

**Institutions and the Path to the Modern Economy:  
Lessons from Medieval Trade**

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## Abbreviations

Annali	Annali Genovesi di Caffaro e dei suoi Continuatori, 1099–1240.
BM	British Museum, London;
Bodl.	Bodleian Library, Oxford, England;
CDG	Codice Diplomatico della Repubblica di Genova dal MCLXIII [sic] al MCLXXXX [sic]
DK	David Kaufmann Collection, Hungarian Academy of Science, Budapest.
Dropsie	Dropsie College, Philadelphia.
ENA	Elkan N. Adler Collection, Jewish Theological Seminary of America, New York
GG	Cartolare di Giovanni di Guiberto, 1200–211.
GC	Cartolare di Guglielmo Cassinese, 1190–1192.
GS	Cartolare di Giovanni Scriba, 1154–1164.
INA	Institute Norodov Azii, Leningrad.
Lisciandrelli, 1960	Trattati e Negoziazioni Politiche della Repubblica di Genova (958–1797).
LS	Lanfranco Scriba, 1202–1226.
Mosseri	Private collection of Jack Mosseri.
OB	Cartolare di Oberto Scriba de Mercato, 1186, 1190.
Oxford	Oxford library, England.
TS	Taylor_Schechter Collection, University library, Cambridge, England
ULC	University Library, Cambridge, England (exclusive of the TS collection).

## Chapter 1 Introduction

On March 28, 1210, Rubeus de Campo of Genoa agreed to pay a debt of 100 marks sterling in London on behalf of Vivianus Jordanus from Lucca . There is nothing unusual about this agreement—in fact, there is evidence of thousands of such agreements in Europe at the time. But this agreement implicitly reveals why Rubeus lived in a period of remarkable economic growth measured by such proxies as urbanization, population growth, capital investment, and changing patterns of trade.<sup>1</sup>

First, this agreement reflects well-functioning markets. The institutional foundations of these markets were such that merchants trusted agents to handle their affairs abroad, even without legal contracts. Impersonal lending among traders from remote corners of Europe prevailed, and property rights were sufficiently secure that merchants could travel abroad with their riches.

Second, it reflects well-functioning polities. The institutional foundations of polities throughout Europe during this time induced policies conducive to economic prosperity. Rubeus made his agreement in the Republic of Genoa, which had been established about a century earlier but had already pursued policies that made it a bustling commercial center. To understand why and how such well-functioning markets and polities came about in various historical episodes and what led to their persistence and decline, we have to study their institutional foundations.

Studying institutions sheds light on why some countries are rich and others poor, why some enjoy a welfare-enhancing political order and others do not. Socially beneficial institutions promote welfare-enhancing cooperation and action. They provide the foundations of markets by efficiently assigning, protecting, and altering property rights; securing contracts; and motivating specialization and exchange. Good institutions also encourage production by fostering saving, investment in human and physical capital, and development and adoption of useful knowledge. They maintain a sustainable rate of population growth and foster welfare-enhancing peace; the joint mobilization of resources; and beneficial policies, such as the provision of public goods.

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<sup>1</sup> Lanfranco Scribe (1210, no. 524). This economic upturn has been documented by such scholars as and Britnell (1996), Lopez (1976), Persson (1988), Postan (1973), and Pounds (1994).

The quality of the institutional foundations of the economy and the polity is paramount in determining a society's welfare. This is the case because individuals do not always recognize what will be socially beneficial nor are they motivated to effectively pursue it in the absence of appropriate institutions. A central question in the social sciences and history is therefore why societies evolve along distinct trajectories of institutional development and why some societies fail to adopt the institutions of those that are more economically successful.

This book draws upon detailed historical studies to motivate, illustrate, and present a new perspective—comparative and historical institutional analysis—that goes a long way toward advancing institutional analysis in general and addressing this question regarding the evolution of societies in particular. First, it provides a unifying concept of the term *institution* to integrate the many, seemingly alternative, definitions that prevail in the literature. Second, it studies institutions on the level of the interacting individuals while considering how institutionalized rules of behavior are followed even in the absence of external enforcement. Third, it advances a unified conceptual and analytical framework for studying the persistence of institutions, their endogenous change, and the impact of past institutions on subsequent institutional development. Finally, it argues that institutional analysis requires going beyond the traditional empirical methods in the social sciences that rely on deductive theory and statistical analysis. It then elaborates on a complementary method based on interactive, context-specific analysis. Central to this case study method is the use of theory, modeling, and knowledge of the historical context to identify an institution, clarify its origin, and understand how it persists and changes.

This new perspective makes explicit what institutions are, how they come about, how they can be studied empirically, and what forces affect their stability and change. It explains why and how institutions are influenced by the past, why they can sometimes change, why they differ so much from one society to another, and why it is hard to devise policies aimed at altering them.

This book puts forward the main aspects of this still-evolving perspective and illustrates its applicability by analyzing important issues in medieval economic history. Indeed, the limited ability to address these issues using the common approaches for

institutional analysis led to the development of the perspective detailed here. It presents comparative and historical analyses of institutions in the European (Latin) and Muslim (Mediterranean) worlds. The analysis focuses on the late medieval period because the European economy and polity began its ascent to economic and political hegemony at that time. It suggests that even in this early period, institutional difference within Europe and between Europe and the Muslim world developed and directed subsequent institutional outcomes. This analysis leads to a conjecture regarding the institutional origin of the subsequent economic and political European ascendancy and intra-European divergence.

Section 1.1 briefly reviews the various lines of institutional analysis within economics to present their limitations. It argues that advancing our knowledge of the relationships between institutions and welfare-related outcomes requires mitigating three particular challenges. Section 1.2 provides a glimpse at how comparative and historical institutional analysis addresses these challenges and how it relates to various lines of institutional analysis, particularly outside economics. It also highlights why institutional analysis requires going beyond the empirical methods common in the social sciences and sketches the complementary empirical method developed here. Section 1.3 presents the reason this book focuses on institutional developments in Europe and the Muslim world during the late medieval period. Section 1.4 reviews the structure of the book and the substantive issues addressed in the empirical chapters.

### **1.1 The Challenges of Studying Institutions**

Societies have different “technological” features, such as geographical location, useful knowledge, and capital stock, and these differences impact economic outcomes. Societies also have different “nontechnological” features, such as laws and enforcement methods, ways of allocating and securing property rights, and levels of corruption and trust. It is common to refer to such nontechnological features as institutions. I follow this convention here until I later redefine institutions and their relationships to such nontechnological features.

Economic theory suggests that institutional differences should influence economic outcomes because they affect decisions about work, saving, investment, innovation,

production, and exchange. Econometric analyses suggest that they do. Although the results are tentative, they indicate that more security of property rights, stronger rule of law, and greater trust are correlated with better economic outcomes (R. Hall and Jones 1999; Acemoglu, Johnson, and Robinson 2001; Rodrik, Subramanian, and Trebbi 2003; Zak and Knack 2001).

Econometric analyses and case studies also suggest the historical origins of differences in nontechnological features across societies. These differences were argued to reflect, for example, past cultures, social and power structures, and medieval republican political traditions (Greif 1994a; Glaeser and Shleifer 2002; Putnam 1993). In developing countries, such differences reflect the environment at the time of colonization (Acemoglu et al. 2001), the identity of the colonizing power (North 1981), and the initial wealth distribution (Engerman and Sokoloff 1997).

These findings, however, constitute a beginning, not an end result, for a research agenda aimed at understanding institutions. Understanding the causal mechanism behind these findings requires going beyond identifying correlations between measures of various nontechnological factors and outcomes of interest. It requires examining how the interacting individuals are motivated and able to behave in a manner that manifests itself in these various measures.<sup>2</sup>

It is useful to find out that corruption reduces investment, for example, but this finding does not reveal what motivates and enables people to behave in a corrupt manner. Similarly, discovering a correlation between the security of property rights and outcomes of interest does not *explain* differences in the levels or changes in security; asserting, as is common in economics, that the level of security reflects the function that property rights serve (e.g., efficiency or the interest of elites) does not explain *how* these rights become more or less secure. Understanding how property is secured requires knowing why those who are physically able to abuse rights refrain from doing so. Similarly, discovering correlations between historical events and differences in current nontechnological

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<sup>2</sup> Djankov et. al., (2004) argued that comparative economics should be used to understand the trade-off between the risk of private and public expropriation of property rights. Institutional arrangements, such as private order, judicial independence, a regulatory state, and state ownership are responses to this trade off. The absolute level of efficiency possible under each arrangement in a country depends on its residents' capacity to cooperate. The perspective developed here presents a unifying framework with which to study the micro-level operation of institutional arrangement as well as capacity to cooperate.

features does not reveal how and why past institutions influence subsequent institutional development.

Understanding the impact, persistence, and change of nontechnological features requires examining the micromechanisms underpinning their emergence, stability, and dynamics at the level of the interacting individuals. This requires, in particular, considering the *motivation* (incentives) of these individuals to act in a manner leading to or manifesting itself in these particular nontechnological features.

The main conceptual and analytical framework used in economic neoinstitutionalism, however, does not focus on this motivation.<sup>3</sup> It often identifies economic institutions with politically determined rules that are imposed “top down” on economic agents by the polity. These rules govern economic life by, for example, assigning property rights and specifying taxes due. Political institutions—rules regulating the election of leaders and collective decision making—and political organizations, such as interest groups and labor unions, are therefore central to the analysis. Political institutions and organizations matter, because economic institutions are established and changed through the political process (North 1981, 1990; Barzel 1989; Sened 1997; G. Grossman and Helpman 2002). Transaction-cost economics complements this analysis by postulating that economic agents, responding to rules, choose contracts, and through them, also establish organizations to minimize transaction costs (Coase 1937; O. Williamson 1985, 1996).

This “institutions-as-rules” framework is very useful in examining various issues, such as the rules that politicians prefer and the contractual forms that minimize transaction costs. Yet behavioral prescriptions—rules and contracts—are nothing more than instructions that can be ignored. If prescriptive rules of behavior are to have an impact, individuals must be motivated to follow them.<sup>4</sup> Motivation mediates between the environment and behavior, whether the behavior is rational, imitative, or habitual. By

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<sup>3</sup> For recent discussions of neoinstitutionalism in the social sciences, see Eggertsson (1990), Bardhan (1991), Furubotn and Richter (1997), G. Hodgson (1998), and Greif (1996b, 1997a, 1998a, 1998b) in economics; P. Hall and Taylor (1996) and Thelen (1999) in political science; and W. Powell and DiMaggio (1991), Smelser and Swedberg (1994), Scott (1995), and Brinton and Nee (1998) in sociology. The perspective developed here is neoinstitutionalist in focusing on the microfoundations of behavior.

<sup>4</sup> I use the term *motivated* (rather than *enforced*) because actions can be induced by both fear of punishment and reward for compliance.



motivation I mean here incentives broadly defined to include expectations, beliefs, and internalized norms.

The institutions-as-rules framework, however, is not well suited for considering the motivation to follow behavioral instructions embodied in rules and contracts. As a first approximation, and for various analytical purposes, it may be sufficient to assert that people follow a rule of behavior because other rules specify punishment if they do not. But this assertion merely pushes the question of institutional effectiveness one step backward, by assuming that those who are supposed to enforce the rules do so. Why would this be the case? Who watches the watchman?

To understand behavior, we need to know why some behavioral rules, originating either inside or outside the state, are followed while others are ignored—something that is not possible within an analytical framework in which motivation is taken as exogenous. A comprehensive understanding of prescriptive or descriptive rules requires examining how the motivation to follow particular rules of behavior is created.

Considering motivation at the level of the interacting individuals as endogenous is crucial to addressing many important issues. It is crucial to understanding what is referred to as “private order,” that is, situations in which order prevails despite the lack of a third-party enforcer of that order. In such situations, the prevalence of order or its absence reflects the behavior of the interacting individuals rather than what transpires between them and a third party. Indeed, order characterized by some security of property rights and exchange sometimes prevails when there is no state, when economic agents expect the state to expropriate rather than protect their property, or when the state is unwilling or unable to secure property rights and enforce contracts. Even in modern market economies with effective states, private order is an essential ingredient.

Because institutions reflect human actions, we ultimately must study them as private order even when a state exists. For some analytical purposes, it is useful to assume—as the institutions-as-rules does—that the state has a monopoly over coercive power and can enforce its rules. But political order and an effective state are outcomes. Political actors can and sometimes do resort to violence and invest in coercive power, the use of which can lead to political disorder or revolution. Studying political order or disorder requires examining the motivation of political actors to abide by the particular

rules. Moreover, the effectiveness of state-mandated rules depends on motivating agents within the bureaucracy and judiciary to enforce them. Understanding the impact of the state requires examining the motivation of the agents involved. In other words, a comprehensive understanding of political order or its absence and of the behavior of the state's agents requires considering the motivation that influences the behavior of the relevant individuals.

Apart from its limited ability to study motivation, the institutions-as-rules approach is also limited in analyzing institutional dynamics. In accounting for institutional stability and change, it focuses only on the important, but partial, impact of politics and efficiency. When institutions are identified with politically devised rules or efficient contracts, institutional change is considered to result from an exogenous shift in the interests or knowledge of the political actors who set the rules or the efficient contracts (see Weingast 1996; O. Williamson 1985). Institutions contribute to change only to the extent that they alter the interests and knowledge underpinning the prevailing rules or contracts.

Institutional persistence has been attributed mainly to frictions in the process of institutional adjustments (e.g., the costs of changing rules) or to the impact of exogenous informal institutions, such as customs and traditions. These informal institutions are considered immutable cultural features whose rates of change are so slow as to be immaterial (North 1990). This leaves much to be explained, because persistence and change are attributed to forces other than the institution under study (O. Williamson 1998, 2000).

Classical game theory has been used extensively to expand institutional analysis to the study of endogenous motivation. Game theory considers situations that are strategic in the sense that the optimal behavior of one player depends on the behavior of others. A game-theoretic analysis begins by specifying each player's set of possible actions and information and the payoffs each will receive given any combination of actions that can be taken by all the players. Given these rules of the game, classical game theory focuses mainly on equilibria in which each decision maker correctly anticipates the behavior of others and finds it optimal to take the action expected of him. (The basic concepts of game theory are explained in Appendix A.) This framework enables

endogenously motivated behavior to be considered; motivated by the actual and expected behavior of all other players, each player adopts the equilibrium behavior. Game theory thus allows the relationship between the rules of the game and self-enforcing behavior to be studied.

Economists, in particular, have used game-theoretic equilibrium analysis to consider why individuals follow particular rules.<sup>5</sup> Such analysis has been applied to the study of private order, particularly one in which property rights are secured and contracts are fulfilled in the absence of an effective legal system administered by the state (O. Williamson 1985; Greif 1989, 1993; Ellickson 1991; Dixit 2004). Related research examines the endogenous motivation to adhere to various contracts despite asymmetric information and limited legal contract enforceability (Townsend 1979; Hart and Holmstrom 1987; Hart and Moore 1999). In the game-theoretic approach, institutions are considered as either equilibria (Schotter 1981; Greif 1993; Calvert 1995); the shared beliefs motivating equilibrium play (Greif 1994a; Aoki 2001); or the rules of the game (North 1990).

When institutions are defined in these ways, however, classical game theory provides an inadequate analytical framework for studying institutional dynamics, that is, the forces leading institutions to change and the influence of past institutions on subsequent ones. Strictly speaking, in classical game theory the present and future behavior of players is a manifestation of a predetermined strategy. All behavior is then forward-looking, although it may be conditioned on past events. Furthermore, because this behavior is an equilibrium, there are no endogenous forces causing institutions to change. Exogenous institutional changes can occur when the rules of the game change—as a result of new technology, for example—but studying endogenous change is inconsistent with the view of institutions as equilibria.

Worse yet, game theory reveals that many equilibria—self-enforcing patterns of behavior—are usually possible in a given game. Attempts to develop a game-theoretic

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<sup>5</sup> In political science, the “structure-induced equilibria” approach has enriched the institutions-as-rules approach by studying the motivation of the political actors. It studies politically determined rules as an equilibrium outcome within a game spanned by the rules of the political decision process. It considers structural features of the political decision making process (e.g., the committee structure of the U.S. Congress) as part of the rules of the game within which political agents interact. An equilibrium analysis identifies exactly what motivates political agents to institute a particular economic rule (Shepsle 1979; Weingast and Marshall 1988; Moser 2000).

equilibrium concept predicting a unique outcome in all games failed to do so in the repeated situations that are central to institutional analysis. Furthermore, game theory postulates no relationships between behavior in one game and a historically subsequent one.<sup>6</sup> Any equilibrium in a new game, even if this game is only marginally different from a previous one, is equally plausible, irrespective of what transpired in the previous game. If institutions are viewed as equilibria or beliefs in games, we cannot study the impact of past institutions on subsequent ones.

Beginning institutional analysis with a game—viewing institutions as the rules of the game—and considering the equilibrium behavior within it imply taking as given much that needs to be explained. Why, despite similar technological possibilities, are different games played in different societies? Asserting that a particular game is an equilibrium outcome in a larger—meta—game whose rules reflect only the attributes of the available technology and the physical world is useful yet unsatisfactory, because it simply pushes the question of institutional origin back one step. What is the origin of the meta-game? The theory that enables endogenous motivation to be studied is insufficient for analyzing institutional dynamics.

Finally, specifying and solving a game require strong assumptions about the shared cognitive models of the players and their rationality.<sup>7</sup> Initiating the analysis with a game, therefore, assumes away the possible roles institutions play in creating knowledge and cognition and directing rationality. The importance of the institutions in playing these roles, however, is highlighted in the “old institutionalism” literature. It convincingly argued that the *prima facie* reason for institutions is that individuals are neither fully rational nor in possession of perfect and common knowledge of the situation (see Veblen 1899, Mitchell 1925, Commons 1924, and Hayek 1937).

Incorporating the old institutionalism’s assertions about limited rationality and cognition into the study of institutions and institutional dynamics is central to

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<sup>6</sup> A specific game can have multiple periods, and behavior in later ones can be conditioned on behavior and events from earlier periods. This does not, however, capture the relationships between different games. It captures the relationships between different periods or stages within a given game). Game theory provides mapping from a game to a strategy combination, not a mapping between different games.

<sup>7</sup> Classical game theory models strategic behavior by rational agents in situations whose details are common knowledge. S is common knowledge if all players know S, all players know that all players know S, and so on ad infinitum (D. Lewis 1969).

evolutionary institutionalism (which relies heavily on evolutionary game theory). This approach identifies institutions with attributes of the interacting individuals (behavioral traits, habits, routines, preferences, and norms) and examines how evolutionary forces, combined with mutation, imitation, and random experimentation, influence the long-run equilibrium distribution of these attributes (Ullmann-Margalit 1977; Nelson and Winter 1982; Sugden 1989; Kandori, Mailath, and Rob 1993; Weibull 1995; Kandori 1997; Young 1998; G. Hodgson 1998; Gintis 2000).<sup>8</sup>

At the cost of dodging the issue of motivation and attributing changes in behavior to evolutionary forces, the evolutionary perspective mitigates the shortcomings of classical game theory in studying institutional dynamics. Its analytical framework, however, limits its applicability. The processes of experimentation, mutation, and learning that drive the process of institutional change are taken as exogenous to the analysis. As David (1994, p. 208) notes, “the exact workings of the evolutionary process have remained sketchy at best.” Furthermore, for technical reasons, the analysis often resorts to extreme assumptions about human nature. Individuals are usually assumed to be completely myopic, unable to recognize those with whom they interacted in the past, unable to choose with whom to interact unable to coordinate their behavior, and generally incapable of structuring their environment. These assumptions provide unsatisfactory microfoundations for evolutionary processes in human societies.

Even this short discussion indicates that many definitions of institutions prevail in economics (this is also the case in sociology and political science). These definitions have been considered mutually exclusive. The institutions-as-rules approach defines institutions mainly as rules, organizations, and contracts. Scholars who use classical game theory define institutions as either the rules of the game, equilibria, or shared beliefs motivating equilibrium play, while evolutionary institutionalists identify institutions with equilibrium attributes of the interacting individuals, such as behavioral traits, habits, routines, preferences, and norms.

Furthermore, there is a debate about the degree of choice individuals within a society possess in selecting their institutions. The structural (cultural) view—common in

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<sup>8</sup> For learning models in which the same players repeatedly interact with one another (rather than random matching), see Schotter (1981); Fudenberg and Kreps (1988); Ellison (1993); Marimon (1997); and Fudenberg and Levin (1998).

sociology and old institutionalism—emphasizes that institutions transcend individual actors and are immutable cultural features of societies that determine behavior (Sewell 1992; Scott 1995; Dugger 1990). In contrast, the agency (functionalist) view—common in economics and neoinstitutionalism—emphasizes that individuals create institutions to serve various functions. Institutions are best studied from a functionalist perspective that recognizes that they are responsive to interests and needs.

Within each of these approaches, scholars differ in their assertions regarding the forces shaping institutions and their dynamics. Among those who adopt the agency perspective, for example, some postulate that institutions reflect efficiency considerations, whereas others emphasize the importance of distributional issues or the desire for social status or political control. Some hold that institutions reflect unintended outcomes of interactions among individuals with limited rationality and cognitive ability, whereas others maintain that institutions reflect intentional responses by rational, forward-looking individuals (Schotter 1981; O. Williamson 1985; North 1991; Knight 1992; Acemoglu et al. 2001).

Considering different definitions of institutions as mutually exclusive and initiating their analysis based on different premises about their nature and the forces shaping them limit the advancement of institutional analysis. Each of these premises captures a different, yet important aspect of reality. It is sometimes appropriate in examining the issue at hand to consider institutions as exogenous structures; other times they are best considered as endogenous to the interacting individuals. In yet other cases it is appropriate to study them as reflecting the actions and interests of some individuals but not others. Therefore it is unsatisfactory to assert that either the structural or the agency perspective is always appropriate for studying institutions.

To advance institutional analysis, we need conceptual and analytical frameworks that integrate diverse lines of institutional analysis and accommodate the factors, forces, and considerations that each highlights.

The institutionalists' attempt to study the relationships between institutions and welfare-related outcomes should meet three interrelated challenges:

- Develop an integrative concept of institutions that benefits from insights and analytical frameworks drawn from seemingly alternative lines of institutional analysis.
- Study institutions at the level of the interacting individuals, while considering motivation to follow rules of behavior an integral part of the analysis.
- Advance a unified conceptual and analytical framework for studying the persistence of such institutions, endogenous institutional change, and the impact of past institutions on their subsequent development.

## 1.2 Comparative and Historical Institutional Analysis

This book presents a new perspective aimed at meeting the challenges of integration, motivation, and dynamics while building on and benefiting from previous lines of institutional analysis.<sup>9</sup> Motivated by the variety in observed trajectories of institutional development, I have explored the origin and implications of this variety by combining an explicit analytical framework with contextual, historical information. I refer to this approach as comparative and historical institutional analysis.

To address the three challenges listed in section 1.1, the perspective presented here departs from two practices that have dominated institutional analysis. First, it departs from the practice of defining an institution as a monolithic entity. As we have seen, institutions have been defined in many ways but all of them consider an institution as *either*, for example, rules, the rules of the game, beliefs, norms, or behavioral traits. Instead, the present perspective recognizes that institutions are not monolithic entities but are composed of *interrelated* but distinct components, particularly rules, beliefs, and norms, which sometimes manifest themselves as organizations. These *institutional elements* are exogenous to *each* individual whose behavior they influence. They provide individuals with the cognitive, coordinative, normative, and informational microfoundations of behavior as they enable, guide, and motivate them to follow specific behavior.

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<sup>9</sup> For earlier and partial expositions of this interpretation, see Greif (1989, 1992, 1994a, 1997a, 1996b, 1998a, 1998b, 2000). This perspective is most closely related to those expressed in Shepsle (1992), Calvert (1995), Gibbons (2000), and particularly Aoki (2001).

Second, the perspective developed here departs from viewing institutions from either a structural, cultural perspective (as common in sociology) or an agency, functionalist perspective (common in economics). Instead, it combines the structural and the agency views. It emphasizes the importance of studying institutions as equilibrium phenomena in which they constitute the structure that influences behavior, while the behavioral responses of agents to this structure reproduce the institution. In studying institutions as an equilibrium phenomenon, I consider neither games nor institutions as the basic unit of institutional analysis. Rather, I develop a particular notion of transactions and view them as the basic units of institutional analysis.<sup>10</sup>

In other words, institutions are studied from an equilibrium perspective, while recognizing that institutions are not monolithic entities and considering the transaction as the basic unit of analysis. This premise enables me to advance an integrating concept of institutions that reveals why institutions have such a profound impact on behavior and why they exert an independent impact on institutional dynamics. It allows institutional dynamics to be studied as a historical process in which past institutions influence the timing of institutional change, the manner in which they change, and the details and implications of new institutions. Presenting the details of these contributions goes beyond the scope of this introduction; the following merely highlights the basic relationships between the foregoing premise and these contributions.

The integrative definition of institutions advanced here restricts the scope of the analysis, mainly by requiring an institutional element to be an equilibrium outcome exogenous to *each* individual whose behavior it influences. Because it recognizes that institutions are composed of various components, this definition encompasses many seemingly alternative definitions of institutions (such as rules enforced by the state *or* systems of beliefs) as special cases. It accommodates the fact that institutions have different origins and serve different functions and that they sometimes reflect learning and limited rationality and sometimes reflect forward-looking behavior in well-understood situations. It is possible to build on the insights and analytical frameworks developed in seemingly distinct lines of institutional analysis. The usefulness of the

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<sup>10</sup> The transaction is the basic unit of analysis in transaction-cost economics. See D. Williamson (1993), who also discusses alternative units of analysis in institutional economics. The definition of transactions used here is different from that used in transaction cost economics (see Chapter 2).



definition advanced here is well reflected in its application in this book to many empirical studies exploring distinct issues.

Similarly, the perspective taken here responds to the challenge of studying endogenous motivation by integrating the agency and structural perspectives. It enables us to study, in the most general case, *endogenous* institutions—those that are *self-enforcing*. In self-enforcing institutions all motivation is endogenously provided. Each individual, responding to the institutional elements implied by others' behavior and expected behavior, behaves in a manner that contributes to enabling, guiding, and motivating others to behave in the manner that led to the institutional elements that generated the individual's behavior to begin with. Behavior is self-enforcing in that each individual, taking the structure as given, finds it best to follow the institutionalized behavior that, in turn, reproduces the institution in the sense that the implied behavior confirms the associated beliefs and regenerates the associated norms.

Studying institutions as equilibrium phenomena, while making explicit, as is done here, the forces rendering them self-enforcing, exposes the exogenous shocks that will lead to institutional failure, specifically, the shocks that cause an institution to no longer be self-enforcing. But the perspective advanced here achieves more than that. It enables us to study institutional dynamics as a *historical process*. Institutions can remain stable in a changing environment, and can change in the absence of environmental change, while past institutions—even those that are no longer self-enforcing—can influence the details of subsequent ones.

To study stability and change in the same framework, it is necessary to recognize that institutional elements provide the micro-foundations of behavior and that institutions are equilibrium phenomena; this makes it possible to study both institutional persistence in a changing environment and endogenous change in a stable environment. For an individual to choose behavior, he or she needs to have the appropriate information, a cognitive model, and the ability to anticipate others' behavior. Individuals also seek guidance on morally appropriate and socially acceptable behavior. Institutional elements provide these cognitive, coordinative, normative, and informational micro-foundations of behavior. At the same time, retrospective and limitedly rational yet forward-looking individuals respond to the behavioral and normative prescriptions provided by

institutional elements based on their private information, knowledge, and innate preferences. In situations in which institutions generate behavior, institutional elements constitute equilibrium phenomena that aggregate these features of the situation.

Under certain conditions, institutions can therefore persist in a changing environment. This is the case because individuals find it possible, necessary, and desirable to condition their behavior on the cognitive, coordinative, normative, and informational content provided by institutional elements rather than directly on the environment. In other words, using the jargon of game theory, individuals do not play against the rules of the game. Instead, they *play against (institutionalized) rules*. Because these elements are equilibria and do not necessarily correctly aggregate private information and knowledge, they are often more stable than the environment. Behavior will persist in a changing environment. Indeed, behavior can persist even in cases in which if individuals were to condition their behavior on the environment, such that past behavior would no longer be self-enforcing.

To understand endogenous institutional change there is a need to study the interplay between micromechanisms through which institutions influence behavior and their implications, behavioral and otherwise. This highlights the ways an endogenous institution—although an equilibrium phenomenon—can *reinforce* or undermine itself. One that is reinforced (undermined) becomes self-enforcing in a larger (smaller) set of parameters. Examining these reinforcing or undermining processes makes it possible, in particular, to study how an institution cultivates the seeds of its own demise, leading to its endogenous change.

The key to understand why and how past institutions influence the direction of institutional change is recognizing the dual nature of the components of which institutions are composed. The interrelated components making up an institution are also characteristics of individuals and societies. Rules, beliefs, and norms inherited from the past constitute and reflect individuals' shared cognitive models; they are embodied in these individuals' preferences and concept of self; and they constitute commonly known beliefs about expected, normative, and socially accepted behavior. They often also manifest themselves in organizations that have acquired various capacities. There is

therefore a *fundamental asymmetry* between institutional elements inherited from the past and technologically feasible alternatives.

Hence, even if the behavior associated with a particular institution is no longer self-enforcing, or if an institution is needed to govern a new transaction, not all technologically alternative institutions are equally likely candidates. Rather, the resulting new institution will reflect the impact of past institutional elements. Beliefs, norms, and organizations inherited from the past will constitute part of the initial conditions in the processes leading to new institutions. Whether such a process is coordinated or not, past institutional elements influence the selection among alternative technologically possible institutions. The past, encapsulated in institutional elements, directs institutional change and leads societies to evolve along distinct institutional trajectories.

The perspective developed further facilitates comparative institutional analysis over time and across societies by considering the transaction as the basic unit of analysis. We can focus on the same transaction in different episodes and explore the institutions that, as equilibrium systems of their constituting components, generate behavior within that transaction in each episode. Focusing on transactions while studying institutions from an equilibrium perspective closes the gap between two main lines of analysis in neoinstitutionalism. Transaction-cost economics (O. Williamson 1985) asserts that institutions are formed to reduce transaction costs; the institutions-as-rules approach considers institutions as determinants of transaction costs (North 1990). The equilibrium perspective I propose allows actors to attempt to improve their lot while simultaneously recognizing that the resulting institution is an equilibrium that determines the transaction costs facing each actor.

Many analytical frameworks can and should be used to study institutions as conceptualized here. The discussion and the empirical studies presented here highlight the benefits of using classical game theory enriched by insights from sociology, cognitive science, learning, and experimental game theory among other fields of study. The usefulness of game theory for institutional analysis has been debated in the social sciences. Many micro-economic theorists, such as Gibbons (1998), believe that it is indispensable, while institutional economists, such as North and Williamson, express reservations. In sociology and political science, a fierce debate has raged over its

empirical usefulness (see Hechter 1992, Scott 1995, D.Green and Shapiro 1994, J.Friedman 1996, Scharpf 1997, Bates, Figueiredo, and Weingast,1998, Elster 2000, and Munck 2001).

Although there is merit in the arguments presented on both sides, the debate often confounds two questions. The first is whether games are the basic unit of institutional analysis and whether game theory provides a theory of institutions.<sup>11</sup> The second is whether game theory is empirically and analytically useful. My own view is that games are not the basic unit of analysis and that game theory does not provide a theory of institutions, although it is analytically and empirically useful.

Furthermore, there is much to learn about institutions from responding to the puzzling observation that game theory has been found useful for institutional analysis, even though it rests on unrealistic assumptions about cognition, information, and rationality. The position taken here is to ask what we learn from the need to impose these assumptions. How and to what extent are these assumptions fulfilled in the real world? What do the ways in which they are fulfilled tell us about how and when game theory can beneficially be used to study behavior in real-world situations? As we will see, addressing these questions contributes much to our understanding of institutions.

Because the perspective presented here studies institutions through the lens of a game-theoretic equilibrium analysis, it is sometimes referred to as the *institutions-as-equilibria* approach and the related institutions as *self-enforcing institutions*. These terms capture the spirit of the analysis but not its essence. Institutions are not game-theoretic equilibria, games are not the basic unit of institutional analysis, and game theory does not provide us with a theory of institutions. Indeed, the key to advancing institutional analysis by using game theory is precisely to recognize the difference between game-theoretic equilibrium analysis and institutional analysis.

Both evolutionary institutionalism and classical game theory suggest that the search for a comprehensive, deductive theory of institutions—that is, a theory providing a one-to-one mapping between the observable, exogenous features of the situation and the institutions—may be futile. Achieving a unique equilibrium in evolutionary models

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<sup>11</sup> By a theory of institutions I mean a theory predicting, based on exogenous features of the situation, the resulting institution. Game theory, however, is a theory of behavior in strategic situations.

requires restrictive assumptions on possible actions, rationality, and the stochastic processes underpinning experimentation, learning, and mutations. Classical game theory indicates that multiple equilibria—and hence institutions—can be self-enforcing. Even under the game-theoretic assumption that individuals are highly rational and the game is common knowledge, multiple equilibria are the rule rather than the exception in the repeated situations central to institutional analysis.

This indeterminacy of institutions challenges our ability to study them deductively. The premise of deductive analysis is that theory can restrict—*predict*—the endogenous outcomes for a given set of the exogenous and observable features of the situation. This prediction should be sufficiently precise to render an empirical analysis meaningful. In the case of institutional analysis, we do not have such a deductive theory able to predict institutions.

Inductive analysis à la Francis Bacon, which identifies and classifies institutions based on their observable features, is similarly deficient for studying institutions while recognizing the need to study motivation. Identifying institutions with such observable features as rules and organizations is misleading, because motivation provided by unobservable beliefs and norms determines whether rules are followed and what is the impact of an organization.<sup>12</sup> While certain components of an institution, such as formal rules, or organizations, such as stock markets or courts, are observable, others, such as norms about honesty in dealing with strangers and beliefs about legal enforcement, are inherently difficult to observe and measure.<sup>13</sup>

Moreover, as game theory and other frameworks reveal, multiple beliefs and norms can be self-enforcing in the same situation, even if we assume that individuals are highly rational and the rules of the game are common knowledge. There is no one-to-one mapping between the observable components of institutions (rules and organizations) and those that are unobservable (beliefs and norms). The same rules and organizations can be components of institutions that differ in their beliefs and norms, implying that we cannot study institutions inductively based on their observable components.

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<sup>12</sup> For this reason, identifying institutions with such observable features as constitutional restrictions on the executive, rules protecting property rights, or an independent judiciary is misguided.

<sup>13</sup> Sources, such as correspondence and surveys that reflect beliefs and norms are sometimes useful. See, for example, Zak and Knack (2001).

Without a deductive theory of institutions or the ability to identify institutions based only on their observable components, the traditional empirical methods used in the social sciences are challenged. These methods rest on twin pillars: the predictive power of deductive theory and the ability to inductively classify outcomes.

The extent of this challenge is reflected in the attempts to econometrically evaluate the effectiveness of institutions while identifying them with their observable features (particularly rules) or implications (particularly the security of property rights). Despite immense scholarly input and much econometric analysis, the debate whether the findings support the assertion that institutions are important still rages (Rodrik et al. 2003; Glaeser et al. 2004). Analyses using quantitative measures of institutions, such as civil liberties and property rights to substantiate their impact on growth are similarly not robust (Aron 2000). Even the impact of political instability and social capital on growth have been difficult to substantiate econometrically (Campos and Nugent 2002; Schneider, Plumer, and Baumann 2000).

These inconclusive results may well reflect insufficient attention to the fact that unobserved institutional elements can vary systematically across societies and directly influence the effectiveness of an institution. Two societies with the same formal rules specifying property rights will experience very different levels of investment if different beliefs about the enforcement of these rights prevail in each. Dismissing such unobservable institutional elements as simply idiosyncratic variations introduces an omitted variable problem that biases any attempt at measurement that fails to account for them.

As a response to the challenge institutional analysis presents to the traditional empirical methods of social science, the perspective developed here presents a complementary case study method. It is particularly promising given the absence of a deductive theory of institutions, the extent of institutional diversity, the interest in comprehensively understanding particular institutions for policy purposes, and the need to develop general propositions regarding institutions.

This method builds on the argument that institutional elements inherited from the past influence subsequent institutions and argues the need to use contextual—historical—information in studying institutions. More generally, this book advances an empirical

case study method, central to which is an interactive, context-specific analysis that combines contextual knowledge of the situation and its history with theory and an explicit, context-specific model. The method interactively uses contextual knowledge combined with a context-specific model to *identify* the institution, to clarify why and how it established itself, and to understand its persistence, changes, and implications.<sup>14</sup>

By recognizing that institutions are made up of components that are also attributes of individuals and societies, the perspective developed here bridges the divide between studying institutions as rules or contracts (as is common in economics) and studying them as cultural phenomena (as is common in other social sciences).<sup>15</sup> The perspective advanced here recognizes the futility of arguing about definitions of culture and institutions and debating whether one is more important than the other in generating a particular phenomenon.

Instead, this perspective highlights the large extent to which the “culturalists” and “institutionalists” are fundamentally interested in the same phenomena: the implications of manmade, nonphysical factors that generate regularities of behavior while being exogenous to *each* individual whose behavior is influenced, such as beliefs systems and internalized norms that generate regularities of behavior. This analysis, therefore, highlights the extent and conditions under which the “cultural” and the “institutional” overlap. Within economics, this implies bringing together institutional analysis and the analysis of social capital.<sup>16</sup>

More important, by recognizing how the institutional and cultural interrelate, the perspective advanced here enables us to study the interaction between them. A significant conclusion of this book is that culture influences institutional development. At the same time, the integration of cultural elements into a society’s institutions is a mechanism that leads to their persistence.

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<sup>14</sup> This position is in the spirit of Sutton (1991); Greif (1996b, 1997a, 2000); Scharpf (1997); Bates et al. (1998); Levi (2004); and others.

<sup>15</sup> *Cultural* is difficult to define. As early as 1952, Kroeber and Kluckholm identified more than 164 definitions of *culture*. For illuminating discussions, DiMaggio (1994, 1997); and Part III.

<sup>16</sup> *Social capital* is often defined as the “features of social organization, such as trust, norms, and networks, that can improve the efficiency of society by facilitating coordinated actions” (Putnam 1993, p. 167). Coleman (1990) and Putnam (1993, 2000) are classic contributions. See also Woolcock (1998); Dasgupta and Serageldin (2000); Sobel (2002); and <http://www1.worldbank.org/prem/poverty/scapital/home.htm>.

Extending the scope of the analysis to include the cultural, social, and organizational implies that the perspective developed here is *socioeconomic*.<sup>17</sup> It departs from and complements the institutions-as-rules approach, which studies institutions as determined by economic or political forces. This socioeconomic view reflects and constitutes a “sociological turn” in economic neoinstitutionalism that departs from the institutions-as-rules emphasis on political and economic considerations. The socioeconomic view accommodates but goes beyond these particular considerations.

Indeed, the perspective developed here draws on the main traditions of sociological institutionalism: the tradition associated with Durkheim, which focuses on socially constituted codes of conduct and beliefs; the tradition associated with Parsons, which focuses on normative behavior; the focus on social structures and relationships associated with Wrong (1961), Granovetter (1985), and March and Olsen (1989); and the tradition associated with Weber (1947, 1949), Berger and Luckmann (1967), Searle (1995), and W. Powell and DiMaggio (1991), which concentrates on the cognitive foundations of behavior, organizations, and the social construction of reality. As these sociological notions are also central to old institutionalism (Dugger 1990), expanding neoinstitutionalism to include them entails bringing together the two lines of institutional analysis in economics

By addressing institutional stability, endogenous change, and the impact of the past on subsequent institutions in a unified framework, the analysis of institutional dynamics as a historical process complements three lines of research: historical institutionalism in political science, which emphasizes that institutions reflect a historical process (P.Hall and Taylor 1996; Thelen 1999; Pierson and Skocpol 2002); the path-dependence literature developed by David (1985) and Arthur (1988), which emphasizes the stability of historically inherited phenomena; and the study of culture as a “tool kit” for the reconstitution of society in new situations (Swidler 1986).

Equally important is the relationship between the perspective developed here and evolutionary institutionalism. The analysis of institutional dynamics as a historical

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<sup>17</sup> It accommodates the four pillars of the sociological view on institutions, as summarized by Smelser and Swedberg (1994) in the *Handbook of Economic Sociology*. As is now common in economics, the perspective adopted here accepts that preferences and rationality are socially constructed, that social structures and meaning are important, and that the economy is an integral part of the society.



process is evolutionary in capturing the impact of the past on the rate and direction of change. Indeed, it highlights the microfoundations of evolutionary processes in institutional development. Existing institutions affect the processes of learning, imitation, and experimentation that lead to new ones; influence the costs and benefit of introducing new institutional elements; and bias new institutions toward ones that interrelate with and do not depart greatly from their elements.

### **1.3 Institutions and Commercial Expansion during the Late Medieval Period**

The empirical studies presented in this book compare institutional development both within Europe and between Europe and the Muslim world, primarily during the late medieval period (from about 1050 to about 1350). The words of Sa`id ibn Ahmad, a Muslim scholar and judge who lived in Toledo in the eleventh century, explain why studying this period is of interest. He compared various nations in terms of their achievements in science, military skills, artistic ability, and craftsmanship. The Europeans—the “barbarians of the North”—did not fare well. They “lack keenness of understanding and clarity of intelligence, and are overcome by ignorance, apathy, and stupidity” (B.Lewis 1982, p. 68). If one measures development using such criteria as urbanization and the contents of exports, Europe was indeed economically underdeveloped relative to some other regions of the world during the eleventh century.

Sa`id ibn Ahmad grimly assessed the “barbarians of the North” exactly when the European economy, polity, and society were embarking on the road that led to the Rise of the West, a process that began in the late medieval period with the growth of European commerce (North and Thomas 1973; Rosenberg and Birdzell 1986). Long-distance trade “became the driving force of economic progress, and in the end affected every aspect of human activity almost as decisively as the Industrial Revolution changed the modern world” (Lopez 1967, p. 126).<sup>18</sup> The commercial center of gravity along the shores of the Mediterranean Sea was shifting away from the Muslim world toward Europe.

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<sup>18</sup> Scholars such as Herlihy (1958), Lopez (1967), Duby (1974), and Mokyr (1990) emphasize the contributions of increasing agricultural productivity and technological change in this growth. P. Hoffman (1996), G. Clark (1991), and Grantham (1992, 1993) have challenged this claim. For a general discussion of this period, see Pirenne (1939, 1956); Lopez (1976); Hatcher and Bailey (2001); and Cipolla (1993).

This book examines various aspects of the institutional foundations of this late medieval commercial expansion and the ensuing political and social transformations. This historical episode lends itself to examining the general nature of institutions, their dynamics, and implications. After all, trade expansion was not, as trade theory would have predicted, a response to changes in endowments or technology. Rather, new institutions, which had provided the foundations for markets and political units, played an important role in initiating trade and creating a complementary process of institutional development and trade expansion.

The historical and theoretical importance of this period has drawn the attention of scholars adopting the institutions-as-rules approach. In their interpretation, once feudal warfare declined, peace enabled the population to grow and to realize the gains from “commerce between different parts of Europe” that “had always been potentially of mutual benefit” (North and Thomas 1973, p. 11). Subsequent institutional development reflects attempts to reduce transaction costs. The “revival of trade led to a host of institutional arrangements [such as insurance contracts and the bill of lading] designed to reduce market imperfections” (p. 12).

This interpretation attributes the revival of trade to exogenous political events that led to institutional development directed by efficiency considerations. This proposition ignores a host of relevant questions, however. Which, if any, institutions curtailed fighting? There was no “state” that could have prevented war between different political entities, and no entity had a monopoly over coercive power even within a political unit. How, then, was peace sustained? During the late medieval period there were no states to provide the institutions required for long-distance trade. Which institutions ensured secure property rights for merchants while they traveled or sent their goods abroad? Which institutions provided the contract enforcement needed for people from various corners of Europe to enter into contracts over time and space?

Was trade expansion a function of only peace and factor endowments, or did institutional elements inherited from the past influence the timing, location, and extent of trade expansion? Why did the emerging institutional arrangements in Europe differ from those in other (technologically similar) economies in response to increased trade? Why did European contractual and organizational forms, which early in the medieval period

were the same in Europe as in the Muslim and Byzantine worlds, differ by the fifteenth century?

To answer these questions, it is necessary to go beyond regarding institutions as rules and institutional development as an inevitable response to gains from trade and peace. There is a need to examine the origin and manifestation of the institutional elements that generated behavior among the interacting political and economic agents and how they constituted equilibria. In particular, as the historical analysis presented here demonstrates, understanding the late medieval commercial expansion requires considering the institutional foundations of states and markets.

This historical research touches on the question of the Rise of the West. That rise, and the rhythm of history more generally, have recently been attributed to various deterministic forces. Some scholars have subscribed to technological or environmental determinism, attributing Europe's success to the location of coal deposits, ports suitable for trade with the New World, or geography (Diamond 1997; Pomeranz 2000; Sachs 2001; Acemoglu, Johnson, and Robinson 2002). Others have favored cultural and social determinism, asserting that economic and political outcomes reflect the social capital and trust inherited from the past (Putnam 1993; Fukuyama 1995). Another line of research argues that the Rise of the West is a modern phenomenon. Indeed, economic outcomes—measured by food consumption, market integration, and other indicators—may not have been any better in Europe than in other parts of the world until as late as the nineteenth century (Pomeranz 2000; Shiue and Keller 2003). These findings support the conjecture that Europe's success is rooted in such recent events as the rise of the mineral-based economy, colonialism, or the Atlantic economy (Pomeranz 2000; Acemoglu et al. 2002).

The historical research presented here suggests that the West developed distinct institutions as early as the late medieval period. The organization of society in the West was centered on intentionally created institutions. Neither the state nor kin-based social structures such as tribes and clans were central to these institutions. Instead, the organization of society centered on interest-based, self-governed, non-kin-based organizations. These organizations—mainly in the form of corporations—were vital to Europe's political and economic institutions during the late medieval growth period as well as the modern growth period.

Several factors, particularly institutional elements inherited from the past, contributed to the emergence of this societal organization during this period: individualistic cultural beliefs and weak kin-based organizations (which to some extent reflected the church's interests and actions), the institutional weakness of the state, and norms legitimizing self-governance. This historical heritage implied that gains from cooperation could not be achieved by relying on institutions that were based on either kin-based organizations or the state. At the same time, economic and coercive resources were distributed with relative equality so that the resources of many individuals had to be mobilized before the interests of the relatively powerful could be advanced. Interest-based, self-governed, non-kin-based economic and political corporations were therefore established.

Since then, this particular societal organization—centered on self-governed, non-kin-based organizations and individualism—has been behind the behavior and outcomes that led to European-specific economic and political developments. This societal organization is the common denominator behind such seemingly distinct historical phenomena as the late medieval economic expansion, the rise of European science and technology (Mokyr 2002), and the creation of the modern European state, the ultimate manifestation of a self-governed, non-kin-based corporation composed of individuals rather than larger social units (Greif 2004b).

If institutions are central to economic, social, and political outcomes, and institutional development is a historical process, the roots of the eventual success of the West may very well lie in its past political and economic institutions. The tentative nature of this assertion must be emphasized. Surprisingly little is known about past institutions: it may well be that European and non-European institutions had more in common than is currently perceived. Furthermore, the relative efficiency of any particular set of institutions depends on the context. Finally, Western institutions may have undermined themselves in the long run by creating excessive individualism and materialism (see Lal 1998); if success is measured by the share of world population, the West may already have declined. Hence whether the Rise of the West reflects its institutional particularities or, more generally, whether history is driven by distinct institutional dynamics created by past institutions remains a question. It is notable, however, that the institutional

particularities of the late medieval period are also associated with the rise of Europe in the modern period. The two main periods of economic development in Europe share similar institutional foundations. Claims that the Rise of the West is due to either predetermined factors or recent events must show that the implications of these exogenous factors and these particular events are not reflections of the particularities of European institutions.

#### **1.4 The Structure of the Book**

The remainder of this part, Chapter 2, presents the concept of institutions developed here and relates it to other concepts. Part II studies endogenous institutions as equilibrium systems of interrelated components using game theory. It begins with two empirical studies that demonstrate the usefulness of the perspective developed here in considering the institutional foundations of markets. Chapter 3 examines the institution that provided contract enforcement among merchants in the Muslim world, thereby enabling exchange in the absence of legal contract enforcement. Chapter 4 considers the institution that fostered long-distance trade by securing property rights in Europe. This institution enabled a ruler with a monopoly over coercive power to commit to respecting the property rights of foreign merchants.

Chapter 5 delves deeper into the nature of various institutionalized elements and their interrelationships. It articulates what we learn about institutions from the restrictive assumptions required for, and the insights provided by, game-theoretic analysis and what they teach us about the appropriate use of game theory for institutional analysis. The chapter builds on cognitive science, old institutionalism, and sociology, among other fields, and discusses the integration of normative and social considerations in institutional analysis. Appendix B complements this analysis by evaluating whether the assumption that individuals are rational—in the particular sense attributed to the term here—is consistent with the claim that normative and social considerations are important.

Part III studies institutional dynamics. Chapter 6 considers endogenous institutional change, whereas Chapter 7 considers the impact of past institutions on subsequent institutions. The theoretical discussions in Chapters 6 and 7 are illustrated through a comparative analysis of the institutional foundation of the two most successful

Italian maritime city-states, Genoa and Venice. The analysis touches on the critical issues of state building, the endogenous creation of a state with a de facto monopoly over coercive power, and the economically productive use of coercion. Chapter 8 expands on the analysis of institutional success, failure, and dynamics in the process of state building in Genoa. Chapter 9 presents a comparative analysis of institutional and contractual development in two groups of merchants, one from the Muslim world, and the other from the European (Latin) world. It emphasizes that cultural beliefs—roughly speaking, shared uncoordinated beliefs—influence the selection of institutions, become integrated into existing institutions, and direct the process of institutional innovations and responses to new circumstances.

Chapter 10 illustrates the benefits of interactive, context-specific analysis. The issue it focuses on—the institutions that provide the foundations of impersonal exchange in the absence of a partial legal system—is of interest for its own sake. The empirical analysis it presents highlights the role of a European institution that endogenously motivated intracommunity, impartial contract enforcement institutions to dispense the partial justice that supported intercommunity impersonal exchange. The long-distance trade that these institutions facilitated in turn influenced the development of intrastate contract enforcement institutions. Chapter 11 generalizes this example to explain why institutional analysis usually requires a combination of deduction and induction. It then presents the mechanics of combining historical, contextual information and explicit models in conducting an interactive, context-specific analysis. Appendix C, which focuses on private-order, reputation-based institutions, complements this discussion by elaborating on the role of theory in delineating general considerations that shape these institutions and hence in identifying the relevant evidence. Chapter 12 concludes by reviewing the assertions and concepts central to the perspective advanced here and elaborating on the general insights provided by the historical studies. It ends by assessing the book's implications for development and institutional design.

To facilitate access by different types of readers, the book is organized so that it can be read while focusing on either the study of institutions or the historical analyses. Readers interested in institutions and their analysis can focus on Chapters 2, 5, 6, 7, 11, 12, and Appendices B and C. Readers interested in the historical material can focus on

Chapters 3, 4, 8, 9, and 10 (each of which includes an intuitive discussion of the theoretical results) and Chapter 12. Readers not versed in game theory will benefit from the primer presented in Appendix A.