Chapter 1

Introduction and Outline

This book is concerned with the thorny question of tax design. Its emphasis is on the issues and problems involved in choosing a tax and transfer structure. Rather than examining the details of particular systems or countries, the following chapters discuss broad problems which can be illustrated using relatively simple models.¹ However, it is well known that even the simplest possible tax structure – a basic untaxed and unconditional transfer payment combined with a proportional tax in a population where individuals differ only in their income-earning ability – presents substantial complexities.

Part II of the book is concerned with the link between economic theory and tax policy. Chapter 2, from which the title of the book is taken, discusses the question of why it is so difficult to design a tax and transfer structure which receives widespread support. It considers the numerous elements involved, such as the information needed, the modelling problems, the constraints on choices and, above all, the range of objectives and value judgements held by different judges. The crucial role of value judgements plays a substantial part in subsequent chapters. The link between economic theory and tax policy is examined further in chapter 3, stressing that there is

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¹For detailed examinations of particular tax structures, a valuable role can be played by behavioural tax microsimulation models. These have been discussed in other books by the author and colleagues; see Creedy *et al.* (2002), Creedy and Kalb (2006) and Buddelmeyer, Creedy and Kalb (2007).

no such thing as a value-free economic argument in favour of any particular structure. It explains how economic theory can nevertheless help to gain a clearer understanding of the interdependencies and relationships involved in tax design.

Part III is devoted to the analysis of particular simple tax and transfer structures, and alternative approaches to the choice of tax rates within those systems. Chapter 4 considers the general problem of selecting the tax rate in a linear tax structure, or basic income–flat tax system. This tax system is in many ways the ‘workhorse’ of tax analyses. The chapter discusses positive and normative aspects of the choice, covering both majority voting and optimal tax frameworks. The former turns on the choice of a single individual who holds the balance of power, while the latter depends on the maximisation of a social welfare function representing the value judgements of an independent judge. In general, explicit solutions are not available, even for simple assumptions about individuals’ behaviour and the structure of the population. However, the chapter shows that some basic relationships can be established. Chapter 5 then considers explicit solutions in the voting and optimal tax models, again for the simple linear income tax, and using an assumption that individuals have Cobb–Douglas preferences defined in terms of net income and leisure. This chapter also discusses stochastic voting in addition to simple majority voting, and shows that there is an analytical correspondence with the optimal tax framework.

Chapter 6 turns to the consideration of an alternative to the linear tax structure, the loglinear income tax. This form has received relatively little attention in the literature, but has a number of convenient properties for tax analyses. It is found that this structure can give rise to particularly simple labour supply behaviour, when combined with Cobb–Douglas preferences. Again, majority voting and optimal tax outcomes are examined.

The next three chapters in Part III are devoted to the analysis of particular features of income tax systems which depart from the simple forms.

Unlike the stylised forms of linear and loglinear taxes, many actual structures have a tax-free threshold in the income tax structure. Chapter 7 considers the role of a tax-free threshold and examines the likely implications of modifications to an existing structure. Chapter 8 turns to the analysis of an in-work payment with an hours threshold, and its potential labour supply effect. This type of structure has been introduced in a number of countries in an attempt to encourage increased labour force participation by low-wage workers. However, chapter 8 shows that the implications of such a system, which introduces further nonlinearities into individuals' budget constraints, are not straightforward. Finally, chapter 9 turns to the question of identifying welfare-improving income tax reforms in practical structures having multiple rates and thresholds. Rather than trying to identify an optimal structure, the more limited objective is considered of making an adjustment to an existing system in a way which increases the value of a specified social welfare function. This involves the use of a behavioural microsimulation model.

The crucial role of value judgements, summarised by a social welfare function and in particular its implied elasticity of marginal valuation, is stressed in earlier chapters. Chapter 10, the final chapter in Part III, turns to the discussion of a number of studies which have attempted to 'measure' the elasticity of marginal valuation in a variety of contexts. The various models and underlying assumptions are examined. The fundamental point made in the chapter is a reminder of a long-recognised (but often forgotten) point that there is no way to move from an observation of what 'is' to what 'should be'.

Part IV of the book is concerned with tax revenue and its variations. Chapter 11 discusses the concept of the tax revenue elasticity, that is the elasticity of revenue with respect to income, at the individual and aggregate levels. This concept plays a central role in the analysis of fiscal drag, arising from the failure to adjust tax threshold for inflation. Chapter 12 examines the concept of the elasticity of taxable income, which attempts to measure in one elasticity all behavioural responses of taxable income to an increase

in a marginal tax rate. The assumptions required for the use of such an elasticity, and its role in obtaining measures of the excess burden of income taxation, are considered in detail. Chapter 13 then turns to consideration of the way in which these two elasticities combine to generate an elasticity of tax revenue (again at individual and aggregate levels) in response to an increase in a marginal tax rate. Finally, chapter 14 presents a diagrammatic treatment of tax revenue in a multi-rate income tax structure, involving the well-known Lorenz curve of income distribution.

Part V turns to an examination, not of tax structures, but of two wide-ranging reviews of tax structures which have recently been produced. Chapter 15 discusses the report by the Tax Working Group in New Zealand, conducted under the aegis of the Centre for Accounting Governance and Taxation Research at Victoria University of Wellington. Chapter 16 is concerned with the large-scale review produced by a group of economists connected with the Institute of Fiscal Studies in London. These chapters examine the strengths and, in some cases, weaknesses of the reviews, while recognising the ambitious and difficult nature of such exercises. In discussing the various issues, it is perhaps not surprising that attention is again directed towards the arguments presented in chapter 2, which highlighted the ‘tax and transfer tensions’ which are inevitable in tax policy debates. In view of the many tensions involved, it is argued that economists can make a valuable contribution to rational policy debate by clarifying the nature of the interdependencies and relationships involved, and attempting to obtain orders of magnitude regarding a range of relevant summary measures and behavioural responses.