

An Introduction to Varieties of Capitalism

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Political economists have long been interested in institutional variation across countries. Some regard the institutional differences among nations as deviations from ‘best practice’ that can be expected to decline as countries catch up to the technological and organizational leader. Others see them as the distillation of more durable historical choices for a particular kind of economy and society, since economic institutions are closely linked to the levels of social protection, distribution of income, and collective goods that reflect a nation’s conception of social solidarity. From either perspective, comparative political economy requires conceptual frameworks for identifying and understanding the most important variations in institutions across nations.

On such frameworks hang the answers to a range of important questions. Some of these are policy-related. What kinds of macroeconomic, industrial or social policies will improve the performance of the economy? What should governments be expected to do in the face of economic challenges and what defines a state’s capabilities? Others are firm-related. Are there systematic differences in the structure and strategy of companies located in different countries and, if so, what conditions them? How are cross-national differences in the character of innovation to be explained? Institutional differences also affect economic performance. Do some forms of economic organization provide lower rates of inflation and unemployment or higher rates of growth? What are the economic trade-offs to developing one type of political economy rather than another? Finally, there are second-order questions about institutional change and stability of special importance today. Can we expect the institutional structures of national economies to converge with technological progress and the competitive pressures associated with ‘globalization’? What factors condition the adjustment paths taken by national political economies?

The object of this book is to elaborate a new framework for understanding the differences and similarities among the developed economies that bear on such questions.¹

We outline the basic approach in this Introduction, while subsequent chapters extend and apply it to a wide range of economic and political issues. It will be obvious that this approach is a work-in-progress, offering answers to some of these questions but generating new ones as well.

As any work on this topic must be, ours is deeply-indebted to prior scholarship on the subject. The ‘varieties of capitalism’ approach developed here can be seen as an effort to go beyond three perspectives on institutional variation that have dominated the study of comparative capitalism for the past thirty years.² In important respects, each was a response to the economic problems of its time.

The first of these perspectives was an *interventionist approach* to comparative capitalism with roots in Shonfield’s magisterial treatise of 1965. Devised in the post-war decades, it saw the principal challenge confronting the developed economies as one of modernizing industries still dominated by pre-war practices in order to secure high rates of national growth. Analysts tried to identify a set of actors with the strategic capacity to devise plans for industry and to impress them on specific sectors. Occasionally, this was said to reside in the banks but more often in public officials. Accordingly, this approach emphasized the institutional structures that gave states leverage over the private sector, such as planning systems and public influence over the flows of funds in the financial system (Cohen 1977; Estrin and Holmes 1983; Zysman 1984; Cox 1986). Countries were often categorized according to the structure of their state, into those with ‘strong’ and ‘weak’ states (Katzenstein 1978; Sachs 1980; Nordlinger 1981; Skocpol et al. 1985). From this perspective, France and Japan emerged as models of economic success and Britain as a laggard (Shonfield 1965; Johnson 1982).

During the 1970s, however, when inflation seemed to be the preeminent problem facing the developed economies, a second approach to comparative capitalism was developed, based on the concept of *neo-corporatism* (Schmitter and Lehmbruch 1978; Berger 1982; Goldthorpe 1984; Alvarez et al. 1991). Although there is some variation in how it is defined, neo-corporatism was generally associated with the capacity of the trade union movement to strike bargains of national significance with employers and the state.³ This capacity was usually said to depend on the centralization or concentration of the

union movement, on an Olsonian logic of collective action which specifies that more encompassing trade unions can better internalize the economic effects of their wage settlements, (Olson 1965; Cameron 1984; Calmfors and Driffill 1988; Golden 1993). Those who saw neo-corporatist bargains as a 'political exchange' also emphasized the ability of states to offer inducements as well as the capacity of unions to discipline their members (Pizzorno 1978; Regini 1984; Scharpf 1984, 1988; cf. Przeworski and Wallerstein 1982). From this perspective, countries were categorized largely by reference to the organization of their trade union movement; and the small, open economies of northern Europe appeared as success stories in this literature.

During the 1980s and 1990s, what we will term a *social systems of production* approach to comparative capitalism gained currency. Under this rubric, we group a diverse set of analyses of sectoral governance, national innovation systems, and flexible production regimes united by several features. Responding to the acceleration of technological change and reorganization of production apparent in this period, these works devote more attention to the needs of firms and, influenced by the French regulation school, all emphasize the way in which the institutional structures of a nation, region, or sector provide support for innovation and production regimes different from those traditionally associated with mass production (Boyer 1990; Piore and Sabel 1984; Herrigel 1995; Campbell et al. 1991; Hollingsworth et al. 1994; Hollingsworth and Boyer 1997; Streeck and Schmitter 1986; Dosi et al. 1988; Nelson 1993; Edqvist 1997). This literature brings a wider array of institutional structures into the analysis, many of them located at the sectoral or regional level, and often adopts a more sociological approach to institutions, stressing the ways in which they create trust or capacities for learning within economic communities. As a result, it tends to resist the categorization of nations in favor of more emphasis on regional or sectoral particularisms whose models of success lie in dynamic regions like those of Baden-Wurttemberg and the Third Italy.

Each of these bodies of work explains important aspects of the economic world. However, we seek to go beyond them in several respects.

Although it characterized national differences in the era of modernization well, the interventionist approach overstates what governments can accomplish, especially in

contexts of economic openness where adjustment is often firm-led. We will argue that features of states once seen as attributes of strength actually make the implementation of many economies policies more difficult; and we seek a basis for comparison more deeply-rooted in the organization of the private sector.

Neo-corporatist analysis directs our attention to the organization of society, but its emphasis on the organization of the trade union movement underplays the role that firms and employer organizations play in the coordination of the economy (cf. Soskice 1990a; Swenson 1991). We want to bring firms back into the center of the analysis of comparative capitalism and, without neglecting trade unions, highlight the role of business associations as key collective actors in the political economy.

In some respects, the literature on social systems of production does this, linking the organization of production to the support provided by institutions external to the firm. However, without denying that regional or sectoral institutions matter to firm behavior, we focus on variation among national political economies. Our premise is that many of the most important institutional structures depend on the presence of regulatory regimes that are the preserve of the nation-state. Accordingly, we look for national-level differences and terms in which to characterize them that are more general or parsimonious than this literature has generated.

Where we break most fundamentally from these approaches, however, is in our conception of how the institutions of the political economy affect behavior. Three frameworks for understanding this relationship dominate the analysis of comparative capitalism. One sees institutions as *socializing agencies* that instill a particular set of norms or attitudes in those who operate within them. French civil servants, for instance, are said to acquire a particular concern for the public interest by virtue of their training or the ethos of their agencies. A second suggests that the effects of an institution follow from the *power* it confers on those within it via a hierarchy allocating formal sanctions and authority or mobilizing capacity implicit in the organizational and ideological resources of the institution. Industrial policy-makers and trade union leaders are often said to have such forms of power. A third framework construes the institutions of the political economy as a *matrix of sanctions and incentives* to which the relevant individuals

respond, refusing to provide public goods in the absence of selective incentives for instance, such that behavior can be predicted more or less automatically from the presence of specific institutions. The willingness of encompassing trade unions to moderate wages in order to reduce inflation is often attributed, for example, to such effects.

Each of these formulations captures some of the ways in which the institutions of the political economy affect economic behavior, and we make some use of them. However, we think that these approaches tend to miss or model too incompletely the *strategic interactions* central to the behavior of economic actors and the most important outcomes. This point is widely appreciated by economists but neglected in studies of comparative capitalism.⁴ If strategic interaction is central to the endeavors of economic and political actors, the most important institutions distinguishing one political economy from another will be those that condition the character of such interactions, and these are what we seek to capture in this analysis. Accordingly, we construe the key relationships in the political economy largely in game-theoretic terms and focus on the kinds of institutions that tend to alter the outcomes of such interactions. This generates an approach that considers some of the same institutions others have identified but construes their impact differently and highlights other institutions that have not yet received enough attention.

One of the advantages of this *varieties of capitalism* approach is that it integrates analytical perspectives now central to microeconomics into the comparison of political economies. By bringing the firm into the center of the analysis, we also build bridges between business studies, economics, and political science in terms that should be of interest to scholars in all of these disciplines.

II. The Basic Elements of the Approach

We take an approach to the political economy that is actor-centered, which is to say that we see the political economy as a terrain populated by multiple actors, each of whom seeks to advance his interests in a rational way and engages in strategic interaction with others (cf. Scharpf 1997). The relevant actors may be individuals, firms, producer groups or governments. However, this is a firm-centered political economy that regards companies as the central actors in a capitalist economy. They are the key agents of

adjustment in the face of technological change or international competition, and it is their activities that aggregate into overall levels of economic performance.

i. A Relational View of the Firm

Our conception of the firm is relational. Following recent work in economics, we see firms as actors seeking to develop and exploit *core competencies* understood as capacities for producing and distributing goods and services profitably, and we take the view that most of these competencies turn on the quality of the relationships the firm is able to establish, both internally, with its own employees, and externally, with a range of other actors that include suppliers, clients, collaborators, stakeholders, trade unions, business associations and governments. As the work on principal-agent relationships and transactions costs over the last twenty years in the modern economics of organization has underlined, these are problematic relationships (cf. Milgrom and Roberts 1990). Thus, firms are ‘congeries of contracts’--many implicit or relational rather than formal, and the success of a firm depends on how effectively it coordinates with others to accomplish the endeavors it undertakes (cf. Williamson 1985).

For the purposes of this inquiry, we focus on five spheres in which firms must develop relationships to resolve coordination problems central to their core competencies. The first is the sphere of *industrial relations* where the problem facing companies is how to coordinate bargaining over wages and working conditions with their labor force, the organizations that represent them, and other employers. At stake here are wage and productivity levels that ultimately condition both the success of the firm and rates of unemployment or inflation in the economy as a whole. In the sphere of *vocational training and education*, firms face the problem of securing a workforce with suitable skills, while workers face the problem of deciding how much to invest in what skills. On the outcomes of this coordination problem turn not only the fortunes of individual companies and workers but the skill levels and competitiveness of the overall economy.

Issues of coordination also arise in the sphere of *corporate governance*, to which firms turn for access to finance, while investors seek assurances of returns on their investments. The solutions devised to these problems affect both the availability of finance for particular types of projects and the terms on which firms can secure funds. The fourth

sphere in which coordination problems crucial to the core competencies of an enterprise appear is the broad one of *inter-firm relations*, a term we use to cover the relationships a company forms with other enterprises, and notably its suppliers or clients, with a view to securing appropriate supplies of inputs and access to technology, endeavors that may entail standard-setting, technology transfer, and collaborative research and development. Here, coordination problems stem from the sharing of proprietary information and the risk of exploitation in joint ventures. On the development of appropriate relationships, however, depend the capacities of individual firms to remain competitive and of the economy as a whole to make technological progress.

Finally, firms face a set of coordination problems vis-a-vis their own *employees*. Their central problem is to ensure that employees have the requisite competencies and cooperate well with others to advance the objectives of the firm. In this context, familiar problems of adverse selection and moral hazard arise, and issues of information-sharing become important. Workers develop reservoirs of specialized information about the firm's operations of value if shared with management, but they also have the capacity to withhold information or effort. The relationships firms develop to resolve these problems condition both their competencies and the character of production regimes in the economy.

ii. Liberal Market Economies and Coordinated Market Economies

From this perspective, it follows that national political economies can be compared by reference to the way in which firms resolve the coordination problems they face in these spheres. The core distinction we draw is between two types of political economies, liberal market economies and coordinated market economies, which constitute ideal types at the poles of a spectrum along which many nations can be arrayed.⁵

In *liberal market economies*, firms coordinate their activities primarily via competitive market arrangements. This form of coordination is well-described by a classic literature (cf. Williamson 1985). Market relationships are characterized by the arm's length exchange of goods or services in a context of competition and formal contracting. In response to the price signals generated by such markets, the actors adjust their willingness to supply and demand goods or services, often on the basis of the marginal

calculations stressed by neo-classical economics.⁶ In many respects, market institutions provide a highly-effective means for coordinating the endeavors of economic actors.

In *coordinated market economies*, firms depend more heavily on non-market relationships to coordinate their endeavors with other actors and to construct their core competencies. These non-market modes of coordination generally entail more extensive relational or incomplete contracting, network monitoring based on the exchange of private information inside networks, and more reliance on collaborative, as opposed to competitive, relationships to build the competencies of the firm. In contrast to liberal market economies (LMEs), where the equilibrium outcomes of firm behavior are usually given by demand and supply conditions in competitive markets, the equilibria on which firms coordinate in coordinated market economies (CMEs) are more often the result of strategic interaction among firms and other actors.

Market relations will be important to firms in all capitalist economies, of course, and, in even the most competitive of them, firms will enter into some relationships that are not mediated entirely by market forces.⁷ But this typology is based on the contention that the incidence of different types of firm relationships varies systematically across nations. In some, for instance, firms rely primarily upon formal contracts and highly-competitive market relations to organize relationships with their employees or providers of finance, while, in others, firms are more likely to coordinate these endeavors differently. In any national economy, firms will gravitate toward modes of coordination for which there is institutional support there.

iii. The Role of Institutions and Organizations

Institutions, organizations and culture enter this analysis because of the support they provide for the various types of relations that firms use to resolve coordination problems. Following North (1990: 3), we define institutions as a set of rules, formal or informal, that actors generally follow, whether for normative, cognitive or material reasons, and organizations as durable entities with formally-recognized members, whose rules also contribute to the institutions of the political economy.⁸

From this perspective, markets are institutions that support relationships of particular types, marked notably by arms-length relations and high levels of competition.

Their concomitant is a legal system that supports formal contracting and encourages relatively-complete contracts, as the chapters by Teubner and Casper indicate. All capitalist economies also contain the hierarchies that firms construct to resolve problems that markets do not address adequately (Williamson 1985). In liberal market economies, these are the institutions on which firms rely to develop the relations on which their core competencies depend.

Although markets and hierarchies are also important elements of coordinated market economies, here firms can also draw on a range of other organizations and institutions for support in constructing their core relationships. Typically, these include powerful business or employer associations, strong trade unions, extensive networks of cross-shareholding, and legal or regulatory systems designed to facilitate collaborative endeavor. As a result, in CMEs, firms can coordinate on strategies to which they would not have been led by market relations alone.

How do we identify the organizations and institutions most important to the distinctive strategies of economic actors in coordinated market economies? Because these economies are distinguished by the use firms and other actors make of relationships built on strategic interaction to resolve the coordination problems they face, the institutions of most interest to us will be those that allow the actors to make credible commitments to each other and to reduce uncertainty about the behavior of others. A standard literature suggests that these will be institutions providing capacities for (i) the *exchange of information* among the actors, (ii) the *monitoring* of behavior, and (iii) the *sanctioning* of defection from cooperative endeavor. Where institutions of this sort are available, it will be easier for firms and others engaged in strategic interaction to coordinate on equilibrium strategies that offer higher returns to all concerned (cf. Ostrom 1990).

The problem of operating collaborative vocational training schemes of the sort found in some CMEs provides a classic example. Here, the willingness of firms to participate depends on the security of their beliefs that the workers will learn useful skills and that other firms will not poach so extensively from the ones investing in training that the latter do not secure the skilled labor force they seek, while the participation of workers depends on their certainty that training will lead to remunerative employment. Therefore,

as Culpepper's chapter in this volume indicates, such schemes can be operated only if there are institutions available to provide reliable flows of information about appropriate skill levels, the incidence of poaching, and the employment prospects of apprentices (Finegold and Soskice 1984; Culpepper and Finegold 1998).

Similarly, the terms on which finance is provided to firms in any economy will depend on the presence of institutional capacities for monitoring firms. Where suppliers of capital have little access to inside information about the strategies and progress of the firms they fund, access to capital is likely to depend on the assets of the firm and its ability to meet relatively transparent, public criteria of the sort commonly found on balance sheets. Here, the relevant exchange of information is a public exchange. In settings where suppliers of finance are linked to the firms they fund through networks that provide inside information about their progress, however, they will be more willing to supply capital on terms that do not depend entirely on their assets or balance-sheets. The presence of institutions providing network monitoring of this sort can have substantial effects on the terms on which firms secure finance.

Accordingly, this is an approach to comparative capitalism that emphasizes the presence of institutions providing capacities for the exchange of information, monitoring, and the sanctioning of defections relevant to cooperative behavior among firms and other actors; and it is for the presence of such institutions that we look when comparing nations.

iv. The Role of Culture and Deliberation

Here, our approach departs from some of the previous works on comparative capitalism that attempt to characterize nations in terms of the institutional differences among them.⁹ Many of these focus on institutional frameworks of sanctions and incentives from which the behavior of economic actors is said to follow more or less automatically. One of the implications of our emphasis on coordination, however, is that the relevant outcomes, understood in terms of the strategies on which actors coordinate, cannot always be read directly from the presence of particular institutions.

As we have just noted, of course, the presence of formal institutions or organizations supportive of a particular set of cooperative strategies can be a crucial prerequisite for attaining the relevant equilibrium. But they are rarely sufficient to ensure

it. It is well-known that in multi-player games with multiple iterations, of the sort that characterize most of the outcomes in which we are interested, there exist multiple equilibria, any one of which could be chosen by the actors even in the presence of institutions conducive to the formation of credible commitments (Fudenberg and Maskin 1986). Something else is needed to lead the actors to a particular equilibrium and notably to equilibria offering high returns in a non-cooperative context.¹⁰ Accordingly, our analysis takes two further steps beyond those taken in many standard accounts of comparative capitalism or in the new economics of organization.

First, we emphasize the importance of informal rules and understandings to the achievement of the equilibria in the strategic interactions that characterize many coordinated market economies. These are important constitutive elements of the ‘common knowledge’ that can lead participants in strategic interactions to coordinate on one outcome, rather than another, when both are feasible given the presence of a particular set of formal institutions. We consider these informal understandings to be part of the institutions that make up the political economy but, in so doing, expand the concept of institutions beyond the purely formal connotations given to it in many analyses.

In this respect, there are roles for history and culture in this analysis. Many actors have learned to follow a set of informal rules only by virtue of experience with a familiar set of actors and exposure to a common culture. The latter can be as crucial to the achievement of particular kinds of coordination within an economy as the formal institutions there. In this respect, our concept of institutions is similar to some of the concepts of culture arising from the ‘cognitive turn’ of sociology (cf. DiMaggio and Powell 1991). It comprehends both the formal institutions established by law, regulation, and organizations within the political economy and the ‘strategies for action’ or informal rules developed from experience of operating in a particular environment (Swidler 1986). Many of the institutions in a nation’s political economy are inextricably bound up with its history, and not only in the sense that they are historically-created but in the sense that, to remain viable, they must be reaffirmed periodically by appropriate historical experience. Thelen makes a similar point in this volume when she observes that the operative force of

many institutions cannot simply be taken for granted but must be reinforced by the active endeavors of the participants.

Second, reflection on this problem and examination of coordinated market economies lead us to emphasize the importance of another kind of institution that is not normally on the list of those crucial to the formation of credible commitments, namely institutions that provide actors potentially able to cooperate with one another with a capacity for *deliberation*. By this, we simply mean institutions that encourage the relevant actors to engage in collective discussion and to reach agreements with each other.¹¹ Deliberative institutions are important for several reasons.

Deliberative proceedings in which the participants engage in extensive sharing of information about their interests and beliefs can improve the confidence of each in the strategies likely to be taken by the others. Many game-theoretic analyses assume a level of common knowledge that is relatively thin, barely stretching past a shared language and familiarity with the relevant pay-offs. When multiple equilibria are available, however, coordination on one (especially one that exchanges higher pay-offs for higher risks) can be greatly facilitated by the presence of a thicker common knowledge, one that extends beyond the basic situation to a knowledge of the other players sufficiently intimate to provide confidence that each will coordinate on a specific equilibrium (cf. Eichengreen 1997). Deliberation can substantially thicken the common knowledge of the group.

As Scharpf (1987: ch. 4) has pointed out, although many think only of a 'prisoners' dilemma' game when they consider problems of cooperation, in the political economy many of those problems take quite different forms, including 'battle of the sexes' games in which joint gains are available from more than one strategy but are distributed differently depending on the equilibrium chosen. Distributive dilemmas of this sort are endemic to political economies, and agreement on the distribution of the relevant gains is often the prerequisite to effective cooperation (cf. Knight 1992). In many cases, such as those of collaborative research and development, the problem is not simply distributing the gains but the risks attendant on a the enterprise. Deliberation provides the actors with an opportunity not only to establish the gains that may be available from cooperation but to resolve the distributive issues associated with them. In some instances of deliberation, the

actors may simply be negotiating from positions of relative power, but extensive deliberation over time may build up particular conceptions of distributive justice that can be used to facilitate agreement in subsequent exchanges.

Finally, deliberative institutions can enhance the capacity of firms or other actors in the political economy for strategic action when faced with new or unfamiliar challenges. This is far from irrelevant since economic actors' economies are frequently subject to exogenous shocks that require them to respond to situations different from those to which they are accustomed. The history of wage negotiations in Europe is replete with examples of this. In such instances, developments may well outrun common knowledge, and deliberation can be instrumental to devising an effective and coordinated response. It allows the actors to develop a common diagnosis of the situation and to agree on a response to it.

In short, deliberative institutions can provide the actors in a political economy with strategic capacities they would not otherwise enjoy; and we think cross-national comparison should be attentive to the presence of facilities for deliberation as well as to institutions providing for the exchange of information in other ways, monitoring, and the enforcement of agreements.

v. Institutional Infrastructure and Corporate Strategy

It should be apparent that this 'varieties of capitalism' approach draws its basic conceptions of how institutions operate from the new economics of organization. We apply a set of concepts commonly used to explain behavior at the micro-level of the economy to problems of understanding the economy as a whole (cf. Milgrom and Roberts 1992). One of the advantages is an analysis with robust and consistent postulates about what kind of institutions matter most and how they affect behavior and one that integrates the analysis of firm behavior with the operation of national economies.

However, our account deviates from mainstream views in the new economics of organization in an important respect. These tend to assume that structure follows strategy, namely, that firms create the institutional structures most efficient for performing the tasks they face, whether those be markets, hierarchies or networks (Williamson 1975; 1985; cf. Chandler 1974; Chandler and Daems 1980). In our view, firms enjoy a great

deal of autonomy to pursue strategies adapted to their own needs within any national economy, and they certainly contribute to the formation of collective institutions. But we think it unrealistic to regard the overarching institutional structures of the economy, used to coordinate the endeavors of many firms, as the creation of those firms themselves.

Precisely because they are collective institutions generating many externalities, market structures, institutional networks, and the organizations supporting collaborative endeavor can only rarely be fashioned or refashioned by a single firm or even a group of firms acting alone.¹² Instead, constructing them is a second-order coordination problem of considerable magnitude (cf. Calvert 1995). In many cases, it entails governmental action to put regulations congenial to the operation of a particular set of coordinating institutions in place and the formation of coalitions among a range of key actors, including political parties and labor organizations that are motivated by considerations extending well beyond efficiency (cf. Swenson 1991; 1997). Although it is outside the scope of this volume to explain how nations acquire their coordinating institutions, the essays by Hancké, Culpepper, Mares, and Wood explore some features of such processes.

The important point is that the firms located within any political economy face a particular set of coordinating institutions that are beyond their immediate control and offer a particular set of opportunities. We expect companies to gravitate toward strategies that take advantage of these opportunities. And, for this reason, our approach predicts systematic differences in corporate strategy across nations.

Of course, because firms are autonomous actors with access to resources beyond the institutional ones we highlight, there is substantial variation in corporate strategy inside all economies; and the institutional support provided at sectoral or regional levels can give rise to systematic differences in firm strategy at that level as well (cf. Hollingsworth et al. 1994; Campbell et al 1991; Herrigel 1995; Piore and Sabel 1984). But we expect to see especially important differences in corporate strategy at the national level because so much of the institutional framework on which firms rely to coordinate their endeavors remains nation-specific. Many of its features, such as the structure of trade unions or employers associations, are the product of nationally-specific processes of development. Others depend for their existence on the laws or regulatory regimes promulgated by nation-states.

We explore these differences in corporate strategy in detail below. In the most general terms, the actors in coordinated market economies should be more willing to invest in *co-specific assets* (i.e. ones that cannot readily be turned to another purpose and whose returns depend heavily on the active cooperation of others), while those in liberal market economies should invest more extensively in *switchable assets* (i.e. assets whose value can be realized if diverted to other purposes). This follows from the fact that CMEs provide more institutional support for the strategic interactions required to realize the value of co-specific assets, whether in the form of job-specific training, collaborative research and development or the like, while the more fluid markets of LMEs provide economic actors with greater opportunities to move their resources around in search of higher returns, encouraging them to acquire switchable assets, such as general skills.¹³

There is some evidence for systematic differences in corporate strategy across nations. The data that Knetter (1989) has gathered, for instance, indicate that the firms of Britain, a typical LME, and those of Germany, a CME, respond quite differently to similar shocks, in this case an appreciation of the exchange rate that makes a nation's goods more expensive in foreign markets. The British firms tended to pass the price increase along to their customers in order to maintain their profitability in the near term, while the German firms usually maintained their previous prices, accepting lower returns in order to preserve market share over the long-term. This is precisely what our approach would lead one to expect. British firms privilege current profitability because the structure of financial markets orients them toward it, and they can sustain the loss of market share because fluid labor markets allow them lay-off workers readily. By contrast, German firms can sustain a decline in returns because their system of corporate governance provide them with access to capital independent of current profitability, and they try to retain market share because labor institutions make lay-offs difficult and militate in favor of long-term employment strategies. In short, there are multiple respects in which the institutional arrangements of a nation tend to push its firms toward particular kinds of corporate strategies (cf. Casper 1999).

vi. Institutional Complementarities

The presence of *institutional complementarities* reinforces the differences between liberal and coordinated market economies. The concept of ‘complementary goods’ is a familiar one: two goods, such as bread and butter, are conventionally described as complementary if an increase in the price of one depresses demand for the other. In recent years, analysts have suggested that there may also be complementarities among the operations of a firm: using flexible machine tools on the shopfloor and marketing arrangements that offer customized products, for instance, are practices that may each generate higher returns when coupled to the other (Jaikumar 1986; Milgrom and Roberts 1990; 1995).

Following Aoki (1994), we extend this line of analysis to the institutions of the political economy. Here, two institutions can be said to be complementary if the presence (or efficiency) of one increases the returns from (or efficiency of) the other.¹⁴ The overall returns to the presence of a stock market trading in corporate securities, for instance, may be increased by regulations mandating a fuller exchange of information about companies.

Of particular interest are complementarities between institutions located in different spheres of the political economy. Aoki (1994) has argued, for instance, that the long-term employment contracts used to secure employee effort may be more feasible in nations where the financial system provides capital on terms that are not sensitive to current profitability. Alternatively, highly-fluid labor markets may sustain employment more effectively where the structure of financial markets facilitates the transfer of resources from one endeavor to others, thereby sustaining the demand for labor (cf. Caballero and Hamour 1998; Fehn 1998). Casper’s chapter in this volume explores another set of complementarities between national systems of contract law and various forms of inter-firm collaboration; and we explore other complementarities in the sections that follow.

This point has particular relevance for the study of comparative capitalism because it suggests that institutional practices of various types should not be distributed randomly across nations. Instead, nations that have developed particular forms of coordination in one sphere should tend to develop complementary practices in others.¹⁵ This may occur because the institutions that support coordination in one sphere can be used to support analogous forms of coordination in others. The network monitoring supplied by business

associations to support collaborative vocational training can also be employed, for instance, to support cooperative standard setting. Firms and governments may also foster the development of institutions complementary to those already present in the economy in order to secure the efficiency gains such complementarities provide.

If this is correct, we should see some clustering along on the dimensions that divide liberal from coordinated market economies: nations should tend to group together as they converge on complementary practices across the multiple spheres of the economy. Figure One presents some evidence for these propositions. Here all the OECD nations for which commensurate data is available are positioned on three dimensions that provide rough measures of the extent to which market versus non-market modes of coordination are present in the spheres of corporate governance, vocational training, and wage bargaining. Although there are some outliers, a pronounced clustering is evident.¹⁶

Among the large OECD nations, six can be classified as liberal market economies (the U.S., Britain, Australia, Canada, New Zealand, Ireland) and another ten as coordinated market economies (Germany, Japan, Switzerland, the Netherlands, Belgium, Sweden, Norway, Denmark, Finland, and Austria) leaving only six in more ambiguous positions (France, Italy, Spain, Portugal, Greece, and Turkey).¹⁷ However, the latter show some signs of clustering as well, indicating that they may constitute another type of capitalism, sometimes described as ‘Mediterranean’, marked by a large agrarian sector and recent histories of extensive state intervention that have left them with particular kinds of capacities for non-market coordination in the sphere of corporate finance but more ones in the sphere of labor relations (cf. Rhodes 1997).

Although each type of capitalism has its partisans, we are not arguing here that one is superior to another. Despite some national variation, especially over short periods of time, both liberal and coordinated market economies seem capable of providing satisfactory levels of long-run macroeconomic performance, as Figure Two indicates. Where there is systematic variation between them, it is on more specific dimensions of performance. We argue below that the two kinds of economies have quite different capacities for innovation. In addition, they tend to distribute income and employment differently. As Figure Three indicates, liberal market economies provide employment to a

larger proportion of their populace but in the context of higher levels of income inequality. From the perspectives of distribution and social protection, the differences between these types of political economy are highly consequential.

To make this general framework more concrete, we now look more closely at coordination in the principal spheres of firm endeavor in coordinated and liberal market economies, drawing on the cases of Germany and the United States and emphasizing the complementarities in each political economy.

III. Coordinated Market Economies: The German Case

Recall that we see capitalist economies as systems in which companies and individuals invest not only in machines and material technologies but in competencies based on relations with others that entail coordination problems. In coordinated market economies, firms resolve many of these problems through strategic interaction. The resulting equilibrium depends, at least partly, on the presence of supportive institutions. Here, we consider each of the principal spheres of firm endeavor, using the case of Germany to illustrate how non-market coordination is achieved. In other CMEs, the institutions used to secure that coordination may vary.

i. The *financial system or market for corporate governance* in coordinated market economies typically provides companies with access to finance that is not entirely dependent on publicly-available financial data or current returns. Access to this kind of ‘patient capital’ makes it possible for firms to retain a skilled workforce through economic downturns and to invest in projects generating returns only in the long-run. The core problem here is that, if finance is not to be dependent on balance-sheet criteria, investors must have other ways of monitoring the performance of companies in order to ensure the value of their investments. In general, that means they must have access to what would normally be considered ‘private’ or ‘inside’ information about the operation of the company.

This problem is generally resolved in CMEs by the presence of dense networks linking the managers and technical personnel inside a company to their counterparts in other firms on terms that provide for the sharing of reliable information about the progress

of the firm. Reliability is secured in a number of ways. Firms may share information with third parties in a position to monitor the firm and sanction it for misleading them, such as business associations whose officials have an intimate knowledge of the industry. Reputation is also a key factor: where membership in a network is of continuing value, the participants will be deterred from providing false information lest their reputation and access to the network suffer. CMEs usually have extensive systems for what might be termed 'network reputational monitoring' (Vitols 1997).

In Germany, information about the reputation and operation of a company is available to investors by virtue of (a) the close relationships that companies cultivate with major suppliers and clients (b) the knowledge secured from extensive networks of cross-shareholding, and (c) joint membership in active industry associations that gather information about companies in the course of coordinating standard setting, technology transfer, and vocational training.. Other companies are not only represented on the supervisory boards of firms but typically engaged closely with them in joint research, product development, and the like. In short, firms sit inside dense business networks from which potential funders can gain a considerable amount of inside information about the track record and projects of a firm.¹⁸

The overall structure of the market for corporate governance is equally important. Since firms often fund their activities from retained earnings, they are not always sensitive to the terms on which external finance is supplied. But they can be forced to focus on profitability and share-holder value if faced with the prospect of hostile takeover by others claiming to be able to extract more value from the company. Thus, the corporate strategies found in many CMEs also depend on tax provisions, securities regulations and networks of cross-shareholding that discourage hostile mergers and acquisitions, which were unknown, for instance, until recently in Germany.

ii. The *internal structure* of the firm reinforces these systems of network monitoring in many CMEs. Top managers in Germany, for instance, rarely have a capacity for unilateral action, unlike their counterparts in LMEs. Instead, they must secure agreement for major decisions from supervisory boards that include employee representatives as well as major shareholders, and from other managers with entrenched

positions as well as major suppliers and customers. This structural bias toward consensus decision-making encourages the sharing of information and the development of reputations for providing reliable information, which facilitate network monitoring.

In the perspective we present, the incentives facing individuals, whether managers or workers, are as important as those facing firms. In CMEs, managerial incentives tend to reinforce the operation of business networks. Long-term employment contracts and the emphasis firm-structure places on one's ability to secure consensus for one's projects leads managers to focus heavily on the maintenance of their reputations, while the relative unimportance of stock option schemes in managerial compensation leads them to focus less on profitability than their counterparts in LMEs. The incentives for managers are broadly aligned with those of firms.

iii. Many firms in coordinated market economies employ production strategies that rely on a highly-skilled labor force given substantial work autonomy and encouraged to share the information it acquires in order to generate continuous improvements in product lines and production processes (cf. Sorge and Warner 1986; Dore 1986). However, companies that adopt such strategies are vulnerable to 'hold up' by their employees and the 'poaching' of skilled workers by other firms, while employees who share the information they gain at work with management are open to exploitation.¹⁹ Thus, CMEs need *industrial relations* institutions capable of resolving such problems.

The German industrial relations system addresses these problems by setting wages through industry-level bargains between trade unions and employer associations that generally follow a leading settlement, normally reached in engineering where the union is powerful enough to assure others it has received a good deal. Although union density is only moderately high, encompassing employers associations bind their members to these agreements. By equalizing wages at equivalent skill levels across an industry, this system makes it difficult for firms to poach workers and assures the latter that they are receiving the highest feasible rates of pay in return for the deep commitments they are making to firms. By coordinating bargaining across the economy, these arrangements also limit the inflationary effects of wage settlements (cf. Streeck 1994; Hall and Franzese 1998).

The complement to these institutions at the company level is a system of works councils composed of elected employee representatives endowed with considerable authority over lay-offs and working conditions. By providing employees with security against arbitrary lay-offs or changes in their working conditions, these institutions encourage them to invest in company-specific skills and extra effort. Their effectiveness is underpinned by the capacity of either side to appeal a disputed decision to the trade unions and employers associations, who act as external guarantors that the councils function as intended (Thelen 1991).

iv. Because coordinated market economies typically make extensive use of labor with high industry- or firm-specific skills, they depend on *education and training systems* capable of providing workers with such skills. As Culpepper notes in his chapter, the coordination problems here are acute, as workers must be assured that an apprenticeship will result in lucrative employment, while firms investing in training need to know that their workers will acquire usable skills and will not be poached by companies not making equivalent investments in training. CMEs resolve these problems in a variety of ways.

Germany relies on industry-wide employer associations and trade unions to supervise a publicly-subsidized training system. By pressuring major firms to take on apprentices and monitoring their participation, these associations limit free-riding on the training efforts of others, and, by negotiating industry-wide skill-categories and training protocols with firms in each sector, they ensure both that training fits firm needs and that there will be an external demand for any graduates not employed by the firms at which they apprenticed. Because German employer associations are encompassing organizations providing many benefits to their members and to which most firms in a sector belong, they are well-placed to supply the monitoring and suasion that the operation of such a system demands as well as the deliberative forums in which skill categories, training quotas and protocols can be negotiated. Workers emerge from their training with both company-specific skills and the general skills to secure employment elsewhere.

v. Since many firms in coordinated market economies make extensive use of long-term labor contracts, they cannot rely on the movement of scientific or engineering personnel across companies to effect technology transfer, as liberal market economies do.

Instead, they tend to cultivate *inter-company relations* of the sort that facilitate the diffusion of technology across the economy. In Germany, these relationships are supported by a number of institutions. Business associations promote the diffusion of new technologies by working with public officials to determine where firm competencies can be improved and orchestrating publicly-subsidized programs to do so. The access to private information about the sector that these associations enjoy helps them ensure that the design of the programs is effective for their purposes. A considerable amount of research is also financed jointly by companies, often in collaboration with quasi-public research institutes. The common technical standards fostered by industry associations help to diffuse new technologies, and they contribute to a common knowledge-base that facilitates collaboration among personnel from multiple firms, as do the industry-specific skills fostered by German training schemes (Lutz 1993; Soskice 1997; Ziegler 1997).

Casper's chapter in this volume shows that Germany has also developed a system of contract law complementary to the presence of strong industry associations that encourages relational contracting among companies and promotes this sort of technology transfer. Because of the many contingencies that can arise in close inter-firm relationships involving joint research or product development, tightly-written, formal contracts are often inadequate to sustain such relationships. However, the German courts permit unusually open-ended clauses in inter-firm contracts on the explicit condition that these be grounded in the prevailing standards of the relevant industry association. Thus, the presence of strong business associations capable of promulgating standards and resolving disputes among firms is the precondition for a system of contract law that encourages relational contracting (cf. Casper 1997; Teubner 1997).

In these respects, German institutions support forms of relational contracting and technology transfer that are more difficult to achieve in liberal market economies. One of their effects is to encourage corporate strategies that focus on product differentiation and niche production, rather than direct product competition, since close inter-firm collaboration is harder to sustain in the presence of the intense product competition that tends to characterize LMEs. The chapter by Estevez-Abe, Iversen and Soskice links these product-market strategies, in turn, to skill systems and social policy regimes.

The complementarities present in the German political economy should be apparent from this account. Many firms pursue production strategies that depend on workers with high levels of skills and corporate commitment that are secured by offering them long employment tenures, industry-based wages, and protective works councils. But these practices are feasible only because a corporate governance system replete with mechanisms for network monitoring provides firms with access to capital on terms that are relatively-independent of fluctuations in profitability. Effective vocational training schemes, supported by an industrial-relations system that discourages poaching, provide high levels of industry-specific skills. In turn, this encourages collective standard-setting and inter-firm collaboration of the sort that promotes technology transfer. The arrows in Figure Four summarize some of these complementarities. Since many of these practices enhance the effectiveness with which others operate, the economic returns to the system as a whole are greater than its component parts alone would generate.

IV. Liberal Market Economies: The American Case

Liberal market economies can secure levels of overall economic performance as high as those of coordinated market economies, but they do so quite differently. In LMEs, firms rely more heavily on market relations to resolve the coordination problems that firms in CMEs often address via collaboration and strategic interaction. In each of the major spheres of firm endeavor, competitive markets are more robust and there is less institutional support for non-market forms of coordination.

i. Several features of the *financial systems or markets for corporate governance* of liberal market economies encourage firms to be attentive to current earnings and the price of their shares on equity markets. Regulatory regimes are tolerant of mergers and acquisitions, including hostile takeovers when the market valuation of the firm declines. The terms on which large firms can secure finance are heavily dependent on their valuation in equity markets where dispersed investors depend on publicly-available information to value the company. This applies both to bond or share issues and bank lending.²⁰ Compensation systems that reward top management for increases in net earnings or share price are also common in such economies. These economies generally lack close-knit

corporate networks providing investors with inside information about the progress of companies that allows them to supply finance less-dependent on quarterly balance sheets and publicly-available information. The relevant contrast is with CMEs, where firms need not be as attentive to share price or current profitability in order to ensure access to finance or fend off takeovers.

Of course, there are some qualifications to these generalizations. Companies with readily-assessable assets associated with forward income streams, such as pharmaceutical firms with a 'pipeline' of drugs, consumer-goods companies with strong reputations for successful product development, and firms well-positioned in high-growth markets need not be as concerned about current profitability. New firms in high-technology fields can also secure venture capital from companies that have the resources and technical expertise to monitor their performance directly and trade ownership stakes for the high risks they take.²¹ On the whole, however, the markets for corporate governance in LMEs encourage firms to focus on the publicly-assessable dimensions of their performance that affect share price, such as current profitability.

ii. In the *industrial relations arena*, firms in liberal market economies generally rely heavily on market relationships between the individual worker and employer to organize their relationships with the labor force. Top management normally has unilateral control over the firm, including substantial freedom to hire and fire.²² Firms are under no obligation to establish representative bodies, such as works councils, for employees; and the trade union movement is generally less powerful than it is in CMEs, although it may have significant strength in some sectors. Because trade unions and employer associations are less cohesive and encompassing in LMEs, economy-wide wage coordination is generally difficult to secure there. Therefore, these economies depend heavily on macroeconomic policy and market competition to control wages and inflation (cf. Franzese in this volume; Hall and Franzese 1998).

Fluid labor markets influence the strategies pursued both by firms and individuals. They make it relatively easy for American firms to release or take on labor in order to take advantage of new opportunities, but less attractive for them to pursue strategies based on the implicit promise of long-term employment. Similarly, they encourage individuals to

invest in general skills, transferable across firms, rather than company-specific skills and career trajectories that include a substantial amount of movement among firms.

iii. The *education and training systems* of liberal market economies are generally congruent with these highly-fluid labor markets. Vocational training is normally provided by institutions offering formal education that focuses on general skills because companies are loathe to invest in apprenticeship schemes imparting industry-specific skills where they have no guarantees that other firms will avoid training and simply poach their employees. From the perspective of workers facing short job-tenures and fluid labor markets, career success also depends on general education; and most educational programs from the secondary through university levels, even in business and engineering, stress 'certification' in general skills rather than the acquisition of more specialized competencies.

High levels of general education, however, lower the cost of additional training. Therefore, individual companies in these economies do a substantial amount of in-house training, although rarely in the form of the intensive apprenticeships used to develop company- or industry-specific skills in CMEs. More often, they provide further training in the marketable skills that employees have incentives to learn. The result is a labor force well-equipped with general skills, especially suited to job growth in the service sector where such skills assume importance, but one that leaves some firms short of employees with highly-specialized or company-specific skills.

iv. *Inter-company relations* in liberal market economies are also generally based on standard market relationships and enforceable formal contracts. In the United States, they are mediated by rigorous anti-trust regulations, designed to prevent companies from colluding to control prices or markets, and doctrines of contract laws that rely heavily on the strict interpretation of written contracts, nicely summarized by MacNeil's dictum: 'sharp in by clear agreement, sharp out by clear performance' (Williamson 1985: xx). Therefore, companies wishing to engage in relational contracts with other firms get little assistance from the American legal system, as Casper observes.

In some fields of endeavor, such as after-sales service, companies can engage successfully in incomplete contracting by building up reputations on which other parties rely. But extensive reputation-building is more difficult in economies that lack the dense

networks of business associations that circulate reputations for reliability or sharp practice quickly and widely. A market for corporate governance that renders firms sensitive to fluctuations in current profitability also makes it more difficult for them to make credible commitments to implicit or relational contracts extending over substantial periods of time.

How then does technology transfer take place in liberal market economies? In large measure, it is secured through the movement of scientists and engineers from one company to another or from research institutions to the private sector that fluid labor markets characterized by high rates of labor mobility facilitate. LMEs also rely heavily on technology transfer effected through the licensing or sale of innovations, a technique most feasible in sectors of the economy, such as biotechnology, microelectronics and semiconductors, where effective patenting is possible. In the United States, the importance of licensing is reinforced by the character of standard setting. Since few sectors have business associations capable of securing consensus on new standards, collective standard setting is rarely feasible, as Tate observes in this volume. Instead, standards are often set by market races, whose winners then license their technology very profitably to many users. The prominence of this practice helps to explain the presence of venture capital firms in such economies, where one success at standard-setting can pay for many failed investments (cf. Borrus and Zysman 1997).

Research consortia and inter-firm collaboration, therefore, play much less important roles in the overall process of technology transfer in LMEs than they do in CMEs where the institutional environment is more conducive to them. Until the National Cooperative Research Act of 1984, American firms engaged in close collaboration with others ran the risk of being sued for triple damages under anti-trust law, and the amount spent on collaborative research is still estimated to be only 1 to 7 percent of the funds spent on research and development in the American private sector. (xxxx: 376).

It should be apparent that there are many institutional complementarities across the sub-spheres of a liberal market economy. Labor market arrangements that allow companies to shed labor to cut costs in a downturn are complementary to financial market arrangements that render firms sensitive to current profitability. A system of technology transfer that relies on labor mobility is more feasible in the presence of highly-fluid labor

markets and an educational system that privileges general, rather than firm-specific, skills. Licensing agreements are a more effective way to transfer technology than inter-firm collaboration where the legal system militates against relational contracting.

Special note should be taken of the complementarities between the internal structure of firms and the institutional environment in liberal and coordinated market economies. Firms in LMEs tend to have corporate structures that concentrate authority in top management. This makes it easier for them to release labor under pressure from financial markets or to impose a new strategy on the firm to take advantage of shifting market opportunities. By contrast, the corporate structures that impose more consensual forms of decision-making on firms in CMEs make it easier for them to develop reputations that are independent of top management in contexts of networks where such reputations are valuable. It also makes the relational contracts that firms form with employees and others more credible in contexts where a capacity for such contracting can be valuable given the abundance of external institutional support for it. Lehrer's chapter explores these linkages between corporate structure, strategy, and external institutions.

V. Comparing Coordination

Although many of the developed nations can be classified as liberal or coordinated market economies, the point of this analysis is not simply to identify these two types but to outline an approach that can be applied to the comparison of many kinds of political economies. It is one that draws attention to the ways in which firms coordinate their endeavors and to the institutions supporting different kinds of coordination.

In this context, it is important to note that there is some variation within each of these two ideal types. Broadly speaking, liberal market economies are distinguishable from coordinated market economies by the extent to which firms rely on market mechanisms to coordinate their endeavors as opposed to forms of strategic interaction supported by non-market institutions. But the institutional structures underpinning strategic coordination in CMEs can vary, often with some consequences for corporate strategy and economic outcomes there.

One important axis of difference runs between economies that rely primarily on *industry-based coordination*, as do many European nations, and those in which firms make more use of *group-based coordination* of the sort common in East Asia. As we have seen, coordination in Germany depends on the presence of business associations and trade unions that are organized largely by industrial sectors, corresponding to vocational training schemes that emphasize the cultivation of industry-specific skills, a system of wage coordination that regularizes wages by sectors, and corporate collaboration that is often industry-specific. By contrast, the business networks of most importance in Japan are built on *keiretsu*, families of companies with dense interconnection that cut across many different sectors. The institutions of both nations provide substantial support for non-market forms of coordination, but they give rise to some variation in corporate competencies.

Here, we can outline only for some of the most salient differences between group- and industry-based CMEs. Although many Japanese companies make extensive use of long-term employment contracts, as the Germans do, their sectoral associations are generally too weak to support industry-based vocational training. Thus, training often takes place inside firms and workers acquire company- rather than industry-specific skills. There are neither powerful trade unions or works councils in Japan, but wage bargaining is coordinated by strong employer associations in response to a ‘spring offensive’; and several institutions reinforce employee loyalty, including social policies administered by firms, relatively-flat compensation structures, and the system of *amikadurai* providing positions for loyal employees when they leave the firm (cf. Soskice 1990a; Estevez-Abe 1999). By virtue of close linkages among firms across sectors but within a *keiretsu*, Japanese companies are well-placed to collaborate with firms in more than one sector. As a result, many have better capacities than their European counterparts for developing products and production processes that combine diverse technologies (cf. Soskice 1994).

Because market institutions are better-known, we will not explore the differences among liberal market economies here. But differences in the regulatory regimes governing markets can certainly affect the character and outcomes of market-based coordination.

There are some familiar differences in financial and labor-market institutions that produce different equilibrium outcomes in those markets across the LMEs.

This approach can be useful for understanding any political economy, including ones that do not correspond to the ideal type of a liberal or coordinated market economy. To illustrate the point, consider the Southern European nations of France, Spain, Italy, Portugal and Greece that seem to belong to a separate group along the axes dividing CMEs from LMEs.²³ From the perspective of our approach, they are not simply anomalous cases but ones that display particular forms of coordination with significant implications for what their firms and governments can do.

All are nations in which the agrarian sector remained relatively large until well into the post-war era, and their trade unions and employers associations have been too fragmented to coordinate many endeavors on their own. Until recently, however, the state played a highly interventionist role in these economies, leaving a substantial legacy in the form of business networks initially forged through the public sector and systems of cross-shareholding that provide firms with some protection against hostile takeovers. By virtue of these networks, the top managers of large firms often enjoy close connections with each other and with the state that allow for the development of reputations and a limited degree of monitoring based on the value that managers attach to those reputations. That, in turn, facilitates some forms of inter-firm collaboration.

The presence of overlapping labor organizations and weak employers associations makes national wage coordination of the sort orchestrated largely by producer groups and elsewhere in Europe impossible in these countries. But their governments have distinctive capacities for wage coordination based on the significance of minimum wages to their economies and the state's ability to translate wage agreements across entire sectors. As a result, these government can sometimes secure a certain level of wage coordination through regulation or the negotiation of 'social pacts' with producer groups (cf. Perez 1999; Rhodes 1997; Regini 1984). Although lay-offs are generally more regulated here than in most liberal market economies, individual firms in these nations still rely heavily on markets to coordinate their relation with employees, and most have hierarchical corporate structures consistent with such labor practices.²⁴

Focusing on the case of France, the chapters by Lehrer, Culpepper and Hancke explore some of the implications of these institutional practices. Lehrer argues that, because the character of French business networks gives top managers close ties to the state and weak ties to the rest of the enterprise, those managers gravitate towards a particular set of strategies when faced with new challenges, looking to the state for assistance more often than their counterparts in other nations. Using the case of vocational training, however, Culpepper shows that there are clear limits to what states can do in the absence of business associations capable of monitoring their members. Hancke examines how large French firms are adapting to these limits, suggesting that many are taking industrial reorganization upon themselves, sometimes devising new ways of coordinating their activities and regional networks to support them.

In sum, although the contrast between coordinated and liberal market economies is important, we are not suggesting that all economies conform to these two types. Our approach is designed to advance the analysis of political economy in more general terms by drawing attention to the way in which firms coordinate their endeavors and elucidating the linkages between their strategies and the kind of institutional support provided for them in the political economy as a whole. In this respect, the approach can be used to analyze the operation of many kinds of political economies.

VI. Comparative Institutional Advantage

We turn now to some of the issues to which this perspective can be applied, beginning with one central to international economics, namely, how to construe comparative economic advantage. The importance of the theory of comparative economic advantage lies in its implication that, if each country produces some kinds of goods more efficiently than others, more extensive trade will not impoverish nations, by driving their production abroad, but enrich them, by allowing each to specialize in the goods it produces most efficiently and exchange them for even more goods of different sorts from other nations. Thus, it can be used to explain both the expansion of world trade and the patterns of product specialization found across nations. The most influential version of the theory focuses on nations' relative endowments of basic factors, such as land, labor and capital,

and suggests that, in the presence of trade, each nation will specialize in the production of goods that use its most abundant factors most intensively (Stolper and Samuelson 1941).

This account of comparative economic advantage has been dealt a serious blow, however, by recent developments, including the expansion of intra-industry trade and increases in the international mobility of capital. If the theory is correct, nations should not import and export high volumes of goods from the same sector; and transnational movements of capital seem to be evening out factor endowments.

As a result, many economists have become skeptical about whether nations really have comparative advantages, and they have begun to seek explanations for the expansion of trade and spatial concentration of production elsewhere. Some explain the growth of trade, and intra-industry trade in particular, as the result of efforts to concentrate production so as to secure returns to scale (Helpman 1984). Others explain the concentration of production of particular kinds of goods in some nations as the result of firms' efforts to secure the positive externalities generating by a group of firms engaged in related endeavors at the same site, whether in the form of appropriate labor pools, the availability of relevant intermediate products or technological spillovers. This theory predicts that companies making similar products will cluster together, whether in Silicon Valley or Baden-Wurttemberg (cf. Krugman 1991).

Both of these theories are valuable as far as they go, and nothing in our own is inconsistent with them, but we think they do not go far enough. Both explain why the production of similar kinds of goods might be concentrated in a nation, but they say little about why production of *that* kind should be concentrated in *that* nation, while other nations specialize in other kinds of production. Agglomeration theory explains why firms engaged in similar endeavors cluster in Silicon Valley or Baden-Wurttemberg, but it cannot explain why firms engaged in activities that entail high risks, intense competition, and high rates of labor turnover cluster in Silicon Valley, while firms engaged in activities that entail lower-risks, close inter-firm collaboration, and low rates of labor turnover locate in Baden-Wurttemberg. We still need a theory that explains why particular nations tend to specialize in specific kinds of production.

We think that such a theory can be found in the concept of *comparative institutional advantage*. The basic idea is that the institutional structure of the political economy provides firms with advantages for engaging in specific kinds of activities. Firms produce some kinds of goods more efficiently than others because of the institutional support they receive for their activities, and the relevant institutions are not distributed evenly across nations.

The contention that institutions matter to the efficiency with which goods can be produced receives considerable support from the growing volume of work on endogenous growth. Economists have observed that national rates of growth cannot be explained fully by incremental additions to the stock of capital and labor and fixed rates of technical change. The institutional setting for production also seems to matter to national rates of growth, and various efforts have been made to specify what the important features of it might be, including: economies of scale available from oligopoly positions, economies of scope arising from experience in related endeavors, network externalities generated by firms engaged in similar activities, the nature of property rights regimes (cf. Aghion and Howitt 1998; Romer 1986, 1994; Grossman and Helpmann 1992).²⁵ There is now widespread recognition that the institutional context can condition rates of technological progress and growth.

To date, however, the efforts by endogenous growth theorists to specify these institutions have concentrated on market relationships and the legal framework for them, neglecting the non-market relations that may be equally important to such outcomes. The latter have been given more emphasis in the literature on national innovation systems and some analyses of the competitive advantages of nations, of which Porter's (1990) ambitious work is the best-known (cf. Dosi et al. 1988; Edquist 1997; Barro and Sala i Martin 1995). By and large, however, this literature looks for the ingredients of *absolute* advantage: more of each is said to improve the performance of any economy. We seek the institutional features associated with *comparative* advantage, better-suited to explaining cross-national patterns of product or process specialization (cf. Zysman 1996).

The basic logic of our approach should be apparent. We have argued that national economies vary according to the extent to which firms are able to utilize non-market, as

opposed to market, modes of coordinating their endeavors. Broadly speaking, this corresponds to the level of support for these different forms of coordination provided by the institutions of the political economy; and we have identified many of the institutional features that distinguish liberal from coordinated market economies. These correspond to broad differences in corporate strategy across these economies.

The important point we add here is that the availability of these different modes of coordination conditions the efficiency with which firms can perform certain activities, thereby affecting the efficiency with which they can produce certain kinds of goods and services. In short, the national institutional frameworks examined in this volume provide nations with comparative advantages in particular activities and products. In the presence of trade, these should give rise to cross-national patterns of specialization.

Although there may be other ways in which such institutions confer comparative advantage that we have not yet explored, we focus here on their impact on *innovation* since it is crucial to the long-run success of firms. The key distinction we draw is between *radical* innovation, which entails the development of entirely-new goods or substantial shifts in product lines and ways of producing them, and *incremental* innovation, which entails continuous but small-scale improvements to existing product lines and production processes.

Radical innovation is especially important in fast-moving technology sectors, which call for innovative design and rapid product development based on research, as in biotechnology, semiconductors, and software development. It is also important to success in the provision of complex system-based products, such as telecommunications or defense systems, and their service sector analogues: airlines, advertising, corporate finance, and entertainment. In the latter, competitiveness demands a capacity for taking risks on new product strategies and for the rapid implementation of such strategies within large, tightly-coupled organizations that combine personnel of many kinds.

Incremental innovation tends to be more important for maintaining competitiveness in the production of capital goods, such as machine tools and factory equipment, consumer durables, engines and specialized transport equipment. Here, the problem is to maintain the high quality of an established product line, to devise incremental

improvements to it that attract consumer loyalty, and to secure continuous improvements in the production process in order to improve quality control and hold down costs.

Coordinated market economies should be better at supporting incremental innovation. This follows from the emphasis we have put on the relational requirements of company endeavors. It will be easier to secure incremental innovation where the workforce extending all the way down to the shopfloor is skilled enough to come up with such innovations, secure enough to risk suggesting changes to products or process that might alter their job situation, and endowed with enough work autonomy to see these kinds of improvements as a dimension of their job. Thus, incremental innovation should be most feasible where corporate organization provides workers with secure employment, autonomy from close monitoring, and opportunities to influence the decisions of the firm, where skill system provide workers more than task-specific skills and high levels of the industry-specific technical skills, and where close inter-firm collaboration encourages clients and suppliers to suggest incremental improvements to products or production processes.

The institutions of CMEs provide significant support for these relational requirements. Highly-coordinated *industrial relations systems* and *corporate structures* with works councils and consensus decision-making provide employees with the guarantees that elicit their cooperation. Their *training systems* provide high skill levels and the requisite mix of company-specific and general technical skills. Appropriate *contract laws* and *dense networks of inter-corporate linkages* allow firms to form relational contracts with others; and *systems of corporate governance* that insulate firms against hostile takeovers and reduce their sensitivity to current profits encourage long employment tenures and the development of the inter-firm and employee relations that foster incremental innovation. By encouraging product differentiation rather than intense product competition, these inter-corporate networks also tend to promote incremental, rather than radical, innovation. A reputation for risk-taking or cut-throat competition is rarely an asset in such networks.

By contrast, the institutional features of liberal market economies tend to limit firms' capacities for incremental innovation, although some can occur. Financial market

arrangements that put an emphasis on current profitability and corporate structures that concentrate unilateral control at the top deprive the workforce of the security conducive to their full cooperation in innovation. Fluid labor markets and short job tenures make it rational for employees to concentrate on their personal career rather than the firm's success and on the development of general skills rather than the industry- or company-specific skills conducive to incremental innovation. Anti-trust and contract laws discourage inter-firm collaboration in incremental product development.

However, the institutional framework of liberal market economies is highly supportive of radical innovation. *Labor markets* with few restrictions on lay-offs and high rates of labor mobility mean that companies interested in developing an entirely new product line can hire in personnel with the requisite expertise and release them if the project proves unprofitable. Extensive *equity markets* with dispersed shareholders and few restrictions on mergers or acquisitions allow firms seeking access to new or radically-different technologies to do so by acquiring other companies with relative ease; and the presence of venture capital allows scientists and engineers to bring their own ideas to market. As Lehrer's study of the airline industry shows, the concentration of power at the top typical of *corporate organization* in LMEs makes it easier for senior management to implement entirely-new business strategies throughout a multi-layered organization delivering complex system goods or services and to acquire or divest subsidiaries quickly. *Inter-firm relations* based primarily on markets enhance the capacities of firms to buy other companies, to poach their personnel, and to license new products, all means of acquiring new technologies quickly.

By contrast, although the dense inter-corporate networks of CMEs facilitate the gradual diffusion of technology, it is more difficult for firms there to access radically-new technologies by taking over other companies. Corporate structures characterized by strong worker representation and consensus decision-making make internal reorganizations more difficult, as each of the affected actors contemplates the consequences for its relationship to the company. The long employment tenures that such institutions encourage make it less feasible for firms to secure access to new technologies by hiring in large numbers of new personnel.

In short, the institutional frameworks of liberal market economies provide companies with better capacities for radical innovation, while those of coordinated market economies provide superior capacities for incremental innovation. To the extent allowed by transport costs and the efficiency of international markets, there should be national patterns of specialization in specific kinds of activities and products based, not on random agglomeration, but on rational responses to the institutional frameworks identified here.

Figures Six and Seven provide some evidence for these propositions. Using data from the European Patent Office, they report indices measuring the degree to which innovation in Germany and the United States is concentrated into any of 30 technology classes that vary according to whether technological progress in them is characterized mainly by radical or incremental innovation.²⁶ Higher scores reflect greater specialization in that kind of technological innovation, and the charts include data from 1993-94 as well as 1983-84 to assess stability over time.

The striking finding is that Germany specializes in technological developments that are just the reverse of those in the U.S.. Figure Six is almost the mirror image of Figure Seven. Firms in Germany have been more active innovators in fields predominantly characterized by incremental innovation, including mechanical engineering, product handling, transport, consumer durables, and machine tools, while firms in the United States innovate disproportionately in fields where radical innovation is important, such as medical engineering, biotechnology, semiconductors, and telecommunications. These patterns are consistent over time and precisely the ones our analysis would expect. There does appear to be specialization in innovation across nations, with firms in the liberal market economy specializing in radical innovation, while those in the coordinated market economy concentrate on incremental innovation.

We have focused on innovation here because it is one of the most crucial dimensions of economic success. However, the institutional structures of LMEs and CMEs may confer other kinds of comparative advantages yet to be fully explored. Firms in coordinated market economies are well-placed to secure quality control, for instance, by virtue of close relationships with workers and suppliers, which may give them advantages in products for which demand turns more heavily on quality relative to price. Conversely,

the ease with which firms in liberal market economies can cut costs by releasing workers, given fluid labor markets and high levels of managerial prerogative, may provide them with advantages in products for which demand is highly price-sensitive.

Analysts have long acknowledged that skill levels can be important to comparative advantage, and our analysis suggests that the availability of labor with particular types of skills is dependent on precisely the types of institutions we emphasize. The extensive facilities for inter-firm collaboration that foster high levels of industry-specific skills in some CEMs and company-specific skills in others may provide advantages for producing some kinds of goods there, while the fluid labor markets and support for the development of general skills in LMEs seem to make the production of goods and services that require less-skilled but lower-cost labor more viable there.

We have stressed the paradigmatic cases of liberal and coordinated market economies, but this perspective can be extended to other economies and variations among them. We have already observed that the group-based systems of coordination provide firms with better capacities for diffusing technology across sectoral boundaries than industry-based systems of coordination, and this gives some types of CMEs special advantages in particular industries (cf. Soskice 1994). There are many dimensions of comparative institutional advantage that remain to be explored, but we have provided a concrete basis for understanding how it operates and what institutions matter to it.

VII. New Perspectives on Comparative Public Policy-Making

The analytical framework developed in this volume also opens up new perspectives on economic and social policy-making in the domestic and international arenas.

i. Economic Policy-Making

This framework suggests that the problematic of economic policy-makers, especially on the supply-side of the economy, should be reconceptualized. A substantial literature in comparative political economy, going back to Shonfield, (1965), construes the problem facing policy-makers as one of settling on the actions that firms or other private-sector actors should take in order to improve economic performance and then devising a set of incentives, whether regulatory or financial, to induce them to take those actions. This was

what the ‘strong’ states of France and Japan were once said to be so effective at doing (cf. Zysman 1983; Johnson 1982). Broadly speaking, the problem was seen as one of inducing economic actors to cooperate with the government.

From our perspective, the principal problem facing policy-makers is one of inducing economic actors to coordinate more effectively with each other.²⁷ This follows from our view of the economy as an arena in which multiple actors develop competencies by devising better ways of coordinating their endeavors with one another. When firms coordinate more effectively, their performance will be better, and the result will be better overall economic performance. In some cases, more effective coordination among other actors, such as trade unions and employers, will also enhance performance.²⁸ Accordingly, one of the principal ways in which policy-makers can improve national economic performance is to secure better forms of coordination among private-sector actors.

In some cases, markets can be used to secure this coordination, and the task facing policy-makers is to improve the functioning of markets. That is not always easy, but there are some well-known techniques for doing so. However, there are other cases in which firms can perform certain endeavors well (whether wage bargaining, collaborating with other firms in research and development or the like) only by coordinating with others in a context of strategic interaction. Here, the problem is one of improving the equilibrium outcomes that arise from strategic interactions, and less is known about how to accomplish it. Culpepper describes the problem as one of securing ‘decentralized cooperation’. It entails persuading private-sector actors to share information, improving their ability to make credible commitments, and altering their expectations about what others will do. As we have noted, the development of supportive institutions may be crucial but so may the cultivation of a particular base of common knowledge.

This formulation highlights the difficulties facing economic policy-makers, especially where they seek to enhance non-market coordination. These are not contexts in which states can tell economic actors what to do, not only because the outcomes are too complex to be dictated by regulation but because states generally lack the information needed to specify appropriate strategies. States may establish agencies, but what agencies can do is limited. In many cases, effective strategic coordination depends on the presence

of appropriately-organized social organizations, such as trade unions and employer associations, that governments cannot create. As Culpepper's analysis of vocational training shows, effective cooperation also requires common knowledge that may develop only out of experience over time. Where norms and institutions supporting effective cooperation already exist, policy-makers may be able to improve its operation with complementary regulations, but it is difficult to induce such cooperation *ex nihilo* (cf. Culpepper 1998).

It follows that economic policies will be effective only if they are *incentive compatible*, namely complementary to the coordinating capacities embedded in the existing political economy (cf. Wood 1997). In liberal market economies, where coordination is secured primarily through market mechanisms, better economic performance may demand policies that sharpen market competition, while coordinated market economies may benefit more from policies that reinforce the capacities of actors for non-market coordination. Because the institutional context of the British economy encourages the acquisition of general skills and militates against sectoral coordination, its government is likely to enhance skill levels more by expanding formal education than by trying to foster sectoral training schemes modeled on the German. Conversely, competition policies that serve Britain well might erode the capacities of German firms for non-market coordination.

Wood (1997 and this volume) goes beyond this to argue that the viability of policy depends not only on the organization of the political economy but on the organization of the political realm (see also Katzenstein 1978b; 1987).²⁹ Let us distinguish between 'market incentive' policies and 'coordination-oriented' policies. The former rely on market-based incentives to induce actors to engage in a specific activity. The latter attempt to improve the competencies of firms, such as their skill levels or technological capabilities, by addressing firm needs with relative precision. Thus, coordination-oriented policies must be based on high levels of information about the activities of the firm. But, as Wood points out, firms are reluctant to share such information with governments whose position as powerful actors under a range of unpredictable influences raises the risks that they will defect from any agreement and subsequently use the information they

have acquired against the firm. The transaction costs to governments of coordinating the activities of many private-sector actors can also be prohibitively high. In short, this kind of policy-making is marked by information asymmetries, high transaction costs, and time-inconsistency problems.

The governments of coordinated market economies have taken advantage of the strong business associations, trade unions and other para-public organizations in their political economies to resolve these problems. Because such associations are independent of the government and responsible to their member-firms, the latter are more inclined to trust them with enough private information to administer a coordination-oriented or 'framework' policy effectively. And because these associations are in good positions to monitor and even gently sanction their members, they can often secure the coordination that a policy demands with lower transaction costs. Thus, producer-group organizations enter into 'implicit contracts' with the government to administer the policy, drawing some benefits of their own in the form of enhanced resources and authority.

This is where the organization of the political realm matters. These associations and their members will be willing to form such contracts, which usually entail some information-sharing, only if the government's commitment to them is credible. And, as Wood (1997) observes, that commitment will be more credible where the relevant producer groups have enough structural influence to punish the government for any deviations from such agreements. This structural influence may rest on a number of bases: the authority of producer organizations inside political parties, the entrenchment of neo-corporatist practices in enough spheres of policy-making that defection in one can be punished in another, and policy-making procedures decentralized enough to allow producer groups many points of access. Of course, it also depends on the producer groups themselves being encompassing and powerful enough to mobilize a large constituency if they need to sanction the government. In short, coordination-oriented policies should be more feasible in nations with both a coordinated market economy and a political system in which producer groups enjoy substantial structural influence.

Coordination-oriented policies will be more difficult to implement in liberal market economies because business and labor associations there usually lack the encompassing

character required to administer them well. In addition, producer groups will be less willing to enter into such implicit contracts in nations where they do not possess enough structural influence to sanction the government for deviations from them, for instance, in nations where the powers of the state are highly-concentrated in the political executive or where the power of producer groups inside political parties is very limited.

In contradistinction to many others, then, this analysis suggests that the attributes normally associated with the ‘strength’ of a state may prevent governments from implementing many kinds of policies effectively. Wood (1997) shows that the failure of successive British schemes for industrial rationalization has roots, not in the weakness of the British state as many have suggested, but in the way it concentrates power in a political executive that producer groups could not trust (cf. Sacks 1980, Leruez 1975; Shonfield 1969). Despite its many powers, the French state has also had difficulty implementing successful schemes for training and regional or technological development that require coordination among private-sector actors, partly because it concentrates power in Paris and partly because France lacks powerful producer groups to operate them (Levy 1999; Culpepper 1998; Smryl 1997).

In general, liberal market economies should find it more feasible to implement market-incentive policies that do not put extensive demands on firms to form relational contracts with others but rely on markets to coordinate their activities. These include regional development schemes based on tax incentives, vocational programs focused on formal instruction in marketable skills, and government subsidies for basic research. Because of the bluntness of the instruments available to their states and the importance of markets to their economies, deregulation is often the most effective way to improve coordination in LMEs.

This analysis of institutional complementarities between political regimes and political economies raises some intriguing issues about patterns observable in the developed world. Many liberal market economies have Westminster systems of government that concentrate power in the political executive, while coordinated market economies tend to be governed by consociational, coalitional or quasi-corporatist regimes. Several factors could lie behind this congruence.³⁰ However, some amount of co-

evolution cannot be ruled out. If regimes that provide structural influence to encompassing producer groups find it more feasible to implement coordination-oriented policies, while states in which power is highly-concentrated have more success with market-incentive policies, the character of the political regime may contribute to the development of a particular type of economy. Levy (1999) argues forcefully for a variant of this view in the case of France.

To put a similar point in more general terms, the character of the political regime may condition the levels of asset specificity found across nations (cf. Alt et al. 1997). We have already argued that the fluid market settings of liberal market economies encourage investment in switchable assets, while the dense institutional networks of coordinated market economies enhance the attractiveness of investment in co-specific assets. In addition, however, political regimes characterized by coalition governments, multiple veto points, and parties that entrench the power of producer groups may be more conducive to investment in co-specific assets than states that concentrate power in highly-autonomous party leaders, because (i) they provide the framework policies that sustain the intermediate institutions supporting co-specific investments and (ii) they offer investors assurance that the course of policy over the long term will heed their interests and not damage the value of assets that cannot readily be switched to other uses.³¹ Thus, we should expect to find more investment in specific, and especially co-specific, assets in nations with such regimes. These are issues that merit further investigation.

ii. Social Policy

This varieties of capitalism approach to political economy also opens up new perspectives on social policy. In particular, it highlights the importance of social policy to firms and the role of business groups play in the development of welfare states. Convention associates the development of social policy with organized labor and progressive political parties, on the assumption that business generally opposes such initiatives. However, Mares (1998a and this volume) shows that business groups have played key roles in the development of social policy for over a century and develops a parsimonious model to explain the policies in which various types of firms will have interests. Her work advances an important literature exploring the contribution that business groups make to welfare states (Mares

1998b, 1999; Pierson 1995; Swenson 1997, 1999; Martin 1997; Ebbinghaus and Manow 1999; Estevez-Abe 1999).

A relational approach to company competencies emphasizes the support social policy provides for the relationships that firms develop to advance their objectives. Social policy is often tantamount to labor-market policy, but the contributors to this volume look well beyond its effects policy on labor costs or the reservation wage. They note that the terms of unemployment compensation affect the ability of firms to attract and retain pools of labor with specific kinds of skills. The terms under which pensions are available can be important to the capacity of firms to operate particular production regimes, requiring employee loyalty or a capacity for lay-offs. Social policies can be crucial to the relational strategies adopted by firms.

For this reason, there should be a correspondence between types of political economies and types of welfare states. And that appears to be the case. Virtually all liberal market economies are accompanied by 'liberal' welfare states, whose emphasis on means-testing and low levels of benefit reinforce the fluid labor markets that firms use to manage their relations with labor (Esping-Andersen 1996). As Estevez-Abe, Iversen and Soskice note, liberal social policy regimes also encourage individuals to develop the general, rather than specific, skills that corporate strategies in LMEs tend to emphasize.

Although the social-policy regimes that accompany coordinated market economies are more varied, they also tend to support the corporate strategies found there. Large firms in Japan find it easier to secure employee loyalty and company-specific skills because they provide many of the social benefits that might otherwise be the responsibility of the state (Estevez-Abe 1999). Pension and unemployment-benefit systems that tie replacement rates closely to wages in many of the European CMEs encourage workers to develop industry- and company-specific skills; and generous retirement or disability benefits allow firms to release labor without violating the guarantees of a stable income implicit in the long-term employment contracts used to secure collaborative relations inside the firm.

Governments introduce social legislation for many reasons, and it is conditioned both by partisan competition and the demands of labor. But, in this volume and other works, we argue that business also has important interests in social policy and a hand in its

development. Mares (1998) traces the way in which business groups form alliances with trade unions and public officials in order to advance their interests, while Estevez-Abe (1999) and Iversen and Soskice (2000) explore the politics that leads specific types of political economies toward distinctive welfare states. In the sphere of social policy, the varieties of capitalism approach is helping to open up several new research agendas.

iii. National Interests in the International Arena

The international arena is also a sphere for policy-making of increasing importance. What states cannot secure domestically because of political resistance or transnational externalities, they often seek in negotiations about the development of international regimes (Putnam 1988; Keohane 1984; Krasner 1983). Many such regimes now bear on economic or social affairs, of which the most developed are run by the European Union. Since their regulations can have substantial effects on national economies, it is important to understand how these are determined, and a number of perspectives can be taken to that problem. One of the most influential argues that the character and regulations of regimes are determined by their member states, operating from conceptions of national interest, albeit in contexts where agreement often requires compromise (cf. Moravcsik 1993). Thus, what can be expected from such regimes turns heavily on conceptions of national interests, and it has become important to be able to specify those interests.

Analysts have taken several approaches to identifying the economic interests motivating nations in international negotiations. Some formulations associate them with prevailing economic conditions in the nation, such as levels of inflation or unemployment (Moravcsik 1998: xxx). In other cases, neo-classical economic doctrine can be used to specify welfare interests the nation as a whole may have in particular outcomes, such as freer trade (Frieden and Rogowski 1986). More often, the conceptions of national interest from which officials operate in international negotiations are seen as a response to pressure from domestic interests, which is then specified in a number of ways. Most specifications use an economic theory to identify the impact a decision will have on particular sectors and an institutional theory to predict which sectors will have more influence over the government (Milner 1988;, 1997; Frieden 1991; Garrett and Lange 1986).

There is some value in all these approaches, especially for particular cases, but the conceptions of national interest they generate can be nebulous or of limited generality, especially when rooted in transitory economic conditions or shifting parallelograms of sectoral pressure. The approach to comparative capitalism developed in this volume provides another way of identifying the national interests that states pursue when negotiating about international economic regimes. It suggests that their stance toward new regulatory initiatives will be influenced by judgments about whether those initiatives are likely to sustain or undermine the comparative institutional advantages of their nation's economy. Governments should be inclined to support such initiatives only when they do not threaten the institutions most crucial to the competitive advantages their firms enjoy.³²

In this volume and other work (1997), Fioretos applies this perspective to the positions taken by Britain, Sweden, France and Germany in negotiations leading up to the Maastricht Treaty. He argues that many of the conflicts between Britain and its partners, leading to opt-out from the social charter, can be traced to British efforts to protect the institutions of its liberal market economy. The positions member states have taken on EU industrial policy also correspond to the demands of nations seeking to preserve distinctive institutional infrastructures and particular types of relations among firms.

This approach can be applied to a wide range of issues associated with the evolution of the European Union. Germany's longstanding reluctance to accept deep financial deregulation may derive, for instance, not simply from a desire to maintain the rents of its financial sector but from a concern to preserve the capacities for network monitoring that sustain the terms on which domestic capital is available to its firms (cf. Story and Walter 1997; Harnishfeger 1999). Britain's efforts to secure regulations that enhance market competition in many sectors may reflect desires to secure a competitive edge for its own firms, whose corporate strategies and structures are already appropriate operating in such environments.

Even some of the positions that member states have taken toward the development of the Union's own institutions may be explicable in these terms. We have argued that the success of a national economy can depend on whether it is supervised by a state with institutions appropriate for supplying the kind of economic policies that sustain it. As the

EU takes on additional economic responsibilities, its members may be concerned to ensure that the agencies and techniques used to administer them are congruent with the needs of their own economies. Thus, states and actors from coordinated market economies might seek institutions conducive to the formation of implicit contracts between public authorities and business associations, while those from liberal market economies should want to avoid agencies interventionist enough to interfere with the operation of market mechanisms. Such considerations cannot fully explain the design of European institutions, but they may figure in the process (cf. Schmidt 1997; Pollack 1997).

This perspective can help explain why it has been so difficult for the EU to secure full regulatory harmonization and resorted instead to the ‘mutual recognition’ of national regulations (cf. Nicolaides 1997). Transaction costs alone do not seem to provide enough of an explanation. If the structure of the European economies were broadly similar, it should be possible to agree on ‘best practice’, allowing a transition period for laggards to catch up. But there are profound institutional differences among the political economies of Europe on which the firms of each nation have come to rely for their competitive advantages. Although all can agree on some measures as market economies, to enforce high levels of institutional homogeneity on the member-nations would be to compromise the institutions and firm strategies on which national comparative advantages depend. It is not surprising that there has been no consensus on such matters. Much more than national tradition has been at stake. The more general point is that, in the economic sphere at least, international regimes may be less likely to be capable of effecting cross-national institutional convergence than many suppose.³³

VIII. The Dynamics of Economic Adjustment

Although we have emphasized cross-national variations of longstanding importance, ours is not a static conception of the political economy. To the contrary, we expect the corporate strategies, policies, and institutions of each political economy to evolve in response to the challenges they face, and our approach contains a number of conceptual tools for understanding both the nature of contemporary challenges and the shape this

evolution is likely to take. In this section, we discuss some of the dynamic elements of the analysis that are pursued in more detail in subsequent chapters.

The developed economies are currently experiencing profound changes. A technological revolution is creating entirely new sectors, based on biotechnology, microprocessors, and telecommunications, whose products are transforming business practices across the rest of the economy. A wave of managerial innovations have seen companies around the world adopt new forms of supplier-client relations, just-in-time inventory systems, quality control and team production. Economic activity is shifting from the industrial sector into the service sector. Capitalism seems to be in the midst of one of those 'cycles of creative destruction' identified by Schumpeter (1948).

If technology provided the spark for this revolution, the accelerant has been liberalization in the international economy. With declining transport and communication costs, more liberal trade and financial regimes have inspired vast new flows of goods and capital across national borders, including large increase in foreign direct investment. All the developed economies are more open than they were twenty years ago, and intense international competition is enforcing innovation on many firms. The watchword for these developments has become *globalization*—a term summing up the hopes of some for global prosperity and the fears of many that their way of life will be lost to international forces beyond the control even of governments (Keohane and Milner 1996; Friedman 1998; Berger and Dore 1996).³⁴

The principal issue in political economy raised by globalization concerns the stability of regulatory regimes and national institutions in the face of heightened competitive pressure (cf. Rodrik 1997; Boyer and Drache 1996). Will institutional differences among nations of the kind we have identified remain significant or will the processes of competitive deregulation unleashed by international openness drive all economies toward a common market model?

To these questions, the conventional view of globalization popular in the press and much of the scholarly literature gives an ominous answer. It is built on three pillars. First, it sees firms as essentially similar across nations at least in terms of basic structure and strategy. Second, it associates the competitiveness of firms with their unit labor costs,

from which it follows that many will move production abroad if they can find cheaper labor there. From this follows a particular model of the political dynamic generated by globalization.

In the face of threats from firms to exit the economy, governments are said to come under increasing pressure from business to alter their regulatory frameworks so as to lower domestic labor costs, reduce rates of taxation, and expand internal markets via deregulation. What resistance there is to such steps will come from trade unions, seeking to protect the wages of their members, and social democratic parties, seeking to preserve social programs. The precise effects that each nation suffers in the face of globalization will be determined largely by the amount of political resistance that labor and the left can mount to proposals for change. But, because international interdependence increases the exit opportunities for capital more than it does for labor, the balance of power is said to have shifted dramatically toward capital. Thus, this is a model that predicts substantial deregulation and convergence in economic institutions across nations. Conventional views of globalization contain a 'convergence hypothesis' analogous in force, but considerably less sanguine in its implications, to earlier ones based on theories of industrialism (cf. Kerr et al. 1960; Graubard 1964).

To date, the principal challenges to this view have come in two forms. Some scholars argue that the internationalization of trade and finance has not been as extensive or unprecedented as is often believed. Others argue that national governments are not as defenseless in the face of these developments as they appear, because governments have simply used international institutions or pressure as an excuse to pursue reforms they wanted in any case (Wade 1996; Boyer 1996; Cohen 1996). There is some validity in both arguments.

However, the analysis developed in this volume provides another basis for reassessing globalization and its effects. We begin by calling into question each of the assumptions that underpin the conventional view. First, our analysis suggests that firms are not essentially similar across nations. On the contrary, firms in LMEs and CMEs develop distinctive strategies and structures to capitalize on the institutions available for market or non-market coordination in the economy. There is substantial evidence that

firms in different types of economies react differently to similar challenges (cf. Knetter 1989). Thus, we should not expect identical responses to globalization.

Second, our perspective suggests that firms will not automatically move their activities off-shore when offered low-cost labor abroad. Cheaper labor that comes with commensurate skill and productivity levels is always attractive, but firms also derive competitive advantages from the institutions in their home country supporting specific types of inter- and intra-firm relationships. Many will be reluctant to give these up simply to reduce wage costs. Comparative institutional advantages tend to render firms less mobile than theories that do not acknowledge them imply.

Of course, with international liberalization, there will be some movement of corporate activities across national borders, as firms seek access to new markets and new sources of supply, but our approach suggests dimensions to this movement that conventional views do not anticipate. It implies, for instance, that firms based in LMEs may be more inclined to move their activities abroad to secure cheaper labor, because they already coordinate their endeavors using the basic market structures that less-developed nations usually provide, while firms from CMEs whose corporate strategies rely on high skills and dense institutional infrastructure that may be more difficult to secure elsewhere.

Our theory of comparative institutional advantage also suggests that firms may exploit new opportunities for movement to engage in a form of *institutional arbitrage*. By this, we mean that companies may shift particular activities to other nations in order to secure the advantages that the institutional framework of the political economy offers for pursuing such endeavors. Thus, companies may move some of their activities to liberal market economies, not simply to lower labor costs, but to secure access to institutional support for radical innovation. This helps to explain why Nissan locates design facilities in California, Deutsche Bank acquires subsidiaries in Chicago, and German pharmaceutical firms open research labs in the United States. Conversely, companies may locate some activities in coordinated market economies in order to secure access to the quality control, skill levels, and capacities for incremental innovation that their institutional frameworks offer. General Motors locates its new engine plant in Dusseldorf rather than in Spain.

Over time, corporate movements of this sort should reinforce differences in national institutional frameworks, as firms that have shifted their operations to benefit from particular institutions embellish them and pressure governments to retain them. Because of comparative advantage, international competition militates in favor of national diversity rather than institutional convergence (cf. Vogel 1996; Berger and Dore 1996).

Finally, our perspective calls into question the political dynamic conventionally associated with globalization. It predicts one dynamic in liberal market economies and an altogether different one in coordinated market economies. In the face of more intense international competition, business interests in LMEs are likely to pressure governments for deregulation, since firms that coordinate their endeavors primarily through market mechanisms can improve their competencies by sharpening those mechanisms. The government is likely to be sympathetic because the comparative advantage of the economy as a whole rests on the effectiveness of market mechanisms. Organized labor will put up some resistance, resulting in mild forms of class conflict. Because international liberalization enhances the exit options of firms in LME, as noted above, the balance of power is likely to tilt toward business. The result should be some weakening of organized labor and a substantial amount of deregulation, much as conventional views predict.

In organized market economies, however, the political dynamic inspired by globalization should be quite different. Here, governments should be less sympathetic to deregulation because it threatens the nation's comparative institutional advantages.³⁵ Although there will be some calls for deregulation even in such settings, the business community is likely to provide less support for it because many firms draw competitive advantages from systems of relational contracting that depend on the presence of accommodating regulatory regimes. In these economies, firms and workers have common interests to defend because they have invested in many co-specific assets, such as industry-specific skills. Thus, the political dynamic inspired by globalization is likely to entail less class conflict and the formation of cross-class coalitions, as firms and workers with intense interests in particular regulatory regimes align against those with interests in others (cf. Swenson 1991; 1997).³⁶

This analysis explains several outcomes, in the spheres of policy and politics that are otherwise puzzling. Globalization was expected to weaken trade unions across the industrialized world. But comparative data shows that trade union membership has dropped only in some nations and remains robust in others (Lange et al. 1995; Visser 1999). Our analysis predicts most of the patterns observed. Trade unions have been weakened by business initiatives and deregulation in LMEs but remain strong in CMEs where cross-class coalitions help to preserve labor institutions (see Figure Six).

Instead of the monolithic movement toward deregulation that many expect from globalization, our analysis predicts a bifurcated response marked by widespread deregulation in liberal market economies and limited movement in coordinated market economies.³⁷ This is precisely the pattern of policy across the OECD in recent decades. Deregulation has been far-reaching in the liberal market economies of Britain, the United States, New Zealand, Canada, and Australia but much less extensive in the coordinated market economies of northern Europe and east Asia (King and Wood 1999; Wood 1997; Ellis 1997; Vogel 1996; Story and Walter 1997).³⁸ Moreover, Wood and Thelen report finding just the sort of politics this approach would lead one to expect in both liberal and coordinated market economies in recent years (this volume; Wood 1997; Thelen 1999).

Ultimately, it is not surprising that increasing flows of trade have not erased the institutional differences across nations. After all, world trade has been increasing for more than fifty years without enforcing such a convergence. In its presence, nations often prosper most, not by becoming more similar, but by building on their differences to consolidate comparative advantage.³⁹

However, there is another side to the pressures of globalization with more ambiguous effects. We refer here to pressures associated with the internationalization of finance, where recent developments have been more dramatic, if not unprecedented.⁴⁰ International flows of capital have increased exponentially in the past two decades, including both direct and portfolio investment (cf. Simmons 1999). This puts pressure on the institutions of coordinated market economies in several ways.

For large firms, international capital markets have become increasingly attractive sites in which to raise capital. But many international investors lack the facilities to

monitor the progress of a firm closely and prefer to provide capital on Anglo-American criteria, namely, on arms-length terms that emphasize transparent, balance-sheet criteria. Therefore, firms seeking access to these funds have come under pressure to revise their accounting standards and appoint independent directors to their boards. Firms courting equity investors or using their own equity to make acquisitions face additional pressure to deliver the high rates of return associated with 'shareholder value'.⁴¹ But this can be a problem in CMEs where corporate strategies and structures traditionally demand responsiveness to a wider range of stakeholders, including employees of the firm. Rates of return on equity have often been correspondingly lower there (see Figure Seven). In short, the growing importance of international financial transactions is putting pressure on corporate structures and strategies in coordinated market economies, threatening the relationships with other stakeholders long important to many firms there.

The systems for corporate governance in CMEs are also coming under pressure from another direction. Some of the large banks and insurance companies that once cultivated close relations with industrial firms have been disengaging from them in order to free up resources for global expansion. One dramatic manifestation is the German government's recent decision to facilitate such moves by lowering capital-gains taxes on the sale of corporate shareholdings. These actions could disrupt the intricate systems of cross-shareholding and inter-corporate linkage that provide capacities for network monitoring in CMEs, thereby reducing access to capital that is not tied to current profitability.

Where cross-shareholding declines enough to reduce the protection it provides against hostile takeover, the prospect of heightened merger and acquisition activity could also provoke substantial changes in CMEs. Faced with the threat of hostile takeovers, firms may be forced to become more attentive to their share price and rate of return. As a result, they may find it more difficult to sustain credible commitments, through market downturns as well as upswings, to the collaborative arrangements with other firms and employees on which they have customarily relied. Efforts by the EU or national governments to establish large equity markets and deregulate financial markets could accelerate such processes, as international pressure has in East Asia.

In short, developments in international financial markets have the potential to alter the operation of coordinated market economies. However, it is not yet certain how far-reaching their effects will be. Germany provides a case in point. Although the large German banks are seeking a global role, they are still engaged to some extent with Germany industry, and the regional banks maintain important *hausbank* relationships (cf. Ziegler 2000; Griffin et al. 2000; Vitols 2000).⁴² Many German firms have embraced international accounting standards, but there are still few independent directors on their boards and ‘shareholder value’ has been used mainly as a slogan to justify reorganizations that would have been dictated in any case. Although hostile takeovers have become more common in France, they remain rare in Germany, where regulatory regimes and cross-shareholding militate against them.⁴³ The market for corporate governance is changing but at a pace that may allow firms to retain some aspects of their longstanding strategies.

Firms around the world are shifting their strategies to take advantage of the new opportunities offered by higher levels of international integration, and this is inevitably unsettling the equilibrium outcomes on which actors in CMEs have hitherto coordinated. The difficulties that the German system of wage coordination is now encountering provide a good example.⁴⁴ For many years, the capacity of this system to generate wage increases moderate enough to sustain the competitiveness of German industry has depended on the ability of employers’ associations to put up strong resistance to exorbitant wage demands, if necessary orchestrating ‘lock outs’ of the workforce. But, as the major firms in some sectors have rationalized, moving some operations off-shore and refining supply chains, they have become increasingly sensitive to interruptions in production and inclined to veto lock-outs. In some sectors, these developments have disrupted an equilibrium in which the major firms would resist wage agreements that they could afford in order to maintain solidarity with smaller firms that could not afford them, sometimes increasing their own workers’ wages only after a sectoral agreement was reached. As a result, employers associations can no longer mount effective resistance to wage demands, and smaller or less-efficient firms are dropping out of them. Trade union leaders inclined to accept moderate wage increases to preserve employment sometimes find themselves unable to do so because of pressure from militants who are no longer deterred by the threat of lock-

outs.⁴⁵ The result has been some deterioration in the effectiveness of wage coordination in Germany (cf. Manow and Seils 2000).

However, there are some good reasons for thinking that effective coordination on a new set of outcomes can be secured in such cases. As Thelen points out, these kind of problems are not unprecedented in coordinated market economies. The equilibrium outcomes on which actors coordinate there are often unsettled by economic shocks and new ones found through processes of negotiation and compromise, which may entail sub-optimal outcomes for a time and some testing by each side of the power of the others but ultimately produce satisfactory results. The presence of institutions that entrench the power of the actors, whether corporate stakeholders or trade unions, give them strong incentives to cooperate, and the availability of deliberative institutions at many levels of these economies facilitates coordination on such outcomes. In large measure, these are 'negotiated economies' where encompassing producer groups have extensive strategic capacity and many incentives to agree with others on solutions to common problems.⁴⁶ Economies that are coordinated primarily by markets can often respond more quickly to a new challenge, but markets do not necessarily generate superior outcomes. Coordinated market economies have substantial capacities and a track record for meeting challenges of the sort they face today (cf. Hall 1997; Global Economic Forum 2000).

Several considerations also suggest that they will do so without converging entirely on a liberal market model. As we have already noted, the political dynamic associated with globalization does not militate as strongly for deregulation in CMEs as in it does in LMEs. Institutional complementarities play a particularly interesting role in this process.

On the one hand, these complementarities raise the prospect that institutional change in one sphere of the economy may snowball into change in other spheres as well. The deregulation of financial markets, for instance, can make it more difficult for firms to offer long-term employment, thereby making it harder for them to recruit skilled labor; and this could ultimately inspire substantial changes in labor market practices and production strategies (cf. Aoki 1994). Financial deregulation could be the thin end of a wedge prying open coordinated market economies.

On the other hand, the presence of institutional complementarities acts as a disincentive for radical change. To the extent the actors are cognizant of these complementarities, they may attempt to preserve institutional arrangements in one sphere so as to secure the efficiency gains they provide when combined with the institutions present in another sphere of the economy. Even though they have sought more flexible skill categories to cope with technological change, for instance, many German firms have tried to preserve the vocational training system in order to secure the skill levels that complement their production regimes. Despite the difficulties they have encountered with the wage bargaining system, many employers have worked to preserve wage coordination in order to sustain industry-specific skills and avoid industrial conflict in a context where powerful trade unions make it costly.

As the essays by Thelen and Wood indicate, there is substantial evidence that such considerations influence the actors in coordinated market economies. Although they are changing, most of these economies are following adjustment paths that sustain high levels of non-market coordination. In some cases, that has entailed devising new forms of coordination. Peak-level bargaining broke down in Sweden during the 1980s, for instance, because it was no longer meeting the needs of firms facing new technologies and greater international competition, but, rather than revert to purely liberal arrangements, Swedish producer groups developed new forms of wage bargaining coordinated at the sectoral level (cf. Pontusson and Swenson 1995). Cross-national data confirms that most CMEs are re-coordinating wage bargaining at this level (Iversen 1999; Lange et al. 1995).

Of course, we can expect some deregulation in CMEs as well. They are market economies, and there are some ways in which greater market competition can improve their efficiency without undermining their basic capacities for non-market coordination. The point of this analysis is not to suggest that CMEs should never sharpen market incentives but only that they should do so with one eye on the other ways in which firms coordinate their endeavors. Precisely where the line is to be drawn between what might be called ‘coordination-conforming competition’ and ‘corrosive competition’ is an issue that deserves more systematic investigation. We can expect adjustment paths in CMEs that combine some deregulation with efforts to improve non-market coordination.

There is a fundamental asymmetry, however, between CMEs and LMEs. The former can deregulate, radically if the actors so wish. But LMEs cannot readily develop systems for non-market coordination that they now lack. This follows from the difficulties of securing it. As we have noted, effective non-market coordination often depends on institutions that cannot be legislated into existence by governments and the presence of a thick common knowledge born of common experience that can be difficult to develop.⁴⁷ Therefore, although CMEs can converge toward LMEs, movement in the opposite direction is much less likely.

* * *

The chapters that follow elaborate many of the themes raised in this introduction. Each uses the basic approach outlined here to explore a more specific set of issues, but we have not imposed a rigid template on the contributors and so there are differences of emphasis among them. These essays encompass a wide range of cases, issue-areas, and methodologies. They illuminate both the potential in the approach and the scope of the research agenda it opens up. Since we have already referred to many of the chapters in the course of this introduction, we will simply outline the organization of the volume here.

The chapters in Part I of the volume examine different spheres of the political economy in comparative terms that deepen our understanding of how coordinated and liberal market economies work with an emphasis on the institutional complementarities within them. Thelen examines recent developments in the industrial relations arena, showing how institutions at the macro and micro levels of the economy contribute to a politics that produces quite different outcomes in CMEs and LMEs. Vitols uses a varieties of capitalism approach to compare the systems for corporate governance in Britain and Germany, arguing that, despite recent changes, they remain distinct. Casper explores the way in which contract law and corporate strategies interlock in Germany and the United States. He shows how legal systems support particular forms of coordination, while the institutions shaping business coordination influence the development of the law. Estevez-Abe, Iversen and Soskice examine the relationship between social protection and the political economy, emphasizing the support that social policy provides for the development of skills to suit different product-market strategies. This work draws strong

linkages between varieties of capitalism and types of welfare states. Finally, Tate examines the differences in systems of standard-setting characteristic of different varieties of capitalism, stressing the impact that collective arrangements for standard-setting can have on corporate behavior.

The chapters in Part II of the volume explore some of the new perspectives on public policy-making opened up by this varieties of capitalism perspective. Mares makes a powerful case that employers have strong interests in social policy and contribute to its development. She devises a parsimonious model to explain the interests that different kinds of firms have in social policy and presents evidence from three case-studies to show that the interests they articulate conform to that model. Wood compares the development of labor-market policy in Britain and Germany with a view to showing how the organization of the political realm interacts with the organization of the political economy to generate distinctive patterns of policy across LMEs and CMEs. Culpepper takes on issues of reform, exploring efforts to transplant vocational training schemes of the sort practiced in West Germany to East Germany and France. His analysis shows how difficult it is for governments to secure such coordination and how dependent the results are on the presence of supportive employer organizations. Hancké focuses on the case of France, arguing, contrary to our images of a *dirigiste* regime, that its industrial adjustment has been led, not by the state, but by firms using the business networks available to them.

The contributors to Part III of the volume apply the insights of the approach to a diverse range of problems at multiple levels of analysis. Lehrer develops a varieties-of-capitalism approach to strategic management and, comparing it to alternative approaches, shows it can be used to explain national differences in corporate strategy, taking up the case of the passenger airline industry. His analysis links the structure of the political economy closely to corporate strategy. By contrast, Franzese focuses on interaction effects in the macroeconomy, showing how institutions for wage coordination and monetary policy-making interact with each other and the sectoral composition of the organized workforce to generate nationally-distinctive patterns of economic performance. In an analysis that nicely complements Casper's, Teubner explores the co-evolution of law and corporate behavior. Taking up 'good faith' doctrine in the British case, he argues that

the character of a nation's political production regimes will influence its receptivity to specific legal concepts and the ways those concepts are applied. Finally, Fioretos shows how a varieties of capitalism approach can be used to resolve important issues in international relations, tracing the positions taken by Britain and Germany to the Maastricht negotiations in the EU back to fundamental differences in the organization of their political economies. Together these essays suggest that a varieties of capitalism approach can illuminate many kinds of issues in economics, business and political science.

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Notes

¹ We concentrate here on economies at relatively-high levels of development both because we know them best and because we think the framework applies well to many problems there. However, the basic approach should also have relevance for understanding developing economies as well (cf. Bates 1997).

² Of necessity, this summary is brief and slightly stylized. As a result, it cannot do full justice to the variety of analyses found within each of these valuable literatures and it neglects some treatments of the problem that fall outside them. It should be noted that some of our own prior work is so influenced by these approaches that it can be said to fall within them. For more extensive reviews, see Hall 1999, 2001.

³ An alternative approach to neo-corporatism, closer to our own, which put less emphasis on the trade union movement and more on the organization of business was also developed by Katzenstein (1985a,b) among others (Offe 1982).

⁴ There are a few notable exceptions that influence our analysis, including the work of Scharpf (1988, 1997) and Przeworski and Wallerstein (1984).

⁵ In other works by the contributors to this volume, ‘coordinated market economy’ is sometimes used as a term synonymous with ‘coordinated market economy’. Although all of these economies are ‘coordinated’ in the most general sense of the term by markets, if not by other institutions, the term reflects the greater prominence of strategic interaction and hence of game-theoretic processes of coordination in CMEs.

⁶ Although we do not emphasize it here, this is not meant to deny the observation of Granovetter (1985) and others that market relations are often underpinned by other more personal relationships of familiarity and trust.

⁷ The strategic decisions of oligopolists or those with other forms of market power provide one case in point.

⁸ Note that, from time to time, we refer loosely to the ‘institutions’ or ‘organization’ of the political economy to refer to both the organizations and institutions found within it.

⁹ Here we depart from some of our own previous formulations as well (cf. Hall 1986; Soskice 1990).

¹⁰ Culpepper documents this problem and explores some solutions to it in this volume and Culpepper 1998.

¹¹ One political economist who has consistently drawn attention to the importance of deliberation is Sabel (1992; 1995) and, although the issue has long been neglected by game theorists, it is now the subject of a growing literature (cf. Elster 1998).

¹² At the sectoral or regional level, of course, large firms may be able to exercise substantial influence over the development of some of these institutions, and especially business networks, as Hancke shows in his article for this volume (cf. Hancke 2000)

¹³ For examples in one sphere, see the essay by Estevez, Iversen and Soskice in this volume.

¹⁴ Conversely, two institutions can be said to be ‘substitutable’ if the absence or inefficient functioning of one increases the returns to using the other. Note that we are thinking here of total returns, leaving aside the question of to whom they accrue which is often a matter of property rights, and we define efficiency relatively simply as the net returns to the use of an institution given its costs.

¹⁵ Of course, there are limits to the level of institutional isomorphism that can be expected across spheres of the economy. Although efficiency considerations will press in this direction, the presence of functional equivalents for particular arrangements will limit the institutional homology found across similar types of political economies, and the importance to institutional development of historical processes driven by considerations other than those of efficiency will limit the level of complementarities found in any one economy.

¹⁶ PROVIDE DETAILS OF MEASURES

¹⁷ Luxembourg and Iceland have been omitted from this list because of their small size and Mexico because it is still largely a developing nation.

¹⁸ In previous decades, the German banks were also important contributors to such networks by virtue of the large numbers of shares in industrial firms they controlled (cf. Hall 1986: ch. 9). In recent years, however, the role of the large commercial banks has been reduced, as they divest themselves of many holdings (cf. Griffin 2000).

¹⁹ ‘Hold up’ is Williamson’s (1985) term for the withdrawal of active cooperation to back up demands.

²⁰ Firms in LMEs tend to rely more heavily on bond and equity markets for external finance than do those in CMEs. However, bank lending in such economies also privileges publicly-accessible, balance-sheet criteria, since banks find it difficult to monitor the less-obvious dimensions of corporate progress in an environment that lacks the close-knit corporate networks conveying such information in CMEs. Intense monitoring by a loans officer is feasible only when small sums are involved, since it exposes the bank to problems of moral hazard that are especially acute in countries where officers can take advantage of fluid labor markets to move elsewhere.

²¹ Note that we characterize this realm in terms that avoid an older distinction often drawn between countries in which firms can raise ‘long-term’ versus ‘short-term’ capital on the grounds that this is often not very meaningful. Many companies in LMEs with established market reputations can raise capital for projects promising revenues only in the medium to long term, and many companies finance the bulk of their activities from retained earnings in any case. Of increasing relevance, however, are the rules governing hostile take-overs, whose prospect can induce firms to pay considerable attention to the price and earnings of their shares

²² Partly for this reason, the market valuation of firms in LMEs often depends more heavily on the reputation of top management than it does in CMEs.

²³ See above p. xx and Figure One.

²⁴ Of course, as Locke (1995) points out, alongside some broad commonalities, there are also variations in corporate strategy within these nations, including some in the sphere of labor relations; and institutional variations across these countries also generate some distinctive features of corporate strategy of the sort evident in Lehrer’s analysis.

²⁵ Note that strategic trade theory focuses on a very similar set of variables (cf. Krugman 1986; Busch 1999).

²⁶ The data is from the European Patent Office and calculated for 30 classes of technologies. For technology class *i* (eg. machine tools) Germany's relative specialization is measured by the share of German machine tool patents in total German patents *less* the share of global machine tool patents in global patents. Maximum specialization is +1, minimum -1.

²⁷ The formulations in this paragraph and those following owe a good deal conversations with Pepper Culpepper (cf. 1997).

²⁸ Here, as elsewhere in this chapter, when we refer to 'more effective' coordination, we mean coordination by the actors on new equilibrium sets of actions that are pareto-superior in the sense that they make at least some of the actors better off without making others worse off.

²⁹ The analysis in the following paragraphs owes a great deal to Wood 1997 as well as his chapter in this volume.

³⁰ Since many LMEs were once British colonies, the diffusion of cultural norms in the economic and political spheres may be a factor here; and, of course, the U.S. provides a notable exception to this rule.

³¹ Katzenstein (1987) shows how structural features of the German state hem in most governments, for instance, while Gamble and Walkland (1987) show how frequently British governments have changed regulatory regimes or policies important to business.

³² It should be noted, of course, that governments can misperceive the impact of a proposed regulation, and other factors may also enter into their calculations of national interest. Our formulations here are deeply influenced by the work of Fioretos (1997).

³³ As Streeck (1996) and Scharpf (1995: ch 2) have pointed out, precisely because they cannot legislate regulatory convergence, international regimes, like the EU, may resort to enhancing market competition with the result that convergence comes in another form via processes of competitive deregulation. There is much to be said for this view. For further discussion, see the section on 'globalization' below.

³⁴ We use the term 'globalization' in this chapter to refer to the developments that have made it easier for companies to locate operations abroad, including the liberalization of trade, the deregulation and expansion of international financial markets, the new accessibility and expansion of markets in what was the communist world, and declining transportation or communication costs.

³⁵ Let it be clear that we are not claiming all types of non-market institutions contribute to the efficiency of the economy. We have identified some specific types of inter-and intra-firm relations and supporting institutions that we associate with effective firm performance. There are other 'non-market' institutions in many economies that simply generate economic rents or detract from economic efficiency. The point is to distinguish among them and not to label all 'non-market' institutions efficient or inefficient.

³⁶ Note that this observation corresponds to the predictions of Frieden and Rogowski (1996) that class conflict is more likely in economies where switchable assets predominate and sectoral conflict characterized by cross-class coalitions more likely in economies where asset specificity is high. However, because firms and workers share some interests in all economies, we do not exclude the possibility that some cross-class coalitions will also be formed in liberal market economies, as Swenson (1997) suggests.

³⁷ We use 'deregulation' as a convenient shorthand to refer to policies that remove regulations limiting competition, expand the role of markets in the allocation of resources, or sharpen market incentives in the

economy. Of course, with Vogel (1996), we recognize that all deregulation is implicitly a form of reregulation.

³⁸ We predict some, if more limited, deregulation in CMEs because, alongside non-market institutions, they also use market mechanisms whose operation may be improved by a measured amount of deregulation.

³⁹ Trade integration seems to have the greatest effects, not on the differences between CMEs and LMEs, but on state intervention of the sort once prominent in France and parts of the developing world, as governments found that *dirigiste* policies could encourage domestic firms to increase production but could not ensure that they were competitive on international markets (cf. Hall 1990; Ziegler 1997; McArthur and Scott 1966).

⁴⁰ As Zevin (1992) points out, international capital markets were probably more integrated in the decades before the First World War than they have ever been since.

⁴¹ We are grateful to Michel Goyer for drawing our attention to this last point (cf. Goyer 2000).

⁴² The important role played by the German banks in the rescue of the construction group, Philip Holzmann, provides one example.

⁴³ As of 1999, the combined equity stake of hard-core shareholders and the shares voted by German banks in firms on the German DAX-30 still averaged 39 percent (figures supplied by Michel Goyer).

⁴⁴ We owe this example to Kathleen Thelen.

⁴⁵ Of course, with the advent of European monetary union, the Bundesbank no longer has the capacity to discipline union members by threatening tighter monetary policies, and the capacity of the European central bank to do so is much lower now because it stands at one remove from the German economy (cf. Hall and Franzese 1998).

⁴⁶ By ‘strategic capacity’, we mean the capacity to formulate a collective strategy for the group and to mobilize support for it among the group. Typically, this entails highly-articulated organization.

⁴⁷ Of course, what we mean by ‘coordination’ here excludes the efforts at concertation of relatively short duration that producer groups in all nations are sometimes able to accomplish, usually under pressure from the government. Regini (1984) describes such social pacts well in terms that emphasize the mobilizational effort required to accomplish them and that distinguish them from the more routinized processes whereby actors secure what we normally mean by non-market coordination (cf. Rhodes 1997; Perez 1999).