

THE
SELECTED
WORKS OF
GORDON
TULLOCK
VOLUME 4

The Economics of Politics

#### THE SELECTED WORKS OF GORDON TULLOCK

VOLUME I Virginia Political Economy

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Constitutional Democracy (with James M. Buchanan)

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Gordon Tullock

## THE SELECTED WORKS OF GORDON TULLOCK

VOLUME 4

The Economics of Politics

**GORDON TULLOCK** 

Edited and with an Introduction by

CHARLES K. ROWLEY



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#### INTRODUCTION

The Economics of Politics brings together Gordon Tullock's wide range of contributions to public choice, one of the most important new fields of inquiry in the social sciences during the second half of the twentieth century. In selecting the title of this volume I deferred to Professor Tullock, who is of the opinion that "public choice" is not truly descriptive of the field, whereas "the economics of politics" surely is.<sup>1</sup>

Public choice is a relatively new science located at the interface between economics and politics. It was founded in 1948 by Duncan Black, who died in 1991 without ever achieving full recognition as the founding father of the discipline.<sup>2</sup> Scholars schooled in public choice theory seek to understand and predict the behavior of political markets by utilizing the analytical techniques of economics, most notably the rational choice approach, in modeling the behavior of political markets.<sup>3</sup>

Public choice, as defined above, is primarily a positive science concerned with what is or might be. As such, it is to be distinguished from its normative counterpart, social choice, which concerns itself, without reference to real-world institutions, with what should be.

This does not imply that normative analysis is impossible within the framework of public choice; rather, normative policy discussions are advanced on a realistic basis of "politics as it is." From this latter perspective, Tullock has not been averse to evaluating alternative policy solutions to alleged problems of market failure.

*The Economics of Politics* consists of nine parts, each depicting a separate component of public choice.

Part 1, "The Nature of Public Choice," brings together three papers that focus on the nature and origins of public choice, outlining Tullock's evolving perspective over a period of forty years.

- Gordon Tullock, "Origins of Public Choice," in *The Makers of Modern Economics*, vol. 3, ed. Arnold Heertje (Aldershot, U.K., and Brookfield, Vt.: Edward Elgar, 1997), 125.
- Charles K. Rowley, "Duncan Black: Pioneer and Discoverer of Public Choice," *Journal of Public Finance and Public Choice* (Summer 1991): 83–87.
- 3. Charles K. Rowley, "Public Choice and Constitutional Political Economy," in *The Encyclopedia of Public Choice*, vol. 1, ed. Charles K. Rowley and Friedrich Schneider (Dordrecht/Boston/London: Kluwer Academic Publishers, 2004), 3–5.

"An Economic Analysis of Political Choice," a direct precursor to chapter 6 of *The Calculus of Consent*, introduces the elementary principles of the economics of politics through a concrete example concerning the appropriate governance mechanism for maintaining access roads by a small farming community. Tullock expands this example to define more generally an ideal constitution for simple, direct democracies such as New England town meetings and Asian village assemblies.

"Origins of Public Choice" is a unique personal reflection on the origins and evolution of public choice. Tullock traces the frustrated beginnings of public choice in eighteenth-century France through its reemergence during the 1940s, its evolution into a recognized field of scholarly study during the 1960s, and finally through later advances in the wake of Tullock's own insight into the nature of rent-seeking behavior.

"People Are People: The Elements of Public Choice" identifies the bonds that have developed between economics and political science during some forty years of the public choice revolution. As Tullock notes, *Homo politicus* and *Homo economicus* are the same species; each is driven largely by self-interest to pursue vigorously such personal objectives as wealth, power, prestige, and income security to the extent possible within the particular domestic and work environments they occupy. In this respect, they are driven largely by solipsism rather than by altruism. Economists and political scientists working outside the public choice research program typically assume, in contrast, that *Homo politicus* is motivated by altruism to serve the public interest, that government is omniscient and impartial, and that political markets are perfect mirrors of the majority vote. As Tullock notes, the public choice scholar knows that this is not the case.

Part 2, "What Should Government Do?" assembles seven papers that analyze the actions government should take once it is understood that solipsism governs political as well as private markets.

In "Mosquito Abatement" Tullock argues that a central element of making an efficient decision is the presence or absence of geographical contiguity. The distinction between a scale economy that can be achieved only if customers are located next door to each other and one that can be attained without such geographical contiguity is basic to both public and private choices. He then launches the discussion with a concrete example, namely the imple-

<sup>4.</sup> James M. Buchanan and Gordon Tullock, *The Calculus of Consent: Logical Foundations of Constitutional Democracy* (Ann Arbor: University of Michigan Press, 1962).

mentation of aerial spraying, through either private or public initiative, as a means of mosquito abatement.

In "Property, Contract, and the State" Tullock applies public choice principles in describing the complex relationship among property, contract, and the appropriate role of the state. Efficiency—and efficiency alone—is the normative principle that guides him through this politically sensitive maze. Tullock notes that private property rights are necessary, but not sufficient, for economic efficiency.

"Bargaining" shifts the discussion away from externalities in general to the nature of the bargaining costs that prevent adverse third-party effects from being resolved through mutually beneficial exchange. Again focusing on situations of geographical contiguity (in this case real-estate exchanges in urban renewal projects), Tullock identifies a significant problem that confronts private bargains in that holders of real estate perceive an incentive to prolong negotiations in the expectation that they may extract large payments as residual holdouts (referred to in economics as the holdout problem).

In "Externalities and All That" Tullock takes up the case of the externality that cannot be eliminated privately because of high bargaining costs. The standard public finance solution in such a situation is to impose on the output of the perpetrator of the externality a marginal tax equal to the marginal monetary harm suffered by the third party. Even if such taxes, known as Pigovian taxes, could be efficiently calculated and effectively imposed, Tullock argues, it would not replicate a market solution because the taxes would be sequestered by government. Only if those harmed by the externality are also paid a marginal subsidy equal to the marginal monetary harm that continues to be imposed on them in the post-Pigovian tax situation will economic efficiency result.

The nature of the costs associated with government is the focus of "The Costs of Government." As Tullock notes, important costs arise in the form of a loss of potential benefits to individuals because government electoral platforms are bundled into indivisible packages rather than tailored, as in the case of private markets, to match divergent individual preferences. Because individual voters perceive themselves to be unimportant in determining the outcome of an election, they have little incentive to become well informed about the precise composition of the competing policy portfolios that an election offers. Such rationally uninformed voters are unlikely to exercise good judgment in the selection of a government.

In "Remedies" Tullock reviews a range of alternative solutions to exter-

nality problems, albeit with a clear warning about the law of unintended consequences that confronts anyone who attempts to play God in the policy arena. Tullock justifies his preference for reliance on the private associations that emerge to accommodate members who share common goals and interests and that exclude individuals of a different persuasion. In the literature of economics this is referred to as the club principle. If the club principle cannot be effectively applied, his preference is for small, decentralized governments that facilitate outward and inward migration of individuals by providing competing taxation and expenditure portfolios.

In "The Social Costs of Reducing Social Cost" Tullock explains why government intervention tends to impose additional social costs rather than to eliminate those costs that trigger intervention in the first place. In part, the explanation for this lies in the nature of democratic government. Tullock closes with the suggestion that democracy may not be the most efficient form of government and that resources should be devoted to exploring potentially superior alternatives.

Part 3, "The Vote Motive: An Essay in the Economics of Politics," reproduces a widely cited monograph by Tullock on that subject. Written in 1976, when the public choice research program was still struggling to make its impact on mainstream economic thinking in the United States and was virtually unknown in Europe, this monograph illustrates, through a sequence of compelling examples, the power of using economic analysis to understand and predict the behavior of political markets. The monograph was instrumental in invigorating public choice research and discussion during the late 1970s and early 1980s in the United Kingdom and throughout Western Europe.<sup>5</sup>

The papers in part 4, "Rational Ignorance and Its Implications," explore the likely consequences for political markets when a significant part of the electorate chooses to be poorly informed not only about the electoral platforms of competing political parties but also about the actual policies of elected governments (a situation referred to in public choice as rational ignorance).

"Political Ignorance" adapts the model of voter abstention developed by Anthony Downs in 1957 to explain why many potential voters remain politically ignorant concerning the policy positions of competing candidates in

<sup>5.</sup> Gordon Tullock, *The Vote Motive*, Hobart Paperback Number 9 (London: Institute of Economic Affairs, 1976), 1–58.

large-scale elections.<sup>6</sup> Tullock demonstrates that such ignorance is rational whenever the cost of acquiring information exceeds the expected value. Politicians recognize this and therefore design policies that concentrate benefits on clearly identifiable minorities while dispersing the costs as invisibly as possible across a wide constituency.

In "The Politics of Persuasion" Tullock segments the electorate into the ignorant, the casually informed, and the well informed (the latter being a very small minority). The casually informed voter is susceptible to persuasion through the media, mass and specialized, which opens up opportunities for political advertising. Tullock explains how television newscasters, newspaper columnists, radio announcers, and others who secure a significant audience or readership through the mass media are able to use their positions to promulgate their political prejudice to a large audience at almost zero cost under the guise of information. Such job opportunities attract individuals endowed with a relatively intense desire to influence electoral outcomes.

"The Economics of Lying" refocuses the discussion to take account of lies and deception within the political marketplace. Tullock once again develops a simple, formal model that categorizes the costs and benefits of making statements that one knows to be untrue. Such actions, he claims, are more effective when dealing with the completely uninformed and the casually informed voter than when dealing with the well-informed voter. The absence of any legal penalty for lying during political campaigns increases the net benefits of lies in political as compared with economic markets.

"Some Further Thoughts on Voting" is a discussion of why rationally ignorant voters vote in elections. Tullock argues that, for most individuals, the cost of voting is very low. In such circumstances, rational individuals go to the polls in response to social pressures rather than as a response to any effort expended in a decision-making process.

Part 5, "Voting Paradoxes," brings together six papers that explore and evaluate two apparently troubling voting anomalies. The first such anomaly, initially identified by Kenneth Arrow, demonstrates that when at least three voters make pairwise choices over at least three policy alternatives, the out-

Anthony Downs, An Economic Theory of Democracy (New York: Harper and Row, 1957).

<sup>7.</sup> Kenneth J. Arrow, *Social Choice and Individual Values* (New York: John Wiley and Sons, 1951).

come may be a majority vote in favor of policy A over policy B, a majority vote in favor of policy B over policy C, and a majority vote in favor of policy C over policy A. Such an intransitive outcome implies that the majority vote rule is susceptible to cycles. The second such anomaly, first identified by Anthony Downs,<sup>8</sup> asks why voters who have no instrumental incentive to vote, because their individual votes are clearly nondecisive in large group elections, nevertheless turn out in significant numbers at the polling stations.

"A Measure of the Importance of Cyclical Majorities" (coauthored with Colin Campbell) and "The Paradox of Voting—A Possible Method of Calculation" investigate the empirical significance of the above-mentioned Arrow vote-intransitivity paradox. Because sufficient real-world data concerning pairwise voting outcomes were unavailable, Tullock substituted computer for human resources using the Monte Carlo method, which relies on computers to generate pseudorandom numbers that mimic the random processes hypothesized to generate (in this case) pairwise voting data. The technique, relatively sophisticated at that time, is now widely used by economists and political scientists when real-world data cannot be assembled.

In "Computer Simulation of a Small Voting System" (coauthored with Colin Campbell) Tullock again uses computer simulations to demonstrate that the Arrow problem is less significant when voting occurs more or less continuously in small committees.

Tullock addresses the second voting anomaly in "The Paradox of Not Voting for Oneself" and "Avoiding the Voter's Paradox Democratically," deconstructing a wide variety of attempts by public choice scholars to explain why many voters do not abstain from voting when the expected value of their votes is markedly less than the cost of voting.

In "An Approach to Empirical Measures of Voting Paradoxes," coauthored with John L. Dobra, Tullock takes advantage of the real-world information provided by faculty voting at Virginia Polytechnic Institute to evaluate the frequency with which Arrow's voting paradox occurs and the frequency with which there is a dominant majority outcome in which one option defeats every other available option in pairwise voting.

The two papers in part 6, "The Median Voter Theorem," are Tullock's evaluations of early public choice contributions suggesting that competing candidates or parties, concerned to maximize votes, will be driven by cen-

tripetal pressures to support the preferences of voters located at the policy center (the median voter).

"Duncan Black: The Founding Father" is Tullock's 1991 obituary for Duncan Black, to whom Tullock refers with the Chinese toast as "the father of all of us." Tullock demonstrates that Black, not Arrow, first discovered the problem of vote intransitivity and the associated vote cycle. Having determined that vote cycling may occur, Black then identified the specific condition under which it would not occur, namely the conjunction of voters with single-peaked preferences over one identifiable issue dimension (for example, if each voter identifies one most-preferred level of defense expenditure and is less satisfied as the level of such expenditure is either less or more than that preferred level).

In "Hotelling and Downs in Two Dimensions" Tullock reviews earlier contributions by Harold Hotelling, who developed a theory that explains why competing stores locate closely together on the main street and do not space themselves to minimize the transportation costs of potential customers; and Anthony Downs, who deployed Hotelling's theory to explain why competing political parties tend to converge rather than diverge in political policy space. The theories of both Hotelling and Downs focused on competition in single-dimensional space. Tullock widens the discussion to embrace elections in which the parties compete over two separable issue dimensions, for example, defense and the economy, when logrolling is feasible across these dimensions and when more than two political parties enter into the competition.

Part 7, "Vote Trading and Logrolling as Mechanisms of Political Exchange," is a compilation of three papers evaluating the role and relevance of logrolling for spatial theories of democratic voting.

In "A Simple Algebraic Logrolling Model" Tullock emphasizes that, with logrolling, the political equilibrium changes whenever individual voters have different preference intensities over several policies and when transaction costs of vote trading are low. He distinguishes between explicit logrolling, most often observed as deals between politicians within the legislature, and implicit logrolling, which occurs when political parties or candidates bundle policy platforms for electoral purposes.

Examples of vote trading and logrolling among committees within a legislature, among the separate chambers of a bicameral legislature, and among political parties within the legislature are explored in depth in "More Complicated Log-rolling." In Tullock's view, this kind of logrolling explains the

high degree of stability evident in most political systems despite the existence of the Arrow cycling problem.

In "Efficiency in Log-rolling" Tullock argues that logrolling protects minorities from significant harm from majorities and often leads to exchange efficiency.

Part 8, "More on Demand Revealing," brings together three papers that explore the strengths and limitations of a tax innovation designed by Tullock to ensure that individuals represent their true demands for a public good.

"Some Limitations of Demand-Revealing Processes" (coauthored with Nicolaus Tideman) acknowledges that the demand-revealing approach has a number of potential defects. Specifically, it may undermotivate participants to obtain all relevant information, may lead to a waste of resources when the number of participants is small, may result in the bankruptcy of some participants, and may be subject to manipulation. The authors note, however, that an overall judgment on the demand-revealing approach must be based on a comparison between it and other real-world alternatives, all of which are vulnerable to free-rider and strategic manipulation problems.

"Coalitions under Demand Revealing" (also coauthored with Nicolaus Tideman) acknowledges that coalitions may arise to manipulate collective choice outcomes even under the demand-revealing approach. The authors make a strong case, however, that such coalitions are much less likely than they are with other methods of determining the optimal outcome of public good provision.

Finally, "More Thoughts about Demand Revealing" challenges the view that the demand-revealing approach does not allow individuals to reflect altruistic preferences for a public good. As Tullock notes, individuals' demand curves reflect both selfish and altruistic preferences. Tullock argues that individuals are selfish 95 percent of the time.

Part 9, "Voting Methods and Political Market Behavior," consists of six papers that evaluate a range of voting rules and political institutions typically ignored or downplayed by public choice scholars.

"Proportional Representation" addresses the potential advantages of proportional representation over plurality-based voting methods in democratic elections. Tullock notes that political scientists in the United States misuse the term "representation." A left-leaning Democrat elected into office in Massachusetts does not represent the interests of a right-leaning Republican constituency. Under the plurality system, an elected politician may advance legislation representative of as little as 25 percent of his constituency. In con-

trast, with proportional representation, legislation requires a minimum coalition of 50-plus percent of the voters.

"Democracy as It Really Is" explores the weaknesses of democracy in responding to the informed preferences of special-interest groups at the expense of the general voter. Tullock argues that the federal system, although it does not completely resolve this weakness, nevertheless provides a net gain for society as a whole.

"A Bouquet of Governments" and "Thoughts about Representative Government" outline the wide diversity of democratic institutions utilized in different countries and at different levels within a country. Tullock once again manifests a strong preference for decentralization under a federalist framework.

In terms of legislative outcomes, "Voting, Different Methods and General Considerations" looks at the importance of methods actually used to determine a majority vote and focuses on problems posed by agenda control when the number of alternatives in the final vote must be reduced to two.

Problems of agenda control, as Tullock notes, are especially evident in the voting behavior of legislative bodies. The final paper in this volume, "A Bouquet of Voting Methods," outlines and briefly evaluates a wide range of voting methods used throughout the history of democracy. Tullock concludes the paper by commending the demand-revealing process as the best method ever devised, albeit a method that, as yet, is deployed only in small, private communities.

The Economics of Politics demonstrates the immense range and depth of Tullock's contributions to public choice. Equally confident in both the normative and the positive branches of the discipline, and well versed in the wide variety of institutions and practices of democracy across time and nations, Tullock expands the effective horizon of the continuing public choice revolution and makes a case for a return to the more catholic approach to political economy advanced by the great eighteenth-century scholars of the Scottish Enlightenment.

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# PART I THE NATURE OF PUBLIC CHOICE

### AN ECONOMIC ANALYSIS OF POLITICAL CHOICE

It is sometimes hard to follow extremely abstract reasoning in a new field. Since the field to be discussed is new to most economists, <sup>1</sup> I have decided to begin by discussing a concrete example rather than presenting an abstract and fully general model. Constitutional problems of a small and rather peculiar community will be discussed in the early part of the article. The theory developed of this particular community will then be converted into a general model.

Consider, then, a community of 100 farmers owning more or less equivalent farms who live in a township cut by a number of main highways. These highways are maintained by the state government, but they are limited access roads and can be entered only from local roads. These local roads are the responsibility of the township. Four or five farmers are dependent on each of the local roads to reach the main highways. The maintenance and improvement of these roads is the only political problem of the township and, as our final restriction, the taxing power of the township government is limited to a general property tax which will mean that costs will be relatively equally shared by all the farmers.<sup>2</sup> The question to be discussed is: What would be the ideal voting rule for these farmers to use in determining which roads will be repaired or improved?

One possible rule, which has simplicity if nothing else to commend it, would be to let any individual order repairs or improvements on any road he

Reprinted, with permission, from Il Politico 16 (1961): 234-40.

This paper was presented by the author, professor of International Studies at University of South Carolina, to the third congress of Southern Economic Association (Atlanta, Georgia, November 1960).

- I. The only economists to whom it will not be new will be those who have seen the mimeographed version of *The Calculus of Consent* (James Buchanan and Gordon Tullock, University of Michigan Press, forthcoming). Although this article is not directly drawn from the book, it follows the same general line of reasoning and is intended as a sort of introduction to this new field.
- 2. The relationship between this model and the one I introduced on page 573 of my article, "Problems of Majority Voting" (*Journal of Political Economy*, December 1959, pp. 571–79), is obviously close. The "Problems" model, in fact, is a single point on the continuum to be introduced on the next few pages.

wished. Thus, any farmer could simply call up the township government and order some road repair project and the cost would then be assessed to all the farmers. Since each farmer would be able to get his own road repaired while paying only 1% of the cost under this rule, I presume it is obvious to an audience of economists that there would be vast overinvestment in road facilities. We would have a Galbraithian world in which splendid highways connected hovels and in which the congestion problem had been solved by putting cars with tail fins beyond the purse of most farmers. The costs of this overinvestment on the farmers we will call "external costs," and we will find that there is an external cost for every voting rule short of unanimity.

A method of improving the situation would be to require that several farmers agree on each road maintenance project. This would mean, of course, that some time would be spent in negotiating the agreement, but let us for the time being ignore the problems of reaching agreement and concentrate our attention on the results that could be expected if the parties were able to reach agreements costlessly. Increasing the number of farmers required to agree to a given repair or maintenance job would make only a minor difference as long as the number was small enough so that those farmers living on a given road are sufficient to get it repaired. Let us, therefore, consider a rule requiring 10 farmers to agree to any given road repairing project, which would insure that farmers along at least two roads would have to agree.

Clearly, the farmers along one road could get agreement to its repairs from the farmers on another only by promising to agree to the repair of the other road. If this is so, then they must count the cost of repairing the other road as part of the cost of repairing their own. Thus, the real cost to them of repairing their road is something close to 10% of the total cost. (An easy way of thinking of this process is to consider how much the voter, under various rules, must pay in taxes for each \$100.00 worth of road repairing. Under the one voter choice rule he would have to pay \$1.00, under our present 10-voter rule \$10.00 and under a unanimity rule, \$100.00.)

Clearly, with our new 10-voter rule, the amount of road repairing undertaken would be much less than with the single voter rule, and, hence, the external cost imposed on each member of the community would be less. (It may appear peculiar to refer to this cost as "external" since in normal usage the term usually refers to some private activity, not to governmental action, but a little reflection will indicate that government action can impose external costs. If I am taxed to pay farmers subsidies so that they will reduce their production and thus raise my food costs, clearly I am suffering an external

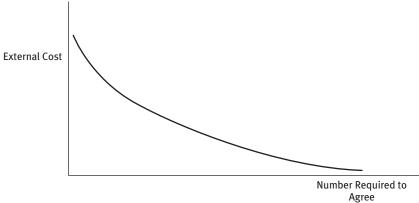


FIGURE 1

cost under the usual definitions of the term. The really peculiar phenomenon is the failure of economists in the past to use external costs in discussing political decisions, not our present usage.)<sup>3</sup>

Our community, of course, can require more than 10 voters to agree to any given road repair or improvement project. Each increase in the number required to agree will increase the number of necessary parties to a bargain, and hence raise the cost to each individual of a given amount of road repairing. The larger the number of farmers required to agree, the closer the cost of having the road repaired to each individual farmer will approach the real cost, hence, the less wastage of resources and the less external cost imposed on the farmers. We can represent this process by an idealized curve with the external cost of the voting rule very high at the single voter extreme and zero at the unanimity end.

Note that the curve in Figure 1 is perfectly smooth; there is no kink or irregularity at the 51-voter point. In view of the role played by simple majority voting in most of our present political ideology, this is most interesting. I would devote more attention to the simple majority case which is given so

3. Costs associated with shifting some activity from the private sector to the public are, of course, frequently discussed by economists. These costs, however, have normally been essentially the bureaucratic costs of administration, not the intrinsic costs of the decisions themselves. For a partial exception, see "Free Enterprise and Competitive Order," in Friedrich A. von Hayek, Individualism and Economic Order, Chicago, 1948, pp. 107-18.