1

Introduction: Problems with the German model

Most historical and contemporary accounts of the political economy of industry in Germany written since the end World War II depict a highly centralized, large-firm-dominated, ultimately neocorporatist industrial system whose characteristic institutional features all can be traced back to Germany's "late" industrialization. Interest in this national industrial system, which has been variously described as "organized capitalism," "coordinated managerial capitalism," or a "coordinated market economy"[1] has been widespread both because of its consistent historical success in world markets, and because this success often has been taken to demonstrate how countries can achieve economic development by actively shaping market forces rather than being shaped by them. The argument of this book agrees with much of the latter lesson drawn from the German case, but claims, nonetheless, that the received post World War II model of the German industrial economy and its history is highly misleading, partial, and rooted in a problematic understanding of industrialization.

The alternative picture of the German political economy presented in this book is one in which the traditional model of the German industrial system is repositioned into a larger, regionally differentiated, national framework. My argument is that two distinct, parallel, and internationally competitive systems of industrial organization and practice, located in different regions, have characterized the German experience at all levels of the economy and society since the very onset of industrialization. These different systems continue to shape adjustment in Germany today.

One of the regional systems, which I will call the *decentralized industrial order*, will be, as a system, unfamiliar even to many readers knowledgeable of the German case. This alternative form of industrialization is composed of multitudes of highly specialized small- and medium-sized producers and a host of extra firm-supporting institutions. Together, these actors have created (and in part were created by) a system of governance mechanisms that stimulate innovation, socialize risk, and foster adjustment, at both local and national levels, in ways that do not resemble the governing principles of either markets or hierarchies. Finally, the decentralized industrial order is not at all the outcome of late industrialization. Its origins can be traced back into the seventeenth and eigh-

teenth centuries to regions that had property relations and political structures that favored the small property holder and supported simultaneous engagement in agricultural and petty industrial pursuits.

The second regional system, which I will call the *autarkic industrial order*, resembles in many respects the model that shapes the attention of traditional accounts: It is dominated by very large scale, vertically integrated enterprises with close ties to universal banks and it came into existence relatively late in the 19th century. The autarkic industrial order differs from the traditional organized capitalism system, however, in that it is understood to be a regional system whose primary organizational and strategic characteristics in production and governance are shaped at least as much by the desire to cope with environmental uncertainty than by the imperatives of efficiency. Indeed, for much of the history of industrialization in Germany, producers in the autarkic industrial order were similar to producers in the decentralized industrial order, in that both types of producer attempted to maximize flexibility in production and favored the production of relatively specialized products. The two forms of organization differed in that the autarkic form of industrial order relied upon the firm and the large-scale enterprise to govern this strategy, whereas the producers in the decentralized industrial order did not.

An important consequence of conceptually repositioning the organized capitalism model of the German political economy into a larger framework of multiple regional industrial systems is that the problem of the governance of the national political economy as a whole has to be reconceptualized as well: How have two different systems of industrial practice in Germany been governed within a single national political economy? As a solution to this problem, this book suggests that the heterogeneity of governance that exists at regional and industrial levels in Germany also exists at the national level in the form of a nonintegrated, composite architecture of national industrial-governance structures.

The logic behind this claim is straightforward. Since the process of industrialization in Germany was not a unitary social transformation, but a variety of regionally distinct ones, it also was true that the process of creating national-level rules, policies, and institutions for the governance of economic processes (e.g., national financial institutions, taxation schemes, tariff structures, railroads, legal rules about contract, industrial agencies, and policies, etc.) did not involve the construction of a single, uniform system of governance, nor even a single or uniform boundary between the national institutions of economic governance and society. Rather, unique and discreet institutional solutions were sought and, in most cases, provided for the national-level governance problems posed by the regionally distinct systems of industrial order. The national political economy of Germany has always been a complicated composite of industrial-governance structures – even when at particular historical moments there appeared to be considerable integration between the different industrial orders – and continues to be so today.

The vehicle for this reconceptualization of the industrial order of the German

political economy is an insistently constructivist orientation to economic and industrial processes: All organizational and governance forms that shape production, including the institution of the firm itself, are viewed as outcomes, not the starting points, of historically specific social, economic, and political conflicts about the structure of the social division of labor. Moreover, where traditional narratives assume that industrialization was a single unitary process and that firms and markets were the primary mechanisms shaping the development of production, the analysis here emphasizes the organizationally and governmentally heterogeneous character of industrialization. Each of the regional industrial systems to be presented in this book involve very different ways of organizing and governing industrial production, are shaped by different logics of competition, and involve different relationships between industry, society and politics, at all levels of social life. In order to emphasize the embedded and constructed character of these regional industrial systems, I use the term industrial *order* rather than the more standard, yet more narrowly economic terms such as industrial structure or industrial organization to characterize their organization.

It is the task of this introduction to explain, elaborate and justify these claims. The chapter will thus have three parts. The first section presents and critiques the traditional "late development," organized capitalism conception of the German political economy and the underlying vision of industrialization that it contains. The second section then presents the empirical outlines and theoretical underpinnings of the alternative account that subsequent chapters in the book will develop. A final section outlines the overall organization of the book.

The traditional conception of German political economy and its problems

The advantages of the latecomer and organized capitalism

Much of what today can be considered to be the standard understanding of the contemporary German industrial system and its historical development can be traced back to the early post World War II writings of Alexander Gerschenkron.[2] His work both sketched out the main institutional pillars that make up what came to be the received post War view of the German industrial political economy and helped to create a paradigm for understanding the relationship between the economy and politics more generally in the process of industrialization. His influence has been pervasive in post 1945 comparative politics and political economy as well as in much of the scholarship on the history of business and industrialization. This is true, moreover, not only of the post World War II literature on Germany, but also of the broader literature on the political economy of industry and industrial development throughout the developed and developing worlds.[3]

Gerschenkron's most influential general claim was that nations could improve their position in the international division of labor through political and institu-

tional adaptation. The German case, he argued, illustrated this extremely well. Before industrialization, Gerschenkron's Germany was a backward country. It had no industrial infrastructure – no skills, poorly developed markets, little capital, and few entrepreneurs. The essential pieces required for economic progress, in other words, were all absent. There were no firms to organize production, no factories with mechanized production, and no free labor markets. The basic starting point for Gerschenkron was his rejection of the idea that market forces alone could produce the pieces needed for economic progress.[4]

The Germans circumvented the market in three ways. First, with the help of the state they acquired the most advanced technologies then available on the world market. Second, they utilized the advantages of their own backwardness to construct large efficient plants. Latecomers such as Germany, Gerschenkron suggested, could produce with very large scale production economies because they were not beset by the problems of competition among numerous smaller firms, which often slowed the pace at which earlier industrializers achieved efficient scale economies. The Germans could create firms that started out at the largest and most efficient scale of production as dictated by the reigning international standard of efficiency. Finally, Gerschenkron pointed out that to finance all of this development, the Germans developed a unique form of bank that combined the strengths of both the British commercial banks and the French investment banks. German universal banks collected short-term deposits and pooled local capital in order to subsidize long-term investments to industry. Taken together, these three achievements created the core characteristics of the traditional conception of the German industrial system.

This combination of technological and institutional innovation, in his view, ultimately affected both the structure and organization of industry. Bankers directed their industrial clients into the fastest-growing industries – especially the heavy industries, such as electrical engineering, iron and steel, heavy machinery, and chemicals – and gave them the capital they needed to continue purchasing the best technology and implement it at the most efficient scale. Finally, as financial capital became more concentrated toward the end of the 19th century, this resulted in the concentration of industry as well. Centralized control of large swaths of an industry prompted the banks to encourage their holdings to take advantage of scale economies through amalgamation and cartelization.

In the post World War II period, this story of overcoming backwardness and the model of the core characteristics of German industrialization – advanced technologies, large plants, concentrated markets, universal banks with close linkages to large industrial enterprises, and a helping state – was generally accepted as a seminal portrait of the most characteristic and distinctive features of German capitalism and its experience of industrialization. Since the publication of Gerschenkron's original essay in the early 1950s, there have been a number of important extensions, elaborations, and modifications of particular pieces of Gerschenkron's argument with specific regard to the German case, and many of his general causal claims have been solidly refuted.[5] Yet, as with most robust research programs, the criticisms and refinements have affirmed the value

of the initial insights about the central institutional characteristics in the German industrial experience.[6]

Jürgen Kocka and many of his students, for example, deepened the Gerschenkronian view by linking it to the pioneering work of Alfred Chandler on the development of the modern industrial enterprise.[7] This link was forged by showing how the development of the corporation in Germany was shaped by the timing of industrialization. Sharing Gerschenkron's assumption about the lack of industrial talent and institutions in agrarian 19th century Germany, Kocka argued that German corporations were forced to grow very large very rapidly. The lack of any industrial infrastructure in the face of exogenously generated technological opportunity and competition forced the firms to incorporate most of the operations of production in-house.[8] Moreover, given the highly fragmented structure of the consumer markets that German producers served, it was difficult for producers to achieve the kinds of production economies that were typical of large producers in the United States. The distinctive character of large German enterprises was their broad diversity and their capacity to produce specialized products in relatively small, single-lot sizes. Now, following Kocka, Chandler himself has recently emphasized that large German enterprises grew large by optimizing economies of scope rather than economies of scale.[9]

In the view of this school of German business historians, these artifacts of the lateness of German industrialization were further enhanced by another dimension of the lateness of German development: bureaucratization. Kocka pointed out that although the Germans industrialized late relative to Britain and other western European powers, in the political sphere German states had been quite advanced in their construction of modern bureaucratic organization. Indeed, because these bureaucracies had emerged before the process of industrialization began, the new industrial firms constructed their own large organizations by self-consciously borrowing organizational principles from the states.[10] This isomorphism had two consequences. First, it explained how large German enterprises tended very early on to develop many of the kinds of managerial hierarchies and internal functional specializations that Chandler had shown to be the outcome of large-enterprise development in the United States – in many cases even before such innovations occurred there.[11] Second, the central importance of vertical integration combined with the availability of bureaucracy in general created a strong tendency among German industrial firms to circumvent the market and rely on the bureaucratic governance of their industry through the use of cartels, close linkages to banks, and other forms of interfirm cooperation. Modern capitalism in Germany, according to Kocka and his colleagues, was "organized capitalism," or in the more recent words of Alfred Chandler, "Cooperative Managerial Capitalism."[12]

A second current of modifications of Gerschenkron's original theses came from technological historians such as David Landes and a host of other more specialized writers. Landes, in particular, traced in great detail the slow pace by which "advanced" British technologies, such as the steam engine, the self-acting mule, and the puddling process in steel making were transferred to Germany.

Their sudden adoption near the middle of the 19th century came at a scale that catapulted Germany into rapid industrialization.[13] Once industrialization had come on line, Landes showed, the development of German technologies in chemicals, steel, and electrical engineering benefitted from the timing of the industrialization process as well. Their original lateness had encouraged the German state to develop institutes to pay attention to the new industrial technologies and educate people to produce them. This created a continuously self-replenishing pool of engineering talent, and just as importantly, an extensive infrastructure of public support for industry that enabled Germany to move into "science-based" industries such as chemicals and into the most advanced forms of steel making. This, moreover, at the same time as (and in the case of chemicals, even ahead of) the British.[14]

A third critical modification of the Gerschenkron model came from Richard Tilly's work on the development of German banking, which shows clearly how commercial banks were able to pool scarce capital to subsidize the growth of massive firms, although he claims that the intensely close bank–industrial firm ties described by Gerschenkron were not especially important in the early period prior to 1871.[15] After 1871, however, Tilly showed how extremely close relations between joint stock companies (which represented, in his view, the most "modern" sectors of the economy) and the banks played a crucial role in sustaining German industrial growth up to the first World War. The contribution of large banks was to foster the continued growth of the largest and most technologically and organizationally advanced enterprises, and the growth of these enterprises made overwhelmingly significant contributions to growth.[16]

Finally, the very important work of Sidney Pollard, Hubert Kiesewetter, Rainer Fremdling, Richard Tilly, Klaus Megerle, and others took Gerschenkron's insight that the timing of industrialization creates the possibility for variety in the speed and character of industrialization and turned it on Gerschenkron himself. They called into question Gerschenkron's taken-for-granted emphasis on the nation–state as the appropriate unit of analysis for understanding the process of European industrialization.[17] In place of the nation–state these authors emphasized the crucial importance of the region as a differentiating factor in the process of industrialization. In their view, industrialization in Germany was simultaneously a part of a larger European process and a regional phenomenon: It occurred only in certain specific regions and among those regions it began earlier and later, faster or slower, depending upon (a) the social, political, technological, and resource endowments that existed there and (b) the extent and character of trade and supply linkages with industrializing regions elsewhere in Germany and Europe.

The key aspect of this literature is that its explanatory focus is less on the development of institutional, organizational, and especially governance forms and practices than it is on relatively more macro- and narrowly economic variables (such as growth, income, consumption, productivity, industrial output, exports, etc.). Consequently, these authors have never disputed the basic organizational teleology in the above, modified, Gerschenkron view (i.e., that large

firms, vertical integration, universal banks, and advanced technologies were what industrialization in Germany developed toward, when it occurred). They simply have pointed out that regions embarked on this process in different ways, at different times, due to different economic and political causes, and with different sectoral and technological emphases and peculiarities. The work of this school has done much to encourage more differentiated research, both regionally and sectorally, into the industrialization process and to shift attention from national macro-aggregates to regional ones.

This historical work on the industrialization process in the 19th century, all of which took its cue, in one way or another, from the initial framework Gerschenkron provided, has formed the conceptual groundwork for interpretations of the experience of the German political economy in the 20th century. Post World War II analysts of the Weimar industrial economy, and students of West German industry and political economy since 1945 accepted the historical argument about lateness and the increasingly nuanced picture of large-scale organized capitalism that the Gerschenkronian research program produced. Even when the evolution of industrial practice and organization as such was not the primary focus of attention, historians and political economists framed their analyses in ways that highlighted and privileged the core Gerschenkronian structure of universal banks, large firms, and important supporting institutions attached to the state as the most advanced and most important sections of the German industrial economy.

In the Weimar discussion, for example, much of the literature on the industrial economy informed by the organized capitalism framework focuses on the initially cooperative but then increasingly desperate and bitter struggles among large-firm actors, unions, banks, and the government to establish an institutional framework of governance for the stabilization of the economy.[18] Another important stream of research takes up where the previous one leaves off and focuses on determining the precise role played by big business in the Nazi rise to power.[19] In both literatures, the primary actors within the picture of the modern economy developed by the above Gerschenkronian research program – large industrial enterprises in an array of (by the 1920s, more and less) advanced sectors, universal banks, and the central state –are also presented as the dominant and/or advanced core of German industrial capitalism.[20] By studying the politics of these groups within the German political economy and not that of other industrial actors, the authors freely imply that the former are the most important ones for understanding the German experience.

In the case of the post World War II political economy literature, the focus has generally been on the way in which the system of large firms, universal banks, supportive state institutions, and neocorporatist arrangements have contributed to the stability and growth of the West German economy.[21] What was most impressive about these arrangements, particularly in the period between the onset of international economic turbulence in the 1970s and the deep industrial crisis in the mid-1990s, was the way that this system apparently allowed for a uniquely successful negotiated form of continuous industrial adaptation and

adjustment. Many, for example, pointed to the success of large firms in rapidly growing export sectors such as automobiles, chemicals, electro-technical products, and machinery and showed how they benefitted from close ties to universal banks and from continuous communication with state ministries and other supporting parapublic institutions (such as all kinds of educational institutions) for the stable transfer of technology and supply of skilled labor.[22]

Others, such as, Wolfgang Streeck and his school, supplemented this work on large industry with close analyses of the way in which the system of industrial relations in Germany functioned in relationship to large firms. They found that the flexible dual system of plant-level works councils and centralized collective bargaining on the part of national unions had two major advantages for German competitiveness. It benefitted large enterprises by fostering cooperation and internal monitoring within them, making it possible to reorganize work and technology without significant disruption. And it benefitted German workers and the rest of German society by presenting a strong and responsible organized presence of industrial workers in national-level wage and work time negotiations. Organized German capitalism in the Streeckian view was full of hard formal institutions that supported and disciplined large industrial producers.[23]

Small firms in organized capitalism

In developing this portrait of the standard post World War II image of the German political economy and its history, I naturally do not intend to imply that any of the above, very large, literatures utterly overlooked the existence of and role played in the political economy by small- and medium-sized firms in any of the four modern German regimes. Many writers, though not all, did take the existence of such producers into account. It is simply that the Gerschenkronian/organized capitalism framing of the industrial economy that the above groupings of otherwise often quite disparate writers shared led them to characterize the development and significance of these other industrial actors in a very particular way.

Small- and medium-sized industry generally was viewed as different from large industry primarily in size and in degree of reliance on market forces (smaller firms participated in more competitive markets). Within these broad boundaries, however, authors differed widely on how they judged smaller producers and their role and place in the economy. In some cases they were termed archaic, inefficient, and backward. In other cases, authors recognized that smaller producers could be prosperous within a special and nongeneralizable niche in relationship to the large enterprises, despite the latter's larger scale and more advanced technologies. In still other cases, particular subsets of smaller producers were singled out – such as the artisanate, in particular – and shown to be functionally useful to the large-firm economy through their capacity to provide manpower and training.

In accounts of the 19th and early 20th centuries up to 1945, for example, these ways of understanding small- and medium-sized business led scholars to interpret

crises or adjustment difficulties among these producers as having a particular historical weight: The unitary forces of industrialization were understood to be pushing these producers to a subsidiary, dependent, and more fragile position on the historical stage.[24] Bigness and scale were associated with modernity and small- and medium-sized producer efforts to address their problems in the market and in politics were filtered through this historical understanding. Their efforts to stabilize themselves therefore frequently were called antimodern.[25]

Among observers of the period after 1945, small- and medium-sized producers were not characterized as antimodern,[26] but they were still considered to be marginal and embattled by the forces of bigness and the pressures of concentration. The survival of small- and medium-sized producers, at least in the period prior to the 1980s, was typically explained in one of two ways: Either they participated as suppliers to large mass-producing firms during periods when demand for the latter's products overstretched its internal capacity to supply (e.g. automobile parts suppliers) or they lodged themselves into small and specialized niche markets in which large-scale production had no intrinsic competitive advantage (e.g. machine tool producers). In both cases, the existence of a space for small- and medium-sized producers was seen to be derivative of either production or technological characteristics of large firms.[27]

During the 1980s, the framing of small- and medium-sized firms changed slightly, largely in response to their relatively better performance in world markets than large firms.[28] In some cases, the view that small firms flourished by occupying niches was simply modified by the claim that the size and/or number of specialized niches was growing larger.[29] Other writers recognized that the phenomenon of small- and medium-sized firm growth was larger than the niche argument allowed and modified the framing of such producers even further. A very important strand of argument pointed out that the survival and general health of the artisinate was linked to the survival of large German firms. The former supplied the latter with training and labor and the latter allowed for the juridical protection of the former because they knew they benefitted from this as well. In this view, small-firm success and large-firm success traveled in unison.[30] This view essentially dissolved all small- and medium-size enterprises not producing for niches into the artisanate.

As the above paragraphs indicate, in neither the postwar period, nor in the discussion of the period prior to 1945, was the claim made that small- and medium-sized *industrial* producers were constituted within a distinct system of industrial practice and governance. Nor was the claim advanced that the systems in which small- and medium-sized producers were embedded continuously succeeded, through the active strategic behavior of the actors within those systems, in adapting to new historical circumstances in German, European, and world markets. Rather, the view was a unitary one: Small- and medium-sized producers were industrial firms like any other and were governed by the same principles that governed large ones; they were simply more specialized, less competitive, and/or more dependent than their larger cousins.[31] Their survival was attributed to quirks of the modern industrial structure, which was dominated by the in-

stitutional structures of organized capitalism, rather than to any active strategic behavior on the part of small- and medium-sized enterprises themselves.

This traditional set of institutional images and arguments about the German system and its development was constructed by scholars (historians and political economists) writing after 1945 in Europe and the United States. It builds on the work of earlier writers, both German and non-German,[32] but the particular understanding presented above, which is the current one, is a relatively modern view: The postwar authors were responding to and attempting to make sense of the developments of their own time. In this sense their emphases on large firms and large scale in production and their particular way of framing the experience and position of small- and medium-sized firms in society made them part of a much larger international discussion that viewed these things as constitutive features of "modern" capitalism.[33]

Moreover, this model of the German system, *as a conceptual system*, proved to be more robust than many other country models during the turbulent 1980s. During that decade, the international discussion shifted to the general problems generated by the fragmentation of mass markets, the shortening of product cycles, and the acceleration of technological change. As countries struggled to adjust to these new conditions, scholars were forced to revise their conceptual understanding of how such countries worked.[34] Since German industry performed relatively well in this decade, it appeared to observers that the central institutions of the German model played a decisive role in this: The Germans were in a better position to react flexibly in this kind of environment, many argued, because their traditional industrial system had a kind of native flexibility that many of the other Western nations lacked and which was rivaled only by the Japanese. Indeed, as we saw above, the relative absence of mass production in the economy was one of the features of the system that distinguished it in international comparisons.[35]

The theoretical underpinnings of the traditional account

An important feature of this Gerschenkronian/organized capitalism conceptualization of the German industrial economy is that its theoretical genealogy can be traced back through a very robust tradition of economic reasoning that, in contrast to neoclassical economics, seeks to highlight the essential role of institutions and institution building in economic process. The classical economists and Joseph Schumpeter were the theoretical influences on the research program, not the marginalists or postwar neoclassicals like Walt Whitman Rostow and Robert Solow.[36] Indeed, the model of the German industrial economy often has been presented by its developers as evidence for the limitations of the neoclassical view and of the significance of the role of institutions and power in the process of industrial development.[37]

As a positive view however, and not simply as a critique of neoclassical economics, three things in particular are important about the broad theoretical structure of the Gerschenkronian/organized capitalism literature: a unitary con-