

The Effect of the Harmonized Sales Tax on Consumer Prices in Atlantic Canada

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Cet article examine l'effet des Taxes de Vente Harmonisées (TVH) sur les prix à la consommation pour les trois Provinces Atlantiques canadiennes impliquées d'avril 1997 à mars 1999. En utilisant les données globales ainsi que groupées (huit composants) fournies par l'indice des prix à la consommation (IPC), nous avons effectué une analyse contrefactuelle et avons découvert que, *ceteris paribus*, alors que l'indice des prix à la consommation a, globalement, marqué une légère baisse au cours des deux premières années, pour les composants de l'IPC, le changement varie considérablement d'une catégorie à l'autre.

This paper examines the effect of the Harmonized Sales Tax (HST) on consumer prices for the three participating Atlantic Canada provinces from April 1997 to March 1999. Using aggregate and disaggregate (eight-components) consumer price index (CPI) data, we conduct counter-factual analysis and find that, *ceteris paribus*, while the consumer price index for overall items fell slightly during the first two years of the HST, the change in the components of the CPI varies substantially from one category to another.

INTRODUCTION

On 23 October 1996, three Atlantic Canada provinces — Newfoundland, Nova Scotia, and New Brunswick — together with the federal government, announced that they would harmonize their respective provincial sales taxes (PST) with the federal Goods and Services Tax (GST). The three PST rates would be equalized and lowered to 8 percent. Furthermore, the three PST tax bases would be converted to the GST valued-added base, and be expanded to include those goods and services exactly covered by the GST. The tax-collection and

tax-compliance mechanisms would be merged such that the federal government would collect the harmonized sales tax (HST).

Before the official HST announcement, going back to when the original tax harmonization intentions were made in April 1996,¹ there was some policy discussion — concentrated among the participating governments, the provincial opposition parties, and the media — as to the effect the HST might have on consumer prices. The federal government and the three HST-participating provincial governments claimed that the HST would benefit

consumers taken as an aggregate, and that poor families, albeit that they would not benefit as much as non-poor families, would still see some tangible welfare improvement. The opposition parties, the media, and many lobby groups stated that the HST would raise consumer prices, similar to the way in which the earlier GST raised consumer prices in 1991. As well, there was the worry that lower income households would be disproportionately hurt by the HST — analogous to the earlier debate of how the GST would disproportionately affect lower income families.²

This paper examines how the implementation of the HST, put in place on 1 April 1997, has affected consumer prices. In particular, we investigate: how the actual aggregate (all-items) consumer price indexes (CPI) in the three HST-participating provinces, in the post-HST period, move in relation to the corresponding simulated CPI indexes if the HST had not been imposed; and how the CPI indexes for eight major consumer goods components changed during the first two years of the HST.³

The paper proceeds as follows. The next section briefly describes the HST and discusses the reasons that governments gave for implementing the harmonized tax. The third section outlines the *a priori* arguments pro and con, as to whether or not the HST reduces consumer prices.⁴ The fourth section presents data, empirical methodology, and results. The last section makes some concluding remarks.

A BRIEF DESCRIPTION OF THE HARMONIZED SALES TAX

The Government of Canada has long been committed to promoting tax harmonization among the provinces.⁵ The federal government and the three participating provinces (Newfoundland, New Brunswick, and Nova Scotia) signed a memorandum of understanding (MOU) signalling the governments' intention to proceed with the implementation of the

HST. A formal agreement to legislate the HST was officially signed on 23 October 1996. Briefly put, the HST consists of the following:⁶

- the provincial sales tax bases of the three participating provincial governments will be converted into value-added tax bases, the bases defined to be exactly equivalent to the operative GST tax base;
- the provincial sales tax rates in operation at the time of the sales tax conversion (12 percent for Newfoundland; 11 percent in New Brunswick; and 11 percent in Nova Scotia) will be reduced to 8 percent for all three provinces, and will be defined as the “provincial sales tax portion” of the HST;
- the participating provinces will no longer apply their provincial sales tax onto the GST, that is, imposing “a tax upon a tax,” as was done before the HST was put into effect. In the case of New Brunswick and Nova Scotia, the 11 percent PST applied on the 7 percent GST meant that an extra 0.77 percent tax was collected on taxable goods before the HST was instituted;
- businesses now file one unified HST form (replacing the earlier GST), pay the tax, and receive credits, using the HST rate (instead of the GST rate). In turn, the federal government now collects the HST tax, and rebates the provincial sales tax portion of the HST back to the participating provinces. The participating provinces have closed their respective sales tax-collection departments, transferring employees to other areas of work.

Analogous to the run-up of the implementation of the GST before 1991, there were many controversies surrounding the HST. We mention two controversies which led to slight changes in the actual implementation of the new tax regime. First, at the time of the HST agreement, in October 1996,

the participating governments agreed to enforce “tax-inclusive pricing” for all goods and services. The total price of commodities, including the total 15 percent HST tax rates, were to be stated on price tickets and advertising. Criticism from retailers, lobby groups, and the media led the Senate to amend the original tax-in policy. The federal government passed the amended HST law, whereby retailers and others were given the option of showing tax-inclusive and tax-exclusive prices. Second, in the HST-participating provinces a considerable lobbying effort was launched against the prospect of provincial sales taxation on textbooks, a protest that continued throughout much of 1996. As a result of this protest, when the HST was announced in October 1996, Finance Minister Paul Martin also stated that a full Canada-wide GST rebate would be applied to textbooks, library books, and books purchased by non-profit organizations (Finance Canada 1996a). Analogous rebates would be given on the provincial sales tax portion of the GST.

The stated objective of the HST was to further tax harmonization, both vertical and horizontal (see Pigeon 1995, for a more complete description of these terms). Horizontal harmonization takes place when states or provinces in a federation set identical tax bases. In this sense the HST is seen as a limited success since only three provinces comprising only a small part of the national economy took part. Vertical harmonization occurs when — in a situation where multi-level jurisdictions tax the same revenue source — the lower level jurisdiction sets an identical tax base with the higher level jurisdiction. The HST, with vertical harmonization, needs only one form to be filed, instead of two: PST and GST respectively. This reduction in complexity reduces taxpayer costs (having less paperwork and accounting documentation) and administration costs (the three HST provinces no longer collect the tax).⁷

In the promotional literature on the HST, the federal government stated these objectives.⁸ The literature advertised “a simpler tax system for both

consumers and businesses,” “lower costs and less paperwork” for businesses that will improve their “competitiveness.” Although not specifically an objective of tax harmonization, the value-added feature of the HST was also well promoted. Analogous to the GST, the value-added nature of the provincial sales tax portion means that exporters in the participating provinces (exporters shipping to other provinces as well as to international destinations) could export at more competitive prices, since taxes on all intermediate goods and services would be credited back to the exporting firms (Canada 1997).

WOULD THE HST RAISE OR LOWER AVERAGE CONSUMER PRICES? ARGUMENTS MADE AT THE TIME OF THE IMPLEMENTATION OF THE HST

The belief that businesses would benefit from the HST was generally well accepted at the time of the original announcement. But there is no clear *a priori* reason, before the HST came into effect, as to why the implementation of the HST in the participating provinces would in fact lower average consumer prices.

In theory, overall consumption prices could either rise or fall for the following reasons. First, since the new HST broadens the overall tax base, consumer prices would rise for those components that are taxed under the GST, but not taxed under the provinces’ PST. Many such components — fuel and electricity, most clothing and footwear, gasoline and diesel fuel, and purchased transportation — typically make up a significant part of the household’s budget.⁹

Second, for many other items already covered by both the old PST and GST before the HST came into being, consumer prices would fall, since the new rate covering the “provincial portion” of the HST falls to 8 percent from a higher old PST rate. These items include snack foods, personal care products,

cleaning supplies, electronic products, restaurant meals, and “big ticket” items such as new and used cars, appliances and furniture, among many goods purchased. These effects that raise prices on some products and lower them on others would take place in the short run, immediately as the HST came into effect on 1 April 1997. Furthermore, after the HST came into being, firms at each stage of production paid no effective provincial tax on capital and intermediate goods and services. The move to the HST meant that producer, wholesaler, and retailer costs were lowered on this account, and that the lowering of such costs, through market competition, would take place over time. Similarly, we would expect consumers to adjust their purchases to buy less of goods that went up in price, and more of those goods that became less costly. In other words, we would expect a longer run adjustment of consumer prices after the original HST-implementation took place on 1 April 1997.

Finally, the federal government has agreed to special transfers to the HST-participating governments, to partially compensate for the anticipated shortfall in sales tax revenues. Over a four-year period, the three HST provinces are to receive \$961 million. Our analysis measures both the HST tax change effect and the federal transfer effect jointly. However, we surmise that the income effect of federal transfers (through provincial transfers to consumers) would be small.

Government Statements on the Effect of the HST on Consumer Prices

At the time of the announcement of the HST, the federal government steered clear of making any exact prediction as to how the HST would influence overall consumer prices. The federal government, in promoting the HST, often spoke in generalities: “Harmonization will mean a lower combined rate for consumers”; “Harmonization will mean lower prices on most goods”; “Inclusion of services in the harmonized tax base will spread the tax burden more evenly across all sectors of the economy” (Finance Canada 1996*b*). In press releases and documents,

the federal government emphasized that part of the HST that lowered prices: the lowering of the official tax rate to 15 percent, the elimination of the old “double taxation” problem, and so forth.

The Government of Newfoundland and Labrador repeated the general federal government argument, without making any specific predictions on HST effects on overall consumer welfare. The government made note that the official combined tax rate would (for this province) fall by “almost five percentage points” and that the (then) provision for “tax-included” pricing would assist consumers. These aspects would result in “substantial benefits” for consumers. Although this provincial government did not make any hard predictions concerning household prices, it must be noted that — given that the provincial tax rate would drop the furthest of all the provinces with the HST:¹⁰ if there were any average cost savings to be enjoyed by consumers, they would occur first in Newfoundland and Labrador.

The Nova Scotia government was ambiguous as to any prediction of the overall HST effect on households. On one hand, the government repeated the federal government’s statements as to positive effects on average consumer prices. But in other documents the government stated that the HST might not change overall consumer prices. One paragraph, for example, included a graph stating that (given Statistics Canada’s consumer price index basket of goods for Nova Scotia) 34.1 percent of goods and services would decline in price and 23.5 percent of commodities would increase in price (Nova Scotia 1996). This allowed the government to say that “The overall impact on the cost of living due to these [tax] changes is expected to be pretty much neutral.” In a different document, the government simply states that “some items will be taxed more, some will be taxed less” (Nova Scotia 1997).

Of the four HST-participating governments, New Brunswick attempted the most specific forecast as to HST-impacts on households. Using the Social Policy Simulation Database/Model (SPSD/M), a

Finance Canada model, the Government of New Brunswick Finance Department estimated that the move to the HST would save the average New Brunswick family about \$255 a year.¹¹ The government estimated that the average household would save \$632 in reduced taxes on those goods and services where the provincial tax rate declines from 11.7 to 8 percent, and that the average household would pay \$377 extra in taxes on those items now included in the expanded HST tax base.

The APEC HST Study

Some months after the official HST agreement, the Atlantic Provinces Economic Council (APEC) released a study measuring the impact of the new tax regime on different aspects of the Atlantic economy (see APEC 1997). The study mentioned that the business sector would receive much of the tax relief, but that for most sectors consumer prices would fall and that retail sales (for those sectors) would rise. This study estimated the GST “tax effects” on consumer prices for 1991 (the year the GST was put in place), for 28 consumer sectors where the GST had an effect, and then carried these separate tax effects over to the corresponding 28 consumer sectors to measure an analogous impact of the HST on prices and spending in each of the three HST-participating provinces.

The study indicated that, of the 84 measured consumer sub-groups (28 sectors times three provinces), prices rose as a result of the HST in only 11 sub-groups. Although the study did not report directly how the HST would effect the aggregate change in the average provincial consumer price indexes, the APEC report did state that total real consumption spending would rise by about \$100 million in the three provinces, implying some decline in average prices (1997, p. 20). The report noted that Newfoundland would benefit relatively more than the two participating Maritime provinces, given the larger decline in Newfoundland’s sales tax rate and the smaller expansion in the sales tax base. (The provinces tax rate fell from 12 to 8 percent, and the province had already partially harmonized its sales

tax base to the GST earlier, having included electricity, fuel oil, and adult clothing in the base.) After the release of the APEC study, the New Brunswick government used the study to support the argument that consumers would benefit (New Brunswick 1998).

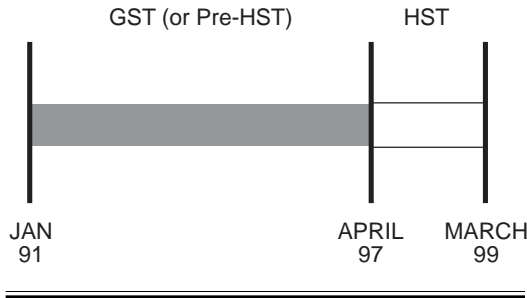
DATA, METHODOLOGY AND RESULTS

To assess the effect of the HST on consumer prices in Atlantic Canada, the consumer price indexes for the harmonizing provinces (New Brunswick, Newfoundland, and Nova Scotia) are used. While the CPI for all items is used to examine the overall impact of the HST on the cost of an average basket of consumer goods and services, the CPI for the eight major components (food, shelter, household operations and furnishings, clothing and footwear, transportation, health and personal care, recreation, education and reading, and alcoholic beverages and tobacco products) are used to assess the impact of the HST on consumer prices in each category. Thus, there are altogether 27 CPI series to be examined. All CPI data are taken from the CANSIM database (Statistics Canada, Catalogue No. 62-001-XPB).

The sample period for this study is chosen from January 1991 to March 1999. The relatively short sample period warrants some explanation. We chose January 1991 as a starting date, given that the GST was instituted at that time. The GST contributed to a sharp increase in consumer prices in the period immediately following its implementation. Thus, the impact of the change from the GST to the HST would be better assessed using only the most recent GST trend. Accordingly, data from January 1991 to March 1997 (i.e., the pre-HST period) are used to form projections for the HST period from April 1997 to March 1999. Figure 1 shows the estimation and impact period.

Turning to our forecast procedure, we use the pre-HST data and Holt-Winters’ double exponential smoothing method¹² with additive seasonal

FIGURE 1
The Study Period



adjustments¹³ for generating forecasts for the logarithmic transformation of CPI (i.e., dependent variable = LnCPI) for the HST period. We then follow a counter-factual procedure by comparing the estimated LnCPI (denoted by LnCPI^* , in the absence of the HST), to the actual LnCPI to derive the impact of the HST on consumer prices as measured by $(\text{LnCPI} - \text{LnCPI}^*)$, for each of the HST-participating provinces.

Due to space limitations, we will not present the forecasting results for all 27 CPI series. Instead, as an illustration, we show in Figure 2 the actual (LNBPALL) and the estimated series (LNBPALSM) for New Brunswick overall CPI. The figure shows that the estimated series (the dotted line) follows closely the actual series (the solid line) during the pre-HST period, but diverges sharply in the period after April 1997 when the HST was implemented. The difference between the two series for each month during the HST period represents the percentage change in the CPI. This exercise is also done for the eight CPI subcomponents for each of the three HST-participating provinces.

The monthly percentage change is then averaged over the first 12 months from April 1997 to March 1998 and the second 12 months from April 1998 to March 1999 to derive the annual average percentage changes in CPI series for each province. The results are summarized in Table 1; as expected, they show that consumer prices declined for those subcomponents with a heavy representation of

FIGURE 2
Comparing the Actual and Estimated LnCPI for New Brunswick: An Illustration

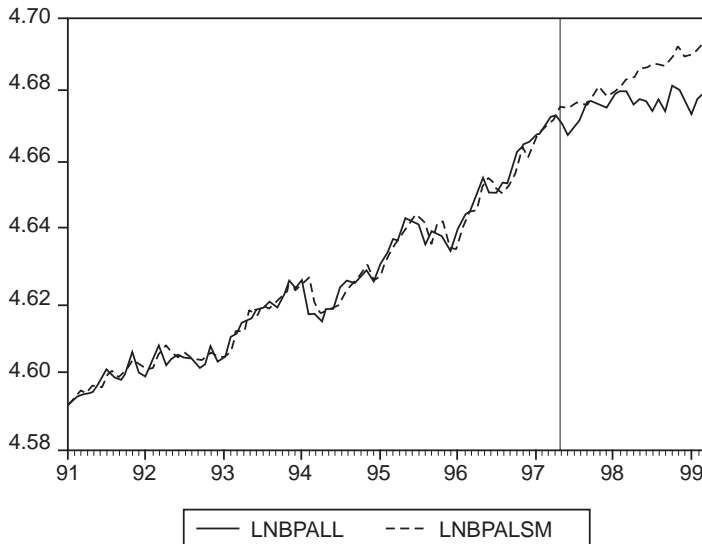


TABLE 1
Average Percentage Changes in the CPI and Components for 1997 and 1998 During the HST Period

Component	New Brunswick			Newfoundland			Nova Scotia		
	1997	1998	1997-98	1997	1998	1997-98	1997	1998	1997-98
	%	%	%	%	%	%	%	%	%
Food	-0.97	-0.11	-0.54	-1.71	-1.27	-1.49	-0.78	-0.44	-0.61
Shelter	2.20	0.82	1.51	1.03	-1.74	-0.35	0.55	-1.71	-0.58
Household operations	-2.95	-2.93	-2.94	-3.64	-2.90	-3.27	-2.96	-2.39	-2.68
Clothing and footwear	4.52	3.81	4.16	-2.14	-1.05	-1.60	4.92	4.24	4.58
Transportation	-2.30	-7.50	-4.90	-0.55	-5.53	-3.04	-0.19	-4.73	-2.46
Health and personal care	0.38	0.59	0.49	0.18	1.70	0.94	0.38	2.10	1.24
Recreation, education and reading	-1.13	-2.54	-1.84	0.07	-0.67	-0.30	-0.90	-2.29	-1.59
Alcoholic beverages and tobacco products	-3.09	-1.30	-2.19	-0.50	-0.12	-0.31	-1.61	-0.04	-0.83
Overall items	-0.30	-1.15	-0.73	-1.03	-2.32	-1.68	-0.08	-1.01	-0.55

- Notes: 1. Values under 1997 refer to the monthly averages over April 1997 to March 1998 and those under 1998 refer to the monthly averages over April 1998 and March 1999.
2. All results are based on estimates using the pre-HST from January 1991 to March 1997 except for the last CPI component — Alcoholic Beverages and Tobacco Products. For this component, we used sample from March 1994 to March 1997 due to the fact that Ottawa cut cigarette tax by \$5 a carton in early 1994 which caused a structural shift in the CPI series.
3. The sum of squared residuals (SSE) and the root mean squared errors (RMSE) of *ex post* forecasts from January 1991 to March 1997 for the 27 LnCPI series (overall CPI and eight components for each province) are very small ranging from 0.000446 to 0.07342 for the SSE and from 0.00244 to 0.03129 for the RMSE. For example, the SSE and RMSE for NB food LnCPI are 0.002582 and 0.0059 respectively. These small values indicate that the forecasts are fairly accurate.

commodities formerly taxed by both the PST and GST (components like household operations, transportation, recreation, and reading). Prices rose, particularly in 1997, for those components heavily represented by commodities not formerly taxed by the PST but taxed by the GST. Such components include shelter (including electricity and heating costs), clothing and footwear, and health and personal care. Across the three HST provinces, some noteworthy differences occur. In the “shelter” price component, prices went down in Newfoundland and Nova Scotia, but went up in New Brunswick. Much of this difference results from a strong rise in electricity prices in New Brunswick, in contrast to 0 to

1 percent growth in the other two provinces. In clothing and footwear, Newfoundland had already included less expensive clothing and footwear in its PST base, whereas the other provinces had not. The bottom row of Table 1 shows that, overall, consumer prices fell given the new HST regime. Prices fell most sharply in Newfoundland, and the overall price declines were similar in Nova Scotia and New Brunswick. The sharper fall in Newfoundland’s CPI makes sense. Through tax harmonization, the province’s sales tax rate drops from 12 to 8 percent, a greater fall than for the two Maritime provinces. Furthermore, Newfoundland’s sales tax base was already partially harmonized to the GST, so

consumers did not suffer high effective cost rises through the complete merger of sales tax bases.

CONCLUSION AND POLICY DISCUSSION

To summarize, we found that prices adjusted as expected during the first two years of the HST for the three HST-participating provinces and the overall price fell somewhat. But several other issues concerning the HST that we have not addressed should at least be mentioned briefly.

First, it could be the case that certain income groups, in particular, low-income families, might do worse given the move to harmonize sales taxes. We did not look at this, and to do so would require recalculating an aggregate “low-income family’s” CPI index (using perhaps the same simulated sub-component indexes shown in Table 1, but with different basket weights). We suspect that poor families would at best benefit proportionately less than wealthier families. To that end, both the Nova Scotia and New Brunswick governments have expanded tax credit programs for poor families, as a compensation measure for bringing in the HST. An interesting exercise would be to calculate the gain (or loss) to poor families given the HST, and to compare that change to the compensating programs under the various tax credit systems.

Second, there is the issue of anticipated tax revenue losses by the three participating provincial governments. It is fairly straightforward to calculate expected sales tax revenue losses (Murrell 1996a), and these losses can then be contrasted to the federal subsidy given to the three HST provincial governments. An interesting question is whether the participating governments, at least in the short run, gained or lost (in terms of pure revenue) on the deal.

A related question has to do with why only three small, poor provinces chose to harmonize sales taxes. Part of the reason, perhaps, was that (although

the consumers in the three signing provinces gained from the HST) consumers in other provinces might have lost from the same HST deal. Our results, in other words, cannot immediately be extended to consumers in other provinces. The three participating provinces had the highest sales tax rates in the country, and reducing those high tax rates to 8 percent (along with changing the tax bases) ended up benefiting consumers. But sales tax rates in Quebec, Ontario, and in the western provinces are clearly lower than the old PST rates in the participating provinces. It might have been the case that in the other provinces consumers would lose, given an HST rate of 15 percent. Obviously consumers in Alberta — to take the extreme limit of a province with a zero tax rate — would lose. Indeed, in Newfoundland, which realized the largest consumer gains with HST, opposition to the HST was the weakest. And in Prince Edward Island, with a 10 percent PST, consumer gains could be expected to be from very small to non-existent. Perhaps the absence of gains to consumers explains why Prince Edward Island chose not to harmonize. Consequently the federal government might want to design a sales tax harmonization scheme to ensure that the majority of consumers in all provinces benefit, as a way of inducing all provinces to harmonize.

Most economists support the efficiency arguments for tax harmonization. Yet the failure for bringing in the seven non-participating provinces might be the result of the federal government insisting on a harmonized, equal sales tax rate. The pre-harmonized sales tax rates among the provinces were so unequal as to preclude unanimous agreement on a uniform tax rate. But perhaps agreement on a harmonized tax base, without a harmonized tax rate, would have been a more achievable goal. The participating provinces could have agreed on a uniform tax base such as the GST tax base, but then agree to be allowed to set their own tax rates. Such a scheme is analogous to the current personal income tax system. Yet the efficiency gains for having a common tax base, vertical and horizontal, would be retained. The questions of impacts on consumers,

for such a scheme, would still have to be answered, but the ultimate goal of full-fledged sales tax cooperation could be attained.

NOTES

We would like to thank Frank Strain, Paul Hobson, three anonymous referees, and the editor of this Journal for helpful comments. The usual caveats apply.

¹The original memorandum of understanding (MOU) was announced on 23 April 1996, so there was some policy discussion from this earlier date onwards.

²The debate led to the GST rebate being granted for low-income families. For example, see our discussion in the conclusion of this article.

³That is, we ignore the general equilibrium effects of having changed provincial government revenues, and corresponding effects on provincial expenditures that might flow through in the form of changed personal incomes. This point will be taken up in the text below.

⁴The 23 April MOU was signed by the three HST-participating provinces, but the issue was also heavily-discussed in Prince Edward Island, the only Atlantic province not taking part in the harmonization scheme.

⁵Space limitations preclude any discussion on the history of tax harmonization. For a good, complete discussion of the theory and political economy of tax harmonization, see Bird (1984), Thirsk (1980); and Pigeon (1995). For a discussion on the historical progress of sales tax harmonization in Canada, before the HST was signed, see Domingue (1991, 1994) and Murrell (1996b).

⁶For a concise description of the HST, see Finance Canada (1996a). For a detailed description of the tax, see Governments of Canada, Nova Scotia, New Brunswick, Newfoundland and Labrador (1997).

⁷For a good discussion of the costs of tax complexity, see Slemrod (1992).

⁸On 23 October 1996, the federal government and the three HST-participating provinces all put out respective press releases on the HST. Especially with the harmonization arguments promoting economic efficiency, the respective provincial governments tended to repeat state-

ments made by the Government of Canada. See Finance Canada (1996a).

⁹Other items where the HST would raise tax-included prices include personal services (such as haircuts and plumbing and electrical services in the home), transactions on new housing and land, legal/accounting fees, stamps, and other items (New Brunswick 1996b).

¹⁰The provincial tax rate would fall from 12 to 8 percent, whereas in New Brunswick and Nova Scotia the tax rate would fall from 11.77 to 8 percent.

¹¹See the handout, *Average Annual Savings per Family*, given out as part of an information package to the media by the Government of New Brunswick, 23 October 1996. See also New Brunswick 1996a, p. 3.

¹²There are, of course, more sophisticated time-series forecasting methods such as regression analysis and Box-Jenkins' ARIMA (see Granger and Newbold 1986) modelling. Preliminary data analyses show that all LnCPI series are non-stationary. Given that the data also present seasonal patterns, transforming the data into stationary series by differencing will result in a loss of 12 degrees of freedom. Due to the complexity of these approaches and the relatively short samples, we decided to adopt Holt-Winters exponential smoothing model for simplicity, following the guidelines provided by Granger and Newbold (1986, pp. 185-86).

¹³*Eviews* contains several exponential smoothing models ranging from single parameter smoothing to double exponential smoothing with either multiplicative or additive seasonal adjustments. Based on *ex post* forecasting accuracy as measured by the root mean squared error (RMSE), we adopt the double exponential smoothing model with additive seasonal adjustments. Further discussion of exponential smoothing is provided by *Eviews* 3.1 User Guide (Quantitative Micro Software 1999) and Gardner (1985).

REFERENCES

- Atlantic Provinces Economic Council (APEC). 1997. *The Harmonized Sales Tax in Atlantic Canada: Win, Lose or Draw?* Halifax: APEC.
- Bird, R. 1984. "Tax Harmonization and Public Finance: A perspective on Recent Canadian Discussion," *Canadian Public Policy/Analyse de Politiques* 10(3):253-66.

- Canada. 1997. *Draft Legislation and Regulations Relating to the GST and HST*. Ottawa: Department of Finance, pp. 61-100.
- Domingue, R. 1991. "The GST and the Provinces: State of Negotiations." Ottawa: Library of Parliament, Government of Canada.
- _____. 1994. "Harmonization of Taxes." Ottawa: Library of Parliament, Government of Canada.
- Finance Canada. 1996a. "Sales Tax Harmonization: Detailed Agreements Reached," Press Release, 23 October.
- _____. 1996b. "Sales Tax Harmonization: What it Means for Consumers and Business," Press Release, 23 October.
- Gardner, E.S. 1985. "Exponential Smoothing: The State of the Art," *Journal of Forecasting* 4:1-28.
- Governments of Canada, Nova Scotia, New Brunswick, and Newfoundland and Labrador (1997), *Harmonized Sales Tax: Technical Paper*. Ottawa: Supply and Services Canada.
- Granger, C.W. and P. Newbold. 1986. *Forecasting Economic Time Series*. New York: Academic Press.
- Murrell, D. 1996a. "An Update on the Federal Government/Atlantic Provinces Sales Tax Harmonization Agreement: Points of Controversy," *ACEA Papers and Proceedings* 26:128-34.
- _____. 1996b. "The Movement Toward Tax Harmonization in Atlantic Canada," in *Has the Time Come? Perspectives on Cooperation*, ed. M. Mandale and W.J. Milne. Fredericton, NB: Atlantic Provinces Economic Council and The Vaughan Chair in Regional Economics, pp. 43-65.
- New Brunswick. 1996a. "Blanchard: HST Government Is an Excellent Deal for New Brunswick," Press Release, 23 October.
- _____. 1996b. "33 Frequently Asked Questions about the HST," in *Harmonized Sales Tax*, ed. Governments of Canada, Nova Scotia, New Brunswick, Newfoundland and Labrador.
- _____. 1998. "Blanchard Addresses Senate Committee," Press Release, 4 March.
- Nova Scotia. 1996. "What it Means for Consumers," in *Harmonized Sales Tax*, ed. Governments of Canada, Nova Scotia, New Brunswick, Newfoundland and Labrador.
- _____. 1997. "Background on the Harmonized Sales Tax," Press Release, 26 March.
- Pigeon, L. 1995. *Tax Harmonization in Canada*. Ottawa: Conference Board of Canada.
- Quantitative Micro Software. 1999. *Eviews 3.1*. Irvine, California.
- Slemrod, J. 1992. "Did the Tax Reform Act of 1986 Simplify Tax Matters," *Journal of Economic Perspectives* 6(1):45-57.
- Thirsk, W. R. (1980), "Tax Harmonization and Its Importance in Canadian Federalism," in *Fiscal Dimensions of Canadian Federalism*, ed. R. Bird. Toronto: Canadian Tax Foundation, pp. 118-42.