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ECONOMIC GOVERNANCE AND THE ANALYSIS OF STRUCTURAL CHANGE IN THE AMERICAN ECONOMY

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The institutions that govern economic activity in the United States have changed dramatically since the late nineteenth century and continue to do so as politicians, business leaders, and others scramble to cope with sluggish productivity, rapid technological change, volatile markets, increasing international competition, trade deficits, and a host of other problems that plague the economy. This book explains how and why these transformations in governance, the political and economic processes that coordinate activity among economic actors, occurred in different industries and industrial sectors. Although we seek to understand the dynamics of the U.S. economy, we also address questions about the governance of modern capitalist economies in general by focusing on the emergence and rearrangement of several common institutional forms of governance, or governance mechanisms, which include markets, bureaucratic hierarchies, associations, and informal networks. We add further breadth to the analysis by discussing the unique role that the state plays in the governance transformation process.¹

Of course, social scientists have adopted a wide-ranging set of theoretical positions to explain transformations in governance. Those following Adam Smith, John Stuart Mill, and the neoclassical economic tradition adopted

¹ As a result, this study provides a substantial empirical and theoretical complement to the vast, normatively oriented literature, which suggests that a variety of institutional changes are necessary to solve the U.S. economy's recent problems. Much of this literature fails to appreciate not only the conditions under which various institutional alternatives are likely to emerge, but also that some institutional arrangements may be better suited than others to rectify different types of economic problems in different types of industries and sectors - an issue to which we give serious attention. For a sampling of this literature, see
a utilitarian view and suggested that governance transformations occur when rationally calculating economic actors see that alternative forms of governance offer more profitable ways of doing business than those already in place (e.g., Williamson 1975, 1985, 1986). Others followed an organizational approach, reminiscent of Max Weber, and suggested that a broader set of motivations and organizational goals, such as a sense of community and reciprocity, also influence governance transformations (e.g., Granovetter 1985). Borrowing from the evolutionary traditions of Auguste Comte, Emile Durkheim, and Herbert Spencer, some observers maintained that more efficient organizational forms emerged to govern economic activity through a natural selection process, where the institutional forms best suited to prevailing environmental conditions are most likely to survive (e.g., Hannan and Freeman 1977; Nelson and Winter 1982). A fourth group, influenced by Karl Marx as well as Weber, developed a political economy approach that argued that struggles over power transformed governance (e.g., Schmitter and Lehmanbruch 1979; Berger 1981; Perrow 1981).

This book is located at the intersection of these debates and strives to move them forward by offering a new approach to the analysis of governance transformations. It does this by pursuing several more specific theoretical objectives. First, it offers a new conceptual scheme that we hope will build bridges in a fragmented and scattered literature about economic governance. Second, it provides an empirical analysis of the causal models that other scholars have offered previously to explain or predict the conditions under which different forms of governance emerge. Third, because we find that many of these models, especially those that are based on explanations about economic efficiency, offer causal predictions that are not always supported by our data, we argue that the search for universal generalizations with which to predict governance transformations is futile and that there are no universal or immutable logics in the governance of capitalist societies. Instead, we embrace the broadly neo-Weberian position that one can only hope to find and explain historically specific patterns and sequences of transformation. Fourth, we theorize the process by which governance transformations occur—something that has not been done in most of the literatures that are dedicated to predicting specific types of transformations with causal models. Through a critical synthesis of these models, we argue that transformations occur as actors select new sets of governance mechanisms in ways that are constrained economically, politically, institutionally, technologically, and culturally in complex ways, and that the choices actors make bear heavily on future constraints and choices.

Fifth, whereas most theoretical traditions neglect or understate the importance of the state as it constitutes the institutional arrangement of economic sectors, we theorize the role of state actors and especially state structures in shaping the selection of new governance regimes. Finally, we believe that this book contributes to the debate about the origins and causes of the productivity problems of the contemporary U.S. economy and the prospects for solving them. Our findings are particularly relevant to those who argue that productivity problems stem from organizational weaknesses in the U.S. production system because our analysis illuminates how these organizational problems developed in the first place.

We begin to address these issues in this chapter by clarifying our assumptions about the nature of governance, particularly insofar as they differ from the prevailing neoclassical economic paradigm. We argue that it is not just the search for economic efficiency, but also struggles over strategic control and power within economic exchange that provide the principal dynamic for governance transformations. Furthermore, drawing on the idea that governance is largely a matter of social control, we provide a typology of governance mechanisms that are commonly found in advanced capitalist economies. We also discuss briefly the state's role in economic governance and why we consider it to be significantly different than the governance mechanisms we identify and, therefore, worthy of separate consideration. Finally, we offer a brief description of the governance transformation process for heuristic purposes. As such, this chapter provides a conceptual framework within which to analyze specific governance transformations that have occurred in the U.S. economy.\footnote{This chapter is signed by the editors but is in a profound sense a collaborative product of a dialogue with all the authors in this volume and with several other participants in the Workshop on the Governance of the American Economy, which met regularly in Madison at the University of Wisconsin from the Fall of 1984 to the Summer of 1986. Many of these individuals also provided detailed critiques of earlier drafts of this chapter. Memoranda prepared and presented to the workshop by Ken Bickers and Marc Schneiberg proved particularly useful in advancing the conceptual and theoretical work. In addition, special thanks for their comments go to Michael Allen, Howard Aldrich, William Coleman, Gerald Hage, Gerhard Lehmbuch, Marc Eisinger, Philippe Schmitter, Marc Schneiberg, and Graham Wilson.}

THE NATURE OF GOVERNANCE

Unit of analysis

Governance is a phenomenon that is best conceptualized at the level of industries and industrial sectors. In contrast to neoclassical models that focus on the behavior of discrete market actors, we view each industry as
a matrix of interdependent social exchange relationships, or transactions, that must occur among organizations, either individually or collectively, in order for them to develop, produce, and market goods or services. Thus, governance is an extremely complex phenomenon. Transactions occur within a sector among a wide range of interdependent actors, including producers and suppliers of raw materials, researchers, manufacturers, distributors, and many others, who must routinely solve various problems, such as raising capital, setting wages, standardizing products, and establishing prices in order for economic activity to continue. Complicating matters further, there are several types of governance mechanisms that groups of actors may adopt to help them solve these problems. If we tried to specify all the actors, all their problems, and all the governance mechanisms they employed, analyzing governance in a sector would become an overwhelming task. One need only recognize that a matrix representing the relationships among all possible combinations of actors and problem areas would involve scores of cells. However, because our major concern in this book is with understanding the transformations in governance mechanisms historically, we have simplified matters by focusing only on governance mechanisms when they fail, encounter serious legitimacy problems, and when actors search for and devise alternative means of governing their relationships. By narrowing our attention to these moments when new arrangements of governance mechanisms emerge, the analysis becomes much more manageable.

Interests and rationality

Rather than assuming that economic behavior is always self-interested or rational in the sense that people select the most efficient course of action in order to maximize their utilities or wealth, we recognize that people may also be content merely to satisfy their needs. Furthermore, they will do so not just within the limits of bounded rationality, where actors make intendedly rational choices based only on the incomplete information available to them (e.g., Simon 1961), but also within those of contingent rationality, where the political, economic, ideological, and other institutional conditions prevalent at the moment constrain the range of choices available in the first place. Indeed, a variety of values or ideologies, including but not limited to opportunism and avariciousness, motivates economic activity and is conditioned by all of these contingencies, not just markets.  

3 For further discussion of contingent rationality, see Peter Hall (1986: 34-7) who, for example, argues that we cannot derive the rationality of economic actors from the market a priori because the institutional structure of markets and, therefore, market rationality is historically specific.
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Significance of nonmarket forms of governance

Our approach to the study of governance is also different from neoclassical economics because, as noted earlier, rather than focusing almost exclusively on markets, we are concerned with shifts to alternative forms of governance. We agree that autonomous organizational actors often coordinate their transactions through markets, where hard contracts specify the terms of exchange, such as price, quality, wages, and conditions of work. However, market contracting does not always ensure that the interests of all parties to a transaction are sufficiently served. Market uncertainties may be so severe that actors believe that they do not have enough information with which to act. Economic risks may be so difficult to assess that parties to exchange find it very hard to develop acceptable contracts. In short, markets may fail to provide for the kinds of transactions that actors desire, in part because economic reality often differs from neoclassical assumptions about pure competition, uninhibited entry and exit from the market, the availability of accurate information, and the like.

Under these circumstances, actors seek alternative forms of governance rather than permitting exchange relationships to fracture under what Oliver Williamson (1985: 3) called the hammer of unassisted market contracting. Collective action, for instance, a common phenomenon in industries despite the presence of Mancur Olson’s (1965) free-rider problem, emerged in the U.S. textile industry during the early 1900s in an effort to stabilize production levels and prices when manufacturers, relying on markets to coordinate their activities, failed to do so (Galambos 1966). Indeed, alternative forms of governance warrant attention in their own right because it is their presence, as common elements of economic life, that undermines many of the neoclassical assumptions about how markets work in the first place. The presence of huge corporate bureaucracies, which limit some actors’ access to markets and market information, is a common example (e.g., Galbraith 1967).

Power and equilibrium

We view production and exchange as systems of power, manifested through market and nonmarket governance mechanisms, an assumption that implies that economic activity does not necessarily tend toward equilibrium, equal exchange, or efficiency, but often involves institutionally determined, asymmetrical, and shifting exchange advantages. Hence, the institutional

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4 See Alt and Chrystal (1983: 175–83) for a review of the vast literature on market failure. It is interesting that although even the most conservative neoclassical economists acknowledge that the problems of market failure may lead to alternative forms of economic governance, they persist in paying only scant attention to these alternatives (e.g., Friedman 1962: Chap. 2).
distribution of power, not just prices, regulates economic exchange. Furthermore, although governance mechanisms and their arrangement evolve over time, there is nothing natural or inherent about that evolution. Instead, the history of governance transformations is guided by actors searching in cooperative and conflictive ways for what they believe are the best available options. We will argue that governance transformations are likely to occur when actors, who are unable to manage problems of interdependence to their satisfaction within the existing arrangement of governance mechanisms, search for institutional alternatives in contingently rational ways. In sum, our framework forces a basic shift in the analysis of economic exchange processes, particularly away from the neoclassical economic tradition that emphasizes rational economic man, commodities, prices, and perfect or imperfect markets to one that focuses on organizational actors with complex motivations, their interdependencies, and the qualitatively different types of transactions in which they engage—phenomena that vary historically within and across industries.\(^5\)

**DYNAMICS OF CHANGE WITHIN THE GOVERNANCE FRAMEWORK**

Despite the vast literature on nonmarket forms of governance, discussed in what follows, there is often a failure to theorize how economic performance and governance processes cause different governance mechanisms to develop, on the one hand, and how the relative influence of different governance mechanisms is determined historically, on the other. For example, it is not enough to assert that all economic action is embedded in networks of informal social relations (e.g., Granovetter 1985) and that such networks, rather than the largely fictitious pure market, account for whatever observable order exists in an industry. To do so neglects the important tasks of identifying different degrees and qualities of embeddedness, specifying different kinds of networks, explaining how they developed, and determining how effectively they moderate different types of exchanges. Similarly, it is not enough to know how private organizations or the state makes decisions, that work and exchange relations are hierarchically controlled, or that capitalists monitor each other’s behavior through networks. We must also determine the origins and performance capacities of these different forms of governance.

For these reasons, we have been particularly interested in the recent literature on industrial economics, especially those variants that recognize that institutions play important, but often neglected, roles in shaping eco-

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\(^5\) Our assumptions about the functioning of economic systems are similar to those of institutional rather than neoclassical economics. For an elaboration and comparison of institutionalist and neoclassical assumptions, see Stevenson (1987).
nomic performance within and between industries, sectors, and entire political-economic systems. Specifically, we are drawn to the work of Williamson (1975, 1985, 1986) and Douglass North (1981), who have used transaction-cost theory to develop models that seek to explain transformations in the institutional coordination of economic exchange. This may seem ironic because the transaction-cost approach is steeped in neoclassical assumptions, many of which we do not accept. However, for reasons that follow, this approach provides useful starting points for addressing the issues with which we are concerned.

Williamson argued that corporate hierarchies emerge to coordinate economic transactions when the costs of conducting such exchanges through the market become prohibitive. That is, when actors feel that the financial costs of engaging in and monitoring transactions become too uncertain, because transaction-specific investments are great and it is difficult within the limits of bounded rationality to control an exchange partner's opportunism, they will develop hierarchically integrated, corporate organizations to supplant the market as the primary forum for exchange. Despite its problems (see note 6 before), transaction-cost theory offers the important insight that when actors can no longer efficiently consummate transactions through either the market or, we would add, another form of governance, at least to their satisfaction, they will try to develop other more efficient governance mechanisms. Furthermore, it suggests the need for a general theory of governance transformation that specifies a dynamic for change, accepts that there are different forms of governance, and recognizes that each may play an important role in coordinating economic activity.

Yet to argue that transaction-cost inefficiencies are the sole cause of governance transformations is an excessively narrow view. First, when institutional arrangements undermine the efficient allocation of resources and information for any reason, not just because transaction costs are high, actors may begin to look for alternative arrangements that will improve efficiency. For example, because labor is too expensive, managers in an

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7 Williamson and other transaction-cost theorists generally assume that governance transformations begin with market failures. Although this is one possibility, we will argue for a more general theory of governance failure where transformations may also occur in response to the inability of nonmarket governance mechanisms to satisfactorily coordinate economic activity. To do otherwise requires that we accept the neoclassical assumption that markets are the ever-present starting point for the development of alternative governance arrangements, an assumption that has been rejected based on the historical record (e.g., Polanyi 1944; Lazonick 1986), but which has permeated transaction-cost theory (e.g., Williamson 1986: 143). See Robbins (1987) for an elaboration on the empirical and theoretical problems this presents.

8 Efficiency in this sense is a function of a firm, industry, or economy's input-output ratio,
industry may switch from a union-based, hierarchical system of obtaining labor, where the (transaction) costs of monitoring labor are low, to a market-based system with higher monitoring costs in the belief that a net saving in resources will be achieved through the realization of lower wages. Second, transaction-cost theory and orthodox economics in general ignore the strategic causes of governance transformations. That is, in addition to simply acquiring the resources and information they need at the lowest possible cost, actors may also be concerned with controlling the terms of exchange under which they make these acquisitions— a strategic concern insofar as power, rather than just the ability to procure resources, is at stake. In this sense, the arrangement of governance mechanisms is undesirable and worth changing from an actor's point of view if it systematically restricts the actor's control over the terms of exchange relative to that of the exchange partner. Thus, when strategic problems become intolerable for enough actors, the legitimacy of the prevailing set of governance mechanisms suffers, and they may press for governance transformations. If workers, for instance, labor for low wages under dangerous working conditions, they may decide to unionize and establish collective bargaining with management in an effort to control more closely the terms under which they exchange their labor. As a result, an alternative form of governance replaces the traditional labor market. In sum, governance transformations are likely to occur not only when actors are unable to efficiently get the resources and information they want through exchange, but also when they cannot control satisfactorily the terms of exchange under which they attempt to obtain these resources and information in the first place. However, knowing that all sorts of ineffi-

and is consistent with the neoclassical tradition. Optimum efficiency is reached when the output is maximized relative to a given set of inputs (or input costs) and markets clear. For example, firms obtain the production factors they need at lowest cost and sell the commodities they produce. Therefore, transaction-cost efficiency is a special type of the more general neoclassical notion of efficiency. For a critical discussion of these definitions of efficiency from an institutional economics perspective, see Stevenson (1987).

9 Failure to recognize the importance of strategic causes of governance transformations is linked to, and perhaps derived from, other problems with the transaction-cost and neoclassical economic perspectives. First, as Stevenson (1987) suggested, representatives of these schools fail to ask the important normative questions— how and in whose interest are the standards of efficiency judged and established? — questions which, when posed, would force them to recognize that definitions of efficiency are not always universally accepted and, thus, that there may be additional reasons why actors try to change governance arrangements. Second, as Perrow (1981) argued, adherents to these traditions usually fail to accept the fact that power and class conflict often play important roles in the development of nonmarket governance arrangements, phenomena that are often the result of inequalities in strategic control.

10 We have been influenced here by Zald's (1970) classic discussion of the political and economic aspects of organizational activity, where organizational politics and economics center on problems of the control and exchange of resources, respectively, within and between organizations.
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iciences and strategic considerations trigger interests in governance transformations tells us very little about how transformations actually occur and why governance assumes particular institutional forms.

Although North (1981) adopts the same transaction-cost perspective that Williamson does and, as others have noted (e.g., Robbins 1987), suffers from many of the same theoretical problems as a result, he makes several additional points. The institutions that coordinate economic activity are, in effect, property rights structures (what we would call governance mechanisms) that are comprised of systems of rules, procedures, and norms that define ownership and control of the means of production, govern transactions, and determine the efficiency with which resources and information are allocated. Furthermore, although property rights structures vary historically and are determined in part by the efforts of transacting parties to increase the efficiency of their exchanges, they are also determined by actors within the state who are trying to maximize their revenues and maintain the support of their constituents. 11

North's analysis is helpful not only because he unbundles the concept of property rights by identifying three dimensions with which we can differentiate among property rights structures, or governance mechanisms, but also because he recognizes that political forces and, thus, the state play crucial roles in establishing property rights, an idea that implies that governance transformations often involve conflict, rather than a smooth evolution to more efficient exchange processes. 12 This also follows from his suggestion that property rights structures are the institutionalized systems of power and control that actors design to reproduce exchange relations so as to help them obtain systematically greater access to resources and information than others. In short, property rights structures are the institutional arrangements that determine not only the efficiency of economic activity, broadly speaking, but the strategic control of this activity as well. Hence, when actors from the state and civil society try to transform property rights, they necessarily engage in struggles over power and control. Furthermore, these struggles determine directly the various institutional forms of property rights structures that emerge and the degree to which they are efficient and strategically acceptable for different actors. As a result, these struggles constitute the central dynamic of governance transformations and largely determine which governance mechanisms emerge.

This is not to ignore the important effects that a variety of other factors has in sparking the search for alternative governance mechanisms. For example, problems may arise among actors due to the changing physical

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11 North's theory of the state is steeped in neoclassical economic assumptions, such as the maximizing interests of state actors. Although we agree that a theory of the state is important in understanding the transformation of economic governance, as will become apparent in what follows, we do not embrace his version of that theory.

12 For an early attempt to develop these ideas, see Commons (1924).
or technological characteristics of the production and marketing process. In industries where markets become very large and require complex delivery schedules and specialized marketing services, producers may become vulnerable to wholesale and retail marketers who, by virtue of these changes in market structure, have gained more control over the exchange process. In other cases, suppliers of specialized parts or scarce natural resources may use their position of control over exchange to raise prices, restrict access to resources, and incite their customers to seek alternative forms of governance, by organizing consumer cooperatives as a means of counterbalancing the power of producers. North (1981) stresses the significance of such factors as these in the transformation of property rights structures and argues that different property rights structures tend to systematically produce inefficiencies in different ways. Indeed, all of the economic problems mentioned earlier with which actors must often contend, such as adjusting prices, standardizing products, and raising capital, are often the concrete manifestations of the general inefficiencies that may occur within an industry's property rights, or governance, structure. Hence, an analysis of economic governance should determine not only which governance mechanisms tend to develop in response to different strategic concerns or inefficiencies, but also which concerns and inefficiencies tend to occur as a result of the structure and dynamics of different types of governance mechanisms. Yet we must remember that although efforts to transform governance may stem from problems such as these, struggles for power and control will usually determine the outcome.

By critically employing these insights, we can begin to see the causal links between economic performance, governance processes, and the development of different combinations of governance mechanisms. Specifically, we are now in a position to do the following: distinguish systematically among different types of governance mechanisms according, in part, to the qualitative differences in their rules, procedures, and normative guidelines — dimensions that North has identified; recognize the important role the state plays in the governance transformation process; and recognize that the problems of political and economic performance and control are often the driving forces behind governance transformations. We will discuss each of these in order.

**A TYPOLOGY OF GOVERNANCE MECHANISMS**

There is a vast and very eclectic literature about many forms of governance, including markets, bureaucratic hierarchies, associations, and different types of networks, that expands the relatively narrow, market-oriented vision of neoclassical economics by providing points of departure for the consideration of how other organizational forms help govern economic
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activity. Yet this literature remains largely fragmented and unintegrated, perhaps due to the intense academic specialization of the social sciences, but also because scholars have failed to specify the significant organizational dimensions that differentiate among types of governance mechanisms. This fragmentation has hampered the development of a more comprehensive understanding of economic governance that addresses simultaneously the wide array of governance mechanisms and the relationships that exist between them. In an effort to remedy this problem, we have constructed a typology of governance mechanisms that integrates the previous research and provides the core concepts that guide this study. We also hope that it will help improve communication across different specialties in several social science disciplines. Bear in mind, however, that because we are concerned in this volume with the organization of production, this typology is intended primarily to describe the types of exchanges that occur among actors within the production process. Thus, the discussion that follows does not dwell at length on the relationships between manufacturers of finished products and the general consumer.

Theoretical dimensions that define our typology identify two of the most important questions one can ask about social control systems. First, is economic activity coordinated within a formal organization or through more informal relationships among economic actors? Second, do the institutions that coordinate economic activity involve interactions among a relatively small number of rather autonomous actors or a larger group, engaged in some form of collective enterprise?

The first dimension of our typology, degree of formal integration, is a continuum that embodies the distinction between formal and informal types of organizations (see Table 1.1). This is perhaps the most common distinction found in the literature on forms of economic coordination and control. For example, political economists differentiate between exchange and authority systems (e.g., Lindblom 1977), transaction-cost economists discuss markets and hierarchies (e.g., Williamson 1975), and organization theorists

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13 For introductions to this literature, see, for example, Pfeffer and Salancik (1978), White (1981), Granovetter (1985), and Perrow (1986), on markets, networks, and hierarchies; Offe and Wiesenthal (1985) and Streeck and Schnitter (1985) on associations; and Aldrich (1979), Mintz and Schwartz (1985), and Pfeffer (1987) on less formally organized collective organizations. These literatures receive more thorough attention in Chapter 11. See McCloskey (1986) and deVille (1987) for discussions about the neoclassical tradition's obsession with the study of markets.

14 The need for such integration is indicated, for example, by the widespread attention that Williamson's work has received, which, we suspect, stems in part from his attempt to develop an analysis that links different types of governance mechanisms through a typology, on the one hand, and offers a theoretical explanation about the conditions under which each type emerges, on the other. As a result, his work appeals to a very broad, interdisciplinary audience that includes those interested in studying markets, hierarchies, and certain intermediate forms of governance, either alone or in combination.
Table 1.1. A typology of governance mechanisms

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<th>Degree of formal integration</th>
<th>Range of interaction</th>
<th>Bilateral</th>
<th>Multilateral</th>
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| Low: No discrete organizational structure | Markets | • Self-liquidating sales  
• Spot-market contracts | Monitoring  
• Extensive corporate interlocks for information sharing  
• Market-sharing agreements  
• Dominant-firm pricing |
| Moderate: Linked autonomous, but interdependent actors | Obligational networks | • Follow-on weapons contracts  
• Long-term subcontracting  
• Franchise contracts  
• Inside contracting  
• Limited corporate interlocks to stabilize resource and capital flows  
• Small hierarchies  
• Joint ventures | Promotional networks  
• Action sets  
• R&D alliances  
• Coalitions  
• Interorganizational clans |
| High: Bureaucratic administrative control structure | Hierarchies | • Vertical and horizontal integration  
• Conglomerate  
• Job-control union contracts | Associations  
• Trade association  
• Employer association  
• Producer cooperative  
• Unions |

compare social choice and bureaucratic control systems (e.g., Weber 1978: 63–211). In the pure case of informal organization, there is no formal structural provision for a division of labor among organizations, and organizations attempt to control each other's behavior through dispersed, arms-length interactions, where each offers benefits to induce exchange and each is at liberty to accept or refuse those inducements from one exchange to the next. In the pure case of formal organization, on the other hand, actors coordinate behavior by command through a bureaucratic hierarchy. They use rewards and penalties that are institutionalized within a single organizational structure, such as those described by Alfred Chandler (1977) in his discussion of the visible hand of management. Hence, the element of coercion is not dispersed into innumerable arms-length exchanges, as it is in the informal case, but is hierarchically centralized.

The literature in transaction-cost economics and interorganizational re-
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lations has identified and theorized an intermediate form of coordination that seems to possess sufficiently distinctive organizational properties to warrant inclusion as a separate category, standing between thoroughly informal and formal types of governance mechanisms (e.g., Powell 1987). Williamson (1985) wrote about relational contracting, Mark Granovetter (1985) and Robert Eccles (1981) discussed the quasifirm, Arthur Stinchcombe (1985) described the contractually created small hierarchy, and others elaborated the concept of network control (e.g., Benson 1975; Pfeffer and Salancik 1978; Aldrich 1979). In all these cases, constituent organizations are neither integrated into a single, formal organization nor autonomously arranged to the extent that each is completely free to refuse or accept the inducements of others. Instead, independent organizations are loosely joined to each other by relatively long-term commitments that are sufficient to ensure some degree of stability and some capacity to cooperate and collaborate with each other through repeated exchanges.

The second dimension in our typology, range of interaction, distinguishes between governance mechanisms according to the degree to which organizations engage in exchanges that involve several or just a few members of the sector at a time. Again, we are referring to a continuum where exchange at one extreme is bilateral because it involves only two organizations, but at the other extreme is completely multilateral insofar as it involves all the organizations from the sector. Toward the bilateral extreme, actors are engaged in more individualistically oriented behavior and are less deliberately concerned with the well-being of the sector as a whole. Toward the multilateral extreme, actors use inducements to engage organizations in collective behavior and arrive at definitions of common sectoral interests.

While recognizing the dilemmas of large-group collective action, especially the free-rider and prisoner’s dilemma problems that are stressed by economists (e.g., Olson 1965; Elster 1978), political scientists and sociologists have shown that collective action, in the form of voting, social movements, and voluntary associations, altruism and self-sacrifice, and obedience to rules, laws, and customs that are embedded in social relations are an important part of economic and political life, and that these phenomena play an important role in obtaining stability and social control. Yet the markets and hierarchies literature completely ignores collective action. Such action is also the kind of behavior that the neoclassical paradigm is least capable of handling and, thus, neglects systematically. We hope that this dimension of our typology will convince others to extend the discussion of governance beyond the bounds of much traditional economic theory.¹⁵

¹⁵ For further discussion of this point, see Etzioni (1988). The degree to which scholars continue to ignore collective forms of governance is sometimes remarkable. Some who have spent years studying networks, an important form of governance in its own right, still insist that markets and hierarchies are the primary forms of economic governance.
The two dimensions that form our typology refer to structural characteristics of governance. Of course, there are many additional dimensions that one could choose with which to differentiate among types of governance. Many typologies could be devised. We recognize this, but focus on these two structural dimensions because they have been very important in much of the literature on economic governance. Yet we also understand that the processes that characterize different governance mechanisms are important and that these processes vary, depending largely on where the governance mechanism is located along our two structural dimensions. The discussion that follows focuses on both structure and process and is summarized later in the chapter in Table 1.2.

From our two structural dimensions, we derive a typology of six ideal types of governance mechanisms, each identified by a particular organizational form. For example, in the pure market case informally organized actors pursue their individual interests through numerous bilateral exchanges. In contrast, formally organized groups of actors, pursuing their collective interests through comprehensive multilateral exchanges, guide activity through associations. However, following North (1981), each governance mechanism also involves a unique set of processes or operating principles, by which governance is achieved. On the one hand, each is characterized by certain types of rules that define the terms of exchange between economic actors. On the other hand, to understand fully how different governance mechanisms operate, we must also recognize that each consists of different means for obtaining compliance to these rules of exchange. First, each involves a unique set of procedures that actors use for enforcing compliance when actors deviate from the rules, something necessary particularly in situations where actors would otherwise exercise opportunistic behavior, such as cheating on exchange agreements or shirking on contracts. Second, each involves a unique set of norms or ideologies that helps to reduce the costs of enforcement. Because no enforcement system can completely eliminate opportunism, these normative arrangements further minimize such behavior, thereby providing additional assurance that exchange relations will not break down. In short, each governance mechanism is associated with different means and combinations of coercion and consent for obtaining compliance to its rules of exchange. Because of these variations, actors have different capacities for handling different kinds of transactions, interdependencies, and uncertainties, depending on which governance mechanisms they have organized. Let us first consider these processes insofar as they characterize the three types of governance mechanisms that fall toward the bilateral end of the horizontal continuum.

(e.g., Burt 1988: 390–1). We hope that this typology and, indeed, this entire volume will help to temper that view.
Many theorists have criticized neoclassical economics for failing to recognize that markets are more than general systems of exchange linking buyers and sellers (e.g., Hall 1986: Chap. 2; Lazonick 1986). As Peter Hall (1986: 46) argued, markets are also institutions with particular organizational configurations that structure the relations between economic actors in significant ways. Following these criticisms, our definition of markets is much more specific institutionally than that of the neoclassical tradition.

The type of contracting that takes place during an exchange is important to understanding what is unique about a market. Actors conducting market exchanges engage in decentralized, arms-length bargaining where the rules of exchange are specified typically through what Williamson (1985: 70; 1986: Chap. 7) called classical contracting. The parties are informally organized and remain autonomous. Each press its own interests vigorously, and contracting is relatively comprehensive (e.g., Williamson and Ouchi 1981: 361). That is, actors clearly specify performances and prices through contracts that, when fulfilled, are self-liquidating and require no further interaction among the parties involved, such as in spot-market contracts. Furthermore, the identities of the parties involved do not affect the terms of the exchange. Sellers agree simply to trade with the highest bidder regardless of who it is. Actors narrowly prescribe remedies for breach of contract so that if one exchange partner violates the agreement, the consequences will be predictable from the beginning and will not be open-ended (e.g., Telser and Higinbotham 1977; 997; Macneil 1978; 864; Williamson 1985: 69). Finally, and in sharp contrast to corporate hierarchies, there is no mechanism for the planned coordination of the activities of individual economic actors (e.g., Powell 1987).

Coercion is a particularly important means of obtaining compliance in markets and typically involves a variety of legal and economic sanctions, such as fines levied in response to contract violations (e.g., Daems 1980: 205). Ultimately, actors will resolve their contractual disputes through litigation. Prices also serve an important coercive role in coordinating economic activity in markets (e.g., Ouchi 1980: 137–9), at least insofar as they discourage inefficient behavior. However, parties to market contracting often consent voluntarily to abide by the rules of market exchange to some degree because they accept norms of private appropriation, financial reward to self-interested behavior, and the legitimacy of free-market exchange as an

16 In fact, Williamson (1986: 114, 1985: 75–6) suggests that although classical contracts are the purest form of market contracting, neoclassical contracts, which involve more long-term agreements subject to arbitration, rather than litigation, during contract disputes, represent a modified version of the market form of governance. We recognize that there are variations on the classical contract form that are also found in markets. However, we emphasize the classical contract here to sharpen the distinctions in the typology.
efficient and self-stabilizing coordination measure (e.g., Weber 1958; North 1981: 52–4), although these ideologies are less influential in obtaining compliance to market exchanges than are more coercive measures. Finally, market alternatives play an important role in ensuring that actors voluntarily uphold their commitments to one another. Opportunistic actors, who do not abide by their contractual agreements, run the risk of losing their trading partners to others in the future (Williamson 1985: 74).

Of course, market exchange may assume different forms. For example, competitive markets have large numbers of buyers and sellers, and supply and demand very much shape prices. Oligopolistic markets tend to exist where a few firms produce most of the output in an industry, and where these firms exercise considerable influence over prices and quantities produced. In a monopoly market, there is only one seller of a good or service, and the monopolistic firm has much greater control over prices and quantities. Similarly, a monopsony market exists when there is a single purchaser of goods and services. The point is that bilateral exchanges, based on classical contracting, may occur in all of these.

Obligational networks

Between market contracting and hierarchical control systems lies a wide variety of interorganizational arrangements and contracting practices that offers much more flexibility in relationships, performance, prices, and surveillance than markets, and yet works to some extent like hierarchies even though the actors retain their organizational autonomy. In order to ensure relatively permanent access to the critical resources or information upon which they depend, actors often participate in obligational networks, a form of governance where the rules of exchange are often characterized by what Williamson (1985: 75–6; 1986: 114–16) called obligational contracting. These contracts involve a closer identification of interests among the actors than under strict market arrangements because each wants to stabilize and maintain the exchange relationship over time. Similarly, because actors are seeking stability in changing environments, these agreements are less precisely specified and much more flexible than market contracts. Furthermore, they often entail periodic redefinitions of the obligations among parties and are more open-ended and continuous than self-

17 There has been substantial debate about the degree to which such ideologies are important for ensuring that capitalist market relations continue to operate efficiently. However, most participants in the debate agree that ideology is less important than more coercive means of obtaining compliance to the terms of market exchange (e.g., Abercrombie et al. 1988; Bottomore 1980). Even Weber (1958: 183), who argued that materialist explanations for the development and operation of capitalist market economies needed to be balanced with a theory of ideology, suggested that the latter should complement, not replace, the former.
liquidating market contracts. In contrast to corporate hierarchies, however, actors participating in obligational networks do not consolidate their exchange relationships within a single bureaucratic organization. As a result, these arrangements offer many advantages when compared to either markets or hierarchies in dealing with uncertainty, asset specificity, and transactions requiring teamwork and small-numbers bargaining. For example, they may include flexible incentive systems, methods for adjusting costs, quantities, and prices, such as open-ended escalator clauses, and complex arrangements for privately resolving disputes and making binding decisions (e.g., Stinchcombe 1985; Williamson 1985, 1986).

There are many examples of obligational networks based on such contracts, including follow-on agreements negotiated between the U.S. Department of Defense and weapons manufacturers, long-term subcontracting relationships, franchise contracting in the automobile and fast food industries, and some joint ventures. In many respects, inside contracting is another example where a company hires another firm or a group of individuals to perform a specific task on either a piece-rate or fixed-price basis, and provides the subcontractors with the necessary plant, equipment, and materials (e.g., Buttrick 1952; Eccles 1981: 344–7; Williamson 1985: 156–7). We would also categorize as obligational networks interlocking corporate directorates that organizations establish to stabilize the exchange of important resources among themselves (e.g., Pfeffer 1972; Allen 1974; Pfeffer and Salancik 1978). Although interlocks are not obligational contracts, actors often establish them for many of the same reasons. Of particular importance are networks based on interlocking directorates where corporations and financial organizations interlock with one another to coordinate and secure the flow of capital over time (e.g., Knowles 1973; Mintz and Schwartz 1985). An example would be the efforts of J. P. Morgan and Company in the early part of the twentieth century to provide capital to many large manufacturing and transportation firms in exchange for key positions on the firm’s board of directors.

What all of these examples have in common is that actors avoid many of the costs of hierarchies while they maintain control through interlocks, or what Stinchcombe (1985) called small hierarchies, systems of interor-

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18 Our typology of governance mechanisms helps distinguish more precisely among different forms of interorganizational arrangements that are often referred to by the same name, such as joint ventures. In fact, there are various types of joint ventures (e.g., Pfeffer and Nowak 1976). Those that coordinate the flow of resources and information among a limited number of firms in order to serve their individual, or nonindustrywide, interests exemplify what we call an obligational network. Those that serve to reduce excessive competition or facilitate cooperation among firms throughout an industry for the industry’s collective well-being are examples of the promotional network (discussed in what follows) in our framework. Such distinctions are important because different types of joint ventures, as distinguished in the typology, have different governance capacities and characteristics.
organizational authority and administration that are organized contractually, not bureaucratically. These arrangements may be especially desirable when organizations seek to establish relatively long-term exchange relationships, but want to minimize their loss of organizational autonomy, something that would happen, for instance, through the creation of a more formal, vertically integrated hierarchy (e.g., Cook 1977: 74–5).\(^\text{19}\) Such networks provide flexible ways of reducing the uncertainties associated particularly with an asymmetrical distribution of resources or power, although they may also institutionalize more egalitarian relationships among autonomous organizations, such as the joint venture where Toyota and General Motors agreed to produce cars together in the United States.

In addition to the explicit contractual arrangements that coerce participants to comply with the terms of exchange associated with obligational networks, the need for critical resources itself helps ensure that organizations will cooperate with each other over the long term once they have established such networks (e.g., Williamson 1986: 115). It follows that the more dependent an actor is on his exchange partner for critical resources and information, the more difficult it will be for that actor to get away with violating the agreement and dissolving the relationship. For example, obligational networks involving financial institutions tend to last only as long as firms are heavily dependent on financial institutions for their capital. As firms become more solvent, they may use other institutional mechanisms as instruments for their capital needs.\(^\text{20}\) The more symmetrical the exchange, the more difficult it will be for either party to successfully violate the agreement.

However, before coercion becomes necessary, actors often consent willingly to abide by obligational agreements. Personal relations within the business community often help informally mediate exchanges and generate standards of behavior between firms (Granovetter 1985). One reason for establishing interlocks in the first place is to develop personal liaisons between corporations that depend on each other for key resources (Allen 1974). Furthermore, many firms voluntarily uphold their exchange commitments, even in the absence of formal contracts, precisely to preserve the exchange network over the long term (MacCaulay 1963).\(^\text{21}\) There are clear advantages to doing this. For instance, by continuing to deal with each other over time,

\(^{19}\) These exchange networks may be either symmetrical or asymmetrical. For an extensive comparison of different types of symmetrical and asymmetrical networks, see Laumann and Marsden (1982).

\(^{20}\) For further examples of the coercive nature of resource dependence in obligational networks, see McCraw and O’Brien’s (1986: 81–2) discussion of the Toyota automobile company’s ability to terminate its obligational relationships with parts subcontractors, and Mintz and Schwartz’s (1985: 35–40) discussion of the ability of banks to dominate their relationships with creditors.

\(^{21}\) See Gottfredson and White (1981: 482) for further discussion about the importance of maintaining reputation and long-term relationships as a consensual alternative to contractual coercion in networks.
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buyers and sellers develop a stable and trusting relationship that may permit them to reduce their transaction costs because elaborate bidding procedures and costly new contracts are not necessary each time a different transaction occurs. A classic example is the relationship between general and subcontractors in the construction industry (e.g., Eccles 1981). By developing a continuing relationship, the general contractor does not have to resort to soliciting bids from a large number of subcontractors for each new project, and both parties increase the potential for a trusting relationship. In addition, because of the development over time of good communication between them, they are more likely to produce higher-quality products than would be the case if they had a less stable relationship.\textsuperscript{22}

Hierarchies

In many industries, actors build formal administrative and bureaucratic command systems within a single organization to replace market contracting among autonomous exchange partners as the means by which they coordinate the flow of personnel, capital, and goods through the production and distribution processes. Some scholars have suggested that by increasing administrative control through corporate hierarchies, managers can improve productive efficiency, reduce transaction costs, maximize the gains of joint team production, and control the opportunism inherent in exchange relations (e.g., Coase 1937; Alchian and Demsetz 1972; Williamson 1975), although others disagree (e.g., Margin 1974; K. Stone 1981; Perrow 1986). Regardless of the suspected benefits, hierarchies as a type of governance have a number of formal elements, including labor contracts, that subject employees to the authority of employers, fiduciary relations embodied in boards of directors as trustees or representatives of stockholders, legal arrangements establishing centralized decision-making authority and incentive systems, standard operating procedures providing for the routine governance of activities, and hierarchically controlled meetings for authoritatively resolving internal disputes (Stinchcombe 1985). Managers of hierarchies typically express rules of exchange as administrative commands.

One of the most common forms of hierarchy is the vertically integrated firm in which production technologies, such as mass assembly or continuous process production, are tightly connected. The firm transforms materials in a rigid but serial relationship so that the output of one task is the input of the next. These firms develop through backward or forward integration by absorbing suppliers or distributors, respectively, within a single corporate

\textsuperscript{22} We are not suggesting that harmony and cooperation always characterize obligational networks nor that organizations necessarily join these networks on a completely voluntary basis. Often, the opposite is true (e.g., Aldrich 1979: 267; Zeit 1980; Mizruchi 1982: 41). The point is that both coercive and consensual means of obtaining compliance to the terms of exchange may be at work.
organization (e.g., Chandler 1966, 1977). A second form of hierarchy is the conglomerate firm, where managers concentrate and direct cash flows to what they perceive as being productive divisions within the firm, thereby simulating a capital market within a bureaucratic organization (e.g., Williamson 1975, 1985). Finally, we consider the very large, often horizontally integrated, firm to be another example of corporate hierarchy because even if these firms are engaged in producing only a single product and are not coordinating producers and processors or processors and distributors within one company, they often share one characteristic with vertically integrated and conglomerate companies: they all tend to coordinate the relationship between labor and capital within the firm by means of internal labor markets, job ladders, collective bargaining, and other bureaucratic systems designed to induce workers to accept the goals of the firm. These mechanisms are much different from spot-market contracts and individual wage bargains that coordinate the labor-capital relationship outside firms. Thus, at least in terms of labor relations, all of these firms possess hierarchical qualities (e.g., Williamson 1975: Chap. 4; 1986: 118–21).

To coordinate the activity of workers, organizational divisions, and subsidiaries, managers of corporate hierarchies rely on various coercive capacities, including rules, supervisory procedures, and administrative sanctions, typical of bureaucratic organizations (e.g., Weber 1978: 956–1005). Insofar as formerly independent organizations are concerned, these capacities rest in part on the firm’s legal ownership and administrative control over other organizations as a result of merger. In terms of labor, this coercive power of ownership and control translates ultimately into the legal right of managers to supervise and fire workers, at least as long as they do not violate collective-bargaining agreements or other contractual provisions that might apply (Daems 1980: 205–6).

However, managers also obtain hierarchial control by more consensual means, including what Weber (1978: 215–23) called legal-rational authority, a system of legitimacy whereby subordinates accept the legal, rule-based authority of their superiors and agree to be governed by them accordingly. For example, believing in the legitimacy of collective-bargaining agreements and other rules governing their interactions with management helps convince labor to consent to the dictates of supervisors, although the hope of sharing in the rewards of their company’s success may be an equally important means of obtaining labor’s consent (e.g., Cohen and Rogers 1983: 54–60). Consensus to governance through hierarchy may also be achieved through recognition that this form of governance may be the most efficient way to administer transactions (Hurst 1982: 107–8; Perrow 1986: 4), reduce transaction costs (Williamson 1975), and achieve economies of scale and planning (Galbraith 1967: Chap. 7; Chandler 1980; North 1981: Chap. 4).

Let us now consider the three governance mechanisms that fall toward the multilateral side of the horizontal continuum of our typology. In each
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case, many organizations collectively share resources and information, and interorganizational coordination is based, at least in part, on strategic incentives, common interests, and appeals to solidaristic values. As a result, these types of governance mechanisms tend to produce collective goods. Of course, we distinguish among three types by the degree to which actors engage in multilateral interactions through formal or informal organizations.

Monitoring

Of those forms of collective action that coordinate economic exchanges among organizations, monitoring most closely corresponds to the market as an informal and potentially unstable form of control. This form of governance is primarily dedicated to the collection and sharing of information as a collective good. To the extent that there are identifiable rules of exchange in monitoring, actors abide by mutual understandings that are often tacit in nature. Examples include what Harrison White (1981) referred to as mutual monitoring, Michael Useem's (1984) business scanning interlocking directorates, informal price-setting and market-sharing agreements, such as the famous Gary dinners and dominant-firm pricing strategies in the steel and other industries, and the communities of interest or elite networks that figure prominently in some of the neo-Marxist and other power-structure literature (e.g., Domhoff 1974, 1983; Chap. 3; Dye 1976). The latter are informal structures of control, which researchers impute from corporate interlocks or multiple board of director memberships (e.g., Mizruchi 1982; Useem 1984), whereby corporate actors tend to forge a capacity to represent capitalist class interests vis-à-vis corporations, the business community, and state policy makers. In contrast to those interlocks that we have identified as examples of obligatory networks, which are largely bilateral in nature, occur among pairs or small cliques of firms, and serve to coordinate the buying and selling of products, the borrowing of money, the operation of some joint ventures, and the coordination of other specific exchanges, interlocks of the monitoring type are much more diffuse and include members from a greater number and wider spectrum of firms. They help corporate leaders identify problems concerning large numbers of companies, and facilitate the search for general solutions to these problems (e.g., Useem 1984: 41). 23

Although the consequences of interlocking directorates are often difficult to specify with rigor, interlocks among the same or closely related

23 Thus, our typology allows us to distinguish among types of interlocking directorate networks, much as it helps us differentiate among types of joint ventures (see note 17). Indeed, Useem (1984: 43–5) argued that most interlocks are not of the obligatory variety discussed earlier, where actors try to coopt or directly influence corporate policy, but are of the monitoring type. See Mintz and Schwartz (1985: 128–33) for an alternative opinion and a thorough discussion of different types of interlocks.
industries have occasionally discouraged expansion and diversification into competitive areas, and sometimes into the development of new fields of business. Whether intended or not, interlocks among buyers and sellers of relatively equal strength have provided channels of intercorporate communication, blunted the rivalry of each, and undermined the competitive position of opposing interests. For example, interlocks among groups of petrochemical companies during the 1960s apparently helped facilitate the development of similar product lines within the group (Knowles 1973: 36–41).

Although interlocking directorates have been a means of enhancing communication and stability among buyers and sellers, the dominant-firm pricing strategy has been a means of promoting price stability among competitors in single industries. Whereas the monitoring type of interlocking directorate tends to be based on common role positions and socialization patterns (e.g., Useem 1984), the dominant-firm pricing strategy results from the ability of one firm to impose its will on others. The dominant firm in an industry permits other competitors to sell as much output as they wish at whatever prices it sets. Competitors have no incentive to initiate price cuts because they know that the dominant firm has the ability to win a price war, at least as long as it is able to retain its cost advantages. Indeed, the dominant firm occasionally begins a price war to remind competitors of the need for price stability. However, when the dominant firm becomes no more efficient than its rivals, it gradually loses its position of power and either another firm assumes leadership over pricing structures or actors search for another form of governance (Scherer 1970: 164–6, 216–19; Lamoreaux 1985).

In general, actors engaged in monitoring based on corporate interlocks or sociability ties have few coercive means of obtaining compliance among the membership because there are almost no explicit rules or enforcement arrangements, other than perhaps peer pressure, to guard against opportunism and free-rider problems. Dominant-firm pricing is an exception to the extent that firms recognize the dominant company's capacity to coercively enforce price stability. More often, however, governance through monitoring rests primarily on the members' willingness to consent voluntarily to cooperate with each other — a consensus that is very fragile because it is based on little more than the lowest common denominators of social background, culture, socialization experiences, or political and economic interests. For example, industry leaders organized the dinner club meetings of the midnineteenth-century U.S. textile industry to fix prices informally through voluntary gentlemen's agreements, a very unstable and short-lived arrangement precisely because there were no coercive mechanisms for enforcement (Galambos 1966). In short, these networks depend heavily on a strong dose of what Albert Hirschman (1970) called loyalty to the group.
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Promotional networks

Some networks among economic actors in an industry constitute what Howard Aldrich (1979; Aldrich and Whetten 1981) called action sets, observable and relatively stable groups of organizations formed into a temporary alliance or coalition for a common purpose. Actors create these networks, occasionally with the participation or initiative of state agencies, when managing organizational interdependencies is essential for the effectiveness of the industry as a whole. In contrast to monitoring, where the rules of exchange are tacitly recognized, actors in promotional networks explicitly negotiate and define these rules, although they do not necessarily specify them in contracts or other formal agreements. Furthermore, in contrast to obligational networks, where only a few members of the sector are involved and where members of the network are concerned only with their group's particular self-centered interests, many actors constitute promotional networks and do so, in part, to promote the collective interests of all, or at least a large segment, of the sector's members. They do this by negotiating common definitions of interest and rankings of their collective priorities through complex decision-making processes. Hence, the relationships among actors found in promotional networks tend to be more stable than those in market types of governance, where buyers and sellers are constantly changing. However, this stability is not hierarchically imposed within a corporation. Instead, shared norms, attitudes of trust, considerable knowledge about one another, and respect for each other's interests stabilize the relationships among actors.

Promotional networks typically bring together diverse actors from different parts of the production or service delivery chain for the purpose of the common promotion of a product, including the organization of research and development, the diffusion of information, and lobbying the state. For example, long-standing collaborations among federal and state governments, land grant colleges, extension services, and agribusinesses have played an important role for decades in guiding agricultural research and development in the United States (e.g., Hightower 1978). More recently, members of the U.S. semiconductor industry agreed to work together to develop and share more advanced production techniques by creating the Semiconductor Manufacturing Technology Institute (e.g., Sanger 1987), an arrangement with a more formal organizational structure than monitoring arrangements, but less so than the associations we describe later, particularly insofar as members retain their organizational autonomy. These networks are often more capable of achieving production flexibility, confronting technical change more effectively, and adapting quickly to volatile markets than corporate hierarchies (e.g., Porter 1986; Ernst 1987; Gordon 1987; Hollingsworth 1987; Powell 1987). Furthermore, by participating in promotional networks, actors have the potential of developing
a common language and outlook regarding technical matters, rules of contracting, and the standardization of processes, products, and routines (Johanson and Mattsson 1987). The more exchange partners adapt to one another in these ways, the more trust evolves, which may offer stability and additional benefits, such as lower transaction costs. Finally, and in contrast to market governance, but similar to obligational networks, actors who participate in promotional networks are able to enter into open-ended and less precisely specified contingency contracts with much greater ease.

The coercive capacities available to members of promotional networks are limited and rest on peer pressure and the ability to organize selective access to collective goods. Policing deviance and enforcing compliance to group goals are particularly difficult because these coalitions have only an informal organizational structure and often no staff (e.g., Warren 1967). Hence, participation is largely voluntary and rests on the common values and interests among members, discussed earlier (e.g., Aldrich 1979: 317). In this sense, promotional networks are much like an interorganizational version of what William Ouchi (1977, 1980, 1984) called a clan, where normative mechanisms, negotiation, and socialization within the group coordinate relationships and control opportunism over relatively long periods of time. However, these are not clans in the anthropological sense, but are networks of suppliers and customers who, as a result of solidaristic values, establish, develop, and maintain lasting relationships with one another. In contrast to some types of obligational networks, such as a bank’s informal control over its debtors through interlocking directorates, promotional networks also resemble Ouchi’s clans to the extent that, although members may have different roles, they are all of relatively equal stature within the group. No member enjoys great superiority — another reason why compliance to the terms of exchange within the group rests primarily on consensus rather than coercion.  

Associations

Associations are distinctive forms of multilateral governance in that they involve structured negotiations among organizations that mutually recognize each others’ status and entitlements and that seek to create formal organizations with charters, bylaws, and procedures in order to implement

24 For further discussion of the importance of relative equality among members of clans, see Durkheim (1933: 175–6), a source that Ouchi (1980: 132) draws from in deriving his concept of the clan. Also note that our attempt to typologize three types of networks (obligational, monitoring, and promotional), as distinct from each other and from associations, improves upon the otherwise very helpful literature on interorganizational relations that tends not to make these distinctions, but rather lumps these different forms of governance into very broad and homogeneous categories. For example, see the reviews by Aldrich and Whetten (1981) and Cummings (1984).
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relatively stable and formal agreements in pursuit of some common interests (Schmitter and Streeck 1981; Streeck and Schmitter 1985). As such, the rules governing exchange within an association are typically formally organized membership agreements. Whereas markets, corporate hierarchies, and informal networks tend to coordinate economic activity among different types of actors, associations typically coordinate actors engaged in the same or similar kinds of activities, such as manufacturers or distributors within an industry, although they may also incorporate other actors more vertically. Associations vary in the degree to which their staffs are able to develop autonomy from members in order to pursue long-term strategies for the management of the industry’s problems, particularly those involving the stabilization of relationships with the state, labor, or other forces in the industry’s environment.

Associations are generally more important in coordinating economic activity in Europe than in the United States. Most significantly, in Europe, large numbers of firms and their corresponding sectors are often linked together through peak associations. Although U.S. business associations are usually more narrowly focused, they often collect data for their members about production levels and prices, conduct research, develop product-development projects, promote the standardization of products, develop codes of fair competition, develop common strategies toward public policies, and carry out negotiations with state agencies on behalf of the industry or some part of it. In the case of employers’ associations, they negotiate industrywide labor–management agreements. On the other hand, producer cooperatives negotiate collective dealer–supplier exchanges. In some industries, associations occasionally exercise substantial influence by playing pivotal roles in both the enactment and implementation of public policies for the industry (e.g., Galambos 1966; Himmelberg 1976; Staber and Aldrich 1983: 163).

Despite the possibility that workers may be less well equipped to organize than capitalists (Offe and Wiesenthal 1985), scholars have produced much more literature on trade unions and other forms of collective action by labor. However, we still have very limited systematic knowledge about variation in the structure and function of working-class organizations over time and across economic sectors, and even less on the way that working-class and capitalist business associations affect each other. However, interest associations, whether on the part of labor or capital, are very active in mediating the conflicts that occur between both sides. For example, trade unions attempt to confront a wide range of problems that exist between labor and capital, including wage negotiations, working conditions and job specifications, and working hours. They also occasionally participate in decisions about employment levels, investment strategies, pricing policy, and pension fund accumulation. Thus, labor organizations are another important example of associations in our typology.
The capacity of trade associations to coordinate transactions in a sector depends often on the capacity of the organization to control opportunism and free riding via peer pressure (e.g., Whitney 1934: 42) and, more important, the coercive ability to restrict access to the information, status, and other collective goods the association provides for its members (Naylor 1921; Schmitter and Streeck 1981; Williamson and Ouchi 1981: 361–3; Streeck and Schmitter 1985). Associations usually enjoy a state-sanctioned capacity to provide these selective, solidaristic goods to members (Streeck 1983; Schmitter 1984), an important asset without which it becomes difficult for them to transcend the individual preferences of members who may contribute substantial resources to the association (Staber and Aldrich 1983: 165). In addition, the threat of state intervention into sectoral affairs often provides the association with leverage for obtaining cooperation among the membership insofar as members, faced with the choice of self-regulation or state regulation, generally prefer to avoid political meddling (Pfeffer and Salancik 1978: 177; Schmitter 1984: 16). However, grants of authority from the state (Schmitter 1984: 37), the socialization of members to the association’s goals (e.g., Naylor 1921: 18; Foth 1930: 120), and the recognition of common interests, particularly in times of crisis (e.g., Warner, Unwalla, and Trimm 1967: 324; Pfeffer and Salancik 1978: 177) also serve as means of obtaining membership consent and augmenting the association’s ability to govern.25 As a result, associations often confront a contradictory situation, where, on the one hand, their staffs may need to coerce members into cooperating toward collective goals, but, on the other, must do so at the risk of driving members away because membership is ultimately voluntary (Streeck 1983: 278).

Summary

Our descriptions of these six governance mechanisms represent ideal types, conceptual abstractions of what these governance mechanisms look like in their pure forms. Of course, not every empirical example perfectly fits these descriptions. With that in mind, we have summarized in Table 1.2

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25 It is not clear from the literature to what extent utilitarian or more normative and affective incentives are necessary for the development and maintenance of economic associations (cf., Olson 1965; Moe 1980: Chaps. 7–8; Knolke and Wright-Issak 1982: 234). However, there is substantial evidence that for voluntary associations in general, not just economic ones, the latter incentives are often as important as the former (e.g., Warren 1967; Knolke 1981, 1985; Knolke and Wood 1981: Chap. 3; Knolke and Prenske 1984).

26 Because the threat that members will exit is higher in voluntary associations than it is for large, oligopolistic business firms (Hirschman 1970: Chap. 9), we would expect that the forms of coercion associations employ would usually be milder than those that corporate hierarchies use. For discussions of the important effect the threat of exit has in constraining associational behavior in general, see Warner et al. (1967: 301), Aldrich (1979: 224–5), Moe (1980: 75), and Knolke (1981).
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the organizational structure, the type of exchange rules, and the coercive and consensual means of obtaining compliance to the terms of exchange that are typical of each governance mechanism. Thus, where Table 1.1 represented simply the structural features of these six types of governance mechanisms, Table 1.2 offers an expanded version of the typology that includes its procedural elements as well.

It is important to recognize that some of these governance mechanisms appear to have particularly important relationships with the state, at least insofar as the state helps them obtain compliance to the terms of exchange. For example, the ability of markets to function effectively depends in part on the ability and willingness of state actors to enforce contracts and punish those who would violate the terms of exchange specified therein. The ability of business associations to muster support and cooperation among their members often rests on the threat of state intervention and grants of authority or other resources from the political authorities. State agencies may participate in promotional networks, such as the land grant college complex, described earlier. Indeed, because the state plays an especially unique and wide-ranging role in the governance process, it deserves special attention.

THE STATE AND GOVERNANCE MECHANISMS

What is the role of the state in our analytic framework? Should the state, or state regulation through its hierarchical controls and coercive capacities, be conceptualized as another governance mechanism comparable to the market, hierarchy, networks, or association? At certain stages of this project, we have taken that position (e.g., Hollingsworth and Lindberg 1985; Lindberg 1985). However, we now think that it is more appropriate to conceptualize and theorize the state in its own terms.

This is not to obscure the fact that state agencies or officials are frequently important actors in the production and exchange processes of a sector. Indeed, exchanges both between the state and other economic actors, and within the state, between its frequently uncoordinated actors and agencies, often play very important roles in sectoral governance and governance transformations, most obviously when state agencies are either sole or joint owners and operators within a sector. The case studies that follow make the importance of the state abundantly clear, even in the United States, where it ostensibly plays a much less prominent role in the economy than is generally the case in modern capitalism.

However, the state is theoretically and substantively distinct from our six governance mechanisms for several reasons. For example, different parts of the state apparatus provide arenas through which groups, whose participation in governance is not already institutionalized, may participate. In this capacity, the state serves as a gatekeeper to outsiders. The courts are a common gate-keeping mechanism that determine what effects, if any,
outsiders, such as consumer and environmental groups, have on sectoral governance. Public regulatory proceedings and political referenda do much the same thing (e.g., Friedland, Piven, and Alford 1977; Wolfe 1977; North 1981: 21; Skowronek 1982).

Furthermore, the state may deliberately facilitate or inhibit production and exchange and, thus, the development of different forms of governance, by allocating resources and information. For example, it may offer subsidies or other financial incentives to encourage the formation of promotional networks in a sector, as was the case in the fledgling computer industry during the 1950s when the federal government helped orchestrate the industry’s development of common programming languages by threatening that it would only purchase equipment from those manufacturers who participated in the network (e.g., Brock 1975). Often only the state is in a position to do this, particularly insofar as the manipulation of fiscal and monetary policies, whose effects span economic sectors, is concerned. Similarly, only the state can define and enforce property rights, policy tools whose use is often instrumental in altering governance, as we have seen. Indeed, different parts of the state apparatus often regulate specific markets, networks, corporate hierarchies, or associations, and may contribute to their formation in the first place, through the manipulation of constitutional, antitrust, labor, environmental, contract, and other laws that establish the parameters of exchange and ownership. By passing antitrust legislation, for instance, Congress made it very difficult for corporations to set prices collectively and thereby prevented individual firms from interfering with the price negotiations a competitor conducted with a customer. The development of various forms of multilateral exchange suffered as a result.

There are other unique and important ways in which the state influences governance, which we discuss in detail in Chapter 12. For now, the important point is that the state assumes a privileged conceptual position in this study because it is capable of influencing governance in many complex ways, most of which are not available to organizations in civil society. One of the things that is so fascinating about the state is that although its agencies can behave like other organizational actors in an industry, participating directly in production and exchange relations, other actors cannot behave like the state because they cannot serve as gatekeepers, allocate resources and information, influence and structure property rights, or affect governance and governance transformations in other ways as does the state.

A SIMPLE DESCRIPTION OF THE TRANSFORMATION PROCESS

Historical case studies follow this chapter and identify the arrangements of governance mechanisms that have succeeded each other over time in eight industries in the U.S. economy. They focus particularly on the po-
litical, economic, technological, and other structural conditions that contributed to these transformations as well as the perceptions, preferences, and struggles of the actors involved. The authors of these studies were guided by, and in several cases sought to test, propositions about the conditions under which governance mechanisms tend to emerge, succeed, and fail. However, they also shared a common conceptual framework, the governance-mechanism typology, and used a simple model of the governance transformation process to help organize the histories about which they wrote. This model is a heuristic device and is not intended to capture the complex subtleties of the transformation process. Indeed, one of the purposes of constructing these case studies was to provide data to help us develop later a more sophisticated model, a task to which we turn in Chapters 11 and 12.

In developing the simple model, we recognized that governance mechanisms do not exist in isolation, but occur together in various combinations, or governance regimes, in different industries and at different times in history. Furthermore, at any time, actors tend to organize themselves, adopt rules of exchange, and utilize means of compliance that are typical of one governance mechanism more than another. In this sense, we speak of some governance mechanisms as being dominant relative to others within a governance regime.27 For example, when an industry’s actors respond primarily to fluctuations in supply, demand, prices, and classical contracting agreements, the market is the dominant governance mechanism. Under these circumstances, if insufficient demand is the problem, competing firms might engage in short-term, individual strategies, such as price cutting. On the other hand, if firms adopted a more multilateral, cooperative strategy with long-term horizons, such as industrywide production quotas, collectively arranged through a formal organization, then an association would be dominant.

Furthermore, we recognized that governance transformations require some initial pressure for change, and suspected that these pressures, as suggested earlier, often stem from economic inefficiencies, such as problems in setting prices, standardizing products, establishing production levels, and raising capital, or from actors’ strategic concerns about their inability to control the terms of exchange. Yet despite the presence of these and other pressures, we knew that governance transformations do not develop automatically. Instead, actors perceive pressures for change and

27 Because each industry is composed of different exchanges among different kinds of actors, certain governance mechanisms are likely to exert greater influence over some exchanges than over others. Actors may prefer to organize the exchange of technical information through promotional networks, but may arrange the exchange of raw materials through corporate hierarchies. Indeed, as noted before, we expect that different governance mechanisms and governance regimes will have different capacities for handling different kinds of exchanges and problems.
then initiate a search process, where they select new strategies for coping with these pressures and struggle to institutionalize their strategies as a new governance regime. Our notion of the search process was much broader than that of Richard Nelson and Sidney Winter (1982), from whom we borrowed the term. Whereas Nelson and Winter conceived of the search as a process that occurs within organizations, we believed that it is also very much an interorganizational exercise. Furthermore, we knew that actors do not have free choice to select any governance regime they want because there are a variety of factors that constrain their search. For example, we believed that the existing governance regime tends to limit the power of different actors and, thus, their ability to create the governance regime they may prefer. Similarly, we anticipated that the state's ability or willingness to ratify, legitimate, or otherwise help generate public acceptance for a proposed governance regime limits or expands the options available to actors during their search, and influences the stability of the new regime once it emerges. The rigidities of antitrust law and the dogged persistence of state agencies to enforce it, for instance, certainly constrain the ability of actors to search for collective solutions to their governance problems. In any case, we needed to know how all of these factors influence the development of new governance regimes.

The processes depicted in this model are evolutionary, not only because problems produced under an initial governance regime often trigger a search process and the creation of a new regime, but also because the search and, thus, the range of possible alternatives from which actors may choose are limited by the governance regime that already exists. Yet because some actors may succeed in blocking change, it is possible that a transformation will not occur even though the current governance regime is rather inefficient or strategically undesirable in the eyes of some actors for managing important exchanges. Hence, governance transformations may be either rapid or slow and emerge in some cases only after earlier attempts at change have failed. Similarly, because the search process does not necessarily produce governance innovations that are more efficient or satisfying to the parties concerned than those previously in place, the model does not imply that the "best" industrial practice necessarily emerges or even that there is one best practice under a given set of circumstances. Indeed, even when a new governance regime has emerged, it may be far from perfectly functional or efficient.

OUTLINE OF THE VOLUME AND A METHODOLOGICAL NOTE

What follows in Chapter 2 is an historical overview of the kinds of governance transformations that have been typical in the U.S. economy during the late nineteenth and twentieth centuries. This provides a backdrop
against which to cast detailed case studies of the transformations that have occurred in the telecommunications, commercial nuclear energy, dairy, meatpacking, steel, railroad, automobile, and hospital sectors, stories that constitute Chapters 3 through 10 and comprise the empirical heart of this project. We return to more theoretical concerns in Chapter 11, where, in light of our case studies, we examine the current debates about the causes of governance transformations, and where we refine the governance transformation model, sketched before. Similarly, Chapter 12 is devoted to a discussion of the state's role in the governance transformation process.

Our task in this project is to understand why specific types of transformations take place over time from one governance regime to another. The extent to which different governance mechanisms operate and are dominant cannot easily be determined quantitatively. Thus, our method is to describe, through the construction of qualitative historical case studies, governance transformations in eight sectors. However, this is more than simple storytelling. First, in selecting sectors to study, we chose those that have varied significantly on a number of critical variables. For example, we have selected sectors that differ in such characteristics as firm size, the degree of capital and labor intensity, and the degree of concentration and competitiveness. We have also picked sectors that vary in the degree to which their products and production technologies are complex and in the speed with which this technology has changed. We have also selected sectors that are both old and new, some having been born during the nineteenth century and others during the midtwentieth century. Second, because shifts in governance occur several times in each of our case studies, we are able to compare over two dozen examples of governance transformations, thereby giving us ample opportunity for generalizing theoretically from the data. Third, although these studies are thick with historical description, they are all informed and guided by the conceptual framework that we have developed in this chapter. Indeed, we have tried to pursue the ideal of the case study method, as described by Benjamin Ward (1972: 180), giving an account of an interrelated and complex set of phenomena in which factual historical material and theories of human behavior are mixed and inform each other. As a result, although we do not aspire to develop universal generalizations, we do seek, as a result of our largely inductive analysis of specific case studies, to develop generalizations about regularities that hold across similar historical circumstances.

28 For further discussion of the importance of such a methodology in social science research, see Ward (1972), Lawrence Stone (1981: 74–96) and McCloskey (1986).