

Explaining Tax Reform

by

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July 30, 2004. Revised October 29, 2004

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Prepared for the conference “The Challenges of Tax Reform in a Global Economy”,
Andrew Young School of Policy Studies, International Studies Program, Georgia State
University, Stone Mountain Park, May 24-25, 2004. Winer wishes to thank the Canada-
United States Fulbright Foundation for support, and the Department of Economics and
the Center for the Study of Democracy at U.C. Irvine for their hospitality during the
Winter and Spring of 2004.

1. Introduction

A recent headline in the *Los Angeles Times* warned readers to “beware of the ides of April”. The writer, somewhat tongue in cheek, had chosen this title to refer to April 15, the date for filing income tax returns. Although he had misappropriated the Latin term (“the ides” referred to the 15th of March, May, July or October in the ancient Roman calendar), he achieved his intended purpose of linking taxation to a somewhat ominous feeling. There is no doubt that many look on taxation with the kind of foreboding that seems associated with “the ides”. (Romans also used the word to refer to the 13th day of all remaining months.)

Economic analysts generally have a more dispassionate attitude toward the subject. They are interested primarily in studying the effects of taxation on individual behavior and market prices, and in describing the distributional effects of tax policies. When the discussion turns to changes in the tax system, however, positive analysis may be replaced by advocacy of particular alternatives. This is illustrated by the frequent use of the word “reform” in the literature, a term usually employed to refer to changes designed to make the system better, where “better” is judged in relation to some ideal standard.

We take a different approach in this paper. It is based on an analysis that views tax policies as equilibrium outcomes of a well specified political and economic system, where information problems for participants are of great importance. As in other areas of economic life, existing equilibria can be disturbed by outside forces. Shocks can upset the existing balance and cause readjustments toward a new solution that is again consistent with all the relevant influences. This leads us to expect a variety of recurring changes and adjustments over time in the ways that individuals and organizations are taxed.

When alterations in tax systems are seen as responses by political decision makers to exogenous shocks, they can be studied and explained in much the same manner as other economic changes or realignments. We can form hypotheses on how and when tax change occurs and can test them empirically with reference to statistical data. Furthermore, a somewhat different terminology from the one generally employed becomes appropriate: it becomes more accurate to talk of *tax change*, rather than *reform*, since the latter word relates primarily to the redesign of tax systems motivated by normative concerns.

Once we start looking for them, we discover that significant alterations in tax systems are a ubiquitous phenomenon, whether we are interested in the distant past or in comparisons across modern countries. For recent examples, we can turn to the websites of major international organizations, where a search will turn up a variety of publications describing recent tax history, in countries as diverse as Switzerland, Poland, Bolivia, Korea and Indonesia.

Although some studies of recent tax 'reform' suggest factors that may have caused the observed policy adjustments, they only rarely use a framework where tax changes are treated as endogenous responses. Political economy models suitable for this task are not

used widely as yet in this literature. The present paper tries to move the discussion in this direction. We start by suggesting a descriptive model of tax change that distinguishes among different types of policy responses to outside shocks. We then speculate about the effects of a decline in the costs of international transactions and of international institutional arrangements in this framework. Next, the discussion is expanded to the nature of different constitutional regimes and to their influence on the type and frequency of responses.

We also discuss a second and somewhat different approach to empirical research. This work emphasizes that changes in the tax system must be politically feasible. Since policy proposals will only be adopted and implemented if they have sufficient support by voters and politicians, the research attempts to evaluate whether different 'reform' proposals are consistent with a given or existing political equilibrium.

2. A Descriptive Model of Implementation and Reform

A good place to begin any discussion of why tax reforms look the way they do is with an understanding of tax systems as equilibrium structures in a political economy, and with the information and coordination problems that face all policy makers in such environments. In confronting these problems, it should be noted, elected officials, bureaucrats and academics are very much alike.

The feasibility of designing and implementing policy plans in the face of information costs are classic questions in social science. The traditional debate was concerned primarily with the choice between central planning and allocation by market forces. Among the most influential ideas in this debate were those of Friedrich Hayek (1945), who argued that only decentralized markets could solve the information problem in a world beset by continual changes in the economic environment. They do this, it was argued, by allowing each economic agent to economize on the information necessary to reach an optimizing decision, while at the same time insuring that in the aggregate, individual plans are consistent and socially efficient.

The historical debate points in a particular direction if one's objective is to construct a framework for understanding how tax systems are in practice chosen and implemented and how they evolve in a competitive political system. The debate suggests that an effective approach for politicians to policy design and implementation will be to decentralize policy making into separate, semi-independent areas. Such segmentation allows specialization in the production of knowledge, and also permits the mobilization of special interests to provide valuable information as part of their attempts to influence policy choices.¹

In fact, the study of policy making in modern societies indicates that decentralization of

¹ Note that even the theory of optimal taxation assumes that policy making is decentralized by separating the theory of taxation from the determination of public expenditures, although this is not usually justified by reference to the information problem.

policy areas is a common feature of democratic government.² While the apparent lack of coordination that results is often decried by economic analysts, this may in fact represent a rational response to information problems associated with the problems of managing complex policy structures. Decisions on taxation and expenditures are taken separately at the political level, and implemented by different administrative bodies, while periodic budget resolutions or politically motivated ministerial or presidential directives are used to maintain broad overall coordination. As far as taxation is concerned, further decentralization of policy making and administration tends to occur in accordance with major tax bases. Moreover, tax commissions and tax reform are usually directed at selected parts of the revenue structure.

To fully understand the nature of tax policy and tax 'reform' in the presence of information costs then, it appears necessary to examine the benefits and costs associated with the segmentation of policy making, and to relate this sort of governance structure to the provision and processing of information necessary for effective policy.

If we go down this path, as we do below, it will be necessary to keep in mind that we are thinking about decision making by governments and politicians engaged in the struggle for political office, and about bureaucrats advising political representatives. Thus the relevant information problems that policy makers face stem from continual change on relevant political as well as economic margins.

2.1 A representation of the political calculus when information and coordination costs matter

To begin a more formal discussion, we consider the nature of the equilibrium fiscal system in a competitive political economy. Subsequently we introduce problems of information and coordination that arise in the making of tax and other policies.

In a political equilibrium, the marginal political costs of further reliance on any particular alternative tax source will be equalized across sources, and the common marginal political cost per dollar of revenue will be equal to the marginal political benefit of raising one more dollar and spending it on public goods and services (Hettich and Winer, 1988, 1999 chapter 3). Schematically we can illustrate such an equilibrium as follows:

$$(1) \quad MPC_i / \Delta T_i = MPB_G, \quad i=1,2,\dots,I$$

or

$$(1a) \quad MPC_i = MPB_G \cdot \Delta T_i, \quad i=1,2,\dots,I$$

where MPC_i is the marginal loss of political support (or expected votes) from a small rise in the rate of tax levied on base or activity i , ΔT_i is the amount of tax revenue that results from this marginal adjustment in tax policy, and MPB_G is the marginal benefit of

² A decentralized tax policy process may also be called a 'piecemeal' process. For an early discussion of the advantages of piecemeal policy making in taxation, see Bird (1970, 455-457).

spending one more dollar on public services. This is a very simple representation of an equilibrium fiscal system, but it will suffice for our purposes.

In order to introduce information and coordination problems in this setting, it is useful to decompose the right and left sides of condition (1a), assuming that it is possible to distinguish impacts of a short-run, distributional nature from the longer-run allocative effects of taxation resulting from tax-induced changes in private behavior. On the left hand side, we may think of a decision to increase reliance on a particular tax base as having three distinct effects on electoral support:

- (i) an impact effect on political support, reflecting the short run, primarily distributional consequences for voters of a change in the tax rate, holding the level of all tax bases constant;
- (ii) a direct effect on support that results from the consequences of decline in the size of the tax base in question; and
- (iii) a general equilibrium or indirect effect on support that depends on the nature and the consequences of substitution towards tax bases not directly subject to the rate increase.

Concerning the right hand side of (1a), we can decompose the change in tax revenue following a small increase in the tax rate into two parts:

- (i) a direct effect on tax revenue that occurs when all taxable activities other than the immediately affected base are held constant; and
- (ii) a general equilibrium or indirect effect on tax revenue that takes account of the implications for total revenues caused by substitutions away from the activity that is more highly taxed.

Using the above decompositions, condition (1a) can then be re-written as:³

$$(2) \text{ MPC} = [\text{impact effect on support} + \text{direct effect on support} + \text{indirect effect on support}] \\ = \text{MPB} \cdot [\text{direct effect on tax revenue} + \text{indirect effect on tax revenue}]$$

where the second term in square brackets in the second line of (2) is the term $[\Delta T_i]$ in equation (1a).

Finally in specifying this simple model, we shall think of the tax instruments for each tax base i (including rates structures, special provisions and the exact definition of taxable activity) as being assigned to a separate group of 'experts' in a Ministry or Treasury. Each group will be assumed to be fully informed about the impact, direct and indirect effects of

³ A more complete mathematical derivation of equation (2) is provided in Hettich and Winer (1999, chapter 6).

a change in the instruments under their control, but to have no information about or control over impact, direct and the general equilibrium effects caused by tax instruments assigned to other departments. This stylized framework is intended to represent a situation where decentralization of the policy making process allows specialization in information acquisition, while at the same time creating a problem of coordinating semi-autonomous policy makers.

In a world where information and coordination problems are absent, all the effects represented in the decomposition (2) will be fully taken into account by politicians and their tax officials. In a world where such costs are considerable, however, institutional arrangements will arise within the tax policy process that lead to complete or partial neglect of some of the effects. In that case, the decomposition in (2) provides a useful basis for categorizing the types of tax 'reform' or tax changes that we may expect to observe.

2.2 *A taxonomy of 'reforms'.*

In the above framework we can identify different types of reforms, depending on the nature of exogenous shocks and the time frame of our investigation. Reforms in this framework will be of four, and possibly more, distinct types: technical, coordinating, comprehensive and strategic. These reforms are distinguished by the nature of the exogenous shocks that precede them, by the types of information and coordination issues that are involved, and by the time frame involved.

Shocks that are small in magnitude, or which affect only particular activities can be handled by *technical reform*, at least in the short run. This will involve prediction about the impact and direct economic and revenue effects of particular taxes, and can be handled within each tax department without the need for major interdepartmental coordination. Indirect or general equilibrium consequences of taxation are not usually involved.

Technical reform, often implemented by regulation rather than by explicit legislation, will be continual, because minor shocks to the economy are always occurring. Personal income tax codes for example, including the set of regulations that are used to refine the definition of income subject to tax, are in a constant state of flux in all countries where this tax is an important part of revenue structure.

Coordinating reform involves two or more tax bases, and may result from larger shocks that will usually have general equilibrium consequences for support and revenue. Coordinating reform may also result from a series of technical reforms that gradually encroach on the 'territory' of two or more branches of the treasury.

Coordinating reform may also arise as a result of the links between taxation and other policy instruments such as regulation, where other departments controlling the non-tax instrument are involved. Few Americans were surprised, for example, when former President Clinton took credit in 1996 for passing an increase in the minimum wage jointly with a package of tax measures designed to alleviate the impact of higher wages on small

business. Voters expect and accept compromises of this sort as a valid expression of the democratic process, regardless of whether they favor or oppose a particular policy. One should note that this example also shows that a full understanding of tax change requires the consideration of how shocks emanating from other parts of government reverberate in the treasury.

The distinction between coordinating reform and *comprehensive reform* is not as tightly drawn as the difference between technical and coordinating reform. A comprehensive reform could also be described as a big coordinating reform. The entire tax system is considered, usually reluctantly in view of the difficulties of compensation that such big policy studies are forced to deal with. As coordinating reform can result from a sequence of technical reforms, so comprehensive reform may emerge over a decade or more from a sequence of coordinating reforms. General equilibrium or indirect effects are of key importance in this type of tax change, which are usually preceded by blue-ribbon panels of experts who work for substantial periods on redesign of major parts of the system.

Finally, it may be worthwhile to single out a type of reform that can be used in the context of international competition for business investment, which we label *strategic reform*. The issue here is not how the tax base is designed or administered so much as the implications of effective rates of tax, however levied, on mobile taxpayers and their capital. It is obvious in this case that a reform of the corporate tax rate is really nothing more than a change in a rate of tax designed to attract activity, and not a 'reform' in any sense that this word is used in the extant normative tax literature such as that reviewed by Hettich and Winer (1999, chapter 5).

2.3 Globalization, its associated tax changes and the role of international institutions

It is interesting to consider the effects of a major shock on tax reform using the framework outlined above. Suppose, for example, that the cost of international transaction of various kinds declines substantially, a shock that may be referred to as globalization.

The direct effect of this shock is to make the corporate tax base more elastic. Consistent with the empirical models of tax structure (Hettich and Winer 1984, Becker and Mulligan 2003, Kenny and Winer 2003), we will find tax change occurring as politicians respond by lowering corporate tax rates, and shifting the tax mix towards less mobile bases such as consumption, of course at the political expense of certain distributional and allocative effects that were being pursued before the shock occurred. Since corporate and personal income taxation is linked for high income earners, personal tax rate structures will be flattened in the face of threatened arbitrage between corporate and personal forms of income. Coordinating reform is clearly required.

Lost revenue is partly made up by shifting to less mobile bases such as consumption, as noted earlier. In addition, some base broadening may occur, though the income taxes remain essentially complex. Finally, there may be a net downward pressure on the size of the public sectors depending on the extent to which tax instruments are substitutable in equilibrium.

All of this is born out in what has actually happened over the past two decades in most developed countries (see Profeta 2004 for a recent discussion and similar interpretation of what has happened in E.U. countries). There have been many coordinating reforms over the last twenty years involving both personal and corporate taxation.

It is also interesting in this context to ask why developed countries that have followed this general pattern have done so while maintaining substantial differences in marginal effective tax rates in manufacturing and services, as illustrated in Table 1 from Wilson (2003), as well as substantial differences in reliance on personal income taxes, as illustrated in Table 2.

[Tables 1 and 2 here]

Ashworth and Heyndels (2003) also ask this question. They use an index of tax shares from various sources for each of the OECD and European Union countries over the period from 1965 to 1995. Using panel data time series techniques, they look for convergence of tax structures to a system wide average, as might be expected in the face of globalization. They find strong evidence of this convergence as far as reliance on corporate taxation is concerned, but not for personal taxation, and attribute the latter result to the immobility of labor. This work indicates that tax 'reform' can be studied from a positive perspective, and such work bolsters the view we are presenting: that what looks like reform is in most cases a response of a political equilibrium to exogenous shocks.

Reductions in transactions costs that lead to international competition have also lead to reactions by the international community of nations. Institutions such as the WTO are increasingly important in constraining national policy choices so as to manage (that is, to harmonize or to attenuate, depending on one's viewpoint) international competition. This leads to another interesting source of shocks that are exogenous to each country - the international trade ruling. Such rulings may also generate coordinating 'reform', though the countries affected would like a quicker and less painful technical fix if they could get away with it.

An interesting case in point is the recent ruling by the WTO concerning the U.S. tax break for American exporters that establish overseas subsidiaries known as foreign sales corporations, allowing U.S exporters to exclude a portion of foreign sales from the corporate income tax. The WTO ruled in 1999 that this tax provision in the U.S. code is a violation of WTO rules subject to retaliation by the complaining European Union countries. The U.S tried to fix the matter with a technical reform but the revised provision was rejected by the WTO in 2002.(See Vieth, 2003). Now E.U. countries are preparing to levy retaliatory tariffs of substantial magnitude.

As Peter Morici of the University of Maryland reputedly put it, the problem for the U.S now is: "You cannot get rid of [the offending] provision without redesigning the entire corporate tax. Once you get involved in that, it becomes a major piece of legislation."⁴

If such legislation were to be drawn up and passed by Congress, should we refer to it as tax reform, or as tax change?

3. Institutions and Tax Change

When outside forces disturb equilibrium, adjustment occurs. The government, or politicians seeking office, will propose policies to redress the imbalance. These may be minor in nature or involve coordinating or even comprehensive reform. Proposals may also have strategic elements related to the political process by which they must be adopted.

Readjustment and policy change occur in an existing institutional framework. Although institutions can be changed if needed, this will require greater effort and call for the creation of a larger consensus. As a result, tax change generally occurs within the channels of existing institutional arrangements and is influenced by current institutional design.

The influence of institutions on "tax reform" can be seen most readily if we study the impact of constitutional restrictions that govern the political process relevant to tax policy. A comparison of tax change in countries that have similar economic structures, but that differ in constitutional design, is particularly instructive in this regard. In this paper, we choose the federal governments of the United States and Canada as objects of comparison, but the major conclusions can be generalized to a variety of countries having arrangements that result either in more centralized or in more diffused decision making power. (For further discussion of the relevant literature, see for example the survey in Kirchgassner 2002).

We start the description of policy making in Canada, since it has the more direct policy process than the United States, relying on Hartle (1982) and Breton (1996) and others for institutional detail.⁵ Proposals are made and passed by the party in power, which generally has a majority in Parliament. They are formulated by a professional cadre of public servants in the Department of Finance and presented by the Minister of Finance to Cabinet, where they must be approved. Policy is subject to tight security over information until relevant legislation is introduced in Parliament. Although some parliamentary

⁴ Indeed, the Senate approved corporate tax legislation on May 11 (see Simon in the *L.A. Times*, May 12, 2004), that repealed the export subsidies and replaced them with new tax breaks, primarily for manufacturers. The bill also contained tax concessions to promote energy conservation and production. And the final bill passed by Congress in October 2004, the American Jobs Creation Act of 2004, is a mammoth 633 pages of special tax provisions (see Andrews in the *L.A. Times*, Oct. 13, 2004). It remains to be seen whether this legislation, if signed into law, will satisfy the WTO, or whether the trade organization and the complaining E.U. countries will raise new objections.

⁵ See also Pollack (1996).

committees exist that may review tax proposals, they lack the power to make substantive alterations. All participants in the process are aware that the government's intentions on important matters will prevail. After policy is passed in the House, matters are decided, since the Senate almost never exercises its power of postponement. In fact, tax changes effectively become law at the time they are proposed to Parliament and are rarely changed subsequently, except for technical adjustments or 'reforms'.

The centralized policy process gives the Minister of Finance and his team significant power, allowing him to set the agenda and to select specific policy responses. In designing policies, members of the minister's team will be aware of potential reactions by heads of other departments and will try to anticipate and avoid opposition at the cabinet level. Similarly, they will be aware of likely responses by major interest groups. Nevertheless, the minister and his team of experts have a crucial and determining influence on how tax policy is formulated, chosen and passed.

The decision making process in the United States is much more diffused (see for example, Pechman 1987). Although the President generally sends tax legislation to the House of Representatives, it is expected that his proposals will be altered significantly by Congress. There will be extensive public hearings, and much of the bill will be rewritten in committee before it reaches the floor. After the much revised version of the bill is sent to the Senate, a new set of hearings starts. When passed, the Senate bill may have substantive differences from the one adopted in the House, differences that will have to be reconciled in conference committee. Often, the bill that is sent to the President for signature has only a tenuous similarity to what was originally proposed to Congress by the White House. Moreover, Congress has the power to originate tax bills, a power given by the constitution to the House of Representatives. And even the Senate may enter the game by attaching important tax provisions to bills dealing primarily with other matters and thus become a center where tax policy originates.

Unlike in Canada, where the team of the Minister of Finance and budget secrecy (which makes it difficult for cabinet members to form alliances that challenge the Minister of Finance and the Prime Minister) play central roles, the policy process in the United States allows for participation by many actors. In the executive, the Bureau of the Budget and the Treasury have significant roles in setting the agenda. In Congress, committees have major power to rewrite and influence legislation. During the process, interest groups get the chance to give information and to apply pressure, both in the executive and in Congress, where extensive negotiations on specific details take place. The process is more open than in a parliamentary system, but it is also much more costly in terms of time and of resources. While governments in a parliamentary setting have strong power over legislation between elections, this power is more diffused in presidential systems where power is shared on a more continuing basis over time.

As a result, tax change in the United States system of checks and balances involves much greater transactions costs in terms of lobbying and coordination. We should therefore expect more rapid and frequent change to occur in Canada in the face of similar shocks hitting the two economies. Winer and Hettich (1999, chapter 11) have shown this to be so

for a period in the 1970s. There seems no reason why such an investigation could not be extended to encompass other electoral and legislative systems in the European Union for example. Some work surveyed by Kirchgaessner (2002) concerning the financing of budget deficits in divided or fragmented governing coalitions suggests that institutional arrangements do matter in the determination of equilibrium fiscal policy choices. The work of Steinmo (1993) on tax systems in Sweden, the United Kingdom and the United States also confirms the suspicion that institutions matter. But the role of institutions in shaping tax 'reform' has not been studied in much detail so far.

4. The Sustainability of Policy Reforms: An Alternative Approach

Existing political arrangements will limit the type of proposals that can be adopted through democratic choice. Another approach to empirical work tries to determine the boundaries of the feasible set of tax changes for given electoral and legislative institutions. One may note that experienced tax policy analysts often make calculations of this nature in an informal manner. We are suggesting that it be done more formally in the tax policy process. Recent research suggests that such calculations can be formalized and based on explicit models of political equilibrium.

For example, in the field of pension policy Galasso and Profeta (2004) consider the effects of aging on the nature of the social security system in OECD countries. Aging has an economic effect represented by a rising dependency ratio, and a political effect leading to pension systems that are more generous as people generally, and the electorate in particular, become older. Using numerical simulations, they look for policies that are better able to deal with the tension between these forces, and they suggest that increasing the retirement age will be more acceptable to the electorate than a cut in benefits. This is because the former policy mitigates the adverse economic consequences of both the economic and political forces.⁶

Similarly, Uebelmesser (2004) determines the latest point in time when a majority of voters would favor a reform to cut pension generosity. Her calculations indicate that Italy has only a year or two remaining, while Germany and France become what she calls gerontocracies in 2012 and 2014 respectively. In work on female retirement, Buetler (2002) uses data from Swiss referenda to test an empirical model that predicts support for and opposition to the extension of the retirement age.

In earlier work, Rutherford and Winer (1990) suggest different metrics that could be used to measure the 'distance' of a proposed tax policy from that in the existing political equilibrium in a computable equilibrium model. Such metrics are required for a more formal statement concerning the acceptability or democratic feasibility of alternative proposals for change.

⁶ This paper as well as the one discussed immediately below uses a modified median voter (or median cohort) model, which is likely to be incomplete when a multi-dimensional redistributive issue like pension reform is being discussed. The work is capable of being generalized in this respect.

5. Conclusions

Tax systems are best thought of as equilibrium outcomes constrained by a particular governance structure and the nature of the market economy. They can be studied theoretically and empirically as such. Tax reform, or more accurately, tax change, is the natural outcome of shocks in this equilibrium framework. Shocks may have a narrowly political origin, as when the incumbent party loses to the opposition in a polarized political system, or an economic origin. In the latter case, the resulting changes in tax systems will be continual, and of varying magnitude and scope.

We have suggested a way of categorizing the types of tax change that can be observed, beginning with a consideration of the information and coordination problems that all policy makers face. From this perspective, we should expect cycles of reform to occur, proceeding from technical to coordinating to comprehensive reform over a period lasting one or two decades, and depending on the nature of shocks bequeathed by history.

In summary, it is possible to study tax reform or tax change in an evolving political equilibrium as a positive enterprise. Although empirical research in the area is still in its infancy, a sufficient body of work exists to provide guidance and confirmation that such work is worthwhile. Research can be carried out in a formal statistical manner or less formally using historical investigation. Further work on political sustainability and work comparing different institutions and countries appears particularly promising.

References

- Andrews, Edmund L. (2004). "How Tax Bill Gave Business More and More." *Los Angeles Times*, October 13, 2004.
- Ashworth, John and Bruno Heyndels (2003). "Are Tax Structures Converging in the Long Term". Paper presented at the IIPF Congress, Linz Austria, August 2002. Revised, University of Durham.
- Becker, Gary S. and Casey B. Mulligan. "Deadweight Costs and the Size of Government." *Journal of Law and Economics* 46 (October 2003): 293-340.
- Bird, Richard (1970). "The Tax Kaleidoscope: Perspectives on Tax Reform in Canada". *Canadian Tax Foundation*. XVIII (5), 444-473.
- Breton, Albert (1996). *Competitive Governments: An Economic Theory of Politics and Public Finance*. Cambridge University Press.
- Buetler, Monika (2002). "The Political Feasibility of Increasing the Retirement Age: Lessons from a Ballot on the Female Retirement Age." *International Tax and Public Finance* 9, 331-348.
- Galasso, Vincenzo and Paola Profeta (2004). "Lessons for an Aging Society: The Political Sustainability of Social Security Systems". *Economic Policy*, April 2004, 63-115.
- Hartle, Douglas G. (1982), *The Revenue Budget Process of the Government of Canada: Description, Appraisal and Proposals*, Tax Paper No. 67, Toronto: The Canadian Tax Foundation.
- Hayek, F.A.(1945), "The Use Of Knowledge in Society". *American Economic Review*. 35(4), September.
- Hettich, Walter and Stanley L. Winer (1984)". A Positive Model of Tax Structure." *Journal of Public Economics*. 24/1, 1984, 64-87.
- Hettich, Walter and Stanley L. Winer (1988). "Economic and Political Foundations of Tax Structure." *American Economic Review*, 78(4): 701-712.
- Hettich, Walter and Winer, Stanley L. (1999). *Democratic Choice and Taxation: A Theoretical and Empirical Analysis*. Cambridge MA: Cambridge University Press.
- Kenny, Lawrence W. and Stanley L. Winer (2003). "Tax Systems in the World: An Empirical Investigation into the Importance of Tax Bases, Collection Costs, and Political Regime". Carleton Economic Papers. Available at www.ssrn.com.

- Kirchgaessner, Gebhard (2002). " The Effects of Fiscal Institutions on Public Finance: A Survey of the Empirical Evidence." in S. Winer and H. Shibata (eds.). *Political Economy and Public Finance: The Role of Political Economy in the Theory and Practice of Public Economics*. Cheltenham U.K.: Edward Elgar Publishers, 145-177.
- Pechman, Joseph A. (1987). *Federal Tax Policy*. Fifth Edition, Washington D.C.: The Brookings Institution.
- Pollack, Sheldon D. (1996). *The Failure of U.S Tax Policy: Revenue and Politics*. Penn State Press.
- Profeta, Paola (2004). "Public Finance and Political Economics in Tax Design and Reforms". in Luigi Bernardi and Paola Profeta. "Tax Systems and Tax Reforms in Europe. Routledge, 55-75.
- Rutherford, Thomas and Stanley L. Winer (1990). "Endogenous Policy in a Computational General Equilibrium Framework." Research Report 9007, University of Western Ontario, June 1990. Chapter 12 in S. Winer, *Political Economy in Federal States: Selected Essays of Stanley L. Winer*. Cheltenham U.K.: Edward Elgar
- Simon, Richard (2004). "Senate OK's Corporate Tax Overhaul Bill to Settle Trade Dispute", *Los Angeles Times*, July 14, 2004.
- Steinmo, Sven (1993). *Taxation and Democracy: Swedish, British and American Approaches to Financing the Modern State*. New Haven: Yale University Press.
- Uebelmesser, Silke (2004). "Political Feasibility of Pension Reforms." *Topics in Economic Analysis & Policy*. 4(1), Article 20.
- Vieth, Warren, "E.U. Imposes 1st Tariff Penalties on U.S. Goods", *Los Angeles Times*, March 2, 2004.
- Wilson, Thomas (2003). "An Evaluation of Business Taxes in Canada". in H. Grubel (ed.). *Tax Reform in Canada*. Vancouver: the Fraser Institute, 109-138.
- Winer, Stanley L. and Walter Hettich (1999). "Information, Co-ordination and Tax Policy Making", in R. Bird and T. Wilson (eds.), *Rationality in Public Policy: Retrospect and Prospect; A Tribute to Douglas Hartle*. Toronto: Canadian Tax Foundation., 19-42.
- Winer, Stanley L. and Walter Hettich (2003). "The Political Economy of Taxation: Positive and Normative Analysis When Collective Choice Matters". In C. Rowley and F. Schneider (eds.) *The Encyclopaedia of Public Choice, Volume I*. Kluwer Academic Publishers.

Table 1
Marginal Effective Tax Rates (METRs) for Domestic Firms,
Selected OECD Countries, 1996 and 2001

Manufacturing										
	Canada	US	UK	Germany	France	Italy	Japan	Sweden	Ireland	
1996	23.5	23.8	19.4	38.0	25.3	31.6	31.6	14.4	4.2	
2001	23.4	23.6	17.2	21.1	23.2	18.1	22.6	14.4	4.2	

Services										
	Canada	US	UK	Germany	France	Italy	Japan	Sweden	Ireland	
1996	29.0	25.0	19.2	37.5	27.9	35.5	33.1	14.2	4.2	
2001	28.3	24.8	17.2	20.8	25.8	21.4	24.0	14.2	4.2	

Source: Adapted from Table 7 in Wilson (2003, 130-131).

Notes:

1. To single out the tax impact, it is assumed that the interest rate and inflation rate are 6.8% and 1.4% respectively across countries and periods.
2. The Canadian METR for the service sector in 2001 is corresponding, respectively, to the federal CIT rate of 28.12% (including the 4% surtax), combined with the weighted average provincial CIT rate of 14.15%.
3. The German METR for 2001 reflects the federal CIT reduction from the current 40% to 25%, starting in January 2001. The municipal trade tax (16.66% on average) and the solidarity surcharge (5.5%) will still apply.
4. The general CIT rate in Ireland was 32% in 1996, 24% in 2000 and 20% in 2001. A lower rate of 10% is applicable for manufacturing and the international tradable service sector (i.e., financial service sector), to which a corresponding METR of 4.2% is shown. In 2004, Ireland's statutory corporate rate will be 12.5% and the corresponding METR, 5.3%.

Table 2
Personal Income Tax Revenues as Percent of GDP and of Total Revenues,
Selected OECD Countries, 1998

	1998	
	% of GDP	% of Total Revenues
Austria	10.0	22.5
Belgium	14.1	30.7
Denmark a)	25.7	51.6
Finland	14.9	32.3
France	7.8	17.4
Germany	9.3	25.0
Ireland	10.0	30.9
Italy a)	10.7	25.0
Luxembourg	7.8	18.8
Netherlands	6.2	15.2
Portugal a)	5.8	17.1
Spain a)	7.1	20.8
Sweden	18.2	35.0
United Kingdom a)	10.2	27.5
Norway	11.9	27.3
Switzerland	11.2	31.8

(a) Partly estimated.

Source: CESifo DICE, from OECD. *Revenue Statistics, 1965-1999*. Paris 2000.