Varieties of Capitalism and Institutional Complementarities[1]

Monetary Policy and Wage Bargai. Institution in EMU

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Political economists have always been interested in the differences in economic and political institutions that occur across countries. Some regard these differences as deviations from 'best practice' that will dissolve as nations catch up to a technological or organizational leader. Others see them as the distillation of more durable historical choices for a specific kind of society, since economic institutions condition levels of social protection, the distribution of income, and the availability of collective goods – features of the social solidarity of a nation. In each case, comparative political economy revolves around the conceptual frameworks used to understand institutional variation across nations.

On such frameworks depend the answers to a range of important questions. Some are policy-related. What kind of economic policies will improve the performance of the economy? What will governments do in the face of economic challenges? What defines a state's capacities to meet such challenges? Other questions are firm-related. Do companies located in different nations display systematic differences in their structure and strategies? If so, what inspires such differences? How can national differences in the pace or character of innovation be explained? Some are issues about economic performance. Do some sets of institutions provide lower rates of inflation and unemployment or higher rates of growth than others? What are the trade-offs in terms of economic performance to developing one type of political economy rather than another? Finally, second-order questions about institutional change and stability are of special significance today. Can we expect technological progress and the competitive pressures of globalization to inspire institutional convergence? What factors condition the adjustment paths a political economy takes in the face of such challenges?

The approach we develop here elaborates a new framework for understanding the institutional similarities and differences among the developed economies, one that offers a new and intriguing set of answer to such questions.[2] This 'varieties of capitalism' approach can be seen as an effort to go beyond three perspectives on institutional variation that have dominated the study of comparative capitalism in the preceding thirty years.[3] In important respects, each of these perspectives was a response to the economic problems of its time.

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The first offers a *modernization approach* to comparative capitalism nicely elucidated in Shonfield's magisterial treatise of 1965. Devised in the post-war decades, this perspective 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 capacity was said to reside in the banks but more often in public officials. Accordingly, those taking this approach focused on 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). France and Japan emerged from this perspective as models of economic success, while Britain was generally seen as a laggard (Shonfield 1965; Johnson 1982).

During the 1970s, when inflation became the preeminent problem facing the developed economies, a number of analysts developed a second approach to comparative capitalism based on the concept of *neo-corporatism* (Schmitter and Lehmbruch 1978; Berger 1982; Goldthorpe 1984; Alvarez et al. 1991). Although defined in various ways, neo-corporatism was generally associated with the capacity of a state to negotiate durable bargains with employers and the trade union movement regarding wages, working conditions and social or economic policy.[4] Accordingly, a nation's capacity for neo-corporatism was generally said to depend on the centralization or concentration of the trade union movement, following an Olsonian logic of collective action which specifies that more encompassing 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' 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). Those working from this perspective categorized countries largely by reference to the organization of their trade union movement; and the success stories of this literature were the small, open economies of northern Europe.

During the 1980s and 1990s, a new approach to comparative capitalism that we will term a *social systems of production* approach gained currency. Under this rubric, we group analyses of sectoral governance, national innovation systems, and flexible production regimes that are diverse in some respects but united by several key analytic features. Responding to the reorganization of production in response to technological change, these works devote more attention to the behavior of firms. Influenced by the French regulation school, they emphasize the movement of firms away from mass production toward new production regimes that depend on collective institutions at the regional, sectoral or national level (Piore and Sabel 1984; Dore 1986; Streeck and Schmitter 1986; Streeck and Schmitter 1986; Dosi et al. 1988; Boyer 1990; Lazonick 1991; Campbell et al. 1991; Nelson 1993; Hollingsworth et al. 1994; Herrigel 1995; Hollingsworth and Boyer 1997; Edqvist 1997; Whitley 1999). These works bring a wider range of institutions into the analysis and adopt a more sociological approach to their operation, stressing the ways in which institutions generate trust or enhance learning within economic communities. As a result, some of these works resist national categories in favor of an emphasis on regional success of the sort found in Baden-Württemberg 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 those who wrote within it characterized national differences in the early post-war era well, for instance, some versions of the modernization approach tend to overstate what governments can accomplish, especially in contexts of economic openness where adjustment is 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 trade union movement underplays the role that firms and employer organizations play in the coordination of the economy (cf. Soskice 1990a; Swenson 1991).

The literature on social systems of production accords firms a central role and links the organization of production to the support provided by external institutions at many levels of the political economy. 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 – notably systems of labor-market regulation, of education and training, and of corporate governance – 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.[5]

Where we break most fundamentally from these approaches, however, is in our conception of how behavior is affected by the institutions of the political economy. 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 particular actors through the formal sanctions that hierarchy supplies or the resources an institution provides for mobilization. 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 actors respond such that behavior can be predicted more or less automatically from the presence of specific institutions, as, for instance, when individuals refuse to provide public goods in the absence of selective incentives. This kind of logic is often cited to explain the willingness of encompassing trade unions to moderate wages in order to reduce inflation.

Each of these formulations captures important ways in which the institutions of the political economy affect economic behavior and we make use of them. However, we think these approaches tend to miss or model too incompletely the *strategic interactions* central to the behavior of economic actors. The importance of strategic interaction is increasingly appreciated by economists but still neglected in studies of comparative capitalism.[6] If interaction of this sort is central to economic and political outcomes, the most important institutions distinguishing one political economy from another will be those conditioning such interaction, and it is these that we seek to capture in this analysis. For this purpose, we construe the key relationships in the political economy in game-theoretic terms and focus on the kinds of institutions that alter the outcomes of strategic interaction. This approach generates an analysis that focuses on some of the same institutions others have identified as important but construes the impact of those institutions differently as well as one that highlights other institutions not yet given enough attention in studies of comparative capitalism. This *varieties of capitalism* approach to the political economy is actor-centered, which is to say we see the political economy as a terrain populated by multiple actors, each of whom seeks to advance his interests in a rational way in strategic interaction with others (Scharpf 1997). The relevant actors may be individuals, firms, producer groups or governments.

Liberal Market Economies and Coordinated Market Economies

National political economies can be compared by reference to the way in which firms resolve the coordination problems they face. 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.[7]

In *liberal market economies*, firms coordinate their activities primarily via hierarchies and competitive market arrangements. These forms of coordination are well-described by a classic literature (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.[8] 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.

Firms and other actors in coordinated market economies should be more willing to invest in *specific* and *co-specific assets* (i.e. assets that cannot readily be turned to another purpose and assets 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 industry-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 or multi-purpose technologies.

The Role of Institutions and Organizations

Institutions, organizations and culture enter this analysis because of the support they provide for the relationships firms develop 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.[9]

From this perspective, markets are institutions that support relationships of particular types, marked 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 the problems that cannot be addressed by markets (Williamson

1985). In liberal market economies, these are the principal institutions on which firms rely to coordinate their endeavors.

Although markets and hierarchies are also important elements of coordinated market economies, firms in this type of economy draw on a further set of organizations and institutions for support in coordinating their endeavors. What types of organizations and institutions support the distinctive strategies of economic actors in such economies? Because the latter rely more heavily on forms of coordination secured through strategic interaction to resolve the problems they face, the relevant institutions will be those that allow them to coordinate on equilibrium strategies that offer higher returns to all concerned. In general, these will be institutions that reduce the uncertainty actors have about the behavior of others and allow them to make credible commitments to each other. A standard literature suggests that these are 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 (see Ostrom 1990). Typically, these institutions include powerful business or employer associations, strong trade unions, extensive networks of cross-shareholding, and legal or regulatory systems designed to facilitate information-sharing and collaboration. Where these are present, firms can coordinate on strategies to which they would not have been led by market relations alone.

In short, this approach to comparative capitalism 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.

In addition, examination of coordinated market economies leads 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.[10] 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 (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 such 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 (Knight 1992). In some cases, such as those of collaborative research and development, the problem is not simply to distribute the gains but also the risks attendant on the enterprise. Deliberation provides the actors with an opportunity to establish the risks and gains attendant on cooperation and to resolve the distributive issues associated with them. In some cases, the actors may simply be a negotiating from positions of relative power, but extensive deliberation over time may build up specific conceptions of distributive justice that can be used to facilitate agreement in subsequent exchanges.

Finally, deliberative institutions can enhance the capacity of actors in the political economy for strategic action when faced with new or unfamiliar challenges. This is far from irrelevant since economies are frequently subject to exogenous shocks that force the actors within them to respond to situations with which they are unaccustomed. The history of wage negotiations in Europe is replete with examples. In such instances, developments may outrun common knowledge, and deliberation can be instrumental to devising an effective and coordinated response, allowing the actors to develop a common diagnosis of the situation and an agreed response.

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 institutions that provide for the exchange of information in other forms, monitoring, and the enforcement of agreements.

The Role of Culture, Informal Rules, and History

Our approach departs from previous works on comparative capitalism in another respect.[11] Many analyses take the view that the relevant outcomes in economic performance or policy follow more or less directly from differences in the formal organization of the political economy. Particular types of wage settlements or rates of inflation and unemployment are often said to follow, for instance, from the organizational structure of the union movement. Because we believe such outcomes are the products of efforts to coordinate in contexts of strategic interaction, however, we reject the contention that they follow from the presence of particular set of institutions alone, at least if the latter are defined entirely in terms of formal rules or organizations.

As we have noted, the presence of a set of formal institutions is often a necessary precondition for attaining the relevant equilibrium in contexts of coordination. But formal institutions are rarely sufficient to guarantee that equilibrium. In multi-player games with multiple iterations of the sort that characterize most of the cases in which we are interested, it is well-know that 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 coordinate on a specific equilibrium and, notably, on equilibria offering high returns in a non-coooperative context.[12] In many instances, what leads the actors to a specific equilibrium is a set of shared understandings about what other actors are likely to do, often rooted in a sense of what it is appropriate to do in such circumstances (March and Olsen 1989).

Accordingly, taking a step beyond many accounts, we emphasize the importance of informal rules and understandings to securing the equilibria in the many strategic interactions of the political economy. These shared understandings are important elements of the 'common knowledge' that lead participants to coordinate on one outcome, rather than another, when both are feasible in the presence of a specific set of formal institutions. By considering them a component of the institutions making up the political economy, we expand the concept of institutions beyond the purely formal connotations given to it in some analyses.

This is an entry point in the analysis for history and culture. Many actors learn to follow a set of informal rules by virtue of experience with a familiar set of actors and the shared understandings that accumulate from this experience constitute something like a common culture. This concept of culture as a set of shared understandings or available 'strategies for action' developed from experience of operating in a particular environment is analogous to those developed in the 'cognitive turn' taken by sociology (Swidler 1986; DiMaggio and Powell 1991). Our view of the role that culture can play in the strategic interactions of the political economy is similar to the one Kreps (1990) accords it in organizations faced with problems of incomplete contracting.

The implication is that the institutions of a nation's political economy are inextricably bound up with its history in two respects. On the one hand, they are created by actions, statutory or otherwise, that establish formal institutions and their operating procedures. On the other, repeated historical experience builds up a set of common expectations that allows the actors to coordinate effectively with each other. Among other things, this implies that the institutions central to the operation of the political economy should not be seen as entities that are created at one point in time and can then be assumed to operate effectively afterwards. To remain viable, the shared understandings associated with them must be reaffirmed periodically by appropriate historical experience. As Thelen emphasizes in this volume, the operative force of many institutions cannot be taken for granted but must be reinforced by the active endeavors of the participants.

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 described as complementary if an increase in the price of one depresses demand for the other. However, complementarities may also exist among the operations of a firm: marketing arrangements that offer customized products, for instance, may offer higher returns when coupled to the use of flexible machine tools on the shopfloor (Jaikumar 1986; Milgrom and Roberts 1990; 1995). Following Aoki (1994), we extend this line of reasoning 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.[13] The returns from 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 that long-term employment is more feasible where the financial system provides capital on terms that are not sensitive to current profitability. Conversely, fluid labor markets may be more effective at sustaining employment in the presence of financial markets that transfer resources readily among endeavors thereby maintaining a demand for labor (cf. Caballero and Hamour 1998; Fehn 1998). Casper explores complementarities between national systems of contract law and modes of inter-firm collaboration, and we identify others in the sections that follow.

This point about institutional complementarities has special relevance for the study of comparative capitalism. It suggests that nations with a particular type of coordination in one sphere of the economy should tend to develop complementary practices in other spheres as well.[14] Several logics may be operative here. In some cases, the institutions sustaining coordination in one sphere can be used to support analogous forms of coordination in others. Where dense networks of business associations support collaborative systems of vocational training, for instance, those same networks may be used to operate collective standard setting. Similarly, firms may pressure governments to foster the development of institutions complementary to those already present in the economy in order to secure the efficiency gains they provide.

If this is correct, institutional practices of various types should not be distributed randomly across nations. Instead, we should see some clustering along on the dimensions that divide liberal from coordinated market economies, as nations converge on complementary practices across different spheres. Nations with liberal market economies tend to rely on markets to coordinate endeavors in both the financial and industrial relations systems, while those with coordinated market economies have institutions in both spheres that reflect higher levels of non-market coordination.

Among the large OECD nations, six can be classified as liberal market economies (the US, 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 six in more ambiguous positions (France, Italy, Spain, Portugal, Greece, and Turkey).[15] However, the latter show some signs of institutional 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 specific kinds of capacities for non-market coordination in the sphere of corporate finance but more liberal arrangements in the sphere of labor relations (see Rhodes 1997).

Although each type of capitalism has its partisans, we are not arguing here that one is superior to another. Despite some variation over specific periods, both liberal and coordinated market economies seem capable of providing satisfactory levels of long-run economic performance. Where there is systematic variation between these types of political economies, it is on other dimensions of performance. We argue below that the two types of economies have quite different capacities for innovation. In addition, they tend to distribute income and employment differently. In liberal market economies, the adult population tends to be engaged more extensively in paid employment and levels of income inequality are high.[16] In coordinated market economies, working hours tend to be shorter for more of the population and incomes more equal. With regard to the distribution of well-being, of course, these differences are important.

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 used to compare many kinds of economies. In particular, we are suggesting that it can be fruitful to consider how firms coordinate their endeavors and to analyze the institutions of the political economy from a perspective that asks what kind of support they provide for different kinds of coordination, even when the political economies at hand do not correspond to the ideal-types we have just outlined.

It is important to note that, even within these two types, significant variations can be found. 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. Because market institutions are better-known, we will not explore the differences among liberal market economies here. But a few words about variation in coordinated market economies may be appropriate, if only to show that variation in the institutional structures underpinning strategic coordination can have significant effects on corporate strategy and economic outcomes.

One important axis of difference among CMEs runs between those that rely primarily on *industry-based coordination*, as do many of the northern European nations, and those with institutional structures that foster *group-based coordination* of the sort found in Japan and South Korea. As we have seen, in Germany, coordination depends on business associations and trade unions that are organized primarily along sectoral lines, giving rise to vocational training schemes that cultivate industry-specific skills, a system of wage coordination that negotiates wages by sector, 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 interconnections cutting across sectors, the most important of which is nowadays the *vertical keiretsu* with one major company at its center.

These differences in the character of business networks have major implications. In Germany, companies within the same sector often cooperate in the sensitive areas of training and technology transfer. But the structure of the Japanese economy encourages sharp competition between companies in the same industry. Cooperation on sensitive matters is more likely to take place within the *keiretsu*, i.e. among firms operating in different sectors but within one 'family' of companies. The sectoral cooperation that takes place usually concerns less-sensitive matters, including recession cartels, licensing requirements and entry barriers as well as the annual wage round (Soskice 1990). Partly for this reason, the attempts of MITI to develop cooperative research projects within sectors have had very limited success; serious research and development remains the preserve of the laboratories of the major companies.

This pattern of *keiretsu*-led coordination also has significant implications for patterns of skill acquisition and technology transfer. Serious training, technology transfer and a good deal of standard-setting take place primarily within the vertical *keiretsu*. Workers are encouraged to acquire firm- or group-specific skills, and notably strong relational skills appropriate for use within the family of companies within which they have been trained. In order to persuade workers to invest in skills of this specificity, the large firms have customarily offered many of them life-time employment. And, in order to sustain such commitments, many Japanese firms have cultivated the capacity to move rapidly into new products and product areas in response to changes in world markets and technologies. This kind of corporate strategy takes advantage of the high levels of workforce cooperation that lifetime employment encourages. To reinforce it, Japanese firms have also developed company unions providing the workforce with a voice in the affairs of the firm.

Japanese firms tend to lack the capacities for radical innovation that American firms enjoy by virtue of fluid market setting or for sector-centered technology transfer of the sort found in Germany. Instead, the group-based organization of the Japanese political economy has encouraged firms there to develop distinctive corporate strategies that take advantage of the capacities for cross-sector technology transfer and rapid organizational redeployment provided by the *keiretsu* system. These translate into comparative institutional advantages in the large-scale production of consumer goods, machinery, and electronics that exploit existing technologies and capacities for organizational change. Although Japan is clearly a coordinated market economy, the institutional structures that support group-based coordination there have been conducive to corporate strategies and comparative advantages somewhat different from those in economies with industry-based systems of coordination.

The varieties-of-capitalism approach can also be useful for understanding political economies that do not correspond to the ideal-type of a liberal or coordinated market economy. From our perspective, each economy displays specific capacities for coordination that will condition what their firms and governments do. 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 object is to advance comparative analysis of the political economy more generally by drawing attention to the way in which firms coordinate their endeavors, elucidating the connections between firm strategies and the institutional support available for them, and linking these factors to patterns of policy and performance. These are matters relevant to any kind of political economy.

Comparative Institutional Advantage

We turn now to some of the issues to which this perspective can be applied, beginning with a question central to international economics, namely, how to construe comparative economic advantage. The theory of comparative economic advantage is important because it implies that freer 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 from other nations. 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 the relative endowment of basic factors (such as land, labor and capital) found in a nation and suggests that trade will lead a nation to specialize in the production of goods that use its most abundant factors most intensively (Stolper and Samuelson 1941).

However, recent developments have dealt a serious blow to this account of comparative economic advantage. The most important of these include 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 there is a real possibility that international movements of capital will even out national factor endowments. As a result, many economists have become skeptical about whether comparative advantages really exist, and many have begun to seek other explanations for the expansion of trade and the geographic distribution of production.

Some explain the growth of trade, and intra-industry trade in particular, as the result of efforts to concentrate production in order to secure returns to scale (Helpman 1984). Others explain the concentration of particular kinds of production in some nations as the result of firms' efforts to secure the positive externalities generated 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 approach predicts that companies making similar products will cluster together, whether in Silicon Valley or Baden-Württemberg (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* type should be concentrated in *that* particular nation, while other nations specialize in other kinds of production. Agglomeration theory explains why firms engaged in similar endeavors cluster in places like Silicon Valley or Baden-Württemberg, 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 very different activities that entail lower-risks, close inter-firm collaboration, and low rates of labor turnover locate in Baden-Württemberg. We still need a theory that explains why particular nations tend to specialize in specific types of production or products.

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 a particular political economy provides firms with advantages for engaging in specific types of activities there. Firms can perform some types of activities, which allow them to produce some kinds of goods, more efficiently than others because of the institutional support they receive for those activities in that political economy, and the institutions relevant to these activities 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 body of work on endogenous growth. Many 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. Endogenous growth theorists have suggested that the institutional setting for production also seems to matter to national rates of growth; and various efforts have been made to specify what features of that setting might be important, generating suggestions that include: 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, and the nature of property rights regimes (Romer 1986, 1994; Grossman and Helpmann 1992; Aghion and Howitt 1998).[17] There is now widespread recognition that the institutional context can condition rates of growth and technological progress.

To date, however, most efforts 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 receive more emphasis in the literature on national innovation systems and some analyses of the competitive advantage (Dosi et al. 1988; Porter 1990; Barro and Sala i Martin 1995; Edquist 1997). Most of this literature, however, looks for the ingredients of *absolute* advantage, i.e. it identifies factors more of which will improve the performance of any economy. We seek institutional features that might confer *comparative* advantage and, thus, better-suited to explaining cross-national patterns of product or process specialization (Zysman 1996).

Broadly speaking, the comparative institutional advantages on which we concentrate correspond to the level of institutional support available for market, as opposed to non-market, coordination in the political economy. The availability of these different modes of coordination conditions the efficiency with which firms can perform certain activities. We focus on their impact on *innovation*. The key distinction we draw is between *radical* innovation, which entails substantial shifts in product lines, the development of entirely-new goods, or major changes to the production process, and *incremental* innovation, marked by continuous but small-scale improvements to existing product lines and production processes. Over the medium to long-term, efficiency in the production of some kinds of goods requires a capacity for radical innovation, while, in other kinds of goods, it requires a capacity for incremental innovation.

Coordinated market economies should be better at supporting incremental innovation. This follows from 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 the skill system provides workers with more than task-specific skills and, ideally, high levels of 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 coordinated market economies normally provide high levels of support for these relational requirements.

By contrast, the institutional features of liberal market economies tend to limit firms' capacities for incremental innovation. Financial market arrangements that emphasize 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 more heavily on their personal career than the firm's success and on the development of general skills rather than the industry- or company-specific skills conducive to incremental innovation. The complexion of contract law and anti-trust 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, knowing they can 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. The concentration of power at the top typical of *corporate organization* in an LME makes it easier for senior management to implement entirely-new business strategies throughout a multi-layered organization delivering complex system goods or services. Such firms can also 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.

Conversely, in CMEs, although dense inter-corporate networks facilitate the gradual diffusion of technology, they make it is more difficult for firms to access radically-new technologies by taking over other companies. Corporate structures characterized by strong worker representation and consensus decision-making make radical reorganization of a firm more difficult, as each of the affected actors contemplates the consequences for his 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. Therefore, to the extent allowed by transport costs and the efficiency of international markets, there should be national patterns of specialization in activities and products; and these should reflect rational responses to the institutional frameworks identified here rather than random geographic agglomeration.

New Perspectives on Comparative Economic Policy-Making

Comparative political economists have been as interested in patterns of economic policy-making as in problems of economic performance. Accordingly, it is appropriate to note that the analytical framework developed in this volume also opens up substantial new perspectives on both economic and social policy-making with relevance for the domestic arena and international relations.

The approach we take to the political economy suggests some important revisions in the way we normally think about the problematic facing economic policy-makers, especially on the supply-side of the economy. 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 (Johnson 1982; Zysman 1983). Broadly speaking, the problem was seen as one of inducing economic actors to cooperate with the government.

From our perspective, however, the principal problem facing policy-makers is quite different: it is one of inducing economic actors to cooperate more effectively with each other.[18] 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.[19] 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 so the task facing policy-makers is to improve the functioning of markets. This is not always easy, but there are some well-known techniques for accomplishing this task. 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 contexts 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 that. Culpepper describes this 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 and the cultivation of a base of common knowledge may be crucial here (Ostrom 1990; Ramirez-Rangel 2000; Culpepper 2001).

This formulation highlights the difficulties facing economic policy-makers, especially when they are seeking to enhance non-market coordination. In such contexts, states cannot simply 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 can encourage but not 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* (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 (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).[20] Let us distinguish between 'market incentive' policies and 'coordination-oriented' policies. The former rely on market-based incentives to induce actors to perform more effectively. 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 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 a good position 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. Business associations and their members will be willing to form such contracts, which usually entail some information-sharing, only if the government's commitment to abide by them is credible. As Wood (1997) observes, however, that commitment will be more credible where the relevant producer groups have enough structural influence to punish the government for any deviations from its 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, or policy-making procedures decentralized enough to allow producer groups many points of access and some veto points. Of course, the influence of producer groups will also depend on the character of those groups themselves: they must be encompassing and powerful enough to mobilize a serious 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 their business and labor associations usually lack the encompassing character required to administer such policies well. In addition, producer groups may 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. This should be an especially important problem in nations where the powers of the state are highly-concentrated in the political executive or where the influence of producer groups inside political parties is very limited.

In contradistinction to some 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 failures of successive British schemes for industrial rationalization were rooted, not in the 'weakness' of the British state, as many who underline the limited levers in the hands of the authorities have suggested, but in its very strength: the Westminster system concentrates so much power in the political executive that producer groups were reluctant to trust it (cf. Sacks 1980; Leruez 1975; Shonfield 1969). Despite its many powers, the French state has also had difficulty implementing schemes for regional or technological development that require coordination among private-sector actors, partly because it concentrates power in Paris and cannot find encompassing producer groups to operate them (Culpepper 1998; Levy 1999).

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 states and the importance of markets to these 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 the 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.[21] 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 (see Alt et al. 1997). We have already argued that the institutional structure of the economy encourages certain kinds of investments. 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 specific or co-specific assets. Political regimes characterized by coalition governments, multiple veto points, and parties that entrench the power of producer groups may also be more conducive to investment in specific assets than ones that concentrate power in highly-autonomous party leaders, because (i) regimes of this sort are well-positioned to provide the framework policies that sustain the institutions supporting specific investments and (ii) because they provide producers with more direct influence over government and the capacity to punish it for deviating from its agreements, such regimes offer investors more assurance that policy will not shift in such a way as to damage the value of assets that cannot readily be switched to other uses.[22] Thus, we should expect to find more investment in specific assets in nations with such regimes. These are issues that merit further investigation.

The Dynamics of Economic Adjustment

Although we have emphasized differences among political economies that have been relatively durable, ours is not a static conception of the political economy. On the contrary, we expect the corporate strategies, policies, and institutions of each nation 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 covered in more detail in subsequent chapters.

The Challenge of Globalization

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 economy. A wave of managerial innovations has 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' that Schumpeter (1950) identified.

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

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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 their government (Berger and Dore 1996; Keohane and Milner 1996; Friedman 1998).[23]

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

To these questions, the conventional view of globalization prominent in the press and much of the 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. And, third, these propositions generate a particular model of the political dynamic inspired by globalization of the following type.

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 thus be determined by the amount of political resistance that labor and the left can mount to proposals for change. But, because international interdependence provides capital with more exit opportunities than it does for labor, the balance of power is said to have shifted dramatically toward capital. In short, this is a model that predicts substantial deregulation and a convergence in economic institutions across nations. Conventional views of globalization contain a 'convergence hypothesis' analogous in force, but considerably less sanguine in implications, to an earlier one based on theories of industrialism (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 the excuse of global pressure to pursue reforms they wanted in any case (Wade 1996; Boyer 1996; Cohen 1996). There is some validity to both arguments. However, the analysis developed in this volume provides another basis for reevaluating the effects of globalization.

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 and the locus of collective bargaining has dropped far more substantially in some nations than in others (Lange et al. 1995; Visser 1999). Trade unions have been weakened by business initiatives and deregulation in LMEs but remain strong in CMEs where cross-class coalitions help to preserve them and some degree of wage coordination.

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.[24] 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 (Vogel 1996; Ellis 1998; Story and Walter 1997; Wood 1997; King and Wood 1999).[25] 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 fifty years without enforcing convergence. Because of comparative institutional advantage, nations often prosper, not by becoming more similar, but by building on their institutional differences.[26]

Importance of institutional complementarities

Institutional complementarities should play an important, if ambiguous, role in these processes of adjustment. On the one hand, they raise the prospect that institutional reform in one sphere of the economy could snowball into changes in other spheres as well. If the financial markets of a CME are deregulated, for instance, it may become more difficult for firms to offer long-term employment. That could make it harder for them to recruit skilled labor or sustain worker loyalty, ultimately inspiring major changes in production regimes (cf. Aoki 1994). Financial deregulation could be the string that unravels coordinated market economies. On the other hand, institutional complementarities generate disincentives to radical change. Firms and other actors may attempt to preserve arrangements in one sphere of the economy in order to protect complementary institutions or synergies with institutions elsewhere that are of value to them. Many German firms have devoted energy to revising rather than abolishing their vocational training schemes because they operate production regimes that demand particular types of skills.

The types of adjustment problems encountered in a coordinated market economy are well-illustrated by some of the recent difficulties afflicting the Germany system of wage coordination.[27] 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 mount resistance to exorbitant wage demands, if necessary orchestrating lock outs of the workforce. In many cases, the major firms in a sector would resist high industry settlements, even if they could afford them, in order to maintain solidarity with smaller firms that could not afford them, in favor increasing their own workers' wages only after an industry agreement had been reached.

In some sectors, the large firms have now rationalized their operations to take advantage of the opportunities presented by higher levels of international integration, moving some operations off-shore and reconfiguring supply chains. As a result, they have become increasingly sensitive to interruptions in production and inclined to veto lock-outs. But this shift in stance has disrupted the existing equilibrium. Without the cooperation of large firms, employers associations can no longer mount effective resistance to wage demands. As a consequence, some smaller or less-efficient firms are dropping out of them; and trade union leaders who would normally be inclined to accept moderate wage increases in order to preserve employment are now finding themselves unable to do so because of pressure from their militants, who are no longer deterred by the threat of lock-outs.[28] The result has been a deterioration in the effectiveness of wage coordination and of employers associations in some German sectors (Thelen and Kume 1999; Thelen and Wijnbergen 2000; see also Manow and Seils 2000).

This is the type of adjustment problem that often arises in coordinated settings. However, there are good reasons for thinking that effective coordination can be restored in most such cases. As Thelen points out, such problems are not unprecedented in coordinated market economies. The equilibrium outcomes on which actors coordinate have been unsettled by economic shocks many times in the past. In each case, new equilibria have been found through processes of negotiation and compromise. The process of adjustment may well entail a period of conflict and sub-optimal outcomes, as each side tests the power and resolve of the other. But the presence of institutions that entrench the power of the actors, whether employers or trade unions, give them strong incentives to cooperate with each other, and the availability of deliberative institutions facilitates coordination.

In 'negotiated economies' such as these, adjustment is often slower than it is in economies coordinated primarily by markets; but markets do not necessarily generate superior outcomes. Where encompassing producer groups have extensive 'strategic capacity' and strong incentives to reach agreement, the results can be equally satisfactory.[29] Coordinated market economies have a track record of meeting these kind of challenges (Hall 1997; Global Economic Forum 2000). In Sweden, for instance, peak-level bargaining broke down during the 1980s because it was no longer meeting the needs of firms facing new technologies and greater international competition; but the trade unions and employers developed new forms of wage bargaining recoordinated at the sectoral level rather than revert to purely-liberal arrangements (Pontusson and Swenson 1995).

In sum, the Varieties of Capitalism approach to political economy is designed not only to identify important patterns of similarity and difference across nations but also to elucidate the processes whereby national political economies change. It anticipates institutional change in all the developed democracies, as they adjust to contemporary challenges, but provides a framework within which the import of those changes can be assessed.

Notes

1. This chapter draws on ideas from 'An Introduction to Varieties of Capitaliasm±', in Peter A. Hall and David Soskice (eds.), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage.* Oxford: Oxford University Press, 2001, pp. 1–68.
2. We concentrate here on economies at relatively-high levels of development because we know them best and 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).
3. Of necessity, this summary is brief and slightly stylized. As a result, it does not do full justice to the variety of analyses found within of these literatures and neglects some discussions that fall outside them. Note that some of our own prior work can be said to fall within them. For more extensive reviews, see Hall (1999, 2001).
4. An alternative approach to neo-corporatism, closer to our own, which puts 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).
5. One of the pioneering works that some will want to compare is Albert (1992), who develops a contrast between the models of the Rhine and America that parallels ours in some respects. Other valuable efforts to identify varieties of capitalism that have influenced us include Hollingsworth and Boyer (1997), Crouch and Streeck (1997), and Whitley (1999).
6. There are a few notable exceptions that influence our analysis, including the work of Scharpf (1988, 1997) and Przeworski and Wallerstein (1984).
7. In other works by the contributors to this volume, 'organized market economy' is sometimes used as a term synonymous with 'coordinated market economy'. Although all of the economies we discuss are 'coordinated' in the general sense of the term, by markets if not by other institutions, the term reflects the prominence of strategic interaction and hence of coordination in the game-theoretic sense in CMEs.
8. Although we do not emphasize it here, this is not meant to deny the observation of Granovetter (1985) and others that market relations are usually underpinned by personal relationships of familiarity and trust.
9. 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.

10. One political economist who has consistently drawn attention to the importance of deliberation is Sabel (1992; 1995) and the issue is now the subject of a growing game-theoretic literature (see Elster 1998).
11. Here we depart from some of our own previous formulations as well (cf. Hall 1985; Soskice 1990).
12. Culpepper documents this problem and explores some solutions to it in this volume and Culpepper 1998.
13. Conversely, two institutions can be said to be 'substitutable' if the absence or inefficiency of one increases the returns to using the other. Note that we refer to total returns, leaving aside the question of to whom they accrue, which is a matter of property rights, and we define efficiency as the net returns to the use of an institution given its costs.
14. Of course, there are limits to the institutional isomorphism that can be expected across spheres of the economy. Although efficiency considerations may press in this direction, the presence of functional equivalents for particular arrangements will limit the institutional homology even across similar types of political economies, and the importance to institutional development of historical processes driven by considerations other than efficiency will limit the number of complementarities found in any economy.
15. Luxembourg and Iceland have been omitted from this list because of their small size and Mexico because it is still a developing nation.
16. The Gini Index is a standard measure for income inequality, measured here as post-tax, post-transfer income, reported in the Luxembourg Income Study for the mid to late 1980s. Full-time equivalent employment is reported as a percent of potential employment and measured as the total number of hours worked per year divided by full-time equivalent hours per person (37.5 hours at 50 weeks) times the working age population. It is reported for the latest available of 1993 or 1994.
17. Note that strategic trade theory focuses on a similar set of variables (cf. Krugman 1986; Busch 1999).
18. The fotmulations in these paragraphs are influenced by the work of Pepper Culpepper (1997; forthcoming) and owe a good deal to conversations with him.
19. Here, as elsewhere in this chapter, when we refer to 'more effective' coordination, we mean coordination by the actors on actions providing equilibria that are Pareto-superior to those that preceded them in the sense that they make at least some of the actors better off without making others worse off.
20. The analysis in the following paragraphs owes a great deal to Wood (1997) as well as his chapter in this volume.
21. 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 US provides a notable exception to this rule.
22. Katzenstein (1987) shows how the structural features of the German political system hem in most governments, while Gamble and Walkland (1987) show how frequently British governments have changed regulatory regimes important to business.
23. We use the term 'globalization' 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.
24. 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, we recognize that all deregulation is implicitly a form of reregulation (Vogel 1996).

25. We predict some, if more limited, deregulation in CMEs because, alongside non-market institutions, they also use market mechanisms whose operation can be improved by a measured amount of deregulation.
26. The effects of trade integration seem to have fallen, less substantially on the differences between CMEs and LMEs, and more heavily on practices of state intervention of the sort once prominent in France and the developing world, as governments found that *dirigiste* policies cannot ensure competitiveness on international markets (cf. Hall 1990; Ziegler 1997; McArthur and Scott 1966).
27. We owe this example to Kathleen Thelen (see Thelen and Kume 1999; Thelen and Wijnbergen 2000).
28. Of course, with the advent of economic and 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 (see Hall and Franzese 1998).
29. 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.

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