

BOOK REVIEWS

Modern Public Economics, Raghendra Jha,
London, Routledge, 1998, pages xv + 558, Price £19.99.

A good graduate textbook in Economics is perhaps intended to perform two major functions. First, it is supposed to deconstruct the Journal articles, which often suffer from the 'tip of the iceberg' syndrome, in the form of a do-able model and discern the general principles so as to guide the students in their pursuit of further modeling, extensions or empirical verification. Secondly, and more importantly, a textbook is supposed to place a model locationally, strip it of the apparent niceties so that the student gets a sense of perspective of the general class of models within which this particular model can be located. This is what one gets from a Handbook-type survey article. A good textbook has to have both these attributes. Looked at from these two functional angles, Raghendra Jha's *Modern Public Economics* is clearly a winner.

To put the claim in specific terms, one may note that the universally followed standard comprehensive graduate textbook on public economics by Atkinson and Stiglitz was published in 1980.¹ As a result the progress in the field of public economics during the last seventeen years is not captured in it. To give an example, the revolution in informational economics, in which Stiglitz himself played a pioneering role, being largely a phenomenon of the eighties is absent in Atkinson and Stiglitz (1980).² Again topics like dynamic fiscal policy, tax-reform, regulation, or fiscal federalism, which are of recent origin, do not find a place in Atkinson and Stiglitz (1980). Although in between fundamental works in public economics appeared in book form, yet if one does not consider Jha's effort, there has been no substitute to Atkinson and Stiglitz (1980) for comprehensiveness.³

Public Economics, as the author has aptly put, is "loosely defined as the study of government intervention of the marketplace.." (p. xi). Thus, from an applied micro-theoretic standpoint, it is largely devoted to the study of welfare implications of government intervention: The author's coverage of this traditional aspect of public economics is complete. Starting with a digression on welfare economics, the author gives a quick account of the "basics of consumer demand" (Chapter 1), "perfect competition and Pareto optimality" (Chapter 2), and "forms of social welfare function", (Chapter 3). While every student of public economics is expected to be exposed to the topics of the first two chapters (as the author himself has pointed out), the chapter on social welfare function is particularly interesting. The author does a commendable job in introducing topics like Sen's interpretation of information in Arrow framework, neo-utilitarianism, or Rawlsian maximin, that would have been normally skipped from a chapter in the nature of digression, although these topics deal with realistic concerns of welfare economics and help improve our understanding of public economics.

Three chapters of the book are devoted to theory of public expenditure. The chapter on "external effects and market mechanism" (Chapter 5) discusses both the traditional issues like Pigovian taxation or subsidisation, as well as the advanced material on tragedy of commons or depletable and non-depletable externalities. In a similar vein the chapter on "theory of pure public goods" (Chapter 6), starting from Samuelson's 1956 model on conditions of Pareto optimality with pure public goods, goes to more recent development of solutions to the problem of incentive compatibility that is associated with provision of pure public good.

Apart from discussing the standard Lindahl-Wicksell mechanism of a linear tax, associated with the benefit derived from a particular public project, the author takes up a number of more recent mechanisms of solving the free rider problem of public good; notable among them are Groves-Lob mechanism (wherein private parties have no incentive to lie), or Clarke-Groves-Vickrey mechanism (wherein revelation of true individual preferences becomes profitable). However, the author rightly notes that all these mechanisms to solve the free rider problem are in the nature of assuming away its very existence. Two other examples of provision of public good have been considered in this chapter, viz., its private provision, and public choice theoretic voting models. In the last chapter of this part (Chapter 6. "Topics in the theory of public goods"), the author introduces the theory of clubs in the context of Tiebout hypothesis of local (as opposed to national) nature of public goods. The discussion on provision of public goods with asymmetric information in this chapter is found to be most exciting. Based on his own earlier joint work (with R. Broadway and I. Horiba), the author shows that supply of public good in the asymmetric information case will be smaller than that in the full information case. However, if the agencies have same marginal cost, and differ only in their fixed cost, then the iso-profit curves will not be crossing each other and the optimal policy will lie in a pooling equilibrium. The author also takes up the issue of rent-seeking as a problem area in the provision of public good.

Spanning over ten chapters, the coverage of theory of taxation is perhaps the most complete in the book. It discusses the traditional issues like effect of taxation on savings, labour supply, investment behaviour, and risk taking or optimal non-linear income taxation. While these subjects are very essential to any complete book on public economies, what is interesting to find in the book is inclusion of a number of more recent topics like dynamic taxation, tax-reform, taxation in an endogenous growth model. Even in the discussion of the traditional topics the author incorporates a number of recent developments. The following list is illustrative, viz., (i) extended life cycle model of saving in the chapter on "effect of taxes on savings", (ii) tax incidence in a model of involuntary unemployment in the chapter on the "theory of tax incidence", and (iii) optimal taxation under asymmetric information in the chapter on "aspects of income taxation".

The author discusses "tax incidence in dynamic models" (Chapter 12) in the context of a Solowian growth model, as well as in its monetary version. Taking real wealth as comprising of real money balances and real value of corporate bonds, the author, as a comparative static exercise, shows that an increase in inflation will increase the capital intensity of the growth process. This apart, in the same chapter the author discusses two other important issues, viz., Ricardian equivalence proposition in the context of Blanchard version of life-cycle model, and comparison of tax and debt as revenue instruments in a Feldstein model. An important inclusion of a topical nature in the chapter on "some results in commodity taxation" (Chapter 13), is a descriptive discussion on value-added tax, as well as its comparison with retail sales tax.

Four specific topics have been dealt with in the chapter on "topics in the theory of taxation" (Chapter 15), viz., (i) taxation in endogenous growth models, (ii) income tax indexation, (iii) time inconsistency problems, and (iv) tax compliance. All the four are of current interest. In particular, in an endogenous growth model it is shown that the growth rate depends positively on the rate of inheritance tax, and not on the rate of income tax. The discussion of time inconsistency problems in the context of a dynamic tax model, giving an example from Fischer shows that a finite repetition of Fischer model is capable of generating a unique time consistent equilibrium. Tax compliance (or evasion) has, of late, become an increasingly

important topic of tax policy. There is, in fact, an enormous literature on the underground economy. In the context of a dynamic tax evasion model, the author shows that in the presence of an imperfect capital market with borrowing constraint, tax evasion cannot be ruled out even with full auditing. After all, for a liquidity constraint taxpayer it may make sense to evade a tax in the current period and pay a higher tax, along with penalty, in future when the income level is sufficiently high.

Against the backdrop of international experience in tax reform, Jha takes up issues relating to tax reform (Chapter 16) both in static and dynamic contexts. The static theory of tax reform, primarily following Guesnerie, makes a distinction between equilibrium-preserving tax reform and Pareto-improving tax reform. In the context of dynamic tax reform it is shown that, under some fairly general conditions, substitution of a consumption tax for a wage tax may turn out to be inefficient.

In the part on "applied problems in public economies", the author takes up three major issues, viz., pricing in the public sector, international aspect of taxation and cost-benefit analysis. On "pricing in the public sector" (Chapter 17), the author discusses topics like Ramsey-Boiteux linear pricing problem, redistributive Ramsey-Feldstein pricing, non-linear pricing, and peak load pricing. Normally textbooks on public economies pay scanty attention to problems of "international aspects of taxation" (Chapter 18). While it is a welcome change to see that the author takes extremely important issues like interest taxation in international fiscal coordination, and Ramsey optimal taxation in this context, it is little intriguing to see the inclusion of the theory of optimum tariff in this chapter. The chapter on "cost-benefit analysis" is fairly standard and takes up topics like shadow pricing, Little-Mirrless and UNIDO criteria.

The part on fiscal federalism is perhaps one of the more nonstandard material incorporated in the text. In the penultimate chapter on "issues in fiscal federalism" the author delves into diverse issues like rationale for the existence of subcentral authorities (primarily in terms of Arnott and Grieson model), and optimal size of local jurisdictions. In the final chapter on "grants and taxes in federal countries", issues like different purposes of grants, and tax assignment in federal countries are discussed.

It may not have been possible, within the span of the present review, to do full justice to a book that literally discusses hundreds of models in a timetable and easily derivable manner. Readers will be thankful to Jha for bringing out such a book. However, from a reader's point of view, presentation of so many exercises (analytical or otherwise) would have made the text much more useful. Perhaps a little more attention to the problems of the developing countries in the field of public economics could have been provided. Besides, as the strength of the book lies in its vast coverage, one suspects that in some cases a number of topics had been accommodated within the span of a chapter without sufficient organic wholeness. Despite these limitations, the book is likely to be valued as an important text on public economics for years to come.

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¹ Atkinson, Anthony and Joseph E. Stiglitz (1980): *Lectures on Public Economics*, London: McGraw Hill.

² See for example. Arnott, R and J. Stiglitz (1986): "Moral Hazard and Optimal Commodity Taxation". *Journal of Public Econometrics*, 29: 1-24.

³ As for example. Laffont, Jean-Jacques (1989): *Fundamentals of Public Economics*, Cambridge: MIT Press.

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