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INSTITUTIONS AND CORPORATE STRATEGIES FOR REORGANIZATION:

Revising theoretical models on hand from a case study of a German conglomerate in the U.S. and Germany

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INTRODUCTION

With the introduction of standardized mass production in the beginning of the 20th century scholars began to argue that dramatic reductions in production costs associated with it would cause other forms of production to gradually disappear. In essence, mass standardized production was based on Adam Smith's idea that efficiency in the production process came from breaking the steps of production down into simple, basic tasks. One of the critical advantages of such production systems was the deskilling of labor and reduction in labor cost associated with it. Nevertheless, production methods did not converge on this model. In Germany and Japan firms were never as committed to standardized mass production as firms in the United States (Hollingsworth 1997). Moreover, craft-based production has coexisted in Germany alongside mass standardized production (Herrigel 1996). In general there would seem to be substantial evidence that there have always been a great variety of production regimes even within countries (Sabel/Zeitlin 1997)

The deterministic course predicted for production regimes by neoclassical economists following Adam Smith was dramatically challenged by the advent of post-fordist types of production in the 1970s. Such production models directly challenged fordist assumptions that the substantial efficiency gains could be realized through the standardization of small production steps. Advocates of post-fordist production have argued that cooperative production done by multi-functional teams had the potential to revolutionize production and help companies to realize even greater efficiency gains. Some scholars even began to argue for the convergence of production regimes along post-fordist lines (Lazonick 1991). Although the proliferation of post-fordist production strategies was initially limited to types of production which required relatively high-skilled workers, it gradually spread to other industries and thereby presented unique challenges to corporations and economies alike.

By focusing solely on questions of profitability and efficiency while ignoring the importance of the institutional context in which production occurs, neoclassical economists argue simply for the dismantlement of social and legal institutions which they believe unnecessarily hinder the ability of corporations to chose their appropriate production strategy. Social relations are treated "as a frictional drag that impedes competitive markets" (Granovetter 1985: 484). For many foreign and domestic followers of the U.S. economic scene the apparent benefits of its seemingly weak institutional framework in regards to formal institutions are best represented by widely proclaimed, but questionable, improvements in profits through the corporate restructuring which occurred in this country during the late 80's and early 90's.² The proselytizing of people in the United States about the potential benefits of restructuring has added fuel to the fire of managers and academics around the world who support the elimination of those institutions which they believe hinder the implementation of the type of restructuring which occurred in the United States. Thus, the increase in global competition in the 1990's has brought renewed attention to theories

¹ The most famous example here would be the work of David Landes. See Landes, David S., 1972 The Unbound Prometheus: Technological Change and Industrial Development in Western Europe from 1750 until the Present Cambridge: Cambridge University Press

² One particular analysis of the profitability of companies which restructured between 1989 and 1994 claims that only 34% of companies increased profitability after restructuring, while 30% witnessed a decline in profitability after restructuring. See "Does America Still Work" *Harpers* May (1996)

of convergence concerning both production regimes and institutions. The desire of some for institutional convergence toward the type of institutional framework in the United States would seem to driven by the assumption that the United State is still the "leading sector" in the development of production regimes. In general scholars seem to believe that Coordinated Market Economies (Soskice 1999) will have to reform along the lines of Liberal Market Economies in order for them to survive. The former type of economic system is generally perceived to be too expensive to maintain in light of intensified global competition. Yet, the actual role of different types of national institutions in either facilitating or hindering restructuring remains unclear. Although institutions clearly limit the choices of corporations, it is unclear that they necessarily limit them in ways which are detrimental to corporations and an economy as a whole.

Organizational sociologists, on the other hand, have generally ignored the study of changes in strategies and structures of firms operating for profit (Fligstein and Dauber). In general sociologists have not sought to directly challenge conceptions of firm activity as delineated by economists. Sociologists "have accepted the presumption of economists that 'market processes' are not suitable objects of sociological study because social relations play only a frictional and disruptive role, not a central one, in modern societies" (Granovetter 1985: 504). Although some work has been done on reconceptualizing the relations between firms and their environments, work in this area would still seem to be in the beginning stages. Instead sociologists would generally seem to still focus on simply how institutions limit corporate behavior. Focusing on the manner in which institutions limit corporate choices, Wolfgang Streeck and Arndt Sorge claim that high wages paid to skilled workers in Germany contribute to the high cost of post-fordist production and thereby to the apparent necessity of such firms to concentrate on "diversified quality production" (1988). This form of production allowed firms to limit competition, move upmarket and charge relatively higher prices for their products "by upgrading their products' design and quality and by increasing their product variety." (Streeck 1992: 6). Yet, by the late 1990's Streeck began to have doubts whether the "Rheinishe" model (Albert 1992) would be able to sustain itself in the face of global competition from high-quality, low-cost production from Asia (Streeck 1997). Looking at production systems in the United States Richard Locke, Thomas Kochan and Michael Piore (1995) argue that institutions have very little impact on the production regime They believe that the general decline in the national system of chosen by firms. governance has opened up new strategic choices to corporations in this country. The lack of substantive labor laws limiting employee termination combined with the lack of institutions such as work councils would appear to be some of the major reasons why many scholars believe that corporations are relatively unencumbered by institutions in the United States. Yet, often scholars fail to adequately specify how obvious formal institutions such as labor laws could impact corporate behavior. The case studies of this paper will show how labor laws regarding over-time work may have limited the ability of the company studied to implement the type of restructuring program they would have preferred. In general too little attention would seem to be paid to the manner in which

³ Herbert Kisch provides and exemplar of the "leading sectors" theory in his book dealing with industrialization in 19th century Germany where he claims that the lack of former craft production was advantages to the realization of industrialization. See, Kisch, Herbert 1968 *From Domestic Manufacturing to Industrial Revolution* London: Cambridge University Press

institutions could also facilitate certain strategic choices and even determine whether they could be successfully implemented.

It would seem that many scholars either fail to adequately specify the manner in which institutions could effect corporate behavior. Rarely do less obvious institutions such as historical precedents and the general preference for external or internal labor markets receive the attention they deserve; two clear exceptions to this assertion are the works of Neil Fligstein (1990) and Garry Herrigel (1994;1996). By expanding the types of institutions we integrate into our models and precisely specifying the manner in which they could impact corporate behavior, scholars will come to a better understanding of how institutions impact corporate behavior. At the same time, scholars should attempt to integrate the role of informal institutions such as conventions and codes of behavior into their frameworks (North 1990). Along these lines attention also needs to be paid to how norms are socially constructed within organizations. At the same time, the manner in which such rules are institutionalized can not be overlooked (DiMaggio and Powell Paul Pierson has argued that path dependence established through existing institutions is grounded in a dynamic of increasing returns causing common practices to be adopted largely because of the historical precedence they set. To an extent this paper builds upon this idea.

This paper will seek to show how the successful adoption of fordist or post-fordist strategies could be linked to the national institutional settings in which they occur. In order to accomplish this task this paper will discuss theoretical approaches for understanding how institutions may influence the decision of corporate actors through an review of current literature in on industrial relations, political economy and industrial sociology. In the process it will refine existing approaches and suggest how a superior theoretical framework for understanding how institutions impact the potential success of corporate strategies for reorganization. In general the literature in political economy seems to create broad categories for economic systems without specifying the institutional frameworks which underlie them, while industrial relations concentrates on power relations between workers and employers apparently without exploring the concrete manner in which institutions can facilitate cooperation between these two groups. Industrial sociology, on the other hand, tends to generate long lists of institutional variables which can potentially impact corporate behavior without generating any coherent theoretical framework to help scholars understand precisely which variables are potentially more explanatory. At the same time, it tends to "oversocialize" (Granovetter 1985) the importance of institutions, leaving little room for actors to actually influence the environment in which they operate. By construing this environment as "political" (Fligstein 1990 and Fligstein and Freeland 1995) scholars can also call attention to the moments in history in which institutions are actually formed, thereby also opening up debates about the potential desirability for future reforms.

This paper does not assume that either form of production is superior to the other but rather it intends to convince the reader that certain institutional frameworks are more conducive to certain production regimes. Although research has been conducted to demonstrate how an institutional framework within a particular region may contribute to the viability of post-fordist production models (Piore/Sabel 1984; Locke 1995), little work has been done to adequately delineate how institutional frameworks on the national scale contribute to the predominance of one production regime over the other. This paper

will argue not only that a national institutional framework is critical in causing firms in a particular country to successfully implement post-fordist strategies, but also that there are path-immanent and path-challenging types of corporate restructuring in every country. Since Germany would appear to have strong formal labor market institutions and the United States would seem to have a considerably weaker set of formal institutions, an examination of the impact of these economic institutional frameworks on corporate decisions in their respective country should prove fruitful. This paper will undertake such an analysis and develop a theoretical model which delineates path-immanent and path-challenging types of corporate restructuring for both countries.

First this paper will address recent strategies for restructuring which corporations attempt to implement in their attempt to remain competitive. Then, it will review relevant literature in the field and suggest how current theoretical frameworks might be improved. Next, it will suggest a non-deterministic approach to understanding how institutions may effect corporate behavior. This will be followed by an attempt to use this approach to analyze how two cases of restructuring by a German conglomerate conducted by this author – one in the United States and one in Germany – could have been impacted by the national institutional framework of each country respectively. Finally, this paper will end with some concluding remarks about future research in this field.

Globalization and the role of Fordist and post-fordist production systems in shaping restructuring

Modern corporations in the 21st century are thought to need structures which can generate greater innovation and a higher degree of flexibility. The decline of product life cycles within this modern market would seem to require firms to improve the speed of their innovations as well as the speed at which they can adapt production to new types of products. There would seem to be general agreement that hierarchically organized largescale enterprises will have to change their traditional structures in order to compete on a global scale (Reich 1991). To improve their competitiveness, corporations are taking a renewed interest in the various means of reconciling the apparent need for hierarchical control with the desire for flexibility within the organization of production (Sabel/Zeitlin 1997). Yet, there would still seem to be a great deal of variety in managerial practices. Although there would appear to be substantial technological convergence, social and managerial practices are not changing in a similar manner (Locke/Kochan 1995; Cole 1979). Some scholars have argued that the performance of companies and economies are being shaped more by new organizational methods than by technology (Cole/Yakushiji 1984; Dore 1979). In this context it is important to note that differences in systems of governance may have a profound impact on the ability of corporations to implement similar organizational methods cross-nationally as systems of governance would seem to preference some organizational choices over others; the institutionalization of previous rules and norms can impact the ability to successfully implement a reorganization program. In this sense, the system of governance can impact not only the production regime chosen but also potentially the productivity of corporations as well as economies as a whole.

Until recently the modern bureaucratic administration associated with most modern firms was generally thought to be more efficient than "contracting-out" work

(Williamson 1985). The bureaucratic structure and organization of modern firms was thought to be an efficient organizational mechanism as long as the tasks to be managed were multiple and complex. Intensified global competition, however, would seem to place the survival of overly bureaucratic, inflexible firms in doubt (Lazonick 1991; Dörre Consequently corporations are developing numerous 1997: Kotthoff 1997). reorganization programs which seek not only to reduce the size of their bureaucracies but also help them decrease costs as well as product development and production times.⁴ To reach these goals some corporations seek either to empower workers through teamwork and flatter hierarchies or to scale down the size of their production operations through the creation of profit centers and various types of outsourcing arrangements. corporations also combine both of these strategies in their reorganization methods. It is generally accepted that responsibilities will have to be shifted to smaller organizational units or lower hierarchical levels. Within the field of business management some scholars have argued that hierarchical control should decline so that workers can be empowered to take on new responsibilities (Hammer).

For analytical purposes t is necessary to distinguish between operational and strategic decentralization (Faust/Jauch/Brünnecke/ Deutschmann 1994). focuses on the reorganization of work – particularly the reorganization of work on the shop-room floor – while the later merely involves the creation of smaller business units focused on particular products. Operational decentralization entails shifting operational control, competence and responsibilities from the upper hierarchy to the employees performing the actual production process. This could for example lead to a flattening of hierarchies and the empowering of workers. It is commonly thought that firms can increase flexibility and productivity by decentralizing production processes through the introduction of production teams and the reduction of some managerial tasks such as policing and monitoring.⁵ Such reorganization plans also generally necessitate the generation of new human resource and industrial relations policies which embrace flexibility, trust and coordination between workers and management. They may also entail a retraining of workers to enhance their skills in these areas. Operational reorganization can mean teamwork, independent production units, quality circles and Kaizen, also known as continuous improvement processes. Since operational decentralization is post-Fordist strategy, it necessitates more cooperative behavior within Such reorganization efforts are sometimes combined with *strategic* decentralization through the creation of strategic business units, occasionally referred to as semi-autonomous business units. These units are usually responsible for a particular product range within a larger company. Connections with other business units are treated as contracts between two separate companies. These features provide a corporation with a larger degree of flexibility than could be realized within former bureaucratic structures.

⁴ Türk believed by the end of the 70s that large-scale bureaucratically managed corporations were at a distinct disadvantage. See Türk, Klaus, *Grundlagen einer Pathologie der Organisation*, Stuttgart: Enke (1976).

⁵ Although lean production techniques similar to what is described here were originally introduced in Japan around the early 1980s, in recent years many scholars in business management have been pushing for the introduction of similar types of production styles in the United States. In particular see: Hammer, Michael and James Champy *Reengineering the Corporation* New York: HarperBusiness (1993). It is, however, important to state, that empowering employees through cross-functional teams has to be distinguished from similar cost-cutting methods in connection with various lean production models.

Strategic decentralization generally entails some combination of the outsourcing of non-core components and the sale of non-core product lines and/or divisions.

Nevertheless, some corporations continue to compete in the global marketplace without substantively reorganizing the manner in which work is done. Instead, they simply reduce their number of full-time employees, outsource more production and hire more part-time or temporary employees. This type of reorganization is clearly a fordist strategy which seeks to reduce costs within a non-innovative framework; the production function remains within the control of the traditional hierarchy. Clearly, it does not realize any of the potential benefits associated with the types of restructuring outlined above. Yet, strategic and operational decentralization are both designed to allow companies to reduce costs *and* decrease research, development and implementation times so that firms can react faster to changes in the global market place. Although downsizing is also generally undertaken in order to reduce costs and improve the response of companies to global market changes, it does not generally empower workers with more authority and decision making power or reduce the *bureaucratic burden* of companies. David Gordon (1996) has even argued that downsizing has increased the number of managers per workers in the U.S. economy.⁶

The ability of corporations to implement post-fordist restructuring could be directly linked to the historical precedence of certain types of production regimes within a particular country. It would appear that countries with a tendency for fordist traditions would tend to prefer downsizing as it takes advantage of existing institutional advantages which focus on managerial control and price competition, whereas countries which had a post-fordist tradition, namely a country with a strong craft tradition, would tend to chose restructuring because such countries have a tradition of empowering workers on the shoproom floor. In essence post-fordist strategies hark back to craft-based production strategies which put most of the responsibility of the organization on the workers themselves. However, the successful implementation of operational decentralization would seem to require the presence of relatively skilled workers within the firm who are willing and able to take on such responsibilities. Companies can not simply terminate "fordist" workers and hire those with the needed skills. Even if such massive layoffs were possible, corporations would clearly not be able to hire the quantity of skilled workers necessary for their reorganized production processes. The predominance of a fordist production regime within an economy would seem to make it unlikely that such workers would be available in the quantities needed.

Although the German production regime is generally considered to be fordist, Gary Herrigel has pointed out that post-fordist production is prevalent in some regions and industries in this country (Herrigel 1996). Therefore companies in Germany can build upon this resource. Furthermore, the dual educational system in Germany in which students spend part of their time in regular class rooms and some of their time learning a

⁶ Here it should be pointed out that there are serious limitations to David Gordon's methodology. Firstly, he does not consider that many people who have the title managers in the United States are really nothing more than average workers, particularly in the service industry. Secondly, he looks at aggregate data and traces the cause back to the phenomena of downsizing. Yet it would be difficult to argue that the majority of firms in the United States had undertaken downsizing measures.

⁷ Perhaps it is also related to a type of management which Lazonick labels proprietary capitalism in which owners take little interest in the actual organization of work and leave it to the workers to establish. See William Lazonick, Op.Cite.

trade at a factory is well renowned for giving workers a broad education in the multiple skills required to operate under post-fordist conditions. The broad-based skills which workers learn in such an educational system may prove to be an important asset for companies which try to implement operational decentralization. In stark contrast, the United States lacks not only such a formalized education for its workers, but also the general post-fordist tradition found in Germany.

Literature Review

Although national systems of institutions would clearly seem to influence the type of decisions made by corporations, a systematic theory which could be used to model the potential impact of such institutions on corporate behavior is still lacking. Consequently, theoretical frameworks which could account for the successful implementation of restructuring programs are also currently unavailable. The closest theoretical models which attempt to build such a framework are those which focus on regional systems of governance. This section will stress the need to develop theories of national institutional frameworks which could possess the degree of explanatory power usually found only in theories concerning regional systems of governance. In essence this section builds on the assertion of Fligstein and Freeland (1995) that there are stable configurations of systems of governance which constitute "national capitalism". These configurations would seem to have an impact beyond markets, hierarchies, networks or strategic alliances. They have particular institutional contexts which needs to be carefully examined.

Differences in approaches to systems of governance range from Charles Sabel and Jonathan Zeitlin (1997) who argue that institutions are relatively adaptable and flexible and therefore of little importance, to scholars such as Ronald Dore (1973) who see cultural differences as largely determining distinct, practically incompatible, production regimes. There are also others who focus primarily on the manner in which relations between unions and corporations influence corporate behavior (Streeck 1997,1992,1991; Hollingsworth/Streeck 1994; Hollingsworth 1997; Hollingsworth et al. 1994). The decentralized coordination approach, the first paradigm mentioned above, contends that institutions are more elastic than previously thought, whereby institutions are seen as being shaped as much by corporate strategies as vice versa. Some scholars in this approach contend that organizational forms of coordination, particularly in Europe, are changing despite existing structures (Sabel/Zeitlin 1997). The varieties of capitalism approach, the second paradigm, concentrates on constellations of institutions and how multiple institutional frameworks in a political economy interact to produce unique outcomes. The mesocorporatist or governance regime approach, the third paradigm, stresses the manner in which forms of cooperation in wage regulation, training,

⁸ Ronald Dore concludes that the Japanese style of organization for production has its roots in the late development of industrialization in Japan. Three main factors differentiate the history and culture of Japan, and therefore its corporate organizational attributes, from those of England: the integration of a bureaucracy modeled after that of the government, a paternalistic social welfare system at the corporate level, and unions integrated at an early stage into the corporation. By contrast England had an industrial relations system in which corporate structure was modeled after contractual relations, welfare was associated with the state and unions were not integrated into the corporation. See Dore, Ronald 1973 *British Factory Japanese Factory: The origins of National Diversity in Industrial Relations* Berkley: University of California Press

technology transfer, and political lobbying influence corporate behavior and economic performance. In order to better understand the insights and challenges presented by each of these approaches and attempt to build a more rigorous institutional theory which could better account for corporate behavior in comparative perspective, this paper will deal with each of these theoretical frameworks separately before suggesting how they might be combined in an effort to create a more rigorous frame work with more explanatory power.⁹

The decentralized coordination approach seems to largely ignore the manner in which institutions effect corporate behavior. Institutions would seem to merely adapt to meet the changing needs of corporations. Thus, they would appear to have little influence on corporate behavior. Scholars in this paradigm believe that institutions which limit corporate behavior are either ignored by corporations or adapted to meet their changing needs. For Sable and Zeitlin, business practices today, particularly in Europe, are sometimes actually at odds with long-standing national practices and institutions. Economic actors are changing institutions, albeit incrementally, even as their choices are being shaped by them (Sabel and Zeitlin 1997). In their analysis of the Japanese and American automobile industry in the early 1980s, Robert Cole and Taizo Yakushiji argue that human resource policies are the most critical factor in helping automotive companies to achieve technological progress, reduce manufacturing costs and improve their relations with suppliers. For automobile manufacturers to succeed, Cole and Yakushiji argue that they have to develop human resource policies which foster productive, creative and adaptable work (Cole and Yakushiji 1984). Yet these authors overlook how institutions in either country might effect the ability of corporations to adopt such human resource practices. Robert Cole (1979) admits that historical and cultural differences create a different institutional configurations which in turn impact the manner in which such practices are adapted cross-nationally. Yet, he does not integrate this approach into his analysis of corporate behavior. Although he also believes that Japanese corporations are establishing leading human resource practices, he simply accepts that a national institutional configuration will have no significant impact on the ability of corporations elsewhere to adapt similar ideas. Institutions would apparently not dramatically influence the ability of corporations to new practices. Yet, Cole would seem to underestimate the potential manner in which national institutions can effect strategic policies of corporations. Although companies in different nations may attempt to adapt similar practices, the mere adoption of them does not ensure that they will succeed. In essence, national institutions may not directly effect the ability of corporations to adapt best practices, but they might play a substantive role in determining whether they can achieve similar results in different institutional settings.

One example of the *varieties of capitalism* framework is the work of David Soskice (1999). He identifies two general types of market-oriented economies, namely business-coordinated market economies (CMEs) and liberal market economies (LMEs). The former economies stress coordination among companies, suppliers, employees and governments in the setting of technical norms, parameters of technology transfer and

⁹ An excellent discussion of the distinctions between these different approaches can be found in Hall, Peter "The Political Economy of Europe in an Era of interdependence" in Kitschelt's book in Eds. Kitschelt, Herbert, Peter Lange, Gary Marks, and John Stephens *Continuity and Change in Contemporary Capitalism* New York: Cambridge University Press (1999)

vocational training, while in the latter coordination largely goes on within the firm and coordination between firms is largely carried out through the market. Each of these economies is thought to favor some types of corporate behavior over others. Yet, in general LMEs are thought to be more flexible than CMEs largely because of the high costs associated with coordination in the latter. In general, however, this approach would seem to underestimate the ability of CMEs, like Germany, to adapt to increased competition associated with globalization. At the same time the apparent desire for dichotomous categories within this paradigm would seem to underestimate the important causal weight of substantive institutional differences between countries within both of these categories.

Within this paradigm some scholars prefer to examine production regimes rather than forms of coordination between employers, employees and suppliers. Lazonick (1991) focuses on the organization of production and delineates three major ways in which production can be organized, namely proprietary, managerial and collective approaches. The first is associated with production in Great Britain at the turn of the century when English owners took little interest in the actual operation of their plants. The second type is generally associated with management through hierarchies as best exemplified by production in the United State. The third type is team-based organizations as found in Japan. He believes that this last approach is in the process of establishing its dominance. However, he does not believe that managerial capitalism will simply disappear. It will continue to exist despite the fact that he believes it is ineffective in the modern globalized economy. Instead of innovating, he believes companies in such economies will merely cut costs within their existing framework. However, Lazonick's approach would seem to unnecessarily rule out the possibility that non-dominant sectors can radically alter their production regimes. Furthermore, he fails to adequately specify how these production regimes are supported by institutions. If they are not supported by a particular set of institutions, what could prevent countries from simply adapting the best production regime for current circumstances? If institutions do prevent the implementation of certain production regimes, then scholars need to know exactly which institutions have the greatest influence on the adoption of certain production regimes by corporations within different national settings. Ronald Dore (1973), on the other hand, directly links differences in production regimes to the differences in the institutional setting in which they exist. For him constellations of institutions within a political economy determine unique outcomes. Consequently there would seem to be little hope for any type of convergence to any particular production regime. He even doubts the ability of corporations to adopt best practices cross-nationally. Substantial convergence is impossible because he believes production regimes are too closely linked to culture and history. Yet, such an approach would seem to ignore how historical changes have impacted the nature of institutions. Even subtle historical changes can have a dramatic impact on institutional configurations within a society. Scholars should not simply disregard the potential for flexibility within institutional settings and opt for deterministic

¹⁰ Richard Beeg argues that even the traditional structure of German financial system has not been undermined by either harmonization in the regulation of financial markets or globalization. See, Deeg, Richard Finance 1998 Capitalism Unveiled: Banks and the German Political Economy. Ann Arbor: University of Michigan Press

approaches which in the end would seem to be undermined by long-term historical approaches.

In stark contrast to these other approaches, the *mesocorporatist* or *governance regime* approach focuses on institutions and attempts to demonstrate how systems of institutions influence corporate behavior. The focus of such scholars is generally either on national or regional institutions. Within industrial relations, the term system of governance is often used to denote the national institutional framework within which corporate decisions are made. It is generally defined as "the totality of institutional arrangements – including rules and rule-making agents – that regulate transactions inside and across the boundaries of an economic system" (Hollingsworth et al. 1994: 5). Although this approach attempts to show clear connections between institutions and corporate behavior, it would seem to overly deterministic and thereby fail to capture the potential flexibility offered within an institutional context.

Focusing on formal collective institutions, Colin Crouch and Wolfgang Streeck (1997) argue that companies operating under strong systems of governance dominated by formal collective institutions are severely limited in the types of production they can pursue. The system of strong cooperative formal institutions in Germany would seem to engender better performance apparently only from companies which pursue diversified quality production, as such firms are the only ones which can take full advantage of legally sanctioned codetermination, the cooperative vocational training system, and industry-wide wage agreements (Streeck 1992). Although this system of governance is quick to implement decisions, the extensive amount of time spent reaching a consensus on these decisions is seen as detrimental to the ability of companies to quickly respond to changes in the market. Furthermore, extensive negotiations, combined with a long-term orientation resulting from close relations with banks holding shares in companies, apparently slows industrial upgrading and impedes faster modifications of existing products, while also seeming to be particularly detrimental to the development of new products. Despite the fact that Wolfgang Streeck (1997) believes that the German system of governance is doomed to succumb to the powers of globalization, requiring it to dismantle its particular set of collectivist institutions, it appears that this system of governance might be more flexible than originally thought. Contrary to Streeck, J. Rogers Hollingsworth (1997) argues that systems of governance with strong formal institutions may be better able to respond to dramatic changes in globalized markets characterized by unstable demand for heterogeneous goods. Furthermore, he contends that flexible forms of production and the governance arrangements apparently necessitated by them are most likely to occur in rich institutional environments with various forms of collective behavior. Recent statistics from the German division of the conglomerate studied by this author would seem to support Hollingsworth's contention. This division has recently been able to dramatically increase not only their overall worldwide sales but also the number of products which they have introduced onto the market while maintaining most of its research, development and production in Germany. In the first quarter of the fiscal year 2000 sales grew by 21%, while two thirds of their products had been on the market for less than three years (Press release, February 14, 2000).

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¹¹ It is also commonly referred to as socioeconomic regime or industrial order.

Despite the fact that at least some companies in Germany may seem to have found a way to work within its apparently rigid collectivist institutional framework, scholars seem to generally agree that the institutional framework in the United States is more flexible than those of coordinated market economies like the one in Germany. This weak system of governance is seen as placing few limitations on the types of strategies which U.S. companies can pursue. In the United States it is often claimed that institutions such as strong legal structures and industry-wide organizations are either weak or declining, thereby undermining the system of governance and opening more strategic choices for companies (Locke et. al. 1995). Yet such an assertion simply begs the question concerning the importance of institutions in shaping corporate behavior. It is important to understand systems of governance not only as formal institutions such as labor laws and industry-wide agreements. Neil Fligstein and Kenneth Dauber (1989) suggest that the initial distribution of resources and property rights during the period of industrialization restricts the availability of possible organizational structures. Fligstein and Freeland argue that once such structures are institutionalized, they create "stable patterns of difference impervious to market interactors" (32). The creation of this environment is clearly a political process during the period in which it is institutionalized. However, it becomes increasingly difficult to dislodge once it has been institutionalized (Fligstein 1990; Fligstein and Freeland 1995). Garry Herrigel suggests, however, that systems of governance may actually be much more than legal structures and industrial organizations. He suggests that systems of governance are actually embedded in an industrial order which he defines as "the peculiar social, political and legal framework constructed over the course of the industrialization process" (Herrigel 1994: 97). This framework creates the conditions under which governance regimes emerge while validating shared beliefs about the character and boundaries of industrial communities. Through an analysis of the development of the metal working industries in the United States and Germany, he even attempts to show how two opposite types of systems of governance can actually be successful simultaneously, whereby each takes advantage of the particular institutional attributes of the general system of governance under which it operates (Herrigel 1994). He does not, however, clearly indicate which sets of institutions he believes are critical for shaping the overall direction of corporate decisions.

Within the mesocorporatist approach some scholars pay particular attention to regional institutions and the manner in which they facilitate cooperation between firms in wage regulation, training, technology transfer and political lobbying (Hall 1999). The best example for this type of theory is the regional system of governance in Italy. For Richard Locke the Italian economy is "not a coherent national system but rather an incoherent composite of diverse subnational patterns that coexist (often uneasily) within the same national territory" (Locke 1995: x). Marino Regini (1997) develops this argument further by arguing that weak national institutions in Italy are interwoven with an effective, but unstable, voluntaristic regulation at the local and regional level. According to Locke (1995), decisions of corporations in Italy are embedded in local and regional socio-political networks which create different mixes of constraints and resources. Through a comparison of corporate reorganization of Fiat and Alfa Romeo, Locke concludes that industries located within dense networks of well-developed

 $^{^{12}}$ For him small firms are able to circumvent national regulations and take advantage of local networks and are therefore more likely to succeed in Italy.

associations are better able to adjust to changing markets than companies which are located in areas without such networks. Garry Herrigel (1996) also suggests that such regional institutions might have enabled a more decentralized form of production to develop alongside a more traditional standardized form of mass production in Germany. If such configurations of local institutions can offer distinct advantages to corporations in meeting challenges of globalized markets, it is unclear why national institutional configurations could not offer similar advantages. Yet, as was stated earlier, scholars until now would seem to only view national institutional configurations as hindering the ability of corporations to flexibly adapt to changing conditions in the world market.

Peter Hall (1999) points out that one of the most important problems confronting scholars studying the relationship between corporate behavior and institutions is their failure to adequately specify which variables have the greatest impact on corporate behavior. This apparent failure points to the lack of a strong comparative theoretical framework which could help scholars better undertake comparative research. Fligstein and Freeland (1995) argue that theories of governance generally overlook the interdependencies between a firm and its environment and tend to focus on variables particular to one theoretical approach related to such ideas as agency costs, transaction costs trust, etc. They also contend that organization theory needs to conduct more systematic comparative analyses across different societies. This paper is an attempt to conduct such research and outline a broader approach to systems of governance. At the same time this paper will attempt to take up the challenge of Fligstein and Dauber (1989) that "Attention to the process of diffusion, particularly to the intra-organizational dynamics involved, including examinations of failed as well as successful innovations should produce a more balanced picture" (85)

In light of challenges to the presumption that the system of governance in the United States is dwindling in its ability to limit corporate activity and arguments that would seem to point to greater possibilities for flexibility within the German system of governance, it would appear necessary to reconsider our conceptual framework for understanding the impact of systems of governance on corporate behavior. At the same time, scholars should seek to probe the linkages between the three levels of systems of governance, namely the level of the corporate hierarchy, the regional setting and the national setting. In conducting such research scholars should keep in mind the fact that Ronald Dore's (1973) believes that none of these levels of governance would seem to predominate in Japan. Could this also be the case for countries like Germany and the United States? The work of Garry Herrigel (1994) in demonstrating the existence of a decentralized form of production alongside a more centralized version as well as his work indicating the importance of regional institutions in at least some areas of Germany would seem to suggest the need for such an inquiry. Furthermore, an attempt should be made to integrate informal institutions, such as historical precedents and collective beliefs, into a new conceptual model of systems of governance which is "flexible" enough to incorporate change but rigorous enough to use in cross-national comparisons. In essence, this paper attempts to build on Mark Granovetter's (1985) assertion that the study of corporate activity is characterized generally by either undersocialized accounts

13 Regarding the cases of Fiat and Alfa Romeo Locke argues that Fiat was able to reassert control over the

shop floor but did not successfully reorganize, while in Alfa Romeo, managers and local union leaders negotiated a restructuring plan which appeared to have positive results for both unions and the company.

which all but ignore social structures and oversocialized accounts which are too deterministic.

The goal now for scholars is to develop and apply a theoretical framework which can encapsulate the critical institutions influencing corporate behavior without "oversocializing" and thereby limiting the potential influence with corporate actors can have in shaping the conditions under which they operate. At the same time, this paper will argue that institutions can have considerable weight in determining the potential for success of strategic policies chosen by corporate actors. This paper is an attempt to develop such a framework while also putting it to an initial test of its explanatory power through an analysis of two case studies of corporate reorganization. Furthermore, our understanding of institutions should be expanded and we should seek to delineate not only how informal institutions such as historical precedents shape corporate behavior but also how institutions provide a set of sanctions and incentives that lead to some types of firm strategies and away from others.

Different institutions, different paths, different choices

The following section attempts to move toward the creation of a theoretical framework which delineates how institutions influence the likelihood that a particular type of corporate decision will succeed. The management concepts driving corporate reorganization have been translated into many languages and are therefore available to managers in many countries. The degree to which they may coincide or conflict with national governance structures remains largely an open question. On the other hand, the ability of corporate strategies to overcome such structures should not be overlooked. This section will develop a theoretical argument which will be tested in the next section. The primary goal of this section will be to attempt to show how national institutional frameworks in Germany and the United States channel corporate strategies. In particular it will argue that the institutional framework in the United States limits the ability of corporations to implement operational decentralization while promoting strategic decentralization. As for the case of Germany, it will argue that the institutional framework in that country favors both strategic and operational decentralization. This paper contends that firms can run into significant difficulties if they decide to reorganize in a way that is not in accordance with their governance structure. ¹⁴ Thus, this paper argues that there are both path-immanent and path-challenging ways of addressing corporate difficulties through corporate reorganization in any country. ¹⁵ This paper contends that path-immanent choices are more likely to be undertaken because they are more in accord with the institutional framework of the country in which they are undertaken.

¹⁴ Comparative case studies of U.S. and German firms would seem to prove particularly beneficial for developing and testing theoretical frameworks concerning systems of governance because the former is a prime example of a liberal market economy while the latter is a prime example of a coordinated market economy

economy.

15 The idea of path-challenging an path-immanent ways of restructuring was developed by this author in conjunction with Christina Teipen at Wissenschaftszentrum Berlin fur Sozialforschung. See Friel, Daniel and Christina Teipen 2000 "Corporate Reorganization in Germany and the United States: Institutional Challenges and Opportunities" an unpublished paper presented at the German-American Academic Council Summer Institute on Labor, July

In the United States operational decentralization would appear to be pathchallenging largely because the institutional framework in the United States favors fordist production regimes over post-fordist ones. This framework lacks institutions which facilitate participation on behalf of workers. "By law and tradition, American management has enjoyed the sole right to determine the strategic direction of the firm. while labor has been traditionally confined to negotiate the impact of these policies through the collective bargaining process" (Weinstein/Kochan 1995: 2). Unions also rely on codified rules governing the deployment of labor on the shop floor in order to establish some form of control within a company among other things by ensuring lines of promotion. By strictly demarcating lines between jobs and controlling the definitions of jobs, unions develop an elaborate seniority system intended to ensure paths for promotion. 16 Since wages and seniority systems are directly tied to such strict job definitions, workers fear for their livelihoods if such job definitions are altered. 17 Union insistence on such mechanisms of control has hindered the implementation of more flexible types of production. Unless a new employment system is developed to offer workers some type of relative job security which ensures wage stability, work reorganization programs targeted at increasing internal flexibility have little chance of success in the United States. (Weinstein/Kochan 1995). Yet both flexible job definitions and consensus building are critical for post-fordist types of production (Hammer/Champy 1993). However, even in the absence of a union, other institutional factors would seem to limit the possibility that operational decentralization could be successful in the United States. The case study in this paper on reorganization in the United States clearly shows that this non-union shop was unable to successfully implement operational decentralization. Workers and managers alike seemed to hold onto strict job definitions. Lowell Turner (1991) believes that as firms pursue the reorganization of work, they will have to pay increasing attention to the comparative advantage afforded by industrial relations systems like those found in Germany and Japan.

It would also seem that many U.S. corporations only "restructure" part of their organization of work without substantially changing the general structure of hierarchical control. ¹⁸ Nevertheless, the successful implementation of teamwork would also seem to depend on rearrangements in the general decision-making power structures. ¹⁹ The high level of failure of employee involvement programs in the United States could be attributed to the fact that they have generally not been tied to a broader reorganization of work (Weinstein/Kochan 1995). Furthermore, workers in the United States generally do not possess the type of broad-based skills necessary for post-fordist types of production. In general the weak institutional context in the United States, including the lack of an

¹⁶ This developed division of labor was actually welcomed by management, because it was thought to produce efficiency. See Weinstein and Kochan

¹⁷ Thomas Kochan and Michael Piore (1995) point out that job control can also prevent companies from realizing cross-functional integration on the shop floor

¹⁸ Charles and Chris Tilly argue that U.S. corporations tend to emphasize power over quality and efficiency. Therefore, they would seem to be hesitant to restructure their operations in a manner which would undermine existing power structures. See Tilly, Charles and Chris Tilly, *Work Under Capitalism*, Boulder Colorado: Westview Press (1998)

¹⁹ Although the concepts of teams and teamwork is widely used in many businesses today, its use does not necessarily indicate that a company has undergone restructuring or downsizing. In some respects it is merely fashionable to call people who work together a team.

organized vocational training system, little employment security and extensive employee poaching, appears to hinder the development of a more flexible employment system (Marsden 1999). In the case study of the United States a lack of broad-based skills by workers in this facility seems to have been one of the primary factors hindering the implementation of operational decentralization. If US firms try to realize forms of operational reorganization related to post-fordist restructuring, they will encounter substantial obstacles due to the lack of necessary skills and organizational structures required for this type of restructuring to succeed.

Path-immanent restructuring for American companies would seem to involve a minor reorganization of hierarchies which would not challenge the power of management. This could be accomplished through strategic decentralization. The institutional framework in the United States would also not seem to preclude the possibility that production could be optimized or that minor changes could occur in which teamwork on a limited basis could be introduced. Inge Lippert (2000) argues that American companies within the machine tool business were more successful at implementing cross-functional teamwork than their German counterparts. However, she overlooks that fact that she is only considering teamwork amongst levels of upper management. She does not examine how teamwork functioned on the shop-room floor. Therefore, her work can not be taken as evidence that operational decentralization works better in Germany than in the United States. Furthermore, an executive of another German conglomerate in charge of restructuring for some of their divisions in the United States told this author that although he encountered relatively few problems in optimizing production in their factories, he had great difficulty in establishing cooperation between different departments. The case discussed in this paper of restructuring in the United States also clearly indicates that the company was able to implement strategic decentralization with the creation of project management teams in the level of higher management. However, teamwork did not extend to the shop-room floor despite the intention of implementing it there.

Automobile manufacturing is one industry which is considered to have substantially restructured in the United States and in the rest of the world. restructuring even in this industry would seem to have run into limitations inhibiting operational decentralization. Robert Cole and Yakushiji Taizo (1984) believe that U.S. automobile manufactures were able to realize substantial cost reductions through the creation of subassemblies, the redesign of work processes, and improvements in their relations with suppliers. Unlike automobile manufacturers in Japan, however, U.S. manufacturers in the 80s seemed unable to reduce lead-time for product development largely because they were unable to establish effective cross-functional teams. Cole and Yakushiji believed that longer product-development times have put U.S. companies at a substantial disadvantage. Meanwhile, US American automobile firms have continued to have workers undertaking routine tasks in which they have little opportunity to realize real innovations. Substantial reorganization as this level has, according to Jürgens and Lippert (1997) did not occurred because of continual pressures for cost reductions. Hence, it would appear that operational decentralization has not occurred even within this leading industry in the United States. Managers at the German division of the German conglomerate studied by this author remarked that they realized that they could achieve only limited productivity and innovative gains without creating an organizational structure which empowered workers; even substantial downsizing would not be able to realize the type of gains which they wanted to achieve.

In general one of the major hurdles for corporations in the United States seeking to restructure is the lack of existing participatory mechanisms for workers. In stark contrast, German companies can rely on works councils as an existing form of participation on which they can build. Consequently a path-immanent type of restructuring in the United States would be characterized by the strategic decentralization without substantive operational decentralization. Path-challenging restructuring would seek to realize efficiency gains primarily through the empowerment of workers and the reduction of hierarchies through operational decentralization. It could also be combined with some form of strategic decentralization. The realization of operational decentralization could prove difficult largely because of the lack of any pre-existing forms of participation as well as the general lack of broad based skills by workers. The German dual educational system is structured, by contrast, to provide such broad based The ability of corporations in the United States to implement operational decentralization would also be hindered by the historical precedent for firms to rely on external labor markets over internal labor markets (Tilly/Tilly 1998). Teamwork on the shop-room floor, the critical element of operational decentralization, would face substantial difficulties due to employee turnover. It is generally assumed that teamwork requires the formation of coherent groups over long periods of time. Hence the difficulty associated with the lack of broad-based skills by workers would only be exacerbated by the reliance on temporary workers because of the high turnover of such employees. The ability of corporations in the United States to rely on temporary workers to meet seasonal increases in demand is sanctioned by the lack of labor laws governing such activity and the relative ease with which such laws allow corporations to hire and fire workers. Yet, the reliance on external labor markets for temporary workers is also more likely in the United States because of strict labor laws governing over-time work. As the following case study of restructuring in Germany will show, German labor laws actually facilitate a reliance on internal labor markets over external labor markets. Although labor laws in Germany make it difficult to terminate employees²⁰, they also provide incentives for German companies to retain their employees during periods of economic difficulty.

The institutional configuration in Germany creates path-immanent and path-challenging types of restructuring which are the exact opposites of those outlined for the United States. What was path-immanent for the United States is path-challenging for Germany and what was path-challenging for the United States is path-immanent for

The most important limitation on German companies is the law protecting workers against unlawful dismissal (Kündigungsschutzgesetz) and the firm constitution law (Betriebsverfassungsgesetz). The former law requires companies which plan to terminate more than 10% of its workforce within any year to file a "social plan" with the works council. This social plan specifies the compensation for those employees who will be terminated as a result of downsizing. Paragraph 10 of the law protecting workers against unlawful dismissal (§10 of the Kündigungsschutzgesetz) sets the social criteria which must be considered when a social plan is introduced. In such plans the length of employment and the age of the workers serve as the primary basis for the selection of those to be terminated; the length of employment is considered more important than the age of the employee. A social plan clearly places severe limitations on corporations because they can not simply choose to terminate the employees which they deem to be less productive. Many firms in Germany would like to avoid filing a social plan, but they can not cross this 10% mark in any given year without incurring substantial financial penalties.

Germany. In general, the empowering of workers through restructuring is more likely to occur in Germany because companies there can build on the tradition of codetermination, previous post-fordist methods of work organization and the existence of well-trained, broadly skilled workers.

Path immanent restructuring in Germany would be characterized by a firm which undertook operational decentralization combined with strategic decentralization. German corporations would need to implement both strategies in order to realize the type of cost reductions and improvements in productivity which would enable them to remain profitable while continuing to pay relatively high wages to their employees. This form of work reorganization would have to integrate the works council into the strategic decisions of the firm because without its cooperation workers could provide substantive resistance to restructuring efforts. At the same time, restructuring itself would seem to undermine the power of the works council as it empowers workers and potentially takes power away from the council itself. However, the case study of path-immanent restructuring in Germany shows that work councils may actually identify with the project of empowering their workers and not view operational decentralization as a threat to the power of the council itself. Yet, this type of restructuring would also necessitate the maintenance of some basic type of job security for workers. Although workers would potentially resist any measures which sought to reduce their numbers within a company, they may be more willing to accept restructuring if it involved minimal layoffs and occurred at a time when the company was in a particular crisis.

Path-challenging restructuring in Germany would involve just strategic decentralization while possibly undermining forms of worker participation such as the The works council would be unlikely to agree to just strategic decentralization because it would undermine the power of workers and the council itself. Furthermore, this type of restructuring would be difficult because profits and productivity could not be increased through innovations on the shop-room floor; such innovations are likely to occur only if operational decentralization is pursued. Hence, in order to remain profitable and pay workers their relatively high wages, corporations would have to spin off some of their product lines or divisions. These actions would of course further aggravate the tensions between the works council and the corporation, thereby potentially undermining any real productivity gains which could be realized from worker participation. Since centralized conflict resolution and worker representation are thought to provide flexibility in altering the organization of work in Germany, this type of restructuring could actually undermine flexibility instead of improving it (Baethge/Wolf Christina Teipen has shown how path-challenging restructuring proved detrimental to the profitability of a German conglomerate operating in that country. This company implemented strategic decentralization while also emphasizing a shift toward shareholder value, thereby necessitating dramatic increases in profitability. company continually threatened to spin off a division if it did not meet established profit targets. At the same time, it abandoned the collective bargaining system in Germany preferring to negotiate individual contracts with each of its divisions. It also reduced the power of the works councils to participated in the decision-making process of the firm, whereby the power of the works council had already been undermined through the creation of business units through strategic decentralization. Despite these efforts to reduce costs and implement a new shareholder value orientation into the firm, the firms share price fell below that of its major competitors who had not undertaken such drastic measures (Friel/Teipen 2000). Clearly path-challenging forms of restructuring are possible. Corporations can decide to go against established institutions. However, the potential for such companies to successfully realize their goals may be substantially undermined in the process.

The Case Studies

On hand for two case studies conducted by this author this paper will attempt to show how a national institutional framework may be critical in determining the conditions which directly influence on the ability of a corporation to successfully implement a reorganization program. Both case studies address the restructuring of the same German conglomerate. One of them represents an instance of path-immanent restructuring in Germany, while the other represents an attempt at path-challenging restructuring in the United States. The latter actually became more path-immanent as the company failed in its attempt to implement both strategic and operational decentralization. The first case study concludes that the institutional framework in Germany was conducive in enabling the company to realize substantial advantages from strategic and operational restructuring. In particular this paper argues that broad-based skills of the workers combined with a set of labor laws/initiatives on the part of the German government enabled this division to be successful in its reorganization. The second case study concludes that the institutional framework in the United States hindered it from realizing operational decentralization, while having little effect on its ability to implement strategic decentralization. The lack of flexibility in over-time constraints combined with high employee turnover in purchasing and relatively unskilled workers seemed to have limited its ability to realize operational decentralization within this division in the United States.

Although this author would have ideally studied the same division in both the United States and Germany, this task proved insurmountable. Yet, by focusing on two relatively similar divisions, both of which were in the metal industry, this paper attempts to control for industry-specific variables which could have skewered the results. At the same time, the director of the profit center in the factory in Germany is the same as the managing director of the factory at the facility in the United States. He received this promotion largely due to his success at the facility in Germany. By concentrating on the same manager, this paper can also control for variables which might be related to the general management style of the particular director. Furthermore, both of these facilities attempted TOP (time optimized processes) a restructuring program developed in Germany which the company intended to implement around the world in all of its facilities. TOP is a four stage restructuring program which seeks to dramatically increase productivity and profitability by creating business units or project management while at the same time empowering workers and eliminating levels of hierarchy. By focusing on two cases which attempt to implement the same restructuring programs, this paper can also control for variables related to the type of reorganization program implemented. Clearly this paper could not control for all potential intervening variables. However, this author hopes that the potential insights of this paper may help to spur further research which could build on and perhaps refute the claims made herein.

Path-immanent restructuring in Germany

The German division studied for this paper began a massive reorganization program in 1992 in order boost profitability and productivity. The very viability of the division was at stake and the parent company threatened to close the facility unless it could improve its overall performance. They had realized that both the high costs of their products and the extensive amount of time it took them to get new products on the market were hurting their ability to compete in the global marketplace. Consequently they undertook a restructuring plan aimed at creating three financially independent product/profit centers. In doing so they substantially flattened hierarchies and created teams on the shop floor which were directly responsible for the production of various The primary goal of its reorganization program was reducing costs and speeding up product development and production time. Through the implementation of TOP, this division was successful at cutting production time in half while also being able to reduce product development time by slightly more than 50%. At the same time, the company was able to substantially increase their market share and profitability by quickly introducing a number of new products on the market at relatively lower prices; many of their products were new to the market shortly after restructuring. The implementation of TOP was so successful at this particular division that TOP was soon implemented in other divisions in the company.

The first stage of the reorganization process was strategic decentralization within the branch itself. The firm created three product profit centers with one director at the head of each profit center. Employees from the various functional divisions were then divided amongst the three profit centers and at first functional oversight simply remained with upper levels of management below the directors of the profit centers. Part of this strategic reorganization also involved closing the facility for several months in order to reorganize the distribution of machines along post-fordist lines. This process included creating quality circles with a multiple of different machines. This new organization replaced a functional, taylorist division of machines and labor in which workers were generally only operated one machine. With this new organization they were now responsible for operating a multiple machines in cooperation with their coworkers. The director of the works council embraced this reorganization because he believed it reduced the amount of monotony for the company's workers.

This director also welcomed the empowerment of workers which resulted from the implementation of operational decentralization shortly after the strategic decentralization process was complete. The first step in this process was to eliminate some of the supervisory positions on the shop-room floor. Many of the previous responsibilities of these positions were given directly to the worker, including the regulation of their working hours. In order to empower the workers the company also reduced the number of quality control managers and even removed two-way mirrors which had previously allowed the managers to secretly monitor the work of employees. Some of the responsibilities of quality control personnel were given over directly to the workers. Furthermore, it now became the job of the workers themselves to identify problems in their work processes and solve them without the help of supervisors if possible. In order to facilitate the active engagement of the workers in improving their work processes a bonus system was established in which a worker would be rewarded 50% of the cost savings for the first year for any substantial improvement in the process

of production which they suggested. At the same time, bonuses were attached to meeting production schedules. Such bonuses were necessary largely because many of the control functions of their supervisors had been eliminated. The regulation of the work fell largely to workers themselves.

A low rate of employee turnover facilitated the smooth functioning of teamwork at this facility. Although a period of downsizing followed strategic decentralization, the turnover rate, namely the replacement of one worker with another, remained low throughout the period of reorganization. Although one would believe that the works councils would be against such dramatic staff reductions, the works council was actually extensively involved in the restructuring effort. The director of the works council thought restructuring was necessary. He believed that without it the company might face bankruptcy. At the same time the works council welcomed the opportunity to take power away from the managers of the factory and give it to the workers. They were not able to either substantially limit the number of employees laid off nor were they able to prevent the outsourcing of the production of one of the major parts of their products, but they were able to have the company make a long-term employment commitment, albeit informally, to the remaining employees.

For the most part workers had been accustomed to working together over long periods of time. This relative stability in the workforce was largely thanks to a set of labor regulations within Germany. Temporary workers were used only on rare occasions. The manager of one of the profit centers believes that two distinct features of German labor law enabled the company to avoid relying on temporary workers more frequently. The first feature was temporary assistance from the Arbeitsamt, Work Bureau, in covering part of the costs of its workers during economic difficulties. This bureau would help a corporation when they were having financial problems by allowing them to use what was called Kurzarbeit, roughly shortened working times. When a firm in Germany is having financial difficulties it can register these difficulties with the Work Bureau and once these difficulties are verified, the workers will only work 30 hours a week, instead of 35, and the firm will pay them only 30 hours. The other 5 hours are paid by the Work Bureau even though the workers were not on the job for this time. This institutional feature allows firms to have internal flexibility instead of relying upon the external labor market for flexibility. The other feature of German labor law which proved helpful to this manager was the possibility to implement Gleichzeitkontos, or coeval accounts. This accounts enable blue-collar employees to work up to 160 additional hours a year without the company having to pay overtime. Basically a worker has an account of extra working hours with a firm and they can add hours into the account by working overtime. They can then take off additional time during the year according to how many hours they have in this account. At the same time, they can run a deficit of 40 hours a year. These hours would have to be made up sometime during the year. These two mechanisms allowed the company to avoid relying on temporary workers to fill gaps in workforce requirements associated with variations in production cycles. Consequently, the firm was able to build coherent teams without the threat of their disruption either through temporary layoffs of the use of temporary workers.

The broad-based skills of the workers largely enabled them to meet the goals of teamwork. Without these skills it is unclear that supervisory roles could have been eliminated. Seventy-five percent of the workers in the factory had actually received

broad-based training in an apprenticeship program operated by this and other production facilities. The director of one of the profit centers believed that teamwork would have been much more difficult to implement if the workers had not received the broad-based type of education offered by their firm and the dual education system in Germany. The general shift in technology 1980s had caused the firm in Germany to start educating their workers with a focus on such broad-based skills and teamwork at the same time. Technological advances, according to the director of the educational facility at this factory had necessitated a shift away from specific know-how to more general abilities associated with problem solving within a group. The broad based skills of the workers trained on site enabled the employees to take part in cross-functional teams which sought to merge production, procurement and research and development as closely as possible.

Yet, this broad-based training was not enough for average workers to become involved in purchasing. The director of purchasing for one of the profit centers believed that the knowledge required for purchasing was too specific to be handled by the average worker. However, he did believe that the company was able to substantially improve production times by combing purchasing and logistics within small departments in each profit center. The small size of his operation allowed him to be in close contact with people in production and assembly, thereby enabling him to react quickly to problems which might arise there. Yet, he depended upon the skills of the workers to identify these problems. Similar improvements were made in research and development times in the same profit center. The director of research and development for this profit center believed that his close contact with people in production, assembly and purchasing enabled him to substantially reduce the time which it took to implement the production of new products. In this sense, the strategic decentralization of the firm enabled it to realize substantial gains from cross-functional cooperation.

Path-immanent restructuring in the United States

In 1995 this division of Siemens sought to radically reorganize its production regimes along post-fordist lines outlined in the case above. The general manager of the most successful product group from the division of Siemens in Germany discussed above was transferred to this division in the United States largely because of his success at the German division. His goal was to undertake a similar restructuring with the aim of dramatically raising productivity at the plant. The job of this general manager was to implement TOP. In essence the goal of the reorganization project, like the goal of the other division in Germany, was to implement operational and strategic decentralization. Although they were relatively successful at strategic decentralization through the creation of project management at upper levels of their hierarchy, operational decentralization was not successfully implemented.

Unlike the division in Germany, the one in the United States was confronted with a mounting number of orders which it could not fill. One of the primary goals of the reorganization program was the reduction of production times. A particular emphasis was place on reducing production times for those models which had to be substantially customized to meet the particular needs of the customer. Hence, this plant did not have to downsize its workforce but rather realize greater productivity out of the workers which were already there. Since downsizing can often undermine the trust between workers and their employers and thereby undermine a critical basis for the realization of teamwork,

the reorganization program should have had fewer obstacles. Nevertheless, this general manager was not able to realize the same type of reorganization which he undertook at the plant in Germany even though this was his goal. The reasons why this reorganization program only partially succeeded are outlined below. They clearly show that this division intended to realize a path-challenging type of reorganization. Instead they would have to settle for a path-immanent restructuring which was not able to garnish the types of efficiency gains which had been imagined through the thorough implementation of TOP.

Although this division in the United States was able to introduce a project management organization, which roughly corresponds to strategic decentralization, restructuring was limited to the upper-level management. It failed to take hold with the blue-collar workers on the shop-room floor. One of the largest obstacles facing the implementation of teamwork between blue-collar workers was the general lack of skill of the workers. Paradoxically, the workers with the greatest amounts of skill were generally East Europeans with degrees in engineering who were unable to find jobs in engineering largely because their degrees were not recognized in the United States; some managers complained that teamwork with these members was hindered because of their limited English skills. It was relatively common for supervisors to have to often correct similar problems in the production process. Clearly the workers were unable to recognize and solve problems by themselves. The number of problems in the production process after reorganization were so great that quality control managers had to spent their time "fire fighting", namely correcting mistakes in the products instead of proactively working to improve the production process. Ideally the implementation of teamwork should have freed quality control supervisors from such daily tasks. It should also have eliminated levels of the hierarchy by empowering the workers to take more control over the production process themselves while also requiring them to perform a greater variety of tasks. Workers were not empowered and their jobs remained relatively restricted in scope to specific defined tasks despite the fact that this is a non-union shop; usually unions in the United States are one of the main hurdles in post-fordist reorganization largely because of their insistence on retaining strict job definitions. Such job definitions at the plant in the U.S. were not altered despite the lack of a union at this facility. Paradoxically, the managing director at the facility in the United States believed that operational decentralization might have been more successful if he had had a works council at the plant in the United States; usually the directors of works councils are well known and respected union members. The fact that the skills of most of the workers was rather limited would seem to have been the major factor in impeding the ability of this division to eliminate levels of supervision within their hierarchy. The workers at the facility in Germany, by comparison, were actively identifying and correcting problems by themselves without the intervention of supervisors. Furthermore, some of the quality control procedures were actually turned over to the workers themselves at the plant in Germany. Although TOP had envisioned the elimination of hierarchies at all levels of the organization, the division in the United States was only able to eliminate a few positions in upper management. They were not able to reduce such structures on the shop-room floor. Nevertheless, one manager at this facility believed that two levels of management should still be eliminated in order for the company to realize real benefits

from restructuring. According to another source in the plant middle management was simply too entrenched and therefore could not be substantially reduced.

The relatively high percentages of temporary workers on the shop-room floor also hindered the implementation of teamwork at this facility. The percentage of workers employed on a temporary basis fluctuated over the past 5 years between 7 and 20%. The limits which this placed on the realization of teamwork is evident not only in the literature but also from the comments made by some of the managers at the plant in the United States. The fluctuation of personnel inhibits the formations of coherent working groups. Furthermore, many of the workers employed on a temporary basis are relatively unskilled. One member of the management at the facility actually remarked that he believed some of these workers might have come from working at McDonalds. Nevertheless, they did use the employment of temporary workers as a mechanism for identifying potentially skilled employees who they would want to employee on a permanent basis. According to the general manager one of the reasons why they had to rely on temporary workers was their inability to implement Gleichzeitkontos, coeval accounts. Such accounts would clearly violate labor regulations which require overtime to be paid at a higher rate than the customary 40 hour-a-week rate. Furthermore, the reliance on temporary workers was also stronger in the United States than in Germany because the United States does not have a Work Bureau which can pay part of the workers salary if a company endures a downturn in their business cycle. Paradoxically the literature in industrial relations general views German labor law as hindering employer flexibility through its strict regulation of employee termination. Clearly, the assistance of the Work Bureau and the ability of corporations to use coeval accounts are two instances in which German labor law actually increases the flexibility of a firm.

In the United States high levels of employee turnover is often claimed to hinder the implementation of teamwork as it depends on levels of trust and cooperation between workers functioning together in small units over time. If workers are changing jobs often, such coherent groups can not be established. Paradoxically, high employee turnover was not a problem amongst the blue-collar workers in the facility in the United The general manager of this facility claimed that similar mechanical and electrical jobs were not available in the area and workers were generally not predisposed to go to other states or even other cities in search of higher wages. In stark contrast, the facility did have difficulty retaining people in managerial positions. This problem was particularly acute amongst people in the purchasing department because similar jobs at other facilities in the area were readily available. During crisis periods the firm would even have to rely on temporary help in this department. Since component parts accounted for 70% of the value of their product, teamwork in this area could have been a critical mechanism for helping to reduce costs. Yet, the high turnover in this department in particular caused substantial problems in coordinating the purchasing of supplies with the production process. Despite the fact that one of the goals of TOP was the introduction of supplier coordination along the lines of Just-in-Time production, this facility had added warehouses over the past five years after TOP was introduced. They even had to add some warehouses off-site. Some of the managers in quality assurance identified coordination problems with the purchasing department as one of the major hurdles which they still had to overcome. Despite the fact that their warehouses were full, they still had difficulty obtaining key components on time. Such supply chain

management problems contributed to costly delays in the production process and of course would often delay the delivery of the final product. Although part of the problem can be traced back to problems with supply chain management, production was also often delayed by problems in the production process itself. Although the production of standardized products usually took 4 months, a slight improvement over production methods before the introduction of TOP, the production of customized products could take anywhere from 4 months to two years or more. As was mentioned before one of the goals of TOP was the reduction of production times.

Conclusion

This paper has attempted to delineate a new tentative theoretical framework for understanding the manner in which institutions impact strategic decisions of corporations. Although the two case studies above are merely preliminary probes of the potential validity of this framework, this author hopes that it will nonetheless provide an interesting basis for reexamining the relationship between corporate behavior and the national institutional framework in which it occurs. In seeking to sketch a new framework for understanding the manner in which institutions influence the viability of corporate reorganization programs, this paper has called into question the renewed emphasis which has been given to theories of convergence concerning both production regimes and institutions. Building on the claim of Gary Herrigel (1996) that different economic systems can develop different means for adapting to competition, this author hopes that scholars in the future will be more interested in probing the manner in which institutions can both promote and hinder corporate behavior. In conducting further research and further developing superior models, scholars should take Mark Grannovetter's (1985) advice to heart and focus on how corporate activity is embedded within institutions. This would enable us to avoid either ignoring institutions all together or assigning them deterministic weight. Furthermore, the strict regulation of over-time work in the United States clearly shows that the system of governance in this country is not necessarily weakening. In this regard this paper has shown not only that scholars have to pay careful attention to the implications of laws and regulations but also that we need to take seriously claims which assert that states can legitimize concrete institutional arrangements, particularly with regard to contract rights. The implication is clear. Once these rights have been institutionalized in a certain manner, they are difficult to overcome (Fligstein 1990; Fligstein and Freeland 1995; Fligstein and Dauber 1989).

Through a model like the one suggested above researchers could avoid unnecessarily predicting the decline of coordinated market economies. Institutions in such economies which foster worker education in broad-based skills as well as institutions which foster a reliance on internal rather than external labor markets may be quite helpful in allowing companies to improve their competitiveness through operational decentralization. At the same time, scholars should not simply accept assumptions that institutions in liberal market economies have little or no influence on the actions of corporations. Instead we should challenge some of our assumptions about such economies and seek to find the manner in which institutions in these economies could limit corporate behavior. This paper is intended to be an initial foray into such research. Although this author can not claim that the cases discussed above are necessarily representative of developments in other companies in Germany or the United States, they

do nonetheless suggest that institutions may shape the conditions under which reorganization policies can be successful in both liberal and coordinated market economies. In order to further probe the theoretical framework laid out in this paper more comparatives research will have to be done. Future research should focus on conducting studies of one firm active in two national arenas. Only with such a focus will scholars be able to control for variables related to specific industries or corporate policies and thereby develop a theoretical framework with more explanatory power.

BIBLIOGRAPHY

Albert, Michel. 1992. Kapitalismus contra Kapitalismus. Frankfurt am Main: Campus.

Baethge, Martin and Wolf Harold Wolf 1995. "Continuity and Change in the 'German Model' of Industrial Relations". In *Employment Relations in a Changing World Economy*, ed. Richard Locke, Thomas Kochan & Michael Piore. Cambridge Massachusetts: MIT Press. Pp. 231-262.

Boyer, Robert 1991. New Directions in Management Practices and Work Organization. Paris: CEPREMAP.

Ed. Cole, Robert and Yakushiji, Taizo 1984. *The American and Japanese Auto Industries in Transition*. Ann Arbor: Center for Japanese Studies The University of Michigan.

Cole, Robert E. 1971. Japanese Blue Collar. Berkley: University of California Press.

Cole, Robert E. 1979. Work, Mobility, and Participation: a Comparative Study of American and Japanese Industry. Berkley: University of California Press.

Crouch, Colin and Wolfgang Streeck 1997. "Introduction: The Future of Capitalist Diversity". In *Political Economy of Modern Capitalism: Mapping Convergence and Diversity*, ed. Colin Crouch and Wolfgang Streeck. London: Sage Publications.

David, Paul A. 1994. "Why are Institutions the carriers of History?: Path Dependence and the Evolution of Conventions, Organizations and Institutions". *Structural Change and Economic Dynamics* 5 (2).

DiMaggio, Paul and Walter Powell 1983 "The Iron cage revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields" in *American Sociological Review* 48:147-160

Dore, Ronald 1973. British Factory Japanese Factory: The origins of National Diversity in Industrial Relations. Berkley: University of California Press.

Dörre, Klaus 1997. "Unternehmerische Globalstrategien, neue Managementkonzepte und die Zukunft der industriellen Beziehungen". In *Unternehmenskulturen unter Druck*, ed. Ulf Kadritzke. Berlin: Edition Sigma, Pp. 15-44.

Faust, Michael, Peter Jauch, Karin Brünnecke and Christoph Deutschmann 1994. Dezentralisierung von Unternehmen. Bürokratie- und Hierarchieabbau und die Rolle betrieblicher Arbeitspolitik. München/Mering: Rainer Hampp.

Fligstein, Neil 1990 *The Transformation of Corporate Control* Cambridge, MA: Harvard University Press

Fligstein, Neil and Kenneth Dauber 1989 "Structural Change in Corporate Organization" in *Annual Review of Sociology* 15:73-96

Fligstein, Neil and Robert Freeland 1995 "Theorectical and Comparative Perspectives on Corporate Organization" *Annual Review of Sociology* 21:21-43

Friel, Daniel and Christina Teipen 2000 "Corporate Reorganization in Germany and the United States: Institutional Challenges and Opportunities" an unpublished paper presented at the German-American Academic Council Summer Institute on Labor, July

Gordon, David 1996. Fat and Mean: The Corporate Squeeze of Working Americans and the Myth of Managerial Downsizing. New York: The Free Press.

Granovetter, Mark 1985 "Economic Action and Social Structure: The Problem of Embeddedness" *American Journal of Sociology* 30 (November): 481-510

Hall, Peter 1999. "The Political Economy of Europe in an Era of interdependence". In *Continuity and Change in Contemporary Capitalism*, ed. Herbert Kitschelt, Peter Lange, Gary Marks, and John Stephens. New York: Cambridge University Press.

Hammer, Michael and James Champy 1993. Reengineering the Corporation. New York: HarperBusiness.

Herrigel, Gary 1996. *Industrial Constructions: The Sources of German Industrial Power*. Cambridge Massachusetts: Cambridge University Press.

Herrigel, Gary 1994. "Industry as a Form of Order: a Comparison of the Historical Development of Machine Tool industries in the United States and Germany". In *Governing Capitalist Economies: Performance and Control of Economic Sectors*, ed. J Rogers Hollingsworth, Philippe C. Schmitter and Wolfgang Streeck. New York: Oxford University Press.

Hollingsworth, J. Rogers 1997. "The Institutional Embeddedness of American Capitalism". In *Political Economy of Modern Capitalism: Mapping Convergence and Diversity, ed.* Colin Crouch and Wolfgang Streeck. London: Sage Publications.

Ed. Hollingsworth, J Rogers, Philippe C. Schmitter and Wolfgang Streeck 1994. *Governing Capitalist Economies: Performance and Control of Economic Sectors.* New York: Oxford University Press.

Hollingsworth, J. Rogers and Wolfgang Streeck 1994. "Countries and Sectors". In Governing Capitalist Economies: Performance and Control of Economic Sectors, ed. J.

Rogers Hollingsworth, Philippe C. Schmitter and Wolfgang Streeck. New York: Oxford University Press.

Jürgens, Ulrich and Inge Lippert 1997. "Schnittstellen des deutschen Produktionsregimes". In Ökonomische Leistungsfähigkeit und institutionelle Innovation. Das deutsche Produktions- und Politikregime im globalen Wettbewerb, ed. Frieder Naschold et al. Berlin: Edition Sigma, Pp. 65-94.

Kisch, Herbert 1968 From Domestic Manufacturing to Industrial Revolution London: Cambridge University Press

Kotthoff, Hermann 1997. "Hochqualifizierte Angestellte und betriebliche Umstrukturierung. Erosion von Sozialintegration und Loyalität im Großbetrieb". In *Unternehmenskulturen unter Druck*, ed. Ulf Kadritzke. Berlin: Edition Sigma, Pp. 163-184.

Kreps, David 1990. "Corporate Culture and Economic Theory". In *Perspectives on Positive Political Economy*, ed. James Alt, and Kenneth Shepsle. Cambridge Massachusetts: Cambridge University Press.

Landes, David S. 1972. The Unbound Prometheus: Technological Chang and Industrial Development in Western Europe from 1750 until the Present. Cambridge University Press.

Lazonick, William 1991. *Business Organization and the Myth of the Market Economy*. New York: Cambridge University Press.

Lippert, Inge 1999. Zwischen Pfadabhängigkeit und radikalem Wandel. Berlin: Edition Sigma.

Locke, Richard 1995. *Remaking the Italian Economy*. Ithaca and London: Cornell University Press.

Locke, Richard, Michael Piore, and Thomas Kochan 1995. "Introduction: Employment Relations in a Changing World Economy". In *Employment Relations in a Changing World Economy*, ed. Richard Locke, Thomas Kochan, and Michael Piore. Cambridge Massachusetts: MIT Press, Pp. xiii-xxix.

Locke, Richard, and Thomas Kochan, 1995. "Conclusion: The Transformation of Industrial Relations? A Cross-National Review". In *Employment Relations in a Changing World Economy*, ed. Richard Locke, Thomas Kochan, and Michael Piore. Cambridge Massachusetts: MIT Press, Pp. 359-384.

Maitland, Ian 1983. *The Causes of Industrial Disorder: A comparison of a British and a German Factory.* Boston: Routledge Direct Editions.

Marsden, David 1999. A Theory of Employment Systems: microfoundations of societal diversity. New York: Oxford University Press.

North, Douglas 1990a. *Institutions and Institutional Change and Economic Performance*. Cambridge Massachusetts: Cambridge University Press.

Pierson, Paul 2000 "Increasing Returns, Path Dependence, and the Study of Politics" *American Political Science Review* 94 (June):251-267

Piore, Michael, and Charles Sabel 1984. *The Second Industrial Divide: Possibilities for Prosperity.* New York: Basic Books.

Regini, Marino 1997. "Social Institutions and Production Structure: The Italian Variety of Capitalism in the 1980s". In *Political Economy of Modern Capitalism: Mapping Convergence and Diversity, ed.*, Colin Crouch, and Wolfgang Streeck. London: Sage Publications.

Reich, Robert B. 1991. The Work of Nations. New York: Knopf.

Sabel, Charles, and Jonathan Zeitlin 1997. "Stories, Strategies, structures: rethinking historical alternatives to mass production". In *World of Possibilities: Flexibility and Mass Production in Western Industrialization*, ed. Charles Sabel, and Jonathan Zeitlin. New York: Cambridge University Press.

Sorge, Arndt, and Wolfgang Streeck 1988. "Industrial Relations and Technical Change: The Case for an Extended Perspective". In *New Technology and Industrial Relations*., ed. Richard Hyman, and Wolfgang Streeck. Oxford: Blackwell, Pp. 19-47.

Soskice, David 1999. "Divergent Production Regimes: Coordinated and Uncoordinated Market Economies in the 1980s and 1990s". In *Continuity and Change in Contemporary Capitalism*, ed. Herbert Kitschelt, Peter Lange, Gary Marks, and John Stephens. New York: Cambridge University Press.

Streeck, Wolfgang 1997. "German Capitalism: Does it Exist? Can it Survive?". In *Political Economy of Modern Capitalism: Mapping Convergence and Diversity, ed.* Colin Crouch, and Wolfgang Streeck. London: Sage Publications.

	, 1992.	Social Institu	tions and	Economic F	Performance:	Studies of
Industrial Rela	ations in Adva	nced Capitalis	t Countries	s. London: S	Sage Publication	ons.
	, 1991.	"On the ir	ıstitutional	conditions	of diversifie	ed quality
production".	In Beyond	Keynsianism	: The Soc	cio-Economi	cs of Produ	ction and
Unemploymen	t, ed. E. Matzi	ner, and Wolfg	gang Streec	k. Aldershot	: Elgar.	

Thelen, Kathleen, and Sven Steinmo 1992. "Historical Institutionalism in Comparative Politics". In *Structuring Politics: Historical Institutionalism in Comparative Perspective*, ed. Sven Steinmo, Kathleen Thelen, and Frank Longstreth. Cambridge Massachusetts: Cambridge University Press.

Tilly, Chris 1996. *Half a Job: Bad and Good Part-Time Jobs in a Changing Labor Market*. Philadelphia: Temple University Press.

Tilly, Charles, and Chris Tilly 1998. Work Under Capitalism. Boulder Colorado: Westview Press.

Turner, Lowell 1991. Democracy at Work: Changing World Markets and the Future of Labor Unions. Ithaca: Cornell University Press.

Türk, Klaus 1976 Grundlagen einer Pathologie der Organisation. Stuttgart: Enke.

Voskamp, Ulrich, and Volker Wittke 1994. "Von 'Silicon Valley' zur 'virtuellen Integration'. Neue Formen der Organisation von Innovationsprozessen am Beispiel der Halbleiterindustrie". In *Management interorganisationaler Beziehungen*, ed. Jörg Sydow, and Arnold Windeler. Opladen: Westdeutscher Verlag.

Weinstein, Marc, and Thomas Kochan 1995. "The Limits of Diffusion: Recent Developments in Industrial Relations and Human Resource Practices in the United States". In *Employment Relations in a Changing World Economy*, ed. Richard Locke, Thomas Kochan, and Michael Piore. Cambridge Massachusetts: MIT Press, Pp. 1-31.

Williamson, Oliver 1985. *The Economic Institutions of Capitalism*. New York: The Free Press.