Public Choice III

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CHAPTER 1

Introduction

> Man is by nature a political animal.
>
> Aristotle

> This division of labour . . . is the necessary, though very slow and gradual, consequence of a certain propensity in human nature which has in view no such extensive utility; the propensity to truck, barter, and exchange one thing for another.
>
> Whether this propensity be one of those original principles in human nature . . . or whether, as seems more probable, it be the necessary consequence of the faculties of reason and speech, it belongs not to our present subject to enquire. It is common to all men and to be found in no other race of animals, which seem to know neither this nor any other species of contracts.
>
> Adam Smith

Aristotle, observing the Greeks in the fourth century B.C., thought that man's natural proclivities were toward discourse and political activity. Adam Smith, observing the Scots in the eighteenth century A.D., saw instead a propensity to engage in economic exchange. From the observations of these two intellectual giants, two separate fields in the social sciences have developed: the science of politics and the science of economics.

Traditionally, these two fields have been separated by the types of questions they ask, the assumptions they make about individual motivation, and the methodologies they employ. Political science has studied man's behavior in the public arena; economics has studied man in the marketplace. Political science has often assumed that political man pursues the public interest. Economics has assumed that all men pursue their private interests, and has modeled this behavior with a logic unique among the social sciences.

But is this dichotomy valid? Could both Aristotle and Smith have been right? Could political man and economic man be one and the same? In the field of public choice, it is assumed that they are.

Public choice can be defined as the economic study of nonmarket decision making, or simply the application of economics to political science. The subject matter of public choice is the same as that of political science: the theory of the state, voting rules, voter behavior, party politics, the bureaucracy, and so on. The methodology of public choice is that of economics, however. The basic behavioral postulate of public choice, as for economics, is that man is an egoistic, rational, utility maximizer.[1] This places public choice within the stream of political philosophy extending at least from Thomas Hobbes and Benedict Spinoza, and within political science from James Madison and Alexis de Tocqueville. Although there is much that is useful and important in these earlier contributions, and much that anticipates later developments, no effort is made here to relate these earlier works to the modern public choice literature, for they are separated from the modern literature by a second salient characteristic. The modern public choice literature employs the analytic tools of economics. To try to review the older literature using the analytic tools of its descendants would take us too far afield.[2]

Public choice has developed as a separate field largely since 1948. During the thirties, disenchantment with market processes was widespread, and models of "market socialism" depicting how governments could supplant the price system and allocate goods as efficiently as markets do, if not more so, came into vogue. Abram Bergson's (1938) seminal analysis of social welfare functions (SWFs) appeared to indicate how the economist's individualistic, utilitarian ethics could be incorporated into the government planner's objective function and help him to achieve a social welfare maximum as he managed the state.

Arrow's 1951 book was a direct follow-up to both Bergson's (1938) article and Paul Samuelson's parallel discussion of SWFs in *Foundations of Economic Analysis* (1947, ch. 8). Arrow's concern was to characterize the process, whether market or political, through which the SWF Bergson and Samuelson had described was achieved (rev. ed. 1963, pp. 1–6). Since Arrow's book, a large literature has grown up exploring the properties of social welfare or social choice functions.[3] It focuses on the problems of aggregating individual preferences to *maximize* an SWF, or to satisfy some set of normative criteria, that is, on the problem of which social state *ought* to be chosen, given the preferences of the individual voters. This research on optimal methods of aggregation naturally has spurred interest in the properties of *actual* procedures for aggregating preferences via voting rules, that is, on the question of which outcome will be chosen for a given set of preferences under different voting rules. The problem of finding a social choice function that satisfies certain

[1] For a detailed justification of this postulate in the study of voting, see Downs (1957, pp. 3–20), Buchanan and Tullock (1962, pp. 17–39), and Riker and Ordeshook (1973, pp. 8–37). Schumpeter's (1950) early use of the postulate also should be mentioned. One of the curiosities of the public choice literature is the slight *direct* influence that Schumpeter's work appears to have had. Downs claims that "Schumpeter's profound analysis of democracy forms the inspiration and foundation for our whole thesis" (1957, p. 27, n. 11), but cites only one page of the book (twice), and this in support of the "economic man" assumption. Most other work in the field makes no reference to Schumpeter at all.

Tullock has made, in correspondence, the following observation on Schumpeter's influence on his work: "In my case, he undeniably had immense impact on me, although it was rather delayed. Further, although I read the book originally in 1942, I didn't reexamine it when I wrote *The Politics of Bureaucracy* (1965). In a sense, it gave me a general idea of the type of thing that we could expect in government, but there weren't any detailed things that could be specifically cited." I suspect that Schumpeter's work has had a similar impact on others working in the public choice field.

For an interesting discussion of the public choice content of Schumpeter's work, see Mitchell (1984a,b).

[2] See, however, Black (1958, pp. 156–213), Buchanan and Tullock (1962, pp. 307–22), Haefele (1971), Ostrom (1971), Hardin (1997), Mueller (1997b), and Young (1997).

[3] For surveys, see Sen (1970a, 1977a,b), Fishburn (1973), Plott (1976), Kelly (1978), Riker (1982b), and Pattanaik (1997).

normative criteria turns out to be quite analogous to establishing an equilibrium under different voting rules. Thus, both Arrow's study (1963) of SWFs and Black's (1948a,b) seminal work on committee voting procedures build on the works of de Borda (1781), de Condorcet (1785), and C.L. Dodgson (Lewis Carroll) (1876). We discuss the most directly relevant topics of the SWF literature as part of normative public choice in Part V.

Part I also contains a normative analysis of collective action. The models of market socialism developed in the thirties and forties envisioned the state as largely an allocator of private goods. State intervention was needed to avoid the inefficient shortfalls in private investment, which Keynesian economics claimed were the cause of unemployment, and to avoid the distributional inequities created by the market. The immediate prosperity of the post–World War II years reduced the concern about unemployment and distributional issues. But concern about the efficiency of the market remained high among academic economists. The seminal works of the forties and fifties gave rise to a large literature on the conditions for efficient allocation in the presence of public goods, externalities, and economies of scale. When these conditions were unmet, the market failed to achieve a Pareto-optimal allocation of goods and resources. The existence of these forms of market failures provides a natural explanation for why government ought to exist, and thus for a theory of the origins of the state. It forms the starting point of our analysis of the state and is reviewed in Chapter 2. Chapter 3 takes up models of collective action that see redistribution as its main objective. Together these two activities – improving allocative efficiency and redistribution – constitute the only possible *normative* justifications for collective action.

If the state exists in part as a sort of analogue to the market to provide public goods and eliminate externalities, then it must accomplish the same preference revelation task for these public goods as the market achieves for private goods. The public choice approach to nonmarket decision making has been (1) to make the same behavioral assumptions as general economics (rational, utilitarian individuals), (2) often to depict the preference revelation process as analogous to the market (voters engage in exchange, individuals reveal their demand schedules via voting, citizens exit and enter clubs), and (3) to ask the same questions as traditional price theory (Do equilibria exist? Are they stable? Pareto efficient? How are they obtained?).

One part of the public choice literature studies nonmarket decision making, voting, as if it took place in a direct democracy. The government is treated as a black box or voting rule into which individual preferences (votes) are placed and out of which collective choices emerge. This segment of the literature is reviewed in Part II. Chapter 4 examines criteria for choosing a voting rule when the collective choice is restricted to a potential improvement in allocative efficiency. Chapters 5 and 6 explore the properties of the most popular voting rule, the simple majority rule. Chapters 7 and 8 present a variety of alternatives to the majority rule – some equally simple, others more complex. Part II closes with a discussion of how individuals can reveal their preferences for public goods not through the voice mechanism of voting, but by choosing to join different polities or public good clubs (Chapter 9).

Just as Arrow's book was stimulated in part by Bergson's essay, Downs's 1957 classic was obviously stimulated by the works of both Bergson and Arrow (pp. 17–19). To some extent, Downs sought to fill the void Arrow's impossibility theorem had left by demonstrating that competition among parties to win votes could have the same desirable effects on the outcomes of the political process as competition among firms for customers has on the outcomes of the market process. Of all the works in public choice, Downs's book has had perhaps the greatest influence on political scientists.

In the Downsian model, the government appears not merely as a voting rule or black box into which information on voter preferences is fed, but as an institution made up of real people – representatives, bureaucrats, as well as voters – each with their own set of objectives and constraints. The Downsian perspective on government underlies Parts III and IV of this book. Part III begins with a discussion of the implications of having multiple levels of government as in a federalist system. Chapters 11 and 12 examine the properties of two-party representative democracies. Although Chapter 11 reveals that Downs's original formulation of a model of two-party competition did not succeed in resolving the "Arrow paradox" of aggregating individual preferences to maximize an SWF, Chapter 12 discusses more recent models of two-party competition that do appear to achieve this goal.

All of the "founding fathers" of the public choice field were either American or British. Not surprisingly, therefore, most of the early literature in the field focused on two-party systems. In the last two decades, however, the study of multiparty systems by public choice analysts has expanded greatly. This work is reviewed in Chapter 13.

Although Downs's goal was to resolve the Arrow paradox, ironically one of the most important contributions of his book was to put forward a paradox of its own – namely, the paradox of why rational, self-interested people bother to vote at all. Downs's original model of the rational voter and the many extensions and modifications to it that have been made form the subject matter of Chapter 14.

The redistributive potential of representative government – which is generally treated under the heading of "rent seeking" – is the subject matter of Chapter 15. Part III closes with three chapters that review several theories of the state in which the state itself – in the form of the bureaucracy, the legislature, or an autocratic leadership – dictates outcomes with the citizenry relegated to playing a more passive role.

In arguing that government intervention is needed to correct the failures of the market when public goods, externalities, and other sorts of impure private goods are present, the economics literature has often made the implicit assumptions that these failures could be corrected at zero cost. The government is seen as an omniscient and benevolent institution dictating taxes, subsidies, and quantities so as to achieve a Pareto-optimal allocation of resources. In the sixties, a large segment of the public choice literature began to challenge this "nirvana model" of government. This literature examines not how governments may or ought to behave, but how they do behave. It reveals that governments, too, can fail in certain ways. This largely empirical literature on how governments do perform is reviewed in Chapters 19 through 22.

One of the major justifications for an increasing role for government in the economy during the first couple of decades following World War II was the Keynesian prescription that government policies are required to stabilize and improve the macroeconomic performance of a country. The evidence that governments' macroeconomic policies are affected by their efforts to win votes is examined in Chapter 19, which also looks at the impact of electoral politics on macroeconomic performance.

One of the early classics in the public choice literature is Olson's (1965) *The Logic of Collective Action*. In this book Olson applied public choice reasoning to the analysis of various collective action problems involving interest groups. Interest groups have been a focal point within the public choice literature ever since. Although their activities are discussed at several junctures in the book, Chapter 20 is devoted exclusively to the literature that models and measures the impact of interest groups on political outcomes.

One of the most remarkable developments over the half century following World War II has been the growth in size of governments around the world. Is this growth a response to the demands of citizens for greater government services because of rising incomes, changes in the relative price of government services, or a change in "tastes"? Does it reflect the successful efforts of some groups to redistribute wealth from others by means of the government? Or is it an unwanted burden placed on the backs of citizens by a powerful government bureaucracy? These and other explanations for the growth of government are discussed in Chapter 21.

Where Chapter 21 treats the size of government as the dependent variable in political/economic models of the state, Chapter 22 treats it as an explanatory variable. It reviews the literature that has tried to measure the impact of the growth of the government sector in the industrial democracies of the world on various measures of economic performance, like the growth of income per capita and the distribution of income in each country.

The Bergson-Samuelson SWF, which helped spark interest in preference aggregation procedures, is discussed along with other derivations of an SWF in Chapter 23. The Arrowian SWF literature is reviewed in Chapter 24. Although both of these approaches build their aggregate welfare indexes on individual preferences, both tend to shift attention from the preferences of the individual to the aggregate. Moreover, in both cases, the aggregate (society) is expected to behave like a rational individual, in the one case by maximizing an objective function, and in the other by ordering social outcomes as a rational individual would do. Therefore, the SWF literature bears more than a passing resemblance to organic views of the state in which the state has a persona of its own.

Buchanan's first article (1949) appearing before Arrow's essay was an attack upon this organic view of the state; Buchanan (1954a) renewed this attack following the publication of Arrow's book. In place of the analogy between the state and a person, Buchanan offered the analogy between the state and a market. He suggested that one think of the state as an institution through which individuals interact for their mutual benefit – that one think of government, as Wicksell (1896) did, as a quid pro quo process of exchange among citizens (Buchanan, 1986, pp. 19–27). The view of government as an institution for reaching agreements that benefit all citizens leads naturally to the perspective that the agreements are *contracts* binding all individuals. The contractarian approach to public choice is developed in Buchanan and Tullock's *The Calculus of Consent* (1962) and Buchanan's *The Limits of Liberty* (1975a). The approach taken in the former work also has a strong affinity to Rawls's (1971) influential contribution to the contractarian theory. Chapter 25 takes up Rawls's theory, while Chapter 26 reviews and integrates the models of collective choice which – following Buchanan and Tullock – have viewed politics as a two-stage process in which the "rules of the political game" are written in the first stage and the game is played in the second stage.

One indication of the significance of public/social choice's intellectual impact is the fact that three of the major figures in this field have been awarded Nobel prizes – Kenneth Arrow, James Buchanan, and Amartya Sen.[4] Although Sen's contributions to social choice go far beyond the topic of "the liberal paradox," this contribution of his has stimulated such a vast amount of work that it warrants separate treatment, which it gets in Chapter 27.

Although most of this book focuses on the accomplishments of public choice in extending our positive and normative understanding of politics, some criticisms that have been leveled against the public choice approach to politics are taken up in Chapter 28. A reader who is skeptical about whether rational actor models can offer anything to the study of politics might wish to glance ahead at Chapter 28 before plunging into the next 26 chapters. But I do not think that the reader can obtain a full appreciation for the advantages – and limitations – of the public choice approach without submerging him- or herself into its subject matter.[5] Thus, my recommendation is to save Chapter 28 and the critiques of public choice until after the reader has absorbed its lessons.

One of Wicksell's important insights concerning collective action was that a fundamental distinction exists between allocative efficiency and redistribution and that these two issues must be treated separately, with separate voting rules.[6] This insight reappears in Buchanan's work in which the constitutional and legislative or parliamentary stages of government are separated, and in Musgrave's *The Theory of Public Finance* (1959) in which the work of government is divided into allocative and redistributive branches. The distinction is also featured in this book and constitutes the theme of its closing chapter.

[4] One might arguably claim that *four* economists working in the field have won Nobel prizes, since William Vickrey's prize was awarded for his research on incentive systems, which anticipated the development of the family of "demand-revealing" voting mechanisms reviewed in Chapter 8.

[5] Rather than continually write "his or her," I shall sometimes make voters (politicians, bureaucrats, dictators, and so forth) men and sometimes women. I have tried to treat the two sexes evenhandedly in this regard.

[6] Wicksell's 1896 essay is part of the contribution of the "continental" writers on public economics. Besides Wicksell's work, the most important papers in this group are those of Lindahl (1919). Of the two, Lindahl has had greater influence on public goods theory, and Wicksell on public choice and public finance. Their works, along with the other major contributions of the continental writers, are in Musgrave and Peacock (1967).