



Forecasted Effects of Reducing the HST Tax Rate by Two Percentage Points

The Case for Ontario to Follow British Columbia in HST Reduction

By David Murrell



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Date of First Issue: July 2011.

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ISSN 1491-78

FCPP Policy Series No. 111 • July 2011

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Clicking on these words will direct the reader to relevant sites or documents using your associated web-browser.

Executive summary

This paper measures the effect of moving from the old provincial sales tax (PST) to the new Harmonized Sales Tax (HST), assuming that the sales tax rates are reduced. The British Columbia government has announced that the HST will be reduced by two percentage points by July 1, 2014. One per cent reduction will be implemented by July 2012, and an additional 1 per cent by 2014.

Since the government of Ontario has kept its HST unchanged at 13% (8% provincial sales tax and 5% federal sales tax), our calculations for Ontario are hypothetical. We assume, first, that Ontario reduces its HST rate by two percentage points, and second, that it reduces its HST rate by three percentage points, to equal the proposed tax rate in British Columbia of 10% by July 14, 2014.

Our findings are as follows:

- For British Columbia, the tax savings—including the accompanying personal income tax cuts—would amount to about \$255 per family. Consequently, a “no” vote in the HST referendum (where citizens vote to keep the HST) means that households will benefit from a tax cut.
- For Ontario, the tax savings from a 2 per cent HST tax-rate cut (and the ongoing personal income tax credits) would amount to about \$320 per family. Should the province announce a 3 per cent HST tax cut, the total per-household savings would amount to about \$600.

These findings are consistent with the 1997 HST experience in Atlantic Canada. That year, the three HST provinces (New Brunswick, Nova Scotia, and Newfoundland and Labrador) witnessed a modest reduction in their respective Consumer Price Indexes (CPI). We conclude that for a government to earn voter approval for the imposition of the HST, the government must:

- (1) reduce sales-tax rates, and,
- (2) undertake enhanced personal income tax credits and grants.

Introduction

On July 1, 2010, the governments of British Columbia and Ontario converted their old PST bases to the HST. As is well known, this conversion enlarged their tax bases, as most service consumption is now taxed, while keeping the sales-tax rate the same as before. While it is true that businesses now write off taxes paid on material inputs and capital—and that in the longer run much of the resulting lower costs are passed on to consumers—there is a consensus that in the longer term, households would pay higher taxes. The British Columbia independent panel on the HST forecast this and the fact that the average family in the province would pay an extra \$350 a year with the HST set at the old PST rate of 7 per cent (Government of British Columbia [2011b]). Our 2010 study for the Canadian Centre for Policy Studies suggested a somewhat higher amount: A typical family in the province would pay an extra \$593 in 2008 dollars, or \$608 in 2011 dollars.¹

The new HST in British Columbia created a voter backlash and forced the province to announce a province-wide referendum to be conducted in June and July 2011 (CTV News [2011]). To encourage a “no” vote—i.e., to deny a move back to the old PST—the provincial government announced a reduction of the HST from 12 per cent to 10 per cent over the course of three years. (Government of British Columbia [2011a]). This means that the provincial portion of the HST would be reduced from 7 per cent to 5 per cent. Since this announcement, support for the HST has risen; it remains far from clear that voters in this province will favour the new HST.²

In Ontario, our 2010 study suggested that an average family in the province would pay an extra \$783 in sales taxes under the

HST (\$1,041 in gross HST paid, minus an estimated \$258 in input costs passed on by businesses). The institution of the HST in Ontario has created a backlash—with opposition led by both the provincial NDP and Progressive Conservative parties. The Ontario government has kept its provincial HST tax rate at 8 percent, which is considerably higher than the forecasted provincial HST rate that is scheduled to be reduced to 5% by July 1, 2014.

In this paper, we measure the effect of a reduced HST on the average household in Ontario and British Columbia. We find that reducing the HST by two percentage points (to 11 per cent in Ontario and to 10 per cent in British Columbia) still implies modest increases in net HST: \$172 in Ontario and a slight \$15 in British Columbia. However, when we factor in the personal income tax credits and grants now in place in both provinces, the average family would then hypothetically save \$322 in Ontario and \$255 in British Columbia.

The conversion to the HST combined with the personal income tax reductions should be seen as an aggregate tax cut—a savings to households in both provinces. We also calculate a hypothetical 3 per cent cut in the HST for Ontario to make it equal to the 10 per cent HST in British Columbia. We find that the aggregate tax savings add up to \$600 per family. Finally, we total these

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tax savings and find that they represent about 1.5 per cent of total Ontario spending and about 2.5 per cent of total spending in British Columbia. Therefore, we find that the HST tax cuts are fiscally manageable if modest expenditure cutting were to take place in the two provinces.

The next section explains the methodology of the tax calculations and their results and compares them with the 1997 HST experience in Atlantic Canada. In the concluding section, we argue that tax-rate cutting is crucial to earning voter support for the transformation of the PST/GST to the HST.

Therefore, given the above, we recalculate the tax change as follows. We lower the applicable provincial tax rate by two percentage points for both provinces, and then we apply these rates to the new HST commodities for both provinces. All of these commodities are listed in the Appendix

of the 2010 study, and they include new taxable consumer goods plus spending on new-housing construction. We also reduce the tax write-offs on input costs by two percentage points. Finally, we reduce taxes paid on the old PST goods by two percentage points for both provinces. For this last calculation, we had to collect family expenditure data for all of these goods from Statistics Canada—data that was not needed in last year's study.³

In the Appendix (pgs. 10-12), we show data tables for taxable goods applicable to both provinces, to Ontario only and to British Columbia only. Finally, we sum up all of these effects to calculate a net change—from the old PST at higher tax rates—to the new HST at lower rates.

The results are presented in two tables. Using 2008 data, Table 1 (pg. 10) shows the results for an average family in Ontario and in British Columbia.

Methodology of the Tax Calculations and their Results

To keep the analysis short and manageable, we did two things. First, we used the same source data as last year's study: the expenditure data from Statistics Canada's 2008 Family Expenditure Survey. Second, we reported results for the average family and not by income quintiles. Our 2010 paper showed that a move to the HST was in and of itself regressive: The tax increase hit lower-income families disproportionately harder. However, the personal income tax credits were relatively more beneficial to lower-income households. Finally, all of our results in this paper represent the change from the old PST base to the new HST base at lower rates. This is the crux of the debate surrounding the British Columbia HST referendum (through which public

pressure prompted the BC government to lower the tax rate of the provincial portion of the HST)—and our hypothetical tax reductions for Ontario.

Therefore, given the above, we recalculate the tax change as follows. We lower the applicable provincial tax rate by two percentage points for both provinces, and then we apply these rates to the new HST commodities for both provinces. All of these commodities are listed in the Appendix of the 2010 study, and they include new taxable consumer goods plus spending on new-housing construction. We also reduce the tax write-offs on input costs by two percentage points. Finally, we reduce taxes paid on the old PST goods by two

percentage points for both provinces. For this last calculation, we had to collect family expenditure data for all of these goods from Statistics Canada—data that was not needed in last year's study.³

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The results are presented in two tables. Using 2008 data, Table 1 (pg. 10) shows the results for an average family in Ontario and in British Columbia.

As can be seen from Table 1, a two-percentage point cut in the HST for Ontario (from 13 per cent HST to 11 per cent HST) while keeping all announced personal income tax credits and cuts in place results in a \$322 savings for the average family. For British Columbia, the announced two-percentage point HST reduction to 10 per cent can result in a savings of \$255 per household (see the bottom line 13 in Table 1).

The personal income tax credits and cuts are needed to ensure tax-cut benefits to households. If we remove the effects of these policies (line 11) and compare the total HST tax effects (line 10) with the pass-through cost savings (line 12), we see that in the absence of such personal income credits, the average Ontario family would pay \$172 extra a year and the average B.C. family would spend an additional \$15 a year.

At first glance, a finding that families pay extra given a reduced HST tax rate seems puzzling. Consider the experience in Atlantic Canada in 1997 when three provinces—New Brunswick, Nova Scotia and Newfoundland-Labrador—converted to the HST. These provinces reduced their old PST rates to an identical 8 per cent provincial HST rate.

The reduction in rates is comparable to the two per cent rate reduction forecasted in British Columbia.

The total Consumer Price Indexes in the three provinces (which include sales taxes paid) fell immediately after the April 1, 1997, conversion.⁴ The reduction ranged from ½ a per cent in Nova Scotia (which reduced its old PST rate from 11 per cent) to 1.5 per cent in Newfoundland-Labrador (which reduced its old PST rate from 12 per cent).

The reason consumer prices fell in Atlantic Canada is because the HST does not apply to new housing, which is technically not included in Consumer Price Indexes. (It is a capital expenditure item.) So, if we exclude the effect of the HST on housing (line 6 in Table 1, i.e., we subtract line 6 and line 12 from line 10), we see that a 2 per cent HST tax cut would save about \$56 per family in Ontario and less than \$200 per family in British Columbia. Consequently, the reduction of tax rates for these two provinces results in savings for families, as was the case in Atlantic Canada.

Finally, cutting the HST implies lower revenue for provincial governments. Looking at Table 2, we see that a 2 per cent reduction in the HST rate implies a fall in revenue of about \$1.6-billion in Ontario and \$500-million in British Columbia. While these numbers seem large at first glance, they represent about 1.5 per cent and 2.5 per cent of total provincial government spending in Ontario and British Columbia respectively. Given the rather large yearly increases in provincial spending, a modest expenditure-restraint program to accommodate the HST rate reductions discussed in this paper is certainly possible.

Summary and Conclusions

For Ontario and British Columbia, a two-percentage point reduction in the HST combined with the announced personal income tax credits and grants would result in tax savings for average households. We find that a 2 per cent tax rate reduction would save Ontario families \$322 and British Columbia families \$255 in 2008 dollars. This result stands in stark contrast to our findings last year—done for the Canadian Centre for Policy Studies—where we assumed that the provincial HST rates would remain unchanged. Last year, we stated that converting to the HST along with the announced personal income tax cuts would result in a net tax increase of \$289 per household in Ontario and a net increase of \$323 per household in British Columbia (all numbers in 2008 dollars). In this paper, we conclude that although these tax cuts result in reduced revenue for the provincial governments, given savings to consumers, the decline in revenue can be matched by rather modest spending cuts.

There is a large body of literature articulating the pro-growth aspects of the HST.⁵ We do not profess to be knowledgeable as to the politics of the HST tax protests, i.e., voter anger resulting from tax increases. However, we do stress that to achieve the economic growth benefits from the HST, provincial governments ought to ensure that the all-important household sector does not lose from the sales-tax conversion. In Atlantic Canada, tax rates were reduced and consumers benefited. Back in the mid-1990s, there were sporadic protests among the three HST provinces, but these did not gain traction.

In our 2010 paper, we suggested that households lose through HST conversion, and this was true even with generous personal income tax credits. The effective HST tax increases led to a serious tax revolt in British Columbia and voter dislike of the Ontario Liberal government. Indeed, the institution of the federal GST in 1991 was a main factor leading to the defeat of the federal Progressive Conservative government in 1993. In this paper, we strongly suggest that the HST tax rates be reduced in order to win voter support.

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Appendix

Table 1: Changing the Tax Rate from the Old PST to a Reduced HST: \$ Per Family (2008)

No.	Tax-change Effect	Ontario 5% HST	Ontario 6% HST	British Columbia 5% HST
1	New HST: Ontario & B.C.	201	240	184
2	New HST: Ontario Only	253	303	n/a
3	New HST: B.C. Only	n/a	n/a	183
4	New HST: Ontario Tax Cuts	-11	-11	n/a
5	New HST: B.C. Tax Cuts	n/a	n/a	-22
6	New HST: Housing	190	228	215
7	Old PST: Ontario & B.C.	-477	-318	-309
8	Old PST: Ontario Only	-74	-49	n/a
9	Old PST: B.C. Only	n/a	n/a	-91
10.	Total HST Tax Effects	81	393	161
11.	Income Tax Credits	-494	-494	-270
12.	Pass-through Cost Savings	-184	-221	-146
13.	Total Tax Effects	-598	-322	-255

Source: Calculations made from Statistics Canada, Family Expenditure Survey (2008)

Table 2: Changing the Tax Rate from the Old PST to a Reduced HST: Totals in 5-millions

No.	Tax-change Effect	Ontario 5% HST	Ontario 6% HST	British Columbia 5% HST
1	Total HST Tax Effects	393.7	1,917.9	285.8
2	P.I.T. Cuts, Credits, Grants	-2,410.0	-2,410.0	-479.0
3	Pass-through Cost Savings	-899.3	-1,079.1	-259.3
4.	Total Tax Effects*	-2,915.5	-1,571.3	-452.5
5.	% Provincial Expenditures**	3.1%	1.6%	2.4%
6.	2011-12 Provincial Deficit	16,316.0	16,316.0	925.0

* A minus sign indicates savings to consumers. ** Line 4 divided by 2008-2009 expenditures.

Source: Calculations made from Statistics Canada, *Family Expenditure Survey* (2008) and data from the Government of British Columbia (2011) and the Government of Ontario (2011).

**Table 3: Average Family Expenditures (\$) of the
Old PST Taxable Consumer Items--Taxable:
Common to Both Ontario and British Columbia (2008)***

No.	Description of Commodity	Ontario	B.C.
1	PST taxable food from stores	580	586
2	Telephone equipment purchases	62	63
3	Telephone services	540	333
4	Cellphone services	597	691
5	Pet food and other accessories	264	355
6	Household cleaning supplies	267	214
7	Paper/plastic foil supplies	295	272
8	Garden supplies	189	275
9	Other household supplies	103	85
10	Household furnishings	1,035	1,046
11	Household equipment	914	926
12	Furniture equipment repair (times .6)	45	40
13	Adult clothing, not including clothing services	2,489	2,318
14	Automobiles	1,907	1,424
15	Trucks and vans	1,330	1,990
16	Automotive accessories	25	47
17	Rented and/or leased vehicles	800	518
18	Tires, batteries and other accessories	287	295
19	Healthcare supplies	50	80
20	Non-prescription medications not including vitamins	201	216
21	Non-prescription eyewear	27	34
22	Personal care supplies and equipment	729	521
23	Sports and athletic equipment	180	183
24	Playground equipment	10	17
25	Toys and children's vehicles	68	65
26	Video games, etc.	122	107
27	Artists' materials	31	38
28	Computer equipment and supplies	400	434
29	Photographic goods	117	111
30	Musical instruments	43	50
31	Camping equipment	26	40
32	Supplies and parts for recreational equipment	28	18
33	Recreational vehicles	193	606
34	Recreational vehicle supplies and parts	50	87
35	Home entertainment equipment	643	558
36	Magazines and periodicals (times .1)	5	5
37	Books and pamphlets	106	116
38	Maps, sheet music, etc.	6	6
39	Educational supplies	54	44
40	Alcoholic beverages	925	461
41	Government-run lotteries	162	129
42	Tools and equipment for work	30	44
43	Total old PST family expenditures	15,917	15,449

* Source: Statistics Canada, Family Expenditure Survey.

** Amount spent by the average household (all incomes).

Table 4: Average Family Expenditures (\$) of the Old PST Taxable Consumer Items: Ontario Only (2008)*

No.	Description of Consumer Component	Ontario
1	Food purchased in restaurants	1,702
2	Parking away from home	94
3	Cable TV services	412
4.	Satellite TV services	151
5.	Newspapers	100
6.	Total	2,459

* Source: Statistics Canada, Family Expenditure Survey.

** Amount spent by the average household (all incomes).

Table 5: List of Old PST Consumer Items: British Columbia Only (2008)*

No.	Description of Consumer Component	Ontario
1	Fuel and electricity for principal accommodation	1,976
2	Internet access services	323
3	Online services	16
4.	Gasoline for owned and/or leased vehicles	2,152
5.	Gasoline for recreational vehicles	59
6.	Total	4,526

* Source: Statistics Canada, Family Expenditure Survey.

** Amount spent by the average household (all incomes).

Endnotes

1. We updated the 2008 data by using the available total CPI index and a forecast from TD Bank Economics (2011, p. 14). For our estimate, we take the total additional HST paid and subtract from that our assumed 60 per cent of input cost saved, given that firms can write off HST taxes paid on inputs and capital. Our result is higher since we assume 60 per cent of input costs are passed on to households, whereas the study done for the government of British Columbia assumes 90 per cent is passed on to consumers.
2. A poll done in early June 2011 suggested that 56 per cent of potential voters support reverting to the old PST, and 44 per cent support the HST at the reduced rate (Angus Reid [2011]).
3. The reason the data was not needed in our 2010 study [Murrell (2010)] was that when the HST was first introduced, the sales tax rate, moving from the PST to the HST, did not change for goods taxed under the old PST (for example, bars of soap). Therefore, there was no change in gross taxes paid for these commodities. However, with a reduction in tax rates, consumers now pay less for these goods.
4. See Murrell and Yu (2000) and in particular Table 1 on page 457.
5. We cited this literature in our previous paper published by the Canadian Centre for Policy Studies (Murrell, 2010, p. 17). We also direct readers to more-recent studies (Stokes [2011] and Kesselman [2011]). This literature states that a move to the HST increases the incentive to export and to invest in capital, thus stimulating economic growth.

Further Reading

September 2009

Five Thoughts on the Single Rate Income Tax

David Seymour

<http://www.fcpp.org/publication.php/2944>

March 2011

Harper's Tax Boutique: Tax Expenditures in a Time of Deficit

Ben Sand and Peter Shawn Taylor

<http://www.fcpp.org/publication.php/3689>

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