The Political Costs of Tax Reform: A Canadian Perspective

David L. Ryan and Stuart Landon

THE Commonwealth government's forthcoming proposals to reform Australia's taxation system could well include the introduction of a goods and services tax (GST). This would be a broad-based consumption tax that may either be hidden in the price of goods or, as in Canada, added on explicitly at the point of sale.

Political considerations are likely to play a major role in the choice of modifications to specific taxes. For example, voters may be concerned only with the total tax paid, along with the total amount of government services provided (and, possibly, associated changes in government debt if revenues and expenditures do not balance). In this case, tax reform that increases the efficiency of the tax system and is revenue-neutral, as the government of Canada claimed of its GST when it was introduced in 1991,¹ should not affect the government's electoral chances. However, if voters do not treat all types of taxes as being indistinguishable, then there are different *political* costs associated with alternative types of taxes and these may differ substantially from the economic costs of these taxes. To the extent that different forms of taxes affect voters differently, governments may choose those tax instruments which have lower political costs rather than those that have lower economic costs. As noted by Hettich and Winer (1984), the politically optimal tax structure is one in which the marginal political cost, rather than the marginal economic cost, of raising an additional dollar of tax revenue is the same for all types of taxes.

Different types of taxes might be expected to have different effects on voting behaviour, and hence on the political success of the incumbent party, for several reasons. For example, some taxes may be difficult to perceive because they are hidden in prices (excise taxes) or deducted at source (corporate taxes, resource rent taxes), so that the voters are unaware of the true size of the tax burden. Other taxes may be relatively small and paid only infrequently (licence fees), while others may

David Ryan and Stuart Landon are Associate Professors of Economics at The University of Alberta.

¹ 'At the proposed rate of 7 per cent (and allowing for other coincident fiscal measures) the GST is intended to be revenue neutral – yielding ... roughly the same amount that would have been raised in 1991 under the federal sales tax system' (Mitchener, 1990:3). Estimates of the tax revenues under the then existing tax system and the proposed 7 per cent GST, which indicate the revenue neutrality of the proposed tax, can be found in Canada, Library of Parliament (1990).

continually reinforce the voter's perception of the tax (sales taxes, especially those added explicitly at the point of sale). Furthermore, the costs of taxes may be distributed unevenly across the electorate, and this distribution may differ for different types of taxes. Since the political costs of taxes may differ, and these differences may affect the types of taxes chosen, political costs may have a significant impact on the tax structure and, in particular, on whether a tax such as a GST is adopted in Australia.

In this article, the relative political costs of different types of taxes are evaluated empirically, with particular attention being paid to a visible GST-type tax. Unfortunately, this type of analysis is not feasible using Australian data because there does not exist in Australia, at either the State or federal level, a tax which is similar to a visible GST. Further, even an evaluation of the political costs of the hidden federal sales tax is not possible given the small number of post-war federal elections (and, thus, observations). While there have been a larger number of State elections during this period, no equivalent State-level tax exists.

Given the absence of relevant Australian data, the political costs of different taxes are evaluated here using data for Canada. Canada's GST is a federal tax that was introduced at the beginning of 1991. As there have been only two Canadian federal elections since that time, and no variation in the GST tax rate, sufficient Canadian federal data do not exist to evaluate the political costs of this tax. However, all Canadian provinces except one have for some time levied visible sales taxes. Like the Canadian GST, these sales taxes are explicitly added to the purchase price at the point of sale and, therefore, might be expected to have similar political implications as the GST. In addition, these taxes have varied in size across provinces and through time, and data are available for a relatively large number of Canadian provincial elections. As a result, the evaluation of the political costs of a visible GST-type sales tax presented here is based on results obtained using data on Canadian provincial-level taxes and elections. However, it should be noted that the results obtained will reflect the impact of a change in existing tax rates rather than the introduction of a new sales tax.

Since a sales tax is an alternative to other types of taxes, in order to determine the relative political cost of sales taxes it is also necessary to evaluate the costs of other forms of taxes. Hence, in addition to sales taxes, in the analysis that follows we consider the (potentially) distinct effects on political success of direct taxes on persons, direct taxes on businesses or corporations, property taxes, taxes on fuel or specific natural resources, and licence or permit fees. Further, since the political success of an incumbent party will depend on the services the government provides as well as the taxes it levies, it is also necessary to evaluate the political costs and benefits of different types of expenditures. The alternative government expenditure instruments to be considered include government purchases of goods and services as well as transfers from government to persons, transfers to businesses (subsidies and capital assistance are considered separately), transfers to other levels of government, and transfers to hospitals.

Modelling Voting Behaviour

Since the political cost of a particular fiscal policy depends on its impact on voting behaviour, an empirical analysis of political costs must begin with the specification of a model of voting behaviour. Voting can be viewed as a process in which each voter votes for the political party which, if elected, is expected to make him or her better off than any other political party, in the light of the voter's forecasts of what changes will occur if that party is elected and of how, and to what extent, the voter will be affected by these changes. Following Deacon and Shapiro (1975), our analysis is based on an economic model of voting behaviour in which voters focus on expected changes in their gross income as well as on expected changes in various types of taxes and government expenditures and in the level of government debt.²

According to this model, voters consider what policies they expect, and hence how well off they are likely to be, if the incumbent party is re-elected, and then decide whether or not to vote for that party. They use information on how the incumbent party has performed since the last election as a signal of the incumbent's future performance. In particular, they base their decisions on the changes since the previous election in various types of taxes and government spending, as well as in the level of government debt and gross income.

Voters have access to additional information which may signal an incumbent's future behaviour, and which may, therefore, have a systematic effect on the probability that a voter will vote for the incumbent party. This information may include variables reflecting the incumbent's overall economic performance, such as changes in the unemployment rate, as well as other variables that reflect particular characteristics of the incumbent party, such as years in office.

Modelling Political Costs

The political cost (or benefit) of the actions taken by a political party can be measured in terms of the impact of these actions on the objectives of the party. According to Downs (1957) and Riker and Ordeshook (1973), the goal of candidates and of parties is to win elections. While Downs equates winning elections with maximising votes, Riker and Ordeshook provide four different interpretations of winning, implying four corresponding possible objectives for political parties and candidates: maximising their plurality; maximising the number of votes received; maximising the proportion of votes received; and maximising the probability of winning. With a first-past-the-post electoral system, as used in Canada, a party's proportion of seats and its proportion of votes may differ significantly.

Nevertheless, empirical models of voter behaviour have tended to concentrate on explaining the percentage of the vote received (Deacon & Shapiro, 1975; Peltz-

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A similar type of analysis has been used recently by Peltzman (1992), although he concentrated on the political impact of different types of expenditures rather than different types of taxes, and by Schram and Van Winden (1989) and Schram (1990), although they do not examine the impact of taxes and consider only a limited disaggregation of government expenditure.

man, 1990, 1992), perhaps in part because this measure is thought to utilise more information than whether a party simply won or lost. However, except in single-jurisdiction two-alternative contests, a party's vote percentage (like its number of votes or percentage of seats) does not generally imply anything about victory or defeat. A more important reason for concentrating on the vote percentage is that a political party which is interested in maximising the probability that it will obtain the vote of a *randomly chosen* voter can be viewed as if it is maximising its percentage of the vote (Deacon & Shapiro, 1975). In this context, the marginal political costs of particular fiscal policies can be defined as the effect on this vote percentage (that is, on the probability that a randomly chosen voter will vote for the party) of changes in various taxes and expenditures.

In terms of evaluating political costs, however, it may be more useful to view a political party's objective as being maximisation of its probability of victory rather than maximisation of its percentage of the vote. There are several reasons for this, but the most important for present purposes is that, when the objective is defined as the maximisation of the number (or percentage) of votes, the preferences of all voters, including decisive voters as well as voters in marginal non-decisive groups, are given equal weight. Assuming that the objective of a party is political victory, the appropriate measure of the political cost (or benefit) of a policy is its effect on the probability of victory, in which case the preferences of decisive voters are weighted more heavily than the preferences of marginal voters. Indeed, a political party that is interested in maximising the probability of victory can be viewed as if it is maximising the probability that it will receive the vote of the decisive voter.

In view of these considerations, in the empirical analysis reported here the political costs of particular types of taxes and government expenditures are evaluated in terms of their effect on both the percentage of the vote (where the objective is to obtain the vote of a *random* voter) and the probability of winning (where the focus is on the vote of the *decisive* voter). As a result, two different equations are estimated: one describing the percentage of the vote won by the opposition and the other describing the election outcome (where 0 indicates incumbent victory and 1 indicates incumbent defeat). In order to examine the impact of different types of taxes and government expenditures on each of these measures of political success, in both cases the explanatory variables include changes in various types of taxes, transfer payments and government spending, as well as changes in income and in the government debt. Additional variables which may signal the incumbent's future behaviour (which are described more fully below) are also included as explanatory variables in both equations.

While policies that voters believe to be beneficial are likely to increase both the vote percentage and the probability of winning, the different weights attached to the preferences of decisive and non-decisive voters by the two objectives may cause

³ Complete details of the models estimated and the method of empirical implementation (grouped probit for the percentage vote equation and probit for the probability of incumbent defeat equation) are contained in Landon and Ryan (1997).

significant differences in the quantitative measures of the political costs of these policies. A comparison of the empirical results obtained under each of these two alternative political objectives may indicate the importance of correctly identifying the government's objective when attempting to evaluate the political costs of changes in its fiscal program.

Application to Canadian Provincial Data

The economic data used to generate the explanatory variables required to estimate the equations of percentage vote and probability of incumbent defeat are taken from Canada's annual provincial national accounts for the years 1961-90 inclusive. During this period there were 82 provincial elections in Canada's ten provinces, although one election in the province of Newfoundland (in March 1972) occurred less than five months after the preceding election and was omitted since it could not be separately associated with annual economic data. These provincial elections, which follow no particular timetable, were matched with annual economic data by associating the previous year's data with an election which took place on or before 30 June, and data from the current year with elections that occurred on or after 1 July. In view of the differences in the size of government across provinces and the sample period, and since elections do not occur at specified intervals, variables were normalised by dividing by the level of real provincial per-capita GDP for the election year, and were converted into average annual changes since the last election. Since the data refer to changes between elections, the 81 included elections yielded 71 useable observations.

Relatively minor aggregation of expenditure and tax categories left data available for the real annual per-capita change (since the previous election) in the revenue obtained from eight different types of taxes:⁴ direct taxes on persons, corporate taxes, gasoline taxes, natural resource taxes, sales taxes, miscellaneous indirect taxes, licences, permits and other fees, and the provincial property tax; and in six types of government spending and transfers: expenditure on goods and services, transfers to persons, transfers to business (subsidies), transfers to business (capital assistance), transfers to local government, and transfers to hospitals.

As noted above, additional variables which may signal the future behaviour of the incumbent are also included in the empirical specification. The change between elections in the provincial unemployment rate is used as a possible signal of the incumbent's overall economic policy success. Since voters might believe that their well-being depends on whether the incumbent party can cooperate with or counter-balance the federal government, a dummy variable is included to reflect whether the incumbent provincial party was the same as the governing national party. As well, since a new leader might not be held responsible by voters for past actions of the government, we include a dummy variable which indicates if the incumbent party

⁴ Tax variables are calculated from total revenues rather than from tax rates since the appropriate data are unavailable and these revenues represent the cost to individuals, in terms of lost consumption, of the different taxes.

changed leaders within the twelve months prior to the election. Finally, two additional variables — the number of years that the incumbent party has held office, and this value squared — are included since voters may perceive the incumbent party to be more alienated from the public the longer it is in power, and this perception may not grow at a constant rate.

Note that since monetary policy is a federal responsibility, and is taken as given by voters in provincial elections, inflation is not included as an explanatory variable. While inflation may have an effect on taxes paid if the tax system is not inflation neutral, these effects should be accounted for by the use here of tax revenues rather than tax rates.

Empirical Findings

As explained in the preceding sections, the political costs of different taxes are determined by estimating two equations, one describing the percentage of the vote received by the opposition, and the other describing whether the opposition won or lost the election. The opposition's percentage of the vote ranges between 37.35 per cent and 80.35 per cent over the 71 different elections, with an average value of 54.49 per cent. Thus, on average, the probability that a randomly chosen voter would vote for the opposition was almost 0.55. However, the opposition won only 24 of the 71 elections, so that the probability that the decisive voter would vote for the opposition (in which case the incumbent would lose) was only 0.34. Hence, differences might be expected in the results obtained with the two estimating equations.

As indicated by the results presented in Table 1, the only tax variables that have a statistically significant impact on political success in both estimating equations are sales taxes and licences, permits and other fees. Increases in sales taxes reduce both the incumbent's vote percentage and probability of winning, while increases in licences, permits and other fees improve both these measures of the incumbent's political success. In addition, based on the estimates for the equation describing the probability of incumbent defeat, both increases in direct taxes on persons and increases in gasoline taxes significantly improve the opposition's electoral chances. A test of whether all the tax variables have the same marginal impact on the incumbent's political success (that is, whether they all have the same marginal political costs) indicates that the effects of the different taxes are statistically significantly different.

The only type of government spending that significantly improves the incumbent's electoral position is spending on goods and services. Other types of government expenditure either have no significant effect or actually significantly assist the opposition's electoral position, particularly transfers to persons and to local government (in both models) as well as business subsidies (only in the probability of incumbent defeat equation).

As for the other variables included in the estimating equations, increases in per-capita provincial debt decrease the incumbent's vote percentage, but have an insignificant effect on the probability that the incumbent will lose. This suggests that

decisive voters misjudge the future budget consequences of current spending and taxation policies, or they have sufficiently high discount rates or, in the context of provincial elections, they believe that they can avoid future taxes by moving to another province. Increases in real per-capita income tend to raise the incumbent's vote percentage and probability of victory, but not significantly. Although not reported in Table 1, the empirical results also indicate that, as its term in office lengthens, the percentage vote for the incumbent as well as its probability of victory decrease. In addition, there is a significant increase in the incumbent's vote percentage, but not probability of winning, if both the provincial and the federal governments are from the same party. However, neither of the other variables (the change in the unemployment rate and a variable reflecting a change in leaders for the incumbent party prior to the election) is found to have a significant effect on either measure of electoral success.

Table 1: Impact of a one-dollar increase in specific taxes and expenditures

	<i>Effect on the opposition's vote percentage</i>	<i>Effect on the probability of incumbent defeat</i>
<i>Tax variables:</i>		
Direct taxes on persons	.0008	.0040*
Corporate taxes	.0002	.0058
Gasoline tax	.0009	.0127*
Natural resource taxes	.0005	-.0025
Sales taxes	.0017**	.0052*
Miscellaneous indirect taxes	.0007	.0004
Licences, permits and other fees	-.0031***	-.0195**
Provincial property tax	.0007	.0065
<i>Expenditure variables:</i>		
Expenditure on goods and services	-.0006*	-.0041***
Transfers to persons	.0010*	.0051*
Transfers to business: subsidies	.0011	.0093**
Transfers to business: capital assistance	-.0037	-.0002
Transfers to local government	.0012*	.0062**
Transfers to hospitals	.0011	-.0059
<i>Other economic variables:</i>		
Debt	.0001*	.0004
Income	-.0001	-.0003

Note: ***, **, and * indicate significance of the estimated coefficient on the corresponding variable at the 1 per cent, 5 per cent and 10 per cent levels, respectively.

The main difference between the results for the two objective functions is that the effects of the different types of taxes and expenditures on the probability of victory tend to be larger and are estimated more precisely (that is, more coefficients are statistically significant and they tend to be significant at a higher level of confi-

dence) than are their effects on the vote percentage. This difference may arise because, in the probability of winning formulation, the estimated effects reflect the preferences of decisive voters, while in the vote percentage formulation they reflect the preferences of all voters, including those on the fringes of the political spectrum. Indeed, differences in the significance of the tax and expenditure effects in the two formulations imply that the preferences of voters as a whole differ much more significantly across provinces and elections than do the preferences of decisive voters.

The Magnitude of Marginal Political Costs

Numerical estimates of the marginal political costs of each tax and type of government spending are presented in Table 1 for both political cost models. These estimates reflect the impact of a one-dollar increase in each of these variables on either the vote percentage of the opposition or the probability that the opposition will win the election. Since the magnitudes of these effects differ from election to election, the values presented in Table 1 are averages over the 71 observations (elections). These results indicate that a one-dollar increase in per-capita revenue from the visible sales tax would reduce the incumbent's vote percentage by 0.0017 and reduce the incumbent's probability of winning by 0.0052. This latter effect is smaller than the impact of an increase in the gasoline tax on the probability of defeat (the gasoline tax has an insignificant effect on the percentage of the vote), but larger than the impact of an increase in direct taxes on persons (which also has an insignificant effect on the vote percentage). Note, in addition, that increased debt financing has an insignificant effect on the probability of defeat, although it has a significantly negative effect on the incumbent's vote percentage. Thus, debt financing (at least until taxes must be raised to meet interest and principal payments) may be preferred over sales taxes by the incumbent party.

While the magnitudes of the estimated effects associated with corporate taxes, natural resource taxes, miscellaneous indirect taxes, and the provincial property tax are large in some instances, these effects are not statistically significant. Thus, while these taxes may have had a large impact on some elections, they have not had a systematic effect across elections.

In contrast to visible sales taxes which have a relatively large political cost, increases in licences, permits and other fees provide a large marginal political benefit to the incumbent, with the magnitude of this effect dwarfing that of any other tax (or expenditure). Unlike other taxes, these fees tend to be service specific, and voters may see them as resulting in better service (such as shorter queues). In addition, the average voter may not use many of the services funded by these fees and so may prefer that they be financed on a user-pay basis rather than out of general revenues.

In terms of the effects of the various expenditure variables, expenditure on goods and services would increase the incumbent's percentage of the vote by 0.0006 and the incumbent's probability of winning by 0.004. In contrast, transfers to local government would decrease their vote percentage by 0.0012 and their probability of winning by 0.0062. While no other expenditure variables have significant effects in the vote percentage equation, in the probability of winning equation the largest sig-

nificant effect on the incumbent party's success is associated with transfers to business, which decrease the probability of victory by 0.0093.

Political Expediency vs the Economic Efficiency of Different Taxes

It has often been noted that political decisions do not necessarily correspond to the types of decisions that could be justified on purely economic grounds. Although the analysis here has concentrated on the political costs of different types of taxes (and government expenditures), there is a considerable literature concerning the economic cost or efficiency of alternative forms of taxation. A comparison of the political cost estimates obtained here with information about the economic costs of these different types of taxes may provide some indication of the extent to which economic and political tax-choice decisions are likely to coincide. It may also provide an indication of whether political and economic arguments are likely to correspond or diverge in the debate on tax reform in Australia.

In a study of the marginal efficiency costs of various US taxes, Jorgenson and Yun (1991) found that corporate taxes were the least efficient, followed in order of increasing efficiency by individual income taxes, sales taxes, and property taxes. In the empirical work reported here, corporate taxes and property taxes, the two taxes at the opposite ends of this list, are found to have statistically insignificant effects, indicating that the marginal political costs of these two tax instruments are statistically indistinguishable. However, sales taxes are found here to have a higher marginal political cost than direct taxes, so that the estimated political cost ranking of these two taxation instruments is the reverse of their efficiency cost ranking. Thus, to the extent that the efficiency ranking of tax instruments in the US is applicable more generally, the marginal political cost estimates provided here indicate that governments that wish to reduce the political costs of generating revenue may not choose taxes that are the most appropriate from the point of view of economic efficiency.

Predictions of Vote Percentages and Election Outcomes

In common with most economic models, the results reported here rely on empirical specifications that embody a number of assumptions. For example, in the specified models it is assumed that voters make electoral choices based on economic factors which include lagged changes in income, disaggregated tax revenues, disaggregated government spending, and government debt. While the assumptions embedded in the estimated models are not directly testable, one way of assessing the overall usefulness of the modelling approach employed here (as opposed to, say, an approach in which voting depends more on sociological or psychological factors) is to compare the predictions of the models with observed election outcomes. To provide a more stringent assessment of the predictive ability of the models, predictions are made for elections that are not included in the sample used to estimate the two models. To this end, the models are re-estimated with data from the last seven provincial elections (each for a different province) omitted.

Based on these revised estimates, predictions of the incumbent's vote percentage, and of the election outcome (based on predictions of the probability that the incumbent will lose) are made for each of the seven omitted elections. Following conventional practice (Greene, 1993:651-2), values of the probability of losing that exceed 0.5 are viewed as indicating that the incumbent will lose.

Table 2: Actual and predicted election outcomes

<i>Province</i>	<i>Date of election</i>	<i>Actual incumbent vote percentage</i>	<i>Predicted incumbent vote percentage</i>	<i>Actual change in govt.?</i>	<i>Predicted probability of loss by incumbent</i>
Nova Scotia	Sept. 1988	.435	.476	No	.006†
Alberta	March 1989	.443	.366	No	.431†
Newfoundland	April 1989	.476	.413	Yes	.947†
Prince Edward Island	May 1989	.607	.420	No	.393†
Quebec	Sept. 1989	.500	.454	No	.013†
Manitoba	Aug. 1990	.420	.519	No	.282†
Ontario	Sept. 1990	.324	.361	Yes	.984†

Note: Based on the prediction that the incumbent will lose if its probability of defeat exceeds 0.5, a † indicates that the model correctly predicted the election result.

Table 2 lists the province and month of the seven elections for which predictions are made, along with the actual incumbent vote percentage and the result of the election. The predictions of the probability of defeat for the incumbent are always less than 0.5 in the five cases where the incumbent won (and in two of these cases the predicted probabilities are almost zero), and above 0.5 (in fact above 0.9) in both cases in which the incumbent lost. Thus, the actual election result is correctly predicted in all seven cases. Estimates of the incumbent's vote percentage provide no direct prediction of the election result, and thus cannot be evaluated on the basis of actual election outcomes. However, based on the relatively low predicted incumbent vote percentage in the provinces of Alberta (36.6 per cent) and Prince Edward Island (42.0 per cent), one might have expected these governments to be defeated when they were actually re-elected. Along with the relatively imprecise coefficient estimates associated with the percentage vote model, these prediction results suggest that the probability of defeat model might be preferred to the vote percentage formulation.

Conclusion

The introduction of a GST-type visible sales tax is being considered as part of the current discussion on tax reform in Australia. Using Canadian provincial-level data, in conjunction with an economic model of voting behaviour, we obtain estimates of the impact on the success of the incumbent party of changes in a visible sales tax as well as the impact of changes in other forms of taxes and government expenditures.

The model performs well, in terms of both the significance of coefficients and its predictive power, especially when the objective of political parties is taken to be the maximisation of the probability of victory. This suggests that the framework employed here is a useful way of evaluating the political costs and benefits of different fiscal policies.

Whether the objective of the incumbent party is to maximise its percentage of the vote or its probability of victory, increases in visible sales taxes are found to have a significantly negative effect on the incumbent party's success. The effect of a sales tax increase on the probability of defeat is smaller in magnitude than an increase in the gasoline tax, but larger than the effect of an increase in direct taxes on persons (both of which are, at least to some extent, visible taxes). Less visible taxes, such as corporate taxes, natural resource taxes, and other indirect taxes, are shown to have a statistically insignificant impact on the incumbent party's success. The significantly positive impact of licence and other fees on the incumbent's political success suggests a distinct voter preference for user-pay methods of financing publicly provided goods.

Government spending on goods and services is the only type of spending that significantly reduces the probability of incumbent defeat and the opposition's vote percentage, while increased transfers to individuals, businesses or local governments have either a neutral or a detrimental impact (from the point of view of the incumbent). These results suggest that governments could maximise their political success by increasing spending on goods and services and reducing transfers to individuals, local governments and businesses. While an increase in the level of government debt appears to cause a very small but significant reduction in the incumbent's percentage of the vote, it does not have a significant effect on the probability of incumbent defeat. As a result, governments may prefer issuing debt rather than raising taxes in order to cover short-term revenue shortfalls.

Based on the results presented here, it would appear that governments wishing to improve their electoral chances are likely to reduce their reliance on broad-based visible taxes such as sales taxes, gasoline taxes and income taxes, and concentrate instead on raising revenue from less visible revenue sources such as natural resource royalties, corporate taxes, and user fees. Since the largest political costs are associated with the most visible taxes and, in particular, with a type of sales tax which is very similar to a visible GST, these results may have important implications for tax reform in Australia. A federal sales tax of this type was introduced in Canada in 1991 and became a major election issue during the 1993 Canadian federal election. In fact, the opposition party's promise to replace this tax, a major plank of its campaign, was probably one of the reasons it won a majority (although this promise was not kept during its first term in office). In contrast, the party which introduced the GST went from holding a majority of the seats in the Canadian parliament to holding just two of 295 federal seats.

Even though a visible GST-type tax can be supported on efficiency grounds, the associated political costs, as evidenced by the results reported here and the 1993 Canadian federal election, may be sufficiently large to make its introduction politi-

cally unappealing. Indeed, the results presented above suggest that governments considering tax reform may tend to concentrate on increasing taxes which are less visible or increasing user fees, since these are the least politically costly policies. Alternatively, if a GST is introduced, the results here suggest that this tax may be politically less costly if it is included in the price rather than added on explicitly at the point of sale. Despite the political appeal of taxes which are less visible or a hidden GST, tax reform that concentrates on these types of taxes is unlikely to be desirable either on efficiency grounds or in terms of promoting government accountability.

References

- Canada, Library of Parliament (1990), *Goods and Services Tax: Review of the House of Commons Finance Committee Report*, Supply and Services Canada, Ottawa.
- Deacon, R. & P. Shapiro (1975), 'Private Preference for Collective Goods Revealed Through Voting on Referenda', *American Economic Review* 65: 943-55.
- Downs, A. (1957), *An Economic Theory of Democracy*, Harper & Row, New York.
- Greene, W. (1993), *Econometric Analysis* (2nd ed.), Macmillan, New York.
- Hettich, W. & S. Winer (1984), 'A Positive Model of Tax Structure', *Journal of Public Economics* 24: 67-87.
- Jorgenson, D. & K. Yun (1991), 'The Excess Burden of US Taxation', *Journal of Accounting, Auditing and Finance* 6: 487-508.
- Landon, S. & D. Ryan (1997), 'The Political Costs of Taxes and Government Spending', *Canadian Journal of Economics* 30: 85-111.
- Mitchener, D. (1990), *GST Impact: The Final Countdown*, R. De Boo Publishers, Don Mills, Ontario.
- Peltzman, S. (1990), 'How Efficient is the Voting Market?', *Journal of Law and Economics* 33: 27-33.
- (1992), 'Voters as Fiscal Conservatives', *Quarterly Journal of Economics* 107: 327-61.
- Riker, W. (1962), *The Theory of Political Coalitions*, Yale University Press, New Haven.
- & P. Ordeshook (1973), *An Introduction to Positive Political Economy*, Prentice-Hall, Englewood Cliffs, N.J.
- Schram, A. (1990), 'A Dynamic Model of Voter Behaviour and the Demand for Public Goods Among Social Groups in Great Britain', *Journal of Public Economics* 41: 147-82.
- & F. Van Winden (1989), 'Revealed Preference for Public Goods: Applying a Model of Voter Behaviour', *Public Choice* 60: 259-82.
- Stigler, G. (1972), 'Economic Competition and Political Competition', *Public Choice* 13: 91-106, reprinted pp. 117-33 in K. Leube and T. Moore (eds) (1986), *The Essence of Stigler*, Hoover Institution Press, Stanford.

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