRGETR) is the ratio of income tax payable (including deferred taxes) to pre-tax financial accounting (book) income.

While the above conclusion is indicative that companies are paying taxes more in accordance with their Canadian statutory tax rates, the use of Statistics Canada data is unable to provide delineation between domestic and foreign tax rates, since foreign subsidiaries are excluded. If however companies were shifting income abroad to low-tax jurisdictions, one would expect that profits are less in Canada (perhaps subject to a higher corporate rate), with lower effective tax rates on foreign operations. Of course, the world is more complicated, since companies could be shifting income into Canada from high-tax jurisdictions from abroad, which could result in foreign operations being more highly taxed, such as in the United States.

Unfortunately, limited data²² are available to calculate domestic and foreign tax rates for Canadian corporations. Effective cash tax rates on worldwide income can be derived from financial reports of large Canadian multinationals (typically the information is very limited to separate domestic and foreign financial income). However, some information can be seen as to whether the global effective cash tax rates are much different than the aggregate tax rates calculated from a larger source of data.

Table 3 provides the effective cash tax rates for Canada's largest 100 companies on worldwide income as well as the effective tax-payable rate, including deferred taxes (see Appendix for details). The average effective cash tax rate, as a share of financial income for 2006–12 for all industries, is 19 per cent, about 11 percentage points less than Canada's average statutory corporate income tax rate. If deferred taxes are accounted for, the average tax-payable effective rate is 21 per cent over the same period, for all industries.

TABLE 3 STATUTORY AND EFFECTIVE CASH TAX RATES FOR 100 LARGE CANADIAN CORPORATIONS (DOMESTIC AND INTERNATIONAL INCOME)

Year	2006	2007	2008	2009	2010	2011	2012	Average (2006-12)
	Federal-Provincial Corporate Income Tax Rate							
	33.9	34.0	31.40	31.0	29.4	27.6	26.1	30.5
	Effective Cash Tax Rate (CASHETR)							
<i>Resource Sector</i>	14	24	15	38	17	15	23	21
<i>Manufacturing</i>	34	27	23	21	19	20	20	24
<i>Services</i>	16	16	15	13	13	13	14	14
<i>Financial and Real Estate</i>	19	23	54	4	24	16	17	22
All Sectors	17	22	26	14	19	15	18	19
	Tax Payable Effective Rate (AVRGETR)							
<i>Resource Sector</i>	23	22	25	20	26	30	30	25
<i>Manufacturing</i>	29	35	32	32	23	24	23	28
<i>Service</i>	20	21	26	19	23	27	22	22
<i>Finance and Real Estate</i>	24	21	3	12	20	18	15	16
All Sectors	23	21	20	16	22	24	21	21

Source: Authors' estimates.

Notes: Tax rates are defined as follows:

- The effective cash tax rate (CASHETR) is the ratio of tax paid to pre-tax financial-accounting (book) income.
- The tax-payable effective rate (AVRGETR) is the ratio of corporation current tax expense to pre-tax financial-accounting (book) income.

Unlike Table 2, we cannot adjust for the dividend exemption related to non-consolidated profits and prior years' tax losses to adjust profits. However, if we compare both the average tax rates in Table

²² Data on domestic and foreign breakout for taxable and accounting income were not available for Canadian corporations. The authors reviewed the consolidated annual reports of these corporations and found a limited number of cases where they were able to segregate information on domestic and foreign taxes and income.

3 with Table 2, the multinational global effective tax rates are less than domestic tax rates. One has to be cautious about this comparison, however. First, aggregate data from Statistics Canada reflect the universe of companies, which is larger than just the top 100 corporations. Second, international activity could result in lower effective global tax rates because economic activity takes place in lower-taxed jurisdictions on average, rather than as a result of international tax planning to shift profits to low-tax jurisdictions. Regardless, Canadian multinationals seem to be paying a significant amount of corporate tax on their domestic operations once adjusting for the dividend exemption and loss carry-forwards.

IMPLICATIONS OF TAX-REPUTATION RISK FOR TAX POLICY

The concern that some corporations are paying little or no taxes raises several important philosophical issues. Why do we tax corporations? If some corporations bear less tax than others, why does it matter?

The primary role of taxation is to raise revenues to fund public services; the level of tax therefore depends on spending decisions. For a given amount of taxes, governments choose an overall tax structure, including income, sales, property and other revenues (such as royalties and user fees) to minimize economic distortions (economic efficiency), achieve fairness²³ and minimize administrative and compliance costs.

The role of corporate taxation as part of the overall tax structure serves three functions to enhance overall tax efficiency and fairness. The corporate tax serves as a backstop to personal taxation: owners could leave money in an untaxed corporation to avoid payment of personal taxes. The corporate tax is a source-based quasi-user-fee paid by businesses for subsidized public services of advantage to them. The corporate tax also serves as an efficient rent tax (economic rents being the difference between revenues and economic costs of production), which is used in some countries today for taxation of extractive industries.

Neutral corporate taxation contributes to fairness to the extent that it ensures equal tax burdens across businesses, which also contributes to equal tax burdens among similar individuals who benefit from business activities. We note that, for neutrality, some provisions in the tax system — such as exempt inter-corporate dividends and loss-carry-forward accounts — that lead to some companies paying less tax, help achieve fairness. Corporate taxation itself is not a good instrument for redistributing income since the corporate tax cannot vary across individuals. The incidence of the corporate tax falls more heavily on low-income households to the extent that it results in higher consumer prices, lower wage settlements or lower profits for pension funds.

Corporate taxes have also been used as instruments of economic policy to encourage certain business activities. However, it might be better to use other forms of government intervention in the economy to achieve economic policy aims, such as spending programs and regulations. The case for targeted tax policies would vary on a case-by-case basis.

Thus, corporate income taxes are part of an income tax system that assures full taxation of income. Differential treatment of corporations that results in some paying less tax can undermine economic

²³ Fairness is typically defined as horizontal equity (equal tax burdens on individuals with similar resources) and vertical equity (tax burdens varying across individuals with different resources).

efficiency, resulting in a less optimal allocation of economic resources as well as less fairness and higher administrative and compliance costs.

If tax-reputation risk is becoming a common issue for some multinational corporations, how should governments respond? Tax-reputational risk introduces a different form of non-neutrality, as some companies, given the nature of their business, will face higher reputational costs than others. As discussed above, in handling reputational risk, corporations will either try to defend existing activity or avoid certain tax planning that might result in little or no tax. Thus, tax provisions such as accelerated depreciation or investment tax credits can be used at less reputational cost for some firms compared to others. This introduces a new form of non-neutrality. Several points are worth mentioning.

Governments avoiding targeted tax incentives: With tax-reputational risk, governments looking to attract investment may steer away from certain incentives if some businesses are less willing to adopt them to avoid reputational risk. Some incentives may work better than others if companies are less likely to be in a tax-loss position. For example, a reduction in a corporate tax rate might be more effective in encouraging investment than would tax holidays or accelerated depreciation, if the former incentive results in the company paying at least some tax. General corporate tax-rate reductions are often more neutral across business activities within the country, thereby being less distortive and unfair compared to targeted incentives. However, if a country has a relatively low tax rate, a reduction in its tax rate provides a tax advantage to a multinational that earns low-tax income in the host country while deducting related expenditures in a high tax country (in other words, the effective tax rate for the multinational is reduced further in the host country relative to domestic companies). Thus, a corporate rate reduction is more neutral across assets and industries but not domestic and international firms if the country is already low-tax.

Less tax competition for international capital: If certain companies are concerned about reputational risk, governments seeking to encourage capital investment in their country will be challenged in achieving their aims. As the overall tax burden faced by a corporation depends not just on domestic taxation, but also taxes imposed by other countries, a country trying to attract investment might find other jurisdictions trying to offset incentives through their own lower taxes.²⁴ On the other hand, the lack of policy co-ordination at the international level will make it more difficult for a single country to tax investments if other countries continue to engage in tax competition should the incidence of low taxpaying companies be of little consequence to them. Thus, tax competition will be reduced in only those sectors where tax-reputational risk is important to relevant businesses and governments competing for capital.

The G20 countries have agreed to undertake a review of multinational taxation, with the Organisation of Economic Cooperation and Development providing analysis and recommendations. The focus is on reducing tax avoidance related to base erosion and profit shifting (BEPS) by tightening rules related to transfer pricing, financial tax-planning structures and treaty shopping that result in less tax paid by multinationals. Although an attempt is being made to achieve a multilateral approach to co-ordination, the likely outcome, in our view, is that each country will pursue its own policies in this regard, in part conditioned on what other countries do. Canadian firms have been allowed interest deductibility to fund investments in foreign affiliates. This interest deductibility

²⁴ Of course, a foreign government may be countering profit shifting by taxing more heavily foreign earnings of its multinational companies, thereby undoing the incentives provided by a host country. For example, if the U.S. tax on foreign earnings were adopted, as proposed recently by President Obama, it would create a more level playing field between foreign and U.S. domestic investment, although it would give U.S. companies a non-competitive advantage if other countries were to keep taxes low on their own multinationals.

coupled with tax exemption on dividends remitted from foreign affiliates to the Canadian parent firm resulted in lower costs of funds for Canadian multinational companies. Citing the “double-dip financing structure,”²⁵ used by Canadian multinational companies, the federal government in its March 2007 budget effectively disallowed the interest deduction on funds raised by Canadian multinational companies to invest in foreign subsidiaries. This proposal was a major change in Canadian tax policy. Limitations on interest deductibility were met with stiff resistance from industry and tax specialists. Eventually, the federal government in 2009 repealed the proposal, given that corporations from other countries were able to compete without a similar interest-expense restriction.²⁶

Tightening the tax noose: Increased reputational risk will vary across multinationals. Therefore, policies that reduce the incidence of companies paying less tax could improve neutrality among companies. Those companies who face reputational risk will gain more from base broadening with lower tax rates compared to a corporate tax with high rates and targeted incentives.

Minimum taxation: To ensure profitable corporations pay some tax, governments could introduce minimum taxes (as in the case of Ontario). Companies that are avoiding tax-reputational costs might be less affected since they are already voluntarily paying a minimum tax. Minimum taxes, however, result in economic distortions as they increase effective tax rates on risky and startup businesses.

Tax reform the traditional way: In the past decade-and-a-half, federal and provincial governments have pursued a corporate tax policy to achieve internationally competitive tax rates. Canada’s corporate income tax rate is similar to the unweighted average among industrialized economies. The marginal effective tax rate is similar to other jurisdictions as well.²⁷ In recent budgets, several base-broadening measures have been adopted that have led to more neutrality. Other measures, such as accelerated depreciation for manufacturing and a generous capital-cost allowance for liquefied natural gas plants, have made the corporate tax system less neutral. To reduce the incidence of companies paying little or no tax, tax reforms aimed at internationally competitive tax rates and neutrality would be appropriate. The difficult issues arise with respect to taxation of international flows of income. Global neutrality is not easy to achieve since it depends on both domestic and foreign tax systems — Canada can only control its system, not those of other countries.

CONCLUSIONS

Tax-reputational risk introduces a new dimension to tax-policy design for governments. Throughout the history of corporate taxation, a large number of profitable corporations have paid little or no tax.

²⁵ For example, Canadian multinational “X” borrows \$100 million to invest in a foreign subsidiary. The interest on the \$100 million reduces X’s tax base because X’s interest payment on the debt reduces its Canadian income before tax. This is the first interest deduction. The X company invests this money in a subsidiary located in a tax haven. This subsidiary in turn loans \$100 million to a U.S. subsidiary of X. The U.S. subsidiary deducts the interest on the loan from its taxable income. This is the second interest deduction. The interest income received by subsidiaries located in the tax haven is subject to little or no tax. This income is repatriated to Canadian multinational X. The interest income is treated as “active income” and is received in Canada as a tax-free dividend.

²⁶ In 1997, the Technical Committee on Business Taxation recommended a limitation on interest expenses for foreign investments, subject to a transition exempting existing debt. The 2007 budget took up this recommendation and later revised it to focus on double-dip interest transactions. The Minister of Finance then asked the Advisory Panel on Canada’s System of International Taxation to review the recommendation. The panel recommended that the government should not limit interest deductions for foreign investments, which led to the provision being withdrawn in 2009 by the Minister.

²⁷ D. Chen and J. Mintz, “The 2014 Global Tax Competitiveness Report: A Proposed Business Tax Reform Agenda,” University of Calgary School of Public Policy Research Paper 8, 4 (2015).

However, reputational risk has not been as common for companies not paying tax as it is today.

Profitable corporations may have paid little or no tax in recent years for a variety of reasons. Several tax policies lead to low taxation, some of which would be consistent with a tax system that is neutral among different businesses.

Companies can avoid reputational-risk costs by forgoing incentives, which is a form of voluntary minimum taxation. Governments could also reduce the incidence of tax-reputational problems by replacing targeted incentives with more general ones that leave some tax revenues to be collected.

APPENDIX: METHODOLOGY

The effective tax rate is analyzed at two levels. In the first level, the aggregate industry-level data are analyzed, while the second level examines the tax data of the 100 largest (based on after-tax profits) publicly listed Canadian corporations. At the aggregate industry level, “Financial Taxation Statistics for Enterprises” data compiled by Statistic Canada for 2005 through 2012 are accessed in order to obtain tax-data information. The financial and taxation statistics cover all incorporated businesses within Canada but exclude enterprises classified as “Management of Companies and Enterprises,” “Religious Organization,” “Political Organization,” “Public Administration,” as well as “Funds and Other Financial Vehicle.” For the publicly listed Canadian corporations, accounting data from COMPUSTAT and corporate annual financial statements from S&P Capital IQ are used.

The study examines the use of effective cash tax rate (CASHETR) and tax-payable effective rate (AVRGETR) in the Canadian context. There are two main reasons to examine effective tax rate at the industry and the firm level.

First, at the aggregate industry level, the data only capture the domestic taxes paid. At the firm level, both domestic and foreign taxes are captured. Second, at the industry level, operating revenue is for operations in Canada only (i.e., does not include international revenue). At the firm level, operating revenue also includes international revenue.

Definitions of Selected Variables

- (i) *Pre-tax Financial-Accounting (Book) Income*. For the industry-level aggregate data, this variable represents operating and other operating income before provisions for income taxes. This item excludes extraordinary gain and losses. For the largest 100 publicly traded corporations, the profit before tax represents operating and non-operating income before provisions for income taxes and minority interest. This item is reported after deduction of minority interest when minority interest is included in non-operating expense and no breakout is available.
- (ii) *Income Tax Payable*: For industry aggregate data, this variable only includes all income taxes imposed by federal and provincial governments in Canada. For the largest 100 publicly traded corporations, the current tax expense represents all income taxes imposed by federal, state and foreign governments. The income tax payable or income tax expense at the firm level is composed of the sum of current tax expense and deferred tax expense.
- (iii) *Cash Tax*: For the largest 100 publicly traded firms, this variable represents cash payments for income taxes to federal, state, local and foreign governments as reported by a company. This item includes: Cash paid for income taxes applicable to both current and prior years and net income taxes paid. For the industry-level aggregate data, this variable represents cash payment for income tax to federal and provincial governments in Canada.
- (iv) *Profit of Tax-Exempt Corporation*: In Canada, these organizations include tax-exempt incorporated municipalities, universities, schools, hospitals, non-profit organizations, and certain federal Crown corporations and their subsidiaries.

- (v) *Consolidated and Other Conceptual Adjustments*: According to Statistics Canada:
Consolidated Adjustments: this represents inter-corporate revenues and expenses that are eliminated in the process of consolidating the accounts of parent and subsidiary corporations.
Other Conceptual Adjustments: this item includes all other adjustments not included elsewhere to reconcile the consolidated enterprise profits to the aggregate profits of all corporations in the Financial Taxation Statistics for Enterprises' data compiled by Statistic Canada.
- (vi) *Timing Differences*: The difference between the book basis and tax basis of assets or liabilities that is expected to reverse/not reverse over a period.
- (vii) *Other Exemptions and Deductions*: This variable represents the reconciliation of net profit to taxable income and taxes payable.
- (viii) *Net Difference Capital Gain and Losses*: The difference between book capital gains and losses less taxable capital gains. Capital gain is defined as the gain from the disposition of property, and capital loss means the loss from the disposition of property.

About the Authors

Jack M. Mintz

The James S. & Barbara A. Palmer Chair in Public Policy

Jack M. Mintz was appointed the Palmer Chair in Public Policy at the University of Calgary in January 2008.

Widely published in the field of public economics, he was touted in a 2004 UK magazine publication as one of the world's most influential tax experts. He serves as an Associate Editor of *International Tax and Public Finance* and the *Canadian Tax Journal*, and is a research fellow of CESifo, Munich, Germany, and the Centre for Business Taxation Institute, Oxford University. He is a regular contributor to the *National Post*, and has frequently published articles in other print media.

Dr. Mintz presently serves on several boards including Imperial Oil Limited, Morneau Shepell, and as Chair of the Social Sciences and Humanities Research Council. He is also appointed by the Federal Minister of Finance to the Economic Advisory Council to advise on economic planning.

Dr. Mintz has consulted widely with the World Bank, the International Monetary Fund, the Organization for Economic Co-operation and Development, and various governments, businesses and non-profit organizations in Canada.

V. Balaji Venkatachalam, (PhD) is a Research Associate at The School of Public Policy, University of Calgary and specializes in corporate tax, economic growth and the banking sector. He is also a graduate of the Master of Public Policy program at The School of Public Policy. Prior to joining The School, he worked on academic and research assignments for various organizations in Asia, Europe and America.

ABOUT THE SCHOOL OF PUBLIC POLICY

The School of Public Policy will become the flagship school of its kind in Canada by providing a practical, global and focused perspective on public policy analysis and practice in areas of energy and environmental policy, international policy and economic and social policy that is unique in Canada.

The mission of The School of Public Policy is to strengthen Canada's public service, institutions and economic performance for the betterment of our families, communities and country. We do this by:

- *Building capacity in Government* through the formal training of public servants in degree and non-degree programs, giving the people charged with making public policy work for Canada the hands-on expertise to represent our vital interests both here and abroad;
- *Improving Public Policy Discourse outside Government* through executive and strategic assessment programs, building a stronger understanding of what makes public policy work for those outside of the public sector and helps everyday Canadians make informed decisions on the politics that will shape their futures;
- *Providing a Global Perspective on Public Policy Research* through international collaborations, education, and community outreach programs, bringing global best practices to bear on Canadian public policy, resulting in decisions that benefit all people for the long term, not a few people for the short term.

Our research is conducted to the highest standards of scholarship and objectivity. The decision to pursue research is made by a Research Committee chaired by the Research Director and made up of Area and Program Directors. All research is subject to blind peer-review and the final decision whether or not to publish is made by an independent Director.

The School of Public Policy

University of Calgary, Downtown Campus
906 8th Avenue S.W., 5th Floor
Calgary, Alberta T2P 1H9
Phone: 403 210 3802

DISTRIBUTION

Our publications are available online at www.policyschool.ca.

DISCLAIMER

The opinions expressed in these publications are the authors' alone and therefore do not necessarily reflect the opinions of the supporters, staff, or boards of The School of Public Policy.

COPYRIGHT

Copyright © 2015 by The School of Public Policy.
All rights reserved. No part of this publication may be reproduced in any manner whatsoever without written permission except in the case of brief passages quoted in critical articles and reviews.

ISSN

1919-112x SPP Research Papers (Print)
1919-1138 SPP Research Papers (Online)

DATE OF ISSUE

May 2015

MEDIA INQUIRIES AND INFORMATION

For media inquiries, please contact Morten Paulsen at 403-453-0062. Our web site, www.policyschool.ca, contains more information about The School's events, publications, and staff.

DEVELOPMENT

For information about contributing to The School of Public Policy, please contact Courtney Murphy by telephone at 403-210-7201 or by e-mail at cdmurphy@ucalgary.ca.

RECENT PUBLICATIONS BY *THE SCHOOL OF PUBLIC POLICY*

SMALL AND EXPOSED: DEBT ACCUMULATION IN CANADA'S SMALL PROVINCES

<http://policyschool.ucalgary.ca/?q=content/small-and-exposed-debt-accumulation-canadas-small-provinces>

Ron Kneebone | May 2015

SOURCES OF DEBT ACCUMULATION IN RESOURCE-DEPENDENT PROVINCES

<http://policyschool.ucalgary.ca/?q=content/sources-debt-accumulation-resource-dependent-provinces>

Ron Kneebone | May 2015

NO STATECRAFT, QUESTIONABLE JURISPRUDENCE: HOW THE SUPREME COURT TRIED TO KILL SENATE REFORM

<http://policyschool.ucalgary.ca/?q=content/no-statecraft-questionable-jurisprudence-how-supreme-court-tried-kill-senate-reform>

Ted Morton | April 2015

MIND THE GAP: DEALING WITH RESOURCE REVENUE IN THREE PROVINCES

<http://policyschool.ucalgary.ca/?q=content/mind-gap-dealing-resource-revenue-three-provinces>

Ron Kneebone | April 2015

D-FENCE AGAINST THE CANADIAN WINTER: MAKING INSUFFICIENT VITAMIN D LEVELS A HIGHER PRIORITY FOR PUBLIC HEALTH

<http://policyschool.ucalgary.ca/?q=content/d-fence-against-canadian-winter-making-insufficient-vitamin-d-levels-higher-priority-public>

Jennifer Zwicker | April 2015

THE NORTH WEST STURGEON UPGRADER: GOOD MONEY AFTER BAD?

<http://policyschool.ucalgary.ca/?q=content/north-west-sturgeon-upgrader-good-money-after-bad>

Ted Morton | April 2015

ESTIMATING DISCOUNT RATES

<http://policyschool.ucalgary.ca/?q=content/estimating-discount-rates>

Laurence Booth | April 2015

WHAT CANADA COULD LEARN FROM U.S. DEFENCE PROCUREMENT: ISSUES, BEST PRACTICES AND RECOMMENDATIONS

<http://policyschool.ucalgary.ca/?q=content/what-canada-could-learn-us-defence-procurement-issues-best-practices-and-recommendations>

Anessa Kimball | April 2015

WHY DELAY THE INEVITABLE: WHY THE AIIB MATTERS TO CANADA'S FUTURE

<http://policyschool.ucalgary.ca/?q=content/why-delay-inevitable-why-aiib-matters-canadas-future>

Eugene Beaulieu and Wendy Dobson | April 2015

IMPROVING THE ACQUISITION PROCESS IN CANADA

<http://policyschool.ucalgary.ca/?q=content/improving-acquisition-process-canada>

Craig Stone | April 2015

A PRIMER ON RECENT CANADIAN DEFENCE BUDGETING TRENDS AND IMPLICATIONS

<http://policyschool.ucalgary.ca/?q=content/primer-recent-canadian-defence-budgeting-trends-and-implications>

Dave Perry | April 2015

PEERING INTO ALBERTA'S DARKENING FUTURE: HOW OIL PRICES IMPACT ALBERTA'S ROYALTY REVENUES

<http://policyschool.ucalgary.ca/?q=content/peering-alberta%E2%80%99s-darkening-future-how-oil-prices-impact-alberta%E2%80%99s-royalty-revenues>

Sarah Dobson | March 2015