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Author(s): Donald Wittman

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Why Democracies Produce Efficient Results

Donald Wittman

University of California, Santa Cruz

By applying the standard tools of microeconomic analysis, I argue that democratic markets work as well as economic markets. In particular, I show that previous work has greatly exaggerated the existence of principal-agent and informational problems in electoral markets and has drawn incorrect conclusions.

Many controversies in the social sciences are ultimately arguments over the nature of the market. For example, Marxist sociologists believe that both economic and political markets are characterized by poorly informed, possibly irrational, consumers and voters being exploited by monopolist suppliers of goods and policy, while (conservative) economists tend to view economic markets as working well (on the efficiency dimension) and political markets as being inefficient because of monopoly, rent seeking, and poorly informed voters. Here I argue that political and economic markets both work well.¹ I show that democratic political markets are organized to promote wealth-

I would like to thank the editor and the referee for their extremely helpful comments, Brian Barry, John R. Lott, Jr., and participants at seminars given at Claremont and University of California at Los Angeles and at Santa Cruz.

¹ This possibility appears to have been, for the most part, overlooked. Adam Smith's (1776) most famous passages regarding government are negative, but he did argue that governments would pursue their behavior effectively. McKean (1965) argued that the invisible hand operated in the political sector but claimed that political externalities would cause political market failure. Tiebout (1956) claimed that competition among localities creates efficient local governments but did not believe that his model applied to national governments. Becker (1983) showed that there will be a tendency for wealth-maximizing outcomes to arise from pressure group behavior, but elsewhere in his article he argued that political markets are very imperfect. Thus some authors have made positive remarks about the efficacy of political markets, but such remarks are hidden in works that are overwhelmingly critical.

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maximizing outcomes, that these markets are highly competitive, and that political entrepreneurs are rewarded for efficient behavior.² I demonstrate that many of the arguments claiming that economic markets are efficient apply equally well to democratic political markets and, conversely, that economic models of political market failure are often no more valid than the analogous arguments for economic market failure. Thus this paper attempts to cure the schizophrenia facing most economists: economic markets work well and political markets work poorly. Henceforth, the burden of proof should be on those who argue that democratic political markets are inefficient.³

This article also develops a theory of institutional response. I show how various political institutions such as political parties, candidate reputation, and government structure arise in order to mitigate the potential for principal-agent problems in democratic systems.

Efficient markets tend to have informed and rational participants in a matrix of competition with well-defined and easily transferred property rights. Virtually all models of political market failure (inefficiency) implicitly or explicitly assume that one or more of these characteristics are missing. In Sections I, II, and III, I argue to the contrary: that democratic markets do indeed have the qualities typically associated with efficient markets. Section I shows how competition for political office reduces the potential for opportunism by politicians. Section II shows how rational voter response mitigates the problem of "rational voter ignorance." Section III shows how political institutions reduce transaction costs, thereby encouraging the efficient exchange of political rights.

In Section IV, I deal explicitly with issues of transitivity, localism, and pressure groups. In a formal model of electoral competition, I show how efforts to gain a majority push the government toward efficient outcomes. In Section V, I take a close look at zoning and zoning boards, an oft-used example of political market failure, and demon-

² Stigler (1972) argues that political competition has many of the same qualities as economic competition. However, it is evident that Stigler (1971) finds the effects of political competition less than salubrious. The argument here resonates more with Becker (1983, 1985). However, here the thrust for efficiency is a strong force, while in his work it is a weak force (other things being equal, the wealth-maximizing result will occur). Also, here I explicitly consider politicians, elections, etc., while Becker has a black box. See also Denzau and Munger (1986). As in other areas of economics the preferences are given. For our purposes, this means that advertising, political speeches, etc. do not affect voters' preferences; rather, these preferences are embedded much deeper within the culture (e.g., parental values and early religious upbringing) and in the voters' genetic makeup. Preferences may extend to such things as a preference for a "strong" military and hatred of foreigners.

³ This article is directed mainly to those who believe that economic markets work well. For those who are unwilling to accept such a view, the arguments can be interpreted as saying that political markets are no more blemished than economic markets.

strate why zoning is likely to be efficient. Section VI discusses vertical integration and introduces an empirical agenda.

Before I proceed with the analysis, one caveat is necessary. This paper surveys numerous articles and topics. I show that the arguments for inefficiency have failed to consider a whole set of plausible institutional reactions generated by politicians competing for the voters' favor, but in two paragraph sketches I am not able to provide conclusive arguments that the system is efficient. Hence, further research on each one of these topics will be necessary before a definitive answer is achieved.

I. Competition and the Design of Political Institutions

Elected officials can be viewed as agents and the voters as their principals. There is always the potential for opportunism by agents (e.g., not working hard, taking bribes, or adopting positions contrary to those that would be adopted if the voters were fully informed). Here, I argue that competition, reputation, monitoring, and optimal contract design reduce opportunistic behavior in the political sector and that principal-agent problems may be no more severe than in the private sector.

Candidates develop reputations. If they have not kept their campaign promises in the past, they are less likely to be reelected or elected to a higher office. In economic markets, a firm's "goodwill" may be capitalized in the value of the firm and ultimately sold. This transferability means that reputation will not be inefficiently wasted toward the end of the owner's life. In contrast, the ability of the politician to transfer his reputation is clearly attenuated; however, the political market has devised substitute methods for preventing the wasting of the reputational asset. The presence of political dynasties enables the politician to transfer his reputation to heirs.⁴ Political heirs may be more broadly construed. Thus the vice-president may be seen as the heir to the president, the representative as the heir to the senator of the same party, or the congressional aide as the heir to the congressman. The vice-president and the political party may then "pay" the president not to shirk in his last period by making the ex-president an elder statesman of the party (see Alesina 1988). Furthermore, political parties may develop reputations so that candidates do not shirk on the party's ideology. Other members of the party have strong incentives to maintain the reputation of the party since the

⁴ Laband and Lentz (1985) show that in 1965, 45 members of the U.S. Congress and over 8 percent of state governors were sons of politicians.

brand name is valuable in attracting votes. Especially in legislatures, it is relatively easy to monitor other politicians' voting behavior. Those legislators who have proved to be reliable in the past are rewarded by being appointed to influential committees. Unless the person's vote is pivotal, a wayward member without party support is generally ineffectual in a system that requires a majority coalition. The political party is thus the analogue to a franchise in the economic sector. The creation of the party (franchise) brand name allows the voter (consumer) to make more informed judgments about how the coalition of its members will behave. An important part of the franchise activity is to prevent shirking that might result in a diminution of the value of the franchise. As I have argued, political parties are in an especially good position to monitor any shirking.

Monitoring takes place not only within but also across political parties. Competitors can gain great advantage by providing evidence of the opposition's shirking.⁵ In the economic sector, the threat of a takeover reduces opportunism by management, thereby protecting the interests of the diffuse stockholder. Takeovers (losing office) are also an important mechanism for reducing opportunism in democratic political systems. There are differences between political and economic takeovers, but it is not clear that one is a better instrument than the other (indeed, if my argument is correct, each should be best in its own sphere).⁶ Thus a corporate takeover need not involve persuasion (unless there is a proxy fight); instead a higher price may be offered. Unfortunately for the corporate takeover artist, rules such as "poison pills" are designed for the existing stockholders to capture the benefits from potential takeovers, thereby reducing the return to potential owners. More generally, either stockholders or other investors will anticipate an increase in the value of the stock and thereby the bidder's expected profit will decrease. When much of the return from investment in information is captured by others, there will be less investment in information than otherwise and, ultimately, fewer people engaged in takeover activity. In contrast, the candidate with the better ideas does not have to pay a higher takeover "price," but a lower one, since voters will be more likely to vote for him.

One can view elections as a relatively low transaction cost method of exercising political takeovers: the time period between elections is relatively short (legislators are not elected for life), there are no su-

⁵ More egregious behavior by agents, such as accepting bribes, may be sanctioned by law.

⁶ One difference is that in an election the winner has the most votes while in a takeover the winner is the side that is willing to pay the highest price. In Sec. IV, I show how vote maximization leads to wealth maximization, and thus the result is equivalent to paying the highest price.

pramajority requirements for being elected, and the opposition participates in the legislature.

Optimal contract design also reduces opportunism. For example, if there is too much shirking by politicians, they could be paid above-market salaries and be punished by not being reelected.⁷ Also, there is usually no mandatory retirement age for legislators, which reduces the severity of the last-period problem.⁸

With optimally designed contracts, monitoring, reputation, and competition, opportunism will be reduced but possibly not eliminated. However, this does not mean that the outcome is inefficient if it is truly impossible to find an alternative structure that is Pareto superior, because individuals lie and shirk, and monitoring and other forms of private and public control are too costly.

II. Information

A constant criticism of democratic markets is that voters are uninformed. Economists have provided a ready explanation: the benefit of the voter's being informed is outweighed by the cost of obtaining information. The benefit is slight since a vote cast by any individual voter is unlikely to have any effect on the outcome, while the cost of obtaining information is high because the ramifications of any policy are complex and rarely fall directly on the voter. Other models have emphasized the differential information among voters. For example, defense industries are concentrated in a few states. In these states, voters are well informed and sensitive to changes in defense spending (since their income is strongly dependent on the defense industry). In contrast, the cost of defense expenditures is diffuse throughout the states, making the tax burden relatively unimportant. The net result is that defense expenditures are too big since the benefits are felt but not the costs. Finally, some models claim that voters are victims of biased information. For example, the military-industrial complex may be the voters' prime source of information regarding the appropriate level of defense. There are strong incentives for the military-industrial complex to exaggerate its positive role in our national welfare. As another example, newspapers may be hesitant to report neg-

⁷ Candidates engage in very costly campaigns in order to gain or remain in office. This behavior is consistent with the hypothesis that being in office pays above-market salaries.

⁸ However, certain elected positions put a cap on how many terms an individual can serve (e.g., the U.S. presidency). Presumably, if the last-period problem resulted in too much shirking, the restriction on the number of terms served would be removed. Lott (1987) has shown that congressmen who do not intend to run for reelection vote less often (possibly because of illness) but not differently. Thus the last period is not associated with increased ideological shirking.

ative news about businesses since this may result in a reduction in their advertising revenues.⁹

In the following subsections, I show that models of voter ignorance confuse biased judgment with biased information or lack of information, overestimate the cost to voters of obtaining information, and underestimate the amount of information that the voters possess.

A. *The Amount of Information Held by Voters
Has Been Underestimated*

The arguments made for the voter's being uninformed implicitly assume that the major cost of information falls on the voter. However, there are returns to an informed political entrepreneur from providing the information to the voters, winning office, and gaining the direct and indirect rewards of holding office. Thus the rewards to the political entrepreneur from discovering and exploiting unknown political demands are equivalent to the business entrepreneur's profiting from the development of new products.

Furthermore, as argued earlier, the development of party brand names and candidate reputations reduces still further the cost of information acquisition to the voter. Parties establish certain reputations regarding policy positions. The voter can then vote a party line without knowledge of the particular candidates.

It would be foolish to argue that voters are perfectly informed about political markets. However, efficiency does not require perfectly informed voters any more than efficient economic markets require all stockholders to know the intimate workings of the firms in which they hold stock or all principals to perfectly monitor their agents.¹⁰ A voter needs to know little about the actions of his congressman in order to make intelligent choices in the election. It is sufficient for the voter to find a person or organization(s) with similar preferences and then ask advice on how to vote. For example, people who like to hunt are more likely to read the literature from the National Rifle Association than from an organization attempting to ban guns, and one can always ask advice from a more politically knowledgeable friend with similar tastes.¹¹ Voters can also look at the list of campaign contributors (who typically make their campaign endorse-

⁹ Becker (1983, p. 392) goes so far as to claim that there are no independent voter preferences. "These [voter] 'preferences' can be manipulated and created through information and misinformation provided by interested pressure groups."

¹⁰ Wintrobe (1987) has argued that the diversification of portfolios (for the purpose of risk spreading) makes the average stockholder less knowledgeable about his or her company than the average voter is about his or her congressman or party.

¹¹ Thus voters choose their pressure groups rather than pressure groups influence voters, as Becker (1983) has argued.

ments public) and infer the characteristics of the candidates' policies (pro or con). That is, interest group endorsements are like signals in the market and provide strong cues about candidates' preferences. Furthermore, competitors for public office need provide only the information when there are discrepancies between the voters' preferences and the political outcome, not all the unnecessary detail.¹²

*B. The Deleterious Effect of Biased Information
Has Been Overstated*

I have never met anyone who believes that the Defense Department does not exaggerate the need for defense procurement. But if everyone knows that the Defense Department will exaggerate the importance of its contribution to human welfare, then, on average, voters will sufficiently discount Defense Department claims.¹³ Hence biased sources of information need not lead to biases in belief.

A related problem occurs for those who argue that diffuse taxpayers are insensitive to expenditures on concentrated interests. However, to be uninformed about a policy does not imply that voters underestimate (or overestimate) its effects. For example, to be uninformed about the nature of pork barrel projects in other congressional districts does not mean that voters tend to underestimate the effects of pork barrel; it is quite possible that the uninformed exaggerate both the extent and the negative consequences of pork barrel projects. Furthermore, at some point these diffuse voters should be

¹² If voter misinformation were an important reason for poor policy choices, then we should be able to observe more informed voters making better policy choices. For example, college-educated people probably have more informed opinions: perhaps their professors told them that there is too much pork barrel politics. Hence, college-educated persons would be the least likely to be in favor of more government spending (unless they are the recipient of such largess), and persons with only a grade school education should be the most likely. However, survey data do not support such a conclusion. Miller, Miller, and Schneider (1980) report survey responses to the following questions: Should the government spend more or less on (a) space exploration, (b) foreign aid, (c) highway construction, and (d) defense? There is no pattern between education level and support for increased government expenditure. For example, people with a high school education have been the most against foreign aid, while college-educated people have been the most in favor in two of the three surveys (the third category is less than a high school education). Voters do not appear to have any difficulty identifying their own interest in other areas. For example, blacks consistently much more than whites favor federal governmental intervention to ensure fairness for blacks in jobs (see Converse et al. 1980). Thus one would be surprised if voters all of a sudden became stupid when it came to issues of road building and space exploration.

¹³ Even when the ruling class has a virtual domestic monopoly on the instruments of information, as is the case in the Soviet Union, we observe people discounting the information contained in their papers and trusting foreign sources (e.g., when the Chernobyl nuclear accident occurred, citizens of the Soviet Union turned to foreign sources for their information).

sensitive to their aggregate tax burden that arises when all the supposed concentrated rent seekers tax the unsuspecting diffuse voters.

I have argued that neither lack of information nor biased information need lead to irrational expectations. However, even if some individuals make incorrect choices, the law of large numbers is likely to yield the correct majority choice. For example, consider the following situation: if everyone were fully informed, 40 percent of the population would vote for an increase in defense expenditures and 60 percent would vote against. But not everyone is fully informed, and, consequently, each of the 40 percent voters votes for with a 100 percent chance, while each of the 60 percent voters votes against with an 85 percent chance. This is a situation in which there is considerable bias. A voter who should be against has a 15 percent chance of voting for, but a voter who should vote for will not vote against. However, if there are more than 40,000 voters, the chance that the majority of voters will vote for an increase is less than 1 percent.

A model that assumes that voters or consumers are constantly fooled and that there are no entrepreneurs to clear them up in their confusion will, not surprisingly, predict that the decision-making process will lead to inefficient results. In this section I have argued that such assumptions are unwarranted.

III. Negotiation/Transfer Costs

Coase (1960) and others have shown that when there are well-defined property rights and low negotiation/transfer costs, economic market failures disappear. For example, the ostensible divergence between private and social costs or "externality" that arises when a rancher has the rights to trample a farmer's corn disappears when the farmer pays the rancher for nondamage. In much the same way, we would expect low negotiation/transfer costs to overcome many of the externality argument explanations for democratic market failures.

Political markets are inefficient when one group of actors does not account for the costs or benefits to another group of actors: the classic example of the divergence between private and social costs may be the majority's shifting of costs onto an unwilling minority. However, such a divergence will exist only if negotiation/transfer costs are high. Democratic political markets are structured to reduce these costs. For example, majority rule instead of a unanimity rule prevents monopoly holdouts, thereby reducing negotiation costs.¹⁴ Representation in-

¹⁴ The fact that people are willing to set up majority rule with its supposed abuses of the minority instead of a two-thirds or unanimity rule suggests that the abuses of majority rule are less than the negotiation costs (and abuses) of a unanimity rule. Majority rule is preferred to a supramajority rule (e.g., two-thirds rule) when the

stead of direct democracy and a federal rather than a pure unitary system are other ways that democracies (and other forms of government) reduce the cost of decision making. The small number of members in the House and Senate reduces negotiation costs, thereby creating the conditions for efficient logrolling (exchange).¹⁵

It is not only the small size of Congress that facilitates Pareto-improving exchanges, but also, as Weingast and Marshall (1988) have shown, the structure of Congress. The committee system allocates assignments to committees according to those who are most interested in the issues at hand (e.g., the Agriculture Committee is composed of congressmen from farming, not urban, districts). These committees are small in scope and to some degree do not affect those who are not involved. For example, the negative externalities imposed on urban areas by the Agriculture Committee are likely to be slight. If they were not slight, then we would observe urban legislators on the committee. The committee structure also creates property rights so that one committee can trade off policies with another committee. The costs of such transactions between committees are probably less than the costs of making ad hoc trades among individual congressmen.

I shall detail the role of the political parties in reducing externalities between legislative districts in a later section.

A. *Efficient Shifting of Rents*

I have already argued that the degree of opportunism by politicians has been greatly exaggerated. In this and the following subsection, I suggest that, to the extent that rent seeking exists, rents will be shifted efficiently and the seeking of these rents will involve minimal social cost.

It is useful to reconsider the farmer/rancher example in the context of political rent seeking. Farmers may try to use the political process in order to ensure that farmers have the right to nondamage by ranchers; similarly, rent-seeking ranchers may try to influence politicians so that ranchers are given the right to damage farmers' fields. Although the distribution of income is altered, the same efficient outcome arises.¹⁶ For example, if ranchers have the right to damage

system does not want to give weight to a proposal just because it is the status quo. If there were high transaction costs preventing voters (or congressmen) from making side payments in exchange for votes, then a supramajority rule would favor the status quo.

¹⁵ There is an extensive literature arguing that logrolling is inefficient (see, e.g., Riker and Brams 1973), but the arguments are unsound. Even when there is intransitivity and inefficient distributions are on the cycle of intransitivity, if there is a cost to forming coalitions, inefficient coalitions will be the least stable and the least likely to be formed.

¹⁶ Except for the extra costs in transferring the rights if there is a transfer.

but the benefit of nondamage to farmers is greater than the costs to ranchers, then individual farmers will buy the right from individual ranchers. Since negotiation/transfer costs are low, the outcome will be the same whatever the allocation of political rights. Since the negotiation/transfer costs are not zero, the costs of transfers do reduce the rents accruing to ranchers. Hence, ranchers may choose other methods with lower negotiation/transfer costs (e.g., special tax breaks to *existing* ranchers) if these create greater rents. The skilled politician may create policy packages with these types of implicit trades.

One might counter with the argument that the voters would not accept such blatant transfers. This phenomenon can be labeled knife-edge stupidity. Voters recognize efficient transfers but not inefficient ones. But as I have shown, there tends to be greater impetus by political entrepreneurs to expose the latter. Politicians have devised a number of devices to shift rents efficiently. Grandfather clauses allow rents to be shifted to those grandfathered without distorting supply responses.¹⁷ Farm price supports with acreage restrictions may be a reasonable approximation to an efficient rent redistribution. Higher prices would bring forth an inefficient increase in supply. It is easier to monitor acreage responses than to monitor supply responses by individual farmers. Hence acreage allotments (with their milder form of input distortion) are chosen. As another example of the efficient allocation of rents, the rights to offshore oil are auctioned off.

It is insightful to apply my analysis to "rent seeking" by defense contractors and the possible effect it might have on aggregate procurement of weapons. It should first be noted that much of the lobbying by defense contractors may represent interfirm rivalry. The effect of such activity does not increase the total amount of defense expenditures so much as it results in the allocation of defense expenditures among different firms. The problem of concentrated versus diffuse interests does not apply to such rivalry. While different firms may be more successful than others in the art of lobbying, this may be no more of a problem than the fact that certain firms may have better customer relations. For the sake of our argument, assume that the primary purpose of rent seeking by defense contractors is to collect rents from the general taxpayer and that, contrary to our earlier arguments, they are successful in this endeavor. Assume also that defense contractors have no particular taste for defense (or that their change in the desire for defense when their income changes is offset

¹⁷ Stigler (1971) argued that inefficient forms of rent shifting are provided in order to prevent entry since entry will reduce the rents. But as I have shown here, the more entry is prevented, the less the inefficient supply response. Hence greater rents and greater efficiency need not be in contradiction.

by others' changes in their desire). If negotiation/transfer costs are zero, this rent-seeking behavior will have no effect on the number of weapons produced.

The fact that defense contractors want to maximize their income does not necessarily imply that they will try to convince voters to buy too many weapons. It may be easier to convince voters (or Congress) that profit ratios in the defense sector (and possibly wages) need to be twice as high as they are in other sectors than to convince voters that the country needs twice as many weapons as are optimal, especially since it is much less costly to the taxpayer when profit ratios are twice as high than when procurements are twice as large as necessary.¹⁸ For example, a defense contractor could make the following arguments: (1) that high levels of profitability are needed to ensure a strong defense industry, (2) that defense contractors should be given special tax write-offs because their capital equipment depreciates very fast, (3) that they need high profits to promote competition in an industry with high economies of scale, (4) that those defense contractors who have already demonstrated their ability to do defense work should get special performance bonuses (the grandfather clause), and so forth. Or perhaps the defense contractors do not need to say anything at all; rather, the defense industry, in its bilateral monopoly position (the rents suggest that it has some monopoly power), negotiates an "optimal" contract with Congress. The more efficient the level of armaments, the greater the monopoly rents the defense industry can extort.

B. Efficient Rent Seeking

Tullock (1967) and Posner (1974) have argued that expenditures used in trying to curry government favors will tend to dissipate any rents. However, one would expect that democracies and other governments would make rules so that the activity of rent seeking would involve minimal *social cost*.¹⁹ Campaign contributions may be an example. The transfer costs of writing a check are quite minuscule, and the information underwritten by the campaign expenditures is a valuable social product. Furthermore, there is similar rent seeking in economic markets and in the courts. For example, patents provide mo-

¹⁸ Here as elsewhere the rent-seeking theory is undermined by the fact that only relatively fixed factors of production can gain rents. Thus producing twice as many guns may require twice as many workers, but this helps workers little if at all if the supply is readily met by recruitment from outside the industry. Even if workers were gaining rents, those in the industry would prefer higher wages to more workers.

¹⁹ In fact, the standard example in the literature of a complete dissipation of rents (10 risk-neutral players bidding \$100,000 each for a one-tenth chance of a monopoly right worth \$1,000,000) involves no social cost.

nopoly power. Firms therefore will overinvest in patentable research until the marginal return is equivalent to the return on competitive innovation. As another example, polluting firms and residential developers may each seek alteration in the nuisance law in their favor. Rent seeking may also take place within the bureaucracies of large corporations (see Tollison 1982). If rent seeking is not viewed as a serious problem in economic markets, it probably should not be viewed as a serious problem in political markets.

Certainly not all interest groups are equally effective in the political sphere. Owing to lower organizational costs, it is possible that one interest group can deliver more votes than another and, as a consequence, receive more in the political sector. But as I have argued here, inequality of political power is no more an argument against efficiency than inequality of economic power.

IV. A Reinvestigation of Four Archetypal Models of Inefficient Political Behavior

In this section I take a close look at four models that demonstrate political market failure. I attempt to demonstrate how failure is implicitly built into the structure of these models and how plausible alterations to these models lead to the conclusion that political markets are efficient. In particular, I show how the desire to maximize votes leads to efficient policies.

A. Pressure Group Competition

Pressure groups have been viewed as the source of political market failure by the left, right, and middle. Recently, Becker (1983) has argued that pressure groups may also create success. Consider the case in which there are two pressure groups with diametrically opposed interests. If the amount of pressure is a function of their respective utility loss (or gain), then the net political pressure is in the direction of higher utility. Becker's model has two limitations, however: (1) it is a black box, and (2) it sidesteps the issue when pressure groups have orthogonal interests. In this section I extend Becker's model by embedding it into an electoral framework.

I consider a two-candidate election. Assume that if a voter votes, he or she will vote for the candidate who promises the voter the greatest utility if elected. The probability of voting is then a function of a voter's utility differential between the platforms (the greater the utility differential, the greater the likelihood of voting), the advertising differential, and whether the voter belongs to a pressure group or not. Belonging to a pressure group increases the probability of voting.

Donations (which are used for advertising) come from individual voters (possibly, indirectly through a pressure group). The amount that the voter (or pressure group) donates is a positive function of the utility differential to the voter (or members of the pressure group) times the probability of the candidate's winning. It is further assumed that, other things being equal, pressure groups donate more than individual voters and that some pressure groups may be more successful than others when their organizational costs are lower.

This model obviously elevates the importance of pressure groups. Other things being equal, vote-maximizing candidates will tend to weight the interests of those who belong to pressure groups more than those who act as individual voters. Furthermore, candidates will trade off votes gained directly from policy differentials for votes gained through advertising differentials, and pressure groups have a comparative advantage in raising the money for advertising. Even though I have intellectually boxed myself in, I shall now argue that the distortion caused by pressure groups is limited.

I first consider factors that might make some groups more effective in the political process. It has been argued by numerous authors (see, e.g., Demsetz 1982; Becker 1983) that those who have concentrated benefits (e.g., the defense industry) will have an upper hand in the political process over those who face diffuse costs (the taxpayer).²⁰ The logic is that it does not pay to enter the political arena when only small amounts are involved. However, this argument confuses individual motivation on one issue with overall political effect. In fact, quite plausible arguments can be made that concentrated interests are at a great disadvantage in majority rule systems. Consider, for example, the case in which a candidate's policy would result in taking a dollar from a million voters and distributing the proceeds to 1,000 members of a pressure group. Obviously, the probability that each of the 1,000 members of the pressure group votes for the candidate is a lot greater than the probability that each of the 1 million voters (most of whom may not even be aware of the policy) votes against the candidate. But even if this policy reduces the probability of each of the million voters voting for the candidate by only .005, such a redistribution will not take place, for it involves a loss of 5,000 votes from the diffuse majority in return for 1,000 more from the pressure group. And even if the pressure group donates \$500,000 and the resulting advertising re-

²⁰ "The steel industry and its workers . . . are willing to act because the benefits from protection are concentrated on the relatively few who invest and work in the industry. Their incomes are significantly affected. The larger costs of their protection are borne in dispersed fashion by the much more numerous population of taxpayers and consumers. The dilution of costs renders its bearers politically ineffective" (Demsetz 1982, p. 85).

duces the probability loss from .005 to only .002, the candidate would lose undertaking such a policy. Indeed, given these stylized facts, we would observe that the diffuse majority taxes the concentrated minority.²¹ So far the example has treated the probability figures as exogenous, but once again competition for political office may cause the political entrepreneur to provide the requisite information. The information that "the other side is a captive of special interests" need be directed to only a small subset of voters (say 10,000) in order to be politically effective.

I have argued that the concentrated benefit versus diffuse cost explanation for pressure group success is problematic; however, there may still be other valid explanations for their success. I shall now show that any economic distortions are limited by competition, rationality of the voters, and low transaction costs.

Pressure groups compete for their policies to be adopted. The politician chooses policies until the gain in his or her expected plurality coming from an advertising dollar equals the decrease in plurality that results from the policy undertaken to gain that advertising dollar. Obviously, the best choice for the politician is the policy in which there is little or no conflict between the two. Since legislative districts vary in their characteristics, the success of the pressure groups will depend on the relative costs in policy to the voters in the district: the soybean growers' association will gain a more sympathetic ear in those districts in which soybeans are grown. Hence competition may mitigate any losses that might arise from service to pressure groups, and there may be a very close congruence between the preferences of the voters in a district and the pressure group support of the incumbent (see Denzau and Munger 1986).

For both the businessperson and the politician, advertising is not costless. The politician may give preferential treatment to pressure groups that provide campaign contributions (see Peltzman 1976). However, the degree of distortion that might arise from such contributions is limited.²² If the candidate takes a policy position far from the median voter in order to attract campaign contributions, the number of votes captured from marginally uninformed voters via increased advertising will be less than the number of votes lost from the informed voters. This potential for loss is especially acute in political campaigns since there is so much more comparative advertising in political markets than in economic markets. One reason for greater

²¹ Religious minorities may have been more often the victims than the victimizers of religious majorities.

²² Campaign contributions are not distorting from the average if contributions are proportional to the costs to the individual from a policy.

comparative advertising in politics is that elections are zero-sum games (a greater plurality for one candidate is a lower plurality for the other), while comparative advertising in the private sector may be negative sum (e.g., “our chickens have less salmonella than others” is not a viable marketing strategy).²³ Bad policy increases the marginal productivity of advertising by the other candidate and will be pointed out.²⁴ Advertising does not make up for severe product deficiencies in either the political or economic market. If there is any policy distortion, this is the cost of information, just as at the margin a higher price to the consumer is the cost of advertising in the product market.

Furthermore, to the extent that pressure group models rely on the voters’ ignorance of the pressure groups’ influence on the politicians’ behavior, we have a metatheoretical inconsistency: the more people believe in the validity of the model, the less true it can be.

To the extent that pressure groups are successful, there will be a weighting of the utility functions different from the one that would arise if there were no pressure groups. But this does not mean that there is inefficiency, only that the political system has chosen a different distribution of wealth. As argued in Section III, even if pressure groups such as the defense industry are successful in capturing rents from the political system, the method of transfer will minimize economic distortions since the political cost of collecting rents via an inefficient regulation is greater than the cost of collecting an equivalent rent via a more efficient method (be it a subsidy or better-designed regulation).

B. Legislative Failure

Fiorina and Noll (1978), Weingast, Shepsle, and Johnsen (1981), Fiorina (1983), and others have argued that Congress is the source of political failure. Their general argument proceeds along the following lines. Congressmen represent the interests of their districts. Doing good to voters in other districts does not help the congressman get reelected. Therefore each congressman pushes for policies only of benefit to his district. The result is too many pork barrel projects.²⁵

²³ Another reason is that candidates tend to represent different interest groups. Rarely does one interest group contribute to both campaigns. Note, however, that the candidate not receiving funds can alter the amount of funds going to the other candidate by taking differing stands on the issues important to the interest group.

²⁴ This self-correcting mechanism also exists for news organizations. The greater the number of newspapers that refrain from reporting disparaging information about business because they fear losing advertising dollars, the greater the demand for those that do not.

²⁵ Economists generally arrive at just the opposite conclusion (efficiency) when they assume selfish behavior in economic markets.

Fiorina (1983, p. 72) even suggests that congressmen should represent a random sample of voters over the whole country in order to avoid the pork barrel politics generated by geographically based constituencies.

I start off with some empirical observations that make their analysis questionable. Presidents (and governors) are elected at large and, presumably, do not have the particular problems associated with getting their votes from only a specific geographical constituency. Yet it is not at all clear that presidents (and governors) tend to be in favor of smaller budgets and less pork (especially defense, potentially the biggest pork barrel project of all).²⁶

I have argued that congressmen tend to represent the interests of their districts, but how does Congress ensure that these interests lead to collective efficiency? There are three answers: the small size of Congress, the party system, and the structure of Congress.

As already argued, the small size of Congress reduces transaction costs, thereby allowing trades and bargains that are Pareto improving. An inefficient method of transferring wealth from one district to another can be defeated by an efficient transfer. Politicians do not win reelection by maximizing the amount of pork that comes to their districts, but rather by maximizing the welfare of some set of actors (voters or pressure groups). If these actors gain less pork (before-tax income) but at the same time pay much less in taxes so that their after-tax income is greater, the representatives will increase their probability of winning by instituting a lean omnibus bill.

A number of authors have attempted to argue against the possibility that such an omnibus bill will be enacted, but all their arguments rely heavily on some asymmetry in voter behavior. For example, Fiorina and Noll (1978) assume that the voters are aware of the benefits, but not the costs, of incumbent facilitation of constituents' needs. Shepsle and Weingast (1981) assume that the voters recognize the job gains from pork barrel in their district but underestimate the job loss from the sum total of pork barrel in all other districts. Clearly, such asymmetry is the driving force for too much pork barrel. But I have argued in the previous sections that the assumption of voter asymmetry is unwarranted; that is, imperfect information does not imply biased estimates.

Other authors have argued that politicians can take continuing and full credit for pork going to their district but only partial and one-time credit for getting rid of pork altogether. The argument for getting full credit is that no pork would be given to the district unless

²⁶ If presidents were in favor of smaller budgets, they might mitigate but not eliminate Congress's desire for larger budgets.

the legislator did something since no district benefits from pork in any other legislative district. It is continuing since each year the pork is renewed. In contrast, getting rid of pork is a one-time act and is hard to attribute to any one legislator since it would pass even if the particular legislator were against it. Given these assumptions, the conclusion that there is too much pork is unassailable. But are these assumptions legitimate? It might be possible to give continuing credit to the congressman for not passing pork during each election period. Or voters could give continuing credit for an act that took place in the past or be antagonistic to the party for continuing pork barrel policies.²⁷ While it is harder to assign credit when there are multiple inputs, it is not clear why voters would under- rather than overestimate their congressman's marginal contribution to getting rid of pork altogether.

Furthermore, a political party is designed to overcome this problem and to take credit for universal policies (e.g., foreign policy). National political parties internalize the negative externalities that might arise from local interests trying to shift costs onto other districts. The political party is a coalition that facilitates Pareto-improving trades within the party and puts restraints on opportunism by its members: party leaders can assign committees, campaign funds, and so forth.²⁸

Others have put the blame on committees: the members of the Agriculture Committee do not care about the costs imposed on urban districts. Here I shall argue that the committee structure is welfare improving. Being on a committee bestows a political property right. This power can then be used in bargaining. Thus those legislators who head legislative committees may trade with other congressmen on other committees, thereby providing more to their constituents than in the absence of trade. While Congress has a committee structure that could be seen as representing special interests (e.g., Agriculture), it also has committees (such as Budget and Appropriations) that have a more global view. Commentators have argued that the Appropriations Committee is very weak because it is often a "rubber stamp." However, a well-functioning system of control would rarely reject the decision made by lower levels: when designing legislation is costly, the lower levels should anticipate the ruling of the superior level. Furthermore, assignment to committees is ultimately the responsibility of the political parties. The majority would not make assignments that would result in negative-sum legislation.²⁹

²⁷ A commitment by the voters to reelect incumbents for undertaking efficient policies in the past may not be credible, but then reelecting incumbents for undertaking inefficient pork barrel policies in the past is not likely to be credible either.

²⁸ The coalition is especially important for presidential elections.

²⁹ Although this rarely happens, congressmen have lost their committee chairman-

As the passage of the recent tax reform package shows, government policies involve a long process of coalition formation and shaping within a bill as well as implicit and explicit trading over different government policies. Where there is a potential for inefficient outcomes, there is also a potential for some kind of trade that can make the constituents of the affected districts better off, thereby increasing the congressmen's chances of being reelected. Of course, some players may be more important than others. For example, a congressman may be the head of a committee, enabling him to set the agenda and have a more important effect on the outcome. But agenda setting does not imply inefficient outcomes. It just provides the particular congressman and his constituents with greater political wealth. As in ordinary markets, he will trade this right for the most highly valued output.

C. The Median Voter May Choose an Inefficient Outcome

Consider the provision of a public good. For a given tax structure, voter i 's optimal point is where his marginal valuation V_i is equal to his marginal tax, T_i . If two candidates are competing to win the election, then the equilibrium strategies will be at the median voter's most preferred position. Thus the amount of public good provided will be where

$$V_m = T_m \quad (1)$$

(m being the median voter).

In contrast, the conditions for economic efficiency are that the sum of marginal valuations of the good equals the sum of marginal taxations or, more formally,

$$\sum_{i=1}^n V_i = \sum_{i=1}^n T_i. \quad (2)$$

In general, the conditions for (1) need not coincide with the conditions for (2). Hence the median voter outcome may be inefficient.³⁰

This result is not very devastating. If the median voter's marginal valuation and marginal tax bracket are equivalent to the mean voter's

ships for not abiding by party principles. Once appointed to a committee, members have seniority. Parties and committees can be seen as substitute methods of organization. In Great Britain, where the parties are stronger, most of the trading takes place within the party; in the United States, where committees are stronger, more of the trading is within and between committees.

³⁰ This result can be found in Shepsle and Weingast (1984), Holcombe (1985), and others.

marginal preference and tax bracket, as would be the case with symmetric distributions, then the median voter outcome is efficient. Even if there were not exact equivalence, under many conditions there is not a great deal of difference between the median and the mean of a bivariate distribution.

The main reason that this median voter model does not provide the efficient answer is that there is more than one variable being affected: (1) the amount of the public good being provided and (2) the amount of tax falling on individuals, with only one instrument of control being provided. That is, there is a fixed relationship between the amount of public good and the tax incidence. There is no end to the amount of failures one can derive by forcing multidimensional policies into a one-dimensional method of control. This is only one example, but why should politicians restrict their platforms in the way posed in this model?³¹

If the median voter result were truly inefficient, then there would exist a different tax policy (which could itself be multidimensional) coupled with an efficient amount of the public good that would dominate the inefficient median voter result. A candidate might come on this by trial and error, or perhaps there exists a demand revelation mechanism that yields the efficient outcome. Either way, the political market would achieve an efficient result. We would have a “median” voter outcome, but it would be in a multidimensional space.³²

On the other hand, maybe no such demand revelation mechanism exists because we can devise no method to force voters to reveal their true desire for the public good. Then the original median voter outcome is efficient because we have no technology for determining the truth (assuming such a technology puts us out of the feasible set), and the expected value of the median (under my priors) is the mean.³³

D. Multidimensional Problems

McKelvey (1976) devised the following model, which demonstrates inefficiency in multidimensional spaces. Assume that there are two candidates (X and Y) with two-dimensional policy vectors, \mathbf{x} and \mathbf{y} ,

³¹ There is another variant on the failure of the median voter. Voters may choose an inefficient level of public provision over a set of private alternatives with different levels of expenditures for different groups. But the public provision need not be unitary and monolithic and hence need not be inefficient.

³² Income redistribution due to different taxation policies has great potential for intransitivity, so there may be many possible efficient outcomes. For a discussion of why the outcomes are likely to remain in the Pareto-optimal set, see the next subsection.

³³ The aggregation of preferences may be imperfect in comparison with a situation of zero transaction costs and perfect (or costless) information, but this is an inappropriate standard by which to judge the efficiency of either economic or political markets.

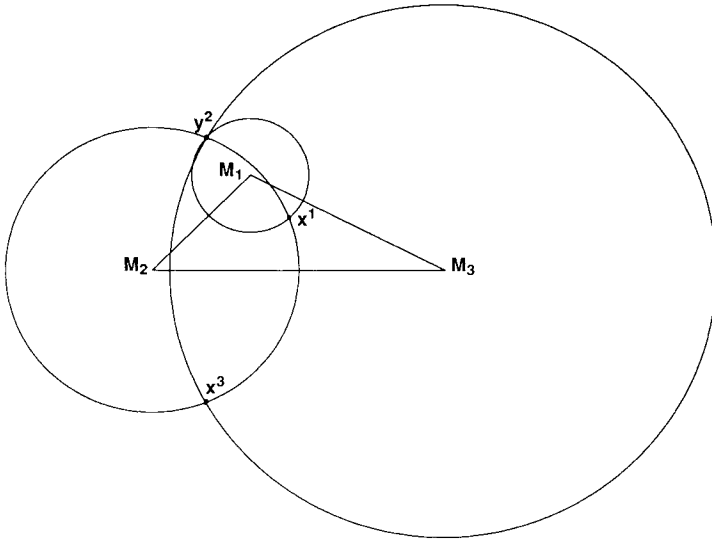


FIG. 1.—The Pareto-optimal set is the triangle formed by the set of most preferred positions M_i . x^1 is the incumbent's position in period 1. Assume that indifferent voters will vote for the opposition (this assumption makes the graphing simpler). Then y^2 is the winning position in the second election (voter 1 and voter 2 will vote for y^2 over x^1), and x^3 is the winning position in the third election (voter 2 and voter 3 will vote for x^3 over y^2). x^3 is further away from the Pareto-optimal set than y^2 .

respectively, and three voters (1, 2, and 3). Each voter has a most preferred point M_i in the policy space with circular indifference curves (utility being a monotonic function of the distance from the most preferred point). Further, assume that the winning candidate must stick with his policy in the next election and that the opposition candidate is concerned only with winning the present election. Then the trajectory of possible winning platforms can go anywhere in the space, and in particular it can go outside the Pareto-optimal set. A particular example is drawn in figure 1: x^1 , the winning position in period 1 and the incumbent position in period 2, loses to y^2 in period 2, which in turn loses to x^3 in period 3.

A slight alteration of the assumptions, however, will keep all trajectories within the Pareto-optimal set.

ASSUMPTION 1. Assume that voter i votes for candidate X according to the probability function $P_i(\|M_i, \mathbf{x}\|, \|M_i, \mathbf{y}\|)$ and for Y with probability $1 - P_i$, where $\|\cdot\|$ is the distance operator, and the probability that i votes for X is strictly concave in \mathbf{x} and convex in \mathbf{y} .

Alternatively, we can interpret assumption 1 as follows. The voters vote with certainty, but the candidates' knowledge of how voter i votes is characterized via assumption 1.

We further assume that candidates X and Y want to maximize their expected vote.

It is now clear that all trajectories will be in the Pareto set defined by the triangle. For given any choice by X (the incumbent), any point y' outside the Pareto set will yield a lower probability of Y winning than some point y within the set. Indeed, we can throw out the awkward assumption that the candidates take turns presenting platforms. Assume that the candidates present their positions simultaneously (and the set of strategies takes place within a closed and convex subset of R^n). Then there exists a unique equilibrium outcome within the Pareto set. The proof follows immediately from our assumptions. Maximizing expected vote is equivalent to maximizing the sum of the individual probabilities. Since these are strictly concave in \mathbf{x} and strictly convex in \mathbf{y} , their sums are strictly concave and convex. We therefore can appeal to a theorem by Nash (1951) on existence and uniqueness. So, at least in this case, we have rid ourselves not only of inefficiency but of intransitivity as well.

Income distribution cannot be characterized in such a space, but a similar analysis can be applied. Ward (1961) demonstrated that any income distribution (which provides an amount of pie strictly greater than zero to a majority of players) can be on the intransitivity set. Thus Ward and McKelvey have similar results, and the solutions to their puzzles are analogues also. Assume that the election is devoted to dividing an income pie in which crumbs may be left on the table. Assume also that the probability that voter i votes for candidate X is an increasing function of the amount of pie that candidate X offers to voter i (if X wins) and a decreasing function of the amount of pie that candidate Y offers to voter i (if Y wins). Assume further that this probability is a strictly concave function of X's offer and a strictly convex function of Y's offer. Again assume that each candidate maximizes his expected vote. Then we shall have a unique equilibrium and it will be efficient. The existence proof is similar to the one made above.³⁴ Efficiency follows immediately (even in the absence of the assumptions required for transitivity) since any crumb needlessly left on the table reduces the expected vote of the candidate.

If we combine the approach used here with that provided in the previous subsection, we can demonstrate that policy is wealth maximizing. Restricting our attention to the case in which voters have circular indifference curves for policy, let us assume that the price that a voter is willing to pay for a policy is independent of wealth (this implicitly assumes that the voter always has some wealth) and that

³⁴ Coughlin (1986) has an existence proof when voters' choices can be characterized by a logistic function.

demand curves are strictly downward sloping (i.e., the closer a position is to a voter's most preferred policy position, the less the voter is willing to pay for an additional movement closer). Assume also that the voters vote probabilistically: the greater the utility that a voter derives from implementation of X's policy and income distribution plan, the greater the probability that the voter will vote for X. Finally, assume that each candidate maximizes expected vote. Then there exists a unique point, P^* , in policy space that will be chosen by majority rule. Given any other policy point, P' , and an income distribution, I' , all voters will prefer P^* and income distribution I'' , which occurs after the voters have paid for the policy move from P' to P^* . Hence the candidates will always choose P^* .

V. Zoning: A Detailed Example of a Well-Functioning Market

Nobody likes zoning. It embodies all the evils of legislative and regulatory bodies. Some people view (exclusionary) zoning as a method for the majority to take unfair advantage of the minority by shifting the costs of urban amenities onto the few developers and future residents who have no vote (Ellickson 1977). Other people view zoning as a method for the minority to take advantage of the majority. Their argument proceeds along the following lines. The costs of development are spread among the whole community, while the benefits accrue to developers and the few holders of vacant land. It will not pay for the diffuse householders to enter the political arena since the benefit to any individual homeowner in doing so is small. In contrast, developers have concentrated interest and lower organizational costs. Hence they will be more successful in the political arena. Other arguments against zoning are based not on the failure of the political process but rather on the inherent problems with zoning per se. Thus it has been argued that the zoning board may be incompetent to handle complex issues involved in zoning and that zoning, being a regulation, is inferior to a system of property rights or liability rules (a court-administered price system).

In contrast to the dismal view of legislative law, the main thrust of the literature devoted to the economic analysis of the common law is that judge-made law is efficient.³⁵ I now demonstrate that zoning is likely to be as efficient as the common law.

³⁵ The majority of articles in the *Journal of Legal Studies* find the common law to be efficient, while virtually all the articles on regulation in the *Journal of Law and Economics* find the legislative law to be inefficient. However, see Rubin (1982), who argues that in the twentieth century both common law and statute law are inefficient.

Judges and zoning boards are either elected by the median voter or appointed by a person who is elected by the median voter. Thus median voter models do not provide us with any theory to explain the relative inefficiency of zoning boards vis-à-vis judges. And since appellate courts can rule various zoning decisions invalid, we would need a theory that explains why appellate courts allow inefficient behavior in one area but not the other.³⁶

Rent seekers will use the courts as much as, if not more than, other areas of the political process. We have no theory to explain why diffuse and disorganized interests will do better in the courtroom than in front of a zoning board. Indeed, in the absence of a class action suit, the unorganized are unlikely to be at all represented in the courtroom. Developers, however, with their organized and concentrated interests, may employ expensive lawyers to argue in front of either a zoning board or a judge.³⁷

Zoning boards are capable of creating implicit trading of property rights, thereby encouraging efficient outcomes. For example, the zoning agency may sell off its right to low-density zoning if the developer pays a high licensing fee or agrees to other stipulations (if this is Pareto superior).

The expertise of the zoning board regarding issues of zoning is likely to be greater than the judge's expertise in nuisance law. Furthermore, the information requirements for zoning are no more difficult than the information requirements for liability rules and property rights. For example, in deciding whether an activity is a nuisance (inefficient), the court must estimate the optimum. Similarly, in deciding whether zoning requirements should prohibit the activity, the zoning board must determine the optimum.³⁸

While there have been numerous articles attempting to account for the invisible hand in the court system, the arguments have been quite weak. Furthermore, to the extent that these arguments are valid, almost all of them apply equally as well to zoning. For example, Posner (1986) argues that court decisions are efficient because judges fear being overridden; but this assumes that they will be overridden either by the legislature if inefficient (implying that the legislature

³⁶ It can be shown that particular sets of liability rules create the same rents as zoning.

³⁷ Posner (1986) argues that courts produce more efficient outcomes than legislatures because courts cannot redistribute wealth. However, courts can distribute wealth between noncontracting parties (neither courts nor legislatures are very effective in redistributing wealth between contracting parties). For example, making trains liable for hitting people who run across their tracks shifts wealth from railroads to pedestrians. Furthermore, the ability to redistribute may encourage Pareto-superior moves by allowing side payments to the party hurt by the law.

³⁸ Ellickson (1973) argues for homeowner associations as an alternative to zoning. But zoning is just a large homeowner association imposed on diversely held land.

promotes efficient laws) or by a higher court. In the latter case, we would then have to explain why Supreme Court justices are interested in efficiency. One possible explanation is that presidents want to promote efficiency and therefore select justices who have shown a commitment to such a goal. If one finds such arguments persuasive, then the analogous argument for zoning should not be too hard to swallow. To wit: zoning board members choose efficient regulations in order to be reappointed and to avoid having their decisions overridden by city councils and courts. As another example, Priest (1977) and Rubin (1977) argue that efficient laws survive because they are less prone to litigation. A similar logic would suggest that efficient zoning regulations survive because they too are less prone to challenge.

Even if the zoning authority had other goals besides efficient solutions to externalities, the zoning authority would be forced to be efficient (within its borders) if the community were in a competitive land market (see Tiebout 1956).³⁹ Thus the importance of competition in disciplining zoning boards is at least as strong as market discipline is on judges.

In this section I have argued that the cases for the efficiency of the common law and the efficiency of regulatory law are likely to stand or fall together. While I have suggested that this will lead to a new approach to politics, those who are more skeptical of the efficiency argument may believe that it will lead to a new approach to the common law.

VI. Organizational Design

There have been a number of studies comparing the technological efficiency of private and public firms. Most, but by no means all, have shown private firms to be technologically more efficient than public firms.⁴⁰ Other studies have shown that government regulations are in-

³⁹ Romano (1986) has shown that corporation law is efficient because states compete for corporate charters. While the location of the articles of incorporation is more mobile than housing, one would still have to ask why cities would not compete by providing better zoning laws.

⁴⁰ Since technological efficiency is not necessarily equivalent to economic efficiency (public firms may choose to satisfy other concerns that are important to voters), efficient political markets could have technologically inefficient public enterprises. Atkinson and Halvorsen's (1986) survey of empirical studies of the relative efficiency of public and private utilities found that there was no significant difference in four studies, that private firms were significantly more efficient in two studies, and that public firms were significantly more efficient in four studies. Borcharding, Pommerehne, and Schneider's (1982) survey of research from five countries showed the private sector in a much more favorable light: 34 studies found the private sector to be more efficient, only four studies found the private sector to have higher costs, and four studies were inconclusive.

efficient. In this section, I argue that some of these studies have methodological flaws and suggest that there are more interesting questions to answer.

It is quite easy to point to any number of inefficient government regulations, for example, rent control.⁴¹ It is also easy to point to examples of efficient government behavior. Hence, believers on the one side or the other can point to corroborating data. However, this is, in general, not the methodology used in establishing whether economic markets are efficient. For example, economists do not typically study individual businesses and consumers and observe whether they implicitly use certain decision rules, such as price ceilings, which are inefficient. Nor do economists tend to perform cost/benefit studies on private decisions in order to see whether these decisions are cost effective. For example, they do not study consumer purchases on energy conservation devices in order to see whether the consumer was "rational."⁴²

The approach that economists typically use in testing their theories of consumer and firm behavior is based on comparative statics. Thus if the price goes up for one good, the demand for it will go down (with real income held constant). Presumably, one would go about testing government behavior in the same way.

Many models of political market failure rely on the inability of the principal (voters) to monitor the agent (politician). If the principal cannot observe the agent, then the researcher cannot either. Thus if government agents tend to be empire builders, researchers cannot observe this. If they could, then the principal could also. And since we are looking at long-term relationships, the principal could correct for such problems. For an example of measuring the agent's behavior, consider the work by Staaf (1977). He shows empirically that the larger the school district, the greater the bureaucratic fat. But if this observation were truly the result of opportunistic behavior, then voters and politicians could make use of this cross-section study (or make their own) and reduce either administrator salaries or the size of the administrations in large school districts. Hence measuring this type of opportunism involves an internal contradiction. When recontracting is possible, the potential for shirking is best measured indi-

⁴¹ Although economists rarely pay much attention, one can always come up with numerous examples of stupidity in the private sector. For example, *Business Week* (August 11, 1986) alleged that the head of Allegheny International engaged in extremely opportunistic behavior and that its board of directors was not exercising any control. As a final example, Downs and Larkey (1986) report that General Motors did not use any of its purchasing power to obtain discounts from the steel companies for sheet metal.

⁴² Some of the studies that have been done have discovered nonoptimal behavior: For example, consumer purchases of safety equipment do not result in equal marginal damage reduction per dollar.

rectly by observing changes in the institutional structure (e.g., piece rate instead of an hourly wage) or by failure of the market to exist at all, not by directly measuring the supposed opportunistic behavior.

These studies of government inefficiency may not ask the most interesting question, however. Once again we take our clue from the study of private markets. We do not have studies seeking to determine whether firms are generally superior (or inferior) to markets. Rather economists try to predict under which circumstances a firm is a superior form of organization to a market. Looking at the sphere of government influence, one can view purchases, taxes, and subsidies as a market solution, regulation as a type of long-term contract between firms (government and the private sector), and the government bureaucracy as the firm (hierarchy). The research agenda should then be, from an efficiency perspective, to determine under what circumstances one of these three modes of government intervention is most likely.⁴³ The answer, of course, depends on transaction costs and the comparative advantage of each organizational form in reducing opportunism. Different policies will yield different institutional responses and different degrees of vertical integration by the government. Consider, for example, the different institutional arrangements for developing the Strategic Defense Initiative (SDI) and producing standard typing paper. There are many suppliers and demanders of standard typing paper. The potential for opportunism by either the government or the suppliers of typing paper is relatively slight. It is difficult for either side to "hold up" the other side by taking advantage of the monopoly power established by a contract to deliver, and it is relatively easy to determine the quality of the item without having to observe the production process. We do not observe many firms producing their own typing paper and we would not expect the government to engage in this activity either. In contrast, the development of SDI does not allow for off-the-shelf purchases of weapon systems. At a minimum we would expect very involved contracting. Determining the efficient choice between government and private development would require a much more involved study and would parallel the analysis of whether and to what degree the suppliers or demanders of a product provide the requisite information.

Another avenue of research is to provide efficiency explanations for the structure of political institutions. For example, why do we have a federal system and not vote directly for members of the cabi-

⁴³ Power relations might determine the amount of control but not the degree of vertical integration, just as wealth (the initial allocation of rights) does not determine the final allocation of rights (when transaction costs are low) or the organization of exchange.

net? I shall now once again consider political parties in light of this approach.

Under proportional representation (majority rule) systems (e.g., France), parties may have to compromise their positions in order to form a majority government. This compromise takes place after the representatives have been elected. The role of the party and of ideology is very important under such a system because it is relatively difficult for a voter to judge the role of any candidate in any compromise. Thus the voter will tend to rely on the party's reputation and ideology as an indication of how the candidate will behave. In contrast, under plurality rule systems (e.g., U.S. presidential elections), the winner need not compromise with the loser; rather the compromise takes place with the voters (the well-known convergence to the median). Hence, the role and influence of the party are lessened. As a consequence, plurality rule systems have significantly less centralized political parties.⁴⁴

VII. Concluding Remarks

Behind every model of government failure is an assumption of extreme voter stupidity, serious lack of competition, or excessively high negotiation/transfer costs. Economists are very suspicious of similar assumptions regarding economic markets. This skepticism should be carried over to models of government behavior.

To say that democratic political markets tend toward efficiency does not imply that political markets are superior to economic markets; rather it implies that democratic governments will allocate to the economic markets those tasks in which the economic market is most efficient. Nor does it say that democratic markets are just, for they merely aggregate (equally or unequally) the preferences of the participants in the political process. Nor does it imply that people are not interested in power or that they desire efficiency for its own sake, only that self-interest will lead to efficient results. Nor does it imply that mistakes are never made, just as efficient economic markets do not imply that consumers and businesspeople never err. Economists do not dwell on business error or pathological consumer behavior (e.g., compulsive drinking); instead economists analyze the normal and look for efficiency explanations for abnormal market behavior. Similarly, they should not dwell on the mistakes made by political markets.

The weakness of the imperfect market view of democratic societies can be illustrated by applying the same view to another society: an

⁴⁴ For another example, see my earlier discussion of the legislative branch in Sec. IVB.

anthill. One could argue that the military is too large in an anthill; that there is a coalition between the military and the queen to inefficiently shift the costs onto the workers, who are poorly informed about the defense industry; and that prisoner dilemma problems, insufficient internal competition (there is only one queen), and high negotiation/transfer costs prevent an efficient outcome from occurring. Perhaps there are good reasons for such a view to be inappropriate for ant societies and yet appropriate for political units (e.g., there may not have been sufficient time to have weeded out inefficient democracies, the competition between human societies may not be so fierce that only the fittest survive, or the members are not genetically related), but I find it strange that our only models of group (and at times individual) irrationality are applied to the only animal capable of rational thinking.

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