Democracy, the Market, and the Logic of Social Choice

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This article compares the types of knowledge democracy and the market require to rationally allocate resources. I argue that high levels of public ignorance and voters’ inability to compare the effects of different parties’ policies make it difficult for parties and elections to rationally allocate resources. Markets mitigate these problems because the simultaneous existence of multiple firms’ products facilitates comparisons that mimic the conditions of scientific experimentation. The economy of knowledge involved in such comparisons indicates there are epistemic advantages to using firms and markets, instead of political parties and elections, to allocate scarce resources. However, in contrast to arguments that markets merely provide better information than political decisions, I argue markets’ epistemic advantages are derived from the way they facilitate comparisons that minimize decision makers’ need for knowledge or understanding.

Few men ever really understand their institutions.

—William Riker

The optimal method for allocating scarce resources among competing ends constitutes one of the most general questions occupying the social sciences. While different societies have used various political and economic systems to allocate resources, modern societies rely on two institutions, democracy and the market, and two organizations, private firms and political parties, to produce and distribute goods (Anderson 2006; Arrow 1963; Hall 1997). The relative merits of these institutions and organizations constitute enduring debates within the social sciences.

Modern institutions and organizations have been studied from a range of perspectives. Social choice theorists have examined problems associated with preference consistency, transitivity, and collective action (Arrow 1963; Black 1958; Olson 1965; Riker 1982; Shepsle 1989). Normative and epistemic democratic theorists have examined how democracy aggregates information and the nature of deliberation (Benhabib 1996; Cohen 1986; Dryzek 2001; Fishkin 1993; Habermas 1998; Knight and Johnson 1994; Landemore 2012; Manin 1987; Ober 2013). Empirical public opinion specialists have examined how voters process information and use various heuristics when making political decisions (Kahneman, Slovic, and Tversky 1982; Kuklinski et al. 2000; Lupia 1994; Lupia and McCubbins 1998; Popkin 1994; Sniderman, Brody, and Tetlock 1991).

While many have studied how knowledge interacts with democracy, voters are often ignorant of basic political information. Voters cannot name their representatives, describe public policies, or explain their effects (Achen and Bartels 2004; Campbell et al. 1960; Caplan 2007; Converse 1964; Delli Carpini and Keeter 1996; Kinder 1998; Somin 1998). Some suggest widespread public ignorance is among the strongest findings of the social sciences (Bartels 1996, 194; Friedman 1998, 397).

Although voter ignorance has been accepted as an empirical finding, some argue voters can use information shortcuts and heuristics, the position of social groups, cues from trusted opinion leaders, values, and the miracle of aggregation to make decisions “as if” they were derived from larger amounts of information (Brady and Sniderman 1985; Conover and Feldman 1989; Erikson, Mackuen, and Stimson 2002; Page and Shapiro 1992).

Indeed, politics is hardly unique in this regard. Most social relationships exhibit imperfect information...
and function on the basis of various decision heuristics (Lupia and McCubbins 1998). While voters know little about politics, consumers are typically ignorant of private information, such as CEOs’ names (Akerlof 1970; Morgan 1978; Nelson 1970; Scitovsky 1950; Stiglitz 1979). Public ignorance is merely the political manifestation of our general ignorance of the social world. For it is difficult for anyone to know if doctors are true experts, whether bridges and roads are properly built, or how complex consumer goods, such as computers, function (Giddens 1990, 28–29).

Although modern societies exhibit little diffusion of scientific understanding, they have developed institutions that allow laymen to make use of specialists’ technical expertise without having to acquire the knowledge specialists possess. While voters may use various psychological heuristics to make political decisions, this article examines how different social institutions require different kinds of knowledge to rationally allocate resources (Dollery and Worthington 1996; le Grand 1991; Wolf 1979, 1981, 1988).

Specifically, this article examines a general problem associated with social choice under conditions of uncertainty: the difficulty in recognizing the optimal means to our ends given our inevitable ignorance of the social world. The article compares the kinds of knowledge that democracy and the market require to rationally allocate resources and argues that democratic politics exacerbates the effects of ignorance on human affairs. However, the epistemic problems created by democratic politics are mitigated by markets, but for reasons that are poorly understood.

Seeking to explain why ignorance has different effects depending upon whether choice is aggregated through democracy or the market, the rest of this article is organized as follows. The first section defines concepts such as democracy, the market, firms, and political parties. The second section uses a thought experiment to explain how certain characteristics of democratic politics, specifically the singular, or “exclusive,” nature of political decisions, creates two problems. First, voters must try to predict the effects of parties’ policies before they can be implemented and their effects observed. Second, voters cannot compare the costs and benefits of parties’ policies, making it difficult to know whether a party has produced policy effects efficiently or whether another party could have produced similar effects at a lower cost.

In democratic politics, voters must try to analyze theories purporting to explain the causes of their dissatisfaction and then attempt to predict whether a party’s policies address the causes of their dissatisfaction efficiently. Since these predictions must be performed before parties’ policies are implemented and their costs and effects can be observed, democratic politics exacerbates the effects of ignorance on human affairs.

This argument applies insights from the socialist calculation debate to critique aspects of democratic politics. Although the socialist calculation debate has undergone five distinct stages (Roemer 1994, chap. 4), this article offers a sixth iteration of this debate by comparing the epistemic characteristics of democracy and the market and does not simply examine the advantages of centralized or decentralized decision procedures.

The third section argues that additional knowledge problems confront political parties producing the “supply” of policy effects. These problems are derived from the ambiguous information that election margins reveal about voter satisfaction with parties’ policies. Since parties produce large policy “bundles,” including disparate goods such as national security, labor policy, and social welfare, election margins reveal information about the entire policy bundle and not the individual policies, composing the bundle. This makes it difficult for parties to use election margins to reveal how to allocate resources among the individual policies they produce.

The fourth section argues that instead of trying to inform voters of complex branches of scientific knowledge, certain institutions and organizations minimize the amount of knowledge individuals need to make rational decisions. Specifically, markets and firms exhibit informational advantages over parties and elections because they facilitate comparisons that allow consumers to judge the effects produced by specialized scientific expertise without having to understand the knowledge responsible for producing these effects. The economy of knowledge involved in such comparisons, and the rationalizing effects these comparisons have upon the population of firms, causes markets to mitigate the effects of ignorance in ways that are unrecognized and largely unexplored (Friedman 1998; Pennington 2003; Somin 1998).

The fifth section discusses the argument’s general theoretical ramifications and qualifies its scope, emphasizing that the informational critique of democratic politics must be conceptually divorced from government’s

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1 I focus on voters’ selection of political agents to rationally allocate resources and ignore arguments regarding representation or political actors’ motives for holding public office (e.g., Mansbridge 2009; Pitkin 1967; Rehfeld 2009).

Indeed, the vast wealth inequalities that markets generate may justify wealth redistribution to facilitate individuals’ ability to “exit” displeasing social relationships without having to understand the causes of, and political remedies for, these relationships (Dowding et al. 2000; Hirschman 1970; Warren 2011).

Addressing general theoretical questions regarding modern social institutions and organizations, and building on insights from certain positive theorists (e.g., Dahl and Lindblom 1953; Lindblom and Cohen 1979), this article examines specific problems associated with knowledge, democracy, and the market and presents a method for mitigating the effects of ignorance on human affairs.

**Conceptual Definitions**

This section of the article defines democracy, the market, the firm, and political parties. While concepts are often defined in ways that are unrealistic, the lack of realism is not intended to generate accurate predictions (Friedman 1953) but to maximize the thought experiment’s conceptual utility by deliberately understating the knowledge problems associated with democracy.

Political parties are typically defined by their electoral operations, their role in government, and their organizational functions (Aldrich 1995; Crotty 1991; Key 1964; Strom 1990; Weisberg 2002). I define political parties on the basis of their authority and the institution society uses to select them (Schattschneider 1942, chap. 3). Political parties are defined as organizations that compete for the ability to produce exclusive goods through the state. The state is defined as a human community that monopolizes the ability to make decisions that cannot be legitimately appealed (see Dahl and Lindblom 1953, 42; Downs 1957, 22–23). Exclusive goods are defined as goods whose substitutes are legally barred from production.

It is important to recognize that exclusivity can be an inherent characteristic of a good. For example, foreign policy is an exclusive good because it is impossible for states to implement multiple foreign policies toward other states simultaneously. However, exclusivity is often a function of the organization that produces goods. For example, the United States Postal Service (USPS) renders mail delivery an exclusive good by preventing private firms from competing with it, even though mail delivery could be privatized. While many public goods are exclusive, exclusive goods are not necessarily public goods; this characteristic is conferred whenever parties produce goods.

In addition to their unique form of authority, parties are also conceptually distinguished by the mechanism society uses to select them: democratic elections. Democracy is defined as a method of selecting political parties based upon the competitive struggle for votes (Medearis 2001, chap. 4; Schumpeter 1942, 269). While other definitions of democracy focus on different aspects of the political process (e.g., Dahl 1971; Pateman 1970; Przeworski 1991; Shapiro 2003), I use Schumpeter’s definition because it places minimal informational requirements upon voters, merely requiring them to evaluate parties that are competing for power. If we define democracy to require voters to deliberate in ways that meet certain criteria, such as justifying their preferences in ways that are universalizable or meet standards of reasonableness, voters must possess information beyond which party they prefer, and the informational demands they face will only increase.

I ignore empirical questions regarding party influence over government and unrealistically assume parties exhibit homogeneous preferences, perfectly control their members, and are faithful agents of the electorate that do not manipulate public opinion. While these assumptions are unrealistic, introducing greater degrees of realism will exacerbate the knowledge problems exhibited by democratic politics. For if parties cannot control their members, shirk, or manipulate public opinion, they will be more difficult for voters to control (Gilens 2005; Hacker and Pierson 2005a; Jacobs and Shapiro 1996; Stokes 1998).

In addition to political parties, modern societies use private firms to produce goods and services. Unlike parties, firms do not compete for exclusive authority over goods; rival firms’ products are sold simultaneously, and firms compete for relative shares of markets. Parties’ production of exclusive goods, and the absence of this form of authority among firms, constitutes the “fundamental difference” between economic and political competition (Stigler 1972, 98; Miller 1999).

Aside from possessing different kinds of authority, firms and parties face different selection mechanisms. While elections grant parties authority over exclusive goods produced by the state, market sales grant firms control over relative shares of markets. The market is defined as a method for selecting among competing firms on the basis of the competitive struggle for consumers’ dollars.

It must be emphasized that I do not rely upon neoclassical assumptions regarding perfectly competitive markets.
or perfectly informed consumers. Instead, I use an Austrian depiction of the market system as an entrepreneurial discovery process where competition is never perfect and consumers are never perfectly informed (Boettke 2001, chap. 3, 2002; Hayek 1948, chap. 5; Kirzner 1973, 1985, 1997). By depicting the market system as a quasi-evolutionary discovery process exhibiting imperfect information and imperfect competition, I accept informational critiques of neoclassical models of the market, critiques of the first and second theorems of welfare economics (Greenwald and Stiglitz 1986; Stiglitz 1994, chaps. 3, 4), and Grossman and Stiglitz’s (1980) arguments that market prices exhibit imperfect and asymmetrical information.

Despite recognizing these imperfections and the problems markets face with externalities and public goods, I focus on examining whether knowledge problems are magnified depending upon the institution used to aggregate social choice. Thus, I do not simply examine whether deviations from certain ideal conditions occur, but I focus on determining whether certain institutions are relatively more effective in coordinating social action when information is imperfect.

I argue markets and elections are similar institutions, as both firms and parties compete to collect dollars or ballots from consumers or voters in exchange for goods. Firms and parties are granted different types of authority over the production of goods depending upon how many dollars or ballots they collect. Democracy and the market are distinguished by quantitative difference in the distribution of “votes” (ballots or dollars), the frequency of elections or market “sales,” and the number of “products” (goods or policies) produced by rival organizations (Perry and Rainey 1988, 196). However, these differences have important implications for the types of knowledge democracy and the market need to rationally allocate resources.

### Elections and Voters’ Demand for Policies

This section of the article uses a thought experiment to examine the knowledge that voters must possess if they use parties and elections to produce a private good, a fuel-efficient car. The thought experiment focuses on a private good because public goods’ costs and benefits are difficult to measure and because voters cannot experience them in the same way as private goods (Elster 1986, 111; Friedman 1998; Wolf 1981). Thus, focusing on a private good, and not the public and regulatory goods that exhibit weaker forms of information feedback, will understate the knowledge problems facing democratic politics.

While the thought experiment examines the difficulties associated with improving a private good’s efficiency, voters might seek other ends, such as justice or equality. The thought experiment focuses on efficiency because of its conceptual simplicity, and the difficulty in measuring other ends, helps illustrate the knowledge problems facing democratic politics.5

Finally, the thought experiment assumes the election only focuses on the production of a fuel-efficient car and excludes all other issues. Since parties produce multiple policies, this assumption is unrealistic. However, since knowledge problems are exacerbated if voters must evaluate and make trade-offs among multiple policies, this assumption also understates the knowledge voters need in democratic politics.

Assuming voters want to improve a car’s fuel efficiency, what kinds of knowledge would be necessary for parties and elections to achieve this end? If democratic politics were used to try to improve the car’s fuel efficiency, voters would use elections to select a party that would be given the authority to produce cars, and during elections, rival parties would propose different methods for improving the car’s fuel efficiency. For example, parties might endorse different engine designs, such as changing the car engine’s cylinders, using different ball bearings, or using innovative materials in the engine’s camshafts. Other parties might endorse altering aspects of the cars that were unrelated to the engine’s design, for example by reducing the car’s weight.

For voters to select a party that improves the car’s fuel efficiency, they must overcome two primary difficulties. First, voters must accurately predict the effects of rival parties’ policy proposals before the party’s policies can be implemented and their effects observed. Since parties compete for authority to produce exclusive goods through the state, rival parties’ policies cannot be implemented simultaneously, and voters cannot observe the effects of different parties’ policies until after they have made their electoral decisions, the new party is placed in power, and its policies are implemented.6

In the context of the thought experiment, voters would have to accurately predict the effects of different

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5 For a discussion of this use of thought experiments, see Popper ([1935] 2002, 466–67).

6 This suggests that the characteristics of “search” goods that can be experienced prior to their purchase and “experience” goods that are consumed after their purchase may be conferred by the type of organization producing them (see Laffont and Tirole 1993).

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4 See Kuhn (1979) and Sorensen (1992) for thought-experiment methodology.
parties’ proposals for changing the engine design, and they would have to do so before the engine is redesigned and the effects of the alterations are observed. If voters do not understand which engine components need to be altered to improve the car’s fuel efficiency, they could elect a party into power that would introduce changes that did not improve fuel efficiency.

Yet for voters to make such predictions, they must understand significant amounts of scientific knowledge regarding engine design, and they must draw correct inferences from this information. Since only one car is produced at a time, voters cannot compare different parties’ car designs and select the one they find preferable, but they must try to predict which party’s proposed alterations will have the desired effects (see Tirole 1994). The difficulty in making these predictions is derived from parties’ exclusive authority over the production of policies and constitutes the principal knowledge problem exhibited by democratic politics.

However, voters also confront a second problem. In addition to having to predict the effects of parties’ policies before they are implemented, voters must also determine whether the effects of parties’ policies are produced efficiently. The problem of rational resource allocation does not simply involve whether successive improvements can be made to the quality of goods. For voters to use parties and elections to rationally allocate resources, they must identify parties whose policies improve the quality of goods without stripping resources from the production of other, more necessary, goods.

For example, building the entire car out of expensive, but very light materials, such as titanium, would improve the car’s fuel efficiency. If the new car were built entirely of titanium, voters would observe the car’s fuel efficiency improved after the new party was elected into power. Yet this improvement would not demonstrate that voters solved the allocation problem because the high cost of titanium could have resulted in the unnecessary sacrifice of other goods. Voters are not simply trying to select parties that improve the quality of goods; improvements must be generated without unnecessarily stripping resources from the production of other, more necessary, goods.

During elections, voters must try to predict whether a challenging party will improve the quality of the incumbent’s goods before they are elected into power and the effects of their policy decisions can be observed. After trying to make these predictions, voters must finally somehow determine whether the improvements a party produced were “worth” the costs of doing so without any metric for measuring trade-offs among different goods.

Unfortunately, these problems persist even if voters are retrospectively evaluating the incumbent party (Ferejohn 1986; Fiorina 1981; Kiewiet and Rivers 2005; Kinder and Kiewiet 1979; Powell 2000). Retrospective voting does not solve these knowledge problems for two reasons. First, the singular nature of political decisions makes it difficult for voters to determine whether they should be satisfied with the effects produced by the incumbent party’s policies. Since voters only observe a single set of policies and social conditions, it is difficult for voters to know whether another party’s policies would have produced better effects at a lower cost.

In the case of the thought experiment, it is difficult for voters to know whether they should be satisfied with the fuel efficiency of the incumbent party’s car. It is possible that, given existing scientific knowledge, the incumbent party has maximized the engine’s efficiency, yet it is also possible that another party’s engine would be more efficient and cost less. However, it is difficult for voters to know whether they should be satisfied with the effects produced by the incumbent party because they cannot observe the fuel efficiency of other parties’ cars.

Since political parties cannot produce their cars simultaneously and then allow voters to compare them, voters must try to conduct counterfactual thought experiments regarding how another party’s policies would have influenced fuel efficiency. Voters must then try to draw correct inferences from significant amounts of scientific knowledge regarding the effects a different party’s policies would have produced. Yet these counterfactuals cannot be tested in empirical reality due to the singular and unrepeatable nature of political decisions (Fearon 1991, 173).

While voters can compare the social conditions that existed under two different parties, after a party is removed from office and replaced with another, social conditions, electoral preferences, and the stock of scientific knowledge may change during the two periods in ways that make them difficult to compare. In the case of the thought experiment, the science of engine design might have changed by the second election, fluctuating gas prices could make fuel efficiency more or less imperative, and advances in alternative fuels or new means of transportation may have altered the importance of a car engine’s fuel efficiency. Such changes make it difficult to compare the effects produced by rival parties’ policies after elections.

However, retrospective voting faces a second, and more significant, problem. If voters are trying to improve the goods parties produce, and not simply penalize parties for producing displeasing effects, they must determine whether another party’s policies will be better than the incumbent’s. If voters are retrospectively penalizing parties for producing displeasing effects without any knowledge of other parties’ policies, they could elect
a party into power whose polices were worse than the incumbent’s.

To prevent this from occurring, voters must have prospective knowledge regarding the comparative effects of different parties’ policies and must make predictions that experts are often incapable of rendering (Tetlock 2005). Although these problems may be exacerbated by voters’ low incentives for collecting information and partisan bias, the epistemological problems created by the singular nature of political decisions would persist even if voters had high incentives to collect information and were completely unbiased (Bartels 2002; Jerit and Barabas 2012; Taber and Lodge 2006).

Unfortunately, the knowledge problems facing voters are exacerbated as the thought experiment is made more realistic. While the thought experiment focuses on the production of a single private good, parties typically produce multiple public and quasi-public goods. Introducing these goods into the thought experiment complicates voters’ calculations because these goods generate weaker forms of information feedback than private goods (Jervis 1997, chap. 4).

Consider the case of national security: if a state produces a new weapon system, it is difficult for voters to determine how this decision influences national security. The new weapon system might increase a nation’s security or it might have been a waste of resources, yet unless it is tested against the country’s adversaries, there are few ways to reveal this information.

Similar problems exist with quasi-public goods, such as market regulations, that involve social conditions that can be more precisely measured. Although conditions such as aggregate unemployment rates or GDP growth can be measured, it is difficult for voters to determine how regulatory decisions influence these conditions because a single set of social conditions is correlated with the incumbent party’s policies. The singular nature of the social conditions correlated with the incumbent party’s policies makes it difficult for voters to observe what would have happened had the incumbent party’s policies never been implemented.

Consider a party’s attempts to limit unemployment during a recession. If unemployment is 8%, and after a party implements deficit spending to limit unemployment the unemployment rate climbs to 10%, some might conclude the party’s policies have failed. However, this inference is not justified because unemployment might have reached 15% had the party’s policies not been implemented or if a different party’s policies were implemented. This problem exists because voters cannot compare the effects of different parties’ policies, and this makes it difficult to assess the incumbent party’s effectiveness.

Yet this example does not capture the full complexity of the problem because unemployment can be reduced at the expense of other ends or through trade-offs with other goods or conditions. For example, aggressive deficit spending could curtail unemployment, but it might generate inflation that imposed disproportionate costs on different voters at a later point in time. These costs could be unequally allocated, for example, falling upon voters who were older or younger, held debt, or were employed in certain sectors of the economy. Even if voters understand the causal relationships between variables such as inflation and unemployment, they may have difficulty calculating how parties’ policies influence their welfare (Arnold 1992).

Of course, these problems may be more significant for certain types of goods. For example, it may be relatively easy for voters to reward parties that act to avoid famines or other situations where the actions necessary to address a social problem are relatively simple (Sen 1981, 1999). However, Sen (1999, 154) recognizes that although democracy is relatively effective in preventing famines and other disasters whose causes are simple and easy to understand, democracy is less effective in addressing the far more numerous complex problems facing modern societies. The regulation of market economies, optimal responses to environmental problems, trade negotiations, decisions about war, and diplomacy with distant and culturally dissimilar societies involve complicated and counterintuitive social processes that often cause knowledgeable experts to err (Jervis 2011; Tetlock 2005).

Finally, the thought experiment is unrealistic because the election is conducted over a single issue. In reality, parties produce large policy “bundles” that include multiple goods ranging from environmental protection and labor regulations to foreign policy, education, and health care. If the thought experiment is altered to involve multiple goods, voters’ electoral decisions become significantly more complex because they must attempt to calculate trade-offs between the costs and benefits of the individual policies composing the parties’ policy bundle.

This dramatically compounds the knowledge problems voters face because there is no metric for calculating trade-offs between “units” of the goods parties produce (Dahl and Lindblom 1953, 173). For example, it is difficult to compare a unit increase in medical insurance with a unit decrease in environmental protection, and it is even more difficult for voters to make these calculations across multiple issues. As Almond (1960, 6) notes, while in both markets and elections the public “buys” goods or policies “produced” by rival organizations:
[T]he policy market is not as simple as an economic market. There is, unfortunately, no simple policy currency in which the cost of alternative policies can be computed. The policy products cannot be felt, tasted, or weighted. They are predictions of consequences of action, hardly a tangible product with regard to which consumer preferences can easily be registered.

Elections require voters to analyze complex social phenomena and choose among rival parties before their policies are implemented and their costs and benefits observed, and they must do so lacking metrics for measuring trade-offs between parties' policies (Downs 1957, 45). While the difficulty of these calculations is exacerbated by social complexity and parties' production of multiple policies, these problems are ultimately derived from political parties' exclusive authority and voters' corresponding inability to compare the costs and effects of rival policies simultaneously.

**Political Parties and the Supply of Policy Effects**

While voters confront knowledge problems during elections, additional problems confront parties producing the “supply” of policy effects. Political parties and private firms confront an identical allocation problem: both organizations are attempting to produce goods or policies to satisfy popular preferences, but they are uncertain about how to make their goods or policies more appealing than rival organizations (Kirzner 1985; Riker 1984; Roemer 2001; Schlesinger 1984, 382; Sheingate 2003).

Despite facing an identical allocation problem, parties and firms have different methods for revealing social satisfaction with the goods they produce. Customer satisfaction with firms’ products is revealed by market prices and profit-loss calculations; voter satisfaction with parties’ policies is revealed by election margins (Wilson 1991, chap. 7). While both market prices and election margins are quantitative metrics revealing social satisfaction with rival organizations, these metrics reveal different kinds of information, and these differences have important implications for the rationality of parties’ and firms’ allocation decisions.

To illustrate these differences, we return to the thought experiment and relax the assumption that the election focuses on a single good. This is done to introduce a higher degree of realism into the analysis and because the information problem facing parties is exacerbated when they produce multiple policies. Two additional assumptions are introduced. First, unlike public-choice theorists, I make no assumptions regarding parties’ motives. Parties may be motivated by a sense of public duty or narrow self-interest, just as private entrepreneurs may be self-interested or motivated to create new products simply for the thrill of invention. This assumption is made to demonstrate that the knowledge problems facing parties exist independently of their incentive structures.

Second, market prices are not assumed to perfectly incorporate all available information (e.g., Fama 1970). It is critical to deny the “perfect” functioning of market prices and to emphasize that in certain markets, such as financial markets, the information conveyed by prices is systematically less informative than prices for other goods (Caginalp, Porter, and Smith 2000; Grossman and Stiglitz 1980; Smith, Suchneke, and Williams 1988). Instead of assuming prices perfectly incorporate all available information, my analysis focuses on comparing the information conveyed by market prices with the information revealed by election margins.

Markets and elections are deeply similar methods for selecting among rival organizations. During both elections and market sales, voters and consumers select organizations, parties, or firms to produce goods in exchange for slips of paper, ballots, or dollars. Markets and elections are distinguished by quantitative differences in the number of organizations that produce goods simultaneously, the degree of inequality in the distribution of ballots or dollars, and the frequency of market sales and elections.

In addition to these quantitative differences, profit margins and election margins communicate qualitatively different types of knowledge. While market prices reveal information regarding consumers’ comparisons of rival firms’ products, election margins reveal voters’ comparisons of the incumbent’s policy bundle with the hypothetical effects that might be produced by another party’s bundle. Since different parties’ policies cannot be implemented simultaneously and compared, voter satisfaction with the incumbent party is measured relative to the hypothetical satisfaction they predict they will experience if another party is voted into power.

These differences have implications for parties’ ability to assess how their policies influence social welfare. Specifically, since parties produce large policy bundles and voters possess single ballots, elections reveal little information about social satisfaction with the individual policies comprising the incumbent party’s policy bundle. Election margins reveal information about social satisfaction with the aggregate effects produced by the incumbent party’s policy bundle, but voters’ evaluations of the individual policies comprising the bundle cannot be
disaggregated from the signal the election margin communicates to a party. This makes it difficult for parties to use election margins to determine how to allocate resources among the individual policies they produce, a problem that exists independently of the difficulty of collecting costly information that exists but cannot be known in its entirety (e.g., Hayek 1945; Stiglitz 1961, 2000).

The informational problem confronting parties will be illustrated by examining the information election margins reveal when parties produce multiple goods. If parties were competing to produce fuel-efficient cars, foreign policy, and public education, how would they know how to direct resources among these policies? If an incumbent party won an election focused on the production of fuel-efficient cars, foreign policy, and public education, the party would observe that voters preferred their provision of these goods to other parties.

However, it is difficult for the party that won the election to discern social satisfaction with their provision of the individual policies comprising this policy bundle because multiple interpretations could be given for why the party won the election. Voters could be satisfied with the incumbent party’s production of the car but dissatisfied with their foreign policies and provision of education. Alternatively, voters could be dissatisfied with the party’s foreign policy but satisfied with their car and environmental policies. Yet it is also possible that voters are ambivalent about foreign policy and the car’s fuel efficiency, but they care so intensely about education that they want to redirect all the resources consumed by foreign policy and car-engine design to education policy.

Since these policies are bundled together and voters cannot evaluate them individually, the election margin cannot reveal which of these interpretations is correct, nor can the election reveal the specific amount of resources voters want to devote to each of the three policy areas. Yet for political parties to allocate resources to satisfy social preferences, parties must determine which interpretation accurately describes voters’ preferences. For if a party were elected to power because voters wanted the party to alter foreign policy—but not any of the other policies—and the party did not realize this, the party could allocate resources in ways that did not reflect social preferences.

Voters’ possession of single ballots and parties’ production of policy bundles containing multiple goods make it difficult for elections to reveal voters’ satisfaction with the individual policies parties produce. This makes it difficult for parties to know how to allocate resources among policies, and this problem becomes more severe as the number of policies parties produce increases. While firms often bundle products together to desensitize consumers to their costs, this problem is more severe in politics because parties produce a far greater number of goods than firms (Adams and Yellen 1976; Soman and Gourville 2001).

Nor can public opinion polls or cost-benefit analysis overcome these problems. Despite improving the accuracy of information about public preferences (Geer 1996), correlations between shifts in public preferences and policy (Page and Shapiro 1992), the ideological tenor of macro-opinion (Erikson, MacKuen, and Stimpson 2002), and whether voters want “more” or “less” of a given policy (Wlezien 1995; Soroka and Wlezien 2005), polls do not reveal the specific “prices” voters are willing to “pay” for individual policies. Similarly, cost-benefit analysis suffers from the simple problem that the price voters are willing to pay for goods, and the benefits they receive from them, cannot be known prior to their production and consumption.

Nor can input prices be used to mimic the market mechanism by setting publicly produced goods’ marginal prices to equal their marginal costs (Becker 1958; Musgrave 1969; Roemer 1994; Sunstein 2002). Theoretically, input prices can be used to calculate profit margins for publicly produced goods. For example, by ordering the United States Postal Service (USPS) to generate positive profits, and by using input prices to calculate marginal costs, the USPS could be evaluated in ways that mimic the market process. However, the information revealed by these calculations becomes ambiguous in the absence of rival firms’ products (Wolf 1979, 114, 116). If the USPS believes consumers would be made better off if mail were delivered more quickly at a slightly higher price, and after adjusting their delivery methods, their profits increased, the higher profit margin could indicate that society preferred this new combination of resources. Unfortunately, the USPS’s exclusive authority over mail delivery makes it difficult to determine what profit margins reveal about social welfare. For it is possible that society was less satisfied with the higher cost of quicker mail delivery, but since they have no alternative way of delivering mail, they must pay whatever prices the USPS charges. Since consumers cannot “exit” from their

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7 Milkman et al. (2012) argue bundling may reduce voters’ loss-aversion bias; however, they assume the costs and benefits of individual policies is known, a point that I am suggesting is the basis of the allocation problem facing parties.

8 While voters may have consistent budgetary preferences (Hansen 1998), consistency cannot reveal voters’ preferences for specific levels of taxation, expenditure, or policies.

9 For cost-benefit analysis, see Sunstein (2002).
relationship with the USPS, the information conveyed by a profit margin becomes difficult to interpret.

Thus, even if input prices and cost-benefit analysis are used to determine the marginal costs of an organization’s products, when an organization possesses exclusive authority, it becomes difficult to interpret what a profit margin reveals about an organization’s satisfaction of social preferences. Although the difficulty in accurately pricing public goods is well known, this inferential problem is created whenever an organization gains exclusive control over the production of private goods as well.

Nor does decentralization, “voting with your feet,” federalism, or using state governments or cross-country comparisons solve these problems (Tiebout 1956). Decentralization, federalism, and foot voting do not solve the knowledge problem for two primary reasons. First, heterogeneity among states’ characteristics frustrates voters’ ability to draw correct inferences about policy effectiveness because policies that are effective in one state may not be effective in another. Voters’ inability to observe how different states’ characteristics may influence policy effectiveness frustrates the replication of quasi-experimental conditions of treatment and control.

Second, voters within states may exhibit different preferences even if other aspects of the states are similar. For example, one state’s voters might be risk averse and hence be, for example, more willing to accept costs associated with certain types of social insurance than voters living in another state. If voters’ preferences are dissimilar across states, it may be difficult to evaluate rival policies’ effectiveness even if states are similar along other dimensions. Even if citizens “vote with their feet,” moving to new areas where parties implement different policies, it is not clear whether changes in voters’ utility are due to specific parties, policies, or other aspects of the new area they move to. These problems exist in addition to the high costs and the high degree of policy bundling that voters confront when they move to a new area. For these reasons, decentralization, foot voting, and policy experimentation among states may not solve the knowledge problems facing democratic politics.

These problems, of course, may be more severe in certain cases. For example, it may be easier to make comparisons between states with similar cultural, economic, political, and demographic characteristics or if a policy issue is simple. However, such comparisons still face the basic problem posed by the singular nature of political decisions: voters cannot observe what would have happened had a policy not been implemented, making it difficult to draw correct inferences regarding policy effectiveness from other states or levels of government.

While different political decisions may be disaggregated at different levels of government—for example, giving certain responsibilities to governors or school boards—disaggregation does not address the basic problem caused by the exclusive nature of political decisions. Although disaggregating political decisions may mitigate the effects of bundling, the basic inferential problem posed by the singular nature of political decisions persists.

Furthermore, foot voting and various forms of decentralization may exacerbate voters’ knowledge problems, requiring them to collect and interpret political information at different levels of government and in different geographic areas. This indicates that knowledge problems will remain, or may be exacerbated, if specific responsibilities are delegated among actors at different levels of government.

While voters have difficulty predicting policy effects during elections, the ambiguous information revealed by election margins makes it difficult for parties to rationally allocate resources among the individual policies they produce. Although these problems are compounded by parties’ production of multiple policies and the complexity of modern political decisions, they are derived from parties’ exclusive authority over the production of goods. Since exclusive authority is a fundamental characteristic of political parties, the problems confronting both the “supply” and “demand” sides of democratic politics appear largely intractable.

Markets, Firms, and the Knowledge Problem

While democratic politics exhibits difficult knowledge problems, this section of the article argues that markets mitigate the effects of ignorance in ways that remain poorly understood. Although the idea that markets and prices aggregate information has a long history in the social sciences, this section develops new explanations for why markets mitigate the epistemic problems facing democratic politics, and also offers a new explanation regarding the information revealed by the market-price mechanism.

I argue the absence of exclusive authority among firms allows consumers to compare rival firms’ products in ways that eliminate the counterfactual analyses necessary in democratic politics. By facilitating simultaneous comparisons of firms’ products, markets do not simply aggregate dispersed and fragmentary knowledge (Hayek 1945). Rather, markets aggregate consumers’ evaluations
of rival goods that embody tacit knowledge that consumers cannot verbalize or explain. Asking consumers to explain why they prefer certain products would be akin to trying to teach someone to ride a bicycle by explaining the mathematical relationships between the rider’s velocity and the radius of the curve on the side of the rider’s imbalance (Polanyi 1969, chap. 10).

The aggregation of consumers’ comparisons has important implications for the type of knowledge revealed by the price mechanism. Specifically, consumers’ possession of multiple “ballots” (i.e., dollars) creates quantitative metrics—market prices—which reveal information about firms’ relative effectiveness in satisfying consumer demands. Unlike election margins, prices aggregate simultaneous comparisons of individual (i.e., debundled) products that have already been produced and are not aggregations of “units” (i.e., ballots) revealing hypothetical predictions of future satisfaction.10

Prices create a quasi-evolutionary tendency directing resources away from inefficient firms without requiring anyone to understand why certain firms are outperforming others (Alchian 1950; Moe 1984, 762). This tendency never reaches a perfect state of equilibrium, and prices are always “wrong” in the sense that new technology, innovation, and shifting consumer preferences, constantly create new potential profit opportunities that are not reflected by existing prices at any one point in time (Kirzner 1997, 70–71).

The single most important aspect of this process is the economy of knowledge with which it functions. By eliminating consumers’ need to understand why they find certain firms’ products preferable, and by creating metrics—prices—that reveal firms’ relative effectiveness in satisfying consumer preferences, markets mitigate the informational problems confronting the “supply” and “demand” sides of democratic politics. However, the quasi-evolutionary pressure that markets impose upon the population of firms does not exist in politics because voters’ inability to compare parties’ policies simultaneously, and the ambiguous information revealed by election margins, eliminates the underlying condition necessary for this process to occur.

To illustrate how markets mitigate the epistemic problems facing democratic politics, a final iteration of the thought experiment examines the knowledge consumers must possess when markets and firms produce fuel-efficient car engines. The second section examined how democracy requires voters to predict the effectiveness

10This is not true of all markets, as financial and insurance markets involve predictions regarding future satisfaction with firms’ products. However, the singular nature of political decisions ensures this condition is always created by democratic politics.
about the costs of firms’ products in ways that are not possible when voters are trying to determine the cost of parties’ policies.

Third, while parties have difficulty using election margins to assess social satisfaction with their policies, the aggregation of consumers’ “ballots” (i.e., dollars) reveals information about firms’ comparative effectiveness in satisfying consumer preferences. The profit-loss calculations that prices facilitate allow resources to be directed to firms that efficiently satisfy consumer preferences without requiring anyone to understand why.

Instead of allowing consumers to simply compare goods and select those they find preferable, democratic politics requires that voters understand why they are dissatisfied with the incumbent party’s policies and then try to determine whether a rival party is proposing policy changes that efficiently address the causes of their dissatisfaction. These calculations are complicated by voters’ difficulty in determining whether they should be satisfied with an incumbent’s policies, their inability to observe the costs or effects of rival parties’ policies before voting, the large number of issue dimensions they must try to assess, and the absence of metrics for measuring the costs and benefits of different policies and trade-offs.

While both market prices and election margins are quantitative metrics that reveal information about rival organizations’ satisfaction of a customer base, these metrics reveal qualitatively different kinds of information. Market prices facilitate comparisons of firms’ satisfaction of consumer preferences, yet election margins reveal voters’ predictions regarding their hypothetical satisfaction with the future effects of a party’s policies relative to the effects experienced under the incumbent party.

Furthermore, market prices also reveal more precise information than election margins because consumers’ possession of multiple “ballots” (i.e., dollars) allows them to allocate them unequally among goods and firms. This allows consumers to reveal their preferences in ways that are not possible in politics due to voters’ possession of singular ballots and parties’ production of multiple policies. These problems are compounded as parties produce more policies, for not only must voters try to predict, for example, whether a hypothetical improvement in fuel efficiency is worth a hypothetical cost, but similar calculations must also be conducted for all the policies parties produce, and trade-offs between policies must then be compared without any metric to measure the marginal costs and benefits of each policy.

Markets simplify these calculations because firms do not bundle as many goods as parties, and markets’ common unit of measurement (dollars) allows consumers to compare different goods’ marginal effects. By minimizing consumers’ need to predict the costs and benefits of rival products prior to their purchasing decisions, markets mitigate the knowledge problems confronting the “demand” side of democratic politics.

These comparisons eliminate anyone’s need to understand why resources are flowing in specific directions or why consumers prefer certain firms’ products. Consumers’ ignorance of the scientific knowledge embodied in firms’ products is rendered irrelevant by their ability to compare rival firms’ goods. The aggregation of these comparisons, and the profit-loss calculations made possible by market prices, imposes a quasi-evolutionary selection pressure upon the population of firms, mitigating the knowledge problems created by political parties’ bundling of policies.

It is critical to deny that this process functions “perfectly” or that it incorporates all available knowledge. While markets mitigate the knowledge problems facing the “supply” and “demand” sides of democratic politics, they do not, and cannot, eliminate them completely. Despite recognizing that markets exhibit various epistemic problems, these problems are exacerbated by the singular nature of public decisions, the large number of policies parties produce, and voters’ inability to compare trade-offs among policies. Hardly occurring because consumers are better informed than voters or because different incentives exist in each realm of action, markets mitigate the epistemic problems exhibited by democratic politics because they eliminate individuals’ need for knowledge or understanding, and because they create metrics that reveal which firms are satisfying social preferences without requiring anyone to understand why.

**Conclusion: Rationality in State and Society**

This article examined why different institutions require different types of knowledge to rationally allocate resources and argued that democratic politics creates difficult knowledge problems for modern societies. By granting political parties exclusive authority over the production of goods and services, by preventing voters from comparing the effects of parties’ policies, and by requiring voters to evaluate multiple policies without a common metric for comparing trade-offs among them, democratic politics exacerbates the effects of ignorance on human affairs.

Furthermore, the large number of policies that parties produce makes it difficult for election margins to reveal social satisfaction with individual policies,
indicating a second set of knowledge problems faces parties that are attempting to rationally allocate resources. The epistemic problems facing voters and parties indicate that democratic politics exhibits a series of intractable knowledge problems that impede the rational allocation of resources, or the attainment of any other end for that matter.

Unfortunately, this indicates that modern societies do not simply exhibit simply increasing levels of rationalization. According to Weber (1958, 139), rationalization occurs as societies reduce magical and incomprehensible forces to matters of technical control and calculation. Yet as markets have rationalized society and expanded into spheres previously legitimated by non-instrumental rationalities, the progressive democratization of society, a trend that has been described as a “central tendency” of our time, is generating a countervailing tendency (Heilbroner 1970, 4).

However, this does not mean that rationalization is not occurring. Although specialized scientific knowledge is increasingly difficult for laymen to comprehend, markets facilitate comparisons that minimize consumers’ need for knowledge or understanding. The aggregation of these comparisons creates a quasi-evolutionary selection process that eliminates or weakens inefficient firms, rationalizing society without requiring anyone to understand why. By eliminating the underlying condition—the simultaneous existence of organizations’ products necessary for this process to function—democratic politics exacerbates the effects of ignorance on human affairs.

The singular nature of public decisions, and the resulting impossibility of approximating experimental conditions of treatment and control, limits our capacity for generating scientific knowledge about modern political institutions. Indeed, even if voters were better informed of politics, the difficulty of accurately predicting policy effects might cause them to err just as relatively better-informed experts often do. This indicates that our understanding of modern political institutions may be consigned to resemble branches of knowledge prior to the invention of the experimental method.

It must be emphasized that this epistemic critique of democratic politics is not applicable to the state’s redistributive welfare functions. Indeed, this article’s argument may justify redistribution to allow individuals to exit displeasing social relationships without requiring anyone to understand the optimal political remedies for these relationships. This indicates that the scope of this critique must be circumscribed within limits that do not fit neatly within existing ideological divisions.12

Furthermore, this argument remains susceptible to criticisms of instrumental rationality, and these criticisms cannot be dismissed lightly (Horkheimer 1946; Lane 2001). It is difficult to ignore the dehumanizing effects of the iron cage, its cultural degeneracy, and the petty creatures it houses. Despite recognizing that individuals are often motivated by ends such as equality, fairness, and justice, the difficulties associated with measuring these values, and assessing trade-offs among them, indicate that knowledge problems are merely exacerbated when democratic politics is used to attain ends other than efficiency. While voter ignorance poses problems for the rational allocation of resources, similar problems exist with issues involving inequality, justice, and fairness (Bartels 2008; Gilens 2005; Hacker and Pierson 2005b).

Finally, it is critical to emphasize that markets suffer from innumerable defects; they are prone to multiple inefficiencies and allocation problems, and no attempt to minimize these problems is made here. Unfortunately, the singular nature of political decisions, and the epistemic problems generated by this aspect of modern politics, indicates that these problems are merely exacerbated in the public sphere. If the satisfaction of human ends is worth pursuing, and it should be emphasized that this assumption must be made by all of the social sciences, there are reasons to maximize the scope of institutions that rationalize society with an economy of knowledge.

References


11 Since this problem is derived from the singular nature of political institutions’ decisions, this issue is less relevant for the study of mass political behavior.

12 These positions are subject to considerable fluctuation. See Jackson (2010).


