Government decisions on income redistribution and public production
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Part I

Consumption, social security and political influence

The impact of government policies on decisions in the private sector is since long analyzed with (applied) general equilibrium models. As noticed in Chapter 1, the influence of private sector decisions on public sector decisions is neglected in the standard general equilibrium analysis. These interactions are inserted in the positive general equilibrium model that will be presented here. In this model government decisions are endogenously determined and depend on the preferences of private sector agents. However, government decisions are also determined by political parameters. These political parameters represent the strength with which private sector agents get their interests promoted by the government. To model political decisionmaking the interest function approach is followed. Since our aim in Part I is to develop a model that is analytically solvable, only those economic mechanisms are taken into account that are most important for the issues to be investigated.

Politicians are assumed to focus on the interests of (representative individuals of) social groups. The number of social groups depends on the number of groups that are important for the topic that is analyzed. Part I concentrates on public policies that affect consumer decisions. In Chapter 2, decisions concerning public consumption and income redistribution are investigated, while Chapter 3 pays in addition attention to social security.

Public consumption is assumed to depend on the level of a public good. In order to produce this good, the government requires labor and public capital as inputs. The production costs are financed with the revenues from a uniform income tax. The negative effect of the income tax on private production is included in the decision process of the government.

Apart from public consumption, the government is able to redistribute income. The redistribution of income depends on the political influence of the social groups. Following BRENNAN AND BUCHANAN (1980) and STIGLITZ (1989) the redistribution of income is not only based on the official tax system, but depends also on special provisions that are determined by the daily political tug-of-war. In the models that will be presented in the next chapters, the official part consists of a uniform income tax, while special provisions are assumed to consist of lump sum transfers between social
groups. In Chapter 3 the redistribution system is extended. In that chapter two groups of dependent individuals, retirees and individuals that are incapable to work (disabled), are introduced. They receive a social benefit from the social security system. The finance of social security is of the pay-as-you-go type.

In Part I a positive general equilibrium model is presented that is analytically tractable. The advantage of an analytically solvable model is that it gives a better intuition of the mechanisms that are at work than a numerical model. Furthermore, an analytical model offers the opportunity to derive comparative static results that hold under (largely) unspecified parameter configurations. Since there is no such thing as a free lunch, there is a price to be paid, which is that simple (Cobb-Douglas type) functional forms have to be chosen. These functional forms are, however, also used in numerically solved applied general equilibrium models [cf., e.g., Feltenstein (1984) and Pereira (1994)].

Chapter 2 introduces the basic model. Consumers are split up in workers and capital owners. They maximize utility and have preferences with respect to private commodities, leisure and the public consumption good. Capital owners run the firms and are, therefore, also regarded as entrepreneurs. Firms maximize profits. Prices follow from the market clearing conditions. The government policies with respect to public consumption and income redistribution are in accordance with the maximization of the value of the political interest function. The model is extended in Chapter 3 by introducing retired and disabled individuals. These individuals receive social benefits from pay-as-you-go social security funds. Chapter 3 also introduces motives that induce individuals to take account of the interest of individuals of other social groups. The main conclusions are summarized in the concluding sections of these chapters.