

GOING ABROAD: HR POLICIES, NATIONAL IR SYSTEMS, AND UNION ACTIVITY IN FOREIGN SUBSIDIARIES OF U.S. MULTINATIONALS

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Previous research is limited regarding the effects of the HR policies of foreign subsidiaries of U.S. multinational companies on union activity. An important topic is the extent to which multinationals employ practices that can be used to reduce unionization in parent company domestic operations and whether they have the same effect in foreign subsidiaries. In this study, the authors examine the effects of a subsidiary's implementation of high-performance work systems, its greenfield site status, and its usage of contract or temporary workers on union activity within the subsidiary. Results from a survey of a number of geographically dispersed foreign subsidiaries of U.S.-based multinationals show that greenfield site status has a strong, negative effect on subsidiary union activity, whereas high-performance work systems have a more modest, negative effect. The authors also show that national IR system characteristics moderate the effect of HR policies, especially if enterprise unionism plays a dominant role in the host country.

Private sector unionism in the United States, which was 6.9% of the private sector labor force in 2011 (Bureau of Labor Statistics 2012), has declined dramatically from its peak of approximately 35% in the 1950s. Although union decline is fairly widespread globally (Blanchflower 2006, 2007), the prevalence of unions in foreign subsidiaries of U.S. multinational corporations (MNCs) remains unclear. Tony Edwards and Anthony Ferner (2002) argued that the union avoidance strategies adopted by U.S. MNCs

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abroad have weakened unions in their foreign subsidiaries. Previous research, however, has overlooked the issue of unionization in foreign subsidiaries of U.S. MNCs.

Studies of companies operating in North America and some parts of the EU have focused on the role of high-performance work systems (HPWSs) in union activity within companies (Appelbaum and Batt 1994; Huselid 1995). Often seen as union substitution techniques (Fiorito 2001), HPWSs have spread extensively to the foreign subsidiaries of U.S. MNCs. Although previous research has shown that aggressive anti-union strategies play an important role in reducing unionization (Lawler 1990), evidence on the effect of HPWSs is somewhat mixed.

In this study, the authors use a sample of foreign subsidiaries of American MNCs in 12 economically and socially diverse countries in Europe, Africa, and Asia. They investigate union activity within these subsidiaries (including variations in subsidiary union density and the presence or absence of written agreements or formal bargaining relationships with a union) with respect to HPWS usage. This study also investigates two other subsidiary organizational human resource (HR) policies in relationship to union activity. One policy regards the mode of entry into a host country. A subsidiary established as a *greenfield* site in a host country (i.e., a completely new operation, as opposed to a *brownfield* site, which is an acquisition of an already established enterprise) is less likely to become unionized. This may be, in part, management's intention (Flood and Turner 1993). The second policy is to use significant numbers of contingent workers, which might help undercut unionization. The nature of the labor movement within a host country may also affect the union activity of subsidiaries. Thus, in this study we examine the effects of several indicators in host-country industrial relations (IR) systems on subsidiary union activity. In post hoc analysis, we consider the moderating effect of IR system variables on the relationships between organizational HR policies and union activity.

Theoretical Framework and Hypotheses

This study uses the labor union definition proposed by Bain and Price (1980) and adopted by Wallerstein and Western (2000: 357): "an organization of employees which seeks to represent the job interests of its members to employers and in some circumstances to the state, but which is not dominated by either of them." To fall under this definition, unions must be, to a considerable extent, independent of both employers and the government. In this study, we consider only host countries that exhibit these conditions (e.g., mainland China and Vietnam have been excluded).

National IR Systems and Union Activity

"Concept stretching" is an important issue in cross-national research (Dunlop 1977; Sartori 1984; Collier and Mahon 1997). The concept-stretching argument holds that certain constructs can become distorted in multicountry

studies, making cross-country comparisons problematic. Equivalent levels of subsidiary union activity in two countries may have very different implications for the strength of a union and the nature of the changes in the employment relationship that unionism can affect. More powerful union structures are likely to enhance the effect of subsidiary union activity. In this study, we also investigate the important national IR system characteristics of host countries, which control for relative labor-management power and provide a means of adjusting for concept-stretching problems. We propose several hypotheses regarding the direct linear effects of IR system variables on union activity. Our empirical work in this study includes exploratory sensitivity analysis to examine whether IR system variables moderate the relationships between organizational HR policy variables and subsidiary union activity.

According to William Cooke and Deborah Noble (1998), host-country union density is a general indicator of the receptiveness of the host-country environment to unionization. Greater union presence in the host country is likely to be associated with more resources available to support new union organizing and establishing unions. This leads to the following hypothesis:

Hypothesis 1a. A positive relationship exists between host-country union density and union activity in the foreign subsidiaries of U.S. multinationals.

Another important IR system indicator is whether the host country has laws or policies promoting or requiring the establishment of works councils in companies. The members of works councils are often union activists. Works councils complement unions by strengthening employee voice and reinforcing trade union goals and objectives:

Hypothesis 1b. A positive relationship exists between host-country works council requirements and union activity in the foreign subsidiaries of U.S. multinationals.

Previous research argues that greater bargaining breadth in labor organizations leads to more power in dealing with employers (Cook and Noble 1998; Wallerstein and Western 2000). This suggests the following:

Hypothesis 1c. A positive relationship exists between more centralized bargaining within a host country and union activity in the foreign subsidiaries of U.S. multinationals.

Workers may see fewer benefits to unionization under enterprise unionism because they view unions as weaker than multi-company unions (whether industrial or craft organizations) (Jeong and Lawler 2007):

Hypothesis 1d. A negative relationship exists between the predominance of enterprise unionism in a host country and union activity in the foreign subsidiaries of U.S. multinationals.

Finally, countries vary in the number of peak labor organizations. More peak labor organizations represent greater resource mobilization in support of unionization and may provide a greater range of choices to employees. Thus, we hypothesize the following:

Hypothesis 1e. A positive relationship exists between the number of peak labor organizations within a host country and union activity in the foreign subsidiaries of U.S. multinationals.

Subsidiary HR Policies and Union Activity

High-performance work systems. Several previous studies have linked the implementation of HPWSs to firm effectiveness (Combs, Liu, Hall, and Ketchen 2006). Although previous researchers have developed various approaches to defining HPWSs, the ability, motivation, opportunity (AMO) framework (Blumberg and Pringle 1982; Boselie, Dietz, and Boon 2005) is probably the most common. *Ability* refers to the enhancement of employee knowledge, skills, and abilities through training and rigorous selection procedures; *motivation* refers to the enhancement of employee motivation to engage in discretionary efforts beneficial to the firm (e.g., merit- and performance-based pay); and *opportunity* refers to workplace empowerment and employee involvement, which provide the opportunity for employees to engage in productive discretionary efforts. Without specifically using the AMO term, David Lepak, Hui Liao, Yunhyung Chung, and Erika Harden (2006) defined HPWSs using essentially the same three policy domains. Thus, extensive recruitment and selection activities can be used to assess potential employee knowledge, skills, and abilities at the entry level. Extensive employee training and development programs can further enhance these competencies and skills. To encourage employees to perform, companies must apply a series of motivational HR practices, such as pay-for-performance, financial incentives, and career planning. Finally, companies must create multiple channels to engage workers and to give them the opportunity to take effective discretionary actions, including workplace empowerment, multifaceted jobs, and teamwork. We adopt the framework of Lepak et al. (2006) to define HPWSs.

The HPWS approach represents a major departure from more traditional, control-based employment systems. This approach could substantially alter the environment in which employees, unions, and employers interact. A common issue in the literature is that HPWSs shift the focus from a collective representation of workers, which favors unionization, toward the “individualization” of the employment relationship (Bacon and Storey 1993; Gunnigle 1995; Fey and Björkman 2001). This emphasis on individual or group performance and competitiveness conflicts with the conventional role played by the collective orientation of union representation. Although the primary motivation for adopting a HPWS may be its positive effect on firm performance, many HPWS components are related to

successful union substitution strategies (Foulkes 1980; Lawler 1990; Fiorito 2001; Machin and Wood 2005).

Studies based on the United States have generally shown that HPWSs reduce unionization (e.g., Kochan, McKersie, and Chalykoff 1986; Fiorito, Lowman, and Nelson 1987; Wells 1993; Lewchuk and Wells 2006). Thomas Kochan et al. (1986) found that the number of workplace innovations (i.e., HPWS practices) implemented by a company significantly reduce the percentage of new facilities organized by unions, regardless of the company's stance on unionization. Jack Fiorito and Angela Young (1998) showed that, whereas human resource management (HRM) policies generally reduce the likelihood of workers voting for unionization in nonunion settings, their effect is weaker than other influences. In another study, Fiorito concluded that individual HRM policies generate no stronger effects than a composite index of such policies, observing that "the critical issue (may be) a configuration or pattern of practices rather than particular practices" (Fiorito 2001: 350).

In environments such as Western Europe, where relationships between labor and management tend to be more collaborative than in the United States, authors have argued for a positive relationship between HPWS implementation and union status. Thomas Turner (1994), however, showed no support for a relationship between HPWS usage and unionization in the Irish private sector, and the increase of HPWSs over time in the United Kingdom did not have a significant effect on unionization (Wood and de Menezes 1998; Forth and Millward 2002; Machin and Wood 2005). John Godard (2009) contrasted the use of what he termed "alternative work practices" (AWP) (i.e., worker empowerment) in union representation in Canada and the United Kingdom. The relationship was negative in the case of Canadian workers, yet positive in the United Kingdom. Godard suggested that labor-management adversarialism in Canada (with an IR system similar to the United States) and collaboration in the United Kingdom are the possible reasons behind such links. Shyh-Jer Chen (2007) also found a positive relationship between a composite HPWS scale and unionization in Taiwanese-owned companies.

Previous research has indicated that HPWSs have a single dimension or consist of multiple subdimensions. The scale development process in this study (discussed in detail below) suggested that the three dimensions of the AMO framework and the work of Lepak et al. (2006) could be combined into two meaningful scales. The first of these scales was a composite of the ability and motivation dimensions (i.e., merit, pay-for-performance, training, and development), forming the *Ability-Motivation* scale. The second scale consisted primarily of opportunity items (i.e., teamwork, employee discretion, multitasking, and information sharing), forming the *Opportunity* scale. For ease of presentation, for this study we test HPWS hypotheses by referencing these two empirically derived dimensions.

Although prior research has shown conflicting HPWS effects on union activity cross-nationally, an important consideration regarding the expected

effects of the Ability-Motivation and Opportunity factors in this study is that we are dealing exclusively with U.S.-based MNCs. A strong argument has been made by others that many U.S. MNCs tend to export strong union avoidance ideology internationally (Edwards and Ferner 2002). Therefore, it seems reasonable to assume that the organizational climates of these subsidiaries as related to union activity are similar to those of U.S.-based companies. We will later report the results of sensitivity analysis of our parameter estimates to assess the robustness of our findings with respect to this assumption across national IR systems and geographical locations.

We draw from Godard (2009) in developing hypotheses because his approach to measuring HPWSs is similar to the AMO framework. His “contingent pay” factor clearly corresponds to the motivation components of the proposed Ability-Motivation factor. Godard argued that contingent pay systems stress self-interest, or perhaps group interest, at the expense of organizational solidarity and a perceived community of interests, as would be the case under fixed wage and seniority-based pay systems. He argued that firms wishing to promote organization-employee fit and utilizing contingent pay systems would be more likely to recruit employees who are more individualist than collectivist, and therefore potentially hostile to unionization. This reflects the argument that the “individualization” of the employment relationship occurs under HPWSs (Bacon and Storey 1993; Gunnigle 1995). Another factor in Godard’s analysis, “new HR practices,” partly overlaps Ability-Motivation, mainly with respect to training practices. He also posited that this factor has a negative relationship on unionization in the North American context, although this relationship was statistically insignificant in his study. These arguments lead to the following hypothesis:

Hypothesis 2a. A negative relationship exists between Ability-Motivation and union activity in the foreign subsidiaries of U.S. multinationals.

Godard’s AWP factor corresponds closely to the Opportunity factor in this study. Godard posited an inverted U-shaped relationship between AWP and union representation in the North American context. Godard (2009) argued that at lower AWP levels, these practices might be accepted to a limited extent by unionized employees in the adversarial North American context, coexisting with union representation. As AWP increase, union resistance grows, so that the relationship becomes negative. His empirical research supported only a negative relationship, however, which seems to discount the inverted-U argument, suggesting that these techniques generally reduce union representation in this context. This may be because participation and empowerment techniques act as alternative employee “voice” mechanisms and serve as a union substitution device.

Hypothesis 2b. A negative relationship exists between Opportunity and union activity in the foreign subsidiaries of U.S. multinationals.

Greenfield sites. Fred Foulkes (1980) showed that companies seeking to avoid unionization often replace existing unionized plants with completely new facilities, which are frequently located in states with low levels of unionization. Such greenfield sites allow a fresh start, with completely new employees and revamped employment systems. In the context of international business, greenfield sites are new subsidiaries built from the ground up, whereas brownfield sites are established facilities acquired by multinationals. Brownfield sites have a legacy of employment practices, worker sentiments, and possibly an existing union.

The international IR literature has thoroughly discussed the role that greenfield sites might play in preventing unionization in MNC subsidiaries (Flood and Turner 1993; Guest and Rosenthal 1993; Gunnigle 1995). Patrick Gunnigle (1995) found no strong relationship between greenfield status and unionization in Ireland, although there were substantial differences across companies based on national origins. The greenfield site subsidiaries of U.S. companies in Ireland were far less likely to become unionized than Irish-owned firms or the subsidiaries of European MNCs. More recently, Gunnigle, MacCurtain, and Morley (2001) concluded that European companies are now tending to adopt the U.S. approach of using greenfield sites as a union avoidance technique. Thus, theory and evidence point to the use of greenfield sites as important union-avoidance strategy. U.S. MNCs favor greenfield sites in foreign operations because this approach provides the option of implementing more individualist employment policies in an unfettered way, which might help prevent unionization (Guest and Hoque 1996).

In assessing the greenfield site literature, Marian Baird and John Leopold (2001) noted that international business research has used the greenfield construct extensively, especially in the area of union recognition. A greenfield site allows for a clean “break from the past” (Baird and Leopold 2001: 257) in terms of implementing completely new HR policies and practices. This approach is unlike the constraints of a legacy HRM system in brownfield site acquisitions. It provides an opportunity to create a new organizational culture that might militate against collective actions by the employees (Baird and Leopold 2001). Prior research on greenfield sites, however, has often involved small samples or case studies of specific facilities, whereas this study uses a large sample of organizations. These arguments suggest the following:

Hypothesis 3: Union activity in the foreign subsidiaries of U.S. multinationals is lower in those begun as greenfield sites than in those acquired as established entities (brownfield sites).

Flexible work practices. Another element in overall workforce management is the use of flexible work practices, such as functional flexibility in the design of jobs, part-time employment, layoffs, and temporary and contract workers. Alison Booth and Marco Francesconi (2003) and Hazel Conley

and Paul Stewart (2008) discussed the various ways in which flexible work practices negatively affect unionization. Employees working under flexible work practices, and especially contract and temporary workers, may not see the value of unionization given their tenuous connection to the employer. Jobs under these arrangements are often relatively marginal, which may discourage unions from organizing efforts among these workers. Booth and Francesconi (2003) found that in Britain, those workers working under various flexible employment arrangements were less likely to be unionized than those working under standard employment arrangements. Marco Francesconi and Carolos Garcia-Serrano (2004) found that temporary and contract employment is negatively related to the likelihood of union coverage in Spanish enterprises. Conversely, Thomas Turner (1994) showed that flexible work practices have no effect on unionization in Ireland. Thus, prior research suggests, although somewhat tentatively, that the prevalence of temporary and contract workers negatively affects unionization:

Hypothesis 4. A negative relationship exists between the usage of temporary and contract workers and union activity in the foreign subsidiaries of U.S. multinationals.

Research Methods

Data Collection

A survey of foreign subsidiaries of U.S.-based MNCs produced the data used in this study. The HR director of each subsidiary provided information on the subsidiary's HRM policies and employee characteristics. In this study we also analyze information on business operations acquired from a senior business manager in each subsidiary and data from other archival sources. For each host country, we randomly selected a set of U.S. MNCs from the S&P 100 list. We then identified one subsidiary of each of these MNCs based on the *Directory of American Firms Operating in Foreign Countries* (2003). We contacted each subsidiary by phone to identify the subsidiary's senior HR manager. Survey instruments were then sent to cooperating subsidiaries, one for the senior HR manager and one for a senior business manager (selected by the HR manager).

We obtained useable data from 188 subsidiaries in 12 host countries distributed across 6 geographical regions: East Asia (Korea: 40; Japan: 11; Taiwan: 26), Southeast Asia (Thailand: 17; Singapore: 24), South Asia (India: 16), Africa (Kenya: 16; South Africa: 9), Western Europe (Italy: 8; Germany: 7), and Eastern Europe (Romania: 9; Russia: 5). The rates at which contacted subsidiaries agreed to participate and returned useable questionnaires varied by the host countries, with rates of 20% to 50% in Asia and Africa (the highest rates being in Korea, Taiwan, Thailand, and Singapore), and only approximately 10% in European countries. Based on these variations in response rates, we conducted a preliminary analysis to check for

response bias. Despite the lack of subsidiary data for nonparticipating subsidiaries, we were able to obtain parent-company data (*Hoover's Directory*) for return on assets, return on equity, number of employees, and principal industry for all participating subsidiaries and a sample of nonparticipating subsidiaries in each country. The only difference between participating and nonparticipating subsidiaries was that the parent companies of participating subsidiaries had significantly higher global rates of return on assets than nonparticipating subsidiaries ($p < .01$). Thus, companies showed no variation in distribution with respect to industry or the parent company size. These differences were no more pronounced in low return rate countries (e.g., Europe) than in high return rate countries.

Measures

Dependent variables. We studied the proposed model against two dependent variables measuring union activity provided by the subsidiaries' senior HR manager. Subsidiary union density refers to the percentage of the company's employees who are union members. This variable is an approximation of the level of support among employees for the union and is therefore a general measure of union activity within the subsidiary. A second indicator was a dummy variable coded as 1 if the subsidiary had a written agreement or formal bargaining relationship with a union, and 0 if not.

Independent variables. Consistent with the framework of Lepak et al. (2006), we implemented a set of 21 Likert items (see Appendix) adapted from the research of Bae et al. (2003) to measure HPWS implementation. These items all refer to employment policies applicable to rank-and-file employees, who are the most common union constituents. Items were scored in such a way that higher values were more consistent, and lower values less consistent, with HPWSs.¹

We used exploratory factor analysis (EFA) to discern the underlying dimensions reflected in these items. Initial factor analysis of the HPWS items showed three eigenvalues greater than or equal to 1.0, suggesting three distinct factors, which was consistent with the AMO and Lepak et al. (2006) perspectives. The third eigenvalue was just slightly greater than 1.0, however, and the results of scree plot analysis suggested the likelihood of only two meaningful factors. The proposed two-factor model consolidates the ability and motivation items into a single factor, with the opportunity items serving as the second factor. Based on these results, we moved forward with the more parsimonious two-factor model.

In interpreting these factors, for this study we exclude items that cross-loaded meaningfully (i.e., factor loadings $\geq .30$) on both factors (Table 1). Items related to pay-for-performance loaded uniquely on the first factor (labeled *Ability-Motivation*).² Reverse-scored items indicating that the firm did

¹As indicated in the Appendix, some items have been reverse-coded to achieve monotonic scales.

²Only factor loadings $> .30$ are reported in Table 1.

Table 1. Results of Exploratory Factor Analysis for Two-Factor Model

<i>Variables</i>	<i>Ability-Motivation</i>	<i>Opportunity</i>
Considerable resources for training	0.45	0.09
Interpersonal skills training	0.45	0.33
Extensive orientation	0.32	0.28
Rotation among jobs for training	0.43	0.23
Cross-training	0.28	0.23
Promote from within	0.12	0.29
Multitasking	0.10	0.41
Rigorous selection	0.41	0.35
Goal-based appraisals	0.33	0.40
Wide wage differential between high/low performers	0.61	0.07
Pay for performance	0.53	0.21
Employee initiative expected	0.04	0.63
Extensive financial participation	0.50	-0.01
Extensive use of teams	0.03	0.61
Information-sharing with employees	0.39	0.40
Seniority-based promotions (r)	0.43	-0.07
Seniority-based pay (r)	0.43	-0.23
Hired for current skills rather than potential (r)	0.19	0.35
Training is a short-term cost (r)	0.25	0.32
Training primarily skill-based (r)	0.06	0.22

Notes: $n = 188$. (r) indicates reverse-scored items. Items used in defining the factor are in **bold text**.

not stress seniority in pay decisions nor in promotions are also consistent with the motivation aspects of this factor. Several ability items, including training items and rigorous selection methods, also loaded meaningfully on this factor. Items loading uniquely on the second factor (labeled *Opportunity*) included the principal workplace empowerment items (employee initiative and judgment, multitasking, and teamwork). The sum of the items identified as meaningfully loading on these two factors produced the scales used in subsequent regression analysis. The Ability-Motivation scale had an alpha value of .71, and the Opportunity scale had an alpha value of .63. Although alpha values of less than .70 raise reliability concerns, exploratory studies such as this often use scales with alpha values in the .60 to .70 range.

The two other independent variables were a dummy variable indicating whether the subsidiary was started by the U.S. MNC as a *greenfield site*, as measured in the business manager survey, and the *percentage of temporary and contract workers used in the subsidiary*, as measured in the HR manager survey. As discussed above for previous studies, we defined a subsidiary as a greenfield site if it began as a completely new organization in the host country, as opposed to an acquisition of an established firm (brownfield site).

Host-country level variables related to Hypotheses 1a to 1e were taken from multiple archival sources. Data on *host-country union density*, which are not readily available in a single source, were obtained from Hayter (undated, for South Africa, Kenya, Thailand, Taiwan, Singapore, Japan, Italy, and Germany), Visser (2006, for Korea), Blanchflower (2006, for Russia), Ratnam and Jain (2002, for India), and the worker-participation.eu website

(2012, for Romania).³ Information on *works councils* and *enterprise unionism* was obtained from various country profiles prepared by the Economist Intelligence Unit.⁴ Given the lack of detailed information on *bargaining centralization* in many host countries, differentiation between relatively centralized and relatively decentralized collective bargaining is possible only by using information provided by Cooke and Noble (1998) and various country profiles prepared by the Economist Intelligence Unit. Information on peak federations was obtained from Economist Intelligence Unit publications and the website of the International Trade Union Confederation (<http://www.ituc-csi.org>).

Control variables. The analysis in this study considers several control variables. Previous research (Elsheik and Bain 1980; Fiorito and Greer 1982; Lawler and West 1985; Turner 1994; Fiorito 2001; Thomason 2004; Chen 2007) suggests that *establishment size* is positively related to unionization. The natural logarithm of the number of employees was used to measure establishment size. We anticipated establishment age to be positively related to unionization (Chen 2007). The declining presence of unions globally means that newer subsidiaries have taken root in an era when union organization is less likely to occur because of declining union resources. *Establishment age* (i.e., the number of years of subsidiary operation in the host country) was obtained from the business manager survey.

Firm unionization studies typically control for industry because manufacturing is more prone to unionization than other sectors. This trend is true in the United States, Canada, and other regions (Turner 1994; Francesconi and Garcia-Serrano 2004; Chen 2007). A series of dummy variables was used to represent the major industrial categories of the parent companies, as reported in *Hoover's Business Directory*. These were broken down into *computer and information technology*, *services* (e.g., entertainment, transportation, education, and media), *banking and finance*, *electronics* (manufacturing), and *heavy manufacturing* (e.g., aerospace and defense, chemicals, industrial manufacturing, and automobiles). *Miscellaneous industries* served as the reference group.

The *proportion of managerial employees* in a firm is another organizational-level control variable. As the number of managers increases, the level of managerial control is likely to increase and may have a dampening effect on unionization. The HR manager questionnaire revealed the proportion of managerial employees in the subsidiary. The average rate of inflation in the host country over the four years preceding data collection served as a national economic control variable (International Labour Organization n.d.). Inflation can lead to increased unionization because employees tend to experience eroding real wages under inflationary conditions (Fiorito and Greer 1982). Table 2 shows descriptive statistics and the correlation matrix for all variables in the analysis.

³Accessed at [http://www.worker-participation.eu/Systemes-nationaux/En-Europe/Syndicats/\(language\)/eng-GB](http://www.worker-participation.eu/Systemes-nationaux/En-Europe/Syndicats/(language)/eng-GB).

⁴One example would be the Economist Intelligence Unit (EIU), Country Commerce: China (February 2003).

Table 2. Descriptive Statistics and Correlation Matrix

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.			
1. Subsidiary union density	Mean	23.63	1.00																				
	SD	0.19	0.39	0.56	1.00																		
2. Written agreement																							
3. Computers and information technology*		0.13	0.34	-0.15	0.01	1.00																	
4. Services*		0.20	0.40	-0.09	-0.04	-0.19	1.00																
5. Banking and Finance*		0.06	0.25	0.00	0.04	-0.10	0.53	1.00															
6. Electronics*		0.12	0.33	0.07	-0.10	-0.15	-0.18	-0.10	1.00														
7. Heavy manufacturing*		0.17	0.38	0.04	0.03	-0.18	-0.22	-0.12	-0.17	1.00													
8. Organizational age		25.04	19.52	0.22	0.30	-0.03	-0.06	0.09	-0.04	-0.05	1.00												
9. Employees (ln)		5.66	1.30	0.22	0.18	0.10	-0.06	0.10	0.10	-0.10	0.30	1.00											
10. Percentage managers		19.66	14.52	-0.06	0.04	-0.10	0.13	0.13	0.07	-0.07	0.14	-0.11	1.00										
11. Host-country average inflation		4.41	6.43	-0.05	-0.10	-0.06	-0.05	-0.02	-0.14	-0.07	-0.16	-0.14	0.06	1.00									
12. Host-country union density		23.59	15.36	0.13	0.07	-0.05	-0.04	0.01	-0.02	-0.01	0.17	-0.12	-0.15	0.16	1.00								
13. Works Council law in host country*		0.34	0.47	0.01	0.11	-0.05	-0.04	0.05	-0.09	-0.02	-0.10	-0.13	-0.04	0.26	-0.16	1.00							
14. Enterprise unionism dominant in host country*		0.42	0.49	-0.03	-0.09	-0.05	-0.01	-0.00	0.11	0.07	0.12	0.11	-0.08	-0.50	-0.03	-0.60	1.00						
15. Centralized bargaining*		0.27	0.44	-0.00	0.20	0.05	0.07	0.04	0.14	0.02	0.19	0.10	0.01	-0.33	0.12	-0.04	0.34	1.00					
16. Number of peak federations		-0.00	1.00	-0.10	0.00	0.20	0.10	-0.01	0.03	-0.11	-0.14	0.26	0.13	0.15	-0.18	0.05	-0.42	-0.03	1.00				
17. Ability-Motivation		0.00	0.52	-0.16	-0.08	0.21	-0.13	-0.02	0.03	-0.00	-0.09	0.18	-0.12	0.03	0.01	-0.11	0.13	0.04	0.09	1.00			
18. Opportunity		-0.01	0.61	-0.08	-0.11	0.14	-0.12	-0.08	0.09	0.00	-0.04	0.01	-0.09	0.09	0.14	-0.10	0.00	-0.05	0.00	0.57	1.00		
19. Greenfield site*		0.62	0.49	-0.34	-0.12	0.11	-0.00	0.02	0.02	-0.03	0.16	-0.03	0.10	-0.02	-0.05	-0.07	0.09	0.15	0.07	0.07	0.04	1.00	
20. Percentage of contract or temporary workers		11.36	14.23	0.01	0.08	-0.09	0.09	0.09	-0.05	-0.06	0.06	0.11	0.01	0.02	-0.18	0.01	0.04	-0.08	-0.04	0.02	-0.09	-0.09	1.00

Notes: $n = 188$. * indicates a dummy variable.

Results

Following Chen (2007), we used tobit analysis to estimate the effects of the independent and control variables on union density. The indicator for written agreement or bargaining relationship was a dummy variable, so we used probit analysis in that case. Endogeneity was a potential concern in this analysis, especially in the case of the HPWS measures, because a firm's choices regarding HPWS activity might well depend on many of the same unobserved factors that condition the organization with respect to unionization, thus biasing parameter estimates. In using instrumental variables techniques with both tobit and probit analysis, the Ward test for endogeneity did not produce significant results. Another estimation problem arose from the two levels at which variables were measured (subsidiary level and host-country level). We addressed this problem using random-effects tobit and probit models. Again, results suggest this was not an issue in our study, as the ρ coefficient was not significantly different from zero. Thus, we were able to estimate parameters using conventional tobit and probit analysis.

Table 3 shows the marginal effects for the tobit and probit functions for the basic model. The marginal effects for continuous variables are first derivatives. Because all continuous predictor variables were standardized, the marginal effects in those cases can be interpreted as the instantaneous rate of change in subsidiary union density or the probability of a bargaining relationship per one standard deviation change in the predictor. In the case of dummy variables, marginal effects are discrete changes in the dependent variable for a 0 to 1 change in the value of the independent variable.

Model Estimation

The overall model for subsidiary union density was significant at the .001 level, although the pseudo- R^2 was relatively modest at approximately .07 (Table 3). The model included three groups of variables: control variables, IR system variables (related to Hypotheses 1a to 1e), and organizational HR policy variables (related to Hypotheses 2a to 4). Likelihood ratio tests were used to assess the overall significance of each of these sets of variables (Table 3).

Only Hypothesis 1d was supported for the IR system variables in the case of subsidiary union density. The dominance of enterprise unionism was negatively related to subsidiary union density ($p < .05$). Although the number of host-country peak federations was marginally significant ($p < .10$), this was negative and counter to expectation (Hypothesis 1e). As predicted by Hypothesis 2a, Ability-Motivation was significant ($p < .05$) and negative. The greenfield site indicator was also negative and statistically significant ($p < .01$), consistent with Hypothesis 3. Neither Opportunity nor the percentage of temporary and contract workers was statistically significant. Thus, Hypotheses 2b and 4 were not supported in the case of subsidiary union density.

Table 3. Marginal Effects for Basic Model

<i>Dependent variables</i>	<i>Subsidiary union density (tobit)</i>	<i>Written agreement or bargaining relationship in subsidiary (probit)</i>
Control variables	$\chi^2(8) = 35.63^{***}$	$\chi^2(8) = 18.85^{**}$
Industry dummy variables		
Computers and information technology ^a	-3.82 (-1.05)	-0.003 (-0.04)
Services ^a	-4.69 (-1.23)	-0.10 (-1.06)
Banking and Finance ^a	3.64 (0.78)	0.02 (0.12)
Electronics ^a	1.49 (0.46)	-0.16 (-1.53)
Heavy Manufacturing ^a	0.73 (0.27)	0.04 (0.52)
Organizational age	2.59 (2.40)**	0.06 (1.97)**
Employees (ln)	3.73 (3.08)***	0.05 (1.14)
Percentage managers	-0.73 (-0.66)	0.01 (0.64)
Host-country average inflation	-0.58 (-0.40)	-0.04 (-0.85)
IR system variables	$\chi^2(5) = 10.38^*$	$\chi^2(5) = 20.14^{**}$
Host-Country union density	-0.42 (-0.28)	-0.02 (-0.46)
Works Council law in host country ^a	1.88 (0.74)	-0.09 (-1.40)
Enterprise unionism dominant in host country ^a	-6.07 (-2.35)**	-0.19 (-2.76)***
Centralized bargaining ^a	-1.19 (-0.44)	0.12 (1.66)*
Peak federations	-2.83 (-1.85)*	-0.01 (-0.21)
Organizational HR policies	$\chi^2(4) = 26.98^{***}$	$\chi^2(4) = 8.39^*$
Ability-Motivation	-2.63 (-2.16)**	-0.01 (-0.49)
Opportunity	0.86 (0.74)	-0.003 (-0.09)
Greenfield site ^a	-9.83 (-4.88)***	-0.14 (-2.64)***
Percentage of contract or temporary workers	-0.49 (-0.49)	0.02 (0.74)
Overall χ^2	46.31***	47.97***
pseudo- R^2	0.07	0.26

Notes: two-tailed tests; $n = 188$. z scores for parameter estimates are in parentheses.

^aMarginal effects are discrete changes for dummy variable changes from 0 to 1.

*Statistically significant at the .10 level; **at the .05 level; ***at the .01 level.

The overall probit model for the presence of a written agreement or formal bargaining relationship was significant at the .001 level with a pseudo- R^2 of .26 (Table 3). In the case of the IR system variables, the enterprise unionism variable was negative and significant ($p < .05$), consistent with Hypothesis 1d. The centralized bargaining variable was positive and significant ($p < .01$), consistent with Hypothesis 1c. The other individual IR system variables were not statistically significant. One of the organizational policy variables (i.e., greenfield site) was significant ($p < .01$) and negative, consistent with Hypothesis 3.

Sensitivity Analysis

Given the concept-stretching problem, the characteristics of national IR systems should be examined in relation to their effects on subsidiary union activity. The results of this study show support for some hypothesized direct IR system effects; however, IR system variables might also moderate the relationships between organizational HR policy variables and subsidiary union activity. To conduct this post hoc analysis, we use two-way interaction terms composed of each organizational policy variable multiplied by each IR system

variable. We do not test specific hypotheses in the usual sense. Tests of statistical significance for the interaction terms are indicative of a coefficient being large relative to its standard error. This finding motivates inductive observations as potential explanations to be investigated in future research, but is not a definitive test of a priori hypotheses.

Because there were 20 national IR system \times HR policy interaction terms, we use hierarchical stepwise estimation to help identify a limited set of interaction effects in the interest of suggesting a relatively parsimonious modification of the model. After including all of the variables specified in the original model (Table 3), the final model included only those interaction terms for which $p < .05$. We further refined the model by making Bonferroni adjustments⁵ in probability levels of the initially included interaction terms, discarding those interaction terms for which the adjusted p -values were greater than .05.

Table 4 presents the results of this analysis.⁶ These results show four interaction effects with sufficiently high p -values in the subsidiary union density equation, all of which were negative. The pseudo- R^2 (.13) was substantially improved with the addition of these interaction terms, suggesting that they made a meaningful contribution to the explanatory power of the model. Thus, host-country union density, works council laws, and dominant enterprise unionism appear to reduce the relationship between subsidiary union density and Opportunity. The same trend appeared for the relationship between subsidiary union density and percentage of temporary/contract workers in the case of dominant enterprise unionism. Analysis of the written agreement/bargaining relationship variable shows two interaction effects with adjusted p -values $< .05$ (Table 4). Again, the pseudo- R^2 increase is substantial (.34) relative to the basic model (Table 3). Dominant enterprise unionism negatively affects both the greenfield site and percentage of temporary/contract workers. The following sections present a discussion of the relevance of these findings in greater detail.

Although this study considers 12 countries, the sample was largely concentrated in 5 East and Southeast Asian nations (118 out of the 188 cases) because of differential return rates. Thus, the parameter estimates for organizational HR policy variables might be overly influenced by the East and Southeast Asian cases. Therefore, we created a dummy variable differentiating the East and Southeast Asian countries from the other countries and examined the interaction effects between this variable and the organizational HR policy variables. Using the same stepwise estimation approach described above, we contrasted a model with all of the linear terms and the significant interactions noted above to a model including the region \times HR policy interactions, for those with $p < .05$. This condition was not met for any

⁵The Bonferroni adjustment decreases false positive errors when several individual relationships are examined in the absence of a priori hypotheses.

⁶The marginal effects for the control variables are not reported, although those variables were included in the analyses.

Table 4. Results of Sensitivity Analysis^a

<i>Independent variables</i>	<i>Dependent variables</i>	
	<i>Subsidiary union density (tobit)</i>	<i>Written agreement or bargaining relationship in subsidiary (probit)</i>
IR system variables	$\chi^2(5) = 9.85^*$	$\chi^2(5) = 5.37^{ns}$
Host-country union density	-0.61 (1.52)	-0.03 (-.81)
Works Council law in host country ^b	1.38 (0.54)	-0.06 (-0.94)
Enterprise Unionism dominant in host country ^b	-3.94 (-1.58)	-0.03 (-.39)
Centralized bargaining	-0.61 (-0.24)	0.11 (1.50)
Peak federation	-3.89 (-2.43)**	-0.02 (-0.79)**
Organizational HR policies	$\chi^2(4) = 39.69^{***}$	$\chi^2(4) = 9.95^*$
Ability-Motivation	-2.74 (-1.42)	-0.02 (-0.81)
Opportunity	10.01 (4.17)***	-0.001 (0.02)
Greenfield site ^b	-9.55 (-4.96)***	0.06 (0.66)
Percentage of contract or temporary workers	5.02 (1.99)**	0.20 (2.55)**
Interactions	$\chi^2(4) = 22.35^{***}$	$\chi^2(2) = 14.30^{***}$
Host-country union density \times Opportunity	-3.99 (-2.75)***	
Works Council Law \times Opportunity	-8.30 (-3.10)***	
Enterprise Unionism dominant \times Opportunity	-10.81 (-3.56)***	
Enterprise Unionism dominant \times Percentage contract and temporary worker	-5.68 (-2.05)**	-0.21 (-2.52)**
Enterprise Unionism dominant \times Greenfield site		-0.29 (-2.52)**
Overall χ^2	95.64***	62.27
pseudo- R^2	0.13	0.34

Notes: two-tailed tests; $n = 188$; z-scores for parameter estimates are in parentheses.

^aThis table includes the same control variables as in Table 3. The marginal effects for those variables are not reported to conserve on space.

^bMarginal effects are discrete changes of dummy variables from 0 to 1.

*Statistically significant at the .10 level; **at the .05 level; ***at the .01 level.

of these interactions for both dependent variables. These results suggest that there were no additional differences between East and Southeast Asian host countries and the rest of the sample beyond what was already captured by the linear terms and IR system \times HR policy interactions.

Discussion

The empirical analysis in this study supported certain elements of the basic model. Sensitivity analysis indicated that IR system variables could play a meaningful moderating role in organizational policy–union activity relationships across host countries.

Implications of the Basic Model

Our analysis generated various results for subsidiary union density versus the existence of a written agreement or formal bargaining relationship. In the former case, the Ability-Motivation scale had a pronounced negative effect, as predicted. This particular aspect of the HR system is highly connected to the process of individualization of the employment system (Bacon and Storey 1993; Gunnigle 1995) and renders the organizational environment less conducive to union activity. When evaluated at the means of the

other variables in the equation, the marginal effect is approximately -2.6 percentage points per standard deviation change in Ability-Motivation (Table 3). Because the tobit model is nonlinear, effect sizes change as a function of all of the variables in the equation, complicating the interpretation of this value. However, this coefficient suggests a meaningful effect, with a shift from a low Ability-Motivation scale value, as in more traditional HR systems, to a high Ability-Motivation level in strong HPWSs. Such a change could affect subsidiary union density by more than 10 percentage points. The greenfield site variable also exerted a negative relationship on subsidiary union density. The effect size indicated that, at the mean values of the other predictor variables, subsidiary union density was also lower by approximately 10 percentage points in greenfield sites compared with brownfield sites. As such, "breaking with the past" (Baird and Leopold 2001), with all its potential associated advantages as an employment strategy, significantly decreases union affiliation within companies.

The national IR system variables, conversely, did not appear to play significant roles in the subsidiary union density equation as predicted, except that subsidiary union density was approximately 6 percentage points lower in countries with enterprise unionism dominating. Contrary to expectations, increasing the numbers of peak federations actually led to a significant decline in subsidiary union density (slightly less than 3 percentage points). It appears that the dispersion of organizing resources and the adverse effect of possible interunion rivalries may more than compensate for any of the advantages to unionization associated with multiple peak labor organizations appealing to diverse employee interests.

Findings with respect to the probability of a written agreement or bargaining relationship differed significantly from those related to subsidiary union density. Of the organizational HR policy variables, only the greenfield site variable had the expected negative effect. The effect size was nonetheless strong, indicating a 14 percentage point lower probability of an agreement or relationship in greenfield sites than in brownfield sites (Table 3). Conversely, national IR system variables had a greater effect on this outcome than in the case of subsidiary union density. Centralized bargaining, evaluated at the means of the predictor variables, increased the probability of a written agreement or bargaining relationship by approximately 12 percentage points, whereas this probability was 19 percentage points less in countries with dominant enterprise unionism.

Implications of the Sensitivity Analysis

The results of post hoc sensitivity analysis show that IR system variables interacted with organizational HR policies in complex ways not fully anticipated by extant theory and that are obscured in the basic model.

Results show four significant interaction effects where $p < .05$ in the subsidiary union density equation (Table 4). The jump in the pseudo- R^2 value from .07 to .13 (Table 3) suggests that the IR system variables play important

roles in moderating the effects of the subsidiary HR policies on subsidiary union density. Three of these interaction effects relate to the effect of Opportunity, which has no significant effect on subsidiary union density in the basic model.

Given the coding of IR system variables in these interaction terms, the parameter estimates shown in Table 4 indicate that Opportunity exerted a strong positive effect ($p < .01$) in countries where enterprise unionism did not dominate, works councils were not present, and in which host-country union density was moderate to low. This finding agrees with previously cited studies suggesting institutional circumstances occur under which aspects of HPWSs, especially those related to employee participation and empowerment, contribute to a positive HPWS-union activity relationship. That research (e.g., Godard 2009) dealt mainly with companies that were not U.S.-based, whereas the current study suggests this possibility in the foreign subsidiaries of U.S. multinationals. Lower host-country union density could mean the absence of a strong external union movement that might view workplace empowerment and employee participation as a threat to its survival and contrary to its ideology. The absence of works councils excludes alternative entities that might compete with the subsidiary's union. Such conditions could generate the sort of collaborative organizational climates that promote a positive Opportunity-union activity relationship (Turner 1994; Chen 2007; Godard 2009). Such settings encourage a relatively weak trade union environment, and subsidiary labor organizations might then feel unable to challenge management over Opportunity issues. In fact, a union might be co-opted into supporting these initiatives, hence generating a positive Opportunity-subsidary union density relationship. Increased host-country union density and works-council laws alter these dynamics, dampening and potentially reversing the Opportunity-subsidary union density relationship. Under these conditions, employers might be more likely to present participation and empowerment as an alternative "voice" mechanism for employees, serving more intensively as a means of supporting union substitution objectives.

We argued earlier that enterprise unionism is typically related to weaker labor organizations than areas in which unions are organized on a multi-company or industrial basis. This assumption is supported by the findings of the basic model and is based on the negative enterprise unionism linear effects of both dependent variables (Hypothesis 1d). In contrasting non-enterprise union environments to those in which enterprise unionism is dominant, we might expect an organizational climate in which unions are at a disadvantage compared to management and where participation and empowerment might readily serve as union substitution techniques. Given the magnitude of the Opportunity x enterprise unionism interaction effect, the total Opportunity effect for subsidiary union density is substantially dampened, if not reversed, under those circumstances. To some extent, this contradicts the other two Opportunity-related interaction effects, clearly making it an issue that requires further study and theoretical refinement.

This study also shows one significant interaction effect in the case of the percentage of contract or temporary workers. Again, the linear contract/temporary worker relationship is strongly positive ($p < .05$) in countries without dominant enterprise unionism. In these environments, strong unions may be capable of securing support from employees even in the face of "outsourcing" efforts. Indeed, such outsourcing might generate antagonism toward management and mobilize employees the greater the extent to which management might rely on this tool (hence the positive relationship). The negative enterprise union \times percentage contract/temporary workers interaction can be understood in the same way as Opportunity. Labor organizations in enterprise union contexts are often less able to resist the adverse effects of management's use of contract/temporary workers on union organizing, substantially dampening, and possibly reversing the positive effects of contract/temporary workers on subsidiary union density.

Results of this study show two interaction effects for which $p < .05$ for the bargaining relationship/written agreement equation. Both of these effects involve dominant enterprise unionism as the moderating variable. Both interaction effects are negative, suggesting dynamics similar to those in the enterprise union interactions considered above. In the absence of enterprise unionism, labor organizations may be able to forestall strong downward pressure on the establishment of bargaining relationships or written agreements. The weakening of the labor movement in enterprise union settings could make it considerably more difficult for unions to overcome the difficulties of organizing a greenfield site, which is the reason for a negative total effect for greenfield site in such situations. The percentage of contract and temporary workers demonstrates a strongly positive relationship with the probability of a bargaining relationship or written agreement ($p < .05$) (Table 4) in non-enterprise union settings. This effect decreases to nearly zero when enterprise unionism is dominant. Again, this can be attributed to weaker labor organizations, which are less able to forestall outsourcing efforts and their effects on unionization.

Conclusions

Based on this study, we reach the following major conclusions.

1. Subsidiaries that are established as greenfield sites generally have lower levels of union activity than do brownfield sites. For U.S. multinationals, starting a completely new organization when opening a foreign subsidiary seems to be a potent means of limiting union activity. Enterprise union dominance in the host country moderated this effect in the case of the probability of written agreement or bargaining relationship.

2. HPWSs affected union activity, but in somewhat complex ways. Ability-Motivation had a generally negative effect on subsidiary union density, although its effects were not intertwined with those of national IR system variables. Although the basic model did not show any effect on union activity exerted by Opportunity, the results of our sensitivity analysis strongly

suggest that its effect is complex and tied in multiple ways to IR system variables in the case of subsidiary union density.

3. The percentage of contract or temporary workers used by the subsidiary had some effects on both aspects of union activity, but these effects appear to depend on certain national IR system variables.

4. IR system variables had some direct effects on union activity, but these effects appeared to be especially important as moderators of the relationships between organizational HR policies and union activity. Therefore, the foreign subsidiaries of U.S. multinationals do not operate in a singular manner, but appear to be influenced by the host-country national context. Enterprise unionism dominance in the host country was particularly important and interacted in theoretically consistent ways.

5. The exact mechanisms through which national IR system variables interact with subsidiary HR policies require further investigation. This study could serve as a basis for further theoretical and empirical work.

6. Although the Ability-Motivation factor is largely related to “individualization” of HRM, the Opportunity factor is more relevant to the “sociality” of HRM. The sensitivity analysis in this study shows that the Opportunity factor could have a positive effect on union activity under certain circumstances, unlike that of the Ability-Motivation factor. Hence, the overall effect of HPWSs on unionization and union activity may depend on the relative dominance of the HPWS factors (i.e., Ability-Motivation factor dominance or Opportunity factor dominance). If a subsidiary has a HPWS with a relatively high Opportunity factor, the overall effect of HPWS on union activity may be positive rather than negative. This issue requires further research.

We encountered particular problems in securing the survey participation of firms in Europe, which might have affected our findings. Because important geographical areas are not represented in the study, particularly Latin America and the Middle East, further research should examine subsidiary HR policies and union activity in these regions. Although we found no significant differences in the effect of HR policies between East and Southeast Asia countries and the other countries in the sample, the sample size limited our ability to perform more in-depth analysis relative to the other countries. Important effects, especially in the sensitivity analysis, were observed in the countries with dominant enterprise unionism, which is pervasive in the East and Southeast Asian countries in this sample. Thus, the composition of the sample may have limited the variability of this factor, and perhaps other variables as well. These limitations may constrain the applicability of these findings.

Comparisons with locally owned companies and subsidiaries of non-U.S. MNCs are important to rounding out our knowledge of these issues. Although such studies have been conducted in one or two countries, more global analysis is needed. We should not ignore conducting case studies using qualitative analysis, and especially studies that contrast employer responses to the possibility of using employment practices as union avoidance techniques in different countries.

Appendix

Items for High-Performance Work System Scales

The Opportunity and Ability-Motivation scales for rank-and-file employees were based on the following items. Respondents answered all questions using five-point anchors ranging from “strongly disagree” to “strongly agree.” The subsidiary’s senior HR manager provided these data. The term (r) indicates a reverse-scored item. Following the AMO framework, each item is marked as being primarily an ability (A), motivation (M), or opportunity (O) item.

1. *This subsidiary devotes considerable resources to employee training and development.* (A)
2. *This subsidiary offers training to improve the interpersonal skills of employees.* (A)
3. *New employees undergo extensive orientation training to learn the values and culture of this subsidiary and/or its American parent company.* (A)
4. *Many of this subsidiary’s employees are moved through a series of different job assignments to prepare them for future assignments.* (A)
5. *Training is primarily intended to prepare employees for their current jobs rather than provide more general knowledge.* (r) (A)
6. *Training in this subsidiary is viewed by management more as a short-term cost than a long-term investment.* (r) (O)
7. *We do considerable cross-training so that employees are familiar with different jobs and can fill in for others when necessary.* (A)
8. *Except for entry-level positions, job vacancies in this subsidiary are generally filled from within.* (M)
9. *Employees are expected to perform a wide variety of different tasks as needs arise.* (O)
10. *Promotions in this subsidiary usually go to the applicant who has worked the longest for the company.* (r) (M)
11. *The employee selection process in this subsidiary is rigorous (e.g., use of tests, aptitude test, interviews, etc.).* (A)
12. *Hiring decisions in this subsidiary are based more on employees’ existing skills rather than on their potential.* (r) (O)
13. *An employee’s job performance is appraised, to a significant extent, on the extent to which he or she has achieved measurable goals.* (M)
14. *We strive to keep a large salary difference between high and low performers in the same position.* (M)
15. *An employee’s seniority is an important factor in determining pay in this subsidiary.* (r) (M)
16. *An employee’s pay is closely tied to individual or group performance in this subsidiary.* (M)
17. *Employee financial participation (e.g., gain sharing, profit sharing, or employee ownership, etc.) is extensive in this subsidiary.* (M)
18. *Employees often work in self-directed teams.* (O)
19. *This subsidiary extensively shares its financial and/or performance information with its employees.* (M)
20. *Employees are expected to exercise considerable initiative and judgment on the job.* (O)

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