



Still a Wallflower: The 2008 Report on Canada's International Tax Competitiveness

By Duanjie Chen and Jack Mintz

- In 2008, Canada ranks 11th highest among 80 countries in terms of its tax burden on business investment, as measured by the effective tax rate on capital.
- Despite improvements since 2005, when it ranked fourth-highest, Canada has made patchwork progress, reducing the tax burden on certain industries, such as manufacturing, while levying very high effective tax rates on others, notably services.
- Canadian governments should concentrate on reforms that not only lower tax rates but reduce differences among effective tax rates across industries.

Business taxation is one of government's most important policy levers for stimulating economic growth and improving the wellbeing of Canadians. In the past decade, federal and provincial governments have addressed serious shortfalls in Canada's business tax policies, by reducing corporate income tax rates, improving the capital cost allowance system and reducing or eliminating capital taxes.

This has improved Canada's tax competitiveness, although as we show below, Canada's rank as 11th highest among 80 countries, continues to reflect high marginal effective tax rates on capital, especially in the service sectors. This indicates the need for a serious new approach to industrial policy and tax reform, which ought to be an important topic in the current federal election.

The recent slowdown in our economy is a sharp reminder to Canadians on the importance of growth. A booming business environment enables employers to take on more workers, invest in new technologies and pay higher salaries to attract workers with needed skills. Contracting economies imply employee layoffs, postponement of investment plans and lower wages.

Insofar as Canadians care about economic growth, they should also care about further increasing our country's international tax competitiveness. A competitive tax regime attracts business investment that is so crucial to improving our mediocre productivity record, raising incomes and stimulating economic growth.

Even in the best of times, Canada's productivity performance – the growth in output per worker – has been mediocre in comparison to many industrialized nations (Competition Policy Review Panel 2008) and lagged the United States in growth by an average of 1.5 percentage points per year from 2000 to 2007 (Statistics Canada 2008). Yet, productivity is the foundation on which Canadians may develop a higher standard of living, because better business performance enables Canadians to earn more income per capita. While many factors influence Canada's poor record of productivity, one particular shortfall relative to Europe and the United States has been noted for years: our underachieving investment performance. Gross investment per worker has almost doubled since 1995, but

Duanjie Chen is the George Weston Analyst in Tax Policy at the C. D. Howe Institute and Jack Mintz is the Palmer Professor of Policy Studies, University of Calgary. The authors gratefully acknowledge support from the C. D. Howe Institute and the World Bank. We thank the Tax Competitiveness Council of the C. D. Howe Institute for comments and suggestions.

Canada's investment performance still lags the United States by \$1,350 per worker a year and the OECD countries by \$550 per worker (Banerjee and Robson 2008).

Domestic investment depends on after-tax returns, as compared to what can be achieved by investors in other parts of the world. If a business earns a higher return on capital in a particular jurisdiction, it will expand its investment in that jurisdiction. Corporate income tax, sales tax on capital inputs, and other capital-related taxes reduce the after-tax return on investment, which affects the demand for capital by businesses. Higher tax on business investment will cause capital investment to decline in a jurisdiction, thereby impairing economic growth. A 1 percentage point increase in the effective tax rate on capital investment reduces investment in plant, equipment and non-residential structures by 0.5 to 1.0 percentage points (Mintz 2007). The effect of taxes on mobile foreign direct investment flows is even stronger, with a percentage point increase in the effective tax rate leading to a 3 percentage point decline in capital inflows.

Where is Canada Now?

We provide in the following tables our 2008 ranking of manufacturing and services sectors effective tax rates on capital for 80 countries, including G-7, other industrialized economies, the BRIC (Brazil, Russia, India and China) and many developing economies. Table 1 ranks countries according to the weighted average of effective tax rates in manufacturing and services sectors (services include construction, utilities, transportation, communications, trade and household and business services). For comparability, we provide estimates for 2005, 2006 and 2007. Table 2 reports estimates for manufacturing and total services.

The effective tax rate on capital is calculated as the annualized value of taxes paid, as a percentage of the risk-adjusted gross rate of return on capital earned on a marginal investment project in a jurisdiction. Marginal investments are those for which the after-tax rate of return on capital is just sufficient to attract investor financing in world markets. We assume the same structure of capital investment and financing structures within Canada, but allow for country-specific inflation rates because tax systems typically do not adjust taxable profits for inflation.¹

Since 2000, federal and provincial governments have reduced the general combined corporate income tax rate from 43 percent to 31.7 percent, with further planned reductions to 27 percent by 2012. The federal government has also eliminated the large corporations tax and provinces have either eliminated or reduced their provincial capital taxes.² Further, the federal and provincial governments have provided for faster writeoffs for capital depreciation.

Without doubt, business tax reductions by federal and provincial governments have improved remarkably Canada's competitive position for investments. As recently as 2005, Canada had the fourth-highest effective tax rate on capital among 80 countries, and in 2008 is 11th highest (Table 1). Other countries may change their tax systems as well, but with planned reductions in federal and provincial rates by 2011, Canada will rank 23rd. This is a remarkable achievement. Canada's effective tax rate on capital in 2008 is 29.1 percent, more than 10 points down from 2005 and somewhat above the weighted average effective tax rate of 28.7 percent among the 80 countries. Some specific results to note are the following:

- For 2008, the US effective tax rate on capital at 26.5 percent is below that of Canada, due to the reinstatement of bonus depreciation in the US on a temporary basis (manufacturing and processing accelerated depreciation is also temporarily provided in Canada). By 2012, the US effective tax rate on capital will jump up to 35.7 percent while Canada's will decline to 25.8 percent. However, proposed corporate tax reforms in the United States may result in a different picture by 2012.
- Generally, the G-7 countries have high effective tax rates on capital although, notably, those of Italy, the United Kingdom and the US are below Canada's in 2008.

1 Inflation interacts with the effective tax rate on capital since historical asset values are used to compute capital cost deductions and interest expense, unadjusted for inflation, is deductible from corporate profits for determining the payment of tax. In general, effective tax rates increase with inflation although it depends on both the degree to which capital is financed by debt and the speed to which capital assets are written off for tax purposes. For simulations, see Chen and Mintz (2008).

2 Taxes other than the corporate income tax have a significant impact on the effective tax rate in 23 countries, including Canada.

Table 1: Marginal Effective Tax Rates on Capital by Country, 2005-2008 (in percentages), ranked from high to low for 2008

	Effective Tax Rates on Capital			
	2008	2007	2006	2005
Argentina	46.0	46.0	46.0	46.0
China	45.3	45.3	45.3	45.3
Chad	40.1	40.1	40.1	40.1
Brazil	39.1	39.1	39.1	39.1
India	37.6	37.6	37.3	40.3
Korea	37.1	37.1	37.1	37.1
Russia	37.0	37.0	37.0	37.0
France	35.9	35.9	35.9	36.2
Japan	35.0	35.0	35.0	35.0
Australia	29.3	29.3	29.3	29.3
Canada	29.1	31.9	37.3	39.3
Pakistan	28.9	28.9	28.9	28.9
UK	28.7	30.3	30.3	30.3
Italy	28.1	33.4	33.4	33.4
Costa Rica	27.9	27.9	27.9	27.9
Germany	27.3	35.1	35.1	35.1
Indonesia	26.9	26.9	26.9	26.9
US (with bonus depreciation for 2008)+	26.5	36.0	36.3	36.3
Iran	26.5	26.5	26.5	26.5
Lesotho	26.5	26.5	26.5	35.0
Spain	26.4	28.7	31.0	31.0
Austria	26.4	26.4	26.4	26.4
Peru	24.7	24.7	24.7	24.7
Norway	24.5	24.5	24.5	24.5
Botswana	23.3	23.3	23.3	23.3
Tunisia	23.1	23.1	26.9	26.9
Tanzania	22.2	22.2	22.2	22.2
Ethiopia	21.9	21.9	21.9	21.9
Bolivia	21.9	21.9	21.9	21.9
Sierra Leone	21.9	21.9	21.9	21.9
Sweden	21.1	21.1	21.1	21.1
Zambia	20.6	20.6	20.6	20.6
Georgia	20.5	24.1	24.1	24.1
Kazakhstan	20.4	20.4	20.4	20.4
Finland	20.1	20.1	20.1	20.1
New Zealand	20.1	20.1	20.1	20.1
Uzbekistan	20.1	20.1	21.1	21.1
Jordan	20.0	20.0	20.0	20.0
Fiji	19.2	19.2	19.2	19.2
Luxembourg	19.1	19.1	19.1	19.6
Portugal	19.0	19.0	19.8	19.8
Thailand	19.0	19.0	19.0	19.0
Denmark	18.6	18.6	21.1	22.7

Table 1: Marginal Effective Tax Rates on Capital by Country, 2005-2008 (in percentages), ranked from high to low for 2008 (*continued*)

	Effective Tax Rates on Capital			
	2008	2007	2006	2005
Malaysia	18.5	19.3	20.1	20.1
Bangladesh	17.8	17.8	17.8	17.8
Madagascar	17.4	21.8	21.8	21.8
Netherlands	16.6	16.6	19.6	21.1
Uganda	16.4	16.4	16.4	16.4
Vietnam	16.3	16.3	16.3	16.3
Jamaica	16.2	16.2	16.2	16.2
Switzerland	15.5	17.2	17.2	17.2
Mexico	15.4	15.4	16.1	16.7
South Africa	15.1	15.1	15.1	15.8
Ghana	14.8	14.8	14.8	14.8
Trinidad	14.8	14.8	18.6	18.6
Czech Rep	14.7	17.0	17.0	18.6
Morocco	14.5	17.8	17.8	17.8
Poland	14.0	14.0	14.0	14.0
Rwanda	13.8	13.8	13.8	13.8
Chile	13.8	14.0	14.2	14.2
Ecuador	13.7	13.7	13.7	13.7
Hungary	13.5	13.5	13.5	13.5
Ireland	13.2	13.2	13.2	13.2
Slovak Republic	12.6	12.6	12.6	12.6
Greece	11.9	11.9	14.0	15.7
Iceland	10.5	12.8	12.8	12.8
Egypt	10.4	10.4	10.4	21.2
Croatia	9.6	9.6	9.6	9.6
Romania	9.4	9.4	9.4	9.4
Turkey	9.2	9.2	9.2	16.6
Ukraine	8.7	8.7	8.7	8.7
Singapore	8.0	8.0	9.1	9.1
Mauritius	7.4	12.2	14.0	14.0
Hong Kong	4.4	4.7	4.7	4.7
Latvia	4.2	4.2	4.2	4.2
Bulgaria	4.1	4.1	6.6	6.6
Nigeria	3.1	3.1	3.1	3.1
Kenya	1.8	1.8	1.8	1.8
Belgium	-3.4	-3.4	-3.4	-3.4
Serbia	-6.0	-6.0	-6.0	-6.0
Weighted Average*	28.7	32.6	32.9	33.2
<i>Simple average</i>	19.6	20.2	20.6	21.1

Notes: Marginal effective tax rates on capital investments incorporate corporate income taxes, sales taxes on capital purchases and other capital-related taxes including asset and net worth taxes, stamp duties on securities, taxes on contributions to equity. Special tax holiday regimes operating in some countries are not included in the analysis. Property taxes are not included due to lack of data.

+ In absence of bonus depreciation, the 2008 marginal effective tax rate on capital for the United States is 35.7 percent.

*Weighted by GDP in constant 2000 US dollar for the period of 2000-2005.

Source: School of Policy Studies, University of Calgary.

Table 2: Marginal Effective Tax Rates on Capital by Country, 2005-2008 (in percentages), for Manufacturing and Services, following the ranking in Table 1

	Marginal Effective Tax Rates on Capital							
	2008		2007		2006		2005	
	Manufacturing	Services	Manufacturing	Services	Manufacturing	Services	Manufacturing	Services
Argentina	50.3	45.0	50.3	45.0	50.3	45.0	50.3	45.0
China	47.3	44.9	47.3	44.9	47.3	44.9	47.3	44.9
Chad	42.9	39.4	42.9	39.4	42.9	39.4	42.9	39.4
Brazil	34.9	39.4	34.9	39.4	34.9	39.4	34.9	39.4
India	32.6	39.4	32.6	39.4	32.3	39.1	35.3	42.2
Korea	39.1	36.4	39.1	36.4	39.1	36.4	39.1	36.4
Russia	39.8	36.0	39.8	36.0	39.8	36.0	39.8	36.0
France	37.6	35.5	37.6	35.5	37.6	35.5	38.0	35.8
Japan	35.6	34.9	35.6	34.9	35.6	34.9	35.6	34.9
Australia	30.4	29.1	30.4	29.1	30.4	29.1	30.4	29.1
Canada	19.3	35.5	23.2	37.1	35.3	39.2	37.1	41.2
Pakistan	30.7	28.4	30.7	28.4	30.7	28.4	30.7	28.4
UK	28.1	28.8	27.5	30.9	27.5	30.9	27.5	30.9
Italy	25.9	28.6	31.0	34.0	31.0	34.0	31.0	34.0
Costa Rica	38.7	27.6	38.7	27.6	38.7	27.6	38.7	27.6
Germany	30.6	26.4	38.5	34.1	38.5	34.1	38.5	34.1
Indonesia	31.1	24.4	31.1	24.4	31.1	24.4	31.1	24.4
US	25.4	27.8	35.0	37.2	35.8	37.2	35.8	37.2
Iran	25.4	27.8	35.0	37.2	35.8	37.2	35.8	37.2
Lesotho	13.8	30.1	13.8	30.1	13.8	30.1	13.8	41.1
Spain	26.1	26.5	28.4	28.8	30.7	31.1	30.7	31.1
Austria	26.1	26.5	26.1	26.5	26.1	26.5	26.1	26.5
Peru	30.3	23.3	30.3	23.3	30.3	23.3	30.3	23.3
Norway	23.5	24.7	23.5	24.7	23.5	24.7	23.5	24.7
Botswana	12.7	24.1	12.7	24.1	12.7	24.1	12.7	24.1
Tunisia	24.2	22.7	24.2	22.7	28.2	26.5	28.2	26.5
Tanzania	15.5	23.4	15.5	23.4	15.5	23.4	15.5	23.4
Ethiopia	30.8	19.9	30.8	19.9	30.8	19.9	30.8	19.9
Bolivia	27.1	20.2	27.1	20.2	27.1	20.2	27.1	20.2
Sierra Leone	15.0	23.0	15.0	23.0	15.0	23.0	15.0	23.0
Sweden	19.8	21.5	19.8	21.5	19.8	21.5	19.8	21.5
Zambia	21.8	20.4	21.8	20.4	21.8	20.4	21.8	20.4
Georgia	23.3	19.8	27.7	23.3	27.7	23.3	27.7	23.3
Kazakhstan	25.2	19.3	25.2	19.3	25.2	19.3	25.2	19.3
Finland	22.2	19.4	22.2	19.4	22.2	19.4	22.2	19.4
New Zealand	27.6	18.4	27.6	18.4	27.6	18.4	27.6	18.4
Uzbekistan	24.2	18.6	24.2	18.6	25.6	19.5	25.6	19.5
Jordan	15.0	21.8	15.0	21.8	15.0	21.8	15.0	21.8
Fiji	22.3	18.5	22.3	18.5	22.3	18.5	22.3	18.5
Luxembourg	22.6	18.8	22.6	18.8	22.6	18.8	23.1	19.3
Portugal	17.4	19.4	17.4	19.4	18.2	20.2	18.2	20.2

Table 2: Marginal Effective Tax Rates on Capital by Country, 2005-2008 (in percentages), for Manufacturing and Services, following the ranking in Table 1 (*continued*)

	Marginal Effective Tax Rates on Capital							
	2008		2007		2006		2005	
	Manufacturing	Services	Manufacturing	Services	Manufacturing	Services	Manufacturing	Services
Thailand	21.3	17.1	21.3	17.1	21.3	17.1	21.3	17.1
Denmark	20.6	18.2	20.6	18.2	23.3	20.6	25.1	22.3
Malaysia	20.5	17.3	21.3	18.1	22.2	18.9	22.2	18.9
Bangladesh	13.1	19.0	13.1	19.0	13.1	19.0	13.1	19.0
Madagascar	22.6	15.9	27.7	20.1	27.7	20.1	27.7	20.1
Netherlands	15.2	16.8	15.2	16.8	18.1	19.9	19.5	21.4
Uganda	5.0	18.4	5.0	18.4	5.0	18.4	5.0	18.4
Vietnam	25.0	13.2	25.0	13.2	25.0	13.2	25.0	13.2
Jamaica	14.6	16.5	14.6	16.5	14.6	16.5	14.6	16.5
Switzerland	14.7	15.7	16.3	17.5	16.3	17.5	16.3	17.5
Mexico	16.3	15.2	16.3	15.2	17.0	15.8	17.7	16.5
South Africa	16.8	14.7	16.8	14.7	16.8	14.7	17.6	15.4
Ghana	13.5	15.1	13.5	15.1	13.5	15.1	13.5	15.1
Trinidad	3.3	19.4	3.3	19.4	5.4	23.9	5.4	23.9
Czech Rep	15.3	14.4	17.7	16.7	17.7	16.7	19.3	18.3
Morocco	17.3	13.7	21.1	16.9	21.1	16.9	21.1	16.9
Poland	11.6	14.6	11.6	14.6	11.6	14.6	11.6	14.6
Rwanda	21.1	12.6	21.1	12.6	21.1	12.6	21.1	12.6
Chile	14.7	13.6	14.9	13.8	15.0	13.9	15.0	13.9
Ecuador	16.8	12.8	16.8	12.8	16.8	12.8	16.8	12.8
Hungary	14.7	13.1	14.7	13.1	14.7	13.1	14.7	13.1
Ireland	13.0	13.3	13.0	13.3	13.0	13.3	13.0	13.3
Slovak Republic	17.2	11.4	17.2	11.4	17.2	11.4	17.2	11.4
Greece	10.9	12.0	10.9	12.0	12.8	14.2	14.5	15.9
Iceland	7.9	11.0	9.7	13.4	9.7	13.4	9.7	13.4
Egypt	10.7	10.3	10.7	10.3	10.7	10.3	22.0	20.9
Croatia	12.1	8.5	12.1	8.5	12.1	8.5	12.1	8.5
Romania	11.3	8.6	11.3	8.6	11.3	8.6	11.3	8.6
Turkey	10.6	8.7	10.6	8.7	10.6	8.7	18.8	15.9
Ukraine	17.5	5.6	17.5	5.6	17.5	5.6	17.5	5.6
Singapore	5.8	9.8	5.8	9.8	6.6	11.1	6.6	11.1
Mauritius	9.0	7.0	14.5	11.6	16.5	13.3	16.5	13.3
Hong Kong	4.6	4.3	4.9	4.7	4.9	4.7	4.9	4.7
Latvia	6.7	3.7	6.7	3.7	6.7	3.7	6.7	3.7
Bulgaria	5.0	3.8	5.0	3.8	8.1	6.2	8.1	6.2
Nigeria	10.7	1.8	10.7	1.8	10.7	1.8	10.7	1.8
Kenya	-78.7	16.3	-78.7	16.3	-78.7	16.3	-78.7	16.3
Belgium	-4.5	-3.2	-4.5	-3.2	-4.5	-3.2	-4.5	-3.2
Serbia	-11.3	-3.8	-11.3	-3.8	-11.3	-3.8	-11.3	-3.8
Weighted Average*	28.3	29.1	32.3	33.0	32.9	33.2	33.2	33.4
<i>Simple average</i>	19.1	19.6	19.8	20.3	20.3	20.6	20.7	21.2

*Weighted by GDP in constant 2000 US dollar for the period of 2000-2005.
Source: School of Policy Studies, University of Calgary.

- The BRIC countries generally have high effective tax rates on capital. Smaller countries, including developing ones, tend to have low effective tax rates on capital.
- China has one of the highest effective tax rates on capital in the world. This is due not to its corporate income tax, which is levied at a statutory rate of 25 percent (less than the existing 31.7 percent in Canada), but is a result of a 17 percent VAT rate applied to machinery and equipment, and a corporate tax rate of only 10 percent which is not generally refundable.
- The lowest effective tax rates on capital are in Belgium and Serbia, where they are negative (implying that companies could have taxable losses that would shelter other income from taxation). In the case of Belgium, the tax advantage arises from the provision of an imputed deduction for cost of equity financing that substantially lowers the cost of capital. Serbia provides accelerated capital cost deductions, and low corporate tax rate of only 10 percent.

Implications

PATCHWORK PROGRESS: All that glitters is not gold. While Canada is certainly looking more tax competitive than it did, owing to targeted tax reductions through various tax allowances and credits in some sectors, its effective tax rates remain relatively high, especially in services (Table 2). Hence, Canada's real achievement has been to create a more tax competitive environment for specific industries – in particular manufacturing, which accounts for about 30 percent of capital investment among non-resource sectors and is facing a challenging economic environment. In 2008, the manufacturing effective tax rate is 19.3 percent, well below the weighted-average effective tax rate of 28.3 percent and well below the effective tax rate of 35.5 percent on the services sector in Canada.

Indeed, the services sector in Canada is highly taxed: its effective tax burden ranks 8th highest among the 80 countries. Few countries have a system so biased against services – Canada ranks with Lesotho, Trinidad and Uganda in its discrimination towards the services sector: in 2008 Canada's services are taxed at a rate 16 percentage points higher than for manufacturing.

With the cancellation of accelerated depreciation for manufacturing assets by 2012 and with planned reductions in corporate and capital taxes by 2012, the effective tax rate on manufacturing will increase slightly, to 20.1 percent. The effective tax rate on capital for the service sector will be 29.6 percent, or still 9.5 points higher than for manufacturing.

SALES TAX REFORM NEEDED: Part of the bias against services arises from provincial sales taxes that tend to exempt to a greater degree capital goods purchased by manufacturing. By eliminating the provincial sales taxes on capital inputs, the effective tax rate on manufacturing would drop to 16.3 percent and on services to 21.1 percent by 2012. Thus, one-half of the disparity between manufacturing and service sectors is due to distortions arising from retail sales taxes in British Columbia, Manitoba, Ontario, Prince Edward Island and Saskatchewan. If the provinces were to reform their sales taxes to adopt a value-added tax similar to the GST, effective tax rates for both manufacturing and services would drop dramatically, creating greater incentive for these sectors to expand investments.

Conclusion

Public debate during the federal election should address bold ideas for Canada's future industrial policy. Politicians should address whether tax competitiveness can or should only be achieved for some industries, while others bear high tax burdens. Given that all industries contribute to Canada's economic growth, business tax reforms should be geared to reducing effective tax rates generally rather than being targeted selectively to some. Entrepreneurs are able to determine where best to invest for economic gain – governments should avoid picking certain industries and creating tax incentives that unduly distort business decisions. Long-run productivity will depend on having a business tax structure that is neutral across assets and industries, and levied at internationally competitive tax rates.

Canadian governments should be looking at reforms that not only lower but reduce differences in effective tax rates across industries. Further reductions in corporate income tax rates, closer alignment of capital cost allowances to economic depreciation, and the removal of retail sales taxes on capital inputs would all make sense. While we are making progress, Canada has much work to do to ensure that the tax system can support a vibrant economy, in the face of some strong economic headwinds.

References:

- Banerjee, Robin, and William B.P. Robson. 2008. "New Tools for a Richer, Greener Future: Why Canadians Need More Robust Business Investment." C. D. Howe Institute E-Brief, July 24.
- Chen, Duanjie, and Jack Mintz. 2008. "Taxing Business Investments: A New Ranking of Effective Tax Rates on Capital." Manuscript prepared for the Foreign Investment Advisory Service. The World Bank.
- Competition Review Panel. 2008. *Compete to Win*. Ottawa: Industry Canada.
- Mintz, Jack. 2007. *The 2007 Tax Competitiveness Report: A Call for Comprehensive Tax Reform*. C. D. Howe Institute Commentary 254. September.
- Statistics Canada 2008. *The Daily*. Wednesday, September 10, 2008. <http://www.statcan.ca/Daily/English/080910/d080910a.htm>

This *e-brief* is a publication of the C.D. Howe Institute.

Duanjie Chen is George Weston Analyst in Tax Policy, C.D. Howe Institute and Jack Mintz holds the Palmer Chair of Public Policy at the University of Calgary and is a Fellow-in-Residence at the C.D. Howe Institute.

For more information contact **Jack Mintz** at 1-403-220-7661, or **Duanjie Chen** at 1-202-285-6082.

This *e-brief* is available at www.cdhowe.org.

Permission is granted to reprint this text if the content is not altered and proper attribution is provided.