

Behavioral economics

and the Virginia School of political economy:

overlaps and complementarities

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The classical theory of omniscient rationality is strikingly simple and beautiful. Moreover, it allows us to predict (correctly or not) human behavior without stirring out of our armchairs to observe what such behavior is like. All the predictive power comes from characterizing the shape of the environment in which the behavior takes place. The environment, combined with the assumptions of perfect rationality, fully determines the behavior. Behavioral theories of rational choice - theories of bounded rationality - do not have this kind of simplicity.

Herbert Simons, Nobel Address (1978, p. X)

The rational ideal eliminates choice, as Schackle [1969] emphasizes. Choice requires the presence of uncertainty for its very meaning. But choice also implies a moral responsibility for action. To rationalize or explain choices in terms of either genetic endowments or social environment removes the elements of freedom and responsibility. "Natural man," in the model of some behavioral responder to stimuli, akin to my dog, contradicts both the notion of individual liberty and that of individual responsibility for the consequences of the choices made. Man must bear the responsibilities for his own choices because of his artifactual nature.

James Buchanan (1978/1999, p. 257)

I. Introduction: some methodological characterizations and background

This essay provides an overview of some commonalities and complementarities between the Virginia school of public choice and behavioral economics. There are many overlaps between these research programs, although they can easily be missed because of differences in vocabulary and methodology. Most behavioral economists stress the psychological dimensions of choice, which they conceive of as a mixture of rational and nonrational systems for processing information. An

important strand of Virginia political economy stresses the subjective nature of choice, by which they mean the highly personalized processes through which individuals understand their choice settings and evaluate the alternatives before them. Subjectivity is, of course, a consequence of each individual's psychological processes, processes that allow individuals to make sense of what Hayek termed their sensory orders. Subjectivism thus yields critiques of the super-rational strand of neoclassical economics that are very similar to those developed in behavioral economics and psychology. It also provides a sufficiently rich conceptual framework to include most of the results of behavioral economics.

To make that case, I need to define some terms and distinguish among methodologies and approaches to economics and political economy. That is where the essay begins. It continues by demonstrating that what I have termed natural ignorance (Congleton 2001) implies subjectivism, which in combination with what I have termed rule-bound choice (Congleton 2019) has implications that are consistent with many of the experimental results reported by behavioral economists. Indeed, those results can be said to affirm the Virginia school's subjectivist strand of research.

1.1 Three behavioral economics approaches

What might be called the psychological strand of behavioral economics tends to focus on the mental processes of individual actors. Much of that literature is devoted to demonstrating that the rational choice models used in neoclassical economics fail to fully account for all forms of individual behavior. Although the psychological approach includes the possibility of rational plans and actions (system 2 choices), it often emphasizes irrational or inconsistent patterns of choice (system 1 choices). The work of Kahneman and Tversky exemplifies that approach. Another strand of behavioral economics is what might be called the inductivist approach. Inductivists are not particularly interested in neoclassical models or theories of mental processes, but rather in cataloging individual choices in a variety of market, political and game settings. The results are what matter; no theories are really necessary. Their aim is a classification scheme analogous to Linnaeus's for life forms. In effect, inductivists reject deduction as a useful methodology and focus on the results of case studies and more or less controlled experiments. Simons and Thaler arguably exemplify this approach¹.

¹ I hesitate to cite specific works by these prolific scholars as typical of their research—or at least those parts that I am referring to here. The best overviews of their research is often provided by Nobel lectures in cases in which a scholar has won that prize, as with Simon (1979) and Kahneman

These two approaches, the psychological and inductive, represent the two most critical corners of what may be represented as a triangle of behavioral economics research methodologies. The third corner is what might be termed the positive or economic approach. It accepts the usefulness of rational choice models and attempts to understand their strengths and weaknesses in economic, political, and game-theoretic choice settings. The experimenters in this group attempt to test the predictions of economic and game-theoretic models. A typical study from this strand of behavioral economics reports goodness-of-fit types of results rather than rejecting the economic theories whenever average or particular results provide less than a perfect fit. This approach is consistent with positivism in that it takes theory to data rather than attempting to devise theories to explain the data. Vernon Smith and Charles Plott, both former presidents of the Public Choice Society, exemplify this approach.²

Most behavioral economists occupy a space within the triangle characterized above, which arguably also is true of the overall research programs of the exemplars I have used to characterize the three corners. However, the three corners provide useful “anchors” or archetypes for the present essay and for thinking about the intermediate approaches that characterize most researchers in behavioral economics.

It bears noting that all three approaches are old—indeed ancient—even though the term behavioral economics is relatively new. Psychological theories of human behavior are among the oldest explanations of human behavior in general and also for the choices made in particular choice settings, such as romance, war, politics and commerce. Reason, conflicting interests, impulses and mistakes have also played roles in explanations of historic events and morality since language and story-telling emerged at the dawn of human history. The inductivist approach also has ancient roots insofar as the possibility of learning from experience has always been acknowledged. Humans learn from their own trials, successes, and failures—as well as those of others relayed to them through stories, heuristics, and theories. Induction and reason play a central role in Aristotle’s path breaking research on politics. What is relatively new—a largely post-World-War-II innovation—is the use of small-scale human experiments to explore how individuals behave in controlled standardized choice

(2002). A good place start with the other two scholars is Thaler (1980) and with Tversky’s joint work with Kahneman: Tversky and Kahneman (1973, 1986).

² Again, it with great hesitation that I point to one or two works out of a lifetime of scholarship. For Smith, one should begin with his 2003 Nobel address; for Plott a good place to start is with his 2014 overview of the early days of experimental public choice research.

settings. That methodology has captured the imagination of an increasingly large number of economists since its introduction, a trend that has accelerated during the first decades of the twenty-first century.

1.2 Deduction and the rational choice approach to understanding human behavior

What separates the mainstream neoclassical approach of the twentieth century from behavioral approaches is the former's extensive use of forward-looking, purposeful characterizations of human decision-making. These provide the basis for the mathematical models of market choices that characterize prices, production, and consumption within neoclassical economics. An exemplar of this approach is Debreu's (1959) classic work on general equilibrium, but essentially all intermediate and graduate textbooks on microeconomics likewise embrace that approach. The logic of utility-maximizing behavior was used to model all of manner of human behavior during the post-war period, although that extension arguably was anticipated by the efforts of Bentham, Spencer and other utilitarians in the nineteenth century.³

Clearly, if one accepts the idea that all aims in life can be reduced to a single-dimensioned purpose or goal, such as happiness or utility, then every rational being would attempt to adopt happiness- or utility-maximizing lifetime plans in all areas of life.

The rational-choice characterization of human decision making arguably is more recent than the psychological and inductive approaches, although it too can be traced back to Aristotle and beyond. For example, the deductive approach has contributed to the development of systems of mathematics, religion and astronomy. All of those fields are grounded partly in speculations about regularities in experience that are worked out through reflection and bound by rules of internal consistency. The use of paper, pencils, equations and computers to enhance one's speculative efforts are far more recent. The use of mathematical models for understanding motion and philosophical ideas emerged in the seventeenth century with the work of Newton and De Carte. In social science, mathematical models of human decisionmaking emerged briefly in the period just prior to the French revolution with the work of Condorcet and Borda and accelerated with the marginalist

³ There are several very lengthy compendia of the works of the Jeremy Bentham and Herbert Spencer. However, a good place to start is with Bentham (1789). Herbert Spencer's works are also voluminous; I suggest beginning with his first successful book, Spencer (1851) and focus on the sections dealing with the evolution of the physical and social sources of utility.

revolution of the late nineteenth century. Complete neoclassical models of man and markets, however, did not reach their modern, highly integrated forms until after World War II.

In the post-war period, the informational assumptions used to understand the implications of rational behavior in familiar market settings were gradually extended to include all human and social relationships. Unbiased expectations and internally consistent lifetime planning became the hallmarks of “rationality,” as the term came to be used in the “rational expectations” strand of neoclassical economics that emerged in the late twentieth century. Earlier adaptive approaches largely were set aside, as the implications of what might be called the “super-rationality hypothesis” were explored in macroeconomics, microeconomics, political economy and game theory.⁴

1.3 Three Virginia political economy approaches

Public choice emerged from neoclassical economics in the post–World War II period before the super-rational models emerged. Many of its grounding books and articles thus used adaptive models and stressed the ignorance and biases of voters and their informational asymmetries vis-à-vis politicians and governmental employees. Some late twentieth century strands of public choice took super-rationality ideas to heart, but relatively few of them did.⁵ One important overlap between behavioral economics and public choice is their criticism of the super-rationality models of mainstream contemporary neoclassical research. This criticism is most evident in the Virginia school of public choice, but it is also evident in many other strands as well.

The Virginia school is a major strand of public choice, rather than its entirety, and the Virginia school itself includes several different approaches to political economy. Its three main approaches characterize a triangular methodological and research space analogous to the one described above for behavioral economics. At one corner are the subjectivists, who argue that choices reflect understandings of circumstances and interests that differ widely among individuals. Common genetic inheritance and similarities in the problems confronted during life tend to induce

⁴ Information-processing models of the mind had previously played central roles in adaptive models of economics. They also were central to a strand of post-World War II psychological research. See, for example, Kahneman (2002, 2011), Pinker (1999, 2003) and Seligman et al. (2016). Informationally bounded rationality also affected economics and politics, as in Stigler (1961), Downs (1960), and Denzau and North (1994), the latter being the most encompassing of the early discussions by economists. Congleton (1978) is among the first general explorations of informationally bounded choice within the Virginia school.

⁵ A useful example of the super-rational approach to political economy is Wittman’s (1995) book on the impossibility of democratic failure.

commonalities in perceptions and conclusions, but these are not sufficient to generate a single uniform human understanding or outlook. James Buchanan and Richard Wagner are exemplars of the subjectivist approach. Subjectivists regard utility-maximizing models to be useful for some purposes but not sufficiently general to fully characterize markets or politics.

A second strand of Virginia political economy can be considered neoclassical. Researchers from the neoclassical group believe that straightforward expected net-benefit and utility-maximizing models are perfectly adequate for explaining all manner of economic and political behavior, including ones involving information asymmetries and institutional effects. Gordon Tullock, Robert Tollison, Arye Hillman and Randall Holcombe are exemplars of the approach. The third strand is that of its empiricists, who are skeptical of theory per se, although they regard theories to be useful sources of hypotheses that can be tested using statistical methods. To that group, the world is what is revealed by statistical analysis of objective data, rather than from direct observation, reflection and deduction. The theories that underly the models estimated are never proven, but simply not rejected by the evidence. Exemplars of the empirical approach are Robert Tollison (again), William Shughart II and Thomas Stratmann.

The first two groups believe that much about decisionmaking and the consequences of the actions undertaken can be deduced through observation, introspection and reflection. The last group combines positivism and inductivism in that they believe that the models and theories worthy of attention are grounded in various forms of statistical evidence—including evidence from experiments. Of the three strands, only the subjectivist strand of Virginia political economy emphasizes knowledge problems and the importance of framing institutions. Those problems play central roles in its theory of governmental failure, critiques of welfare economics and in its theories of institutional choice and reform.⁶

⁶ The Virginia school has its roots in two centers: the Thomas Jefferson Center for the Studies in Political Economy and Social Philosophy at the University of Virginia and the Center for Study of Public Choice at the Virginia Polytechnic Institute and State University and George Mason University (to which it relocated in the early 1980s).

This essay focuses for the most part on scholars directly associated with the “Center”, but it bears noting that the Virginia school also includes persons without long affiliations with those centers, such as Mancur Olson, Elinor Ostrom, Dennis Mueller, Charles Goetz, Charles Plott, Geoffrey Brennan, Bruno Frey, Peter Bernholz, Arye Hillman, Randall Holcombe, Gephard Kirchgässner and Michael Munger—many of whom are past visitors to the Center for Study of Public Choice, graduates of its Ph.D. programs, or regular presenters in its seminar series. I am a long-term affiliate—having variously been a student, graduate, research associate and center director during a period spanning more than four decades.

Most public choice research can be mapped into the triangular methodological space characterized by the aforementioned three corners. And, as is the case for the methodological space of behavioral economics, the exemplars also occasionally stray from their respective corners.

1.4 The point of departure: overlapping conclusions

It bears noting that the Virginia political economy and behavioral economics research spaces are similar triangles that overlap to some extent. The most obvious are at the subjectivist corner of Virginia political economy and the psychological corner of behavioral economics. Subjectivism tends to stress the inner life and over-simplifications of mainstream rational choice models as does the psychological perspective. Both research programs tend to be critical of the super-rational choice models and provide theories and evidence supporting that skepticism. The empirical corner of the Virginia school and neoclassical corners of behavioral economics also have commonalities in that both stress data and statistical evidence and both tend to be interested in theory as a source of hypotheses to be tested.

Readers will note that I have not used differences in the sources of data to distinguish among researchers. Empirical research in public choice tends to use governmental data sources for the most part, although a substantial group of scholars uses experiments to test public choice theories.⁷ Behavioral economists tend to generate their own data by conducting small-scale experiments, although a nontrivial subset has used statistical analysis of survey data or appealed to common sense. It can be argued that experimental methods are the hallmark of behavioral economics; that was not true when the field emerged in the 1950s with the work of Herbert Simons and many others. For the purposes of the present paper, it is not their sources of data, but the priors and types of hypotheses that are entertained that define their research programs.

Perhaps surprisingly, it is the least empirical strand of the Virginia school—the subjectivist strand—that is most complementary to behavioral economics; although its conclusions were reached through different means and for somewhat different purposes.

2. Natural ignorance, subjectivism and framing effects

A natural point of departure for thinking about commonalities between the subjectivist strand of the Virginia school of political economy and the psychological strand of behavioral economics is what I

⁷ For overviews, see Houser and Stratmann (2012), Plott (2014), Kamm and Schram (2018), or Tyran and Wagner (2018). For a thorough overview of tensions between mainstream rational choice models and experimental results, see Ostrom (1998).

have termed natural ignorance (Congleton 2001). We all are born into the world knowing very little. We have our genetically transmitted data-collecting abilities associated with our sense organs and we have genetically transmitted information-processing systems (the untrained brain) through which we make sense of the data with which we come into contact. Our “firmware” puts the mind in motion, but most of our “software” is generated from personal experience that includes direct observations, lessons from others, and each person’s efforts to make sense of the “data” encountered.⁸

When our “firmware” identifies physical and social problems, it directs our attention to a subset of processes through which solutions may be discovered or invented. As solutions are worked out—including general procedures through which they can be worked out—they are remembered and become part of our “software”, our personalized routines for coping with the world as it comes to be understood. For example, our firmware may recognize that we are hungry or thirsty, and our software directs us to various solutions. All babies cry to attract maternal attention for food and other ministrations. They subsequently learn how best to suck to get that food, which takes a bit of practice. As mobility and experience increase, other more direct solutions to the problems confronted are discovered or puzzled out.

Our acquired “software” also reflects rules and heuristics learned from others. Our shared genes and circumstances imply the existence of commonalities among both problems and solutions to those problems. It is such commonalities that make learning from others both possible and fruitful. The enormous advantage of the latter is partly responsible for the emergence of a common language.

Learning from others and the use of a common language for communication tend to reduce the diversity among our subjective universes. However, language is an imperfect method of communication and so interpretation always is necessary. Interpretation, along with differences in

⁸ By “natural ignorance” is meant the state of individual knowledge at birth. As mentioned in the text, we are born largely ignorant of all things. Some knowledge is acquired without intent, as for example, that imparted by our parents and stumbled on by accident. Other is consciously sought and acquired. “Rational ignorance” is that part of one’s ignorance that is chosen. That is to say, it exists in cases in which one consciously decides not to pursue a type of information known to exist—such as the Chinese alphabet (for most persons not of Asian descent), quantum mechanics (for those other than professional physicists), and the color of a contemporary rock star’s eyes (for all but the most devoted fans), and so forth. These are cases in which a type or class of information is known to exist, but we (or most of us) choose to remain ignorant.

experiences and private epiphanies, imply that differences among individuals and among communities of individuals remain substantial even among those speaking the same language.⁹

There are no universal human solutions to even our most basic needs. Solutions to hunger, for example, vary among individuals and among clusters of individuals, as differences among individual, family, regional, national and continental cuisines demonstrate. No two individuals will leave a grocery store with the same basket of foods in their weekly visits. The same variation likewise is evident among clothing and architecture. Differences also are evident for more complex behaviors such as those used to understand economics or politics.

In the contemporary world, mass education and mass media tend to reduce those differences, as do differences in the effectiveness of solutions to the common problems of life in society. Nonetheless, that individuals have the ability to think and choose, and because language is an imperfect mode of communication, individuals cannot be entirely passive recipients of data generated by their physical and social environments. Each person must produce their own systems of rules for understanding and coping with the world in which they find themselves. We consequently are all a bit different—all unique individuals, albeit with much in common. It is the latter that allows the possibility of a social science.

That each person has to generate his or her own mentality, as emphasized by Buchanan (1978/1999) in the epigram at the beginning of this essay, implies that we are all partly self-constructed, or perhaps more accurately, self-programed. Evidence of such differences are obvious in personal experience and evident in both experimental studies and in statistical research, although such studies often look for “average” behavior rather than unique behavior. Such differences are central to the subjectivist approach to public choice.

Subjectivism is not simply about the life of “the” mind, it concerns differences in minds and mentalities that affect choices. Such differences often are found in laboratory experiments, although

⁹ Such differences would exist even if we were all perfectly rational Bayesians because our direct experiences in life provide only relatively small samples of the choice settings confronted by human beings and the phenomena that we refer to as the “real world”. If our informational systems are not fundamentally Bayesian, no such convergence would necessarily follow from even very large samples.

For applications of the Bayesian approach to economics, see Stoneman (1981); for an early application to public choice, see Congleton (1991). More recently, Bayesian learning has played a key role in machine-learning algorithms; see Taylor and Stone (2009) or Ghavamzadeh et al. (2015). Many economists and game theorists use Bayesian updating as their reference point for rationality and the absence of long-term bias, as for example, in Charness and Chetan (2017).

such differences are not usually emphasized. Subjects rarely behave in exactly the same way when confronting identical objective circumstances, nor do they explain their behaviors in the same ways when prompted to do so after an experiment has been run. Natural ignorance combined with somewhat haphazard and idiosyncratic learning both predicts and explains such varied patterns of behavior.

The same logic implies that behavior may not be entirely self-consistent. The idiosyncratic and haphazard way in which we learn about the world and how to best cope with it, implies that inconsistencies are likely to exist among the rules or heuristics that we use to determine what is possible and what is best in particular circumstances. Such locally optimal rules can easily generate what Tversky and Kahneman (1986) refer to as framing effects, because not every theory, principle, rule, or heuristic generalizes across all choice settings. Framing may induce one set of rules to be used rather than another.

The rules we use are likely to be best or adequate locally, rather than parts of grand internally consistent universal rule systems. The way one makes choices in a library or grocery store may differ from how one makes choices at an amusement park or bakery, or when facing a dangerous or emergency setting. Although rule-bound behavior tends to be locally rational, more or less in the manner that Smith (2003) attributes to induced preferences and ecological rationality, it is unlikely to be globally self-consistent. Shifts in context thus are likely to call forth different procedures for imagining and ranking possibilities.

One significant difference between the subjectivist approach and psychological approach is that subjectivists tend to stress the variety of internalized rules and knowledge that individuals accumulate, whereas the psychological strand of behavioral economics tends to focus on average or typical results rather than the variation among individuals because of their quest to discover regularities in human behavior. This difference has significant consequences with respect both to what some psychologists refer to as “anchors” and also on the relative willingness of members of the two schools to make suggestions to individuals about how they “should” behave and concerning the types of policies that governments “should” adopt. Behavioral economists such as Thaler are far more comfortable making general claims about “people” and “nudges” than subjectivists from the Virginia school tend to be.

3. Bounded rationality, systematically biased beliefs and mistakes

Shane Frederick (personal communication, April 2003) has used simple puzzles to study cognitive self-monitoring, as in the following example: “A bat and a ball cost

\$1.10 in total. The bat costs \$1 more than the ball. How much does the ball cost?” Almost everyone reports an initial tendency to answer “10 cents” because the sum \$1.10 separates naturally into \$1 and 10 cents, and 10 cents is about the right magnitude. Frederick found that many intelligent people yield to this immediate impulse: 50% (47/93) of Princeton students, and 56% (164/293) of students at the University of Michigan gave the wrong answer. Clearly, these respondents offered a response without checking it. The surprisingly high rate of errors in this easy problem illustrates how lightly the output of System 1 is monitored by System 2. (Kahneman 2002, p. 451)

Conversely, if citizens are less aware of certain private benefits than they are of government benefits, or if they see benefits more clearly than costs, the actual budget may tend to exceed the “correct” budget. In either case, ignorance causes a distorted evaluation of the relative benefits of public and private spending. This distortion is carried over into the budget by interparty competition, which forces each party to give voters what they want - not necessarily what the parties think would benefit them. Thus, the ignorance of the voters may cause the actual budget to deviate from the “correct” budget. (Downs 1960, p. 546)

3.1 Systematic mistakes

Economists use several somewhat different notions of rationality, the most general of which is that rationality implies internally consistent behavior. If A is chosen over B and B over C, then A will be chosen over C. Such consistency and inconsistency have long been a concern of thoughtful men and women is implied indirectly by the well-known expression “consistency is the hobgoblin of little minds” (Emerson 1849).¹⁰ Other uses of the term rationality tend to stress informational aspects of choice and the realism of conclusions reached.

The super-rational strand of neoclassical economics assumes that the information in the possession of individuals is sufficient to make unbiased forecasts about both how the world operates and how it will differ if a new conditional plan of action is adopted or one’s current plans are continued. The conditionality of one’s plans is assumed to be complete in the sense that responses to all possible contingencies are incorporated into one’s long term plans. Such rational actors are never stumped and never face a crisis. Given any event X, a super-rational individual always knows

¹⁰ The expression evidently was the invention of Ralph Waldo Emerson (1849), who argues that one should not worry about consistency, but then concludes that “There will be an agreement in whatever variety of actions, so they be each honest and natural in their hour. For of one will, the actions will be harmonious, however unlike they seem.” The potential irrationality of political decisionmaking was emphasized more recently by Black (1948) and Arrow (1951), who noted that political choices may be inconsistent even if the choices of individual voters are entirely self-consistent. The consistency (or lack thereof) of collective choice captured much of the attention and imagination of public choice theorists for its first four decades.

that conduct $z(X)$ should be pursued. During the heyday of rational expectations models, a large plurality of economists and game theorists undertook research in which perfectly rational planning was routinely assumed in their models and looked for in empirical research. The random-walk theory of stock markets is the best-known finding of that research.¹¹

At the other extreme are models of man that assume static or myopic behavior on the part of individuals. Such persons never learn what really is going on no matter how often they make mistakes. As P. T. Barnum is reputed to have said, “a sucker is borne every minute.” Between those extremes is a continuum of models in which forward-looking rational but adaptive behavior is assumed. Such persons make mistakes because of information problems, as in the quote from Anthony Downs above, but can learn to avoid them or at least to reduce their frequency.

Natural ignorance implies that people tend to be locally rather than globally rational in both their planning and information processing. Such individuals even when fully rational in the sense that they make the best possible use of their information make mistakes, because they lack sufficient knowledge to make the best possible choice. As a consequence, past choices may be regretted in that they would have chosen otherwise in the past, had they fully understood the consequences of their choices. Even completely rational persons (in the consistency sense) tend to make systematic mistakes when they do not have enough information to make accurate and unbiased forecasts of the consequences of their actions.

3.2 The significance of information costs in choice

The quote from Downs at the beginning of this section uses rationality to explain why imperfect and biased views of the world are to be expected, especially with respect to public policy outcomes.¹² A similar intermediate view is associated with Kahneman’s (2011) model of the mind. His theory asserts that the human mind is composed of two informational systems: a rational system (system 2)

¹¹ It should be acknowledged that few mainstream economists actually believe that consumers behave entirely self-consistently or that every individual behaves in a manner that can be regarded as having emerged from fully informed and consistent plans, but many do believe that models based on those assumptions provide useful insights into both individual decisionmaking and political-economic systems.

¹² Downs (1960) also implicitly used natural ignorance to suggest the possibility of biased expectations or complete ignorance about the costs and benefits of government policies. Note that this differed from Stigler’s (1961) theory of the demand for information, which is essentially a demand for sample sizes, from which unbiased estimates would always be possible, albeit with larger error terms associated with smaller samples. Congleton (2001) clarifies this distinction.

and an intuitive system (system 1). System 1 is less consistent and more error-prone than system 2, but system 2 analysis is more costly to undertake (slower) than system 1 (which is faster). Both systems tend to be used by most persons, although to different degrees. About half of the Princeton and University of Michigan students mentioned in the quote from Kahneman's Nobel address at the beginning of this section evidently used system 1 to solve the counter-intuitive math problem posed and the other half used system 2.

3.3 Ignorance, biased beliefs, and public policy mistakes

In the Virginia school, the cost of acquiring and processing information has long been associated with the older notion of fiscal illusion: the hypothesis that voters tend to underestimate the costs of government programs, so overdemand them—rather underestimating their benefits as Downs emphasized in the piece from which the above quote was taken. See, for example, Wagner (1976), Weber and Wagner (1977), or Congleton (2001). Although the point of the fiscal illusion research program was partially normative—governmental programs are systematically too large or too small—the methodological perspective was consistent with the behaviorist approach in that it explicitly included the possibility of systematic error.

Fiscal illusion is an implication of intermediate perspectives on rational choice that acknowledge the costs of information-acquisition and processing. If two information processing methods are possible, one may both decide how much attention to give to a particular problem and which information processing system to apply. To be perfectly informed or completely rational in the Kahneman sense is itself irrational given the broad range of problems that demand one's scarce time and attention. Intuition rather than reason is used to make many political decisions, because rationally evaluating the relative merits of alternative policies is too time-consuming to be worth the trouble, given the relatively small personal benefits from doing so.

In areas in which the opportunity cost of rationally processing policy information exceeds its anticipated benefits, error-prone decisions are likely to be made, which may justify a limited domain for public policy, as often argued by researchers from the Virginia school of political economy.

3.4 Ignorance, rules and heuristics

Decisionmaking is a process of searching through problems and their associated solution spaces that are immense—indeed so large that a human or computer cannot fully explore those spaces in a lifetime. Decisionmaking is simplified by using various combinations of intuition (system 1) and careful reasoning (system 2). Both systems 1 and 2 can be regarded as processes through which

various rules of thumb or “heuristics” (“gut feelings”) guide the search into subsets of problems and that have proven to be important and toward solutions that have worked well in the past. Such rules allow acceptable solutions to be found quickly, freeing scarce time and attention for other problems and purposes.

Quick-and-dirty rules may be regarded as aspects of Kahneman’s system 1 and more sophisticated theory-based rules as parts of his system 2 information-processing systems. Herbert Simon termed the entire process “satisficing” and often contrasted such behavior with that implied by super-rational choice theories. His theory of problem solving provides the framework for what Simon termed bounded rationality. (See Simon 1979, which reproduces his 1978 Nobel lecture.)

The idea that choices may be guided by rules has also long been a central tenet of the subjectivist school of Virginia political economy—although the terms system 1, system 2, and heuristics are rarely used. The Virginia school’s rule-based approach to human decisionmaking was evident before 1980, but became more obvious and central to its research program afterwards. For example, Buchanan and Brennan (1985/2008) wrote a book titled *The Reason of Rules*. Their book explained the rational adoption of self-restraining rules by individuals in their private lives and noted that the same logic can justify similar rules for governments. This rule-based approach to human behavior and policy is very similar to that found in Richard Thaler’s work on nudges, although Thaler uses a different vocabulary and his arguments are grounded in a different methodology.

Interest in rule-bound choice was also evident in the hiring decisions at the Center for Study of Public Choice during the 1980s. Victor Vanberg and Ronald Heiner joined the Center in 1983 and 1989, respectively. Both scholars focused a good deal of attention on rule-based choice. Vanberg was trained as a sociologist in the rational choice tradition with interests in the evolution of both individual and institutional rules. An overview of that research can be found in his 1994 book, *Rules and Choice in Economics*. Heiner was trained in economics at the University of California in Los Angeles and wrote his dissertation on rule-based models of choice and differences in abilities to process information and make rational choices. His main findings were published in a widely cited *American Economic Review* (1983) article. Both scholars had significant effects on the research undertaken by other members of the Center. Vanberg, for example, wrote several highly cited pieces with Buchanan on what may be termed rule-bound choice in circumstances of limited information.

From the Virginia school’s subjectivist perspective, rule-bound choice tends to be (locally) systematic but differs among individuals, because the rules internalized and their relative importance vary among individuals. Clusters of persons who follow similar rules are likely to behave more

similarly than others. Similarities among internalized rules are likely to emerge from commonalities in past experiences, including indirect lessons learned from others through stories and textbooks. This is, of course, one explanation for the claim that Western, Asian, African and Hispanic worldviews are systematically different from one another. It also provides an explanation for the clusters or schools of thought among the researchers discussed in this short essay. Although Westerners are not all the same, nor are behavioral economists or Virginia school political economists, they are sufficiently similar to be used as categories for purposes of analysis and discussion.¹³

4. Nudges as constitutional political economy

Where we cannot know in advance what solutions to our problems may be found, and what the best solution may be, but where we can identify the general criteria against which to measure the “goodness” of solutions, we can seek to set up a framework for a competitive process of evolutionary learning, a framework that allows for diversity and innovation, but subjects the experimental exploration to a selection process that selects in favor of solutions that we consider desirable. (Buchanan and Vanberg 2002, p. 126)

My basic answers are that choice architecture is inevitable and that behavioral market failures do, in fact, justify certain forms of paternalism. When these failures occur and are significant, there are good (presumptive) reasons for a regulatory response even when no harm to others can be found....While I mean to reject the Harm Principle here, there are important qualifications. No one should deny that government officials can also err, and their errors may be especially, even uniquely, damaging. Even the most benign paternalists can go badly wrong, and some paternalists are far from benign. In addition, people are highly diverse in terms of their tastes, their values, and their situations. One size may not fit all. In light of the pervasive risk of government error and the inescapable fact of human diversity, it is usually best to use the mildest and most choice-preserving forms of intervention. These forms include “nudges,” understood as initiatives that maintain freedom of choice while also steering people’s decisions in the right direction (as judged by people themselves). (Sunstein 2014, pp. 16–17)

At this point we shift from focusing on internalized rules to external rules. Internalized rules form an individual’s mind or mentality. External rules are part of the environment in which choices are

¹³ My use of the term “clusters” may make it sound as if a sharp break exists among groups of individuals or researchers. Clusters of researchers or research circles are more like colors than atoms. That is to say, they are (improper) subsets along a continuum of research interests and approaches that are sufficiently similar to be identified as a category, rather than completely non-overlapping groups. In Denzau and North’s (1994) terms, members of such categories share mental models.

undertaken. Human-made external rules are partly evolutionary phenomena and partly objects of choice. Such rules can be created and modified, and adherence to such rules is encouraged in various ways, as with law-enforcement agencies and the informal chiding and encouragements associated with informal norms.

A subset of such rules may be used to incentivize private decisions; another subset to make decisions about the incentivizing rules that “should” be adopted.

The external rules of interest in section 4 are all chosen in some way. They may be imposed by a single rule-maker—a dictator or choice architect—or adopted through some preexisting process of collective choice, such as majority rule. How individuals will and should choose rules through political procedures is one of the main research programs of the Virginia school of public choice.

The process of collective decisionmaking is complicated by differences among the individuals engaged in making choices. If everyone had identical interests, majority rule would tend to generate unanimity in practice. However, that is not the case for reasons discussed above. Individuals have different interests because they have different experiences, they make sense of it in different ways, and so tend to have different expectations and assessments of the consequences of alternative rules for themselves and others. Thus, it will rarely be the case that everyone can get exactly what he or she wants—i.e., their preferred policies or decisionmaking procedures.

Nonetheless, the subjectivist strand of Virginia political economy tends to emphasize unanimity as a criterion for whether a new policy or decision-making procedure should be adopted. Unanimity is the only way to be sure that everyone’s interests are advanced by a given policy or constitutional reform. However, members of that school argue that unanimity is more likely to emerge at the procedural level than at the policy level and, hence, a group may agree to use majority rule to make its policy decisions, while acknowledging that some persons will be made worse off by a subset of subsequent group decisions (Buchanan and Tullock 1962).

Behavioral economics has placed more emphasis on individual choices than on public policies or institutions, although arguments recently have been advanced concerning how public policies can or should be modified to take account of experimental results and associated behavioral theories. For example, the policy implications of behavioral economics are discussed in widely cited and read books by Thaler and Sunstein (2008) and Sunstein (2014), in which the words “nudge” and “choice architect” are assigned central roles.

Thaler and Sunstein argue that the findings of behavioral economics can and should be used to improve life in various ways. In effect, they appeal to a reader's system 2 (rational) interests and argue that choice settings in which various system 1 (intuitive or impulsive) choices tend to be error-prone, but often can be modified in ways that reduce ex post regrets. Individuals may do so for themselves or ask others to do so for them by modifying their choice settings, as with using smaller plates on their tables or placing healthy foods at the most visible and convenient places in refrigerators. Such nudges modify choice settings so that one's intuitive choices are more likely to yield results that are consistent with one's long-run or system 2 goals.

Voters also may task government officials with adopting public policy nudges or "defaults" that advance "obvious" desirable goals, such as health and safety. In effect, Thaler and Sunstein argue that when individuals become aware of the error-prone propensities of system 1 choices, their system 2 conclusions often will favor governmental policies that a supermajority expect to improve their own choices. No true paternalism is required for such voting or policies, although the two authors use the term paternalism throughout their books—possibly because they believe that enormous discretion would be delegated to bureaucrats to craft such nudges. Nudges operate by making some quick decisions easier than others, without explicitly reducing the scope of possible decisions. Their discussion, however, tends to make nudges sound more obvious and easier to adopt than they usually are.

It bears keeping in mind that nudges can be used to advance a variety of purposes and voters often will disagree about the nudges that governments should design. Disagreements are partly due to differences in the extent to which systems 1 and 2 are used in decisionmaking. Others emerge for reasons similar to those stressed in the subjectivist strand of public choice research—because of differences in interests. Although, a broad consensus exists in a few areas of policy in which nudges of various kinds can improve choices—as with the old skull-and-crossbones' labels on poisons, traffic lights, and placing desserts after the main courses in cafeteria lines—Thaler and Sunstein's discussion neglects the many cases in which disagreements are likely.

Differences of opinion, for example, are likely with respect to governmental nudges that affect abortions, organ transplants, suicide and diets—partly because of differences in the frequency with which system 1 and 2 informational systems are employed for public policy analysis, but also because of differences in ideology, religion and ethical theories—which is to say because of differences in internalized rules.

At the level of political institutions, some voters may advocate increasing the difficulty of voting to reduce the number of system 1 voters—who therefore may pass up voting instinctively because the registration process is “too” much trouble. Others favoring participation rather than rational results—possibly for system 1 reasons—may support policies that make voter registration as easy as possible. Such disagreements were, for example, commonplace in Europe during the late nineteenth century when suffrage gradually was expanded to larger subsets of national citizenries. Which suffrage nudge is best would vary according to whether it is most important that the persons casting votes make use of system 2 information-processing or that the number of voters be maximized, even if that implies more votes cast based on impulse rather than on careful analysis of the merits of the policies or candidates at issue. The solution is not obvious.

Virginia school political economists would be inclined to point out that government officials likewise use both systems 1 and 2 for their decisions and also are constrained by what remains of their own natural ignorance. Government officials also may benefit from nudges of various kinds both with respect to their own careers and in their roles as stewards of their polity’s standing rules and procedures for making decisions. How to nudge government officials into making policy decisions that advance the interests of most voters is the main focus of the normative strand of constitutional political economy.

Unfortunately, the problem of motivating politicians to be good stewards and reformers is not trivial. That is partially because of human variety. The best characterization of a “good steward” is not entirely obvious even when given serious attention (e.g., by one’s system 2). The subjectivist strand of the Virginia political economy school has long been concerned with such problems, and although their vocabulary differs from that of behavioral economists, many of their recommendations are nudges of various kinds—which is to say decision-making procedures in which some choices are made easier (less costly) to make for those making them than others.

That conclusion is evident, for example, in both Buchanan and Brennan’s (1985/2008) discussion of the rationality of self-restraint and in the emblem on the journal *Constitutional Political Economy* (Ulysses tied to the mast)—a journal founded by three members of the subjectivist research program (Buchanan, Vanberg and Wagner). Thaler and Sunstein (2008 p. 61) also use the Ulysses story to illustrate the value of self-restraint or self-nudging.¹⁴

¹⁴ This is not entirely a coincidence—Sunstein has long served on the editorial board of *Constitutional Political Economy*.

Buchanan and Brennan are most concerned with the adverse consequences that arise when government officials adopt policies that favor their short-term over long-term interests (Buchanan 1958; Brennan and Buchanan 1985/2008; Buchanan and Congleton 1998/2006). Other members of the Virginia school are more concerned about cases in which officials favor their friends and family members or those who provide them with the most useful political or financial support (Congleton and Hillman 2015; Holcombe 2018). The Virginia school also stresses cases in which even system 2 rationality generates various social dilemmas.

That constitutions are not carved in stone but can be adjusted along many margins implies that constitutions can be regarded as “nudges”; that is, they make some kinds of policy choices easier and less costly than others—including choices to amend the constitution. They do not truly eliminate possibilities, but simply vary the costs of different kinds of decisions in a manner that constitutional designers and other choice architects regard to be on average good for members of the polity of interest (or themselves). That elections focus attention on the public policies that are likely to advance a broad range of interests is, of course, one of the reasons that constitutional democracies have done relatively well for the past two centuries.

Day-to-day governmental decisionmaking procedures in liberal democracies often are cumbersome, but by subjecting policy proposals to a series of reviews, they tend to make system 2 calculations relatively more frequent and also tend to increase and aggregate information. Such recursive review systems would make little sense in a world populated by super-rational agents but serve obvious purposes in a world populated only by partially informed individuals who do not always conscientiously gather information or use their system 2 processes for important decisions.

5. Commonalities

Know thyself (γνώθι σεαυτόν) —Ancient Greek proverb

In particular, I believe that observed regularities of behavior can be fruitfully understood as “behavioral rules” that arise because of uncertainty in distinguishing preferred from less-preferred behavior. Such uncertainty requires behavior to be governed by mechanisms that restrict the flexibility to choose potential actions, or which produce a selective alertness to information that might prompt particular actions to be chosen. These mechanisms simplify behavior to less-complex patterns, which are easier for an observer to recognize and predict. In the special case of no uncertainty, the behavior of perfectly informed, fully optimizing agents responding with complete flexibility to every perturbation in their environment would not produce easily recognizable patterns, but rather would be extremely difficult to predict. Thus, it is in the limits to maximizing that we will find the origin of predictable behavior. (Heiner 1983, p. 561)

The overlaps between Virginia political economy and behavioral economics are not entirely accidental. Both stress the life of the mind. Both share a skepticism about the super-rational strand of neoclassical economics. Both stress the possibility of systematic mistakes. Both arose in the post-war period as what might be considered “outcast” research programs. Indeed, the Public Choice and Economic Science Societies met at the same times and places during the 1980s and 1990s.

It thus might appear natural that some ideas would cross the methodological boundaries. Yet, little direct evidence of cross fertilization exists. Very few citations to the Virginia political economy literature are found in behavioral economics—beyond the small subset of that research focused on public choice theory. And very few citations from behavioral economics are found in public choice research beyond those who conduct experiments. The two are substantially independent research programs that just happen to reach many similar conclusions. This, quite indirectly, provides support for both research programs.

Differences, of course, can also be found between the subjectivist strand of Virginia political economy and the psychological strand of behavioral economics. Some are mere differences in vocabulary as stressed in this essay. Choice architects and constitutional designers both shape choice settings with an aim of inducing particular kinds of choices. Systematic mistakes can result from the rational and natural ignorance that characterize bounded rationality. Others relate to significant differences in methodology. Subjectivists develop their theories using self-reflection and personal experience as the data upon which they ground their theories. Behavioral economists doubtless do that as well but place greater emphasis on the results of small-scale experiments.

With respect to the former, it should be acknowledged that some people are better at this than others. A huge range of theories can be supported by various subsets of personal experience or the grand catalog of experimental results generated by behavioral economics, marketing, management, political science, psychology and sociology. We all undertake self-reflection and examine our personal experiences, but few of us develop world views as rich and coherent as those of Hayek or Buchanan. Similarly, reflection on the broad range of experimental results accumulated over the past half century rarely produce theories that are as grand or coherent as those developed by Kahneman or Vernon Smith. Nonetheless, these programs are not products of a handful of especially talented minds, but of a broad cadre of researchers

It could be said that the practical aim of those pushing the behavioral economics research program forward is to induce individuals to better understand themselves and use that knowledge to improve their own lives and the performances of markets and governments. The psychological

strand of behavioral economics uses experimental methods to produce new evidence about how choice settings affect choices. Experimental evidence clearly suggests that altering choice settings can improve decisions in the sense that individuals will subsequently have fewer ex post regrets. Once familiar with those results, individuals can engage in self-nudging, join groups that provide nudging services, hire professional nudgers, or vote to have the government take on such responsibilities (Thaler and Sunstein, 2008).

The practical aims of the subjectivist strand of the Virginia school of political economy are very similar, although far more attention is focused on the variety of human interests than on their commonalities and, given that variety, on how one might identify proper nudges (rules) so that that a variety of interests can simultaneously be advanced through public policies (Buchanan and Vanberg 2002).

It is interesting to note that in their efforts to influence public policies, both behavioral economics and constitutional political economy have developed arguments that are oriented toward their readerships' reason-based (system 2) assessments of personal life, economics and public policy, perhaps reflecting the academic audiences to which they address their arguments. But if gut reactions are used more frequently to make choices by most people than is reason, such arguments are unlikely to reach the broader public. Nonetheless, both groups evidently share the hope that reason will win out and rules will be adopted that better motivate our shorter term, less rational selves to advance our long-term interests.

References

- Arrow, K. J. (1951). *Social choice and individual values*. New Haven CT: Yale university press.
- Black, D. (1948). On the rationale of group decision-making. *Journal of Political Economy*, 56(1), 23-34.
- Bentham, J. (1789/2013). *An Introduction to the Principles of Morals and Legislation*. Reprinted in. *Collected Works of Jeremy Bentham*. Minerva Classics. Kindle Edition.
- Brennan, G., & Buchanan, J. M. (1985/2008). *The reason of rules: Constitutional political economy*. Cambridge: Cambridge University Press.
- Buchanan, J. M. (1949). The pure theory of government finance: A suggested approach. *Journal of Political Economy*, 57(6), 496-505.
- Buchanan, J. M. (1958). *Public Principles of Public Debt A Defense and Restatement*. Homewood, IL: Irwin.
- Buchanan, J. M. (1978/1999). Natural and artifactual man. *The collected works of James M. Buchanan, Vol 1, The logical foundations of constitutional liberty*. Indianapolis IN: Liberty Fund.

- Buchanan, J. M. (1979). General implications of subjectivism in economics. *What Should Economists Do?* Indianapolis IN: Liberty Fund.
- Buchanan, J. M., & Congleton, R. D. (1998/2006). *Politics by principle, not interest: Towards nondiscriminatory democracy*. Cambridge: Cambridge University Press.
- Buchanan, J. M. & Tullock, G. (1962). *The calculus of consent*. Ann Arbor MI: University of Michigan Press.
- Buchanan, J. M., & Vanberg, V. J. (1991). The market as a creative process. *Economics & Philosophy*, 7(2), 167-186.
- Buchanan, J. M., & Vanberg, V. J. (2002). Constitutional implications of radical subjectivism. *Review of Austrian Economics*, 15(2-3), 121-129.
- Charness, G. & Chetan, D. (2017). Confirmation bias with motivated beliefs. *Games and Economic Behavior* 104 (July): 1-23.
- Congleton, R. D. (2019). Toward a Rule-Based Model of Human Choice: On the Nature of Homo Constitutionalis. in R. E. Wagner (Ed.) *James M. Buchanan: A Theorist of Political Economy and Social Philosophy*. New York: Palgrave Macmillan.
- Congleton, R. D. (2001). Rational ignorance, rational voter expectations, and public policy: A discrete informational foundation for fiscal illusion. *Public Choice*, 107(1-2), 35-64.
- Congleton, R. D. (1991). Ideological conviction and persuasion in the rent-seeking society. *Journal of Public Economics*, 44(1), 65-86.
- Congleton, R. D. (1978). *The Role of Information in Choice*. Virginia Polytechnic Institute and State University Dissertation.
- Congleton, R. D., & Hillman, A. L. (2015). *Companion to the political economy of rent seeking*. Edward Elgar Publishing.
- Debreu, G. (1959). *Theory of value: An axiomatic analysis of economic equilibrium*. New Haven CT: Yale University Press.
- Denzau, A. T., & North, D. C. (1994). Shared mental models: ideologies and institutions. *Kyklos*, 47(1), 3-31.
- Downs, A. (1960). Why the government budget is too small in a democracy. *World Politics*, 12(4), 541-563.
- Emerson, R. W. (1849) Self-Reliance. Reprinted in *Emerson, Ralph Waldo. Self-Reliance and Other Essays* Seattle WA: Amazon Classics (Kindle Edition, 2017).
- Ghavamzadeh, M., Mannor, S., Pineau, J., & Tamar, A. (2015). Bayesian reinforcement learning: A survey. *Foundations and Trends in Machine Learning*, 8(5-6), 359-483.
- Heiner, R. A. (1983). The origin of predictable behavior. *American Economic Review*, 73(4), 560-595.
- Holcombe, R. (2018). *Political capitalism: How political influence is made and maintained*. Cambridge: Cambridge University Press.
- Houser, D., & Stratmann, T. (2012). Gordon Tullock and experimental economics. *Public Choice*, 152(1-2), 211-222.
- Kahneman, D. (2011). *Thinking, fast and slow*. New York: Macmillan.

- Kahneman, D. (2002). Maps of bounded rationality: A perspective on intuitive judgment and choice. Nobel prize lecture, 8, 351-401.
- Kamm, A. & Schram, A. (2018). Experimental public choice: elections. *Oxford Handbook of Public Choice*, (Vol. 2, Ch. 44). Oxford: Oxford University Press.
- Ostrom, E. (1998). A behavioral approach to the rational choice theory of collective action. Presidential Address, American Political Science Association, 1997. *American Political Science Review*, 92(01), 1-22.
- Pinker, S. (1999). How the mind works. *Annals of the New York Academy of Sciences*, 882(1), 119-127.
- Pinker, S. (2003). *The blank slate: The modern denial of human nature*. New York: Penguin Group.
- Plott, C. R. (2014). Public choice and the development of modern laboratory experimental methods in economics and political science. *Constitutional Political Economy*, 25(4), 331-353.
- Shackle, G. L. S. (1969/2010). *Decision order and time in human affairs*. Cambridge: Cambridge University Press.
- Seligman, M. E., Railton, P., Baumeister, R. F., & Sripada, C. (2016). *Homo prospectus*. Oxford: Oxford University Press.
- Simon, H. A. (1979). Rational decision making in business organizations. *American Economic Review*, 69(4), 493-513.
- Smith, A. (1759/2010). *The theory of moral sentiments*. New York: Penguin Group.
- Smith, V. L. (2003). Constructivist and ecological rationality in economics. *American Economic Review*, 93(3), 465-508.
- Spencer, H. (1851). *Social statics: Or, the conditions essential to happiness specified, and the first of them developed*. London: John Chapman.
- Stigler, G. J. (1961). The economics of information. *Journal of Political Economy*, 69(3), 213-225.
- Stoneman, P. (1981). Intra-firm diffusion, Bayesian learning and profitability. *Economic Journal*, 91(362), 375-388.
- Sunstein, C. R. (2014). *Why Nudge? The Politics of Libertarian Paternalism*. New Haven CT: Yale University Press.
- Taylor, M. E., & Stone, P. (2009). Transfer learning for reinforcement learning domains: A survey. *Journal of Machine Learning Research*, 10(Jul), 1633-1685.
- Thaler, R. (1980). Toward a positive theory of consumer choice. *Journal of Economic Behavior & Organization*, 1(1), 39-60.
- Thaler, R. H. & Sunstein, C. R. (2008). *Nudge: Improving decisions about health, wealth, and happiness*. New York: Penguin Group.
- Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, 5(2), 207-232.
- Tversky, A., & Kahneman, D. (1986). Rational choice and the framing of decisions. *Journal of Business*, S251-S278.
- Tyran, J. R. & Wagner, A. K. (2018). Experimental Evidence on Expressive Voting. *Oxford Handbook of Public Choice* (Vol. 2, Ch. 45). Oxford UK: Oxford University Press.

- Vanberg, V. J. (1994). *Rules and choice in economics*. New York: Taylor & Francis.
- Vanberg, V. J., & Congleton, R. D. (1992). Rationality, morality, and exit. *American Political Science Review*, 86(2), 418-431.
- Wagner, R. E. (1976). Revenue structure, fiscal illusion, and budgetary choice. *Public Choice*, 25(1), 45-61.
- Wagner, R. E., & Weber, W. E. (1977). Wagner's law, fiscal institutions, and the growth of government. *National Tax Journal*, 59-68.
- Wittman, D. A. (1995). *The myth of democratic failure: Why political institutions are efficient*. Chicago: University of Chicago Press.