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## BACKGROUNDER

TAX COMPETITIVENESS PROGRAM

### New Housing and the Harmonized Sales Tax: Lessons from Ontario

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#### **In this issue...**

Ontario's revised plan for the tax treatment of new housing under an HST is a significant improvement over its original proposal, with lower economic cost and less impact on homebuyers' decisions. The benefits are instructive for those provinces that have not yet committed to harmonization.

## THE STUDY IN BRIEF

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This *Backgrounder* analyzes Ontario's plans for the treatment of new housing under a new Harmonized Sales Tax (HST) and presents the costs and benefits of options available to other provincial governments as they consider harmonizing their sales taxes with the federal Goods and Services Tax (GST).

The proposed adoption of an HST in Ontario and British Columbia represents an intelligent tax reform that will benefit the economy as a whole, but the impact of the tax reform on new housing has been a thorny issue. New housing is not directly taxed under provincial retail sales taxes (RSTs), but some sales taxes are embedded in the cost of construction. The HST directly taxes housing, but there are rebates to make the tax change effectively neutral on housing under \$400,000.

In the original Ontario HST proposal in the 2009 Budget, buyers of new homes priced between \$400,000 and \$500,000 would have been required to pay back the rebates on the value of the house under \$400,000. This would have resulted in an effective marginal tax rate of 47.3 percent in this price range. New housing over \$500,000 would have faced the regular marginal tax rate after the rebates had been fully paid back.

The revised Ontario proposal, created in response to industry opposition to the scheme, eliminates this "recapture" of rebates for homes between \$400,000 and \$500,000 and instead adopts a "flat tax" on homes above \$400,000. British Columbia has adopted a similar approach to Ontario.

This *Backgrounder* shows that the revised Ontario HST plan has less economic costs and impact on homebuyer decisions compared to the original proposal. However, this comes at the cost of lower provincial revenues and slightly less income progressivity. As policymakers in other provinces consider adopting an HST, they, too, must consider different treatment for new housing and how their local markets will respond to the HST.

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One of the most controversial aspects of Harmonized Sales Taxes (HSTs) is the tax treatment of new housing. This *Backgrounder* examines the economic impact on housing of the planned Ontario Harmonized Sales Tax (OHST) and points to what other provinces considering an HST can learn from the Ontario experience.

Our analysis asks how alternative tax regimes for new housing will affect:

- The size and quality of homes Ontarians choose to purchase;
- The value of land available for residential development and the resulting returns to landowners and developers; and
- The total tax revenues that accrue to all three levels of government.

By considering the likely response of individuals and markets to the HST, we are able to estimate the economic welfare cost of the tax, which measures the economic burden it places on new home buyers and developers, depending on its design. We can then compare the estimated loss in economic welfare with the gains to government from additional revenues.

We analyze the likely impact of both Ontario's original OHST design, as proposed in the 2009 Budget, and the subsequently revised design on the housing market in the Greater Toronto Area. We find that the revised HST plan is a significant improvement over the original proposal, with lower economic cost and less impact on buyer decisions. The revised plan represents a level-playing-field approach that will not distort new housing construction relative to other sectors of the provincial economy.

On balance, the HST is an intelligent tax reform that is likely to boost investment and economic efficiency, while reducing tax compliance costs for taxpayers. Our analysis of the tax treatment of new

housing may therefore be of special relevance to the other provinces – Saskatchewan, Manitoba and Prince Edward Island – that have not yet harmonized their provincial sales taxes. To further discussion of the issues for those provinces, we then provide an analysis of the original and revised approaches assuming an unlimited supply of land, which is probably a more appropriate assumption in those regions.

## Getting It Right: The Evolution of the Ontario HST on Housing

When Ontario announced in its 2009 Budget that it would adopt an HST on July 1, 2010, combining the current federal Goods and Services Tax (GST) and provincial retail sales tax (RST), it signalled major changes for the tax rate on new houses. Under the province's original budget proposal in March 2009, the HST on new houses valued up to \$400,000 would, through rebates to buyers, effectively be 2 percent. Since it has been estimated that the current retail sales tax adds between 1.5 percent and 3 percent to the cost of a typical home in most Ontario cities (CMHC, 2009), the combined effect of the HST reform would be to reduce taxes on housing for many new home buyers.

As originally conceived, purchases of new houses valued over \$500,000 would be subject to an 8 percent HST. Meanwhile, new houses in the \$400,000 to \$500,000 range would be taxed on a sliding scale designed to "recapture" the tax revenue loss from the lower-priced homes. Thus, between the prices of \$400,000 and \$500,000, the effective tax rate on housing would be much higher than the statutory 8 percent. This recapture plus the existing taxes on new housing would have increased the overall effective tax rate to 47.3 percent on houses in that price range.

In response to criticism, the Ontario government amended its original proposal. On June 18, 2009, it announced that new houses selling below \$400,000 would still be taxed at the planned effective 2 percent tax rate, while houses \$400,000 and over would pay HST of \$8,000 (2 percent of \$400,000) plus 8 percent on the value in excess of \$400,000. Under this revised proposal, the effective tax rate under the

The authors would like to thank Richard Bird and members of the C.D. Howe Institute Tax Competitiveness Council for their comments on an earlier draft of this report.

Table 1: Taxes on New Housing in the City of Toronto

**Ontario Land Transfer Tax**

On the first \$55,000 = 0.5%

\$55,001 to \$250,000 = \$275 plus 1% of price minus \$55,000

\$250,001 to \$400,000 = \$2,225 plus 1.5% of price minus \$250,000

Above \$400,000 = \$4,475 plus 2% of price minus \$400,000

**City of Toronto Land Transfer Tax**

On the first \$55,000 = 0.5%

\$55,001 to \$400,000 = \$275 plus 1% of price minus \$55,000

Above \$400,001 = \$3,450 plus 2% of price minus \$400,000

**Federal Goods and Services Tax**

On the first \$350,000 = 3.2% on the entire amount

\$350,001 to \$450,000 = 11.3% times price less \$28,350

Above \$450,001 = 5.0% on the entire amount

**OHST on New Housing***Original Proposal*

Up to \$400,000 = 2% on the entire amount

\$400,001 to \$500,000 = \$8,000 plus 32% of price minus \$400,000

Above \$500,001 = 8% on the entire amount

*Revised Proposal*

Up to \$400,000 = 2% on the entire amount

Above \$400,001 = \$8,000 plus 8% of price minus \$400,000

Note: First-time homebuyers receive a limited rebate under the City of Toronto and Ontario Land Transfer taxes.  
Source: Dachis, Duranton and Turner (2008), Canada Revenue Agency (2009), Ontario (2009).

OHST never exceeds 8 percent. This cap should improve economic incentives to purchase new homes but likely will result in substantial losses in tax revenues. British Columbia proposed the same formula when it announced it would adopt the HST.<sup>1</sup>

One complicating factor in assessing the OHST impact on new housing is that there are other taxes to be considered. New housing in Toronto, for example, is subject to the province's Land Transfer

Tax, the City of Toronto Land Transfer Tax as well as the federal GST (see Table 1).<sup>2</sup> To assess the impact of the OHST, we need to consider its effects on these other sources of tax revenues. British Columbia also applies a Provincial Property Transfer Tax, and results are broadly applicable in other provinces, albeit with different rates.<sup>3</sup>

According to our estimates, the original OHST proposal would have imposed a substantial burden on households purchasing new houses valued at

1 Provinces that have already harmonized tax bases with the GST treat new housing differently. Quebec provides an HST rebate for new homes under \$200,000, but claws back that rebate on homes over \$225,000. Nova Scotia also provides a limited rebate of the provincial component of HST on new housing to first-time homebuyers to a maximum of \$1,500.

2 Municipal development charges are also levied on new housing, but these are not included in the current analysis. These are more appropriately defined as user fees for municipal infrastructure, rather than taxes.

3 The B.C. provincial sales tax rate is 7 percent and the provincial component of the HST will be the same. The Provincial Property Transfer Tax is 1 percent on the value of a house less than \$200,000, and \$2,000 plus 2 percent of the value of a house over \$200,000.

more than \$400,000. The combined economic cost to buyers of new homes and to the government – from the reduced revenues from the land transfer tax and GST – would have been as high as \$1.35 for each dollar raised through the OHST.

The ratio of the welfare loss to the additional OHST revenues on new housing would have made Ontario's original proposal an economically costly source of tax revenue compared to other types of taxes.<sup>4</sup> The above estimate of the welfare loss per dollar of revenue may be high if the HST causes a decline in the price of land available for housing development – a likely outcome in British Columbia, particularly Vancouver, where the supply of land for new housing is relatively fixed. Such a reduction in land prices would mitigate, but not eliminate, the impact of the tax on consumers. In Ontario's case, if the OHST's impact is to reduce the price of land, the welfare cost of the original proposal could have dropped to \$1.16 for every dollar of revenue.

Under the revised OHST proposal, the high-range estimate of the welfare loss per dollar of additional total tax revenue from new housing is \$1.18 – a figure that is comparable to typical estimates of the welfare loss from other taxes, using similar economic models. Although the new proposal likely will yield lower tax revenues, it should reduce the distortions and welfare losses caused by the tax on new housing.

Overall, we consider the revised OHST to be better than the original proposal from a tax policy perspective – the higher tax revenues and greater progressivity of the original OHST would have been achieved at an excessively high cost. That proposal's high marginal tax rates would also have resulted in other distortions not reflected in our calculations, such as the sale of "shell housing" that would sell for under \$400,000 and qualify for the reduced tax rate, with additional improvements added at a later date.<sup>5</sup> The revised OHST, by comparison, can be implemented at a lower welfare cost.

Our analysis is necessarily one of choosing among "second-best" policy alternatives. In economic terms,

there is nothing special about housing consumption. Indeed, most economists believe under a value-added tax such as the HST, housing should be subject to the same tax rate as other consumption goods. As we discuss below, for social, political and administrative reasons, full taxation of residential housing is likely impossible. The question remains how to deliver a tax rebate to lower-priced homes with minimal disruption to housing markets.

## Marginal and Average Tax Rates under the OHST

The marginal tax rate (MTR) on housing is calculated as the tax paid on each additional dollar spent to purchase a newly built home. The MTR on new housing combines the impact of the Ontario Land Transfer Tax, the City of Toronto Land Transfer Tax, the federal GST and the OHST (Figure 1). We show the MTR for three scenarios: 1) under the previous Ontario retail sales tax, which has an assumed 2 percent effective tax rate on new housing embedded in the construction cost; 2) under the original proposal for the OHST and, finally, 3) under the revised OHST proposal for housing valued in excess of \$400,000.<sup>6</sup>

Although there is currently no provincial sales tax levied on new housing sales in Ontario, the inputs used in the construction of housing – tools, materials, etc. – are taxed, which is estimated to add between 1.5 and 3 per cent to a typical new house in Ontario (CMHC, 2009).<sup>7</sup> The effect of a rebate reducing HST on housing under \$400,000 to 2 per cent will therefore be to reduce the combined tax paid on many such homes.

Smart (2007) estimates that Ontario collected over \$1.5 billion in RST revenue from residential and non-residential construction inputs in 2002, while British Columbia collected over \$500 million in RST revenues from the same source. The elimination of these taxes on inputs in the residential construction sector, together with the proposed HST rebates with an estimated tax expenditure of up to \$1 billion

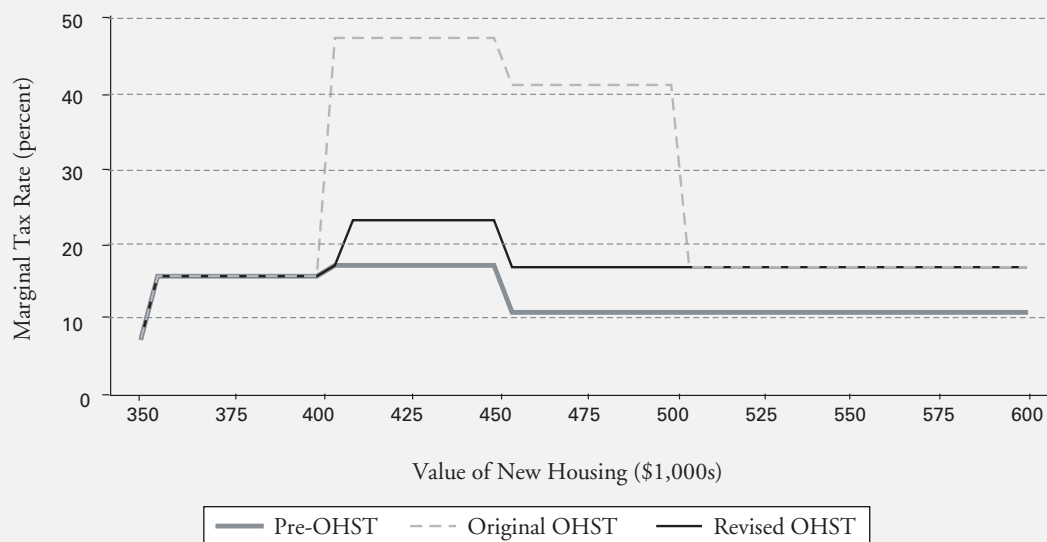
4 Previous analysis of land transfer taxes, which apply in part to new housing, by Dachis, Duranton and Turner (2008) also indicates that these taxes impose a high welfare cost per dollar of tax revenue.

5 See Bob Aaron "HST will box home buyers, builders into bizarre deals," *Toronto Star*, May 2, 2009.

6 Revenue from all taxes on housing priced at less than \$400,000 is not expected to change.

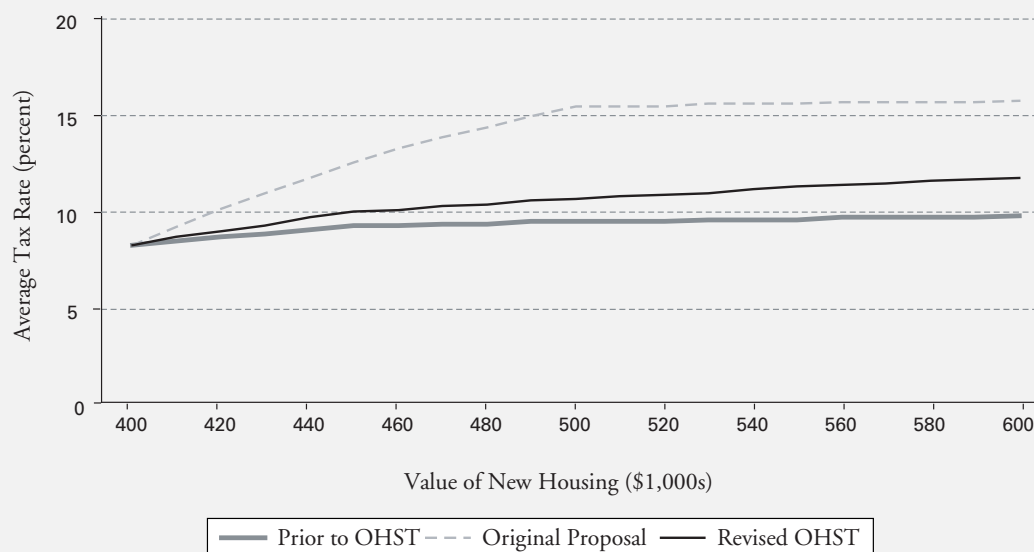
7 The lower figure applies in markets like Toronto where the value of land is a relatively high proportion of the cost of a home, so that RST taxes on construction inputs become a relatively smaller proportion.

Figure 1: Marginal Tax Rates on New Housing



Source: Authors' calculations.

Figure 2: Average Tax Rates on New Housing in Ontario



Source: Authors' calculations.

annually in Ontario will therefore reduce substantially the net revenues obtained from housing construction.

Under the original OHST proposal in the Ontario budget, the marginal tax rate for new house sales in the \$400,000 to \$500,000 range, as noted above, would have increased to as high as 47.3 percent from the current 17.3 percent rate. Under the revised OHST, the marginal tax rate on new housing in the \$400,000 to \$450,000 range will be 23.3 percent, and will decline to 17.0 percent when the value of new housing exceeds \$450,000.<sup>8</sup> The total marginal tax rate falls at \$450,000 because that is the value at which a GST new-housing rebate for homes under \$350,000 has been fully recaptured.

Figure 2 shows the average tax rates on new housing under the original and revised Ontario proposals. In both cases, the average tax rates will increase as the value of new housing increases, but average tax rates are significantly lower under the revised OHST.

## The OHST's Effect on the Housing Market

In evaluating any tax, two key questions are: how does the tax distort economic decisions? and who bears the burden of the tax?

The price of new housing depends largely on the available supply of land. Take two examples – an area with very limited available land and another with abundant land for new housing. The first example may therefore be most applicable to urban areas of British Columbia and Ontario while the second applies to large parts of Saskatchewan or Manitoba – provinces that have yet to adopt the HST. Rural areas tend to have an elastic supply of land, whereas cities with limited space and strict zoning regulations have a fixed amount of land available for new housing. In both cases, the simple laws of supply and demand are at work.

Example one: An increase in taxes leads to a reduction in the demand for new housing, which

implies a reduction in the price of land. If the supply of land for housing is fixed, the effect of the tax is to reduce the value of undeveloped land available for housing construction. As a result, landowners and developers bear a larger share of the burden of the HST, housing price increases due to the tax become smaller, and the reduction in housing demand and its resulting welfare cost is mitigated.<sup>9</sup> Thus the case of fixed land supply provides our lower-bound estimate of the welfare cost of the HST reform.

Some new home buyers purchasing low-cost homes might be better off if land prices fell far enough to result in a lower pre-tax price for new housing. The tax reforms in the revised HST proposal will have important distributional effects, but we still expect that the total losses imposed by the OHST on new homebuyers and landowners will exceed the additional tax revenues.

Example two: If there is an abundant supply of land that can be used either for housing or other purposes such as agriculture, then the burden of the HST will be shifted forward to homebuyers, in the form of higher prices. The assumption of a highly elastic supply of land for housing therefore provides our upper-bound estimate of the welfare cost of the revised HST.

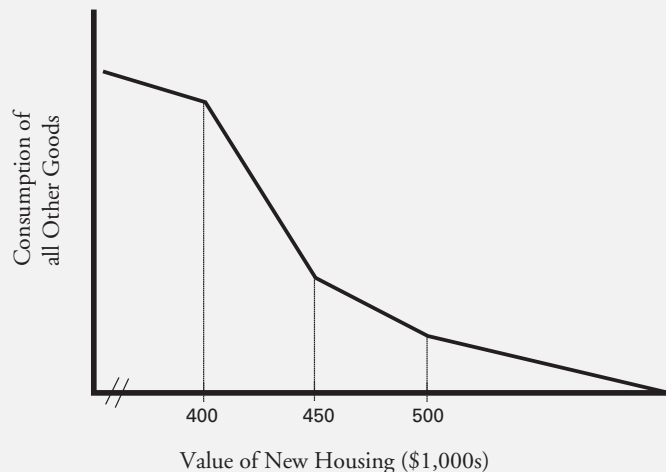
Turning to the distortionary effect of the HST on housing purchases, Figure 3 illustrates a consumer budget line reflecting the trade-offs that households face in making consumption decisions between more expensive housing and other goods.<sup>10</sup> The shape of the budget line in Figure 3 reflects the fact that the marginal price of housing varies with the amount of new housing consumed. In particular, there is a “kink” in the budget line at the \$400,000 level under the original OHST proposal because the marginal price of housing increases there from 1.158 to 1.473. In other words, an additional dollar spent on housing in the \$400,000 to \$450,000 range would mean that a household would have to give up \$1.473 of spending on other consumption goods.

8 The MTR in British Columbia will be 20.3 percent for new houses between \$400,000 and \$450,000 and 14 percent for houses over \$450,000 because the HST rate is one percentage point lower and there is no 2 percent municipal property transfer tax. The land and property transfer taxes are equivalent in British Columbia and Ontario on the value of homes over \$400,000.

9 We assume that new housing is produced with capital and land according to a Cobb-Douglas production function. Land was assumed to represent 50 percent of the total costs of producing housing. The supply of land for housing was assumed to be fixed, while the supply of capital to the residential sector was assumed to be perfectly elastic.

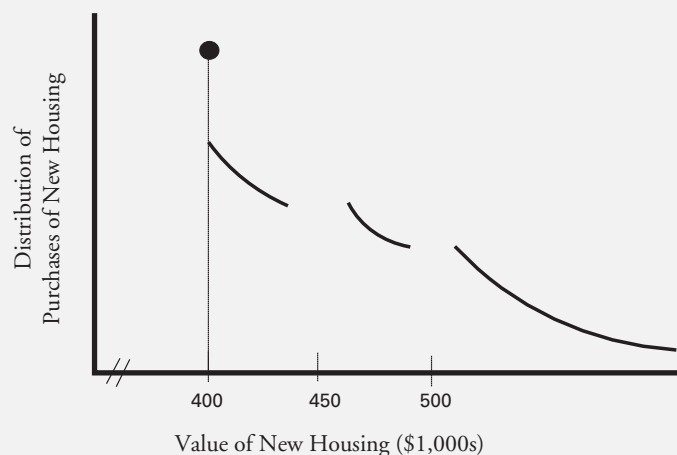
10 We focus on the segment of the budget line where the value of housing is greater than or equal to \$400,000 because this is the range that is directly affected by the introduction of the OHST.

Figure 3: Budget Line under the Original OHST Proposal for New Housing



Source: Authors' calculations.

Figure 4: Predicted Distribution of New Houses Purchased under the Original OHST Proposal



Source: Authors' calculations.

Under the original OHST proposal of Figure 3, the budget line becomes flatter at the \$450,000 level, where the marginal price of housing declines from 1.473 to 1.41, with the phase out of the GST relief for new housing at that point. An additional kink in the budget line occurs at \$500,000, where the marginal price of housing declines from 1.41 to 1.17.

How would this non-linear budget line have affected household decisions to purchase a new home? There would have been “bunching” of

households at a kink in the budget line and there would be “gaps” in the purchases – price ranges where there are very few purchases – centred on the corners in the budget lines.

We attempt to describe the critical tax impact on behaviour question in Figure 4. It shows the expected distribution of purchases of new housing for different price levels induced by the budget line shown in Figure 3.

Bunching occurs at the kink (downturn) in the budget line because households over a wide income



range would, as a group, find it optimal to purchase a \$400,000 house. In other words, these households would prefer a \$400,000 house to a \$401,000 house because they value an additional \$1,000 of housing quality less than \$1,473 in additional costs.

Because housing is a “normal good,” higher income households are likely to purchase new houses worth more than \$400,000. However, at some wealth level, households will be indifferent to purchasing a house in the \$400,000-\$450,000 range or buying one in the \$450,000-\$500,000 range.<sup>11</sup>

Households at a slightly higher income level may prefer a new home above the \$450,000 level. As a consequence, there would be few purchases of new houses in a price range centred on \$450,000, even though housing becomes relatively cheaper at this threshold when the marginal tax rates are taken into consideration. Similarly, there will be a gap in the purchases of houses centred on the \$500,000 level.

With the revised OHST, there will still be a downtrend in households’ budget lines at \$400,000, but it will be less dramatic than under the original proposal because the marginal price will only increase 1.233 times instead of 1.473. There will also be a gap in the demand for housing centered on the \$450,000 level where the marginal price of housing declines to 1.17.

## The Impact of the HST on Households and Tax Revenues

As the above brief description indicates, analyzing the impact of the OHST on household decision-making is difficult because of the bunching that is predicted to occur at the \$400,000 level and the expected gaps in housing sales centred around \$450,000 and \$500,000.

In the following section, we simulate the OHST impact by assuming that all households have the same preferences for new housing.<sup>12</sup> But households differ in terms of their lifetime incomes, and we have used the projected distribution of new GTA house sales to estimate the OHST impact at different wealth levels. The GTA sales pattern is likely to be

similar in other real estate markets, but some differences will exist.

### *The Original OHST Proposal*

Under the original proposal, the 38.7 percent of householders purchasing a new home worth more than \$400,000 would be bunched at the \$400,000 price level for new houses because of the significant increase in the marginal tax rate on new housing (Panel A of Table 2). The ratio of the total welfare loss caused by the distortion in housing purchases to the additional OHST revenues on new housing is estimated to be 1.22. However, this ratio does not include the changes in provincial, federal and municipal tax revenues from the Ontario Land Transfer Tax, the GST, the Toronto Land Transfer Tax or the OHST on the sales of other goods and services arising from the increase in taxes on new housing. When the effects of the OHST on the other tax revenues are taken into consideration, the economic loss per average dollar of total tax revenue would have been as high as 1.35. (Table 3, Column 1). This result demonstrates that the original OHST proposal on new housing would have been a very high-cost source of tax revenues. The marginal cost of an additional housing tax dollar would have been even higher.

Where the supply of land for housing is fixed, the price of land in a regime with the original OHST would have declined by about 4 percent, and the price of new housing would have declined by about 2 percent. Approximately the same proportion of households would have been “bunched” at the \$400,000-price purchase level. On average, they would have gained \$7,145 from lower pre-tax housing prices, but this gain is less than the \$8,400<sup>13</sup> reduction in the price of new housing at this level because many of these purchasers would have been buying smaller, lower quality houses than they otherwise would like to own.

The other households in the over \$400,000 segment of the new housing market would have been worse off with the original OHST relative to the RST. When the projected gains and losses to all groups are

11 In terms of the standard theory of consumer behaviour, a household’s indifference curve between consumption and housing will be tangent to both segments of the budget line.

12 We describe consumer utility with a Cobb-Douglas utility function where households spend one-third of their lifetime incomes on housing.

13 The reduction in the new house prices for this group is predicted to be 2.1 percent of \$400,000 or \$8,400.

Table 2: Range of Impacts on Households' Well-Being – Original and Revised OHST Proposals

Panel A: Original OHST Proposal				Panel B: Revised OHST Proposal		
Wealth Range	Proportion of New Homes over \$400K	Range of Average Welfare Losses (Gain if Negative)	Range of Ratio of Average Welfare Loss to Average Wealth	Proportion of New Homes over \$400K	Range of Average Welfare Losses (Gain if Negative)	Range of Ratio of Average Welfare Loss to Average Wealth
\$1,371K to \$1,611K	38.7%	-\$7,145 to \$3,611	-0.00486 to 0.00234	8.0%	-\$356 to \$130	-0.00025 to 0.0001
\$1,611K to \$1,804K	15.2%	\$6,995 to \$19,010	0.00411 to 0.0112	20.9%	\$1,210 to \$1,710	0.00082 to 0.0012
\$1,804K to \$1,859K	3.3%	\$17,269 to \$30,110	0.00943 to 0.0165	6.3%	\$2,460 to \$2,980	0.00159 to 0.0019
Over \$1,859K	42.8%	\$32,922 to \$54,970	0.01045 to 0.0174	64.8%	\$24,400 to \$25,400	0.00871 to 0.009
Note: The low welfare cost estimates are based on a model where the supply of land for housing is fixed and landowners bear a large share of the welfare cost of the tax. The high welfare cost estimates assume an elastic land supply where home buyers bear the full burden of the tax. Source: Authors' calculations.						

Table 3: Summary of Impact of Original and Revised Ontario Policies for New Housing over \$400,000<sup>a</sup>

	Original Proposal in Ontario Budget 2009	Revised Version June 18, 2009
OHST Marginal Tax Rates		
\$400-\$500K	32.0%	8.0%
\$500-\$600K	8.0%	8.0%
\$600K+	8.0%	8.0%
Total Marginal Tax Rates		
\$400-\$450K	47.3%	23.3%
\$450-\$500K	41.0%	17.0%
\$500-\$600K	17.0%	17.0%
\$600K+	17.0%	17.0%
Proportion of Households Bunched at \$400K	38.7%	8.0%
Welfare Loss per Dollar of the Increase in HST Revenue on New Housing	1.22	1.08
Welfare Loss per Dollar of the Increase in Total Tax Revenues	1.35	1.18
Additional HST Revenue on New Housing per Household	\$23.6K	\$15.7K
Additional Total Tax Revenue per Household	\$21.3K	\$14.4K

<sup>a</sup> These computations assume that the OHST is fully reflected in the price of new housing.  
 Source: Authors' calculations.

combined, the loss per additional dollar of tax revenue for all levels of government would have been 1.16.

### *The Revised OHST Proposal*

Under the revised Ontario proposal, the proportion of households bunched at the \$400,000 price level for new houses will fall to about 8 percent because of the significant reduction in the marginal tax rate on new housing (Panel B of Table 2). As a result of the lower average tax rates, the additional total tax revenues will decline by about one-third (see Column 2 of Table 3). The welfare loss per dollar of additional total tax revenue declines from 1.35 under the original proposal to 1.18.

The welfare cost of raising tax revenues through the OHST on new housing is somewhat higher than the Baylor and Beauséjour (2004) estimate of the welfare cost of raising revenue through a general sales tax. However, in light of the high marginal tax rates on housing, a higher cost of raising revenue through the OHST is to be expected. The distributional objective of sheltering lower-cost housing from a tax rate increase entails a somewhat higher welfare cost for this source of tax revenue. Overall, the new proposal will significantly reduce the purchasing pattern distortions caused by the tax on new housing and generate additional tax revenues at a relatively low social cost.

The distribution of the burden under the revised OHST is less progressive than under the original, based on a fixed land supply assumption for Ontario, because the revised OHST would have little effect on land prices. The 8 percent of households that we predict will be bunched at the \$400,000 new house purchasing level under the revised OHST will be better off as a result of the slight reduction in housing prices, but the average expected gain of \$356 is very modest.

Other provinces considering harmonizing sales taxes should consider the costs and benefits of the two Ontario proposals, summarized in Table 3. We present these estimates based on the assumption that land is relatively elastic for the sake of comparison to other provinces where this is likely to be the case. Further, the distribution of sales in these provinces will be different than in the Greater Toronto Area,

and with considerably lower average prices. These results should be considered a template for other provinces, where they would vary based on local conditions.

### **Taxes and the Resale Housing Market**

Unlike most things taxed by the HST, housing is a long-lived asset – with a well-developed resale market. This creates special challenges for designing the taxation of housing under HST – and for our analysis of the tax.

Under the HST, as under many countries' value added taxes (VAT), new homes are subject to tax – at a reduced rate – while resale homes and most residential rents are tax-exempt. An ideal VAT on housing would look quite different: both newly built and resale homes would be subject to tax at the full rate, but sellers of resale homes would receive a credit for tax paid at the time of the earlier purchase (Ebrill et al., 2001). This would generate more revenue, avoid changing relative prices of new versus resale houses and would result in the tax burden being more fairly shared among successive house owners.

However, such an ideal VAT is clearly impracticable. There is often a decades-long gap between a purchase and subsequent sale of a house, so that record keeping for such a tax would be difficult. More important, the tax would apply in full to sales of existing homes at the time of introduction of the tax – with no credit for tax paid on the earlier purchase, since there was no VAT at the time – which would no doubt generate considerable political opposition from existing homeowners.

Meanwhile, the existing, imperfect treatment of housing under the HST creates a different set of economic problems that are not part of our formal model. First, since newly built homes are subject to tax while resale homes are not, if the two goods are close substitutes (they should be), owners of existing homes at the introduction of the tax will receive a windfall gain in the value of their homes. This is evidently unfair to future taxpayers, but since future taxpayers do not vote today, they are frequently on the short end of transition arrangements like this.

Another challenge is that potential windfall gains for existing homeowners raise the price of tax-exempt

resale homes. This result will create excess burdens in the market for resale homes analogous to the excess burdens on newly built homes analyzed in this *Backgrounder*. Since the stock of existing homes is large relative to the flow of newly built homes, incorporating this effect into our welfare cost estimates would likely result in a very large increase in our estimate of the excess burden per dollar of tax revenue of the proposed HST.<sup>14</sup> Just how much excess burden, however, depends on how easily consumers substitute resale homes for newly built homes.

## Conclusion

While the benefits of HST to the economy are well established, achieving the right balance in applying the tax to new houses has been difficult. We find that the revised version of the Ontario HST improves the tax-rate structure because it reduces the marginal effective tax rates on new housing. Relative to the

original proposal, consumer decisions about the size and quality of the home they desire are less distorted. This is achieved by adopting a rate structure that is similar to that of a “flat tax.” That is, purchases of new housing above a certain threshold, in this case \$400,000, will be subject to a constant marginal tax rate. British Columbia has adopted a similar flat tax rate structure that is superior to the claw-back rate structure of the original Ontario proposal and the GST new-housing rebate. Such a flat tax reduces disincentive effects and raises revenue at a relatively low social cost. However, the distribution of the tax burden is less progressive and the total amount of revenues collected will fall. Another important consideration is that the HST impact depends on the availability of land for new housing, because when land is in plentiful supply the burden of the tax change tends to fall on homebuyers. Policymakers in other provinces should keep in mind that the economic impact of any housing rebate will depend on local conditions.

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14 This additional excess burden is in some sense transitional, since eventually all existing homes will depreciate and be replaced by new built homes. But the transition in this case is very long, indeed.

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