

Norman Schofield  
Gonzalo Caballero *Editors*

# Political Economy of Institutions, Democracy and Voting

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# Introduction

Norman Schofield and Gonzalo Caballero

Modern Political Economy cannot be understood without considering the work of two pre-eminent scholars, Douglass C. North and William H. Riker.

The work by North<sup>1</sup> gave a boost to the New Institutional Economics (Coase 1984), and institutions have become an important research topic in political science and economics in recent years. The contributions by North have had increasing influence and this multi-disciplinary approach has propelled the New Institutional Social Sciences. Work by several institutionalist scholars, such as Williamson (1985), Libecap (1989), Eggertsson (1990), Ostrom (1990), Menard and Shirley (2005) and Greif (2006), as well as the recent book by North et al. (2009), have had a significant influence on current research in social sciences, as well as on policy making in both developed and developing countries.

Riker's work in positive political theory and federalism<sup>2</sup> had a major impact in political science itself, and has influenced the way scholars study democracy. The development of a theory of institutions, combined with the formal theory of elections, has engendered a new political economy involving political scientists, economists and economic historians.

Political economists have used insights about the role of ideas and institutions in an attempt to explain why rapid economic and social development occurred in Great Britain in the seventeenth and eighteenth centuries,<sup>3</sup> and spread to Europe and North America,<sup>4</sup> why the American colonies fought for independence,<sup>5</sup> why

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<sup>1</sup>North (1961, 1981, 1990, 1994), North and Thomas (1973), North and Weingast (1989).

<sup>2</sup>Riker (1962, 1964, 1982, 1986, 1996), Riker and Ordeshook (1973).

<sup>3</sup>Acemoglu and Robinson (2000, 2006), Schofield (2006), Clark (2007), Mokyr (2010).

<sup>4</sup>Acemoglu et al. (2004, 2005).

<sup>5</sup>Schofield (2006).

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Latin America has seemed to fall behind North America,<sup>6</sup> why post-communist states move to democracy, and sometimes fall back to autocracy,<sup>7</sup> why autocracy can be stable,<sup>8</sup> and why economic and political development seems so difficult to implement in some countries, particularly in Africa.<sup>9</sup> Moreover, the research program on institutions has focused on the passage of time and the process of institutional change (North 2005; Greif 2006; Kingston and Caballero 2009). Other authors have examined the links between democracy and economic development, the so-called *modernization hypothesis* that development facilitates the transformation of the polity to democracy.<sup>10</sup> Recently, Jones and Romer (2010), in reviewing theories of economic growth, have suggested that the next major task is to build a theoretical apparatus that focuses on political and economic institutions, and on the difference between oligarchic and democratic societies.<sup>11</sup>

For this new research trajectory, studies of institutions, democracy and voting can provide the key to an understanding of societies both in the present and in the past.

The current volume includes contributions from authors of papers that were presented at conferences on the *Political Economy of Institutions, Democracy and Voting*, held at the Hoover Institution, Stanford in May 2009, at ECARES, Université Libre de Bruxelles, August 2009, and at Baiona, Spain, June 2010, the latter under the auspices of the University of Vigo. The editors thank the Hoover Institution, ECARES and the University of Vigo for the support they provided.

Each chapter in this book went through a review process before publication. These chapters deal with theoretical and empirical issues over the behavior of institutions and the operation of democratic elections. Below we briefly sketch the topics discussed in these chapters.

## Part 1: Institutions

### 1. *Institutions: Rules or Equilibria?*

by Avner Greif and Christopher Kingston

Recent scholarship has demonstrated the power of the rational choice framework for advancing our understanding of institutions and institutional change. Stimulated by these developments, the conceptual frameworks employed by scholars studying institutions have also been evolving, as old frameworks have been adapted and new

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<sup>6</sup>Acemoglu et al. (2001, 2002), Sokoloff and Engerman (2000), Przeworski and Curvale (2006).

<sup>7</sup>Schofield (2009), Bunce and Wolchik (2010).

<sup>8</sup>Epstein et al. (2006), Gallego and Pitchik (2004).

<sup>9</sup>Collier (2007, 2009), Easterly (2007).

<sup>10</sup>Persson and Tabellini (1999, 2003), Przeworski et al. (2000), Przeworski (1991, 2006), Boix (2003), Acemoglu et al. (2008, 2009).

<sup>11</sup>See also Acemoglu (2008).

frameworks have emerged to explore how institutions function, how they change, and how they affect economic behavior and outcomes. This involves two key questions: first, how institutions are selected and second, how people are motivated to follow institutionalized patterns of behavior. One strand of thought within the rational-choice approach to institutional analysis, the ‘institutions-as-rules’ approach, focuses on a theory of how the “rules of the game” in a society are selected. An emerging alternative approach instead emphasizes the importance of a theory of motivation and thereby endogenizes the “enforcement of the rules”, by studying ‘institutions-as-equilibria’. In this chapter, the authors survey these developments and highlight promising directions for future research. They argue that by endogenizing the issue of enforcement, the institutions-as-equilibria approach enables a more satisfactory treatment of several key issues, including promoting our understanding of processes of institutional change.

### 2. *War, Wealth and the Formation of States*

by Carles Boix, Bruno Codenotti and Giovanni Resta

Employing agent-based modelling techniques, the authors examine the evolution of a world with sovereign states that maximize power. They show that: (1) the size (number) of states increases (decreases) as war technologies become capital-intensive; (2) the number of states declines with development and population expansion; (3) capital-rich (capital-poor) economies lead to smaller (larger) economies (mainly because war is less frequent if capital is mobile); (4) world government may become possible in the future (given the evolution of military technology) yet only with a very low probability (given the distribution of economic activities throughout the globe); (5) the possibility of secession leads to a permanent increase in the number of countries if all effects when the countries involved in the split are democratic. These stylized findings fit well the historical evolution of Europe and most of the territorial dynamics of state formation over time, at least until the nineteenth century. The last point accommodates the explosion of the number of countries we have witnessed in the twentieth century.

### 3. *Why Do Weak States Prefer Prohibition to Taxation?*

by Desirée A. Desierto and John V.C. Nye

Why do weak states prefer prohibition to taxation? Desier to and Nye show that keeping an undesirable good illegal is more efficient than legalizing and taxing it, even if producers of the prohibited goods pay out large bribes to prohibition enforcers. If the bribes are recognized as revenues to the enforcers, this additional benefit keeps welfare losses small. This chapter further supports this finding with preliminary empirical evidence and graphical analyses of the likely net welfare losses from prohibition and taxation. It provides a positive rationale for the preference for prohibition in states prone to corruption and imperfect enforcement.

### 4. *Self-Enforcing, Public-Order Institutions for Contract Enforcement: Litigation, Regulation, and Limited Government in Venice, 1050–1350*

by Yadira González de Lara

The spectacular economic growth of Venice during the late medieval period (1050–1350) was based on the expansion of its trade along the Mediterranean and beyond. Crucial to this expansion was the mobilization of large amounts of capital

into risky investments. However, this mobilization required the development of institutions that protected creditors and shareholders from expropriation by controlling merchants. This chapter finds that legal and administrative institutions jointly provided investor protection and explores the interactions between these public-order institutions for contract enforcement and the emergence of a limited government, a coercion-constraining institution that motivated judges and regulators to use their coercive power for protecting rather than abusing investor rights.

5. *Judicial Stability During Regime Change: Apex Courts in India 1937–1960*  
by Alfred Darnell and Sunita Parikh

In this chapter, Alfred Darnell and Sunita Parikh examine the conflictual relationship of two apex courts with the executive branches of India under British colonial rule and after Independence. One, the Federal Court of India, existed in the closing decades of British colonial rule, the other, the Supreme Court of India, replaced the Federal Court in independent India. Little changed between the two courts institutionally or organizationally. However, each court has been characterized quite differently: the former as weak and ineffectual, the latter as elitist and obstructionist. Why has this been the case? In order to answer this question the authors examine major rulings of each court that involved the executive branch and assess each court's decision according to two prevailing theories of judicial decision making: those that emphasize preferences over policy and those that emphasize decisions based on "black letter law". They find both explanations lacking because of evidence that both apex courts in India were concerned not only with issues of law and policy, but also with the stability and security of the institution of each Court.

6. *Institutional Arrangements Matter for Both Efficiency and Distribution: Contributions and Challenges of the New Institutional Economics*  
by Fernando Toboso

Are scholars in the New Institutional Economics tradition systematically disregarding distributive aspects when approaching policy issues as was the case during the 1970s and 1980s? Do economic and political agents usually care about distribution too? To provide an answer to these questions is the basic purpose of this chapter. The analysis carried out demonstrates that not all NIE oriented scholars disregard distributive issues. Some contributions are examined as examples, mainly in the so-called political economy branch of NIE. By means of a well-known graphical tool, the chapter also emphasizes that all of us clearly care about distribution, not just about efficiency, when participating in market transactions as well as in collective political decisions. The analysis also reveals very persuasively how institutional reforms affect participants' relative rights and capacities to act and bargain, not just the total amount of transaction costs experienced by them. Though unfamiliar to many new institutionalists, the author concludes that all this has been acknowledged by authors such as North (1990), Eggertsson (1990) and Libecap.

7. *Institutional Foundations, Committee System and Amateur Legislators in the Governance of the Spanish Congress: An Institutional Comparative Perspective (USA, Argentina, Spain)*  
by Gonzalo Caballero

Legislative organization matters for policy-making. Institutional rules determine the role of property rights, hierarchies, individual deputies, parliamentary groups, transactions and committees in the industrial organization of Congress. The New Institutional Economics and Transaction Cost Politics have given rise to a useful research program on legislative organization. This chapter analyses the institutional foundations of legislative organization of the Spanish Congress from an institutional and transactional comparative perspective. Electoral rules and Committee systems are institutional determinants of the political property rights of congressmen and the structure of governance of legislative organization. The industrial organization of the Spanish Congress is studied, and compared with the traditional model of the US Congress and the Argentine Congress.

8. *Coalition Governments and Electoral Behavior: Who is Accountable?*  
by Ignacio Urquizu Sancho

Elections have been studied in political sciences from two different points of view: either by looking at the selection of ‘good types’ – prospective mechanism – or by studying the sanctions – retrospective mechanism. If we assume that elections are a question about sanctioning, it is widespread that citizens may not assign responsibilities to multiparty cabinets. Thus, scholars have concluded that economic voting does not work properly in the case of coalition governments. This argument has been coined as the hypothesis of ‘clarity of responsibility’. However, if so, how do they explain the electoral results of coalition governments? What do voters consider when they evaluate a multiparty cabinet? In this chapter, Urquizu Sancho discusses some theoretical arguments that question that hypothesis. In fact, this research develops the causal mechanisms that explain how economic voting work for multiparty cabinets.

## Part 2: Democracy and Voting

9. *Empirical and Formal Models of the United States Presidential Elections in 2000 and 2004*

by Norman Schofield, Christopher Claassen, Maria Gallego, and Ugur Ozdemir

This chapter develops a general stochastic model of elections in which the electoral response is affected by the *valence* (or quality) of the candidates. In an attempt to explain non-convergence of candidate positions in the 2000 and 2004 Presidential elections, a formal spatial stochastic model, based on *intrinsic valence*, is presented. A pure spatial model of the election is constructed. It is shown that the equilibria, under vote maximization, do indeed lie at the electoral origin. Other work on Presidential elections in the United States has suggested that a superior empirical model should incorporate the electoral perceptions of the candidate character traits. The chapter then considers a joint model with sociodemographic valences as well as electoral perception of traits and shows by simulation that the vote maximizing equilibrium positions were close to, but not precisely at, the electoral origin. This model used electoral estimates of the candidates’ positions. These



differed substantially from the estimated equilibria of the traits model. To account for this difference, a more general formal model is then considered where the valence differences between the candidates were due to resources that were contributed to the candidates by party activists. The trade off between activist and electoral support is given by a (first order) *balance condition* involving, called the *centrifugal marginal activist pull*. Survey information on party activists, who contributed resources to the candidates, was obtained. It is argued that the difference between the equilibrium obtained from the spatial model with traits, and the estimated candidate positions, is compatible with the location of these activists.

The final model is one where the activist resources are used by candidates to target individual voters or groups of voters. The balance condition in this case involves a complex constrained optimization problem, that captures the essence of modern electoral politics.

#### 10. *Modelling Elections in Post-Communist Regimes: Voter Perceptions, Political Leaders and Activists*

by Norman Schofield, JeeSeon Jeon, Marina Muskhelishvili, Ugur Ozdemir and Margit Tavits

This chapter uses the stochastic electoral model to examine elections in Poland in 1997, 2001 and 2005, in Georgia in 2008, and in Azerbaijan in 2010. In contrast to the result for the U.S. elections presented in Schofield et al. (2011), it was found that in Poland the valence differences were sufficiently large to force low valence parties to adopt divergent positions. This implies a fundamental difference between an electoral system based on plurality rule in contrast to one based on proportional representation. In addition, in “anocracies” such as Georgia and Azerbaijan, the limited access to the media by the parties in opposition to the president means that their support groups find it difficult to coalesce. As a consequence, they are unable to press successfully for greater democratization. In these countries, the presidential electoral system is highly majoritarian, and the President’s party dominates the political arena, controlling political resources and the media. The chapter concludes by giving an overview of the empirical results that have been obtained so far for the three plurality democracies of the USA, Britain and Canada, three polities with proportional electoral systems, and the three anocracies of Georgia, Azerbaijan and Russia.

#### 11. *Electoral Systems and Party Responsiveness*

by Lawrence Ezrow

Do political parties respond to shifts in the preferences of their supporters or to shifts in the mean voter position? Also, do electoral systems mediate these crucial citizen-party linkages? The central finding of this chapter is that electoral systems do condition these effects. Parties in proportional systems are systematically responsive to the mean voter position while parties in disproportional systems do not display the same tendency. Additionally, neither system induces parties to systematically respond to their supporters.

#### 12. *Electoral Institutions and Political Corruption: Ballot Structure, Electoral Formula, and Graft*

by Daniel Max Kselman

Most research on the consequences of electoral institutions examines the distinction between majoritarian and proportional electoral formulae. Recent work has also examined the impact of a system's ballot structure, i.e. the formal rules governing how citizens vote, on a variety of political phenomena. This chapter develops a game theoretic model to study the interactive impact of formulae and ballot structures on political corruption. In contrast to received wisdom, the theoretical results suggest that Open-List voting systems should outperform both Closed-List voting systems and First-Past-The-Post systems in constraining corruption. Also in contrast to received wisdom, the results identify a set of conditions under which Closed-List systems might themselves outperform First-Past-The-Post systems. Analysis of cross-national data provides support for the chapter's theoretical model. Taken together, the chapter's formal and empirical results provide a strong counter-argument to the notion that majoritarian institutions generate better governance than their proportional representation counterparts.

13. *A Model of Party Entry in Parliamentary Systems with Proportional Representation*

by Daniel M. Kselman and Joshua A. Tucker

Spatial models with a party entry decision largely fall into one of two classes. The first of these preserves the Downsian assumptions that candidates are office-seeking and can announce policy positions anywhere in the policy space. A distinct class of models features what are now known as "citizen-candidates" who combine policy- and office-seeking incentives, and who cannot credibly commit to implementing any policy other than their own 'ideal point' as a platform in electoral campaigns. The chapter develops a game theoretic model of party entry which employs mechanisms from each of these classes of analyses, but departs from both bodies of literature in studying party entry in Parliamentary regimes with Proportional Representation. Preliminary analysis of Subgame Perfect Nash Equilibrium suggests that, when parties are exclusively concerned with policy, party entry should be somewhat more likely when status quo parties are well-dispersed around the median voter's ideal point than when they are both fairly centrist. However, as candidates' office-seeking incentives begin to outpace their policy-seeking incentives, the relationship between status quo dispersion and entry becomes more complicated, and depends crucially on the ideal point of the entering candidate.

14. *Moving in Time: Legislative Party Switching as Time-Contingent Choice*

by Carol Mershon and Olga Shvetsova.

Why would a sitting legislator leave the party on whose label she has won election and join another parliamentary party? The premise of this chapter is that a politician's calculus on party affiliation involves not only what she stands to gain or lose, but also when the potential gains or losses likely occur. The theoretical model demonstrates that an MP times a shift in party allegiance so as to minimize losses and maximize gains. The empirical illustrations bearing on our predictions afford variation on the key parameter of electoral laws and drive home the strategic importance of timing in systems. The theoretical and empirical findings on when incumbents switch party during a legislative term shed new light on why they switch.

### 15. *On the Distribution of Particularistic Goods*

by Jon X. Eguia and Antonio Nicolò

This chapter characterizes the set of equilibria in a model of distributive politics with inefficient local public goods. Candidates compete for office in three districts under a majoritarian rule. For each district there is a project that brings a benefit only to this district if implemented, but the aggregate cost for society of financing the project surpasses the localized benefit. Candidates can commit to implement the project, but the aggregate cost for society of financing the project surpasses the localized benefit. Candidates can commit to implement the projects in any number of districts. If projects are very inefficient, in equilibrium candidates commit not to implement any of them. However, if projects are inefficient but not too inefficient, in the unique equilibrium candidates randomize between financing projects in zero, one or two districts, so that in expectation 43% of projects are implemented.

### 16. *Vote Revelation: Empirical Content of Scoring Rules*

by Andrei Gomberg

In this chapter Gomberg considers choice correspondences defined on an extended domain: the decisions are assumed to be taken not by individuals, but by committees and, in addition to the budget sets, committee composition is observable and variable. In this setting, he establishes a restriction on the choice structures that is implied by the scoring decision-making by rational committee members.

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**Part I**  
**Institutions**

# Institutions: Rules or Equilibria?

Avner Greif and Christopher Kingston

## 1 Introduction

In recent years, the interest in rational choice analysis of institutions has received substantial impetus from an accumulating body of evidence demonstrating the importance of a society's institutions in determining its economic outcomes. Econometric studies have uncovered correlations between institutional variables such as the security of property rights, the rule of law, and trust, and economic and political outcomes including levels of production, saving, and corruption.<sup>1</sup> Historical studies have revealed the role that institutions played in long-run trajectories of industrial and commercial development.<sup>2</sup> Studies of the developing world and of countries transitioning from socialism have revealed the challenges involved in creating well-functioning institutions, the benefits that can be obtained when institutional change and economic reform are successful, and the dangers that ensue when they are not.<sup>3</sup> Stimulated by these developments, the conceptual frameworks employed by scholars studying institutions have also been evolving, as old frameworks have been adapted and new frameworks have emerged to explore old and new questions about how institutions function, how they change, and how they affect economic behavior and outcomes.

The rational-choice approach to institutional analysis does not require us to assume that people are always 'rational', or that institutions are chosen rationally. Rather, it holds that a rational-choice perspective enables us to generate a theory with empirically refutable predictions about the institutions that can prevail in a given situation.

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<sup>1</sup>For example, La Porta et al. (2008), Keefer and Knack (1997), Easterly and Levine (2003).

<sup>2</sup>For example, Milgrom et al. (1990), North (1990), Greif (1989, 1994, 2006).

<sup>3</sup>For example, Roland (2000), Aoki (2001), Qian (2003).

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This involves two key questions: first, how institutions are selected and second, how people are motivated to follow institutionalized patterns of behavior. One strand of thought within the rational-choice approach to institutional analysis, the so-called ‘institutions-as-rules’ approach, emphasizes the importance of a theory of selection of institutions, while an emerging alternative approach, the ‘institutions-as-equilibria’ line of analysis emphasizes the importance of a theory of motivation.

The institutions-as-rules approach, following North (1990, p. 3), identifies institutions as “the rules of the game in a society”, including both “formal” rules such as constitutions and laws enforced by the state, and “informal” constraints such as “codes of conduct, norms of behavior, and conventions”, which are generally enforced by the members of the relevant group (North, 1990, p. 36). Many kinds of formal rules are selected through a centralized process of bargaining and political conflict between individuals and organizations who attempt to change the rules for their own benefit. In other cases, formal or informal rules may be selected in a decentralized way through evolutionary competition among alternative institutional forms. In either case, the institutions-as-rules view holds that institutions are ultimately best understood from a functionalist perspective that recognizes that they are responsive to the interests and needs of their creators (although there is no guarantee that the rules selected will be efficient).

Within the institutions-as-rules view, the enforcement of the rules is considered as a distinct issue from the formation and content of the rules themselves. Enforcing the rules involves “enforcement costs”. The formal and informal rules, together with their “enforcement characteristics” constitute the institutional structure within which interactions occur. Thus, the institutions-as-rules approach employs a rational-choice perspective to study the formation of institutions, but a theory of motivation – explaining *why* people follow particular rules of behavior – is not integrated into the analysis.

A growing body of recent research on institutions places a theory of motivation at the center of the analysis, and thereby endogenizes the “enforcement of the rules”, by studying ‘institutions-as-equilibria’. This perspective focuses on how interactions among purposeful agents create the structure that gives each of them the motivation to act in a manner perpetuating this structure. To give a simple example: in the United States, people (nearly always) drive on the right-hand side of the road. This regularity of behavior generates expectations that motivate the behavior itself: people drive on the right because they expect others to do so, and wish to avoid accidents. Of course, it is also a “rule” that one must drive on the right. However, many alternative technologically feasible rules (for example, women drive on the right and men on the left) would generate expectations which would fail to motivate a pattern behavior consistent with the rule: that is, such patterns of behavior are not equilibria, and even if they were formally specified as a “rule” we would not expect them to emerge as institutions, because the “rule” would not be self-enforcing. For everyone to drive on the right, however, is one of two potentially self-enforcing “rules” which could emerge (or be enacted) as an equilibrium.

The crucial point is that while a “rule” may serve as a coordination device, it is fundamentally the expected behavior of others, rather than the rule itself, which



motivates people's behavior. A similar logic can be used to examine economic, political, and social institutions even in situations involving specialized actors and more complex formal "rules". From the institutions-as-equilibria perspective, it is always ultimately expectations about the behavior of the other actors (including those in specialized enforcement roles such as police, judges, etc.) that create the institutional constraints which mold people's behavior, and all such behavior must therefore ultimately be explainable endogenously as part of the equilibrium.

Despite their differences, the institutions-as-rules and institutions-as-equilibria approaches have much in common and are best viewed as complements rather than substitutes. Both seek to advance a positive analysis of the non-technological determinants of order and regularities of human behavior. Recent advances in the literature combine elements of the two perspectives. This chapter surveys these developments and highlights promising directions for future research. As we will discuss, the institutions-as-rules framework has been fruitfully applied to shed light on the emergence and functioning of a variety of institutions, including communities, organizations, and political and legal institutions. However, we will argue that by endogenizing the issue of enforcement, the institutions-as-equilibria approach enables a more satisfactory treatment of several key issues, including promoting our understanding of processes of institutional change.<sup>4</sup>

## 2 Institutions as Rules: Conceptual Issues

As discussed above, the most commonly cited definition of institutions is that advanced by Douglass North: institutions "are the rules of the game in a society, or more formally, are the humanly devised constraints that shape human interaction" (North 1990, p. 3). Institutions include both formal rules, which are explicit, written rules such as laws and constitutions, and informal constraints such as conventions and norms. In North's theory, formal rules are created by the polity, whereas informal norms "are a part of the heritage that we call culture" (p. 37) and therefore impervious to deliberate human design. The focus of the analysis is therefore on formal rules, namely, rules that are explicitly and intentionally created.

To illustrate the institutions-as-rules approach, consider the framework developed by Ostrom (2005), who envisages a hierarchy with several levels of rules: "operational rules" which govern day-to-day interactions; "collective-choice rules", which are rules for choosing operational rules; "constitutional rules" (rules for choosing collective-choice rules); "meta constitutional rules" (rules for choosing constitutional rules); and at the highest level, the biophysical world (p. 58).<sup>5</sup> That is, each level in this

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<sup>4</sup>For a recent discussion, see Greif (2006). Kingston and Caballero (2009) survey theories of institutional change.

<sup>5</sup>North (1990, p. 47) envisages a similar hierarchy with four levels of formal rules: constitutions, statute and common laws, specific bylaws, and individual contracts.

hierarchy of rules consists of rules that govern how rules at the lower level are created. For example, constitutional and collective-choice rules provide the structure that governs the choice of operational rules. Higher-level rules are also more difficult and costly to change.

When they perceive that existing rules governing their interactions at one level are unsatisfactory, individuals are driven to “shift levels” and try to change the rules. A political bargaining process ensues. Each individual calculates their expected costs and benefits from any proposed institutional change, and an institutional change can occur only if a “minimum coalition” necessary to effect change agrees to it. What constitutes a “minimum coalition” is determined by the higher-level rules; for example, in a democracy, a majority would constitute a minimum winning coalition; in a dictatorship the dictator alone might constitute a minimum coalition. Therefore, the set of rules that ultimately emerges will depend on the perceived interests of the actors involved in setting the rules, on the ability of various interest groups to act collectively to make their interests count (Olson 1982), and on the higher-level rules that determine how those individual interests are aggregated.

There is no guarantee that this process will lead to the selection of efficient rules. In many cases, those with political power may try to select rules to generate distributional benefits for themselves; that is, to maximize their welfare rather than that of society as a whole. To explain why societies “choose” inefficient institutions, however, it is not sufficient to note that the groups in power have interests that diverge from the rest of society. If an institutional change could increase efficiency and economic output, why cannot the beneficiaries of the change agree to redistribute the gains to compensate the losers? Acemoglu (2003) argues that the key problem is commitment: the powerful cannot credibly commit not to use their power for their own benefit as the opportunity arises, and other groups cannot credibly commit to compensate the powerful for giving up their power. As a result, the set of bargains which can be struck is restricted to those bargains which can be sustained as equilibrium outcomes (Fearon 2007; Greif 1998, 2006). Because there is no external authority to enforce inter-temporal bargains, politically powerful groups may block changes that would be beneficial overall, or impose inefficient changes that benefit themselves at the expense of others. Fundamentally, therefore, a satisfactory understanding of these aspects of institutional change requires a recognition that the problem is not just choosing new rules, but the more restrictive problem of engineering a mutually beneficial shift to a new, self-enforcing equilibrium. We will return to this issue later.

A second, complementary strand of thought within the institutions-as-rules approach views the development of rules as an outcome of evolutionary competition among alternative institutional forms. Alchian (1950) argued that competitive pressure weeds out inefficient forms of organization among firms in competitive markets, because firms that develop more efficient organizational forms will be more profitable, and the use of these rules and forms of organization will therefore tend to spread through growth or imitation. Demsetz (1967) extended the evolutionary argument to the development of property-rights rules, hypothesizing that these rules develop and adjust as a result of “legal and moral experiments” which

“may be hit-and-miss procedures to some extent”, but which only prove viable in the long run if they generate efficient outcomes. Hayek (1973) argues that groups or organizations that, by accident or design, develop less efficient rules will not survive competition with groups that develop more efficient rules. Therefore, through group selection, rules will evolve towards optimality.

The evolutionary approach finds its most prominent modern expression in Oliver Williamson’s “Transactions cost economics” (TCE). According to this view, ‘transaction costs’ arise in many transactions because of the bounded rationality and opportunism of the transacting parties (Williamson 2000). Depending on the attributes of a particular transaction, some sets of rules (‘governance structures’) will lead to more efficient outcomes than others. The transactions-cost economics approach assumes that the most efficient institutional forms (those which ‘minimize transactions costs’) will emerge.<sup>6</sup> So, for example, if a change in production technology renders existing institutions inefficient, then over time, new, more efficient institutional forms will emerge to replace them.

Although the political-design and evolutionary approaches envisage quite different processes for the selection of rules, the two strands of research are best viewed as complementary. Both treat institutions as sets of rules (or “governance structures”); and both focus on how new rules are selected rather than how they are enforced. Different institutions are associated with different “transaction costs”, including “monitoring costs” and “enforcement costs”, but the nature of these costs is not part of the analysis.

The concept of “transactions costs” is widely used in New Institutional Economics. The term is generally used very broadly to include the costs of finding trading partners, negotiating and drawing up contracts, monitoring contractual partners’ behavior and enforcing agreements, and other costs incurred in an effort to define, measure and enforce property rights or agreements to exchange property rights. Transaction costs may also include the costs of political activity, bargaining, legal action, and so on involved in deliberate efforts to create new rules, the costs of inefficiency resulting from commitment problems and other forms of political transaction costs, as well as all the costs involved in setting up, maintaining and changing the structure of rules and organizations, and monitoring the actions of the agents governed by those rules. In short, any difference between the value of output generated in the real world, where a real transaction is governed by real institutions, and an imagined world without any agency problems or information asymmetries (and therefore a world in which no governance is required), including any deviation from first-best production and exchange, can be called a “transaction cost”.

Despite this breadth, the concept of “transaction costs” has achieved wide acceptance as an analytical tool in the theoretical literature on institutions, particularly within the institutions-as-rules framework. The usefulness of the concept is

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<sup>6</sup>Williamson refers to this as the “discriminating alignment” hypothesis. Thus, for Williamson, “The overall object of the exercise essentially comes down to this: for each abstract description of a transaction, identify the most economical governance structure” (Williamson 1979, p. 234).

that it provides a measure of institutional efficiency. However, the use of transactions costs terminology risks clouding the issue of enforcement. To illustrate, consider an agency relationship between a manager and the workers within a firm. The sale of the agent's labor services involves a fundamental problem of exchange: the decision of whether to work hard is made by the agent, but it affects the welfare of the principal. Given this fundamental agency problem, different institutions will give rise to different patterns of behavior. The explicit and measurable transactions costs in such a setting might include the costs of hiring a manager to monitor the workers and measure their performance, as well as the costs of designing an organization so as to enable this monitoring to occur, choosing a production process which facilitates such monitoring, installing surveillance equipment, and the legal costs of negotiating employment contracts, and suing or firing a shirker; and so on. In addition, if in the end it proves too costly to motivate the worker to act as she would in a first-best (zero transactions cost) world, then the resulting inefficiency would be another (implicit) transaction cost.

But while the concept of "transactions costs" can serve as a handy shorthand to describe how well these problems are solved, all of these "costs" ultimately derive from the agency problems and information asymmetries which give rise to the fundamental problem of exchange in the (potential) transaction of interest. By separating the "costs" of running the economic system – monitoring, enforcement, and so on – from the system itself, the institutions-as-rules approach clouds the issue of *why* people act as they do, and becomes a poor analytical substitute for an account of how behavior is actually motivated within alternative institutional regimes, none of which will approximate the zero-transactions-cost ideal. That is, the problem of designing efficient institutions is not fundamentally a problem of choosing rules so as to minimize "costs", but a problem of aligning incentives in a way which generates the maximum possible benefit, given a fundamental problem of exchange. Higher efficiency (or a lower transaction cost) is a desired outcome of a successful solution to this problem, but it is not the problem itself, and focusing on transactions costs as a catch-all minimand risks masking the essence of the problem, which is one of aligning incentives.

### **3 Institutions as Rules: Applications**

#### ***3.1 Communities and Networks***

Community enforcement refers to a situation in which behavior within a group is governed by "rules" which are enforced by the members of the group themselves rather than a specialist third-party enforcer. One view holds that these kinds of informal rules are best taken as part of a fixed, exogenously-given cultural heritage (Williamson 2000). Other authors, however, consider that informal rules continually adapt and evolve. For example, based on his studies of cattle farmers in Shasta county and New England whalers, Robert Ellickson (1991) hypothesizes that groups

within which information (gossip) circulates easily and informal power is broadly distributed will tend to develop efficient informal rules. Ostrom (1990) found that many communities manage to develop rules to successfully avert the tragedy of the commons in the management of common-pool resources, such as fisheries, forests, and common pasture. Other communities, however, do not, and Ostrom found that successful rules were more likely to emerge in groups with small numbers of decision makers, long time horizons, and members with similar interests.

As communities become larger, therefore, both Ellickson's and Ostrom's studies suggest that informal community enforcement is less likely to be able to support efficient outcomes. For example, as the online community of traders on eBay grew in the late 1990s, the "trust" sustained by a multilateral reputation mechanism based on user feedback had to be gradually supplemented by formal rules developed by eBay to discourage cheating, resolve disputes, and prevent illegal trades (Baron 2001).

### 3.2 *Organizations*

Organizations are akin to artificial communities of individuals brought together for a specific purpose – such as production, political activity, religious worship, recreation, and so on. While some organizations may begin as informal groups whose members later decide to develop a formal governance structure, others are created *de novo* by "entrepreneurs" with a goal in mind. As such, organizations are both cohesive entities which impact and interact with the broader world around them, and governance structures which develop formal rules to govern the interactions among their members and between members and outsiders. Within the institutions-as-rules framework, different authors have focused on each of these two aspects of organizations.

Some authors, notably Douglass North, have treated organizations primarily as unified entities that interact with the broader economic and political system within which they are embedded, and in particular, may act as "players" of the political game, attempting to alter broader institutional rules for the benefit of their members. This aspect of organizations will be discussed in Sect. 3.3 ("Politics"). The other aspect of organizations – their internal governance – is studied in economics primarily in the guise of the theory of the firm.

As is well known, the modern theory of the firm originates with Coase's (1937) insight that organizations and markets are alternative modes of organizing transactions, and the claim that the scope of activity carried out within organizations will therefore be determined so as to minimize "transactions costs". To explain the structure of an organization, therefore, we need to explain its function: what contractual problem it efficiently solves. But why would efficient organizations emerge? One possibility is that the structure of organizations is a product of rational design. If the organization's creators have a correct understanding of the effects of different organizational forms, then it may be reasonable to assume that they will design efficient organizations.

However, an alternative explanation for the emergence of efficient organizations is that evolutionary pressure forces firms to select efficient organizational forms by driving less-efficient organizations out of business. Alchian (1950) was an early proponent of this view, and it also implicitly underlies Williamson's "Transactions Cost Economics", which assumes that organizations (governance structures) will develop so as to achieve an optimal (efficient) match with the transactions they govern. The evolutionary approach has the advantage, noted by both Alchian and Williamson, that it enables us to assume that efficient institutions will develop even if the people designing them are boundedly rational. If a parameter change, such as a change in technology, renders existing institutions inefficient, then over time, by accident or design, some firms will develop more efficient sets of rules ("governance structures"), and through competitive pressure, these new institutions will gradually spread, so that the institutions governing the relevant transaction will evolve toward optimality.<sup>7</sup> Thus, the usefulness of the rational-choice framework does not rest on an assumption of rationality.

The validity of this approach, however, rests on the implicit assumption that there are deeper underlying institutions that lead to the selection of optimal (efficient) institutions. The issue of what exactly these underlying institutions are is frequently left unexplored, and thus the analysis can offer only a partial explanation for the observed configuration of rules. Nevertheless, for the purpose for which it was developed, namely examining the governance structures of firms operating in competitive markets within a modern economy, this approach works well and is an "empirical success story" (Williamson 2000, p. 607).

The assumption that organizations are organized efficiently (whether through evolution or design) also underpins much of the modern theory of the firm, including the literature on principal-agent problems within the firm, which studies how management can design optimal incentive systems to motivate workers; the property-rights approach following Hart (1995), which postulates that the boundary of the firm (ownership of assets) is determined in such a way as to minimize the inefficiencies which result from the inability to write complete contracts; and the theory of mechanism design.

Informal rules and norms, such as a "corporate culture", may also develop within organizations, including firms. The internal governance of organizations typically involves a combination of both formal and informal "rules". For example, one approach to overcoming the principal-agent problem between management and workers within a firm is through optimal wage and bonus structures based on contractible output measures. However, an alternative way to motivate worker effort, given the repeated nature of the relationship, is via the threat of firing a worker caught shirking (Bowles and Gintis 1993). While the formal contract, according to which

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<sup>7</sup>Nelson and Winter (1982) built an evolutionary theory of the firm based on the evolution of routines – sequences of action which coordinate the activities of many individuals – rather than rules. Routines evolve as successful firms expand and their routines are imitated – perhaps imperfectly – by others, creating a tendency towards the adoption of efficient routines (although possibly with considerable inertia).