

## Book reviews

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

The point of departure of “Democratic Choice and Taxation” is the idea—familiar to public choice scholars but largely ignored in the public finance literature—that tax policy in democratic societies can best be understood as the equilibrium outcome of a political process that trades off economic and political forces within a given set of institutions. The book has grown out of research on the topic undertaken by the two authors (in cooperation with various co-authors) during the past decades. While some of the material presented in the book has appeared in international journals, many new results and ideas are presented. Equally important, the book brings together old and new results within a unified framework and will be of great value to seasoned scholars as well as newcomers.

“Democratic Choice and Taxation” sets out to explain the nature and origin of the *complexity of tax systems* in democratic societies. This is an ambitious but most welcome task and by employing a mixture of theoretical and empirical analysis, the book is successful in meeting the challenge. The book demonstrates successfully that the complexity of tax systems can best be understood by endogenising economic *and* political behaviour and by analysing the interaction between the two in general equilibrium. Only by explicitly considering the nature of the relevant political decision-making process can the interdependency among policy instruments be fully appreciated and the complexity of tax systems be understood.

The book has four parts. Part 1 (Chap. 2–4) is devoted to a discussion of the theoretical framework. Part 2 (Chap. 5–6) is devoted to a critical assessment of normative tax theory. Part 3 (Chap. 7) is devoted to an applied general equilibrium exercise. Part 4 (Chap. 8–10) presents a statistical analysis of aspects of the tax structure in the US and Canada. Finally, Part 5 (Chap. 11–12) discusses the role of political institutions and defines an agenda for future research.

Chap. 2 surveys six well-known models of the political economy of taxation with the view to make an informed choice of modelling framework. The six models are the median voter model, the structure-induced equilibrium model, the probabilistic voting model, the Leviathan model, cooperative game theory and the representative agent model. The two authors highlight two key features of the probabilistic voting model that makes it more appropriate for the study of complex tax systems than any of the alternatives. These features are the capacity to deal with multidimensional policy spaces

and the fact that the model captures well the idea that equilibrium policy trades off many opposing voter interests. The probabilistic voting model is thus employed throughout the book as the unifying analytical framework.

Chap. 3 is the first of two chapters outlining the basic probabilistic voting model used in the analysis. The model elegantly combines the hypothesis of expected vote maximisation in a two-party system, uncertainty about how voters respond to platforms, and administration costs related to the complexity of the tax system to show how the three salient features of modern tax systems, tax brackets, tax bases and special provision (exemptions, credits and deductions) can be explained in political equilibrium. In particular, it is shown that high administration costs reduce the complexity of the (equilibrium) tax system and explain why voters are sorted into tax brackets, why taxable activities are lumped into tax bases and why special provisions are granted to some voters; in short, the skeleton of a modern tax system is explained.

The theoretical analysis from the previous chapter is given a more firm micro foundation in Chap. 4. Two central results about tax policy in a *perfect* representative democracy are derived. First, under conditions of strict concavity of the expected vote function, the two political parties competing for votes propose, in equilibrium, the same policy platform. Second, the equilibrium policy platform can be characterised by optimising a particular weighted sum of all taxpayers' utilities and so, it is on the Pareto frontier of the economy. The latter result, referred to as the *Representation Theorem* and first proved in an important paper by Coughlin and Nitzan (1981), simplifies greatly the analysis of tax policy in an *imperfect* representative democracy. For example, the mechanisms by which taxpayers are sorted into tax brackets in the presence of administration costs and asymmetric information are analysed in detail in a sequence of interesting and illustrative examples.

Chap. 5 contains a critical survey of the three dominant normative theories of taxation: equitable taxation, optimal taxation, and fiscal exchange. The shortcomings of the three theories lead to the most welcomed conclusion that an *extended normative framework* that integrates economic *and* political equilibrium is needed as the basis for evaluating tax reform proposals. The foundation of this framework is set out in Chap. 6. It has three key components. The first component is a benchmark that specifies the ideal conditions under which political equilibrium is efficient. The second component is to identify failures in economic, as well as in political markets. The third component is to define a metric that can be used to measure the welfare implications of different reform proposals. Within the analytical framework used in the book, the task of finding a benchmark is facilitated by the Representation Theorem. The Representation Theorem basically characterises the (Pareto efficient) tax system that would emerge in a *perfect* representative democracy. Against this benchmark, political failure is defined as a situation in which the *actual* political equilibrium (due to various transaction costs) deviates from the ideal. Evaluation of policy reforms in the presence of political failure then requires a comparison of the welfare attained in the political equilibrium before and after the reform with that attained in the ideal. Although the formal analysis in this chapter is less developed than elsewhere in the book, the discussion of the extended normative approach to welfare analysis is perhaps the most interesting and innovative part of the book. The need for a new approach is indisputable and the chapter shows one

way to proceed based on the specific analytical framework of the probabilistic voting model.

Chap. 7 contains an interesting and informative empirical application of the theory developed in earlier chapters. Using the Representation Theorem, the probabilistic voting model is integrated with an existing computable general equilibrium model for the US economy and the influence weights for three groups of voters are calibrated. The calibrated model is used to decompose the reduction in capital taxation and the increase in labour taxation observed during the period 1973–1983 into economic and political factors. Interestingly, the analysis suggests that the shift from capital to labour taxation was not driven by increasing political power of the rich. On the contrary, the poor gained political influence over the period and without this shift in political power, the reduction in capital taxation would have been significantly larger than it actually was.

Chap. 8–10 contains econometric analysis. Chap. 8 shows how the general equilibrium model of political and economic behaviour can be simplified to yield a workable empirical specification and reviews the existing empirical literature. Chap. 9 adopts the framework developed in Chap. 8 to analyse why some US states, in 1985–1986, relied more on income taxation as the main source of revenue and allowed for greater deductions of local property taxes than other states. The analysis convincingly demonstrates the usefulness of studying the interdependency among different aspects of a tax system and yields a number of important and puzzling results. Chap. 10 sets out to explain the evolution of the Canadian tax system during the period 1871–1913—a period during which the main sources of revenue were tariffs, excise duties, and government debt. Using the probabilistic voting model as the point of departure, the evolution of the revenue system is decomposed into economic, political, and administrative factors. Economic factors, such as forecasts of the key tax bases, seem to have been more important than political and, in particular, administrative factors in shaping the evolution of the Canadian tax system during the period. Although the specific results and conclusions reached from the two empirical studies are of considerable interest on their own, the main contribution of Chap. 8–10 is to demonstrate how empirical research on political economics can and should be informed by explicit theoretical modelling.

While political institutions per se do not play a prominent role in the voting model used throughout the book, Chap. 11 focuses on the important question: Does institutional differences matter for policy outcomes? By means of a comparative study of the tax system in the US, representing a Congressional system, and Canada, representing a Parliamentary system, the chapter makes some headway toward answering the question, adding to a growing literature on Comparative Politics (see, e.g. Persson and Tabellini, 1999). Much is, however, left to future research, and more than providing definitive answers, the real value of the chapter is to put the crucial question of the role of political institutions on the agenda.

The book is very successful in presenting the case for integrating political and economic analysis. In the process, a lot of insight is gained into how tax systems arise endogenously as a result of a political process in which politicians attempt to maximise expected votes. Although the focus is on taxation, the scope of the analysis is much broader and the exploration of the political economy of taxation is just one among many

potential applications of the general framework developed in the book. In addition, the book integrates theoretical, computational and empirical analysis admirably and demonstrates the value of combining these different approaches. Finally, the book should be praised for putting institutions on the agenda and for the attempt to formulate a framework for welfare analysis that is explicit about the fact that economic policy is ultimately determined by a political process.

In conclusion, “Democratic Choice and Taxation” is an impressive achievement and an enjoyable read. It deserves the attention of everyone interested in political economics and public choice, as well as those mainly interested in tax theory.

## References

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## Privatization, Restructuring, and Regulation of Network Utilities

By David M. Newbery. (Cambridge and London: The MIT Press, 1999. Pp., xvi + 466)

In this very important book, Newbery concentrates on questions of efficiency of privatization, restructuring and regulation in the three network utilities, where there is good evidence of the possibility of rigorous competition: telecoms, electricity and gas. He concentrates on Britain and United States, but examines a variety of other countries as well.

Newbery argues that privatization is a necessary but not sufficient step to achieving the benefits of competition. He shows that the wave of deregulation that started in 1978 in the US exemplifies the fact that markets were better than regulators at reducing prices and increasing efficiency. The information that was being assumed to be costlessly available for directing utility policy was unfortunately incomplete. Thus, regulation is unavoidably inefficient.

The reasonable solution to regulatory failure involves choosing the right structure for the utility, that is, one that will limit the need for necessarily inefficient regulation. Newbery’s rule for structural reform is: “Competition where possible, regulation only where unavoidable”, where “unavoidable” mainly refers to the natural monopoly core. He thereby separates this core from potentially competitive network services. In this sense, it is liberalization rather than privatization that is the key to improved perfor-