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# **How Many Varieties of Capitalism?**

Comparing the Comparative Institutional Analyses of Capitalist Diversity

**Gregory Jackson and Richard Deeg** 



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#### **Abstract**

This essay reviews the development of approaches within the comparative capitalisms (CC) literature and points to three theoretical innovations which, taken together, define and distinguish these approaches as a group. First, national economies are characterized by distinct institutional configurations that generate a particular systemic "logic" of economic action. Second, the CC literature suggests a theory of comparative institutional advantage in which different institutional arrangements have distinct strengths and weaknesses for different kinds of economic activity. Third, the literature has been interpreted to imply a theory of institutional path dependence. Behind these unifying characteristics of the literature, however, lie a variety of analytical frameworks and typologies of capitalism. This paper reviews and compares these different frameworks by highlighting the fundamental distinctions among them and drawing out their respective contributions and limitations in explaining economic performance and institutional dynamics. The paper concludes that the way forward for this literature lies in developing a more dynamic view of individual institutions, the linkages between domains, and the role of politics and power.

# Zusammenfassung

In diesem Discussion Paper werden Ansätze der Comparative-Capitalism-Diskussion vorgestellt. Sie haben drei theoretische Innovationen gemein. Erstens: Nationale Ökonomien werden durch institutionelle Konfigurationen geprägt, die auf jeweils eigene "systemische Logiken" wirtschaftlichen Handelns hinwirken. Zweitens: Die Comparative-Capitalism-Literatur beinhaltet eine Theorie der komparativen institutionellen Vorteile, der zufolge institutionellen Konfigurationen spezifische Wettbewerbsvorteile zugeordnet werden können. Zudem, drittens, beinhaltet die Comparative-Capitalism-Literatur auch eine implizite Theorie der Pfadabhängigkeit. Trotz dieser Gemeinsamkeiten unterscheiden sich die Ansätze hinsichtlich analytischer Zugriffe und Vorschläge zur Typologisierung nationaler Kapitalismen. Beim Vergleich dieser Ansätze werden besonders deren Stärken und Schwächen bei der Analyse wirtschaftlicher Performanz und institutioneller Entwicklungsdynamiken hervorgehoben. Der Aufsatz kommt zu dem Schluss, dass die Comparative-Capitalism-Literatur in dreierlei Hinsicht der Weiterentwicklung bedarf: hinsichtlich einer dynamischeren Modellierung von Institutionen, einem besseren Verständnis der Interaktion institutioneller Domänen und der Berücksichtigung von Macht und Politik in der Analyse von Produktionsregimen.

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#### Introduction

The notion of distinct national varieties or systems of capitalism has gained considerable currency in the last two decades. During the 1980s, significant differences were noted between the excellent economic performance of Germany and Japan and the industrial decline of Britain and the United States. These differences were attributed by many to the distinct institutional arrangements of German and Japanese capitalism. The remarkable competitiveness of these ostensibly more "organized" economies, where the market played a lesser role, was seen in their ability to mobilize collective inputs and long-term commitments. Unlike in neoclassical economics, the emerging literature on institutional economics and economic sociology was coming to understand efficiency in terms of strategic complementarities among organizational elements, which led to the argument that successful capitalism came in more than one variety (Milgrom/Roberts 1994; Sorge/Warner 1986; Aoki 1984). The demise of state socialism in Eastern Europe at the end of the 1980s intensified the debate over whether capitalism is a single or variable type of economic system (Stark/Bruszt 1998) and whether Anglo-American institutions provided the best model for transitional economies. This general debate took another major turn in the late 1990s, as potential virtues of market-led U.S. capitalism reasserted themselves in areas such as information technology (IT).

Even while capitalist diversity was being rediscovered and explored by scholars, economic globalization increasingly called the presumption of nationally distinct forms of capitalism into question. During much of the postwar period, the various institutional domains of the economy were largely organized within the bounds of the nation state. Competition occurred in the form of industrial exports across these boundaries. Today, mobile factors of production are less constrained by national boundaries and rules. This causes more competition among regimes with different institutional environments to provide conditions favorable to production. The task of coordinating transnational policy, performed most strikingly by the European Union, is becoming both an unavoidable and indispensable part of economic policy making. Consequently, a vigorous debate has emerged over whether globalization is leading to convergence on a single model of capitalism, or whether capitalism will retain nationally distinct colors and forms (Berger/Dore 1996).

Capitalist diversity is now being studied by an international academic community with eclectic backgrounds in political science and sociology, as well as Marxist and institutional economics. The literature defies a tightly unified approach, but its authors share a common agenda of relating institutional variables with economic performance outcomes. While regions and sectors are important units of analysis, this review will focus on debates over national forms of capitalism. Along with the "new comparative economics" (Djankov et al. 2003), this literature is centrally concerned with the impact of differences in institutions on economic performance. But distinct from the "new comparative economics," the literature draws upon various insights from economic sociology, such as the emphasis on the embeddedness of business firms within social

contexts and differences in the social organization and governance of firms in different economies. The comparative capitalisms literature is likewise distinguished by its focus on international comparison and a more synthetic understanding of political economy with regard to the complementarities between different sets of institutions.

This essay reviews the development of various approaches within what we call the comparative capitalisms (CC) literature and points to three theoretical innovations which, taken together, define and distinguish these approaches as a group from other comparative approaches to the study of the economy. First, national economies are characterized by distinct institutional configurations that generate a particular systemic "logic" of economic action.<sup>2</sup> In particular, the CC literature offers an institutional theory of the supply side, examining how various institutions shape the collective supply of inputs (e.g., skills, capital) available to firms and other economic actors. Second, the CC literature suggests a theory of comparative institutional advantage in which different institutional arrangements have distinct strengths and weaknesses for different kinds of economic activity. This argument stresses the way in which institutional complementarities between functionally distinct domains (e.g., finance, labor markets) may lead to multiple, efficient combinations of institutional variables. In short, the CC literature links an integrated study of political and institutional variables with a variety of distinct economic outcomes. Third, the CC literature has been interpreted to imply a theory of institutional path dependence. Contrary to notions of convergence on a single model of best practice, the literature emphasizes that common pressures may be refracted through different sets of institutions, thus leading to different sorts of problems and calling forth distinct solutions. Given their institutional interdependence, national models will evolve in an incremental and path-dependent manner.

Behind these unifying characteristics of the CC literature, however, lies a variety of analytical frameworks and typologies of capitalism. Indeed, no agreement exists on the number of distinct types of capitalism, or on the dimensions used to characterize the various types of capitalism. This diversity of the literature reflects the different ordering principle(s) used to compare capitalisms, the different institutional domains used in constructing typologies, and the particular concepts or dimensions used to describe institutions within a given domain. Perhaps less explicitly, different typologies also reflect varying conceptions of institutions or, more precisely, different conceptions of how institutions constrain and relate to actor behavior. Taken together, the diverse approaches within the literature often suggest different theories and predictions about economic

While the new comparative economics focuses on how institutions help secure property rights, the comparative capitalisms literature focuses on how institutions help economic actors solve various coordination problems, such as the way firms coordinate wages with labor or the terms of investment with providers of capital. This literature also looks beyond the market-versus-state debate to other forms of economic "governance," such as networks or self-governing associations (Dallago 2004).

<sup>2 &</sup>quot;Logic" means the typical strategies, routine approaches to problems, and shared decision-making rules that produce predictable patterns of behavior by actors within the system.

and institutional change, as well as a distinct understanding of the sources of growth and economic dynamism present within each model.

These debates naturally lead to the question of which typology is "best." Although there would be some advantages to establishing a more unified typology of capitalism, it is unlikely and perhaps even undesirable on the whole. In this paper, we do not seek to unify these typologies, reduce them in number, or advance another typology of capitalism. Rather, we seek to review and compare these different typologies by highlighting the fundamental distinctions among them and drawing out their respective contributions and limitations. The early CC literature explored how institutions contribute to economic performance, but paid little attention to how institutions themselves are created and change. The emphasis was on mapping the comparative statics of distinct and coherent national "models" wherein institutional elements are often seen as mutually reinforcing. However, the further development of comparative studies of capitalism depends on the ability to generate a more dynamic theory of institutional change. A comparison of the different comparative typologies of capitalism should help us better discern their respective abilities to understand, accommodate, and predict patterns of institutional change.

This paper is organized in four parts. Section 2 briefly traces the intellectual antecedents of the CC literature in earlier comparative studies. Section 3 selectively reviews a variety of more specialist comparative studies focused on particular institutional domains and shows that these later came to constitute important building blocks of the CC literature. Section 4 reviews and analyzes some of the leading frameworks within the literature. Section 5 highlights the similarities and differences among typologies and presents criteria for evaluating the utility or advantage of different typologies within the literature. The paper concludes with a brief discussion of the challenges that need to be confronted in order to advance the CC literature.

### Intellectual antecedents and alternative views of capitalism

The CC literature stands in obvious and stark contrast to the neoclassical understanding of political economies, which denigrates the importance of nonmarket institutions (beyond those needed to sustain markets) or sees them as hindrances to the functioning of markets. In the neoclassical view, the price mechanism in competitive markets leads to the most efficient outcome (with some minor exceptions). The state plays only a small role in correcting market failures. Moreover, if markets are unfettered, no important institutional differences between national economies should exist, and they should converge in market organization and performance.

Many early discussions over different types of capitalism were focused on the role of nonmarket institutions but were framed in terms of evolutionary stages; this was particularly true of Marxist and neo-Marxist approaches.<sup>3</sup> These approaches emphasize a single logic of capitalism and stage-like historical evolution. In a famous example, Rudolf Hilferding (1910, 1924) argued that, as capitalism developed, concentration increasingly displaced competitive markets. Over time, large industrial firms and banks dominated markets through their large size and the formation of cartels and trusts. During the interwar period, as the state became increasingly active as a regulator of the economy, and as concentration facilitated planned production in the private sector, the system evolved into "organized capitalism." Another entire strand of Marxist theory, such as world systems theory, sees capitalism as a global system rather than discrete national capitalisms that may be linked through trade (Wallerstein 1979). Later approaches, including those in CC literature, increasingly distance themselves from such determinist historical conceptions (even though they are not ahistorical) and monistic theories of capitalism.

An important direct precursor to the CC literature was the *modernization* approach. Andrew Shonfield's seminal 1965 treatise, "Modern Capitalism," perhaps best captures this tradition. In this work Shonfield elucidated the diverse national institutional configurations that then existed and how these configurations represented distinct approaches to economic modernization. In each system Shonfield identified the actors with the strategic capacity to guide modernization through planning and inducing desired investment behavior by economic actors. Shonfield was primarily concerned with the diverse ways state actors could intervene in their economies. How each state did this depended heavily on the particular institutional configuration – in good part historically derived - of both state and economy. This emphasis on the state reflected the general fact that the postwar era was characterized by historically high levels of state economic intervention in the advanced capitalist economies. Shonfield's work suggested convergence at a very broad level toward a political-economic model based on mixed public and private ownership, strong planning capacities, and the increased role of associationally organized capital and labor, though the specifics in each national case would vary substantially. In many ways, Shonfield represents an intellectual bridge between the prewar theories, which were dominated by the notion of stages of development, and the later CC approaches, which eschewed stages in favor of nationally distinctive models and trajectories.

<sup>3</sup> However there were, to be sure, non-Marxist and nonteleological frameworks such as the one worked out by Gras ([1939]1971) who, in the 1930s, distinguished between petty, mercantile, industrial, financial, and national capitalisms (the latter referring widely to fascism, Nazism, and the American New Deal as systems in which public capital comes to supplement private capital).

<sup>4</sup> Organized capitalism, as conceived by early Marxists, was distinct from latter notions of "coordinated capitalism": the former term embodied a much broader conception of state-society coordination in which national and class interests were given much consideration, and individual economic interests were restrained (Höpner 2003).

There is also a long tradition of *business studies*, i.e., the study of the development of particular firms and industries, which has provided an important empirical basis for the CC literature. One of the most prominent scholars in this field is Alfred Chandler, who chronicled the rise of major American corporations and their business organization models, most notably the rise of integrated managerial hierarchy – what he called "managerial capitalism" (Chandler 1978, 1990). The emergence of stable and autarkic hierarchies in the United States was connected to the competitive nature of markets and extensive utilization of Fordist mass production. When comparing the U.S. to other nations, Chandler found a similar rise of corporate hierarchy but they were distinct in form and coupled with different approaches to production: In Germany firms tended to cooperate more extensively with each other (via cartels e.g.), hence he termed this "cooperative managerial capitalism"; in Britain "personal capitalism" prevailed, reflecting the prominent role still played by owner-industrialists. Chandler's typology of capitalism based on different forms of corporate hierarchy and the organization of production complemented the modernization approach's emphasis on the role of the state.

Michael Porter, in "The Competitive Advantage of Nations" (1990), brought business studies and modernization approaches much closer together - and thus closer to the present CC literature. In this multi-nation study, Porter observed that nations tended to excel in certain industries over long periods of time, based on competitive advantages rooted in accumulated institutional capacities that were embedded in technology and production skills. Increased global trade only reinforced such advantages. Porter also stressed the key role of the financial system in determining broader industrial capacities. In particular, he advanced the argument that nations with financial systems dominated by securities markets excelled at funding and promoting radical technological innovation because they were able to provide risk capital. Conversely, bank-dominated financial systems supported better long-term investment and investment in "intangible assets" (assets not easily priced by the market) such as research and development efforts or employee training. Porter's ideas are echoed quite clearly in many CC typologies that emphasize the importance of finance and the idea that different national institutional configurations support certain kinds of economic activity (production) better than others.

Institutions were also central to the 1970s *neo-corporatism* literature that emerged to explain the divergent responses and capacities of different nations in managing the growing problems of inflation and unemployment (Berger 1981; Schmitter/Lehmbruch 1979; Goldthorpe 1984). Whereas prior comparative approaches tended to emphasize the key role of the state, hierarchies, the organization of production, financial institutions, and control over investment, this body of literature placed trade unions and collective wage-bargaining institutions at the center of analysis. It documented and explored a widespread (but not universal) trend toward the inclusion of labor and capital into the formation and implementation of economic policy. Most of this literature suggested that nations with a strong neo-corporatist capacity were better able to manage the problems of inflation and unemployment (Goldthorpe 1984; Kurzer 1993; Scharpf

1987). Institutions were central to this analysis because neo-corporatism worked only when there was a prior institutional basis for effective collective action in the form of *peak associations*. Later work showed the importance of central banks and an accommodating monetary policy in making neo-corporatist bargaining successful (Scharpf 1988), and the importance of the party system as well (Katzenstein 1985). The neo-corporatist emphasis on the structure and nature of a nation's labor movement and collective bargaining system provided the CC literature with an initial understanding of how the industrial relations system interacts with other institutional features of a national political economy.

Moving from the macro-focus of neo-corporatism, French "regulation theory" creatively linked the roles of macro- and micro-level labor institutions. Regulation theory was rooted in Marxism but shifted away from a conception of capitalist development as a progression of stages to a conception of "varieties" of capitalism. The theory ambitiously aimed to replace a theory of general equilibrium with a theory of social regulation over capitalism (Aglietta 1979). While capitalism is defined by the accumulation of capital, the social relations of capitalism may take many institutional forms. Unlike the principle of a single equilibrium, different modes of regulation, such as Taylorism or Fordism, give rise to different cyclical or structural crises. Robert Boyer was perhaps most influential in turning regulation theory into a tool of comparative analysis by using it to examine the institutional components of the wage/labor nexus at the micro-level – the organization of work, stratification of skills, mobility of workers within and between firms, principles of wage formation and disposal of wage income (Boyer 1988). Boyer further demonstrated great national diversity in the institutional forms of the wage-labor relation at the macro-level – the relations between unions, employers, and the state; the patterns of collective bargaining and wage formation; the use of social security, etc. As its empirical scope broadened, regulation theory made excellent contributions to the study of macroeconomic performance and forms of labor organization (Boyer 1997, 1988, 2003; Boyer/Yamada 2000).

One final predecessor was the so-called "societal effect" approach, associated with the Laboratoire d'Economie et de Sociologie du Travail (LEST) in Aix-en-Provence, that compared micro-aspects of work organization, primarily in France, Germany, and the United Kingdom (Maurice/Sellier/Silvestre 1986; Sorge/Warner 1986). The basic method was a matched-pairs comparison of particular factories, not unlike Ronald Dore's groundbreaking "British Factory, Japanese Factory," (1973) with the intent of isolating those shop-floor differences attributable to societal differences and then linking these closely with an analysis of various social institutions in the respective countries. Here firms were compared in relation with their social contexts, conceived and compared in terms of several interrelated sets of institutions: organization, skill formation, industry structure, industrial relations, and innovation (Sorge 1999). The methodological sophistication of these studies has been underappreciated, but they actually set the stage for truly "holistic" comparisons that understood institutional settings as systemic configurations rather than isolated attributes – a cornerstone of the CC lit-

erature. These differences in societal contexts of work organization were also related to distinct business strategies and competitive strengths (Sorge 1991).

Finally, the popular comparison of distinct types of capitalism owes considerable debt to Michel Albert's book, "Capitalism vs. Capitalism" (Albert 1993). Albert described two broad types of capitalism: a Rhineland type and an Anglo-Saxon type. Albert's tour de force covers a stunning array of differences in the way private economic activity is organized. The recurrent theme is the Anglo-Saxon preference for "keeping options open" and allowing for short-term market flexibility in contrast to the sticky commitments and long-term thinking in the Rhineland model. Despite the author's insightful discussion of corporate organization, finance, and the insurance sector, Albert's aim was policy-oriented and polemical. He was not proposing an integrated framework with which to compare different types of economies.

# Varieties of capitalism: the building blocks

These antecedents point to three analytical premises that inform and unify the diverse analytical frameworks within the CC literature. First, following Max Weber (1978), economic action is viewed as a special case of social action that "needs to be coordinated or governed by institutional arrangements" (Hollingsworth/Schmitter/Streeck 1994: 4). The concept of "embeddedness" from economic sociology stresses that economic action takes place within social contexts and is mediated by institutional settings (Granovetter 1985; DiMaggio/Powell 1991; Streeck 1997). Hence, the agenda goes beyond the comparison of state economic policies and formal institutions to examine differences in the social organization of private economic activity. A corollary is recognizing that markets and hierarchies (Williamson 1975) are not the only coordination (governance) mechanisms for economic behavior: Other mechanisms include social networks (Powell 1991), associations (Streeck/Schmitter 1985), and state intervention.

Second, the CC literature adopts a comparative approach that focuses on similarities and differences between institutions and governance mechanisms. The central research task is to understand the impact of institutional differences on various economic outcomes (e.g., growth, efficiency, innovation). Most studies focus on institutional diversity at the national level (or families of nations), although this complements similar research comparing regional and sectoral variation of institutional arrangements (Herrigel 1996; Hollingsworth/Schmitter/Streeck 1994).

Wolfgang Streeck (2001: 2) describes an economy as socially embedded "... insofar as the transactions by which it is made up are either supposed to serve also other than economic purposes (in other words, are constrained by non-economic objectives, such as social cohesion or national defense), or are supported by non-economic social ties (i.e., are facilitated by particularistic relations such as tribalism or paternalism, or by enforceable social obligations, engendering trust among economic actors)."

Third, the CC literature conceptualizes these various institutions within an economy as being interdependent. An attempt is made to develop a synthetic understanding of how different domains of the economy relate to one another and give rise to specific, non-random configurations of capitalism. Key concepts for understanding interdependence include institutional linkages, tensions, and complementarities (Aoki 2001; Milgrom/Roberts 1995). Complementarity may be defined as situations where the difference in utility between two alternative institutions U(x') - U(x'') increases for all actors in the domain X, when z' rather than z" prevails in domain Z, and vice-versa. If conditions known as "supermodularity" exist, then x' and z' (as well as x" and z") complement each other and constitute alternative equilibrium combinations (Aoki 2001; Milgrom/Roberts 1990). Complementarities therefore do not imply economic efficiency in any absolute sense and may even help to explain why suboptimal organizational arrangements are sustained. In short, complementarities imply a functional interdependence so that institutions in different domains affect the outcomes or utility of institutions across different domains. Such interdependence may also involve tensions when institutions imply conflicting principles of rationality (Lepsius 1990). Tensions may have destabilizing or adverse economic effects, but may also serve positive economic functions by creating space for diverse organizational patterns and maintaining requisite variety for future adaptation in a population of firms (Stark 2001).

In sum, the CC literature looks at economic activity as being socially embedded within institutional contexts and compares these contexts across different scales, such as sectors, regions and especially nations. Institutions are seen as creating a particular contextual "logic" or rationality of economic action (Biggart 1991) or exerting a "societal effect" on economic organization (Maurice/Sellier/Silvestre 1986). This configurational approach and holistic type of comparison are central features of the CC literature. Yet much debate remains, such as over the extent to which various institutions are tightly or loosely coupled in a causal sense (Roberts 2004). In general, institutional interdependence, along with social embeddedness, is seen as a major source of institutional stability in national systems.

# The building blocks

Before turning to the synthetic comparisons of national models of capitalism, this section reviews the building blocks of the CC literature, namely comparative studies dealing with particular domains of economic activity: financial systems, corporate governance, inter-firm relations, industrial relations, skill creation, work organization, welfare states, and innovation systems. By necessity, the scope of this review is highly selective and draws only on works with relatively broad comparative scope or theoretical depth.

<sup>6</sup> That is, complementarities must not be equated with similar principles of organization (Crouch 2005).

Figure 1 Selected institutional domains in capitalist economies

Institutional domain	Representative typology	Selected examples of performance effects	
Financial systems	Bank-/market-based	Investment pattern; corporate governance	
Corporate governance	Insider/outsider or sharehold- er/stakeholder	Firm strategy; income distribution; skills; investment; innovation	
Inter-firm relations	Arm's length relation/ obligational relation	Cooperation and competition; corporate governance; innovation	
Industrial relations	Conflictarian/pluralist/ corporatist	Internal vs. external labor market flexibility; wage levels; unemployment	
Skill creation	State/associations/market/firms	Income distribution; work organization; innovation; industrial relations; firm strategy	
Work organization	Fordism/flexible specializa- tion/diversified quality produc- tion	Business strategy; industrial relations	
Welfare states	Liberal/conservative/social democratic	Labor market participation; patterns of savings and investment; organization of labor unions	
Innovation	Radical/incremental	Work organization; business strategy; employment	

These studies examine how social and political variables influence the economic functioning and performance across countries within these domains.

An important theoretical point is that the CC literature does not have established criteria for dividing an economy into a fixed number of institutional domains. Nor do the various frameworks within this approach necessarily agree on the defining logic within each domain, on the institutional mechanisms considered most important in each domain, or on the domains that have to be included when constructing a typology of capitalism. Indeed, the diversity and complexity of various typologies of capitalism reflects in part the fact that they are "typologies of typologies," i.e., national or "grand" typologies are assemblages (syntheses) of institutional domain typologies. Even if scholars agree on which domains to include, different typologies may still be used to describe relationships within those domains and thereby generate different national typologies.

# Financial systems

Financial systems channel household savings into investment in the productive sector. There are two basic channels between savers and investors (borrowers); the first channel is mediated by institutions (usually banks) that aggregate savings, match the maturities of savings and investment in order to minimize liquidity risks, and evaluate and monitor investment risks. The second channel is a direct transfer from savers to borrowers via securities markets. Economic historians have long noted international differences in

the relative roles played by banks and securities markets in financing industrialization. Alexander Gerschenkron (1966), e.g., provided a classic description of how so-called universal banks functioned as a substitute for capital markets in late-industrializing countries such as Germany during the nineteenth century. While Gerschenkron's thesis has been debated, both in terms of the historical record (Cameron 1972) and its lack of attention to political variables (Vitols 2001), the basic distinction between banks and markets remains central in comparative studies. Indeed, the simplest (and perhaps most common) typology of financial systems divides them into "bank-based" and "market-based," depending upon which channel is dominant (Berglöf 1991; Deeg 1999; Edwards/Fischer 1994). Bank-based systems are typically associated by the CC literature with more "organized" forms of capitalism; conversely, securities-market-oriented systems are associated with market-dominated capitalisms.

Some early CC literature distinguished not two but three types of financial systems based on the respective roles of financial institutions, industry, and the state: capital market systems (U.S., Britain), negotiated credit systems dominated by relatively autonomous banks and some state assistance (Germany, Sweden), and credit-based systems using state ownership or control over investment (France, Japan) (Zysman 1983). This tripartite dichotomy was also useful to many scholars, though the widespread withdrawal of interventionist states from a direct role in financial markets has arguably reduced its utility.

Sigurt Vitols extended this line of work by showing how two key dimensions of financial systems (banks vs. markets, and the degree of state intervention in credit allocation) are linked to a broader set of institutions (Vitols 1996, 2001). The fundamental choice between banks and markets is not only influenced by state regulation (Verdier 2001), but also by the relative supply and demand for different types of financial assets. Within the company sector, small firms generate demand for credit, while the large fixed costs of issuing equity restrict demand for equity to large firms. For households, high-income groups are the most supportive of market-based systems due to their greater capacity to invest and absorb short-term risks. Countries with greater income equality tend to have high levels of savings by middle-income groups, who may be most supportive of bank-based systems. The state also impacts the demand for financial assets, particularly securitized debt that competes with bank deposits as a low-risk form of investment. Finally, the method of pension savings shapes the demand for long-term investment in equities (Jackson/Vitols 2001). This line of work highlights the extensive embeddedness and potential interdependencies between financial systems and other key institutional domains.

While widely used, the banks-versus-markets dichotomy is problematic in that nearly all financial systems utilize both channels, and it is unclear at what point a given financial system would be seen as shifting from one system to the other. Moreover, comparing the aggregate flow of funds to industrial investment shows internal company sources to be the most important in both market- and bank-centered cases (Corbett/Jenkinson 1996). Equity finance makes surprisingly small contributions to company financing even in market-oriented countries, and the dominance of bank finance was hard to demon-

strate in any country except for Japan.<sup>7</sup> Clearer differences are found in the specific forms of monitoring associated with different financial systems and their impact on the distribution of corporate rewards.<sup>8</sup> This kind of data shows why, in the end, the practice of distinguishing among financial systems often leads to ambiguous results.

### Corporate governance

Corporate governance is a central institutional building block within most CC frameworks. Within the framework of agency theory, corporate governance is studied in terms of how shareholders ("principals") control management ("agents") to act in their interests. Different mechanisms may be used to reduce the costs associated with this control and to involve different trade-offs between liquidity and control: incentives contracts (pay for performance), reputation building, monitoring by banks or other blockholders, and markets for corporate control. Early comparisons posited two basic approaches to controlling agency costs: in some systems, banks play a central role by monitoring corporate management through a combination of debt and equity stakes; in other systems, markets are the dominant mechanism for corporate control (Berglöf 1991; Edwards/Fischer 1994). Later studies distinguished countries on the basis of whether ownership was concentrated among large blockholders, such as families, banks, and corporations, or dispersed among small shareholders within liquid capital markets, thus producing a typology of blockholder vs. dispersed ownership for corporate governance systems (Becht/Roel 1999).

Alternative frameworks compare national diversity in terms of relations among multiple stakeholders. The corporation is often described in terms of the transaction costs involved in making firm-specific investments in employee skills or business cooperation. A broad difference exists between countries that include stakeholders such as employees in corporate governance and countries that have an exclusively shareholder-oriented form of capitalism (Kelly/Kelly/Gamble 1997; Parkinson/Kelly 2001). These discussions reemerged in the more mainstream economics literature and public policy

Macroeconomic studies show that the relative proportion of assets held by banks or stock markets is inversely related (Black/Moersch 1998) and investment in bank-based countries is significantly related to the level of bank assets, while investment in market-based countries is dependent on the size of stock markets.

For example, in firms with close relations to banks, investment is less sensitive to liquidity constraints (Elston/Albach 1995; Hoshi 1994).

<sup>9</sup> Employee voice can increase trust between labor and management, facilitating such investments, improving internal information flows, and creating gains in dynamic X-efficiency (Leibenstein 1966). Giving "voice" to employees as non-contractual conditions of the contract lessens the need for both sides to specify terms and conditions of employment contracts in advance and thus creates more flexibility within the organization. Likewise, a large body of work on transaction cost economics stresses that intercorporate ownership may be an efficiency-enhancing "network" governance mechanism that can lower transaction costs and improve industrial organization with strategic trading partners (Powell 1991).

debate as a distinction between systems with insider control by incumbent management, employees and suppliers, and those with outsider control by shareholders and independent outside directors (Maher/Andersson 1999).

Existing typologies also have other conceptual limits (Aguilera/Jackson 2003). They distinguish only between two groups of countries in rather stylized terms, such as the United States vs. Germany. And they describe corporate governance in terms of a single dominant actor, such as banks, shareholders, or insiders. Moreover, different typologies are grounded in different underlying dimensions of economic efficiency. Yet it appears impossible to say a priori which dimension of efficiency will be most important in shaping corporate governance. Moreover, social and political factors are also seen as increasingly important is explaining the rise of different corporate governance models (Fligstein 1990; Roy 1997).

More recently, attempts have been made to relate more systematically diverse organizational patterns to specific institutional variables by way of comparison (Aguilera/Jackson 2003; Fligstein/Freeland 1995). For example, legal differences in corporate law and financial market regulation are seen as key determinants of national differences in corporate ownership patterns (La Porta/Lopez-de-Silanes/Shleifer 1999; La Porta et al. 1998; La Porta 1999; Roe 1994; Coffee 2000, 2001). Also, the different role of labor and the impact of political contention have been shown to be decisive factors influencing the national diversity of corporate governance (Jackson 2001; Roe 2003; Blair/Roe 1999; Gourevitch/Shinn 2005).

#### Industrial relations

There is a long and strong tradition of comparing the roles of employers, labor unions and employees, and the state in governing employment transactions. Employment relations may be governed at different levels: firm, multiple firms, industrial sector, national, or international. The comparative literature identifies a large number of country-specific patterns and documents variation along a wide range of dimensions: the structure of labor unions, the organization of employers, the institutions of collective bargaining, the degree of state intervention, the extent and forms of industrial conflict and forms of workplace participation in managerial decisions (Bean 1994; Bamber/Lansbury 1998; Baglioni/Crouch 1990; Streeck 1992b).

Colin Crouch (1993) identifies three broad models of interest intermediation in Europe: conflictarian relations (e.g. France or Italy), pluralist bargaining (UK), and corporatism (Sweden or Germany). Each of these models differs with regard to the way labor

<sup>10</sup> Mainstream research has become increasingly agnostic about specifying which type of system is more economically efficient in light of the disappointing results of econometric studies (Roe 2000: 5–7). Moreover, economic efficiency depends not only on the technological environment and relative factor prices, but also on the institutional environment (Aoki 2001).

unions and employers are organized, the extent and role of state intervention, and the patterns of bargaining and change. Other authors suggest a fourth model to differentiate between Germany and Scandinavian countries (Ebbinghaus/Visser 1997) in terms of their degrees of centralization and linkages to the welfare state.

Spawned in part by intense political debates in recent years over labor market reform in Europe, recent distinctions among industrial relations systems have focused on a dichotomy between regulated, centralized and deregulated, decentralized systems. Regulated, centralized systems are characterized generally by higher levels of employment protection, higher wage replacement rates for unemployment, institutions for labor participation in management (e.g., works councils), and collective bargaining institutions – operating at the sectoral, regional, or national level – that reduce wage inequality across sectors and skill levels. Conversely, deregulated systems have weak to no employment protection regulations, less generous unemployment benefits, no or discretionary institutions for workforce participation, and firm-level collective bargaining or individualized labor contracts.

#### Skill creation

This institutional domain is not always considered to be important by comparative capitalism approaches and thus does not figure into many of them (at least as a distinct domain). However, for others working within the CC approach, skill creation systems are seen as essential determinants of the overall system and significantly influence other domains such as work organization, corporate governance, and industrial relations (Thelen 2004). The creation of employee skills is subject to considerable national and sectoral variation. Gaps between nations having high-skill and low-skill equilibriums became a major public policy concern in the 1980s (Soskice/Finegold 1988). Many saw higher skills as a remedy to the long-term industrial decline of liberal economies such as Britain and the United States. In this view the creation of skills in these countries was subject to serious market failure, since firms compete over skilled labor and may act as free riders in appropriating skills that they have not helped generate. Furthermore, direct state provision was largely aimed at general education and failed to keep up with the changing needs of industry. By contrast, Germany and Japan both represent "highskill" patterns that help overcome these various collective action problems in skill generation through facilitating institutional mechanisms, although in fact they generated quite distinct solutions to the "skills dilemma."

A recent landmark collaborative study has systematically compared various institutional arrangements for skills creation and evaluated their impact on patterns of employment and economic performance (Crouch/Finegold/Sako 1999). In this study, the authors distinguish between different mechanisms for creating initial vocational training and further vocational training, respectively: direct state provision, free markets,

institutional companies, firm networks, and corporatist associations.<sup>11</sup> Here countries are seen as combining different governance mechanisms. For example, Britain and the United States. both mix the strong use of markets and on-the-job training by companies, although the British state also plays a greater role in initial training. Training in Japan occurs largely in institutional companies, but also draws upon extended networks between companies for technical consulting and dispatched workers.

### Work organization (production models)

Numerous scholars in the field of industrial relations became interested in the issues of new technology and work organization as it became increasingly clear that the heyday of the Fordist paradigm was coming to an end (Kern/Schumann 1984). Emerging models of production did not resemble traditional models of either mass production or craft production. Three distinctions proved particularly important for differentiating product strategies: whether products were standardized or customized, whether products competed primarily via price or quality, and whether the volume of production was high or low (Sorge/Streeck 1988). In contrast to traditional mass production (standardized, price-competitive, high volume) or craft production (customized, quality-competitive, low volume), the new pattern discussed in this literature combined customization, quality-competition, and higher production volumes. In particular, the incorporation of microelectronics into production machinery lowered the costs for flexible reconfigurations of capital equipment and enabled this new synthesis.

The theoretical excitement about new production methods (typically referred to as post-Fordist) was that they appeared to correlate with particular forms of social organization (or even national systems of capitalism). Within the industrial districts of Northern Italy, post-Fordist strategies of flexible specialization drew upon the embeddedness of small firms within larger social networks in local communities (Piore/Sabel 1984). For Germany, Wolfgang Streeck developed the notion of "diversified quality production" to describe the pattern of German manufacturing success woven into the rich fabric of employers' associations and unions that helped generate collective resources such as high-skilled occupational training (Streeck 1992a). These post-Fordist strategies drew upon high levels of skills, polyvalent and flexible work organization, and could often accommodate high wages.

<sup>11</sup> This typology is based on a more general typology of governance mechanisms (Hollingsworth/Schmitter/Streeck 1994).

#### Welfare states

It is increasingly recognized that welfare states do not simply perform the social protection function of aiding those who cannot provide for themselves adequately in the labor market, cannot work, or have retired. Research is just beginning to see the welfare state as another essential institutional pillar of the political economy that helps define dominant strategies among economic actors and impacts labor markets in particular. Esping-Anderson developed a famous distinction between three types of welfare state: liberal welfare states that provide low flat benefits on a universal basis, conservative welfare states that make extensive transfer payments for particular social or occupational groups on the basis on employment and contributions, and social democratic welfare states that provide the most generous and universal support (Esping-Andersen 1990). These differences were found to shape employment patterns along a variety of measures: employment rates, gender gaps in participation and earnings, the duration of unemployment, the proportion of skilled and unskilled employment, and entry and exit from work. Several authors have challenged this threefold typology and have suggested, in particular, that many Southern European countries do not fit into the conservative welfare category (Castles 1995; Ferrera 1996). In addition, the Japanese case does not fit easily into existing typologies (Gould 1993; Leibfried 1994).

This literature has recently been extended to show a much broader variety of linkages - beyond labor markets - between welfare states and models of capitalism, as well as to the role of business preferences in the development of social policy (Ebbinghaus/Manow 2001; Mares 2003). First, welfare states impact industrial relations and collective bargaining through a variety of mechanisms, e.g., by setting the level of social wages and non-wage labor costs, by influencing the labor shedding strategies that the social partners favor such as early retirement, or by strengthening the organizational loyalties of employees to unions (through self-administered Ghent-type systems) or their firms (through paternalistic company welfare) (Morgan 1997). Second, patterns of production and employment may also be impacted in cases where high labor costs deriving from high social protection act as a "beneficial constraint" that forces employers to specialize in up-market strategies such as diversified quality production (Streeck 1997). Conversely, high social security costs may hamper the employment growth in low productivity service industries - particularly for conservative welfare regimes such as Germany (Scharpf/Schmidt 2000a, 2000b). The portability of pension claims is also an important factor in supporting or hindering the mobility of labor across firms. Third, the public-private mix of pension provision has strong effects on the type of financial system and corporate governance (Jackson/Vitols 2001). Strong public systems will tend to crowd out private savings, thus depriving securities markets of an important source of capital. Private schemes will differ to the degree that they remain organizationally embedded as a means of company internal finance, such as in Germany, or externalized as a source of market investment, such as in the United States.

#### Innovation

National systems of innovation became a key focus in the comparative literature as it became clear that the degree of innovation in an economy depends on the strong integration of science and industry (Nelson 1987). National differences in these institutional linkages were thought to result from different patterns of diffusing knowledge and the different foci of innovation (Lundvall 1992; Nelson 1993). Michael Porter made the important point that nations cannot hope to find the single best pattern of innovation (Porter 1990). Rather, different types of innovation exist: organizational or technical, process or product, and incremental or radical. Porter demonstrated that the strengths of Britain or the United States were in areas of radical innovation and changing technologies. Meanwhile, Germany and Japan were stronger in areas of incremental innovation in the processes and products of well-established industrial sectors.

A number of subsequent studies have sought to elaborate on Porter's basic distinction in order to better define the institutional preconditions for different sorts of innovation (Soskice 1996). The basic answer is that highly coordinated economies often prove better able to generate the collective inputs necessary to foster incremental innovations within stable organizational settings. Highly skilled manual workers, long-term capital investments, cooperative labor relations or standard setting across companies all help foster the innovations that depend on incremental improvement of process or product design. By contrast, more market-oriented and competitive economies are better able to generate the labor mobility and venture capital necessary to pursue or incorporate radical science-based innovation. A new body of literature has also emerged on the way conditions for innovation are related to the different capacities of firms and their governance arrangements across countries (O'Sullivan 2000).

Herbert Kitschelt (1991) also revealed an interesting link between governance structures and the technological constraints posed in particular economic sectors. Technologies may differ in their degree of asset-specificity and in the global or local nature of learning processes. Likewise, technologies differ in the degree of uncertainty they involve. Some technologies have learning processes that occur in incremental steps, while others proceed in more revolutionary jumps. For example, nuclear energy and space exploration face high degrees of uncertainty and require asset-specific investments; they are facilitated by highly coordinated efforts and state planning. By contrast, the fields of computer software and biotechnology also face high degrees of uncertainty but require fewer asset-specific investments. More local learning occurs in these fields that benefits from a public R&D infrastructure and more flexible forms of organization. A crucial point is that national variants of capitalism will have differential innovation performance across sectors and may tend to further specialize around these particular areas of production (Boyer 2003).

### Alternative synthetic frameworks within comparative capitalism

Since Albert's (1993) popular characterization of the differences between Rhineland and Anglo-Saxon capitalism, the question of how capitalist diversity is best conceptualized and compared remains hotly debated. Whereas some authors contrast only two comprehensive types, others identify anywhere from three to six families of capitalism. Each of these reflects a trade-off between parsimony and complexity in describing the unique features of individual cases. Typologies with fewer types attempt to capture the different domains within a single economy under one general theory or principle. In so doing, however, they risk losing the ability to understand and explain the very different dynamics that occur in different institutional domains (including political ones). Alternatively, some view each country as having a unique constellation of institutions. Even where there is agreement on which countries belong in the same category, authors do not always agree on how to "label" the various models. Geographic labels such as Anglo-American or Rhineland may help point to common history or culture, but say little analytically about the characteristics of the model. The CC literature offers a large number of analytic labels, but these attempts show the difficulties in finding a single term that accurately captures the overall logic of a given model of capitalism (Amable 2003).

This section reviews the various attempts at synthetic analysis with special attention to the institutional domains used in each alternative framework to classify national regimes, the resulting typologies used to describe different types of capitalism, and the theories on linkages between institutions. Important questions remain about the way the various building blocks of national capitalisms "fit together." While some authors stress the complementarities between various institutions and the path-dependent nature of change, other authors suggest that various institutional elements are more "loosely coupled" and more easily changed or combined with new institutions.

### The varieties of capitalism approach

One popular approach in the CC literature commonly labeled the "Varieties of Capitalism" (VoC) approach centers on the work of David Soskice (1999) and Peter Hall (2001a). These authors compare capitalisms as production regimes and focus on microagents such as firms, employees, or shareholders and how they organize production. The framework seeks to offer an institutional explanation for cross-national differences in micro-behavior, especially that of business firms. In this VoC framework, firms are embedded in a context with four institutional domains that define their incentives and constraints: financial systems and corporate governance, industrial relations, education and training systems, and the inter-company system (the governance of relations between companies). The approach articulates a theory of comparative institutional

<sup>12</sup> Welfare states are also mentioned as supporting particular relational strategies of firms and thus

advantage, wherein "the institutional structure of the political economy provides firms with advantages for engaging in specific kinds of activities" (Hall/Soskice 2001a: 32).

Hall and Soskice start with the assumptions drawn from resource-based theories of the firm (Barney 2001), namely that firms seek to develop core competencies and dynamic capabilities that enable them to produce and to market goods or services profitability. The pursuit of these competencies and capabilities, however, requires firms to develop and manage ("coordinate") relationships with other firms and agents. Following the new institutional economies of industrial organization (Milgrom/Roberts 1992; Williamson 1975; Williamson 1991), the VoC approach recognizes and underscores that these relationships create transaction costs and principal-agent problems. Through strategic interaction, actors find equilibrium solutions to these coordination problems within a range delimited by the institutional context.

Focusing on the mid-1980s to mid-1990s, the authors distinguish two basic types of production regimes (capitalisms): liberal market economies (LME's) and coordinated market economies (CME's). This typology is based on the relative extent of market coordination through investment in transferable assets vs. strategic coordination through investment in specific assets. LME's and CME's represent polar opposite ideal-types. In liberal economies such as the United States, United Kingdom, or Canada, the market plays the dominant role in coordinating economic behavior, and the state remains an arm's-length enforcer of contracts. Across the four institutional domains (which the authors also characterize in dichotomous terms), LME's share the following characteristics: short-term orientated company finance, deregulated labor markets, general education, and strong inter-company competition. In coordinated economies such as Germany, Sweden, or Switzerland, economic behavior is strategically coordinated to a larger extent through nonmarket mechanisms. CME's are characterized by long-term industrial finance, cooperative industrial relations, high levels of vocational training, and cooperation in technology and standard setting across companies.<sup>13</sup>

While this framework draws closely on the new institutional economics, Hall and Soskice reverse one analytical assumption in an important way: whereas conventionally, structure is argued to follow strategy (e.g., firms create structures that are efficient for them), Hall and Soskice stress that strategy follows structure and thereby leads to different firm behavior across institutional settings (Hall/Soskice 2001a: 14–15; Allen 2004). The authors thus allow social and political information to enter into their model, but retain a fundamentally economic view of action. Notably, Hall and Soskice tend to rely on rather ad hoc descriptions of actual institutions and institutional forms. The

correspond to the overall type of capitalism (Hall/Soskice 2001a: 50–51). However, this idea is not integrated systematically.

<sup>13</sup> Only briefly do the authors differentiate further between two subgroups of CMEs: in *industry-coordinated* economies, such as Germany, coordination takes place within the industrial sector or branch, whereas in *group-coordinated* economies, such as Japan or South Korea, coordination

VoC framework places the economic functions of institutions in terms of coordination in the foreground, rather than the actor constellations and details of their structure.

A final key claim is that models of capitalism display strong complementarities between the four institutional domains, such that each institution depends on the others in order to function effectively (Soskice 1999: 110). Where institutions facilitate strategic (or market) coordination in one domain, these support similar forms of coordination in other spheres. For example, short-term finance requires quick entry and exit from business activities and "fits" with industrial relations systems that allow inexpensive hiring and firing of labor. An important implication of complementarities is that viable public policy changes must be incentive-compatible with existing patterns of business organization.

This notion of institutional complementarity is compelling, but also contains ambiguities. The presence of complementarities across different institutional domains leads the authors to argue that institutions should not be distributed randomly, but clustered into the relatively cohesive types as described above. Yet Hall and Soskice empirically observe a large number of intermediate "mixed" cases, suggesting that many countries do not have coherent models of capitalism. In fact, recent work has developed empirical indicators for these dimensions, and, as a result, produced four clusters of nations (Hall/Soskice 2001b). However, their theory suggests that such mixed cases should be less efficient and yield poorer economic performance than the more coherent polar types (Hall/Soskice 2001b). The empirical evidence for this thesis remains hotly debated (Hall/Gingerich 2004; Kenworthy 2006). Moreover, substantial debate has erupted over the way to reconcile the view of complementarities as "mutual reinforcement" with empirical observations of institutional incoherence and change. The issue boils down to an attempt to spell out what causal processes might produce institutional complementarities. Does the state create and implement coherent policy across such diverse institutional domains? Do economic actors actively create these institutions to solve their economic problems? Are processes of selection leading countries toward coherence?

Hall and Soskice offer only a few general hypotheses. One argument links the political strength of producer interests with regime characteristics:

[T]he political regime may condition the levels of asset specificity found across nations ... 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 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 the course of policy will not shift in such a way as to damage the value of assets that cannot readily be switched to other uses. (Hall/Soskice 2001a: 49–50)

takes place across groups of companies. These subgroups mirror a distinction between associations vs. networks found in the "governance approach" described below.

Ultimately this approach runs into several limitations in dealing with dynamic aspects of political economy. Perhaps to a greater extent than other approaches within the CC literature, this framework imports and integrates traditional tools of economic analysis. Given that strategy should follow structure, it rightly argues that business firms may react differently to similar exogenous pressures, such as international competition (Hall/Soskice 2001a: 64). But a strong version of complementarities makes it hard to discern how endogenous dynamics of capitalist models arise. The argument has strong affinities with theories of path-dependence, where significant change requires very large endogenous shocks. The theory thus describes relatively static models of capitalism that reflect highly coherent and stable "equilibrium" outcomes.

## Governance approaches

Another more loosely developed approach may be associated with a series of collaborative publications from the mid-1990s (Hollingsworth/Schmitter/Streeck 1994; Hollingsworth/Boyer 1997a; Crouch/Streeck 1997). These authors map the diversity of coordination mechanisms used in the governance of economic activity. Beyond the traditional distinction between markets and hierarchies, the framework includes communities, the state, networks, and associations. These six basic governance mechanisms differ along two underlying dimensions: the degree of self-interest or obligations for actors, and the degree to which power is distributed horizontally or exercised vertically. Each governance mechanism has its own organizational structure, rules of exchange and enforcement, and typical strengths or failures (Hollingsworth/Boyer 1997b: 6–19). In contrast to Hall and Soskice, who emphasize rational, strategic behavior within a set of fixed institutions, the governance framework pays more attention to social norms and "logics of appropriateness" in shaping actor behavior and institutional choices (in this sense, this framework is also more sensitive to the way strategy shapes structures).

In their first book, the authors used industrial sectors (rather than nations) as a basic unit of comparative analysis (Hollingsworth/Schmitter/Streeck 1994), as do theories of organization that predict variation in accordance with economic and technological conditions of task environments, i.e., industrial sectors (Fligstein/Freeland 1995). In the eight countries they study, the authors find significant differences in governance mechanisms across sectors within individual countries. Yet the authors conclude that

just as sectoral differences in technology and market conditions give rise to differences in industrial order within countries, national differences produce different governance regimes within sectors ... Differences in governance within sectors are often recognizable as national differences in that they follow a similar logic across sectors. (Hollingsworth/Streeck 1994: 272)

They explain this by arguing that social institutions supporting different mechanisms of economic governance are, for the most part, nationally distinct in, e.g., the degree of state intervention, the propensity to form associations, or the use of relational trading

in networks. Parallel to those of Hall and Soskice, these findings suggested that links between national institutions and sectoral governance generate comparative institutional advantages in particular sectors or market segments within sectors. Different sets of institutions are either more or less supportive of particular modes of governance and thus either enable or constrain different sorts of company strategies.

Several innovations and extensions of this approach were made in subsequent work. First, a more systematic notion of "social systems of production" (SSP) was introduced to describe and explain the dominant production strategies of firms as they are coordinated through different governance mechanisms and supported by their embeddedness in particular institutional configurations. This framework highlights differences between Fordist mass production and alternative patterns of flexible specialization or diversified quality production. Second, the affinities between particular coordination mechanisms and the spatial-territorial scope of governance were examined. Four levels of spatial organization were distinguished: regions within a country, nation states, transnational regions such as the European Community, and the global level (Hollingsworth/Boyer 1997b: 24–33).

The governance approach was also applied to holistic comparison of national varieties of capitalism (Crouch/Streeck 1997). Picking up on the typology of governance mechanisms described above, this approach makes a broad distinction between countries governed largely by markets and hierarchies (market capitalism) and those using a richer variety of coordination mechanisms (institutional capitalism). However, the authors offered no strict typology of national capitalisms. Using the loose collection of governance concepts, they strive in various chapters to understand the distinguishing features of particular national varieties of capitalism and to interpret the internal logic of each model (Pontusson 1997; Regini 1997).<sup>14</sup>

The recent work of Bruno Amable (2003) synthesizes many aspects of the strategic interaction and equilibrium analysis central to Hall and Soskice with the sensitivity to social embeddedness and institutional choices highlighted in the social systems of production approach. Amable utilizes five institutional domains to generate his typology: product market competition, the wage-labor nexus or labor market institutions, finance and corporate governance, social protection/welfare state, and the education/training system. <sup>15</sup> Grouping capitalist economies based on their similarities (using cluster analysis) in these institutional domains generates five models of capitalism: a market-based model, a social-democratic model, a continental European model, a Mediterranean model, and an Asian model (2003).

<sup>14</sup> However, Boyer (1997: 75) argues that "the process of institutionalization reflects the social and political conflict particular to each country" and this justifies the identification of four major variants of capitalism: market-oriented (Anglo-Saxon countries), Rhineland (Germany, Japan), statist (France, Italy), and social democratic (Sweden, Austria).

<sup>15</sup> Each of his domain typologies is fairly complicated with four to six types or clusters of countries within each domain; this produces a relatively large and complex matrix of theoretically possible combinations of institutions.

One of the key additions Amable makes to the SSP and VoC approaches is the further development of the political dimension to models of capitalism. This turns out to be very important toward understanding change and the evolution of a capitalist system (a general weakness of the CC literature). He does this first in his definition of institutions as "political-economic equilibriums" to reflect the fact that they embody political compromises as well as functional (sufficiently efficient) rules. This deviates from a strict rational choice view of institutions in so far as institutions are conceived as designed not primarily to solve coordination problems between equal agents with similar interests, but to solve conflicts among unequal actors with divergent interests (Amable 2003: 7–11). Second, Amable argues that the institutional choices/configurations (and the hierarchy of institutions) existing in a national economy reflect the preferences of the dominant social bloc. Thus institutional choices and change reflect the political coalitions that emerge and are successful in political competition with other coalitions. Further, the character of the political system itself (e.g., whether it concentrates or disperses power) will affect the likelihood of any given coalition's success as well as the likelihood of institutional change.

# National business systems approach

Richard Whitley developed a systematic approach to comparing business systems, defined as "distinctive patterns of economic organization that vary in their degree and mode of authoritative coordination of economic activities, and in the organization of, and interconnections between, owners, managers, experts, and other employees" (Whitley 1999: 33). The typology describes activities as being coordinated through private property rights or through other sorts of association that do not involve unified ownership. Altogether, eight aspects of business systems are compared:

- 1. the means of owner control (direct, alliance, or market);
- 2. the extent of integration of production chains by ownership (low, medium, high);
- 3. the extent of integration of industrial sectors through ownership;
- 4. the extent of alliance coordination of production chains;
- 5. the extent of collaboration between competitors;
- 6. the extent of alliance coordination of sectors;
- 7. the extent of employer-employee interdependence;
- 8. the extent of delegation to and trust of employees.

This approach yields six basic ideal-types of business systems: fragmented, coordinated industrial district, compartmentalized, state-organized, collaborative, and highly coordinated. In simplified form, four basic types are distinguished by the degree (high or low) to which coordination occurs through ownership and through nonownership (e.g. networks or associations), respectively. Coordination may also occur either vertically by integrating production chains or horizontally to integrate industrial sectors.

In fragmented business systems, overall coordination is very low such that economic activity is undertaken by small firms in highly competitive markets. In industrial districts, such as "Third Italy," a greater degree of coordination exists among competitors. In compartmentalized systems, such as in the United States, large integrated and somewhat autarkic firms compete with each other in arm's-length markets. Collaborative systems imply a rather corporatist or associational organization of competitors within a sector. In addition, Whitley suggests two additional types of business systems: state-organized and highly coordinated. State-organized systems look basically like compartmentalized systems except that ownership control remains direct rather than fragmented in the market due to the state subsidies in the form of credit to large firms, as in France. Meanwhile, highly coordinated systems utilize an alliance form of ownership to coordinate activities across sectors, such as in the Japanese keiretsu.

Figure 2 A simplified classification of business systems based on Whitley

	Low non-ownership coordination	High non-ownership coordination
High ownership coordination	Compartmentalized Large U.S. corporations	Collaborative Germany, corporatism
Low ownership coordination	Fragmented Competitive small firms	<i>Industrial districts</i> "Third Italy," regions

Beyond this descriptive typology, Whitley also compares the institutional features that enable and constrain different sorts of business systems. Unlike Hall and Soskice, Whitley carefully distinguishes the dimensions of the institutional environment from the organizational patterns which they produce. These institutional factors are later linked to business systems in terms of schematic hypotheses about whether institutions encourage or discourage various features of the latter. <sup>16</sup>

- 1. States are compared in terms of the strength of intervention, the degree to which it encourages intermediary organizations, and the strength of market regulation.
- 2. Financial systems are compared in terms of the conventional dichotomy between capital-market systems vs. bank-based systems.
- 3. Skill development and control is compared in terms of the strength of public training, the strength of unions, the organizing principle of unions (skill, sector or employer), and the centralization of bargaining.
- 4. Trust and authority are compared in terms of the degree of trust in formal institutions, the type of business environment, and the relative degree of paternalist, communitarian, or contractarian authority.

<sup>16</sup> Perhaps more than other authors working within this framework, Lane does justice to differences between large and small firms within the respective national economies (Lane 1993, 1995). She also introduces the training and careers of management as a distinct variable within business systems.

Whitley's typologies depart refreshingly from the implicit tactic of measuring capitalist diversity in terms of its "deviations" from a liberal Anglo-American "normal capitalism" and attempt to describe capitalist diversity in their own terms using a sociological framework. While the basic variables are quite similar to those found in Soskice and Hall, the introduction of the different dimensions of ownership control and sectoral vs. intersectoral coordination allows more fine-grained distinctions. Yet the business systems approach asks many of the same questions as the rest of the CC literature: is activity coordinated through markets, networks, or hierarchies? If coordination extends across firms, does it cover competing firms within the same sector or firms across multiple sectors? In this sense, a substantive similarity with other approaches is apparent.

# How many models of capitalism exist in Western Europe?

Several other authors offer middle-range comparisons that are not primarily geared to developing conceptual frameworks, but do go beyond single-country case studies by comparing several European countries. Vivien Schmidt, e.g., places particular emphasis on "bringing the state back in" to comparative research by highlighting three idealtypical patterns of state economy policy (Schmidt 2000, 2002): the liberal state giving great autonomy to economic actors (UK), the enabling state encouraging associational governance among private actors (Germany), and the interventionist state directly intervening to coordinate private activity (France). In so doing, Schmidt deviates from many other CC approaches in suggesting that the state can be treated as an independent political-economic actor. Her main empirical focus shows that, while internationalization is pushing all countries toward a more encompassing form of market-oriented capitalism, Germany and France each face distinct sorts of adjustment problems and follow their own independent pathways of change. Schmidt suggests that state capitalist models have been hit harder than managed capitalism by internationalization because of the significant retreat of the state, as contrasted with the more incremental and decentralized adjustment in Germany.

Other European comparisons also use three types of capitalism albeit with different labels, namely Anglo-Saxon, Germanic (e.g. Germany or the Netherlands), and Latin capitalism (e.g. France, Spain, Italy) (Rhodes/van Apeldoorn 1997). In this work, corporate governance is the central institutional domain used to distinguish national capitalisms, and a broad set of features are considered such as the relative role of banks vs. stock markets, the type of owners, the structure of management boards, and the role of employees. The authors carefully distinguish some subtle differences between the Germanic and Latin forms of "network capitalism." Like Schmidt, however, they also stress that both network capitalisms face pressures from globalization that increase shareholder pressure and erode the position of labor. Neither model is likely to serve as a template at the European level, where regulation is strongly biased toward market-oriented negative integration.

Bernhard Ebbinghaus (1999) presents Europe in terms of four basic models of capitalism: Nordic, Center, Southern, and Anglo-Saxon. His typology draws upon eight institutional domains: finance, production regime, the organized interests of labor, patterns of collective bargaining, employment patterns, labor market regulation, welfare-state financing, and patterns of social security. Ebbinghaus is distinctive in highlighting the impact of welfare state arrangements on the social organization of private economic activity. For example, the Nordic model can be distinguished from Germany's Center model by its universalist welfare state that supports much higher labor force participation (Pontusson 1997). The Nordic, Center, and Southern models are also easily distinguished in terms of the strength and centralization of labor unions. In echoing a central theme of the CC literature, Ebbinghaus argues that, while different institutional elements of national models are separately governed, the elements are "mutually-supporting and dependent of each other" (16). However, for Ebbinghaus the elements are only "loosely coupled," displaying functional interdependence but also varying degrees of inconsistency. For example, welfare regimes impact the role of the social partners in industrial relations, as is evident in cases in which social policy supports corporatism or reinforces occupational status divisions. But institutional interdependence also impacts the problems and adjustment processes faced in both institutional domains, as is illustrated by the case in which limits in welfare spending end strategies of early retirement used by the social partners at the company level.

### Capitalism in East Asia

The CC literature is primarily focused on Western Europe and North America. Although Japan is often included, it is lumped together with coordinated capitalism. But a notable set of studies have addressed differences in the capitalist organization within East Asia – particularly Korea, Taiwan, and Japan – and thus broadened our understanding of capitalist variation (Orru/Biggart/Hamilton 1997; Whitley 1992). In such studies the focus has been typically on differences in the way enterprise groups coordinate and control economic activity. The early comparisons argued that isomorphism within countries reflects the institutionalization of particular legitimate patterns of behavior described in terms of Japanese community, Korean patrimonialism, and familial networks in Taiwan (Biggart 1991). These institutions reflect differences in state intervention in the economy through the attempts of rulers to establish or maintain legitimate political rule (Orru/Biggart/Hamilton 1997: 140).

Later comparisons established a more comprehensive distinction among three types of capitalism: alliance capitalism, dirigiste capitalism, and familial capitalism (Orru/Biggart/Hamilton 1997). The classification derives from the relative use of horizontal and vertical coordination in different levels of the economy. Alliance capitalism involves cooperation across the boundaries of firms and elaborate horizontal linkages between institutional domains. These patterns are exemplified by Germany and Japan, whose

economies have a strong infrastructure of associations and cooperative relations between finance, industry, and labor. Dirigiste capitalism is typified by France and South Korea, where institutional domains are connected by the subordination of the private economy to centralized political influence. Finally, family capitalism, such as in Italy or Taiwan, is typified by smaller firms that are strongly segmented across the lines of personalistic family networks.

These studies on East Asia have advocated a theoretical agenda to clarify the nature of institutional explanation. The authors contrast institutional analysis with market, cultural, and political explanations of national differences. For example, the approach rejects one-direction causality from state action to organizational forms: "... rather than positing state action as the prime mover, we are inclined to see the state in each society as interacting (in different degrees and with different strategies) with the other organizational forms in that society" (Orru/Biggart/Hamilton 1997: 157). Again, economic action is viewed as being embedded within institutional contexts that create particular contexts of rationality and coherence.

## Comparing comparative approaches to capitalism

The previous section outlines a number of distinct approaches for comparing capitalism across countries, summarized broadly in Figure 3.

The review points to three theoretical innovations which, taken together, define and unify these approaches into what we have called the CC literature. First, the CC literature offers useful typologies for grouping distinct institutional configurations into distinct types of systems. Second, the literature suggests a theory of comparative institutional advantage in which different institutional arrangements have distinct strengths and weaknesses for different kinds of economic activity. Third, the literature may be interpreted to imply a theory of institutional path dependence. Contrary to notions of convergence on a single model of best practice, the CC literature stresses how common pressures may be refracted through different sets of institutions, leading to different sorts of problems and calling forth distinct solutions. We conclude with a brief discussion of debatable issues related to each of these innovations that should be the foci of future research and theorizing.

### Capitalism as configurations: domains, dimensions, and typologies

A first issue concerns the number of institutional domains to include in cross-national comparisons. Little theoretical debate has addressed the way to systematize the different

Figure 3 Comparative capitalism: selected analytical frameworks for comparing national business systems

Representative Authors	Institutional domains	Country groups	Notes
Hall/Soskice	Financial systems, indus- trial relations, skills, inter- firm coordination	Liberal vs. coordinated (industry vs. group-coor- dinated)	Rooted in transaction cost analysis
Hollingsworth, Boyer, Streeck, Crouch	No systematization	Every case unique	Based on six governance mechanisms for coordi- nating transactions: mar- kets, hierarchies, states, associations, networks, and communities
Amable, Boyer	Product market competition, the wage-labor nexus or labor market institutions, finance and corporate governance, social protection/welfare state, and the education/training system	Five country clusters	Uses some inductive clustering of types, un- like the more a priori approach of Whitley
Whitley	States, financial systems, skills, trust/authority	Six ideal-types: frag- mented, coordinated, industrial district, com- partmentalized, state- organized, and highly coordinated	Compares eight dimensions of coordination related to horizontal vs. vertical organization, control through ownership vs. non-ownership, and employer-employee dependence
Schmidt, Rhodes, Ebbinghaus, and others	Emphasis on state, welfare state	Four types within Europe	Eclectic

institutional domains. One major issue dividing opinion in the literature is whether the role of the state and the impact of the welfare state should be included. Likewise, various functional domains are sometimes aggregated into one labor market domain, or sometimes disaggregated into skill formation, industrial relations, labor markets, etc. In short, the theoretical criteria for developing comparative typologies remain open to debate. But the presence or absence of some domains often has a strong influence on how we categorize a particular country.

Issues also exist around the number of dimensions and complexity of types used to describe the particular institutional domains. For example, most approaches include financial systems as an institutional domain, but different dimensions can be used to describe financial systems. Focused comparative studies often suggest more relevant dimensions within each respective institutional domain than commonly incorporated within the synthetic literature. Here the VoC approach stands out for its very parsimonious distinction between strategic and market coordination. But the use of complex typologies that create three, four, or more "types" for each institutional do-

main – as Amable does – generates more combinations of variables than the nearly 25 national cases commonly studied.

A third issue relates to whether an institutional domain should be considered as dominant, and if so, which one. Many typologies are based – implicitly or explicitly – on a notion of institutional hierarchy in which one particular (or perhaps a couple) institutional domain is either given analytical priority or seen as the primary determinant of the overall system and systemic logic, i.e., complementary institutional domains are adapted or evolve in response to the primary domain. Regulation theory, e.g., views the wage-labor nexus as the dominant domain (at least in Fordist production regimes). More recently Boyer has suggested that the financial domain has supplanted the wage-labor nexus as the dominant domain (also Amable 2003). Other typologies, such as Rhodes and Appeldorn's, favor finance and corporate governance.

What differences thus emerge at the level of country typologies? One of the primary (if not the primary) ordering principles for nearly all frameworks within the CC literature is the degree of coordination among actors outside markets. Thus, at one end of this spectrum nearly all studies cluster a similar group of countries within a category of liberal or market-oriented economies. <sup>17</sup> In other words, if there is any consensus across the literature it is on the character and membership of the liberal economies. Toward the other end, however, greater challenges and divergence emerge in classifying and understanding the nonliberal or coordinated types of capitalism. In part, this is so because authors introduce other ordering principles, such as the degree and character of state intervention. Hall and Soskice largely elide these distinctions among coordinated systems in order to develop a parsimonious dichotomy that has a distinct advantage in testing hypothesis with the use of statistical models (Hall/Gingerich 2004; Paunescu/Schneider 2004; Rueda/Pontusson 2000).

However, if comparison is limited to two polar types, much diversity remains hidden. The concept of "coordination" becomes overstretched to cover very different mechanisms of coordination and governance (Allen 2004). This approach fails to sufficiently distinguish among Western European countries and does not capture distinctive features of East Asian countries. For example, Germany and Japan have similarities as two nonliberal types of capitalism, but significant differences exist between them (Streeck/Yamamura 2001). Likewise, very broad categories, such as that of "coordinated" market economies, may lead us to overlook important changes "within" such broad categories, changes that fall short of being complete shifts to the opposite polar category. For example, many recent studies of Germany have shown that the country has undergone major institutional change; in a sense, German firms have experienced an Anglo-Saxonization. Over-

<sup>17</sup> Even this category often overlooks important differences between Britain and the United States. Moreover, the term "market-based" fails to describe important elements of the U.S. economy, such as the important legacies of state and military intervention for the development of its innovation system.

all, Germany remains a CME, but the German "model" is now very different from what it was in the past (Beyer/Höpner 2003; Deeg 2005a, 2005b; Jackson 2005c; Vitols 2004).

At the other extreme, an important branch of research has shied away from even proposing broad typologies at the country level and focused on very specific paired comparisons or on the interpretation of individual cases (Crouch/Streeck 1997; Sorge/Warner 1986; Maurice/Sellier/Silvestre 1986; Crouch 2005). The SSP approach, for instance, is primarily concerned with developing a broad typology of governance mechanisms, such as hierarchies, networks, associations, and the state. The SSP authors tend to view each national case as unique and rely to a greater extent on thick description of specific cases, albeit using a common vocabulary of governance concepts. An intermediate position is taken by Whitley, whose typologies incorporate a wide range of institutional variables and compare them against bi-polar or sometimes even more complex dimensions. He is thus able to identify a larger number of distinctive types of business systems and map this variation in a systematic way. One strategy is to use ideal-types, whereas another is to simply attempt an inductive empirical clustering of cases. Amable (2003) also takes the intermediate position. While he uses cluster analysis to identify the groups or types of capitalism to be found, he provides a deductive theoretical argument to explain those clusters, like Whitley (1999) (Boyer 2004 also uses cluster analysis). A limited number of ideal-types may be a useful bridge between generalization and the specifics of individual cases. It may also be noted that influential theorists, such as Aoki, approach comparative institutional analysis without seeking to create broad national typologies, but to establish instead middle-range theoretical models that map diversity within domains and to identify a limited number of bi-lateral linkages between them (Aoki 2001).

In sum, mapping capitalist diversity requires the integration of a larger number of dimensions and a number of related analytical trade-offs. Fewer types of capitalism may make it easier to perform parsimonious statistical tests of the underlying models. However, the robustness of theories built around broadly defined types of capitalism is unlikely to be great due to the internal complexity and the contextual nature of the causal effects, which is a basic premise of the CC literature (Rueda/Pontusson 2000). Even a "most similar case" comparative design is likely to discover important differences "within" types of capitalism. Although generalization across national cases may be elusive, the CC literature is distinguished by its ability to inform a holistic understanding of national cases. Policy questions can be asked in a more contextual and precise way by understanding the linkages between different institutional domains.

### Comparative institutional advantage

A central implication of the CC literature is caution against the notion of a single best way to organize an economy. Instead it is emphasized that institutional diversity creates comparative institutional advantage because different sets of institutions may exhibit various strengths and weaknesses when it comes to supporting different sorts of economic activity. The CC literature usually focuses on institutions as an independent variable and examines their impact on modes of governance and company strategies. Institutions are viewed as being in a position to enable and constrain particular business strategies. Business firms will select strategies and develop competencies that "fit" their respective institutional environments. Ultimately, the institutional context and the actor strategies that follow from them are linked to performance outcomes. What aspects of economic performance are generally considered?

First, the bread and butter of the VoC approach is a firm-centered perspective describing the affinities between different institutions and the product market strategies of business firms. Business strategies are generally described in broad qualitative terms and point to different niches with respect to price, quantity, and quality. For example, German firms tend to specialize in high-quality markets, producing lower volumes of specialized products that are relatively insensitive to small differences in price. This "high-road" niche both accommodates the constraint of high and uniform wages in Germany and makes use of collective inputs such as the broad occupational training of blue-collar workers and cooperative institutions of codetermination. With some exceptions, a general consensus exists within the CC literature that firms operating within a variety of capitalist settings can – following different market strategies – nonetheless be similarly successful in terms of growth and profitability.

In a similar fashion, performance is increasingly being framed around issues of innovation rather than production per se. Hall and Soskice in particular linked patterns of firm- and national-level innovation to the broader system of capitalism. Specifically, they argued that coordinated market economies were characterized by incremental innovation, while liberal market economies excelled in radical innovation. While some evidence supports this, other evidence raises doubts that such a simple connection can be made between patterns of innovation and system-type (Zachary Taylor 2004). It thus remains an important area for future research.

Second, growing attention is being paid to overall macroeconomic performance, such as growth, unemployment, or the welfare state (Scharpf/Schmidt 2000a, 2000b). The CC literature has proven useful in generating country-specific case studies that sharpen our understanding of public policy choices. European policy makers have become increasingly aware that socioeconomic problems are unlikely to be resolved through isolated policy measures, but require some coordination across different policy networks because of complementarities. For example, one case study of the Netherlands stresses this approach because employment performance was improved through a sustained series of coordinated labor market and welfare state reforms that did not rely on drastic market deregulation (Visser/Hemerijck 1997).

<sup>18</sup> Relatively little attention is paid to econometric comparison of company performance using accounting data.

Yet the ability of the CC literature to explain divergence in national macroeconomic performance remains hotly debated. Hall and Gingerich (Hall/Gingerich 2004), for instance, found evidence to validate the Hall and Soskice (VoC) thesis that national macroeconomic performance is positively correlated with the degree of internal coherence or consistency around either the basic logic of market coordination or strategic coordination. In a similarly structured analysis, Kenworthy (2006) finds no correlation, which indicates that the research may lack robustness with regard to the time periods and classifications of countries. Circumventing this debate, Boyer (2004) approached this issue inductively using cluster analysis and found at least three institutional configurations that produced successful "technology-led growth regimes" (Boyer 2004). However, it is difficult to make inferences about the complementarities among certain configurations through their macroeconomic performance, because fortuna of external circumstances may prevail and compensate for the underlying institutional mismatch.<sup>19</sup>

Third, one underemphasized aspect of the CC literature that has great potential concerns the distributional consequences of capitalist diversity. For example, national corporate governance models have different normative conceptions of who should control the corporation and create distributions of rents among the various stakeholders within the firm (De Jong 1996; Dore 2000). Another issue concerns international differences in the levels of inequality (Rueda/Pontusson 2000). Countries such as Sweden, Germany, or Japan were able to achieve excellent economic performance and maintain much more egalitarian patterns of income distribution than Anglo-Saxon models of capitalism. However, institutional change has begun to disrupt many of the distributional compromises embedded within past models of capitalism and itself becoming a source of future institutional change (Dore 2000). Thus, different systems of capitalism may produce different levels or patterns of social exclusion.

### Institutional path dependence

A final innovation relates to the issue of institutional change. A central concern of the CC literature is the nature of institutional linkages and complementarities within national varieties of capitalism. If one institutional domain displays complementarities or "fit" with another institution, what does this say about the dynamics of institutional change?

One important possibility emphasized in the literature is that change will be largely incremental and path dependent, in the sense recently used within economic literature (David 1985; Arthur 1989). Certain options may be blocked through lock-in effects; e.g., such actors may lack the incentives or ability to innovate in light of the constraints placed on them by the existing institutional context. Institutional complementarities

<sup>19</sup> We are indebted to Wolfgang Streeck and Robert Boyer for this observation.

generate increasing returns among institutions and may lead to mutually reinforcing patterns of behavior. Thus, a central message of this literature has been to suggest that piecemeal borrowing of institutions may fail to generate the same sort of efficiencies associated with the initial model (Streeck 1996), since practices or institutions may lack support from other complementary institutions. Likewise, firms in different countries facing common external challenges are likely to adapt in different ways due to the different constraints placed on them by their institutional contexts. Thus, while change may occur, adjustments would be largely "path dependent" ones that are unlikely to transform the overall institutional configuration from one type of capitalism to another (Hall/Soskice 2001a).

Still, the same theoretical argument about complementary institutions might also suggest the opposite. Namely, if a new practice or institution is established, the change would have a compounding effect on the surrounding institutions. Hollingsworth (1997: 267) claims, "In general, however, the institutions making up a social system of production are interdependent, and changes in one institution generally result in changes in other institutions." Radical change would look like a collapsing house of cards, while incremental change would more closely resemble a slow erosion of other institutions (Lane 2003).

This competing imagery of institutional change points to theoretical ambivalence. It appears reasonable to argue that national capitalisms follow distinctive "paths" which evolve – in a general sense – from each country's own historical legacy. However, should too much emphasis be placed on the coherence and complementarities among institutions, the degree of stability could be overestimated (Crouch et al. 2005). In bi-polar typologies, such as in Hall and Soskice, only a very limited number of institutional combinations exist. Moreover, the strong foundation of their model in transaction cost economics means they see the different domains as relating to each other according to the same economic logic (e.g. coordination) and hence representing sets of mutually reinforcing alternatives. However, functional interdependence between various domains may relate to multiple dimensions of economic exchange (Crouch et al. 2005) and complementarities between domains that are subject to different political and social dynamics. Different institutional domains have their own unique logic (or *Eigengesetz-lichkeit* following Max Weber) and thus evolve "historically" in the sense of being open to political contention and ideological reinterpretation.

These considerations have led to empirical work on the dynamics of national capitalisms by looking at their historical origins (Streeck/Yamamura 2001). By applying the logic of a "historical institutionalism" (Steinmo/Thelen 1992; Thelen 1999) to the analysis of national models, scholars have shown the broad types of capitalism to be far more dynamic than previously assumed. In particular, different capitalisms were not created as coherent wholes but were the result of political contention and often the unintended result of piecemeal development (Aoki 1997; Streeck/Yamamura 2001; Jackson/Vitols 2001; Okazaki/Okuno-Fujiwara 1999). Likewise, recent studies of contemporary trans-

formations of national capitalisms suggest a wide scope for "hybridization" – a dynamic mixing and matching of institutional elements that change the characteristic linkages and nature of complementarities between institutional elements (Jackson 2005a; Yamamura/Streeck 2003; Vogel 2003; Zeitlin 2000; Djelic 1998).

# Emerging challenges and future research for varieties of capitalism

This paper has compared various comparative approaches to studying capitalism and argued that recent years have seen the emergence of a strong research agenda with a number of common characteristics. However, important unresolved debates exist within this literature. This paper has argued that the way forward for the CC literature does not lie in choosing a particular typology or developing an alternative typology. Rather, further theoretical and empirical progress is more likely to come by developing a more dynamic view of individual institutions, the linkages between domains, and the role of politics and power. Five challenges, in particular, are central in this regard.

The first and most important challenge is to explain and accommodate institutional change (Howell 2003). Approaches within the CC literature have typically been based on comparative statics. Indeed, the whole effort to describe and classify capitalism presumes institutional stability. The CC literature suggests a general view of path dependence in which systems evolve in incremental fashion, reforms cannot wipe the slate clean, and firms adapt along certain lines within constraints. This is especially true for the Hall and Soskice (VoC) framework in which firm strategies, and thus their institutional preferences, are endogenously derived (Allen 2004).<sup>20</sup> An important implication is that foreign best practices cannot be easily imported to the degree that they conflict with or lack the proper collective inputs from the institutional environment. Thus institutional complementarity is viewed as a central mechanism for limiting change. Although it can be justifiable to assume general stability, institutions do change, and the last decade or so has seen considerable change in all systems of capitalism – so much so that the carefully developed typologies of the 1990s are being increasingly questioned. Some very recent work, such as Amable's (2003), have attempted to build in a theory of institutional change, thus establishing a predictive framework for when and how some capitalist systems may shift from one category to another (or possibly develop into a new type of capitalism).

<sup>20</sup> In a recent paper Hall and Thelen (2005) have attempted to overcome the static bias of the original Hall and Soskice (2003) approach, in part by reconceptualizing institutions as "resources" that firms can choose among, thereby creating the possibility for change.

The second challenge is the internationalization of economic activity and the expansion of transnational institutions that affect such activity. The CC literature has heretofore rested on the assumption that capitalism is most usefully segmented for analytical purposes into distinct economies bounded by the borders of nation states. The global economy consisted of various linkages (principally trade and capital flows) among these national units. But the reality of the global economy is rapidly moving away from this as micro-agents become more mobile, as competitive pressures encourage institutional adaptation and harmonization across national units, and as new transnational institutions such as those of the European Union are constructed to integrate national economies. The future analytical utility of the CC literature will rest on how well it meets these challenges of institutional change and the growing transnationalization of capitalist activity and its institutions.

Third, significant evidence exists to suggest that some national economies that have undergone sufficient institutional change no longer fit into the category or "type" of capitalism to which they were ascribed during the 1980s or 1990s. In some cases this shift is quite radical (e.g. New Zealand, France), and a country can be convincingly moved to a different category of capitalism. There has also been considerable speculation that capitalisms characterized by extensive nonmarket institutions are especially vulnerable to erosion from general liberalization pressures (Yamamura/Streeck 2003; Goodin 2003). But generally the change of institutions presents a mixed picture and thus creates situations which leave the national political economy in an uneasy position between two or more categories (Molina/Rhodes 2006; Paunescu/Schneider 2004). Some national cases exhibit such far-ranging institutional change that they can be said to have transformed to the point of belonging to a different subgroup, but not as far as belonging to a different type of capitalism altogether. The CC literature must meet this challenge by updating its typologies (partly to avoid conceptual overstretch) but also by establishing a theoretically-grounded approach for analyzing newer hybrid forms of capitalism.

The task of determining the type of capitalism to which a country belongs is complicated further by the recognition that substantial functional change is hidden, in many instances, behind formal institutional stability (Gilson 2000; Streeck/Thelen 2005). This presents a fourth challenge for the CC literature, namely to recognize and theorize the formal stability that masks functional change. An (albeit contentious) example of this is the German system of codetermination. On the surface there is formal institutional continuity, but in practice the institutions of codetermination may have begun to serve different functions and purposes (Jackson 2005a; Rehder 2003). Similarly, national systems may exhibit formal institutional stability, but a growing body of research suggests that firms can pursue strategies that do not "fit" well with the system logic (Hancké 2002; Herrigel/Wittke 2005). Thus the same set of institutions can be "used" in different ways by the same actors, depending upon their changing preferences and needs (Morgan 2005; Hall/Thelen 2005). In essence, a diversity of strategies within a single institutional setting appears possible in many instances. This suggests that the CC literature must accommodate a less "functionalist" view of institutions.

Finally, a systematic inclusion of politics needs to be developed and included into theories of the formation and transformation of capitalist models. While politics has never been completely ignored in the literature, very recent work has begun to develop promising theories and a research agenda. This work has proceeded along three dimensions of politics. First, the role of partisanship is important. For example, Amable (2003) does a regression analysis showing that LMEs lean toward right party dominance and CMEs toward left. In contrast, several new and important works show a paradoxical but broad pattern of left parties promoting liberalization in finance and corporate governance in Europe (Cioffi/Höpner 2005; Molina/Rhodes 2006). Second, political coalitions play an important role in shaping institutional change (Amable 2003; Gourevitch/Shinn 2005; Hall/Thelen 2005; Deeg 2005c). Finally, political system characteristics have been increasingly incorporated into comparative analyses (Whitley 2005). Here there has been a trend to use the degree of power concentration in the system as the key analytic variable, i.e., the extent to which a political system exhibits a majoritarian or consensual character (Amable 2003; Gourevitch/Shinn 2005; Hall/Thelen 2005; Jackson 2005b; Molina/Rhodes 2006).

In sum, the CC literature constitutes a fruitful paradigm that has generated a broad set of testable hypotheses for understanding modern political economies. While it faces numerous challenges, it has developed the conceptual and theoretical rigor that makes a systematic research agenda both clear and feasible.

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