Introduction to the Economic Analysis of Law

Introduction

Legal scholars often apply external methodologies in the study of law. A list of helpful external disciplines includes Anthropology, Critical Studies, Evolutionary Biology, History, Literature, Philosophy, Political Science, Psychology, and Sociology. It also includes Economics. Since the early 1960s, a vast and influential literature has emerged in “Law and Economics.” This field boasts numerous books, prestigious peer review journals, and academic conferences that take place within the United States and around the world.

Before describing Law and Economics, it is worth saying a few words about economics itself. Economics is a discipline that embraces several complementary methodologies. These include neoclassical economics, public choice, social choice, game theory, and Austrian economics. It also includes behavioral economics, which bridges economic theory and applied psychology. Although each of these subdisciplines has developed its own analytical tools, with the possible exception of behavioral economics, they generally share a set of common premises and methodologies.

I. COMMON FEATURES OF ECONOMIC ANALYSIS

Positivism: Each of these economics subdisciplines developed with the goal of seeking to explain existing behaviors—of individuals, of groups, or of institutions—that other disciplines, including the alternative complementary methodologies that have been applied to the study of law, found anomalous and thus difficult to understand. Those who work within the tradition of economic analysis thus share a set of tools that grow out of a tradition of “positivism.”¹ Positivism means an effort to explain “what is,” as opposed to offering a “normative” account that explains what the scholar asserts “should be.”²

² To be sure, economic analysis of law has also generated a literature on how legal rules should develop based on specified normative criteria, typically associated with concepts of efficiency. One of the themes of this book is distinguishing positive and normative uses of economic theory, and offering economic accounts
Simplification versus nuance: Each economics subdiscipline employs “models” as a principal means of gaining a positive explanatory insight. Models are tools designed to simplify and capture the essence of something more complex. Effective models create manageable images of a more complex reality, thereby avoiding the clutter and messiness of reality itself. The construction of models inevitably produces the following tradeoff: Simpler models are more manageable but less nuanced; complex models are more nuanced but less manageable. In effect, economic modeling constantly seeks to balance the competing criteria of simplification versus nuance as a means of offering insights that are neither so general as to be meaningless nor so specific as to lose the benefits of generalization. The principal benefit of generality is the power to gain important insights in new contexts.

Rationality: The foundational assumption that typically underlies economic models is “rationality.” Rationality is a sufficiently important and subtle concept that there are articles and books devoted just to this topic. As a result, we will spend considerable time in this book, including in this chapter, exploring the concept. Rationality is a contested concept both within economic theory and among those who view economics from other disciplinary perspectives. Rationality also forms part of the divide between scholars in the field of behavioral economics on one side, and those who employ the other listed economics subdisciplines on the other. Economists tend to define “rationality” differently from those writing within other disciplines, including law.

Occasionally, those working within a Law and Economics tradition confront the objection: “But you mistakenly assume that people are rational.” When you hear this, please compare how the speaker understands rationality with how rationality is used in the relevant economic model. Without agreement on what rationality means, the conversation entails people speaking past one another and thus without advancing common understanding.

Minimalism: Also called “reductionism,” minimalism implies an effort to exclude from consideration features that often play a central role in noneconomic accounts of human behavior. Although this relates to the tradeoff in modeling between simplification and nuance, here we emphasize a different aspect. Non-economic accounts of human behavior often consider the nature of individual preferences and how they are formed. Economists generally take preferences as given and claim no particular methodological expertise in devising robust accounts of what particular persons regard as “goods” or “bads.” To be sure, economists believe that preference formation is important to a holistic draw from other subdisciplines when there is a persistent divergence between the state of the law as it exists versus the state of the law as those employing economics tools argue it should be.

One of the central inquiries of behavioral economics is whether observed behaviors are inconsistent with the rationality assumption that pervades much economic analysis, including most notably, neoclassical economics. This implies that rather than accepting the standard definition of rationality as a starting point, behavioral economics sometimes employs a different set of premises about human behavior to create testable hypotheses concerning how individuals manifest rationality. For an overview of behavioral law and economics, see BEHAVIORAL LAW AND ECONOMICS (Cass R. Sunstein ed., 2000). For an article exploring the implications of behavioral law and economics for public choice, see Gary M. Lucas, Jr. & Slavisa Tasic, Behavioral Public Choice and the Law, 118 W. VA. L. REV. 199 (2015).

As discussed later in this book, rationality also sometimes takes on different meanings within economic theory itself as seen in the comparison of rationality described later in this chapter and the definition offered in Chapter 3, introducing social choice theory.
understanding of individual behavior and to understanding societal and cultural differences. However, economists prefer to leave such inquiries to those trained in other fields of social science such as anthropology, psychology, sociology, and religion. This is not because the inquiry is unimportant; rather, it is because the economics toolbox has less to say about it.\(^5\)

*Testable hypotheses:* A benefit of the reductionist economic approach is that it allows for the development of testable hypotheses. By capturing essential features of observable phenomena and by deliberately excluding extraneous details, economists are able to focus on one or a few variables that if changed are most apt to alter incentives, individual behavior, and collective outcomes.\(^6\) An important implication of this approach is that economic models should, in theory, be subject to the possibility of being “falsified,” meaning that for any model-driven account of an observed phenomenon there should be a test capable of disproving it.

Although the various subdisciplines within economics generally share these features, notable differences remain. Throughout this book, we will discuss both the commonalities and differences among these various “schools,” including where they agree and where they diverge on specific questions of law and public policy. Indeed, one of the features that we believe makes this Law and Economics coursebook unique is that it deliberately brings together schools of economic thought that sometimes lead to differing places on related questions. When we encounter phenomena that a given theory cannot adequately explain, rather than abandoning economic analysis in favor of an account from another discipline, we survey other economic approaches for alternative ways to frame the problem. This approach reveals the power of economic analysis in helping devise competing normative framings, the choice of which ultimately rest on noneconomic grounds.

The specific methodologies associated with each subdiscipline within economics are the product of the kinds of questions they are designed to study. We now consider some of these differing approaches and tools.

### A. Subdisciplines of Economic Analysis

*Neoclassical economics* tends to focus on the study of behaviors of individuals and firms as they operate within private markets; how market mechanisms, including firms, develop and evolve; and how differing markets structures, including competition and monopoly (along with structures in between), affect various equilibrium outcomes. Neoclassical

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\(^5\) Commentators sometimes simultaneously criticize economic analysis for appearing hegemonic, seeking to explain too much (sometimes called “economic imperialism”), and other times for its self-imposed restrictions, especially with respect to preference formation. See, e.g., infra Part V.A (reviewing analysis by Daniel Farber and Philip Frickey, who criticize the extension of economic theory into politics and who further fault those who contend that economics needs no theory as to why some individuals have a preference for voting.)

\(^6\) See generally FRIEDMAN, supra note 1, at 7–23. For a debate on whether public choice scholarship has lived up to its expectation of developing testable hypotheses capable of falsification, see infra Chapter 9 (discussing DONALD P. GREEN & IAN SHAPIRO, PATOLOGIES OF RATIONAL CHOICE: A CRITIQUE OF APPLICATIONS IN POLITICAL SCIENCE (1994), and THE RATIONAL CHOICE CONTROVERSY: ECONOMIC MODELS OF POLITICS RECONSIDERED (Jeffrey Friedman ed., 1996)).
economics is closely tied to price theory, which studies various market configurations, and which has played a particularly significant role in the development of the influential Chicago School of law and economics.

Public choice applies the tools of economic analysis to nonmarket decision-making, or, perhaps more simply, to politics. These tools have been extended to the study of law and lawmaking institutions. The term “public choice,” has generally been understood to have two somewhat different meanings. It is sometimes used to distinguish collective, nonmarket decision making from “private choice,” meaning individual market decision-making. Other times it is used as an umbrella term underneath which we can place specific sub-fields of public choice, including interest group theory, social choice, and game theory. The term public choice has also been used in a more specific sense to be synonymous with interest group theory.

We now break these down and describe separately each of the sub-fields of public choice:

Interest group theory studies the incentives and effects of group activity and political institutions. More specifically it focuses on the relationships between private actors and myriad governmental institutions; how firms and groups influence lawmaking bodies, often to gain insulation from competition (called “rent seeking”); and how institutions adapt in response to interest group pressures. Interest group theory plays a particularly significant role in the Chicago public choice school, and also influences other schools.

Social choice theory studies the different implications of a critical aspect of rationality—the assumption of transitive preference orderings (A preferred to B preferred to C implies A preferred to C)—as applied to individuals, on the one hand, and to groups, on the other, and how these differences affect the capacity of institutions to transform individual preferences into collective outputs. Social choice has also been used to study the evolution of institutions and rules, thus influencing the study of constitutional law and lawmaking processes.

Game theory studies interactive individual and institutional behaviors in structured settings as a means of identifying the effects of specified incentives on player strategies.
within single period and iterated (repeated) games.\textsuperscript{11} Both social choice and game theory have given rise to vast, often mathematically sophisticated, literatures, and each provides critical insights that cut across economics and other fields.\textsuperscript{12}

\textit{Austrian Economics} studies the limits of information assimilation in conveying relative values and the implications for employing models to predict market responses to changed conditions. This school emphasizes the unique capacity of decentralized market processes to capture and channel disparate information and to move resources to more highly valued uses. Although developed as an intellectual critique of European central planning, associated with socialism, Austrian economics has also been deployed to challenge particular claims associated with the Chicago School of law and economics along with associated normative prescriptions for law and public policy.\textsuperscript{13}

\textit{Behavioral Economics} employs laboratory and natural experiments to study how individuals respond to incentives set out in various formal games, sometimes calling into question the robustness of rationality-driven models. This field, which offers valuable insights into individual and interpersonal human behavior, differs from the other identified subdisciplines of economics in important ways. Economics generally takes individual preferences as given and as revealed through consumer choices. By contrast, behavioral economics, which is closely tied to applied psychology, seeks in part to explain preference formation. This includes identifying certain behaviors that are claimed to defy neoclassical understandings of rationality. Behavioral economics challenges, for example, the assumption that actual choices are the best evidence of true preferences.\textsuperscript{14}

Most courses on law and economics select a subset of tools and analytical approaches. Conventional courses have tended to focus on neoclassical economics, often associated with the Chicago School, and to explore common law subject matter, with some extensions into judicial process and criminal law.\textsuperscript{15} This approach gained a strong foothold in the legal academy in the early 1980s.\textsuperscript{16} The Chicago School offered significant explanatory power with respect to several bodies of common law doctrine, most notably tort, contract, property, and crime. The neoclassical accounts of these and other doctrinal

\begin{itemize}
\item \textsuperscript{11} Game theory has been successfully employed to study non-human as well as human actors. Evolutionary biology often employs parallel tools to those employed in game theory. For illustrations involving the Game of Chicken and Hawk-Dove, see infra Chapter 16.
\item \textsuperscript{12} Although game theory is not always viewed as a subfield of public choice, we have found that introducing elementary game theory significantly enhances student understanding.
\item \textsuperscript{13} We do not devote a specific chapter to Austrian Economics, but throughout this volume, we introduce concepts drawn from this school as appropriate. See also RESEARCH HANDBOOK ON AUSTRIAN LAW & ECONOMICS (Peter Boettke & Todd J. Zywicki eds., 2017).
\item \textsuperscript{14} We also do not devote a specific chapter to behavioral economics. As with Austrian economics, we draw upon relevant insights as is appropriate.
\item \textsuperscript{15} Excellent examples of texts taking this approach include ROBERT COOTER & THOMAS ULEN, LAW AND ECONOMICS (6th ed. 2011), and THOMAS J. MICELI, THE ECONOMIC APPROACH TO LAW (3d ed. 2017). This volume combines the benefits of STEARNS & ZYWICKI, supra note 9, with that of MICELI, supra, both in terms of selection of methodologies and the range of applications.
\item \textsuperscript{16} Among the reasons was the influence, and controversy, provoked by the first edition of Richard Posner’s famous treatise, RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW (1st ed. 1973), a book now in its ninth edition.
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areas were often more robust than explanations offered in the legal literature and even in the judicial opinions themselves.

The Chicago School helped to resolve many longstanding analytical puzzles. By way of example, it offered important insights into the following questions:

Why does common law condone breach of contract by awarding expectancy damages rather than issuing an injunction when the effect sometimes thwarts contractual performance and allows the breaching party to secure the benefit of a superior market opportunity?

Why doesn’t the law systematically impose liability on the party that creates negative externalities, as for example when industrial pollutants are emitted to the detriment of a pre-existing residential community?

Why does the common law sometimes reward the behavior of seemingly bad actors, for example through such doctrines as adverse possession?

Why does the law sometimes impose strict liability on actors who, although they have produced harm, have taken all reasonable, or cost-effective, precautions?

Adherents to the Chicago School contend that these and other seeming doctrinal anomalies can be explained based on models drawn from a fairly simple set of premises. The models that flow from these premises suggest that overall, common law rules tend to improve social welfare, defined here as promoting the “efficient” allocation of resources. In other words, these seemingly counterintuitive legal rules tend to encourage individuals and firms to move resources to more highly valued uses. Assuming this approach provides the basis for a persuasive account, two important related questions remain: (1) How does the common law process accomplish the objective of calibrating those rules so as to promote social welfare? (2) What motivates judges to create rules based on that normative criterion?

Chicago School adherents maintain that law and economics provides the basis for a more robust account of common law rules than competing methodologies. And yet, some doctrines that we identify operate in tension with claims of efficiency as the overriding motivation of common law rules. Several notable treatises offer comprehensive presentations of common law rules assessed against a normative efficiency baseline. This book takes a different approach. To allow for the competing perspectives on Law and economics, we will later revisit the concept of social welfare, and of a social welfare function, to account for other criteria beyond efficient resource allocation. See infra Chapters 13 and 14.

For a discussion of the closely related Coase Theorem, see infra Part III.

Indeed, you might have noticed that at one point, we claimed that Law and Economics is associated with positivism and at a later point, we observed that those associated with the Austrian school sometimes challenge the Chicago School for its prescriptive accounts. Others, such as Buchanan, criticize Posner’s normative claim that judges should seek to promote efficient rules on the ground that such policy decisions should be left to the legislature and that judges should limit themselves to applying that law. See, e.g., James M. Buchanan, Good Economics—Bad Law, 60 VA. L. REV. 483 (1974) (arguing in favor of legislative policy making despite its acknowledged imperfections).

See, e.g., POSNER, supra note 16; STEVEN SHAVELL, FOUNDATIONS OF ECONOMIC ANALYSIS OF LAW (2004); HANDBOOK OF LAW AND ECONOMICS (A. Mitchell Polinsky & Steven Shavell eds., 2007).
Economics that we provide, we offer a selective presentation of common law rules that are intended to illustrate how to apply relevant economic concepts but without claiming a complete doctrinal overview. This approach allows us to present a positive framework of efficient common law rules that can then be compared with existing common law rules, some of which are reconcilable with the efficiency account and others of which are in tension with it. This comparison allows readers to identify similarities and explore rationales for identified differences.

By way of analogy, students taking the multistate bar exam will study a set of common law rules that don’t actually exist in any state jurisdiction. They will also study state-specific common law rules (including what are sometimes referred to as the exceptions to the majority rules) of the jurisdiction in which they seek to practice. Although there is value in understanding the basic structure of rules operating across states, it is also important to recognize the variations.

There is an important difference between the comparison of actual and efficient legal rules on the one hand, and the study of majority common law rules—what the multistate portion of the bar exam tests—and individual state variation on the other. The law and economics analysis of the common law, and of other sets of rules, provides a template that rests on a particular set of policy objectives. These objectives, most notably, include improving social welfare. With the right premises and tools, it becomes possible to construct law and economics models of what “efficient” common law rules should look like, whereas the absence of a clearly defined set of objectives makes it far more difficult to intuit the majority canon of common law rules. Perhaps that explains why law students tend to find the bar exam a somewhat grueling exercise in memorization.

B. Our Methodological Approach

Comparing legal rules that are, and are not, social welfare maximizing helps in assessing possible alternative efficiency accounts that are being missed along with potential norms that compete with efficiency in driving doctrinal development. A central goal of the early materials in this book is to provide students with a framework for making such assessments across the set of materials typically introduced in the first year law school curriculum: tort, contract, property, criminal law, and judicial process (including aspects of civil and criminal procedure).

Obviously even a law and economics course devoted entirely to these subject areas could not fully survey the first-year curriculum. Chapters 3 through 10 will allow students to develop the basis for a coherent understanding of these broader bodies of case law relying on a particular set of simplifying, and we contend, largely non-controversial assumptions. This includes, most notably, individual rationality. These materials convey

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21 Common law rules sometimes rest on such competing concerns as minimizing administration costs or ensuring due process.

22 For an explanation of how the bar exam ultimately benefits law students by limiting competition and raising fees, see infra Chapter 15.

23 We do not intend to suggest that there is no controversy concerning the foundational assumptions of economic analysis, but rather, we will argue at various points in the book that the controversies often take a different form than what those most critical of law and economics initially claim.
the structure, or architecture, of the common law system and the objectives that a robust positive account—one designed to explain its longstanding features—suggests that this system of law is at least in significant part designed to serve.

This approach to the standard first-year materials provides an apt prelude to the remaining materials in the book. Just as neoclassical economics provides one important simplifying approach to the study of economics, the Chicago School survey of the first-year curriculum offers an important simplifying introduction to the economic analysis of law. As the doctrinal analysis becomes more complex and varied, so too do the tools required to assess it. For other bodies of legal doctrine, including administrative law, aspects of criminal procedure, constitutional law, federal courts, legislation, to name a few, it is not possible to construct a model set of rules that rests exclusively on a single objective such as social welfare maximization, or economic efficiency, without distorting relevant doctrines beyond recognition. For these bodies of law, we need to introduce additional normative criteria and analytical tools. This includes objectives that sometimes operate in tension with social welfare maximization. Most notably, we do not develop these competing objectives by abandoning the economic analysis of law, but rather we do so by broadening it.

As previously noted, public choice traditionally applied the methodology of economics to the subject matter of political science. In recent decades, however, scholars writing in such disciplines as political science, economics, and law have expanded the scope of public choice to study the closely related subject areas of law and the legal process. It is natural to extend public choice to study law and lawmaking institutions. The institutional focus of political science bears striking similarities to the institutional focus of law, especially public law. And yet, as we will see throughout the book, the public choice methodology often provides a point of contrast both to doctrinal approaches to law and to neoclassical law and economics.

In the remainder of this chapter, we consider in more depth several common features that underlie the various economics methodologies applied in this book. For students who have a background in economic theory, much of what follows will be a refresher. For those students for whom this course represents their first entrée into economic reasoning, what follows will be a helpful primer on several foundational economic principles that will be further developed throughout this book. We begin with several foundational assumptions, or principles, which scholars applying the tools of economic analysis generally assume (but do not always state) in their work.

II. FOUNDATIONAL PRINCIPLES OF ECONOMIC ANALYSIS

Economists construct models that are intended to capture or describe important defining characteristics of a broad range of complex real world phenomena. These models allow scholars to construct a manageable image of reality; they are not intended to recreate that underlying complex reality. In this course, we will present numerous models that are intended to help explain common law doctrines, other legal rules, law-making institutions, and a variety of judicial practices and norms. It is important up front to observe that these models are not intended to exclude analyses or insights growing out of other disciplines
that study the same phenomena, including those listed in the opening of this chapter. Often the analysis will complement intuitions drawn from other disciplines, and other times it will encourage us to reconsider those intuitions. But any complete analysis will inevitably depend upon a combination of analytical approaches.

The fundamental principles of economics and the accompanying illustrations will draw upon several of the subfields of economic analysis that were previously described. They will also draw upon a range of legal subject matters and institutional settings. Our purpose is not to provide a complete analysis of any of these topics here; we will revisit these in greater depth in later chapters. Rather, it is to set a foundation that will be helpful in further developing an approach to the study of law and lawmaking institutions that is specifically economic in nature.

A. Individual Rationality

Human beings are infinitely diverse and complex creatures who manifest a dizzying array of instincts, passions, and behaviors. Humans are variously impulsive or cautious, analytic or careless, selfish or altruistic, hardworking or lazy, ambitious or content, heroic or cowardly, and compassionate or cruel. Different people hold wide-ranging traits, and individuals often possess peculiar combinations of seemingly inconsistent personal traits. Individuals often exhibit conflicting or erratic behaviors, and even behaviors that seem ill-suited to furthering objectives that they sincerely express a desire to pursue. Individual variation might appear to pose an insurmountable obstacle to scholars seeking to construct models that rest upon common assumptions about individual behavior as the basis for developing testable hypotheses as to how changing an institution or rule might affect such behavior.

Scholars employing an economic methodology tend to avoid setting out strong assumptions concerning individual human desires or motivations. Instead, they rest their models on the seemingly simple assumption of individual rationality. Rationality is distinct from the preferences individuals hold. The assumption of individual rationality means that whatever a person’s preferences, she or he is expected to pursue the resulting objectives in a cost-effective manner. Because economists take individual motivations as given, individuals can be as rational in the pursuit of starting or growing a firm for profit as in supporting a charitable cause.

The economic understanding of rationality thus differs from so-called *homo economicus*. Critics of economic analysis sometimes believe that the theory rests upon assuming that individuals are narrowly self-interested. This caricature fails to capture the economist’s assumption of individual rationality. Individuals may be motivated by any number of inspirations. While this can, and often will, include the desire to maximize income or profit, it also includes competing concerns, for example, supporting family and friends; gaining intellectual stimulation; increasing leisure; or exhibiting commitments to religion, charity, or a community. Economists assume that *whatever* ends an individual seeks, he or she will do so “rationally.” This simple assertion about individual rationality distinguishes an economic approach to the study of human behavior from those associated with other social sciences, including those previously listed.
Chapter 1

Economists further assume that while individuals are widely varied in their tastes and preferences, rationality reflects certain constant attributes of human nature. This point is perhaps best illustrated by way of comparison. Consider, for example, the approach to human behavior associated with “republican” philosophy. Such an approach assumes that however selfish individuals may be when operating within the private economic sphere, they are expected to set aside personal motivations in favor of the “public good” when entering the public or political sphere. An influential modern variant, “civic republicanism” contends that ideology or public spiritedness, rather than rational self-interest, is necessary to explain certain political behaviors, including for example why people vote. Scholars embracing this perspective contend that because most voters understand that their votes will almost certainly not control electoral outcomes, economic, or public choice, models are hard pressed to explain voting or to do so other than in a circular manner.

Similarly, some legal scholars contend that ordinary and constitutional politics are distinguished based upon the level of public spiritedness among those participating in the process. Thus, for example, Bruce Ackerman has contended that while self-interested behavior characterizes the rough and tumble of “ordinary politics,” those developing constitutions tend to engage in a higher level of public spiritedness that includes focusing on the good of the larger populace.

Now compare the perspective of Nobel Laureate James Buchanan, working in the public choice tradition. Buchanan, like Ackerman, predicts that choices and behavior will differ in the context of constitutional decision making. Unlike Ackerman, however, Buchanan argues that the differing behavior reflects differing incentives within the specific institutional contexts of legislative versus constitutional decision making, as opposed to differing underlying motivations.

Buchanan argues that constitutions tend to be written at a higher level of abstraction and generality than statutes. In general, it is more difficult for individuals to predict where they will be in a post-constitutional regime at the time of constitution drafting than it is to predict how specific pieces of legislation, enacted within an existing constitutional regime, might affect them. As a result, individuals will be more likely to prefer neutral or impartial rules at the constitutional decision-making stage as compared with the stage of enacting legislation. Buchanan’s approach is analogous to the “veil of ignorance” thought experiment advanced by philosopher John Rawls.

24 To avoid confusion, we are discussing small “r” republicanism, which describes a political philosophy, often associated with JEAN JACQUES ROUSSEAU, THE SOCIAL CONTRACT (Maurice Cranston trans., Penguin Books 1968) (1762), rather than large “R” Republicanism, which instead describes a political party associated with an ideology or bundle of ideologies.

25 For a more detailed discussion of voting, see infra Part V.B.


setting because of the institutional constraints that confront them, not because their preferences have changed.

Other well-known scholarly traditions, dating to Karl Marx, assume that individual preferences are a product of group or class associations. Marxian economic analysis is premised upon the idea that the ruling class will seek to further its interest at the expense of the working class. In more modern times, legal scholars associated with critical legal studies, critical race theory, and certain strands of feminist scholarship have built on this insight to criticize legal policies that are claimed to benefit elites or, alternatively, to advance policies that help those perceived as marginalized or otherwise disadvantaged.

By contrast, the neoclassical economics tradition questions whether persons, behaving rationally, will seek to pursue interests that benefit a group with which they are associated if doing so simultaneously operates to their individual detriment. For an interesting, and controversial, example that grows out of the neoclassical analysis of labor law, consider the problem of racial discrimination among private companies, or firms. Nobel prize-winning economist Gary Becker has suggested that in competitive labor markets, firms that seek to indulge racial prejudices in the process of hiring or promotions will incur a cost as they are voluntarily restricting their own access to a segment of the labor market. This restriction will place such firms at a competitive disadvantage as compared with those firms that do not discriminate. Over time, the discriminatory, cost-bearing firms will thus be forced either to change their policies, setting aside their personal views on race, or risk falling out of the market as a result of competitive pressures imposed by non-discriminatory firms. One noted criticism of the Becker model is that it responds to the problem of racism by suggesting that as a theoretical matter, it should not exist.

In evaluating the merits of Professor Becker's theory, consider once again the nature of economic analysis. The deliberately reductionist models of interactive human behavior allows economists to construct models capable of empirical testing. Can you think of any tests that one might develop to falsify or reaffirm Professor Becker’s theory that, holding all else constant, private market competition should be expected to drive racially discriminatory firms out of the market? Given that racism tragically exists in a host of institutional settings, can Becker’s model be extended to explain the circumstances in which it is prone to arise and persist?

More generally, economists are skeptical of claims that individual rationality, and thus behavior, changes as a function of the context in which such behavior takes place. Economists are inclined, for example, to question whether citizens who engage in self-interested private pursuits 364 days a year will shed this predilection on the Tuesday after the first Monday in November (Election Day) thus casting their ballots in a manner that in otherwise uncharacteristic fashion seeks to advance a larger notion of public good.

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Similarly, economists are inclined to question whether a greater degree of public spiritedness better characterizes constitutional politics than ordinary politics. While economists doubt that context or group affiliation alone changes rational motivations, economists believe that institutional incentives can and do shape human behavior.

B. Institutions Matter

Economists are very concerned with how institutions affect individual and group behaviors. In general, such scholars are skeptical about claims that individuals are apt to change their personal motivations as they move from one sphere of activity to the next. Economists agree, however, that individual behavior often changes with institutional contexts, for example, from acting within a market, to acting within a legislature, to acting within an agency or court.

Merely labeling a setting as different, however, is unlikely to change personal motivations. An individual member of Congress who is motivated to procure special interest legislation for her district or to further partisan concerns associated with her party is unlikely to abandon these goals simply because she is called upon to address a set of questions that are labeled “constitutional” rather than “ordinary” politics. For example, her motivations are likely to remain constant when voting on a prospective judicial nominee, a proposed constitutional amendment, or a decision whether to impeach the President or some other officer. But the constancy of human nature does not imply constancy of individual behavior. Quite the contrary.

A fundamental principle of economics is that individuals respond rationally to changes in incentives. A single user of a fishing pond might be indifferent to concerns of overfishing, whereas a single owner of the pond is more apt to be concerned that stocks remain at a level that allows replenishment. In both contexts, the person is seeking to maximize her return, but the effects of her conduct will vary across these two settings.

Consider also how behavior is affected by a price change over two commodities. If the price of oranges rises relative to the price of grapefruits, then holding all else constant (for example assuming that the same land is hospitable to both crops and that the demand functions for both crops are similar), economists predict that citrus farmers will increase their production of oranges as compared with grapefruits, and conversely, that consumers will purchase fewer oranges and more grapefruits. Changes in the relative price of the two goods affects individual behaviors as reflected in purchasing decisions.

Just as price changes within private markets affect individual purchasing behavior, so too do changes in institutional incentives affect the behavior of affected persons. A fundamental tenet of public choice is that institutions matter. By this, economists understand that institutions internalize mechanisms that reward or punish particular behaviors and that individuals, behaving rationally, modify their behavior in response to the resulting institutional incentives.

Nobel prize-winning economist Douglass North has defined “institutions” to be the humanly devised constraints that structure human interaction. They are made up of formal constraints (e.g., rules, laws, constitutions), informal constraints (e.g., norms of behavior, conventions, self-imposed codes of
conduct), and their enforcement characteristics. Together, they define the incentive structure of societies and specifically economies.\textsuperscript{33}

As an example of the importance of institutions in motivating individual behavior, consider the relative difference in “independence” that judges have in various institutional settings. In the United States, federal judges have a high degree of independence. Article III judges are appointed for life rather than elected for a term of years and serve during “good behavior.” This has been interpreted to permit removal only for corruption or malfeasance, rather than for the substantive content, or popularity, of their rulings or written opinions. By contrast, many states have various protocols for electing judges.

Imagine two otherwise identical candidates for judgships, one of whom is appointed to a federal court and the other of whom is selected to a state court for a term of years. Notwithstanding the nominees’ similar ideologies, including their views on the role of the judiciary, it is reasonable to predict that each will behave differently based upon the incentives associated with the two differing institutional settings.\textsuperscript{34} Few would deny that federal judges care about how their rulings and opinions are received.\textsuperscript{35} We can predict, however, that in contrast with state judges who face reelection pressure, Article III judges are less likely to respond directly to the pressures of popular opinion and are more likely to adhere to their preexisting judicial philosophy, including, perhaps, indulging their ideological views whether or not popular among voters. The specific institutional choices concerning the selection, retention, and removal of judges is thus apt to influence judicial behavior at least some of the time.

As is often the case, policy questions about these and other institutional choices do not admit of a right or wrong answer. A careful economic analysis can, however, help to unmask important—if unstated—assumptions concerning the relevant policy choices. The divergent incentives among judges appointed for life versus judges elected for a term of years likely reflects assumptions concerning who the principals are to whom we wish judges to be most responsive. Elected judiciaries, responsive to the political pressures of current voting constituencies, implicitly view judges as agents of those constituencies. By contrast, independent judiciaries, those relatively isolated from popular political pressures, implicitly view judges as agents of those who enacted the laws that they are now called upon to interpret. Of course if judges or other actors were perfect agents for their respective principals there would be no need to build incentives within institutions that minimize potential divergences between the principal’s goals and the agent’s actions. Once more, differences in institutional settings, rather than changes in human nature, best explain how relevant actors respond to incentives.


\textsuperscript{34} For now, we set aside the problem that once the institutional arrangements are put in place, these different judicial institutions attract potential judges who no longer share common approaches to the methodology of judging.

\textsuperscript{35} Or as Finley Peter Dunne’s Mr. Dooley famously put it: “NO matter whether th’ constitution follows th’ flag or not, th’ supreme coort follows th’ iliction returns.” FINLEY PETER DUNNE, MR. DOOLEY ON THE CHOICE OF LAW 52 (Edward J. Bander comp., 1963) (1901).
C. Agency Costs

The divergence between the goals of a group of voters or other decision makers and the actions of those they elect or otherwise choose to represent their interests is referred to as “agency costs.” Agents, whether they are legislators or judges, are not blank slates. A fundamental tenet of public choice holds that agents are not neutral conduits through which principals further their goals. Instead, the agents themselves possess preferences and motivations that sometimes coincide with, and other times diverge from, those of their principals. James Madison highlighted the problem of agency costs in creating Congress in a famous passage from the Federalist No. 51:

If men were angels, no government would be necessary. If angels were to govern men, neither external nor internal controls on government would be necessary. In framing a government which is to be administered by men over men, the great difficulty lies in this: you must first enable the government to control the governed; and in the next place oblige it to control itself.\(^\text{36}\)

Madison was discussing the problem of agency costs in the context of the legislature. But the problem of agency costs also arises in selecting any governmental official, whether the Executive, bureaucrats, or judges. As the preceding discussion shows, in the judicial context, the problem is complicated because before we can identify appropriate measures to reduce agency costs, we must confront the logically antecedent question, who is the principal?

Economic analysis, including public choice, cannot provide an answer as to the optimal degree of judicial independence in a constitutional system. The wide divergences between the federal and state constitutions, and among state constitutions, demonstrate that there is no single correct answer. Public choice can, however, help identify the tradeoffs between accountability, independence, and agency costs, when making these choices, including helping to unmask implicit assumptions concerning whose interests, or which principals, judges are expected to serve.

D. Methodological Individualism

Along with rationality, economic theory rests on the premise of methodological individualism.\(^\text{37}\) A careful assessment of any institution demands that one first understand how that institution motivates affected individuals. James Buchanan and Gordon Tullock, two leading public choice theorists, expressed this intuition as follows: “Collective action is viewed as the action of individuals when they choose to accomplish purposes collectively rather than individually, and the government is seen as nothing more than the set of processes, the machine, which allows such collective action to take place.”\(^\text{38}\) And as

\(^{36}\) The Federalist No. 51, at 290 (James Madison) (Clinton Rossiter ed., 1961).


\(^{38}\) See Buchanan & Tullock, supra note 27, at 13.
Kenneth Shepsle, another leading public choice scholar, famously put it: “Congress is a ‘They,’ not an ‘It.’”

Methodological individualism thus lies at the foundation of economic analysis, underpinning all models of human interaction and behavior. To illustrate, consider a commodity cartel, such as a cartel for oil production. Considered as a collective, the cartel members have a strong incentive to reduce aggregate output, with pro rata allocations among individual producers, in an effort to set the price at the same level as a monopolist who controlled the entire market. And yet, it is well understood that this result is likely to be unstable. The resulting instability arises as a direct consequence of the divergent motivations of the cartel as a whole, on the one hand, and those of its individual members, on the other. Assuming pro rata cuts based, for example, on preexisting market shares or some other formula (such as an average over some set number of years), each individual cartel member, behaving rationally, has an incentive to “cheat” by selling just a bit more than the allocated cartel share at a price just below the newly elevated price level. Each individual member of the cartel hopes to get away with modest cheating while also hoping that the remaining cartel members adhere to their quotas, thus sustaining the overall favorable pricing structure. For the cartel as a whole, however, the problem gets much worse. Each cartel member shares the same incentive to benefit from the artificially inflated cartel price, by selling more than the allocated share. Over time, therefore, the cartel output and pricing scheme tends to erode, thereby restoring both the output and price back toward the pre-cartel, competitive level.

Although each of the cartel members would have been better off had all adhered strictly to the allotted quota rather than cheating, the difficulty is that the ultimate production decisions are made individually. Admonishing members to cooperate will not ensure that they do so. The individual firm’s goal of maximizing profits does not disappear simply because the firms have collectively identified themselves as a cartel.

E. Free Riding and Forced Riding

Group decision making also gives rise to problems of “free” and “forced” riding, key concepts that are especially significant to public choice theory. Free riding occurs when an individual is able to share in benefit of a collective good without contributing to the cost of its procurement. Free riding occurs most commonly in connection with the provision of public goods. Consider, for example, national defense. Once an army is formed, all Americans benefit from its existence in that the army cannot decide to protect one person’s home from invasion, but not her neighbor’s. Thus, if an individual pays taxes to support an army, her neighbor also benefits whether or not he contributes. The neighbor has the opportunity, and incentive, to “free ride” on those who pay to provide the public good. Each individual shares this same incentive. If dependent on voluntary contributions, therefore, public goods will tend to be undersupplied. Although the group

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40 We will revisit this dynamic in the discussion of the prisoners’ dilemma See infra Chapter 13.

as a whole would be better off if everyone contributed to the provision of such goods, each individual’s personal incentive deviates from this collective goal.

Other collective choice situations give rise to “forced riding,” the mirror image of free riding. Forced riding occurs when an individual is coerced by other members of the group (such as under majority rule) to contribute to providing a claimed public good despite not receiving a sufficient personal benefit.\footnote{This problem arises, for example, in cases of forced subsidization of livestock and agricultural marketing programs, which have been challenged by contributors who do not perceive a proportional benefit to collective advertising. See, e.g., Johanns v. Livestock Mktg. Ass’n, 544 U.S. 550 (2005) (rejecting First Amendment challenge to program that forced subsidization of government advertising and distinguishing cases that struck down similar non-government advertising programs).} At the extreme, an individual might even experience disutility from a claimed public good; for instance, a pacifist might claim to be worse off by the provision of national defense. As a less extreme example, consider those who dislike opera but whose taxes subsidize operatic productions or sports detractors whose taxes subsidize the construction of a new stadium. Majority rule does not ensure that those who receive the benefit bear the full cost. Assessed against individual preferences, forced riding risks an overproduction of collective goods as compared with a regime in which the beneficiaries fully internalize the marginal cost of procurement.

The problem of forced riding is largely a consequence of the inability to observe subjective individual valuations of public goods and thus the impossibility of assigning contributions based on those valuations. Instead taxes are assessed based on observable characteristics such as incomes or property values, which often fail to align with marginal valuations of the publicly funded goods or services.

\section{F. Structuring Appropriate Micro-Foundations}

As the twin concepts of free riding and forced riding demonstrate, in seeking to promote preferred institutional outcomes, it is essential to account for the “micro-foundations” of individual behavior. Effective group performance is impossible unless institutions motivate individuals to act in a manner that furthers the collective body’s goals at appropriate levels.

Let us return to the problem of the cartel. Assume once again that contrary to the interests of consumers who prefer competition, the cartel members wish to reduce output in an effort to raise price. An obvious way to align individual and group incentives is to combine the productive capacities into a single firm. The monopolist has an incentive to reduce output and raise price, even though as one of several cartel members, she would prefer to cheat from a quota imposed to achieve the same overall result.

\section{G. Marginal Analysis}

Individual incentives come from many disparate sources. Most individuals are influenced by a combination of their family upbringing, cultural identity, religion, socioeconomic circumstances, educational background, and perhaps most obviously, one’s internal sense of morality. Thankfully most people do not decide whether or not to commit such horrendous acts as murder, assault, or arson based upon the mere presence or absence of a prohibitive criminal statute. Similarly, most of us take care while driving...
because we were raised to think carefully about what we do and to be attentive to how our actions risk affecting others. Unfortunately, the opposite is also true: there is a group of individuals who will engage in harmful activity despite legal prohibitions coupled with considerable sanctions, for example fines or incarceration. Although these observations seem, and indeed are, obvious, they nonetheless raise an important puzzle for the economic analysis of law.

If well-behaved individuals are motivated by personal factors rather than by formal legal rules, and if a subset of individuals will engage in harmful behaviors without regard to such rules, how can law and economics claim to create models describing the likely effect of changes in legal rules on rational individuals or institutional actors? The answer rests on the important economic concept of marginality.

Marginal analysis focuses on the effect of changes in one factor in influencing another, for example how an adjustment in price affects the decision of some consumers to buy or not buy, or how an adjustment to a legal rule motivates some people to engage in, or avoid, a particular activity. There are some goods or services that many consumers will continue to purchase even if the price doubles or even triples, and there are others that consumers will suddenly stop buying even if the price goes up fairly modestly. In each instance, those whose behavior is affected by the price change are “on the margin,” whereas those whose conduct is unaffected are “infra-marginal.” This also applies to the effect of changes in legal rules on personal and institutional behavior. As with price adjustments, changes in legal rules can only affect the conduct of those who are on the relevant margin affected by the rule change.

Law and economics does not claim that legal rules are responsible for all, or even most, human behaviors. As noted, most observed behaviors are the product of culture, religion, psychology, ethnicity, socioeconomic status, education, and countless other factors that define and enrich personal and group identity. Rather, the analysis assumes that legal rules affect the behaviors of those persons or institutions on the relevant margins of the rules themselves. The number of persons or institutions affected by a change in price or legal rule is an empirical question. Intuitively, however, adjustments in many legal rules are likely to affect the incentives and conduct of considerable numbers of persons or institutions. As a result, modeling the likely impact of adjustments to such rules is an important step in assessing the efficacy of rules and institutions.

H. Politics as an Exchange Model

Disaggregating collective action via the assumption of methodological individualism not only helps to explain the formation and structure of private institutions, but also it transforms the traditional understanding of politics. In contrast with the conventional

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43 For a discussion of price “elasticity,” see infra Chapter 2.

44 We will introduce the concept of marginality more formally in Chapter 2. For a discussion of how the concept of marginality helps to explain an anomaly to Adam Smith, namely why such inessentials as diamonds hold considerable value whereas such essentials as water do not. See infra Chapter 16 (explaining that Smith lacked the tools to appreciate the effect on price of marginal increases in the availability of goods or services.)
understanding of politics as a search for the “public interest,” public choice helps to reframe collective action as an exchange model.\textsuperscript{45}

Within this analysis, those who demand government-provided goods and services—voters, interest groups, and lobbyists—offer their support to those elected officials who, in exchange, agree to provide them. Unlike private market exchange, however, the costs and benefits of lawmaking “transactions” affect persons who do not necessarily participate in the bargain. This closely relates to the earlier discussion of free and forced riding.

I. \textit{Pareto Optimality Versus Kaldor-Hicks Efficiency and the Holdout Problem}\textsuperscript{46}

In theory, even without adhering to a unanimous consent rule as a precondition to collective action, it is possible to ensure outcomes that benefit all persons affected by group decisions. If a proposed change in law is welfare maximizing, those benefiting by the action (the “winners”) could compensate those who are harmed (the “losers”) and still come out ahead. The winners would thus be made better off, even after compensating the losers, and after receiving compensation, the losers would be no worse off. If such compensation took place, the result would satisfy the most stringent definition of economic efficiency. A change from the status quo to an alternative state is \textit{Pareto superior} if it improves the position of at least one participant without making anyone else worse off. \textit{Pareto optimality} demands that all potential Pareto superior moves have already taken place. When this occurs, any further changes from the status quo would instead effect a wealth transfer between or among participants, with the result that at least one party to the exchange would be made worse off.\textsuperscript{47}

In private markets, at least assuming no negative externalities,\textsuperscript{48} meaning that persons not party to the transaction are not adversely affected, \textit{Pareto superior} exchanges routinely occur. When an individual purchases a latte for $4, the buyer presumably values the coffee more than the money, and the vendor values the money more than the coffee.

\textsuperscript{45} We will present the exchange model in more detail in Chapter 11.


\textsuperscript{47} The importance of the Pareto principle in formulating law and public policy has long been the subject of academic debate. \textit{See, e.g.}, Daniel A. Farber, \textit{Autonomy, Welfare, and the Pareto Principle}, in \textsc{Law and Economics: Philosophical Issues and Fundamental Questions} 159 (Aristides N. Hatzis & Nicholas Mercuro eds., 2015) (demonstrating theoretical and practical limitations in applying Pareto principle in legal policymaking); Marc Fleurbaey et al., \textit{Any Non-welfarist Method of Policy Assessment Violates the Pareto Principle: A Comment}, 111 \textsc{J. Pol. Econ.} 1382, 1383 (2003) (using social welfare function analysis to critique Kaplow and Shavell’s assertion that “welfarism and the Pareto indifference condition are equivalent”); Louis Kaplow & Steven Shavell, \textit{Any Non-welfarist Method of Policy Assessment Violates the Pareto Principle}, 109 \textsc{J. Pol. Econ.} 281 (2001) (arguing that policy making should be based solely on Pareto criterion, the claimed equivalent to welfarism); Guido Calabresi, \textit{The Pointlessness of Pareto: Carrying Coase Further}, 100 \textsc{Yale L.J.} 1211, 1215–17 (1991) (maintaining that Pareto criterion has limited normative implications because logically, all Pareto improvements should already have taken place).

\textsuperscript{48} For a discussion of externalities, see infra Part IV.
By contrast, when the government provides goods and services, it uses its coercive power of taxation to fund its programs. When this occurs, not everyone benefits, and without regard to contribution levels, those who do benefit might not do so to the same degree. In theory, those who benefit could pay off those who are disadvantaged, thereby satisfying the condition of Pareto superiority. The practical difficulties with such a regime, however, generally make actual compensation implausible.

Under the alternative of Kaldor-Hicks efficiency, a change from the status quo is defined as efficient when the potential for such compensation exists even though the actual compensation does not occur, meaning when the aggregate gain to winners exceeds the aggregate cost to losers. The intuition is that because the winners’ welfare has improved by more than the losers’ welfare has suffered (hence the possibility of compensation), the overall result improves social welfare. This more relaxed definition of efficiency, while acknowledging the unavoidable nature of winners and losers in the public procurement of goods or services, provides an important normative foundation for many public programs that, from a practical point of view, cannot satisfy the more stringent Pareto criterion.

In the collective choice setting, the preceding analysis produces an important insight: the best evidence of whether a given collectively chosen policy maximizes social welfare would be the unanimous consent of all members of the affected community. The unanimity benchmark for collective choice, therefore, appears functionally identical to the Pareto superiority criterion for market transactions. A unanimity rule for collective choice, however, creates the difficulty that even a single person could prevent the proposed law from passing. An individual might oppose based upon the merits of the proposed change or in a strategic effort to use veto power to demand some other benefit as a precondition to tendering support. In the context of individual market transactions (such as for purchasing a cup of coffee), the problem of the strategic holdout does not arise, as an individual lacks the power to impose costs on anyone other than herself. In a collective choice setting, however, the need for consent among all relevant parties can be very expensive, and the costs can include creating opportunities for strategic holdouts.

As a result, although a rule requiring the unanimous assent of those governed as a precondition to coercive governmental action might prevent imposing costs on those who do not benefit from such action, both as a theoretical and as a practical matter, the unanimity norm is impossible to implement. Thus, in judging the merits of a given collective choice institution, it becomes necessary to adopt an alternative to Pareto superiority, or its analogue, unanimous consent, such as Kaldor-Hicks efficiency, and to accept a majority or supermajority decision-making rule.

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III. THE PROBLEM OF RECIPROCAL COSTS (OR EXTERNALITIES) AND THE COASE THEOREM

In well-functioning markets, with well-defined and freely transferable property rights, the rational actions of individuals not only tend to improve individual welfare, but also to contribute positively to social welfare. Where, however, property rights are poorly defined, or individuals can pass part of their costs of production onto others, one can no longer make this assumption. For instance, a farmer might be able to raise and sell pigs to consumers on mutually beneficial terms. And yet, pig farming also gives rise to odors and pollution that are likely to annoy and harm the farmer’s neighbors. If the farmer is not required to compensate his neighbors for the harms created by pig farming, the farmer and his purchasers will not bear the full cost of the activity of raising pigs. At this point, it is no longer possible to infer an increase in social welfare from the transactions that improved the private welfare of the farmer and the purchasers.50

This problem, commonly known as negative externalities, has long been a major focus of neoclassical economic theory. The influential economist Arthur Cecil Pigou believed that a major challenge facing market economies was ensuring that firms absorb the full costs of their own productive activities, and thus that regulation or taxation was necessary to minimize potential negative externalities.52

In his famous essay, *The Problem of Social Cost*, Nobel Prize-winning economist Ronald Coase challenged Pigou’s approach to the problem of externalities, claiming it was analytically flawed. Part of the difficulty centered on the indeterminate nature of defining externalities. Any claimed externality can be recast as involving incompatible uses of property, with the result that vindicating the claimed rights of either party imposes genuine costs on the other.54 Coase claimed that the reciprocal nature of cost undermined the externality framing.

Consider a dental office, with a noisy drill that operates frequently throughout the day, located next door to the home of a nurse who regularly works the night shift. We might say that the dentist’s drill imposes an externality on the nurse, who cannot sleep, and issue the nurse an injunction, but we might as easily say that issuing the nurse’s injunction imposes an externality on the dentist who can no longer practice in that location. Absent these two competing uses, there is no social conflict. In Coase’s analysis,

50 Activities that have externalities are clearly not Pareto optimal and may or may not be Kaldor-Hicks efficient. Do you see why?
51 There are also positive externalities, as for example, when a developer enters a blighted part of a city and introduces new shopping, employment, and entertainment opportunities with the effect of improving the overall quality of life for those residing there. The existence of these positive externalities, however, does not preclude the simultaneous negative externalities for those residents who are thereby displaced. That is why Kaldor-Hicks efficiency balances the benefits to winners against the burdens on losers.
54 This can arise in simple binary conflicts or in more complex multiparty conflicts. In the discussion that follows we focus on binary conflicts, but in later discussions, we will consider more complex multilateral bargaining. See infra Chapters 7 and 8.
identifying either activity as the source of an externality privileges the competing activity in a conclusory manner. Instead, Coase argued, the legal regime must first identify which of the two parties may properly assert a property right and trigger the necessary legal enforcement mechanisms. The “externality” concept offers little guidance in resolving these issues.

Coase posited that with respect to incompatible uses, the legal system has two overriding functions: first, it must identify which of the competing uses is more socially valuable, and second, it must identify the proper legal mechanism to improve the likelihood that the more highly valued use will be achieved. In Coase’s analysis, the legal system’s goal is to promote the movement of resources to their more highly valued uses.

Sometimes that results directly from the allocation of property rights, for example, vindicating the claim of the dentist or nurse. On other occasions, however, the legal system accomplishes this by recognizing that the market conditions are conductive to private bargaining, which can reallocate the legal system’s initial assignment of rights.

Coase’s essay is most well-known for setting out the famous Coase Theorem. The Coase Theorem states that with zero transactions costs and perfect information, resources will flow to their most highly valued uses without regard to the initial allocation of property rights. The Coase Theorem is at once counterintuitive, controversial, and widely misunderstood. One immediate difficulty that Coase confronted was that many critics misunderstood the theorem to imply that transactions costs are low, and, as a result, that resource allocation is generally efficient and welfare enhancing. Of course there are countless illustrations in the real world of inefficient resource allocations and of costly barriers to welfare-enhancing private market exchange.

What Coase intended, however, was the opposite. Coase posited two preconditions that render liability rules irrelevant to efficient allocation of resources: zero transactions costs and perfect information. Certainly in the real world, there is little reason to assume that transacting is costless. Transactions costs include travel, documentation, and communication. They also include opportunity cost, defined as the time and energy taken from other potentially profitable activities. And perhaps most significantly, although he specified perfect information as a separate condition, the cost of gathering the necessary information with which to enter into transactions is among the greatest cost impediments to contracting.

We now illustrate how Coase’s stylized world yields optimal outcomes without regard to the initial assignment of property rights. (This can also be expressed based on which party holds the corresponding liability rule, which controls whether there is a “right” to cause or to be free of a negative externality.) Consider the following hypothetical. Imagine a laundry and a factory that pollutes into a river to the laundry’s

55 Coase, supra note 53.
56 See id. As demonstrated infra, Chapter 13, the term Coase Theorem might be a misnomer because under certain conditions associated with empty core bargaining, even when the theorem’s articulated assumptions are satisfied, the predicted efficient resource allocation is not guaranteed.
detriment. The factory is worth $11,000; but by polluting, it reduces the laundry’s value from $40,000 to $24,000. Further assume that for the laundry to realize its potential value of $40,000, the factory must cease all pollution, which would require the factory to shut down.

The Coase Theorem posits that in a world with zero transactions costs and perfect information, this efficient result will be achieved—the factory will close and the laundry will operate—regardless of which of the two businesses owns the property right to pollute or to enjoin the pollution. Assume first that the factory owns the right to pollute. The laundry will pay up to $16,000—the difference in its value with and without the factory polluting—to purchase that right from the factory. Because the factory is worth only $11,000 even with the right to pollute, it has a rational incentive to sell its right to pollute, thus allowing the laundry to purchase the right to enjoin the pollution. Conversely, if the laundry owns the right to enjoin the factory’s pollution, the factory will not be able to purchase the pollution right from the laundry. The factory values that right at $11,000, $5000 less than the laundry values its contrary right to prevent the pollution. The example illustrates that if the owner of the laundry values the right to be free of pollution more highly than does the owner of the factory to pollute, then regardless of who bears the property right, in a world with zero transactions costs and perfect information, the laundry will ultimately obtain that right.

A critical assumption in the analysis is that the numbers in the example capture all relevant costs. If there are hidden costs, psychological or otherwise, and if such costs are of sufficient magnitude to inhibit the deal, then the result will break down and the efficiency-promoting transaction will not occur, leaving the property right wherever the legal system happened to place it. If that right happened to rest with the laundry, then the efficient result is fortuitously achieved, but if it initially rested instead with the factory, then the transactions costs would suffice to prevent the efficient flow of resources, costing society up to the $5000 premium value that the laundry places on the property right.

Can you identify circumstances in which, even with low transactions costs, the Coasian result is unlikely to arise? If so, could you characterize the implicit impediment to the efficient outcome as a transaction cost? What does the preceding question suggest about the nature of transactions costs as that term is employed in the Coase theorem?

IV. APPLICATIONS: THREE CASE STUDIES

The preceding discussion introduced several important aspects of economic reasoning. We will now introduce three case studies that will help you in developing several insights in the chapters that follow. These case studies are intended to encourage you to think about the power of economic reasoning to tackle foundational questions.

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59 We will return to a more detailed discussion of the Coase Theorem in the context of contract law, in Chapter 4, and property law in Chapters 5 and 6.

60 Portions of the discussion that follow are adapted from MAXWELL L. STEARNS, PUBLIC CHOICE AND PUBLIC LAW: READINGS AND COMMENTARY 64–72 (1997).
about common law doctrine along with our political and legal processes. Although you will gain insights into these examples with new tools introduced throughout the book, for now evaluate them based upon the general intuitions developed in the preceding discussion.

A. The Rational and the Reasonable

In this chapter, we explored the economic concept of rationality. In the next several chapters, which examine the common law doctrines of Tort, Contract, and Property, we consider what the legal system considers “reasonable.” We now explore the relationship between these two concepts. Although the concepts are related, we will see that they sometimes diverge. The divergence has notable implications both for common law doctrine and for economic analysis.

Consider first the conventional law and economics understanding of negligence, meaning the failure to take appropriate precautions that could reduce the risk of an accident arising in Tort. The analysis begins with the famous Learned Hand Formula. That formula defines “reasonable,” or non-negligent, precautions as those for which the burden \( B \) is lower than the probability \( P \) of causing an accident multiplied by the impact or damage \( L \) should that accident occur. Under this formula, an actor is negligent if she has failed to take a precaution for which \( B < PL \). This test has been described as a “threshold rule,” meaning that those who fail to meet it are liable for negligence when the other elements in a prima facie negligence suit are met, whereas those who do meet that test are not liable.

An analogous set of threshold rules apply in other common law contexts, for example, in determining whether a non-breaching party provided adequate notice for damages that might not otherwise be anticipated in the event of a breach of contract, or when a property owner seeks to have land fully restored pursuant to a contractual restoration provision following a mining operation even though the cost of doing so would vastly exceed any difference in the fair market value of the affected property.

Whereas the legal system generally seeks to ensure that litigants respond reasonably in circumstances that give rise to litigation, economic analysis also reveals that social welfare is sometimes promoted when individuals pursue their own idiosyncratic objectives. Although such preferences might appear “unreasonable,” at least as evaluated against most people’s preferences and expectations, the legal system nonetheless often

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61 For an analogous discussion, see Robert Cooter & Thomas Ulen, Law and Economics 11–12 (1st ed. 1988) (arguing that as a result of social costs that individual actions sometimes produce, actions viewed as individually rational might be considered unreasonable from a social perspective).
63 This assumes that the relevant legal standard is negligence as opposed to strict liability or some other standard. When contributory negligence or comparative fault applies, the plaintiff’s failure to take appropriate precautions, based on this analysis, can either absolve the defendant of liability (contributory) or require an allocation based on degrees of relative fault (comparative). For a more detailed analysis, see infra Chapters 3 and 4.
64 See infra Chapters 5 and 6; see also Hadley v. Baxendale (1854), 156 Eng. Rep. 145; 9 Exch. 341.
65 See infra Chapters 5 and 6; see also Peevyhouse v. Garland Coal & Mining Co., 382 P.2d 109 (Okla. 1962).
permits individuals to gain the benefit of such pursuits. Recall also that the economist's
definition of rationality takes preferences as given and assumes only that individuals will
pursue their objectives in a cost-effective manner.

The following are based on more detailed presentations or actual cases discussed in
the chapters that follow. For now, preliminarily assess the following:

1. A skydiving company includes a disclaimer of liability not only for negligent conduct
that might lead to a fatal accident, but even for gross negligence, and indeed for any
skydiving accident regardless of cause. If someone signs a form contract containing
such provisions and a fatal fall resulting from negligence follows, should the contract
terms be judicially enforced?66

2. The purchaser of a newly constructed home specifies a particular brand of pipe to
be included, but after completion, he learns that the builder used an alternative pipe
of equal quality. Should the buyer be able to obtain a judicial order for specific
performance to compel removal of the existing pipe in favor of the pipe specified in
the contract or damages equivalent to that cost?67

3. At great expense a property owner adds features to her home that are customized to
her own tastes, including glass walls with automatic sunblock features, an elaborate
play house for her children, and a beautiful swimming pool, in an area in which the
demand for such features is uncommon. If the property is taken for a public use
through eminent domain, should the owner be able to recover the full cost of her
customized home or the substantially lower fair market value?68

In these hypotheticals, we might ask if the skydiver (or his estate), the homebuyer,
or the property owner, respectively, were behaving rationally by pursuing activities
resulting in potential damages greatly in excess of what others might deem reasonable or
appropriate. What about the skydiving company, the construction contractor, or the state
seeking eminent domain? Were these parties likewise acting rationally in trying to avoid
liability altogether or at least the full scope of claimed liability? How should the judicial
system reconcile these competing interests to arrive at a reasonable (socially optimal)
resolution of the disputes, and why? The chapters on torts, contracts, and property will
provide tools that are helpful in addressing these questions.

B. Is Voting Irrational?

Public choice, taken up in part III of the book, applies economic principles,
including those developed thus far, to politics and political processes. One foundational
aspect of the political process, namely voting, is widely viewed as paradoxical especially
when viewed from an economic perspective. The “paradox of voting” is that although
virtually no informed voter expects her vote to control the outcome of an election, and
although voting is a costly activity, in every election, a considerable percentage of the

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66 See infra Chapters 3 and 4.
67 See infra Chapters 5 and 6; see also Jacob & Youngs, Inc. v. Kent, 129 N.E. 889 (N.Y. 1921).
68 See infra Chapters 5 and 7.
population votes. The obvious costs of voting include not only time and inconvenience, but also becoming sufficiently informed to vote for a desired candidate or group of candidates. As a result, some scholars claim that voting defies “rationality” as that term is understood within economic analysis.

Economists have offered a variety of arguments to “rescue” voting from the claim that it is an irrational activity. The arguments implicate the meaning of rationality. Rationality does not mean narrow self-interest. Instead, individuals may rationally vote because they derive any number of nonpecuniary benefits, or an overall sense of satisfaction, from doing so. Professors Daniel Farber and Philip Frickey have responded as follows:

Attempts have been made to reconcile voter behavior with the economic model by postulating a “taste” for voting. This explanation is tautological—anything people do can be “justified” by saying they have a taste for doing it. These scholars ask: “Why is it so difficult to admit that people vote out of political commitment, not personal satisfaction?”

Professors Michael DeBow and Dwight Lee have argued that voting is rational if one views it as a “consumption” activity. Indeed, these scholars claim that knowing that voting is a consumption rather than purely utilitarian activity, might free individuals to vote their conscience, thereby enhancing enjoyment of the act itself. Others have argued that precisely because voters do not internalize the costs and benefits of their electoral decisions, this invites costly and sometimes irresponsible public policy choices.

Professors Farber and Frickey have responded in part with a reductio ad absurdum: if people derive satisfaction by expecting their votes not to count, they could derive even more...
satisfaction by locking themselves up in an empty house and shouting support for their favorite candidates.\textsuperscript{75}

Consider whether the following theories help to restore the rationality of voting.

1. \textbf{An Expressive Theory of Voting}

Some individuals vote because they value expressing views on important matters of public policy.\textsuperscript{76} Such persons might regard doing so as more effective, for example, than shouting in an empty house because even if their votes do not control the outcome, the results are tallied and widely reported. Similar activities that serve an expressive function might include writing letters to the editor of a newspaper or engaging in peaceful demonstration. Because the likely effect of such activities on public policy is minuscule, this theory of voting is often referred to as a \textit{non-instrumental}, meaning the act is an end in itself, rather than a means to the end of affecting a separate outcome, such as who wins an election.

2. \textbf{A Cost Function of Voting}

This theory helps to explain how voters’ related behaviors might appear more intuitively rational. If the cost of voting rises, holding all else constant, people are less likely to vote. If people voted purely out of “political commitment” rather than personal satisfaction, the cost of voting would seem to have less influence. This observation is, however, consistent with non-instrumental accounts in that the individual willingness to vote (the demand for voting) tends to decline as the price of voting rises. Available evidence tends to support this claim.\textsuperscript{77} Such data include lower turnout in adverse weather and lower voter registration when tied to jury service, a potentially counterintuitive result if voting were motivated by civic virtue. Overall evidence suggests that whatever motivates voting in the first instance, the demand curve for voting appears to slope downward, as is generally consistent with rational behavior respecting the consumption of goods.

3. \textbf{Possibilities of Strategic Electoral Voting}

Some evidence suggests that under specific conditions, individuals vote in a manner that might be described as strategic.\textsuperscript{78} For instance, in primary elections, many voters base their votes in significant part on the apparent electoral viability of the available candidates, rather than on which of those candidates is closest to their “ideal point.”\textsuperscript{79} An ideal point

\textsuperscript{75} See Farber & Frickey, \textit{supra} note 70, at 1017.


\textsuperscript{77} Parts of the following discussion are based upon Mueller, \textit{supra} note 8, at 308–20 (reviewing statistical studies of the “Downsian” model of voting which posits that cost of voting has a negative effect on turnout).


is the point along a continuous liberal-to-conservative issue spectrum that most closely corresponds to a voter’s ideological preference. Some studies further suggest that voter turnout is higher in elections that are expected to be close.

Are these observed voting behaviors strategic? If so, does that enhance or undermine claims of voter rationality?

4. Group-Based Model of Vote Mobilization

Another non-instrumental theory of voting includes the role of certain socioeconomic groups in inculcating voting as a positive value. Examples include especially the well-educated and wealthy, and other identifiable subgroups of voters, such as union members. Citizens are trained through education and social norms to think—perhaps erroneously—that their votes are apt to make a difference in a purely instrumental sense. Indeed, some have suggested that effective democracy depends on such misinformation. Does the incidence of voting among particular groups support or undermine claims that voting is an irrational activity?

5. Voting as a Game of Cat and Mouse

Now consider the first of two alternative instrumental accounts of voting. Imagine a world in which everyone understood the voting paradox. Taken to its logical extreme, we might predict that no one would vote. If so, a single individual (whom we will call the “initial voter”), whatever her policy preferences, could completely control the outcome by voting. Some of those who previously declined to vote might now decide to vote to ensure that an idiosyncratic voter does not control the outcome (we will call these the “responsive voters”). Once the responsive voters turn out, this reduces the incentives of the initial voter to cast her ballot. And without the threat that the initial voter poses, the responsive voters lose their incentive to vote. This creates opportunities for a new set of initial voters who, in turn, motivate more responsive voters, and so on.

Some studies suggest that this non-cooperative game can explain why every election produces at least some voters, although these studies also suggest that without including some utility from the act of voting itself, these accounts are necessarily incomplete. Consider how this theory of voting might also relate to the incidence of voting among particular demographic groups. As previously noted, studies have suggested a high correlation between wealth and education, on the one hand, and voting, on the other. This might appear anomalous in that well-educated and wealthy persons are more likely to be aware of the voters’ paradox than less educated and poor persons. And yet, educated

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80 For a helpful discussion, see Roger D. Congleton, The Median Voter Model, in 1 THE ENCYCLOPEDIA OF PUBLIC CHOICE 382 (Charles K. Rowley & Friedrich Schneider eds., 2004). For a more detailed analysis of spatial reasoning in public choice modeling, see infra Chapters 13 and 14.
81 See MUELLER, supra note 8, at 315.
82 See id. at 326–28; Feddersen, supra note 77, at 105–12.
83 Feddersen, supra note 77, at 100.
84 MUELLER, supra note 8, at 306–07.
85 See id.
86 See id. at 327. See also supra note 83 and accompanying text.
persons who know that their individual acts of voting are unlikely to control electoral outcomes might also intuitions that if they are known to regularly vote, their votes are might be afforded a disproportionate weight relative to their numbers. Even though these voters are unlikely to control the electoral outcome through their individual votes, they might value the signaling effect to those who try to influence outcomes in ways that could harm their interests in the future.

In this analysis, the paradox of voting might result from a somewhat crabbed understanding of each voter’s instrumental calculus. The paradox is premised on excluding any potential payoffs other than the prospect of influencing the outcome of a given election as the marginal, or decisive, voter. Instead, the instrumental value might also include the signaling value of voting, including conveying that the voter is part of a group that can be relied upon to regularly vote. By voting in non-President elections and regardless of weather conditions, such voters signal that those who would play cat and mouse with them are unlikely to succeed. Does voting to send a signal help to ameliorate the paradox of voting? Or does it merely restore it if, for example, an individual voter typically has a small impact on the overall group signal?

This approach to voting might bring another instrumental benefit. Within the relevant social groups to which such voters belong, the failure to vote might be viewed negatively as it weakens the political signal for the group as a whole.\(^{87}\) The opposite might also be true. Within the relevant social group, the act of voting might be rewarded, whereas failing to do so might be frowned upon. In this analysis, consistent voters build a form of political capital independent of election-specific outcomes. Does this help to restore the rationality of voting? Why or why not?

6. **The Voter as Minimax-Regret Strategist**\(^{88}\)

Let us now consider an alternative instrumental voting model. Assume that potential voters register a weak preference as between the two dominant candidates and that they ignore the probabilities of success of those candidates. Assume that a third, fringe candidate, perhaps one affiliated with either the Ku Klux Klan or a neo-Nazi group, enters the race. In this situation, mainstream voters turn out in large numbers to avoid the risk that the fringe candidate might win. The strategy is named minimax regret because the voters are not seeking to optimize their ideal points, but rather they seek to minimize the probability of an outcome that leads to a maximum regret.

Perhaps surprisingly, those who turn out to vote for this reason tend to vote for their first choice candidate even if the second choice candidate stands a better chance of defeating the least favored candidate. Such voters appear to discount the low probability that the fringe candidate will win and the somewhat higher probability that their second choice candidate is more likely to prevent this least favored result from potentially emerging.

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\(^{88}\) See Mueller, supra note 8, at 307–08.
Perhaps the voter’s rationale can be expressed as follows: “Because my vote is almost certainly not going to control the outcome, at the very least I can send a strong signal against my least favorite candidate, but if that’s the purpose of my vote, I may as well vote for my favorite candidate.” Does this further support the intuition that even in the minimax regret context, voters cast ballots because they derive a consumption benefit from doing so?

Questions: Which of these theories do you find most or least persuasive, and why? Do any restore the rationality of voting? Why or why not?

One of the most contentious legal issues in recent years has involved voter identification laws. In 2008, the Supreme Court sustained Indiana’s voter ID law against an equal protection challenge. That law allows voters without an ID to cast a provisional ballot provided they show an ID within ten days after doing so. Since then, thirty-three states have enacted some form of voter ID law, several of which have been challenged in lower federal courts, with some challenged provisions struck down. Those who support these laws claim it is a modest requirement that reduces the risk of voter fraud, and those who oppose the laws claim that allegations of voter fraud are overblown, and that the burdens these laws impose disproportionately target poor communities, correlating to communities of color, who are most apt to support Democratic candidates. Which, if any, of the preceding theories best explain the political dynamics behind such laws and why?

C. Is Legislative Logrolling Good or Bad?

Unlike private markets, which generally depend upon the unanimous assent of parties to transactions and which therefore are often presumed to enhance social welfare, legislatures produce law through various majority, and sometimes supermajority, rules. As a result, even if the resulting laws are Kaldor-Hicks efficient, implying that the law is social welfare enhancing overall, winners and losers nonetheless remain.

Legislative processes do not, however, simply involve a series of votes cast on proposed legislation. Instead, they involve a complex framework, one that we will explore in parts IV and V, that includes voting based upon merit, strategic voting or vote trading, and reciprocal commitments made over extended periods of time. Here we consider the peculiar dynamic of vote trading, also known as logrolling.

Logrolling is often thought to be anathema to the “public good” and sound legislative decision-making processes because it permits private interests to attach unrelated, usually narrowly focused private benefits to larger public-regarding legislation. As such, it is often thought that legislative processes should be adapted to prevent or to minimize the power of special interests to attach private legislation (such as “pork barrel” projects) to general-interest bills. Such proposals can take any number of forms, including

perhaps most notably the item veto and germaneness rules. On the other hand, if politics actually is an exchange process, then there might be nothing intrinsically wrong with logrolling. Instead, laws that further the public interest will often have unequal distributive effects. Even though welfare is generally enhanced, it is inevitable that certain people will be disadvantaged even by the most benign laws.

Logrolling might sometimes represent a form of side payment from the social surplus created by the adoption of the law to compensate the “losers.” Alternatively, logrolling might be viewed as a means through which interest groups extort perks through the political process in exchange for allowing legislation to pass, a process identified with rent seeking.

In politics, as in football, it is generally easier to block than pass. Those empowered for various reasons to prevent the passage of desired legislation might use logrolling simply as a means to get preferred legislative benefits even though the larger legislation does not impose unique costs on them.

Questions: Do you think that logrolling is likely to be a force for good or harm in Congress? If you wished to test this question empirically, how could you falsify either of these competing claims? Can you identify practices in Congress or elsewhere that limit logrolling? Why might some institutions seek to promote logrolling and others seek to inhibit it? Is it possible to allow benign side payments without inviting rent seeking? Why or why not?

Conclusion

The questions presented in this chapter will remain important throughout the course. As you acquire new skills, you might change your thinking about the relationships about the nature of market interactions and about the relationship between markets and lawmaking institutions. In the chapter that follows, we formalize some of the intuitions developed here with a brief introduction to price theory. We then apply several of these concepts to doctrines covered in the first-year curriculum before introducing, in part III, additional methodological tools that will help with more advanced legal materials related to public law.