Rules, Politics and the Normative Analysis of Taxation

by

Walter Hettich* and Stanley L. Winer**

Draft of August 9, 2000

JEL classification: D7, H0, H1, H2

Keywords: Public economics, public finance, taxation, collective choice, rules

* Department of Economics, California State University, Fullerton CA 92834 (whettich@fullerton.edu)

** School of Public Administration and Department of Economics, Carleton University, Ottawa, Canada K1S5B6 (stan_winer@carleton.ca)

Abstract

Taxation has been a much-discussed subject in the literature on economics and in writings on the role and meaning of the state. Over the centuries, many authors have put forward views of what qualifies as "good" taxation and what constitutes undesirable tax policy. Consensus on these issues has changed over time, depending on historical circumstances and prevailing modes of economic thinking.

In this chapter, we look at analytical views that enjoy broad acceptance in the current literature on taxation. We call these views "rules" or "norms" of analysis. They represent patterns of thinking that have wide currency or that have become codified in the literature. The chapter describes eight of the most important rules or norms and then critically examines their validity in a framework that makes explicit allowance for collective choice. Our critique leads us to identify several shortcomings and limitations in existing patterns of thinking.

1. Introduction

Taxation has been a much-discussed subject in the literature on economics and in writings on the role and meaning of the state. Over the centuries, many authors have put forward views of what qualifies as "good" taxation and what constitutes undesirable tax policy. Consensus on these issues has changed over time, depending on historical circumstances and prevailing modes of economic thinking. Even in recent decades, one can find considerable variation in views among economic authors and analysts on what constitutes desirable tax policy. In this chapter, we look at analytical views that enjoy broad acceptance by a substantial group of tax policy experts. We call these views "rules" or "norms" of analysis. They represent patterns of thinking that have wide currency, or that have become codified in the literature.[1]

The chapter describes eight of the most important rules or norms and then critically examines their validity in a framework that makes explicit allowance for collective choice. In each case, we relate our discussion to basic issues or elements of public finance. Our critique leads us to identify several shortcomings and limitations in existing patterns of thinking. We group rules or norms into two categories – those that are outcome-oriented and those that are related primarily to process. In the first set, the shortcomings derive mainly from a failure to integrate collective choice into the formal framework. In the second set, we identify different types of limitations. While political decision making is explicitly acknowledged in this case, the models of collective choice relied upon are often unrealistic or incomplete, undermining suggested reforms. In addition, those using such process-oriented rules show a reluctance to extend their analysis to specific outcomes and to provide a framework that allows for a quantitative evaluation of particular economic results.

In a brief concluding section, the chapter summarizes some major implications for normative tax analysis. We argue for a more complete approach that includes an appropriate treatment of collective choice as an integral part. The discussion makes clear that development of such a framework remains a largely incomplete and challenging task.

[1] It may be useful to point out that we do not examine ethical norms that provide a prescriptive guide for appropriate individual behavior.

Our concern is with the structure of basic ideas. References to the literature are not intended to be comprehensive. Additional references on the issues discussed may be found in Hettich and Winer (1997, 1999).

2. Basic Issues in Public Finance

In a modern economy, governments must achieve two primary goals. They must provide public goods and services demanded by the population, and they must find ways to implement changes in the distribution of income that is generated by market forces if such changes are desired by the collectivity. Theorists have pointed out a condition under which governments could finance these tasks without imposing an 'excess burden', that is, welfare losses over and above the loss due to the payment of the tax. This would require that taxation to pay for public goods be levied in relation to benefits received from the consumption of these goods. Such taxes, often called benefit taxes, would act in a way that is analogous to the role played by prices in private markets. For purposes of redistribution, taxes would have to be imposed as lump sum levies so that taxpayers could not avoid taxation by altering their behavior, while redistributive subsidies would be given out as lump sum payments.

If public goods had the same characteristics as goods sold in private markets, benefit taxation would represent a viable solution. However, many goods provided by the public sector differ in an essential manner from private goods. It is generally considered impossible to exclude those who refuse to pay voluntarily for public services, such as defense or police protection, from consuming these services. Nor is it possible to ascertain the demand for public goods by different individuals by asking them with questionnaires since potential consumers of such goods have an incentive to understate their preferences in order to minimize their own tax payments.[2]

[2] It is possible to find a special tax scheme that will overcome the preference revelation problem under certain conditions, such as the Clark-Groves and Ledyard-Groves mechanisms (see Cornes and Sandler 1996, 221-234 for discussion and references). However, none of these schemes appear to be a practical method of financing a modern public sector.

Problems also arise if we attempt to use lump sum taxes to finance public services. Such taxes would have to be levied on individual characteristics that cannot be changed by taxpayers in order to avoid or lower their tax payments. In practice, there are few such characteristics, and payments related to them are generally perceived as inequitable or unjust, as was revealed forcefully in an experiment with head taxes conducted in the United Kingdom during the Thatcher government**.** Similar problems apply to lump sum subsidies; in general, recipients can find ways to adjust their economic behavior in some manner in response to being granted such payments.

Because of the problems outlined, taxes are usually assessed as compulsory levies, and individual tax payments have no direct relation to the number of units of a public good supplied to any taxpayer.[3] The separation of tax payments from decisions concerning the provision of public goods leads to excess burdens when individuals adjust their behavior to reduce their tax liability while still enjoying the benefits of public services.[4] Such excess burdens or deadweight costs also arise from redistributional policies that draw on resources raised with compulsory taxes and that provide subsidies that are not of a lump sum nature.

The need for compulsory, non-benefit taxation to finance the activities of the public sector requires allocation mechanisms that differ from those used in the private sector. Choices on what public services to provide, on how much of them to produce, and on how to pay for them must be made in a collective manner. Similarly, collective choice mechanisms are required to determine the degree of redistribution and the manner in which it will be

---

[3] The compulsory nature of taxation referred to here stems from the desire to overcome the problem of free-riding. Issues of coercion in a stronger sense are dealt with below. See Buchanan (1975) for further discussion of the distinction between the production of public goods, prevention of free-riding, for which compulsory taxation is usually required, and coercive redistribution in the sense of taking without compensation.

[4] Individuals substitute less valuable, but less heavily taxed activities for activities that are taxed more highly, until further reductions in tax liabilities are just offset by the loss in welfare as a result of the substitution. Since the loss of revenue to the government is also a gain to the taxpayer, it is not lost to society as a whole. However, the welfare loss from the shift towards less valuable activities remains as a net loss (over and above that due to the payment of taxes) to the individual taxpayer and to society. It is important to note that the substitution of taxed activity that is the essential source of excess burdens would not exist if taxing and spending were not separated. For in that case, the substitution away from taxed activity would also lead directly to a corresponding and equal loss of valued public services. See Creedy (1998) for discussion of the definition and measurement of the excess burden of taxation, which is also often referred to as the deadweight cost of taxation.

financed. In democratic societies, allocation choices for the public sector are made through voting, and through the actions of elected representatives, or of officials to whom the political representatives delegate the power to make particular decisions concerning the use of scarce resources. Rules and norms of taxation must be evaluated in such a broader context, one that acknowledges the reasons for compulsory taxation outlined above together with the collective nature of existing political institutions that must be relied on to make fiscal decisions.

3. Rules or Norms in Relation to the Basic Elements of Public Finance

The discussion in the preceding section has identified three basic elements or issues of public finance: (1) separation of taxing and spending and its implications for the socially efficient use of resources; (2) determination of redistribution through the fiscal system; and (3) the necessity for non-market or collective choice mechanisms to allocate public sector burdens and benefits. The literature on rules or norms of taxation represents an attempt to codify strategies of analysis that deal with these essential elements. In this section we outline several of the most important tax rules or norms, indicating how each addresses one or more of the basic elements of public finance.

The literature on rules can be divided into two broad categories, depending on how it deals with the third element. One strand of the literature seeks solutions assuming that there is a planner who can bypass the necessity for collective choice. It is outcome-oriented, looking for detailed policy prescriptions to deal with issues arising from the other two elements, while abstracting from the necessity for collective action. We shall refer to rules arising from this approach to fiscal analysis as planning or outcome-oriented rules.

A second strand of the literature deals with collective choice allocation mechanisms as a central concern. Work in this category often focuses mainly on the nature and design of the mechanisms themselves, rather than on the detailed outcomes arising from them. If particular policies are discussed, they are seen as examples to illustrate the functioning of the process that is of importance. We shall refer to rules in this tradition as being primarily process-oriented.

3.1 Outcome-oriented rules

A. Lump Sum Taxation as a Standard of Reference

Economists have developed a widely accepted approach to measuring the welfare losses arising from the separation between taxing and spending. As pointed out earlier, lump sum taxes differ from other levies by having no announcement effects. Since they are imposed on characteristics of taxpayers that the latter cannot change (or change only at very high costs to themselves), they do not cause a reallocation of effort or resources at the margin. The difference becomes clear if we compare a head or lump sum tax to an income tax. Economic responses to the latter are quite possible: Taxpayers can reduce their work effort and consume more leisure if they are taxed, thus reducing the utility loss from a particular tax. On the other hand, if anyone who is alive must pay the tax simply by virtue of existing, no marginal adjustments are feasible that would allow tax avoidance.

Few economists would recommend lump sum taxes as a realistic way of raising large amounts of revenues. Such taxes require that governments be indifferent to the status of taxpayers no matter how badly off they may be. Rather, this tax is used as a conceptual device to isolate the changes in allocation caused by other types of taxes. The underlying reasoning is quite straightforward. If we can determine resource allocation with a head tax and resource allocation with some other tax, holding the amount of revenues collected constant, a comparison between the two situations must isolate any effects that are due to marginal changes in taxpayer behavior induced by the non-lump sum or distortionary tax.

Let us assume, for example, that a fixed amount of revenues is to be raised from a particular consumer, either by a head tax or by imposing a per unit tax on one of the goods purchased by the consumer. It can be shown rather readily that after-tax utility of the consumer will be higher if the given amount is raised by the head tax, since the latter does not affect relative prices and does not induce a substitution at the margin between the taxed item and non-taxed goods.[5]

Given appropriate assumptions about the preferences of taxpayers, we can determine the difference in after-tax utility levels in the two situations. It is then possible to use consumer surplus measures to assign a monetary value to this difference, although actual measurement may not be a simple matter, and may involve complex issues of estimation and calculation[6]. We call this value a measure of the excess burden or deadweight cost caused by taxation.

Not all effects associated with the provision of publicly provided goods are captured by an analysis of excess burden defined in relation to lump sum taxation. An additional problem arises with mixed goods, such as education, that have both a public and a private component. For such goods, individuals can adjust the number of units consumed, while for purely public goods, the level of consumption must be the same for everyone. If units of the mixed good are provided free of charge, consumers will demand more units than they would with efficient pricing of the good. Use of lump sum taxation as a basis of comparison will not capture welfare losses caused by inefficient pricing of mixed goods.

Welfare analysis based on lump sum taxation furthermore assumes a fixed public budget, since the comparison is made for a given amount of tax collection. If we want a standard that takes taxing as well as spending into account, we need to allow for the level of expenditures to be determined endogenously. Traditional analysis of welfare losses based on lump sum taxation does not consider efficiency losses arising from a non-optimal level of public spending.

The popularity of lump sum taxes as a conceptual device relates to the logical simplicity of the argument and to the fact that differences from the standard of efficiency can

[5] Here we assume away the problem of actually identifying individual taxpayers in such a manner that it is not possible for them to avoid the tax. See for example, Jha (1998, 294-5) and Myles (1995, 44-48) or other public finance texts such as Cullis and Jones (1998), Rosen (1995) or Stiglitz (1988).

[6] A large literature has arisen to deal with the problems of measuring excess burdens from various types of taxes. For a discussion of the issues, see, for example, Creedy (1998).

be measured in monetary terms. It appears that excess burdens can be determined in this manner without reference to the other vexing basic issues, namely redistribution and collective choice. We shall examine at a later point whether this simplicity is in fact a justified perception, or whether it is more apparent than real.

B. Minimization of Excess Burdens

A widely accepted rule of analysis states that a tax system is efficient if it minimizes the total excess burden of raising a given amount of revenues. This rule is an implication or extension of the use of lump sum taxation as a standard of reference.

Let us assume that the government has several well-defined tax bases at its disposal, and that it intends to assess taxes on them in such a manner that measured welfare losses are as small as possible in total. This will be achieved if tax rates are adjusted so that marginal welfare losses per (marginal) dollar of revenue raised are equal across tax bases.

A rather interesting application of this approach is the inverse elasticity rule associated with Ramsey (1927). Assume that we are dealing with a sales tax imposed on different available commodities. Minimization of excess burdens then implies that we should apply higher tax rates on commodities having a relatively inelastic demand in the relevant range of the demand function than to commodities with more elastic demands, so as to raise a given total revenue while avoiding, as far as possible, the excess burdens associated with the substitution away from commodities whose after-tax price has risen.[7]

In its simplest version, minimization of total excess burden abstracts from concerns of redistribution and collective choice. More complex versions of this rule envision a planner who uses distributional weights derived from a welfare function given from outside the conceptual framework.[8] In such a context, the planner attempts to maximize social welfare.

---

[7] This particular result requires that all cross-price elasticities of demand be zero. See Jha (1998, 294) for details.

[8] Stiglitz (1987) and others have suggested the use of the Pareto criterion in place of social welfare maximization. However, in our view, distributional goals remain essential in much of the literature.

To achieve this, he or she will equalize distributionally weighted marginal excess burdens per dollar raised across available tax bases. This more general approach, now called the theory of Optimal Taxation (OT), has become established through the work of Ramsey, Mirrlees (1971) and others as the most influential normative approach in taxation.

While the social planner or OT approach allows incorporation of a second basic issue (redistribution), it does so at the expense of practicality. In actual policy contexts, well-defined welfare functions are not available, and it may be difficult to determine even in an approximate fashion what the prevailing consensus is regarding distributional weights. One should also note that the planner model completely skirts the third basic issue - the necessity for collective choice - since it describes a standard of reference drawn up without regard to the costs of collective choice. We shall return to this point later in the chapter.

C. Tax Neutrality

There is another reason, besides the difficulty of identifying distributional weights, that substantially reduces the practicality of the optimal tax approach. Those concerned with the reform of particular tax systems point to the heavy informational requirements of OT. Since optimal tax plans take full account of the general equilibrium structure of the economy, they tend to be highly complicated and complex. To develop a comprehensive OT blueprint of the tax system, the social planner needs knowledge of preferences, endowments and technology for all participants and sectors in the economy, as well as knowledge of distributional weights**.** How this information is to be acquired by elected politicians who are in charge of policy making is not addressed.

If we restrict the analysis to commodity taxation, the primary need is for information on demand functions and commodity characteristics. Stern (1987) has discussed the conceptual problems involved in the generation of such data:

> The derivation of the appropriate set of commodity taxes requires information concerning patterns of complements and substitutes that is very difficult to extract from the data. Our attempts to extract it will require specifications of functional

> forms, which … may have a profound effect on the recommendations. As Deaton ... observes: 'In consequence, it is likely that empirically calculated tax rates, based on econometric estimates of parameters, will be determined in structure, not by the measurements actually made, but by arbitrary, untested (and even unconscious) hypotheses chosen by the econometrician for practical convenience' (1987, 51).

The problem is particularly acute in developing countries, where the necessary information systems are largely absent, but it also exists in more developed nations, where planners face a bewildering array of different goods and constantly changing market conditions.

Suggestions in the tax literature for dealing with the information problem center on rules of thumb, or simplified guidelines such as tax neutrality. Neutrality here means that all taxable activities should be treated equally by the tax system (that is, taxed at the same effective marginal rate) in order to avoid a far as possible the excess burdens that will arise as taxpayers substitute towards relatively lightly taxed activities. As one writer (Gillis 1989) has put it:

> While not nearly as intellectually satisfying a guide to tax policy as "optimal taxation," neutral taxation is to be preferred as a benchmark until such time as analysts are able to identify optimal departures from neutrality in real world policy settings, and until such time as administrative capacities are equal to the task of operating necessarily complicated optimal tax structures (1989, 515).[9]

In other words, those who advocate tax neutrality recognize that it is less efficient than a properly specified optimal tax blueprint, but argue that a neutral system will be more efficient than any feasible OT system that is badly implemented. We return later to whether or not this conclusion is justified.

---

[9] Bird also draws attention to the "chasm" that exists between optimal tax theorists and practitioners (1991, 38).

D. Harmonization: International and Interregional Neutrality

Neutrality in an international or interregional context is often referred to as harmonization or fiscal coordination.[10] The application of the approach is similar in both the international and the interregional contexts, though specific policy recommendations consistent with neutrality within a federal state are generally more detailed than those considered to be feasible in the international context. For convenience, we shall confine the discussion to the international case.[11]

The problem in the international context is to devise simple rules that allow for the financing of public goods as well as for redistribution within and between countries, while taking account of the possibility that firms and consumers will move across international borders to minimize their tax liabilities. When tax payers are mobile, there is a danger that international competition will lead to the bidding down of national fiscal systems to a level at which the only taxes that can be collected are those that support the business–oriented services which multinational firms are prepared to pay for.

In this sort of situation, moreover, the presence of fiscal externalities in domestic public decision making may lead to suboptimal levels of public services even if some non-benefit elements in the tax system remain. Externalities arises because, in the face of tax base mobility, the cost of raising revenue to pay for public services includes not just the full domestic cost (including excess burden), but also the loss of revenue due to tax base mobility. A national government will take this extra cost of domestic programs into account when setting national tax rates, but will not consider the offsetting gain in taxable activity that may accrue to other countries. From a global perspective, the overall result is an

---

[10] Some authors refer to a harmonized tax system as a system in which different jurisdictions adopt the same set of tax rates. We employ the term in its more widely used sense to refer to a regime in which the tax systems of different countries, or of provinces or states within a federal system, are coordinated according to one set of general principles.

[11] Wilson (1999), Oates (1999) and Musgrave (1991) survey the literature on interregional and international harmonization more fully.

equilibrium with an inefficient level of public services, where the public sector in each country is usually too small.

Ingenious rules have been formulated to permit the financing of public services while preserving intra- and inter-nation equity, all in the face of internationally mobile factors, commodities and services. To the extent that these rules succeed, they do so because they reduce the usefulness of international mobility as a way of avoiding tax liabilities.

One system of interjurisdictional harmonization that has developed over many years (see Musgrave 1991, who in part credits Seligman 1921) is one that combines the residence principle for the taxation of international income from capital for residents of a country with source taxation of nonresidents and a foreign tax credit by the nonresidents' home country. [12]Under the residence principle, the capital income of citizens is taxed in the same way no matter where in the world it is earned. This is an example of tax neutrality in the international setting. Since tax payments do not depend on where they are earned, intra-nation equity is preserved between those who have and those who do not have foreign source income. For the same reason, the capital owned by residents will be efficiently allocated around the world (from a national perspective), a situation often referred to as capital export neutrality.

The taxation at source of income earned domestically by nonresidents preserves inter-nation equity, by giving the country in which resource and other rents are earned the first 'nibble'. And, at the same time, the foreign tax credit extended to nonresidents by their own government eliminates double taxation of their foreign source income, in effect preserving the residence principle despite taxation at source of nonresidents.[13]

For commodity taxation, the analogue to the residence principle is the destination principle, under which purchases by residents are taxed the same no matter where they are made (i.e., imports and domestic purchases are taxed alike), while purchases by nonresidents

[12] See also Keen (1996).

[13] To guard against a raid on the domestic treasury, foreign tax credits are usually limited to the domestic tax that would be payable if the foreign source income was earned at home.

are not taxed (i.e., exports are not taxed). The application of the destination principle insures that prices received by foreign and domestic producers selling into the same market are identical, thus preserving production efficiency even though different countries may have different tax rates.

It is important to note that in this residence-destination tax regime, the pressure for international tax competition is much reduced. Each country's residents pay the same tax no matter where they transact, while nonresidents are (under a foreign tax credit system) largely unaffected by the domestic tax system. If one country raises its tax rates unilaterally, this may lead to domestic political protest, but it will not lead to harmful international capital or commodity tax arbitrage.[14] Moreover, because a harmonized international tax system attenuates the incentives for mobile tax bases to move away from relatively higher tax jurisdictions (since they still pay the same, domestically determined tax), it also reduces fiscal externalities.

Like tax neutrality, the rules for international harmonization that have been worked out over the years are cognizant of the inefficiencies that may arise because of the separation of spending and taxing and the need for redistribution. The role of collective choice in this literature will be addressed later.

3.2 Process-oriented rules

A. The Comprehensive Tax Base and Horizontal Equity

There is a large body of literature that relates to horizontal equity and the comprehensive income tax base. The major proponent of this approach was Henry Simons who published his work in the 1930’s and 1940’s. In his classic book *Personal Income Taxation* (1938), he spelled out the major arguments for levying taxation primarily on income, and for using a comprehensive definition of income in determining the tax base.

[14] Obviously the problem of smuggling arises here and must be dealt with in theory and practice.

While Simons' work on income taxation extended a tradition of analysis originally developed by Haig and Schanz, he added an important new element. He advocated a comprehensive tax base as a way of limiting government interference in the economy. He believed that the tax base could be defined according to logical principles that would command broad support once they had been aired widely in public discussion. His definition of the appropriate base – the change in net wealth plus the value of consumption during an accounting period – was thus offered as a process-oriented rule that would circumscribe government intervention in the private economy.

The definition of the comprehensive tax base depends on the related concept of horizontal equity. Simons argued that those with equal ability to pay taxes should be assessed equal tax payments. He saw this principle as a way of implementing justice in taxation and believed that it would have wide support among taxpayers, leading to a tax system that would be perceived as fair among the population.

The concepts of horizontal equity and of the comprehensive tax base made a lasting impression on economic writings related to taxation and also had a considerable impact on the legal profession. Simons had rejected a utility-based analysis and directed the focus to implementation of the comprehensive tax base in a manner having a direct counterpart in accounting practices. Many writers followed this lead. The result was a voluminous literature dealing with problems of implementation and an extensive debate on what should and could reasonably be included in a comprehensively defined base.

The work by Simons and by many later writers, such as George Break, Joseph Pechman and Richard Musgrave, had an important influence on attempts to reform existing tax laws in the United States, Canada and several European countries. The apogee of this type of analysis was probably reached in the Report of the Canadian Royal Commission on Taxation (1966), that spelled out in volume after volume just how comprehensive income taxation should be implemented at the federal level in Canada. In the United States, ideas in this tradition repeatedly influenced policy discussion, with the most recent example being the debate leading up to the 1986 Tax Reform Act.[15]

While ideas from this tradition continue to influence policy, they have lost favor in recent years among theoretical economists with the development of the optimal tax approach. The Simons tradition also conflicts with more recent writings on collective choice that treat the tax system as an equilibrium outcome of the political process. We shall return to these differences in our critical examination of existing norms.

B. Limiting the Power to Tax

A second process-oriented approach also focuses on the definition of available tax bases, but it reaches conclusions that contrast starkly with those arrived at in the Simons tradition. The reason for this relates to differences in assumptions concerning the motives and actions of government. The literature on limiting the power to tax starts from the premise that public decision-makers attempt to maximize total revenues that can be extracted from the private sector. A comprehensively defined tax base would provide increased opportunities to those who have such Leviathan-like motives. Unlike Henry Simons, who believed that the political process would set appropriate targets for budget size after public discussion, writers using this approach argue that determination of budget size must be the primary focus of the analysis.

Geoffrey Brennan and James Buchanan (1980) provided the classic statement of the reasons for limiting the government's power to tax. They argue for a tax constitution that would restrict fiscal decision-makers to narrowly defined bases. Economic activities that are relatively elastic with regard to tax rates are preferred, since their inclusion in the constitutionally determined tax base allows taxpayers to adjust behavior, and thus to reduce the size of the total budget by escaping into non-taxed alternatives. While such avoidance would create welfare losses, Brennan and Buchanan believe that a tax constitution of this

[15] *Tax Reform for Fairness, Simplicity and Economic Growth* (1984) and *the President's Tax Proposal* (1985), both issued by the U.S. Treasury, summarize the government's proposals and the main issues in the debate preceding the 1986 reforms.

nature would lead to greater overall efficiency, since it limits the excessive growth of public budgets and of the public sector.

Like the Simons' approach, the literature on limiting the power to tax puts the third basic element in tax analysis, namely the need for collective action, at the center of the argument. Detailed examination of the other two elements is subordinated to a review of the implications of political choice, though the ultimate concern of the approach is with the total deadweight costs of the public sector. However, as with the argument for a comprehensive tax base, the approach depends crucially on the model of collective behavior that is chosen. As will be shown in a later section, the use of alternative and, we will argue, more realistic models leads to quite different conclusions, even if political choice remains the centerpiece of the analysis.

C. The Generality Principle

In a recent contribution that has not yet been widely discussed by other scholars, Buchanan and Congleton (1998, chap 8) have returned to the concern of Simons with the problems of majority rule. Their analysis of the operation of majority rule is more explicit than in Simons' work, however, and it includes an examination of the dynamic character of democratic politics.

Buchanan and Congleton argue that rent seeking and static welfare losses are likely to occur since majorities often do not internalize the losses suffered by minorities. Over time the losses due to majoritarian exploitation of minorities may become steadily more serious. Because of the inherent tendency of majority politics to foster vote cycling and instability in the struggle over distributive shares, the long-run rate of growth may decline, unless appropriate constraints are placed on political outcomes. This will be so because any currently successful coalition may find it desirable to raise tax rates even higher than merely static political optimization would suggest, because it realizes that it will probably not be the majority tomorrow, and that it cannot fully capture the future gains from growth enhancing policies.

Interestingly, the solution advocated is similar to Simons' broad base income tax, the purpose of which was to prevent government from dipping into great incomes with a sieve, as Simons (1936) put it. In this more recent contribution to the process-oriented literature however, the suggested solution involves the application of a Generality Principle, or principle of non-discrimination, under which all citizens are to enjoy equal quantities of public services, and pay taxes according to a flat or uniform tax system on a broad base that does not permit economic activity of particular groups to be singled out for 'special' treatment. The intention here is to avoid distributional conflict, and the vote-cycling and associated economic waste that results. In order to do so, Buchanan and Congleton go so far as to argue that it is necessary to eschew the use of exemptions that remove low income taxpayers from the tax rolls, since this invites political conflict over who is to be exempted.

D Time Consistency: Neutrality over Time

The last process-oriented approach we shall consider suggests the use of independent agencies (much like independent central banks), policy rules, or social contracts to distance the setting of policy from the day-to-day vagaries of democratic politics. In this literature, the focus of concern is on the inefficiency that may arise in a dynamic context when contemporary governments, perhaps acting on behalf of majority coalitions, engage in discretionary fiscal and other polices that are not consistent over time.[16]

A policy is not time consistent if it requires a course of action today that will subsequently become undesirable. It is argued that the inability of governments to commit to consistent policy over time will result in a loss of social welfare compared to a situation where governments are prevented from adopting (discretionary) policies based on period by period political optimization. In other words, the concern here is with the welfare losses that may occur in the absence of policy neutrality over time.

An example of how the inability of majority coalitions or governments to commit to a time consistent policy reduces welfare may be useful (see Kotlikoff et al 1988 and Fischer

[16] See Kydland and Prescott (1977) for the seminal statement of this problem. Drazen (2000, chaps 4-6) provides a recent review of the literature.

1980). Suppose an ex ante efficient policy (in the absence of lump sum taxation) in an intergenerational context involves a low rate of taxation now and in the future to encourage saving when people are young. Such a policy will not be time consistent without some special institutional arrangement, however, that commits the older generation to refrain from taxing capital once it has been invested. In the absence of a credible commitment not to tax capital when they are, as a group, old, the young will distort their current saving patterns in anticipation of future taxes. The result will be an economy with sub-optimal saving, lower real growth, and high capital taxation.

The usual policy recommendation emerging from consideration of the time inconsistency problem in the setting of monetary policy is a call for an independent central bank, insulated from day-to-day political pressures, with the power to determine the rate of monetary growth. Although consistency issues regarding taxation are similar to those for monetary policy, it is much less common to hear requests for quasi-independent tax commissions with the power to determine the structure of taxation. One should note, however, that Simons realized the connection between the two issues. He called both for the introduction of a broadly based income tax (1938) and for the adoption of a strict monetary rule (1936) in order to avoid the uncertainty and inefficiency created by what he considered the whims of the political process.

The analysis by Buchanan and Congleton is tailored to deal with much the same problem as the time inconsistency literature. One may thus reasonably ask, whether the flat tax without exemptions advocated by them would serve as an analog to an independent central bank. (Given Simons' work, the same question could also be asked for the comprehensive tax base.) Unfortunately, ready answers are not to be found in the literature, which fails to consider the strong existing parallels between the two situations.

4. Evaluation of Rules or Norms

In the discussion of various norms, we have repeatedly referred back to the three basic elements of public sector analysis. We shall argue that the shortcomings of various rules relate to the partial nature of these rules when they are evaluated in relation to a comprehensive analysis of all three elements. Although particular norms may serve as acceptable analytical tools within a more narrowly defined framework, they are revealed as incomplete in a more encompassing analysis.

Lump Sum Taxation: The first norm – lump sum taxation – abstracts from the need for budget determination through collective choice. Budget size is taken as given. A more complete analysis would compare observed taxation to an ideal standard that allows for the determination of the overall budget in political equilibrium, as well as for the most efficient way of raising tax revenues.

How could we envisage such a more inclusive standard? One approach that has been suggested is to extend the theory of optimal taxation to include the determination of budget size, following Atkinson and Stiglitz (1974). This requires reformulation of the Samuelson conditions for the efficient provision of public goods, so as to allow for the use of distortionary or non-lump sum taxation. Such an approach will not solve the problem, however, if the need for collective choice is admitted as a starting point. In that case, the standard of reference will have to emerge from an efficiently functioning collective choice process. One may note that it is unlikely that such a process would include the use of lump sum taxes, since they do not appear to represent an acceptable policy tool in modern democracies.

There are some theoretical difficulties in determining the exact nature of the tax system that would emerge from an efficiently operating political system. If we use Wicksell's (1896) work as a starting point, we may propose a system reached with unanimous decision-making (or with some approximation to unanimity) as the standard. Or we may turn to Lindahl's (1991) writings and the subsequent work on the nature of Lindahl equilibrium (see for example Foley 1977) for a more formal development of this approach. Alternatively, analysis can start from the literature on probabilistic voting where politically competitive equilibria have been described in some detail. Such equilibria do have existence and are stable. In addition, they can be shown to be Pareto-optimal in some circumstances (Coughlin and Nitzan, 1981), suggesting that they have the necessary characteristics to serve as a standard of reference for tax analysis.[17]

Because of the difficulties of implementing a more inclusive standard of comparison, we may decide to continue to rely on lump sum taxation in determining welfare losses. If we do so, it will be imperative to develop a better understanding of the biases that use of lump sum taxation introduces into the analysis of tax efficiency.

Minimization of Excess Burden: A tax reform imposing policies based on equalizing marginal excess burdens (per marginal dollar collected) across tax bases will lead to Pareto improvements only if we postulate a framework where collective choice has no explicit role. This can best be seen if we consider the question using an alternative standard, namely an equilibrium reached in a world with competitive parties and free political entry, where political decision-makers continually adjust policies so as to maximize expected votes in the next election. Policy equilibria in such a setting may be Pareto-optimal, as noted earlier.

However, decision-makers in such a competitive political system will not equalize the *unweighted* marginal welfare losses across tax instruments; they will also have to consider the impact of a marginal dollar raised on the probability of getting voter support. Since different taxpayers, or taxpayer groups, will react differently to a given tax payment and welfare loss, and since various tax bases are associated with differing incidence patterns, it would not be politically rational to equate unweighted marginal welfare losses in equilibrium. Studies that have found higher such losses for capital taxes than for wage-based taxes may thus have uncovered a pattern that could be both rational and economically efficient if viewed in a more inclusive, political economy setting.

---

[17] The intuition behind the efficiency of the political equilibrium is the following: If the Pareto frontier has not been attained, it will be possible for some party to promise welfare gains to some without reducing the welfare of others, thereby increasing its chances of electoral success. Political competition will drive parties to seek out all such politically profitable and economically superior reforms.

This conclusion contrasts with the arguments of several authors, especially those who favor tax neutrality as a guide to policy, who see unequal marginal welfare losses across different bases as a source of grave inefficiency. (To complicate matters further, it must be pointed out that the existence of differences in marginal welfare losses does not indicate by itself that an efficient political equilibrium has been achieved. Such differences could possibly also reflect the influence of an inefficient policy that arises from non-competitive elements in the political process. Pareto optimality will only be reached if the political process is truly competitive.)

One may perhaps reply that it is difficult, or even impossible, to determine the optimal political weights that would be used by a government in a world with strong competition among parties and probabilistic voting. While this may turn out to be the case, it should be noted that little work has been carried out so far in order to understand or estimate weights of this nature.[18] Given such weights, it would then be possible to determine if there are Pareto gains still to be realized.[19] Furthermore, probabilistic voting represents only one formal approach to this question. The theoretical difficulties just outlined arise from the existence of a costly collective choice process, not from the use of a particular voting model. While unweighted marginal welfare losses (or losses adjusted for distributional objectives reflected in a welfare function) may provide a proper guide to an efficient tax system in a world where decisions are made by a benevolent planner, they cannot play the same role in a context that allows for the necessity of a collective choice mechanism and less than perfect equality of effective political influence.

Neutrality: Neutrality in the static context is intended as a reasonable guide to policy when optimal tax plans are too complicated to design and administer. Since neutrality rules have emerged from a framework that is not cognizant of the need for collective choice, one may reasonably ask if neutrality is still a useful guide to policy in a more complete, political economy framework.

---

[18] For a recent exploration in this direction, see Hotte and Winer (2000).

[19] Coate (1999) also advocates this sort of procedure.

It is easy to see that the information problem for policy makers becomes worse in any political economy setting. The political strategist must have knowledge of all relevant political margins governing voting behavior, in addition to the information about economic margins required by a traditional OT planner. A full solution to the problem of optimizing political support requires knowledge of how changes in the welfare of different voters affect the probability of voting, as well as how taxation affects economic behavior. Only then can the tax system be adjusted correctly to favor those voters who are more likely to offer the party support at the polls. It therefore appears that the argument for neutrality is stronger when the existence of collective choice is explicitly acknowledged.

However, the historical debate points in a rather different direction from neutrality as a solution to the information problem, for both economic policy makers and party strategists. The feasibility of social planning in the face of large information requirements is a classic question in the history of economics. The traditional debate was concerned primarily with the choice between centralized planning and the use of markets. Among the most influential ideas in the debate were those advanced by Hayek (1945), who argued strongly that only decentralized markets could solve the immense task of processing the information necessary to reach efficient economic outcomes. This approach is in contrast to that taken by advocates of tax neutrality, who have retreated from optimal taxation in order to deal with the information problem, while still preserving a command and control approach to policy making.

The historical debate points in a rather different direction from the use of neutrality as a means of economizing on information costs.[20] It suggests that a more effective approach may be to decentralize policy making into separate, semi-independent areas, while mobilizing special interest groups to provide valuable information as part of their attempts to influence policy outcomes. One may note that the most commonly used OT formulation also subsumes a segmentation or decentralization of policy by separating taxation from expenditures, although authors do not generally justify this assumption by making reference to the information question.

[20] For an interesting review of the historical debate, see Simon (1981, chap. 2).

The study of policy making in modern societies indicates that decentralization of policy areas is a common feature of democratic government. In the United States, Canada and Europe, for example, decisions on taxation and expenditures are taken separately at the political level, and implemented by different administrative bodies, while special procedures, such as annual budget resolutions or cabinet directives, are used to maintain broad overall coordination. As far as taxation is concerned, further segmentation of policy making and administrative organization tends to occur in accordance with particular fiscal instruments or major tax bases. Moreover, instructions to tax commissions and tax reform policies are usually directed at selected parts of the revenue structure.

While the apparent lack of coordination that may result is often decried by economic analysts, this lack may in fact represent a rational response to information problems associated with complex policy choices. To fully understand the strengths and weaknesses of existing, decentralized policy processes, which is a prerequisite to the conclusion that neutrality is the best that can be hoped for, it will be necessary to define and examine the benefits and costs associated with existing methods of decentralization and policy segmentation, and to relate them to the provision and processing of economic and political information necessary for electorally effective policy.[21]

Harmonization*:* The implicit assumption lying behind a harmonization regime is that uncoordinated government actions reduce economic welfare even when each government strives to maximize the welfare of its own citizens. One can say that the harmonization literature is more complete than the other outcome-oriented approaches discussed above since it does, implicitly, contain a theory of government, albeit a rudimentary one. However, as Mueller (1998, 180) and Breton (1996) ask, why should we expect competition between governments always to produce inefficiency while competition between private sector agents produces efficiency? And if intergovernmental competition does reduce the possibility for inefficient government behavior, then harmonization, which reduces the extent to which states must compete for taxable activity, will come at a cost in terms of government

[21] For further discussion of this approach, see Winer and Hettich (1999) and Hamilton and Slutsky (2000).

performance. The assumption that every government behaves benevolently, and the absence of a theory of interjurisdictional competition, are the Achilles heals of the harmonization literature.

It should be noted that no race to the bottom, much feared by writers on international harmonization, will ensue if governments supply goods that their citizens want, and if taxes are not unduly coercive. If the mobility of tax bases is a serious problem, adjusting the mix of taxes so as to rely more heavily on inelastic bases such as property may be useful. Residents can avoid such taxes by moving, but only if they also give up the benefits of public services these taxes finance (Mueller, 1998). In other words, not only are the harmonization rules based on a conceptual framework that contains at best a rudimentary theory of government, but they may also be based on an unduly pessimistic assessment of the ability of each nation-state to overcome the problems of raising revenue in the face of the declining costs of international transactions.

In their current state, neither the traditional economic literature nor the literature that is cognizant of collective choice appears to offer practical guidance in dealing with the trade-off between the gains from coordination and the losses from attenuating intergovernmental competition as a disciplining device.[22]

Horizontal Equity, the Comprehensive Tax Base, and the Generality Principle: Although Henry Simons viewed the comprehensive tax base as a way of limiting government discretion in determining and changing tax rates, he did not place the discussion within a formally developed framework of collective choice. As a result, it is not clear why political actors would adopt a truly comprehensive base or why they would choose horizontal equity as their main policy criterion. The same question can be posed concerning the proposal of Buchanan and Congleton for a nondiscriminatory flat tax without exemption.

---

[22] The literature is struggling to come to grips with the problem. Lockwood (1992) and Eggert (1999) show how the standard prescriptions for international harmonization can be overturned by altering the assumptions concerning the objectives pursued by any government. See also Edwards and Keen (1996) and Schulze and Ursprung (1999). For recent reviews of the literature, see Oates (1999) and Shaviro (2000).

The voluminous literature on the comprehensive tax base has focussed almost exclusively on problems of implementation and on theoretical arguments about whether income or consumption would provide a better basis for taxation. While reformers starting from this tradition have influenced public discussion and public policy to a considerable extent, they have not succeeded in having their agenda accepted fully. The reasons for this lack of success can be understood more readily if we consider the choice of tax policy in the context of political equilibrium.

Let us imagine a political system where both the party in power and the one in opposition propose policy platforms so as to maximize expected voter support, while being uncertain of how voters will react to particular proposals. Voters, in turn, will try to maximize net benefits from the public sector, putting a positive value on public goods and services and reacting negatively to the payment of taxes and to the welfare losses arising from taxation. In such a system, political decision-makers will achieve their objectives if they design an equilibrium tax structure that equalizes the change in opposition per marginal tax dollar raised across all taxpayers or taxpayer groups.

In formulating their platforms, parties face a difficult balancing act. On the one hand, they want to create a tax system with as much differentiation in the treatment of taxpayers as possible in order to minimize total opposition. On the other hand, they face information, administration and monitoring costs that increase as more differentiation is introduced. Such costs reduce the ability to provide public services and, for this reason, lead to a loss in expected support. The equilibrium tax system must represent a compromise between these opposing forces. Differentiation is reduced by grouping taxpayers into rate brackets and by combining disparate activities into large bases. However, some of the lost ground is regained by using special provisions, such as exemptions, deductions and exclusions, that provide some measure of differentiated treatment with regard to effective tax rates, even with the existence of large omnibus bases.

An analysis of this nature suggests that democratic governments operating in a competitive political environment will not voluntarily implement a tax program corresponding to the one advocated by Henry Simons. The reason is twofold. First, a broad base income tax without special provisions may make people worse off compared to the outcome that can be obtained in a competitive political system, thereby reducing the support that political parties can expect at the polls. Second, such a system makes no allowance for responses to differences in effective political influence among individuals and groups in society, differences that are tolerated or sometimes even encouraged. While horizontal equity may enter into the government's calculus, among other issues, to the extent that it represents a widely shared value among taxpayers, it will not be the overriding criterion in the fashioning of a tax structure that is consistent with political equilibrium.

The objection to the Generality Principle is essentially the same as that to the broadly based income tax. In the end, the issues are empirical as well as theoretical – how does the political system operate; can it be altered so as to intensify the economic benefits from political competition, or must it be constrained to avoid the worst features of interest group politics?

Limiting the Power to Tax: The literature on limiting the power to tax places the government's motives and actions at the heart of the analysis. Authors writing in this tradition propose a specific model of government behavior. They assume that those in power act as monopolists, attempting to extract as much of the real resources of the private economy as possible. To counter such designs by the taxing authority, these authors suggest a written constitution that limits those in power to the taxing of narrowly pre-defined bases.

Three specific criticisms of the assumed model of government behavior are relevant. The first concerns the nature of contracts. All political systems function within a complex system of contracts and agreements. Constitutions represent merely one among many available contract types. They differ from other forms mainly by making it more difficult to effect change, although there usually are mechanisms in place to amend their provisions.

If we look at existing political frameworks as sets of functioning contracts that can be changed at differing costs, it is no longer clear why a written constitution would make a fundamental difference, or why society would necessarily want to choose the resulting loss in flexibility with regard to the making of tax policy, since constitutional restrictions would no doubt create welfare losses and other costs of their own.

The second criticism is related to the process of adopting constitutions. Creation of constitutional restrictions has to occur within the existing set of political contracts. This is illustrated by recent far-reaching constitutional change in Canada in the 1980's and the European Community in the 1990's. A complete theoretical analysis would thus have to show how a tax constitution could arise as an equilibrium outcome of a functioning political system.

It should also be noted that the literature on the Leviathan model of government does not present an analysis of how its postulated governing structure could arise. Nor is it clear what forces would allow such a structure to remain as a stable outcome, once it had been established. Thus, the model does not satisfy the requirements for a complete discussion of collective choice, despite its emphasis on political motives and decision-making. For example, it is not apparent what determines entry into the governing group or elite, and what may limit the political power to enforce Leviathan-like policies. As a result of these criticisms, the conclusions concerning tax structure that emanate from this tradition cannot readily be applied to the study of tax systems in democratic societies.

Time Consistency*:* The literature is of interest because it raises again the question of how contracts of different types are to be enforced over time in a democratic society. It is not surprising that the complexity of the issue leaves many facets of the problem still to be explored. [23]

In the first place, the time consistency problem is partly an empirical issue (Sheffrin 1989, Taylor 1983). Clearly not all contracts are broken by governments. For example, patents are not usually abrogated unilaterally. Knowledge of the extent to which inconsistency problems actually exist is important, as noted earlier, because giving up discretion through the use of rules or independent agencies must have a cost.

[23] For further discussion of the issues than we provide here, see Drazen (2000).

One reason for thinking that time inconsistency may not be as serious a problem as the models suggest is that people in democratic societies are not powerless in opposing unwanted government actions. The legal system in most developed nations contains features that make it difficult for governments to unilaterally expropriate private property. This is even true in countries such as the United Kingdom, where there is no written constitution. Relevant property rights are not inviolable, but neither are they absent. Mobility and the organization of political opposition are other well used methods available to taxpayers that make them more difficult targets than the time inconsistency argument suggests. Indeed, it is not farfetched to say that the type of expropriation of taxpayers envisaged in models of time inconsistency amounts to the staging of a coup by the government, which is unlikely to happen in most democracies for a variety of reasons.

In any event, there are many facets of existing arrangements in democratic societies that we do not fully understand, making policy advocacy in the area a dangerous enterprise. Why for example do we observe the existence of quasi-independent central banks with authority for monetary stability, as is in accordance with the time inconsistency approach, but we do not observe in any democratic state the corresponding institution of central taxing, even though the time consistency problem with respect to the rate of inflation and the rate of capital income taxation are essentially similar?

A possible answer to the last question is that tax policy is hard to design and implement in the face of constantly changing events, a point emphasized in the discussion of the rule of static neutrality. Indeed, it is this difficulty that lies behind the advocacy of a neutrality rule. It is not hard to see why it is easier to write a contract with a central bank to carry out a program of monetary stability than it is to instruct a central tax authority on the appropriate definition of taxable income in a constantly changing economy.

If central taxing is rejected as a solution, it is tempting to look at the advice of Simons or Buchanan and Congleton regarding the definition of income and the structure of taxation to deal with government opportunism. However, in view of the ability of taxpayers to protect themselves to some extent with mobility and legal and political action, it is necessary to consider the trade-off between the benefits from imposing such tax structures and the costs of policy inflexibility. The nature of this trade-off remains to be studied.

A further complication in the evaluation of solutions to the time inconsistency problem concerns the degree of political stability possible under rules rather than discretion. Boylan and McKelvey (1995) show that if two candidates can commit to a multiperiod consumption path and voters are heterogeneous, no majority rule equilibrium exists. The reason is that by bundling periods together, commitment creates a voting game of high dimensionality. Such commitment in their view implies randomness in economic outcomes. On the other hand, period by period discretion leads to the median voter outcome in each period given their framework, since in this case, voting is confined to one issue at a time, implying a type of structure-induced equilibrium. The argument complicates the evaluation of rules versus discretion by interjecting the question of what sort of consistency over time is compatible with an acceptable collective choice process.

5. Taxation, Welfare Economics and Political Market Failure

The evaluation of current norms of analysis suggests a need for greater comprehensiveness and integration in the study of normative taxation. While outcome-oriented rules fail to account in a satisfactory manner for the necessity of collective choice, process-oriented rules fall short because they are based on misleading or incomplete models of collective decision making. Moreover, they provide little guidance on how to empirically evaluate specific equilibrium tax policy outcomes.

Although the literature based on the planner model avoids dealing with essential questions arising from collective choice, it makes a valuable contribution by formulating a well-developed agenda for the study of policy outcomes. A more comprehensive approach must include many components of this agenda, while at the same time integrating the formal modeling of collective processes. Evaluation of outcomes remains an important task for economists, even if collective decision-making becomes the center of attention. It is essential to understand equilibrium outcomes that are produced by well-functioning political processes, and to examine how such outcomes change when imperfections become part of collective choice.

5.1 Three steps to a more comprehensive analysis

One way of constructing a more comprehensive framework is to seek guidance from the classic literature on welfare economics that was formulated for the evaluation of private markets. This well-developed body of work contains three essential steps. First it provides an elegant analysis of why and how markets achieve a Pareto-optimal allocation of resources, an analysis that is summarized by the First Theorem of welfare economics. Examination of allocative efficiency in competitive equilibrium is then complemented by the study of market failure and of the causes leading to such failure. Finally, the literature provides a framework to measure the consequences of market failure with the help of the concept of economic surplus. Thus a dollar value can be assigned to welfare losses that arise from the existence of market imperfections.

We would argue that a more comprehensive normative analysis of taxation must include all the elements embodied in the three steps taken in welfare economics. This implies that we need a model of collective choice as our starting point that allows us to study and demonstrate the existence and stability of political equilibria and to examine the nature of specific equilibrium policies or outcomes. Probabilistic voting provides one approach that enables us to accomplish this, since it can be demonstrated that the resulting Nash equilibria between or among parties are Pareto-optimal. (For a detailed exploration of this point in the context of tax analysis, see Hettich and Winer 1999, Chapter 4.) One should note, however, that the need for taking this basic analytical step is not tied to the use of a particular framework; rather, it arises from the fundamental nature of normative analysis itself.

Imperfections in private markets have their counterparts in failures of the political process. To take the second basic step, we must focus on the operation of the collective decision mechanism in order to identify features that cause it to operate imperfectly. The challenge is considerable. Not only must we begin by modeling a political process that leads to an optimal allocation of resources, but it is also necessary to determine specific tax policies that will be part of the political equilibrium. Once this has been accomplished, we can then extend the examination to particular imperfections in collective decision making and trace out their implications for the nature and structure of tax policies.

Few authors writing on taxation have concerned themselves with this part of a more comprehensive research agenda. The need for such work is evident however. Unless it is carried out, economists cannot present an analysis of tax policy failure that has the same force as does the well-known work on private market imperfections.

It should be noted that the optimal tax literature is also concerned with efficient taxation. However, writers in this tradition define optimality with reference to a planner who maximizes an exogenously given welfare function. Since no collective choice mechanism is incorporated into the analysis, we cannot examine equilibria that result from the operation of a political process, nor can we examine the effects of process failure within the specified theoretical framework. Optimal solutions determined in this approach would have to be imposed on a collectivity from the outside. Since such solutions are not an endogenous outcome of the society’s political arrangements, it remains unclear whether they would be consistent with the workings of collective institutions and whether they could ever represent stable policy equilibria.

The final step relates to measurement. There is an extensive literature in economics dealing with the quantitative evaluation of welfare losses created by taxation. As pointed out in an earlier section, most of this work uses lump sum taxation as a standard of comparison. The theoretical difficulties that arise concerning this approach, when it is evaluated in the context of a framework that contains collective choice as an essential element, have already been explained. The challenge for research in this area is to define and measure welfare losses in relation to a standard of reference that is consistent with the operation of the political process, or failing that, at least to learn more about the biases that the use of lump sum taxation introduces into the calculation of such losses.

5.2 Other approaches to the redefinition of normative analysis

A key characteristic of the approach to policy analysis we have outlined above is that the status quo is always compared to allocations that can be supported as equilibria of a competitive political system. In a recent contribution, Besley and Coate (2000) also advocate this approach to policy analysis. However, the details of their argument differ from the approach suggested above in an important way.

To argue the case for a policy analysis that is confined to comparisons of political equilibria, Besley and Coate ask: will the availability of a new policy instrument lead to a political equilibrium that is Pareto-superior to the status quo equilibrium (without the new instrument)? One may argue that the appearance of a new instrument may be used in principle to make someone better off. Moreover, parties will have an incentive to adopt new instruments since the chances of electoral success are generally enhanced by increasing the welfare of some voters. Besley and Coate show, however, that the appearance of a new instrument may in fact lead to a new equilibrium in which some people are much worse off than before, so that the new equilibrium does not Pareto-dominate the status quo. Moreover, the new equilibrium may also be inferior when judged in terms of a utilitarian social welfare function.

Imagine for example that a new type of public good appears that is favored by the rich, but disliked by the poor. It is possible, depending on voting behavior, that the expected equilibrium outcome could favor the rich, and that the poor would be worse off in the new equilibrium. Preferences, voting behavior, and the nature of political competition all interact in various ways to make the outcome created by the appearance of the new instrument unclear, provided that attention is confined to political equilibria, and that hypothetical allocations that do not represent equilibria are set aside. Another general lesson of the Besley/Coate paper is that it matters for welfare analysis how public policy is actually made and implemented in the real world.

Although the approach we have advocated above is similar to that developed by Besley and Coate, one would have to inquire into the origin of a new instrument, if one adopts our theoretical perspective. In many cases, particular existing instruments may not be employed in all political equilibria. As a result, it would not be unusual for shocks to lead to new equilibrium solutions, where some previously unused instruments (already available before the shock) become part of the winning political strategy. In such a formulation, the model contains no truly exogenous instruments, and the Besley/Coate analysis does not apply.

The approach of Besley and Coate seems appropriate, on the other hand, if the appearance of a new instrument results from an exogenous shock created by the appearance of a novel idea. Unless we can explain generation of the idea, however, our analysis of such a case refers will refer primarily to the effects created by the shock, rather than to the mechanism responsible for the emergence of new policy instruments.

Because they also see all policy instruments (whether currently in use or not), as being determined in an equilibrium, authors such as O'Flaherty and Bhagwati (1997) recommend giving advice to citizens rather than to governments, in an attempt to influence public opinion, and thereby to move political equilibrium in a desirable direction. However, as Carl Shoup pointed out (1991, personal communication), "any policy framer who adopts an 'activist' approach puts himself outside the scope of [the] welfare analysis, for he becomes then just one of the combatants in the struggle to get for himself the most with the least pain". The general issue here concerns the place where the policy analyst is to stand, once all political behavior and all instrument use has been endogenized. [24] The answer, like that given in the literature on contemporary industrial organization, may be found by studying the operation and reform of institutions. Solutions found in this way will only be partially satisfactory, however, since (as pointed out earlier in our discussion of the Leviathan model) self-interested politicians must in the end decide themselves to alter existing institutional or constitutional arrangements.

[24] For contributions to this debate, see the November 1997 special issue of Economics and Politics (T.N. Srinivasin (co-ed). See also Pomery (1991) and Kirschgassner (1999) for interesting contributions to the debate on the nature of policy analysis when policy instruments are endogenized.

6. Conclusion

Economists have developed a variety of rules or norms to deal with tax analysis. In this chapter, we review eight such rules, dividing them into two categories, depending on whether they focus primarily on outcomes or on process.

As the discussion demonstrates, outcome-oriented tax norms are derived from analytical frameworks that do not acknowledge the need for collective choice. Unless the effects of the operation of collective choice mechanisms are explicitly recognized in the framework of analysis, however, we cannot tell if the policy proposals that emerge will be consistent with political equilibrium. Nor is it possible to determine in all cases whether such proposals will result in actual welfare improvements.

Our analysis also leads to several criticisms linked to particular norms. Lump sum taxes, often used as an outcome-oriented norm, are not likely to emerge as a viable structural solution in a democratic equilibrium. Neutrality, another such norm, if used as a guide to policy reform, will not be consistent with political competition that pushes governments to differentiate the tax treatment of different economic activities in the real world. Nor can we expect rules for international tax harmonization, based largely on the assumption that governments behave in a benevolent manner, to be robust in situations where competition among governments helps to constrain political opportunism.

Outcome-oriented rules attempt to overcome the extensive information problem associated with implementation of a tax blueprint by a planner with the help of simplified planning guidelines. However, an economically efficient tax system in a modern economy must of necessity be complicated, since a myriad of economic margins must be taken into account. Application of simplified rules requires many compromises that may reduce welfare. An alternative approach would be to decentralize the tax policy process. This would allow competitive political pressures, coupled with a decentralized and specialized bureaucracy, to generate information for decision makers, without anyone being aware of what happens in the system as a whole. Such decentralization is a classic solution to economic information problems associated with fiscal and other types of planning. Supporters of outcome-oriented, centrally applied rules must answer the question why the operation of a decentralized competitive political system would not generate results that are preferable to what can be achieved with outcome-oriented norms.[25]

The process-oriented literature also promotes simplified solutions. Examples include the broadly based income tax, flat taxation without exemptions, and the use of independent tax commissions. Unlike outcome-oriented rules, however, these proposals are intended as constraints on the nature of the political process. Those who advocate particular tax structures as political constraints believe that their proposals will improve the democratic process. It is not clear, however, why the proposed structures should be consistent with political equilibrium, and why they should be superior to tax structures generated by the workings of a competitive political process.

Our discussion suggests that a more comprehensive type of normative tax analysis is needed. Such an analysis would include a standard of reference, against which actual outcomes are to be compared, that explicitly incorporates collective choice mechanisms. Until such a revised framework has been created, existing norms may continue to provide partial guidance. The useful insights that can be derived from currently accepted policy norms must be tempered, however, with a careful evaluation of the biases that arise in applying such rules to a functioning democratic process.

[25] It is to our mind evidence of the incompleteness of the outcome-oriented approach that nowhere in this literature can one find any discussion of the potential benefits from increasing the extent of political competition.

References

Atkinson, Tony and Nicholas Stern (1974)." Pigou, Taxation and Public Goods*". Review of Economic Studies* 41, 119-128

Besley, Timothy and Stephen Coate (2000). "The Pubic Choice Critique of Welfare Economics: An Exploration". Unpublished, March 2000

Bird, Richard (1991), "Tax Administration and Tax Reform: Reflections and Experience" in Khalilzadeh-Shirazi, Javad and Shaw, Anwar (ed.), Tax Policy in Developing Countries, The World Bank, 38-56.

Boylan, Richard T. and Richard D. McKelvey (1995). "Voting Over Economic Plans". *American Economic Review* 85, 860-871

Brennan, Geoffrey, and James M. Buchanan (1980*). The Power to Tax*. New York: Cambridge University Press

Buchanan, James M. (1975). *The Limits of Liberty: Between Anarchy and Leviathan.* Chicago: University of Chicago Press, 1977.

Coate, Stephen (1999). "An Efficiency Approach to the Evaluation of Policy Changes". Working Paper 7316, National Bureau of Economic Research, August.

Cornes, Richard and Todd Sandler (1996*). The Theory of Externalities, Public Goods and Club Goods, second edition*. New York: Cambridge University Press.

Creedy, John (1998). *Measuring Welfare Changes and Tax Burdens*. Cheltenham UK: Edward Elgar

Cullis, John and Phillip Jones (1998). Public Finance and Public Choice, 2nd edition. Oxford University Press

Drazen, Allan (2000). *Political Economy in Macroeconomics.* Princeton, N.J.:Princeton University Press

Edwards, J. and M. Keen (1996). " Tax Competition and Leviathan" *European Economic Review* 40, 113-134.

Eggert, Wolfgang (1999). " Capital Tax Competition with Inefficient Government Spending". Paper given at the IIPF congress, Moscow, August 1999.

Foley, Duncan (1977). "Resource Allocation and the Public Sector," *Yale Economic Essays* 7 (1): 45-98.

Fischer, Stanley (1980). "Dynamic Inconsistency, Cooperation and the Benevolent Dissembling Government". *Journal of Economic Dynamics and Control* 2, 93-107

Gillis, Malcolm (1989), "Tax reform: Lessons from Postwar Experience in Developing Nations", in M. Gillis (ed.), Tax Reform in Developing Countries, Duke University Press.

Hamilton, Jonathan and Steven Slutsky (2000). "Decentralizing Allocation and Distribution by Separation with Information Transfers". Journal of Public Economic Theory 2(3), 289-318.

Hayek, F.A.(1945), "The Use Of Knowledge in Society", American Economic Review, 35(4), September.

Hettich, Walter and Stanley L. Winer (1999). *Democratic Choice and Taxation: A Theoretical and Empirical Analysis*. New York: Cambridge University Press.

Hettich, Walter and Stanley L. Winer (1997). "The Political Economy of Taxation" in D. Mueller (ed*.). Perspectives on Public Choice.* New York, Cambridge University Press, 481-505.

Jha, Raghbendra (1998). *Modern Public Economics*. New York: Routledge

Keen, Michael (1996). "The Welfare Economics of Tax Coordination in the European Community", in Michael P. Devereux (ed.). *The Economics of Tax Policy.* Oxford University Press, 189-214.

Kirschgassner, Gebhard (1999). "On the Political Economy of Economic Policy Advice". In Ernst Mohr (ed.). The Transfer of Economic Knowledge. Cheltenham: Edward Elgar, 13-31.

Kotlikoff, L, T. Persson, L. Svensson (1988). "Social Contracts as Assets: A Possible Solution to the Time Inconsistency Problem". *American Economic Review* 78, 662-677.

Lindahl, Eric (1919), *Die Gerechtigkeit der Besteuerung*. Reprinted in part as "Just Taxation: A Positive Solution" (translation by Elizabeth Henderson) in R. A. Musgrave and A. T. Peacock, eds., *Classics in the Theory of Public Finance.* London: Macmillan 1958.

Lockwood, B. (1992). " Commodity Tax Competition Under Destination and Origin Principles". *Journal of Public Economics* 52, 141-162.

Lohman, Susan (1998). " Reputational versus Institutional Solutions to the Time Consistency Problem in Monetary Policy. In S. Eiffinger and Harry P. Huizinga (eds). *Positive Political Economy: Theory and Evidence*. Cambridge: Cambridge University Press, 9-28.

Mirrlees, James A. (1971). "An Exploration in the Theory of Optimum Income Taxation," Review of Economic Studies, 38: 175-208.

Musgrave, Peggy (1991). "Fiscal Coordination and Competition in an International Setting", in L. Eden (ed). *Retrospectives on Public Finance*. Durham: Duke University Press, 276-305.

Myles, Gareth D. (1995). *Public Economics*. Cambridge U.K.; Cambridge University Press

Oates, Wallace E. (1999). "Fiscal Competition and European Union: Contrasting Perspectives". Unpublished paper presented at the conference on Fiscal Competition and Federalism in Europe, Mannheim Germany, June.

Persson, Torsten and Guido Tabellini (1990). *Macroeconomic Policy, Credibility and Politics*. London: Harwood.

Pomery, John (1991). "The New Trade Theory: Implications for Policy Analysis". In David Weimer (ed). *Policy Analysis and economics: Developments, Tensions, Prospects*. Kluwer Academic Publishers, 159-186.

Ramsey, F.P. (1927). " A Contribution to the Theory of Taxation". *Economic Journal* 37, 47-61.

Rosen, Harvey S. (1999). *Public Finance*, 5th edition. Boston: Irwin/McGraw-Hill

Royal Commission on Taxation (1966). Chaired by Kenneth LeM. Carter. Report. Ottawa: Queen's Printer. (The Carter Report)

Schulze, G.G. and Heinrich Ursprung (1999). "Globalization of the Economy and the Nation State". *World Economy* 22, 295-352.

Schumpeter , Joseph (1954). *History of Economic Analysis*. Oxford: Oxford University Press

Seligman, Edwin R. A. (1921). *Essays in Taxation, 9th edition*. New York: Macmillan Co.

Shaviro, Daniel (2000)."Some Observations Concerning Multi-Jurisdictional Tax Competition" Forthcoming in Regulatory Competition and Economic Integration: Comparative Perspectives, Daniel Esty and Damien Geradin (eds.), Oxford University Press

Sheffrin, Steven M. (1989). *The Making of Economic Policy: History, Theory, Politics*. Cambridge MA: Basil Blackwell.

Simon, Herbert A. (1981), The Sciences of the Artificial, Second Edition, MIT Press.

Simons, Henry (1936). "Rules Versus Authorities in Monetary Policy. *Journal of Political Economy* 64(1), 1-30.

Simons, Henry (1938). Personal Income Taxation: The Definition of Income as a Problem of Fiscal Policy. Chicago: University of Chicago Press.

Stiglitz, Joseph E. (1997). "Pareto Efficient and Optimal Taxation and the New New Welfare Economics". In Auerbach and M. Feldstein (eds), *Handbook of Public Economics vol II*, North-Holland, 992-1042.

Stiglitz, Joseph E. (1988*). Public Sector Economics, 2nd edition.* New York: Norton

U.S. Department of the Treasury (1984). *Tax Reform for Fairness, Simplicity and Economic Growth 3*. Washington, DC: U.S. Government Printing Office.

U.S. Department of the Treasury (1985). *The President's Tax Proposal.* Washington, DC: U.S. Government Printing Office

Wilson, John (1999). "Theories of Tax Competition." *National Tax Journal* 52(2), 269-304.

Winer, Stanley L and Walter Hettich (1999). "Information, Coordination and Tax Policy Making". In R. Bird, M. Trebilcock, and T. Wilson (eds). *Rationality on Public Policy: Retrospect and Prospect, A Tribute to Douglas G. Hartle*. Toronto: Canadian Tax Foundation, 19-42.