

STRATEGY MEETS INSTITUTIONS: THE TRANSFORMATION OF MANAGEMENT-LABOR RELATIONS AT DEUTSCHE TELEKOM AND NTT

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This comparison of labor-management relations at Deutsche Telekom (DT) and NTT Group (formerly Nippon Telephone and Telegraph) demonstrates the value of considering both institutions and strategic decision-making to understand the interaction between companies and unions. As corporations diversify, multi-divisional or holding company structures emerge, but the degree of diversity introduced in employment relations within the corporate group depends on the interaction between corporate strategy and the strategy of organized labor. The authors' field research, based on interviews with managers and labor leaders, shows that despite a broadly similar corporate strategy of diversification by DT and NTT after the liberalization of telecommunication markets, employment relations became more decentralized—both for unions and for works councils—within the DT group than within the NTT group. This difference in outcomes is explained by the relative power and strategic choices of labor and management, rather than by constraints and opportunities specific to the existing national institutions.

Eight years after the publication of an important comparison of work and employment relations in telecommunications in ten countries (Katz 1997), the industry continues to face challenges in corporate

restructuring. Especially in “late privatizer”/“late deregulator” nations like Germany, the telecom sector has faced a double blow, with technological change such as the Internet and mobile telephony coinciding with regulatory and ownership changes. This study provides a comparative analysis both of corporate restructuring and of organized labor's job security and income maintenance strategies at two large telecommunications corporations: Deutsche Telekom (DT) and NTT Group.

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The Katz collection reported how the nature of work practices changed as a result of technological change, deregulation, privatization, and globalization of telecom companies. More recent work applies organization theory—in particular, resource dependence and contingency theories—to understand the revitalization of the Communications Workers of America in the United States (Katz et al. 2003). But the role of organized labor at the corporate level, intermediate between the workplace level and national-industry level, has been relatively neglected. The firm is a crucial area for inquiry, since it is within firms that the restructuring of older modes of organization and the formation of new employment patterns intersect and become subject to negotiation. The transformation of the telecom industry, in particular, is closely tied to the restructuring of once monopolistic telephone carriers into more diversified private enterprises.

Examining processes at the level of the firm, this paper extends the Katz et al. (2003) framework for treating unions as organizations. Specifically, we consider how changes in employment relations in the telecom sector result from contestation between corporate strategy and the strategy of organized labor. Corporate strategies of diversification and restructuring have raised new strategic issues for labor in balancing heterogeneous pressures from its membership and preserving influence vis-à-vis management. By comparing two leading telecom firms with similar strategic challenges but distinct national contexts, this study also examines the extent to which organizational strategies are conditioned by national institutions (Hall and Soskice 2001).

1. Strategy and Structure Meet Institutions

This paper draws together insights from the Chandlerian strategy-structure framework (Chandler 1962) and institutional analysis of national business systems (Hall and Soskice 2001; Whitley 1999). In this section, we develop four propositions to

explain changes in company human resource (HR) systems. First, employer preferences for human resource systems are related to the strategy and structure of firms. Second, we extend this framework to the strategies and structure of organized labor. Third, we conceptualize contention in labor-management relations as arising from structural differences between companies and labor organizations, with power differentials being particularly important for human resource outcomes. Finally, we consider the role of national institutional differences in shaping how strategy, structure, and contention interact in different national contexts.

Chandler (1962:13) defined strategy as the planning and carrying out of the growth of organizations, and structure as the organizational form devised to administer activities and resources. One organizational element on which strategy focuses is the scope of the business portfolio: the horizontal scope of the products and markets being served (for example, diversified or focused on related products) and the vertical scope of activities that the firm does in-house (makes) or does not do (buys). In addition to the scope of the business portfolio, corporate structure affects how formal authority is distributed within a firm or within business groups (Granovetter 1995), such as the extent to which responsibilities are organized around business functions (production, marketing, finance, human resources, and so on) or the types of products, regions, or customers.

In the Chandlerian view, strategy determines structure. Single-product firms are usually organized along functional lines. But strategies of product diversification have led single-product firms to adopt either a multi-divisional structure (M-form) or a holding company structure (H-form). More recent literature sees structure and strategy more as two sides of the same coin (Chandler 1992; Whittington 2001). Existing structures condition the capacity of the firm to pursue future strategies, and may also entrench managerial interests that shape the process of strategy formulation. Thus, strategy and struc-

ture are matched over time through ongoing mutual adaptation.

Despite the large literature on strategy and structure, little explicit attention has been paid to human resource systems in this context (Hyman 1987; Streeck 1987). However, recent strategy literature suggests that as corporations diversify, firms introduce different human resource systems for divisions or operating companies to the extent that varied product markets require different technology and employee skills to manage their business (Purcell and Ahlstrand 1994). Human resource systems refer here to policies and practices to manage employees, including payment systems, training, job security, and work organization. Existing human resource endowments, conversely, may also act as an opportunity or constraint on diversification. But as firms adopt M-form or H-form corporate structures, human resource management functions are likely to become more decentralized as part of operational management (Jacoby 2005), thus providing greater diversity of human resource practices within the boundary of the firm. This suggests the following proposition.

Proposition 1. Strategies of product diversification lead firms to adopt either M-form or H-form structures. Diversified M- or H-form firms will adopt more diversified human resource systems within the boundaries of the organization than do other firms, in order to take account of different employment needs and skill patterns in different lines of business.

The strategy and structure framework can be extended to look at the organizational structure of labor representation, as embodied, for example, in unions or works councils. Parallel to business strategies, the strategy of labor organizations concerns the scope of employees whose interests the organization protects and promotes. Labor unions draw their boundaries with regard to such factors as product markets (Commons 1909), production technologies and the associated sets of worker skills (Clegg 1976), the boundaries of corporate structure (Katz 1993; Jacoby 2005), national labor markets (Ulman 1955), and social

identity (Herrigel 1993). These factors influence the scope of labor organization, resulting in (for example) craft, industrial, enterprise, or conglomerate unions. Moreover, union organizations may distribute administrative authority across different functions and different levels of the vertical hierarchy (Undy et al. 1981, 1996). The resulting organizational structure may be centralized or decentralized, depending on the center of gravity within the organizational hierarchy.

The strategy-determines-structure logic appears again here.¹ Strategies for labor representation are formulated with a view to promoting the interests of workers with a specific identity or within a certain social boundary, and such strategy determines the desirable structure of labor organizations. Our framework examines strategy and structure in terms of what Schmitter and Streeck (1999) call the “logic of membership” and the “logic of influence.” The logic of membership describes the set of incentives to secure membership, whereas the logic of influence describes the capacity to cultivate influence with and obtain strategic resources from external interlocutors. These two logics create pressures for both diversity and solidarity that must be balanced within the organizational structure. Broadly speaking, as interest associations become more encompassing in scope, their internal structure is likely to become more differentiated and complex (Schmitter and Streeck 1999).

The logic of membership drives organizations to adopt more diverse human resource approaches, a more decentralized structure of employee representation, and collective agreements of narrower scope with less regard for coordination. This implies that unions may also decentralize some authority to less encompassing bargaining units, parallel to the M-form. Meanwhile, the logic of influence pushes organi-

¹Whereas existing literature often takes the scope of organizational structures as given, we stress that structures are an outcome of strategic choice.

zations in the opposite direction, because aggregating interests across a larger constituency will usually increase resources available to achieve long-term strategic goals, although at the cost of responsiveness to members' particularistic interests. Complex layered structures may also exist where bargaining is decentralized but subject to various degrees of coordination across organizational boundaries (for example, through a federation of unions) (see Streeck and Visser 1998). Given the crosscutting pressures from membership and influence, our second proposition has two parts.

Proposition 2:

(2a) Strategies based on the logic of membership lead labor organizations to adopt decentralized structures and smaller organizational boundaries in order to accommodate members' demand for diversified human resource systems within boundaries of the organization.

(2b) Strategies based on the logic of influence (those designed to influence centralized external interlocutors) lead labor organizations to adopt centralized structures and larger organizational boundaries. This results in promoting more homogeneous human resource systems within boundaries of the organization.

Corporate strategy and labor strategy interact over time. Management takes account of union structures when deciding on corporate strategy and structure. For example, the M-form structure may be introduced as part of a strategy to shift bargaining to the divisional level in order to undermine trade union power (Armstrong et al. 1998). Labor strategy may also influence corporate structure through, for example, consultation over corporate restructuring. Conversely, changes in corporate structure may motivate labor organizations to change their own structure.

A resulting insight is that conflicting strategies or structural mismatches lead to contention over the structural boundaries of human resource systems.² In Figure 1, quad-

rant I represents situations in which management and labor are both centralized and favor homogeneous human resource practices, while quadrant III represents decentralized structures and consensus over more diverse human resource practices. But corporate and labor strategies do not necessarily coincide. Whenever the corporate boundaries within which a uniform human resource system applies are contested (as in quadrant II or IV in Figure 1), power play influences where such boundaries are drawn. Here bargaining power may derive from political action in electoral, regulatory, and legislative arenas as much as from the economic resources of the contending organizations. This suggests the following proposition.

Proposition 3. When the structures of the human resource system pursued by corporate strategy and labor strategy do not coincide, the organizational boundaries are likely to be contested. The resulting structures and human resource systems are those preferred by the party that can mobilize greater power in the implicit bargaining process or are the result of a compromise.

Yet it would be misleading to view the dynamics of strategy, structure, and contention only as a general set of universal contingencies. Strategy and structure are both shaped by diverse institutions that comprise national business systems, such as industrial relations, financial systems, corporate governance, and inter-firm relationships (Hall and Soskice 2001). Institutions are defined here as collective phenomena outside the control of any single firm, and thus strategic decision-makers generally take them as exogenous "social facts." Institutions affect the structures of organizations by legitimating particular patterns of authority within them (Biggart 1991). Institutions also affect strategy directly by providing collective resources for coordinating transactions, and thereby influencing the degree of investments in relationship-specific economic assets (Hall and Soskice 2001). Hall and Soskice (2001:15) argued that "there are important respects in which strategy follows structure.... Our point is that (institutional) structure con-

²On the role of contention in creating or changing social boundaries more generally, see Tilly (2004) and Lamont and Molnar (2002).

Figure 1. Human Resource Outcomes Resulting from Structural Conditions.

		Corporate Structure	
		<i>Centralized</i>	<i>Decentralized</i>
Labor Structure	<i>Centralized</i>	<p>Consensus on homogeneous human resource systems</p> <p>I</p>	<p>Contested: management prefers diverse, labor prefers uniform human resource systems</p> <p>II</p>
	<i>Decentralized</i>	<p>Contested: management prefers uniform, labor prefers diverse human resource systems</p> <p>IV</p>	<p>Consensus on diversified human resource system</p> <p>III</p>

ditions (corporate) strategy, not that it fully determines it.” Likewise, in the area of industrial relations, Streeck (1993) pointed to this two-way causal flow over time that links employee identities and interests, the organizational structures of unions, and institutions, but also acknowledged the ways in which institutions shape union structures and influence how employees see their interests.

Germany and Japan are often regarded as similar cases of “coordinated” business systems (Hall and Soskice 2001) based on the bank-based and stakeholder-oriented nature of corporate governance in both countries. Other authors also stress that important differences exist between them in the nature of non-market coordination (Yamamura and Streeck 2003). Thus, human resource practices in both countries tend to exhibit limited diversity within the firm, but for different reasons.

German unions are normally organized to encompass an industrial sector, and collective bargaining is centralized on a

sectoral, multi-employer basis and standardizes wages across firms. The German “dual” system also mandates interest representation by works councils at the level of the establishment, firm, and corporate group. Historically, works councils have come to act as a “long arm” of the union in implementing collective agreements at specific firms. Consequently, intra-firm coordination by the union has ensured the capacity to impose relatively uniform systems of pay and other conditions. Thus, if German firms pursue diversification strategies, new group firms or divisions tend to be in related industries that fall under the same sectoral collective agreement, and their appearance results in few changes in human resource practices. Still, works councils may exert pressure to decentralize human resource systems to the extent that external union influence weakens.

Japanese unions are normally organized within particular enterprises. An enterprise union typically represents junior and more senior employees, who, given the life-

time employment norm that typifies Japanese businesses, expect steady progression through internal promotion. The union is thus predisposed to ensure the application of a relatively uniform human resource system within the enterprise. Thus, enterprise unions may resist diverse human resource systems within an enterprise, but are able to acquiesce to diversity across firms. However, despite the largely decentralized nature of collective bargaining in Japan, this picture must be qualified by addressing two types of coordination across firms. First, enterprise unions often belong to industry federations, which endeavor to bring about close industry-wide coordination over collective bargaining through the *Shunto* wage round (Sako 1997). Second, the extension of internal labor markets beyond the firm to the corporate group has led to the formation of a federation of enterprise unions organized along the lines of the corporate group (Sako 2006). This sort of federation has exerted pressure to resist the diversification of human resource systems within the corporate group. In such cases, the diversified M-form or corporate groups in Japan may retain some distinctive traits such as the continued centralization of personnel functions (Kagono et al. 1985).

In recent years, both Germany and Japan have experienced a broad trend toward corporate diversification in related businesses and adoption of M-form structures (Kirchmaier 2003; Itoh 2003; Whittington et al. 1999). Management in both countries, therefore, faces intensified pressures to move toward more decentralized human resource systems; but the institutional arrangements that support or constrain decentralization differ across the two countries. This suggests the following proposition.

Proposition 4. Because of differences in institutional patterns across national business systems, German labor is better able than Japanese labor to resist management pressure for decentralization of human resource systems.

In sum, our theoretical framework builds on the Chandlerian strategy-structure

framework (1962), but modifies it in several ways. Rather than focus solely on corporate organization, we extend the strategy-structure framework to labor organizations as well. We thus highlight the interaction between labor and corporate strategies, particularly where divergent strategies lead to contestation over the structure and boundaries of human resource systems. This insight also highlights not only that national institutions act as a set of constraints on strategy (Hall and Soskice 2001), but also how institutions themselves may be modified through strategic interaction and contestation within organizations.

The following empirical sections explore the four propositions with respect to labor-management relations at DT and NTT.³ By around 2005, employment relations had become much more decentralized and diversified within the DT group than within the NTT group. We argue that the transformation in corporate strategy and structure were broadly similar at DT and NTT, responding to broadly similar environmental challenges. By contrast, labor strategies adopted by employees and their collective representatives within DT and NTT differed substantially. The strategic interactions between corporate management and employee representation bodies resulted in contention over the boundaries of the firm within which a uniform human resource system should apply. As a result, more diversity was introduced in Germany—with different pay and a different collective agreement for each DT group company—than in Japan. These differences in the degree of human resource diversity were not consistent with the predominant national institutional patterns in Germany

³Empirical evidence is based both on documents (for example, company reports, presentations, collective agreements, and union documents) and on a total of 30 interviews conducted in 2002 and 2003 with managers in human resources and corporate planning at DT and NTT group companies and corporate headquarters, as well as union headquarters, company-level union branches in Japan, and works councils in Germany.

and Japan. We suggest that they can be explained only if we understand how labor strategies came to modify, rather than merely conform to, prevailing institutional opportunities and constraints.

2. Similarities in Corporate Strategy and Structure at DT and NTT

DT and NTT in the 1990s both pursued strategies of product diversification in response to technological change, privatization, deregulation, competition in global markets, and the growing importance of stock markets. Both firms transformed themselves from primarily fixed line telephone carriers to telecom groups incorporating various branches of the information services industry. In accordance with Proposition 1, diversification transformed the corporate structure from the U-form, dominated by functional departments and regional offices, to a predominantly M-form in the case of DT and H-form in the case of NTT.

The new structure of the DT group, in fact, has some elements of both M-form and H-form organization. T-Com (in fixed line business) is an internal division of parent firm Deutsche Telekom AG. The three additional "divisions" are actually structured as separate companies: T-Systems International GmbH (in information technology and communication systems), T-Mobile International AG (in mobile communications), and T-Online International AG (providing internet services). Deutsche Telekom AG acts as a headquarters to the corporate group, exercising control over the group companies' investment decisions.

Since 1999, the NTT group has been structured around a holding company that controls seven key operating companies. These are NTT East and NTT West (both in fixed line business, which is regulated by the government), NTT Communications (IP integration and networks), NTT Data (data communication), NTT DoCoMo (mobile communications), NTT Facilities (design, construction, and maintenance services), and NTT Comware (software). The first three were established in 1999, while

the other companies were created in the late 1980s and early 1990s.

The DT and NTT groups have similar business portfolios. The fixed line telephone business accounted for 47% of total group sales at DT group and 48% of NTT group sales in 2002—concentrated within T-Com at DT, but split across two regional companies (NTT East and NTT West) and one long-distance company (NTT Communications) at NTT. Mobile telephone service takes up a significant part of the remaining sales, with T-Mobile accounting for 34% and NTT DoCoMo for 41% of total group sales. Remaining sales are in various IT-related fields.

Despite the similarities in group strategy and structure by the late 1990s, privatization and the accompanying liberalization of the telecommunications market occurred a whole decade later for DT (in 1995) than for NTT (in 1985). NTT Corporation diversified operations earlier and more gradually by nurturing internal divisions well before they were hived off in the 1990s. DT diversified later, coincident with privatization. Thus, DT not only spun out internal divisions such as mobile communications (T-Mobile), but also quickly acquired outside firms, such as Debis Systemhaus (from DaimlerChrysler) in 2000. This difference in diversification strategy occurred because competitors had emerged in domestic markets by the time DT was privatized, whereas there were no viable competitors in the Japanese market in the late 1980s when NTT was looking to diversify.

The process of privatization and market liberalization also involved political contestation over the strategy and structure of the former telecom monopolies. From the time of the 1985 privatization, NTT resisted the Japanese government's pressure toward an American Bell system type of break up that would separate NTT into separate regional firms (Zendentsu 1997). The holding company structure emerged as a face-saving political compromise in 1999. Politics thus explains the somewhat weak role of the NTT holding company, which only loosely coordinates investment

within the NTT group and has not been able to hinder competition among group firms in new areas of business such as Internet service provision. By contrast, central management at DT has maintained greater strategic control over the group as a whole. Despite the initial autonomy of subsidiaries during their creation, boundary disputes and post-merger integration of group business lines have prompted greater intervention from the central management of DT AG.

Despite the different *modus operandi* of diversification, changes in the strategy and structure of both DT and NTT created substantial pressures to adopt more diverse human resource systems within their corporate groups. Both groups undertook business diversification into new areas even as they drastically reduced employment in their "older" fixed line businesses. In the period following privatization, DT's work force was cut from 230,000 to 120,000, and NTT's from 300,000 to 150,000. However, the DT group introduced a different pay scale and collective agreement for each of the group companies and relied much more on external employment adjustment, whereas NTT maintained a uniform group-wide human resource system and relied on more internal employment adjustment. These divergent outcomes cannot be easily explained by corporate strategy and structure alone. If anything, political pressures for decentralization were greater at NTT than at DT, and weakened the capacity for centralized corporate strategy. Thus, to better explain these different human resource outcomes, we turn next to labor strategies, and then examine the interaction between corporate and labor strategies.

3. How and Why Labor Strategies Diverged at DT and NTT

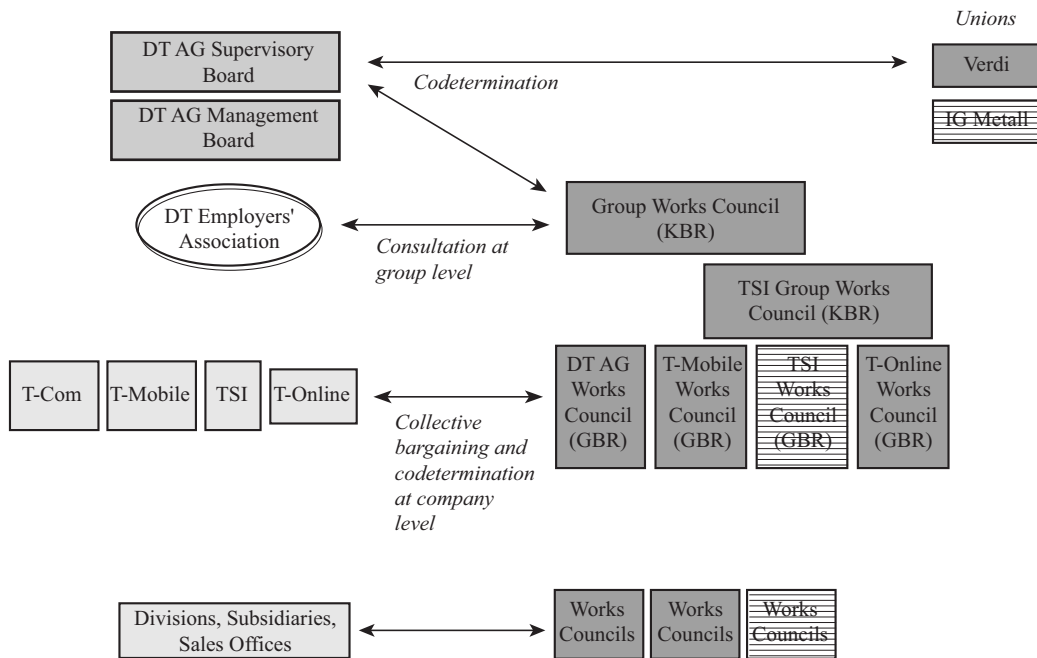
Given the similar shifts in corporate strategy at DT and NTT, what strategies did labor adopt in response? In particular, why did the union at NTT follow the solidaristic strategy of retaining a centralized structure of collective bargaining and consultation? And why did unions and works councils in

the DT group pursue or allow greater diversity of working conditions alongside a more decentralized structure of collective bargaining and works council representation?

Before privatization and deregulation, in both Germany and Japan the telecommunications sector was a regulated public monopoly. Because the monopoly's operational boundary coincided with the boundary of the industrial sector, an industrial union, prevalent in Germany, had the same boundary as an enterprise union, prevalent in Japan. Thus, while Germany and Japan had distinctly different national institutions governing labor-management relations, pre-privatized DT and NTT had very similar employee representation systems. At DT, Deutsche Postgewerkschaft (DPG) represented workers in telecommunications, postal services, and the postal bank. Since these businesses were integrated into a single organization, DPG was essentially an enterprise union, and had very close relationships with Telekom works councils and management. At NTT, Zendentsu (the Japanese Telecommunication Workers Union) was the largest enterprise union in Japan, wielding much power vis-à-vis management (by negotiating a co-decision-based consultation system) and the government (by mobilizing resources to influence the ruling Liberal Democratic Party as well as the Ministry of Post and Telecommunications) (JIL 1996). But in response to the liberalization of telecom markets, the labor representation systems were transformed in widely different ways, albeit from this similar starting point. Ultimately, the employee representation system became much more decentralized at DT than at NTT.

Decentralization is often seen as resulting from unilateral managerial action (Katz 1993), such as the break-up of the Bell system in the United States. However, Proposition 2 suggests that labor strategy must balance cross-pressures for greater diversity (the "logic of membership") and for solidarity (the "logic of influence"). Corporate diversification may increase the heterogeneity of skills and occupations within the firm, and decentralization may expose employees to different risks and

Figure 2. Employee Representation System at DT.

*Notes:*

KBR = Konzernbetriebsrat (corporate group-level works council); GBR = Gesamtbetriebsrat (corporate-level works council).

Co-determination refers to consultation, information, and co-decision-making.

Collective bargaining at T-Com and T-Mobile are with the union Verdi, while bargaining at TSI is with IG Metall. There is no collective agreement at T-Online. See Table 1 for details.

Verdi is represented on all Group Works Councils and Works Councils, except those at TSI, where IG Metall has representation. These patterns of representation are indicated by variable shading.

rewards within different fields of business. Thus, depending on the trade-off between membership and influence in a particular case, labor may itself have different strategic interests in greater centralization or decentralization.

Employee Representation at DT

The structure of employee representation within the DT group is quite complex (see Figure 2). DT follows the German "dual" structure of (a) collective bargaining by unions and (b) legally mandated codetermination rights given to works coun-

cils and through seats on corporate Supervisory Boards. In the past, a single union (DPG) signed a collective agreement with DT, Deutsche Post, and the post bank. In the 1990s, however, only DT AG remained covered by the original agreement. New business areas developed their own employment practices. T-Mobile was eventually covered by a separate collective agreement, while T-Online remained without a collective agreement. T-Systems International is the most complex case, since the various operating subsidiaries are themselves covered by various separate collective agreements. Most of these agreements

were negotiated by DPG and its successor union, Verdi. However, external corporate growth by acquisition brought in new business units covered by prior collective agreements by another union, IG Metall.

The structure of works councils also reinforced decentralization. Figure 2 shows that works councils are arranged hierarchically into three levels. At the establishment level, works councils (Betriebsrat—BRs) are directly elected by local employees and responsible for local working conditions. A corporate-level works council (Gesamtbetriebsrat—GBR) is formed at each company by delegates from various establishment-level works councils. For example, the DT AG GBR has representation from 80 BRs. At the top, a corporate group-wide works council (Konzernbetriebsrat—KBR) has existed since 1996, with half its members from the GBR of the parent DT AG and half from the GBRs of 15 group companies. The mandate of the KBR remained relatively narrow to deal only with broad matters pertaining to the entire group. Meanwhile, GBRs emerged as centers of gravity within DT, due to their stronger legal rights to information and codetermination relative to the KBR (Kalkowski et al. 2001). Moreover, as DT delegated management decisions to group companies, the GBRs had greater access to the key decision-makers on the management side.

Given this structure of employee representation, collective bargaining was substantially fragmented and decentralized. Considerable diversity existed between agreements in basic pay, the number of job categories and working hours arrangements, and the content of performance-related pay (see Table 1). This situation emerged essentially because bargaining took place company-by-company. As new companies were created or hived off, employees from the parent company were covered by transitional agreements that guaranteed their basic wage conditions. But they were no longer covered by the original DT collective agreement regarding future wage hikes and various workplace rules. Meanwhile, newly hired employees at the group companies were often initially not

covered under any collective agreement.

T-Mobile provides a good illustration. After its initial creation in 1992, the central DT management left T-Mobile alone. Salaries for new hires were negotiated on an individual basis for several years. Starting in 1996, the T-Mobile corporate-level works council signed a separate agreement that established a basic system of job classifications—the first time a DT group company officially introduced a new scale. Individual negotiations over salaries had introduced much variation within the company, so both sides saw a need to systematize human resource practices and standardize pay for similar work within the firm. The first collective bargaining agreement with the union (DPG) followed in 1997. Performance-related pay, set at 10% of total salary, was officially introduced, with strong involvement of the parent DT management. The case later provided a template for other group companies, although the actual levels of pay would differ.

One crucial question, which has special resonance because of the contrast with NTT, is why labor did not enforce a uniform collective agreement for the whole DT group. There are three key reasons: inter-union rivalry, pressures for decentralization coming from works councils, and better conditions offered to new employees. These three factors together allowed a “logic of membership” to prevail and create greater decentralization, as opposed to a “logic of influence” based on uniformity and solidarity across business units.

A first pressure for decentralization was strong inter-union rivalry. Telecommunications is an emergent sector, fluid in scope and still in the process of being redefined as information services. As established firms from different sectors have diversified into telecommunications, union representation in the industry has become fragmented. German industrial unions also badly need to offset declining membership by making gains in newer growing sectors. The DT group is represented by four different unions. Verdi (the unified service sector union) is the successor of the former DPG and remains the largest union within DT.

Table 1. Collective Agreements within the DT Group: Selected Characteristics, 2002.

<i>Characteristic</i>	<i>Deutsche Telekom AG</i>	<i>T-Mobile International</i>	<i>T-Systems International^a</i>
Collective Agreement	Yes, with a new payment and evaluation system.	Yes.	Yes, but multiple agreements for different subsidiaries.
Union	Verdi.	Verdi.	IG Metall and Verdi.
Basic Pay	Fixed monthly salary.	Fixed monthly salary.	Yearly salary. Stipulates minimum and maximum salary. Management discretion within corridor (ranging between 7.5% and 60.5% depending on job category).
Performance Related Pay	6–12% of monthly salary given 100% performance. Weighting 2/3 individual/team performance, 1/3 corporate performance.	10% of monthly salary given 100% performance. Weighting 2/3 individual/team performance, 1/3 corporate performance.	Yes.
Number of Wage Categories	10 categories, plus 6 categories for sales-related jobs.	8 categories.	10 categories.
Working Time	38 hours.	n.a.	35 to 40 hours, depending on age.
Pay Range by Job Category	Job Category T5; 28,068 to 33,792 Euro per year.	n.a.	Job Category 5; 33,900 to 50,850 per year.

Note: T-Online has no collective agreement.

^aMajor subsidiaries of TSI have separate collective agreements that may deviate substantially from these parameters.

The *Kommunikationsgewerkschaft*, representing civil servants, and *Christliche Gewerkschaft Post und Telekommunikation* have a long history of cooperation with the DPG and Verdi. However, strong rivalry emerged between Verdi and IG Metall. The Metalworkers' union (IG Metall) became a significant player when the T-Systems division was created by bringing together its internal IT service division (DeTeSystem) and Debis Systemhaus, acquired from DaimlerChrysler in 2000.

When Debis was created by Daimler in 1990, the original 2,400 employees were covered under the sectoral agreement of IG Metall. However, management refused to apply these conditions to new hires as the company expanded to over 10,000 employees. A special Debis house agreement has signed in 1998 to supplant the sectoral-level metal workers' agreement with innovative elements regarding working time and

performance-related pay.⁴ Meanwhile DeTeSystem employees are organized by Verdi and covered under a separate agreement, reflecting Verdi's more conservative stance toward performance-related pay and discretionary working time. Thus, the telecommunications sector is quite untypical in Germany in having a fragmented union structure and no industry-wide collective bargaining agreement.

A second pressure for decentralization came from works councils at newly created business units where union involvement was much lower. The DPG union had a history of very close relationships with the

⁴The new Debis agreement was formally concluded on behalf of the employers' association and was thus intended to be a model for other IT firms. See <http://www.eurofound.ie/1998/03/feature/DE9803257F.html> for details.

Telekom works councils. But the period of diversification of DT coincided with the reorganization of DPG into a conglomerate union, Verdi, as five major service sector unions merged in June 2001. This merger process took substantial organizational resources and drained efforts from union organizing. Consequently, organizing rates went down in newer DT operations. Whereas about 70% of parent company employees were union members, unionization rates dropped to around 25% at TSI, 15% at T-Mobile, and just 5% at T-Online. Given the weaker involvement of Verdi, works councils played an active consultation role as management pioneered new human resource systems.⁵ Given the legal support of their influence within the firm, works councils responded more strongly to the “logic of membership” focused around local concerns. Likewise, the relative weakness of the group-wide KBR gave greater scope for local variation.

A third pressure for decentralization was the fact that employment conditions for new employees in new business units were generally better than those in the existing parent fixed line business units. The cyclical developments in IT and communications also meant that going rates in the external labor market were quite favorable. Works councils have little incentive to behave in a solidaristic fashion when promoting uniformity may lead to perceived reductions in benefits, since the influence of works councils is protected by law rather than based directly on union membership. Perhaps even more compelling was the fact that subsidiaries had to match or better the parent company conditions to induce employees to transfer.

Equally or even more important was the fact that, unlike at NTT, a large number of employees at DT had civil servant status and could not be dismissed, nor could they be reassigned to group companies without

losing their civil servant status. In order to facilitate their movement to “private” sector employment within the group, DPG negotiated transition agreements to protect their working conditions in the case of transfers and allow them the option of returning to DT itself. These agreements set a high threshold for conditions in new DT group companies.

Labor Strategy at NTT

The All NTT Workers Union of Japan (NWJ) is the largest enterprise union in Japan today, with a membership of 185,000. It can be traced back to 1950, when Zendentsu (the Japanese Telecommunication Workers Union) was founded initially with about 43,000 members and a unionization rate of 34% (NWJ 2002). Subsequently, despite an open shop agreement—the legacy of the legally prescribed practice for public corporations—Zendentsu and now NWJ have boasted a union density of over 99%.⁶

When NTT Corporation started spinning off internal divisions after privatization, Zendentsu followed the Japanese norm of retaining the living standards of existing members when they moved to the newly created companies. More remarkably, the same conditions were applied to newly hired employees by extending the existing collective agreement to new companies. Starting with the creation of NTT Data in 1988, neither management nor labor appeared to have questioned this practice. Unlike at DT, the practice at NTT of extending an existing central collective agreement to group companies meant applying the agreements not only to pre-existing employees but also to new recruits. Notably, around half of the 11,000 employees were recruited directly by NTT DoCoMo, and had never worked for NTT Corporation. The strategy to extend the collective agreement coverage also led Zendentsu to become, in ef-

⁵By law, works councils are not allowed to engage in collective bargaining. Their usual role with respect to wages is to help management adapt and apply industry-level agreements to the particular firms.

⁶Less than 1% of NTT group workers are organized by minority unions, such as the Communist Party-controlled Tsushin Roso and Dentsu Roso.

fect, a union encompassing the whole NTT group.

This union structure was the consequence of explicit deliberation. Anticipating the adoption of the holding company structure, Zendentsu renamed itself the All NTT Workers Union of Japan (NWJ). It also changed its organization, switching from regionally based branches to company-based ones, with one branch for each of the eight core firms in December 1998. The union debated an alternative structure—a federation of separate enterprise unions, one for each operating company—but rejected it. Some members argue that the centralized union pulls wages “down” toward the weakest companies, but two advantages are the facilitation of internal employment adjustment and the pooling of union resources.

In particular, union members at the shrinking fixed-line businesses had little to gain from decentralization. A unified union voice was needed to avoid the complete break-up of the NTT group by the government. The “logic of influence” based on solidarity outweighed the “logic of membership” that might have led to differentiation in pay and conditions according to differential performance between, for example, NTT East in fixed line business and NTT DoCoMo. Consequently, while the internal structure was reformed, the organizational boundary of the union was not changed.

Nevertheless, just as in Germany, the boundary of the industrial sector became wider and more blurred, as new firms entered as telecom carriers and IT services companies. NWJ as an enterprise group union was no longer coterminous with an industrial union. Where there are new enterprise unions, at new entrants or at NTT subsidiaries, they belong to the industry federation, Joho Roren (the Japan Federation of Telecommunications, Electronic Information, and Allied Workers). Such separate enterprise unions had existed at NTT DoCoMo’s subsidiaries that provide sales and engineering services. But in 2002, NWJ persuaded these subsidiary unions to disband and to join the

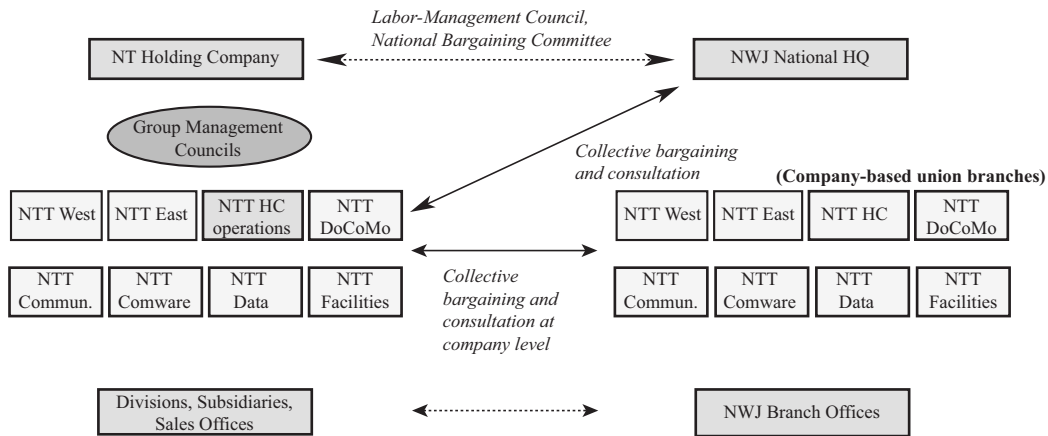
NWJ, despite a slightly higher subscription rate.

A consequence of NWJ’s decision to remain unified and encompassing is that the union is more centralized than corporate management (see Figure 3). The NTT holding company management gave full autonomy for collective bargaining to the group companies. Meanwhile, the NWJ headquarters initially retained the right to negotiate all terms, including both substantive and procedural issues, with each of the eight key group companies, with a view to arriving at an identical agreement for all. Consequently, company-level union branches did not have any authority to bargain and settle an agreement with their respective company management, without the involvement of the union headquarters.

From spring 2001, however, NWJ gave the company-level union branches the right to bargain over all issues except the core work conditions (especially the wage levels, although there is considerable disagreement among union branches as to what else constitutes the core conditions). Consequently, management at each group company bargains at two levels, with the union headquarters and the company-level union branch. While the formal structure of collective bargaining has thereby become more decentralized, the substantive outcomes and policies pursued by the union have thus far remained uniform (Yoshihara 2000). Moreover, the same payment system continues to apply to all group companies, because NWJ retains the right to bargain for an identical wage increase for all employees of the core NTT group through the Shunto bargaining round.

A similar two-level system exists for labor-management consultation. For example, NTT DoCoMo management consults with the union headquarters over how DoCoMo’s business plan fits the context of the overall NTT group. In separate meetings, the same DoCoMo management team discusses DoCoMo-specific issues in greater detail with the DoCoMo union branch. Interestingly, the holding company management has precisely the same two-level

Figure 3. Employee Representation System at NTT Group.



Note: NWJ = All NTT Workers Union of Japan.

consultation system, without the power to take up issues for the NTT group as a whole. Thus, the union, by virtue of retaining a partially centralized system of bargaining and consultation, is more able to act on the basis of group-wide information than is the holding company itself. The holding company has weak authority, not just over the operating companies, but also in the system of employee representation and consultation.

To summarize, compared to the labor strategy at DT, NWJ (the NTT union) has been able to pursue a strategy of encompassing interest representation, in the face of decentralizing pressures from management. In particular, the substance of collective bargaining and consultation remains more centralized and uniform within the NTT group than within the DT group. NWJ was able to pursue this centralized strategy successfully partly because, unlike labor at DT, it did not face any competing employee representation bodies, such as rival unions or independent works councils. NWJ continued to retain full authority over both the bar-

gaining and consultation arenas. Consequently, despite the absence of a union shop agreement, union density remains close to 100% at each NTT operating company.

4. Contention over Human Resource Outcomes

This section examines Proposition 3, which suggests that corporate and labor strategies may coincide or conflict. While DT and NTT pursued broadly similar corporate strategies (see Section 2), labor's strategic response differed (Section 3). Consequently, NTT saw a greater divergence between corporate and labor strategies, whereas strategies in DT initially pushed in the same direction of decentralization of payment systems and externalization of employment adjustment as business diversified. Given the contention over outcomes at NTT, the retention of greater uniformity in human resource practices must be explained with reference to the relative power of the union and management.

Diversity of Human Resource Practices

The DT group's four divisions are governed by different human resource systems, with some variations in collective agreements even within a division such as T-Systems. Not only basic pay, but also the extent of performance-related pay, the number of wage categories, and working time arrangements all differ from division to division (see Table 1). By contrast, the NTT group retains a single human resource system for the whole group. The central collective agreement spells out all substantive terms and conditions of employment. The same performance-related pay system was centrally negotiated and introduced to all group companies at the same time in 2001. This contrast in outcomes may be attributed to different interactions between corporate strategy and labor strategy. At DT, corporate and labor strategies at least partially coincided regarding the introduction of greater diversity into the human resource system (corresponding to quadrant III in Figure 1), leading to less contention than in the NTT group.

Both DT management and the DPG union (later Verdi) saw advantages in more flexible and diverse human resource practices within the group. In departing from the past legacies of civil servant-type employment patterns, DT management used decentralized experimentation coupled with *ex post* coordination. While group companies experimented with new human resource elements, DT also recognized the need to coordinate human resource strategy at the group level. Management created an internal employers' association (Arbeitgeberverband Telekom—AGV-T), which gathers DT personnel directors at various levels to coordinate group-wide human resource policies. AGV-T also participates in collective bargaining alongside the subsidiaries' management, thus giving some oversight and continuity to the employer's side in the bargaining process.

Following the creation of AGV-T in 1996, labor also sought to coordinate its strategies by creating a group-wide works council (KBR). While this centralized consultation

mechanism is used to establish uniform group-wide regulations, the scope of involvement remains limited. However, less formal coordination through this mechanism has been extremely important in the diffusion of innovative components of group companies' human resource systems. A central example is performance-related pay, whereby elements pioneered at T-Mobile served as a template for reforming the system at the parent company, DT AG.

At NTT, decentralization has been limited, and usually a slow and managed process. While management and labor had divergent preferences regarding diversity in human resource systems (corresponding to quadrant II in Figure 1), the union at NTT has been more powerful than management, and was therefore able to impose its preference for a centralized bargaining structure to retain a uniform set of core working conditions.

Despite the union's effectiveness in combating decentralization, more severe conflicts later emerged that suggest limits to union strength. Major restructuring at NTT took place in 2002 due to the deterioration in financial performance of fixed line business. Negotiations that took place over the 2002 restructuring of the NTT group, and the unusually harsh mood that prevailed, are testaments to a fundamental disagreement between management and labor. Management proposed to narrow the corporate boundaries, externalizing a significant proportion of the existing organization in the form of outsourcing companies. The union bargained for, and failed to attain, what had been the norm thus far, namely the maintenance of living standards for existing union members when corporate forms change.

The negotiated outcome involved a plan to reduce costs by 110 billion yen (of which 35 billion was to come from labor cost reduction) at NTT East and 155 billion yen (65 billion from labor cost reduction) at NTT West during the 2002/3 fiscal year. There were four instruments to reduce labor costs. First, various benefit systems (including retirement pensions) were reviewed and some allowances (for example,

for cold climate) abolished with a view to introducing more performance-related elements. Second, 16,400 workers (6,400 from East, 10,000 from West) were to be forced into early retirement, joining 9,400 who had already retired by December 2001. Third, it was agreed that a total of 6,500 would be transferred from East and West to other group companies. Fourth—and this was the most contentious issue negotiated—100 outsourcing companies were established by NTT East and West, and nearly 60,000 employees were transferred to these companies in May 2002. Employees aged 50 or over were asked to take early retirement, and to be re-employed by the new companies at a wage up to 30% lower than in their previous jobs. The union started by negotiating for no pay cut, but ended up agreeing to the 15–30% wage reduction, with a lump-sum payment at the point of transfer to ease the pain of adjustment.

These 60,000 or so employees are doing the same job (in sales, maintenance, and so on) as before, but with pay reductions of up to 30%. This is the cost of treating employment security as the top priority under all circumstances, as both management and labor shun the use of compulsory redundancy. Thus, the solidaristic norm of income maintenance has been broken, but so as to defend the norm of “lifetime employment.” Employees at the outsourcing companies retain union membership, so those companies remain within the bounds of NWJ. The willingness to accept wage reductions opened the door to differentiation across workers within the same union.

Employment Adjustment

On the whole, employment adjustment has been more internal at the NTT group than at the DT group. Both groups have managed to more than halve their work force since privatization, although NTT had a ten-year head-start (with privatization beginning in 1985, versus 1995 for DT). The reduction in total employment to 178,000 at the DT group and 143,000 at the NTT group by spring 2002 was achieved by exits outnumbering recruits by a factor of 2

to 1 or 3 to 1 at various times. Besides normal retirement, early retirement packages were used actively in waves at both DT and NTT.

DT and NTT made similar efforts to avoid outright compulsory redundancies. While DT has an explicit job protection agreement, NTT is governed by a less formal lifetime employment norm, although such norms are usually enforceable in Japanese courts by case law. The German labor market is linked to an elaborate system of occupational training, and consequently career patterns and employment rights are more occupation-centered than in Japan. The importance of occupational status is particularly important given the civil servant or quasi-civil servant employment rights at DT. In effect, this made it possible for a worker to refuse to be reassigned at DT. Such a worker would then be outside the job protection agreement and could be made redundant.

Moreover, the disability-in-occupation certification enabled employees to obtain benefits from the state insurance fund when they were deemed medically “unfit” to work in new occupations. The generous use of these welfare state provisions enabled DT to externalize to the state some of the burden of shedding excess labor. By contrast, the absence of such a welfare state in Japan, as well as the centralized employee representation system in NTT, led to greater internalization of employment adjustment within the NTT group.

Having employed the early retirement option so extensively that its further use is ruled out for at least a few years, DT and NTT have recently begun following more divergent paths. DT created the PSA (Personnel Services Agency) in December 2002, an internal agency charged with the task of finding jobs, both internal to the DT group and externally in the open labor market, for 55,000 excess workers by 2005. At NTT, the creation of 100 outsourcing companies to reassign 60,000 workers from NTT East and West in May 2002 is an adjustment of similar magnitude. DT’s PSA was designed to support employment adjustment external to the DT group, while NTT’s

outsourcing companies involve internal adjustments only. However, the PSA had only limited success in placing workers outside DT, leading DT to partially re-internalize employment adjustment by reversing previous strategies of outsourcing and providing those jobs to the PSA members at slightly reduced wages. Likewise, purely internal adjustment at NTT came at a high price in terms of wages. Thus, each strategy faced inherent limits.

Strategy Meets

Institutions: A Renegotiation

Our case studies also shed light on how pressures for decentralization and diversity play out in diverse institutional settings. Reflecting the similar stakeholder orientation of the German and Japanese business systems, DT and NTT both displayed strong commitment to cooperation and maintaining employment. But Proposition 4 suggested that, given the differences in institutional arrangements, German labor has greater institutional resources and capacity to resist pressure for decentralization. In particular, Germany has industrial unions and legally mandated works councils, in contrast to Japan's enterprise-based unions. However, corporate restructuring showed greater decentralization at DT than at NTT. This apparent contradiction raises a broader issue of how contingencies in strategic decision-making may modify a set of institutions.

At DT, the legal status of works councils supported labor influence, but structured that influence in a relatively decentralized manner. These decentralized structures at DT allowed greater scope for responding to the "logic of membership" in pursuing gains for employees in new business areas. Meanwhile, an industry-wide collective agreement and monopolistic representation by a single industrial union, key features of most German industrial relations, were absent in the telecommunications sector. Corporations diversified into the telecommunications sector from many different fields, with the result that different industrial unions became rivals within the

sector and left employers with no common bargaining agent. Thus, works councils remained as stable structures within DT but took on new functions outside the traditional remit of co-determination and consultation due to their weakened relationship with industrial unions. Thus, the DT case shows how strategic behavior at the boundaries of institutions may lead to incremental forms of institutional change (see Streeck and Thelen 2005).

At NTT, preserving union influence depended much more on the continued centralization of its organizational structure. Meanwhile, this different "logic of influence" for the NTT union required it to adopt a more solidaristic stance in catering to its average member rather than to the diverse needs at different group companies. The union at NTT is an exceptionally strong institution within Japan due to its high organization rate and strong political influence. In order to maintain its centralized influence in the face of corporate diversification, it effectively transformed itself structurally from a strictly enterprise-based union to one encompassing multiple enterprises.

The respective strategies of labor at DT and NTT were also influenced by other sets of institutions, which shaped patterns of employment adjustment. These strategies ultimately affect the boundaries of corporate and union organizations. Differences in welfare state and labor market institutions reinforced differences in labor strategy. The German welfare state supports corporate adjustment through an "externalization regime" (Rosenau and Naschold 1994) that places burdens of adjustment on the welfare state in ways not possible in Japan. Moreover, the occupation-centered qualification and labor market structure in Germany predisposed management and labor to rely more on external adjustment at DT than at NTT. In Japan, commitments to lifetime employment must be taken care of internally by providing employment within a broadly defined corporate group or providing company-based early retirement.

The above comparison shows the impor-

tant influence of national institutions on strategy, but also shows how strategy and power bring about institutional change. DT represents a strong case of a broader trend toward weaker relationships between German unions and works councils (Jackson 2005). Here corporate strategies that blur the boundaries of existing and new sectors are leading to union responses that modify old patterns of industrial relations. The case of NTT is likewise part of a broader phenomenon whereby enterprise unions are redefining their scope, through such means as union federations, in response to corporate strategies of diversification and creation of more decentralized corporate groups (Sako 2006). In theoretical terms, the cases show that strategic decisions by labor, as well as power relationships between labor and management, shape patterns of institutional change.

Conclusions

This paper has shown the usefulness of combining the strategy-structure literature and institutional approaches to explain changes in labor-management relations. The strategy-structure literature proves useful for outlining the general trajectory toward more decentralized and differentiated organizational structures, but is insufficient to explain the different outcomes at DT and NTT. To identify the sources of differential outcomes, we examined several national-institutional factors, including the different structures of employee representation, institutional resources for employment adjustment, and the politics of the privatization process. In themselves, however, institutional explanations are often too focused on macro national-level factors and thereby overlook the dynamics of organizational strategy that modify or fall outside the boundaries of those institutions. Our framework shows that the stability of institutional structures might also coexist with contention and power play in cases where corporate and labor strategies diverge. These insights suggest a view of institutions not only as a set of constraints on strategy (Hall and Soskice 2001), but

also as the outcome of strategic interaction.

The differences in institutional context between Germany and Japan would lead one to predict greater ability to resist pressures for decentralization in the German system than in the Japanese one. However, in the telecommunications sector, we find just the opposite: the DT group has become more heterogeneous in its human resource systems than the NTT group. This result is explained with reference to the four propositions. We showed that DT's and NTT's corporate strategies were broadly similar, with diversification leading to the creation of a corporate group (Proposition 1). We also showed that labor organizations at DT (both unions and works councils) had their own reasons to pursue a strategy that emphasized greater functional differentiation, while the union at NTT pursued a centralizing strategy, maintaining full control over the extension of the existing collective agreement to hived-off companies (Proposition 2).

Given these differences in labor strategies, the organizational boundaries were not greatly contested at DT, with both management and labor preferring decentralization. By contrast, the prevailing boundaries at NTT group were the outcome of greater contention. While labor preferred greater centralization than management, the NTT union proved powerful enough to maintain a centralized human resource system (Proposition 3). The differences in labor strategy between NTT and DT would not be expected based on the prevailing institutional patterns in their respective countries. The divergent outcomes show that although the opportunities and constraints associated with existing institutions do shape human resource systems (Proposition 4), labor is a strategic actor that may also modify those institutions, sometimes in unexpected ways.

In summary, we stress the importance (a) of the corporate enterprise as a level of analysis in labor-management relations, and (b) of bringing together both strategic and institutional variables in understanding how organizations evolve over time.

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