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***Emergent Compensation Strategies in Post-Socialist  
Poland: Understanding the Cognitive Underpinnings of  
Management Practices in a Transition Economy***

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**Comments Welcome**

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**Emergent Compensation Strategies in Post-Socialist Poland:  
Understanding the Cognitive Underpinnings of Management Practices in a Transition  
Economy**

The economic transition in Central Europe has created difficult and enduring challenges for organizations. Incipient capital markets, the paucity of skilled individuals in key functional areas, traditional work norms, and macro-economic uncertainty are among the most salient issues firms must contend with as they formulate new strategies to survive in a newly competitive marketplace (Chelminski, Czynczyk, & Sterniczuk, 1993; Pinto, Belka, & Krajewski, 1993; c.f. Earle, Frydman, & Rapaczynski, 1993). With these challenges, there are also opportunities. For managers and employees in these organizations, the transition from a planned to market economy provides an opportunity to formulate new competitive strategies and to recast traditionally strained workplace relations. For organizational researchers, the initial managerial responses to the collapse of socialism provide an unusual window to study organizational questions that have proved intractable in more static advanced industrial democracies.

The emergence of new compensation strategies in Polish organizations illustrates this opportunity. Faced with the task of increasing workplace discipline and improving labor productivity, managers in Poland have restructured and sometimes abandoned traditional compensation practices. Yet, despite facing common challenges, domestic and foreign-owned firms in Poland have pursued fundamentally different approaches to compensation. Whereas state-owned and privately-owned Polish organizations have introduced individually based variable compensation pay, foreign-owned privatized companies have generally chosen to introduce fixed-pay compensation systems.

Understanding these divergent trends is important for a number of reasons. First, if these initial developments prove stable, they will provide a rare insight into the emergence of competing organizational configurations (Meyer, Tsui, & Hinings, 1993). In the event that these divergent patterns prove transitory, the emergence of subsequent compensation practices will shed light on how organizations achieve vertical fit by aligning human resource practices to firm strategy and horizontal fit through the integration of various human resource practices (Balkin & Gomez-Mejia, 1987; Wright and McMahan, 1992). Finally, regardless of the sustainability of these divergent systems, the initial choices regarding compensation strategy may reveal the institutional and cognitive underpinnings of this critical human resource practice. These findings can be further leveraged to gain a deeper understanding of the ideas, beliefs, and values guiding managerial action and their consequences (Greenwood and Hinings, 1988).

The current evolution of contemporary organizational practices in Poland is being shaped both by history of Polish socialism and newly attained enterprise-level autonomy. To understand the role of history this paper begins with an analysis of the roots of traditional compensation structures in socialist Poland. This discussion illustrates how the logic of the shortage economy institutionalized particular compensation structures that provide the starting point for a re-evaluation of compensation policy in the transition period. Following this analysis, current trends in Polish compensation management will be examined. Field research in 26 Polish enterprises and simple descriptive statistics from a study of 95 state-owned and privatized firms (Enterprise Survey) suggest domestic and foreign-owned firms in Poland have pursued fundamentally different compensation strategies. The extent to which these trends represent distinct approaches to employee management is subsequently examined in a multivariate analysis, which explores the relationship among firm strategy, firm structure, national ownership,

and choice of compensation system. Results from this analysis indicate that differences between Polish and foreign-owned firms cannot be completely explained by firm size, market strategies, technology and employee monitoring. Rather, the different approaches to compensation appear to correspond with competing notions of employee motivation. The paper concludes with a discussion of how emergent trends in Polish compensation policy can provide insight into the interpretive schemes underpinning organizational structures in the post-socialist period.

### **POST-WAR COMPENSATION PRACTICES IN SOCIALIST POLAND**

In interviews conducted during field research in 1992-94, managers and officials at the Ministry of Labor confirm contemporary accounts describing how firm-level human resource practices in post-war period emerged from the economic and institutional constraints of socialism (Sabel and Stark, 1982). The salient feature of this environment was the shortage economy (Kornai, 1986). These endemic shortages produced a set of incentives that encouraged firms to hoard capital and human resources so that they could exceed existing production quotas and anticipate future obligations. For ambitious managers, this cycle began with managers recognizing that their chance for economic and political advancement was dependent on their overall contribution to the Party program of rapid growth. The ability to meet or exceed production targets, however, was more related to the ability to secure scarce resources than it was to technical expertise. The larger the investment share managers received, the more raw material they could acquire, the more workers they could hire, and the more resources for which they could bargain. In subsequent time periods, increased production and higher employment levels could then be used to justify higher investment levels that would lead to still greater access to scarce resources.

For risk averse managers, as well, hoarding of resources was a prudent strategy to preempt the inevitable ratcheting of production quotas (Berliner, 1956). As matter of course, central planning authorities would, all else remaining unchanged, calculate a given year's production quota as being equal to the previous year's production target plus some percentage increase. The better a firm succeeded in meeting its production quota in a given year, the larger was the likely increase in the production quota in the subsequent year. Thus, cautious managers, like their more ambitious counterparts, had incentive to overstate requirements for inputs to production. Control mechanisms further reinforced this tendency since the penalties for failing to meet production goals were more severe than sanctions imposed for the inefficient use of resources. From a manager's perspective, it was safer for the firm to operate wastefully than it was for the firm not to meet a production goal for the sake of efficiency.

The logic of central planning thus led to endemic and system-wide shortages. In this environment, labor became a particularly valuable asset for firms to hoard for a number of related reasons. In the absence of internal labor market rules restricting work tasks, labor could be variably deployed to eliminate production bottlenecks resulting from disruptions in the supply of raw materials. In this way, surplus employment increased production capacity and provided a hedge against the annual increase in production targets that almost inevitably occurred regardless of material constraints or market conditions. Moreover, since labor costs were quite low and budgets were soft, firms could often increase employment levels with little adverse financial consequence. Finally, executive compensation was often tied to the size of the firm's wage fund, providing enterprise managers further incentive to increase employment levels.

Whereas managers could often bargain for increased access to raw materials and capital, they had to compete for workers in a exceedingly tight labor market. At the same time, Ministry

of Labor officials devised a highly articulated system of job analysis and pricing that mandated uniform wages for equivalent work. At first glance, this system would seem to take wages out of competition, thus limiting the ability of firms to attract employees with the offer of higher wages. However, as with other aspects of centrally planned economy, managers developed strategies to outwit bureaucratic planning.

Specifically, strong demand for labor in the context of administrative controls led to the evolution of two compensation practices. The implicit aim of these practices was to provide individual firms the ability to attract scarce labor through circumvention of Ministry of Labor wage guidelines. Two practices, in particular, distinguished compensation management in the socialist period: *ad hoc* piece rates and large individualized monthly bonuses.

With regards to piece rates, the key here was for managers to set rates at levels high enough for workers to earn above Ministry of Labor guidelines. Unlike basic job categories, piece rates were determined at the enterprise level and provided managers a means of raising the effective wages of some categories of workers. Thus, managers and workers had the incentive to form an informal alliance to argue the work of employees in a particular firm went beyond the labor input required by the basic job description. This extra labor justified compensation in excess of the centrally prescribed wage attached to the job description.

The desire to increase wages and to escape the constraints of the Ministry of Labor's pay and classification scheme led to the establishment of piece rates across an extremely broad range of job classifications. On construction sites, for example, masons negotiated with supervisors over the rates for laying a given square meter of wall. In design offices of shipyards, engineers negotiated time norms and prices for given projects. On assembly lines, workers negotiated output norms that reduced their resistance to speed-ups when the full supply of intermediary

goods permitted storming to meet or exceed monthly production norms. Piece rates, which placed a premium on quantity over quality, proved effective in a shortage economy in which enterprises and consumers were captive to the shortages of the Polish marketplace.

A second source of wage differentiation was a bonus that firms allocated to employees as a fixed or variable percentage of base wages. In manufacturing firms, the bonus pool was often linked to bonuses the firm received from its ownership body (e.g. Ministry of Industry, Ministry of Transportation, etc.) for exceeding monthly production quotas. The size of these production bonus pools were, in part, a function of management's ability to negotiate relatively low production quotas that, when exceeded, would yield supplemental payments to the enterprise. Moreover, in many cases enterprises were able to build additional bonus pools from slack resources in the firm. By distributing all or part of this surplus income to employees, firms had a means to encourage higher output and to raise total compensation.

Though the initial intent was for these bonuses to be allocated variably across workers based on supervisors' assessment of employee performance, the norm was to allocate these basic bonuses (*premia podstawowa*) as an equal percentage of base pay to all employees. Over time, managers and employees alike began to view the *premia podstawowa* as a fixed wage supplement. As a result of the growing reliance on piece rates and standard bonuses, the base wage of employees became increasingly less important component in the compensation package of Polish employees in the 1970s and 1980s. This undermined centralized wage policy both as an instrument of macro-economic policy and as a mechanism to ensure that workers with comparable skills doing comparable work within the same industry would earn comparable wages. More importantly, it increased the level and range of informal negotiation between managers and workers. In the 1980s, the latent pressures on wages combined with the loosening

of central administrative controls produced substantial wage drift and contributed to Poland's hyperinflation just prior to the introduction of the economic transformation program (Johnson, 1991).



## COMPENSATION IN POST-SOCIALIST POLAND

In the socialist period, firm-level compensation strategies emerged from the constraints of administrative planning and the incentives encouraging firms to hoard labor. The introduction of market forces and the elimination of central administration of the economy undermined the effectiveness and rationale of the compensation practices that characterized Polish firms in the socialist period. As firms move to replace *ad hoc* piece rates and the *premia podstawowa*, we have an opportunity to understand the extent to which the adoption of new compensation practices are driven by firm strategy, monitoring relations, and indigenous notions of employee motivation.

## RESEARCH METHODS

This study of compensation management is part of a larger project designed to examine the emergence of human resource management strategy in post-socialist Poland (Weinstein, 1996; Ost & Weinstein, 1995, Ost & Weinstein, forthcoming). Initially, field research conducted in 26 state and privatized firms provided the empirical base to ground hypotheses concerning firm-level trends. Since it was evident from the early stages of the field research that there were important differences among domestically owned privatized firms, foreign-owned privatized firms, and state-owned firms, an attempt was made to do field research across these three ownership categories. There were, however, some industries in which foreign firms were not represented. (See Appendix 1 for a description of field research sites.)<sup>1</sup>

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<sup>1</sup>I am very appreciative to Dariusz Chelminski and Artur Czynczyk who provided extensive interview notes for cases 1-10, which they studied in spring 1992. Their findings are reported in Chelminski, Czynczyk, and Sterniczuk (1993). I conducted field research in firms 5, 9, 11-25 between July 1992 and March 1994. In these firms, I interviewed management representatives, Solidarity trade union activists, worker council representatives (in state-owned firms), and employee members of supervisory boards (in commercialized and privatized firms). Data

Following the field research in the first 25 firms, a survey was created, piloted, and ultimately administered in spring 1994. The sampling frame for the enterprise survey matches one state-owned firm with two privatized firms - one purchased by Polish investors and one purchased by foreign investors - by product market and firm size. This sampling frame provides a broad picture of emergent trends across the Polish economy. The inclusion of state-owned and privatized firms in the sample allows an assessment of Poland's stratified institutional environment in which state-owned firms are co-governed by worker councils and privatized firms are governed by supervisory boards. Moreover, the inclusion of domestic and foreign-owned enterprises allows a systematic investigation of the relationship between national ownership and compensation strategy.

Sampling for the survey proceeded in two stages. First, using data from the Polish Agency for International Investment, I identified industrial enterprises that had been acquired by foreign firms whose equity stake was equal to or exceeded \$1.0 million. In February 1994, this population consisted of 40 firms. After identifying 22 foreign-owned firms willing to participate in the study, I proceeded to compile a list of comparably sized state-owned and domestic-owned privatized firms from the same four-digit industries represented in the sample of foreign-owned firms. From this list of firms, the *Centrum Badania Opinii Społecznej* (CBOS)<sup>2</sup> contacted enterprise directors to gain their permission for participation in the study. Once this consent was received, CBOS administered a questionnaire to a representative of the enterprise's management board (*zarząd*), leaders of the two largest trade unions in the firm, a member of the worker

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for Case 26 was collected in August 1994 by David Ost as part of an on-going research project reported in Ost and Weinstein (1995).

<sup>2</sup> CBOS is a state-owned public opinion polling company established in 1983. The firm has extensive experience in general population and firm-level surveys. For a history of CBOS activities see Kolarska-Bobinska (1994).

council presidium (in state-owned firms), and an employee member of the supervisory board (in privatized firms). All respondents were asked a range of questions about the breadth and frequency of management/trade union and worker council consultation as well as a series of attitudinal questions concerning employee and trade union rights, employee motivation, and the social responsibility of firms. Additionally, managers provided data about the current and past compensation practices, employment levels, and training. The data presented below is drawn from the survey of *zarzad* members. Response rates from this group in state-owned, non-state sector domestic firms, and foreign-owned firms were 84, 91, and 55 percent, respectively.

While the distribution of firms by ownership status in the sample provides a natural experiment to test the competing explanations for the choice of compensation practices, it does so by over-sampling privatized and foreign-owned enterprises. Nonetheless, the sample of firms in each ownership category is largely representative of manufacturing firms from their respective populations. For the entire sample, average firm size is 819 employees. This is smaller than Fallenbuchl's (1985) earlier estimate of 1,000 employees, but there is broad consensus that average firm size has been steadily declining since 1989. Additionally, the largest state sector enterprises that receive the greatest amount of public policy attention are not typical of the Polish economy (Pinto, Belka, Krajewski, 1993). Average employment in the sample of foreign-owned privatized firms, domestic privatized firms, and state-owned firms is 872, 855, and 649, respectively.

### ***Trends in Compensation***

The extensiveness of piece rates and bonuses in the socialist period as described during the field research was confirmed by the results of the Enterprise Survey. In this sample, 92.6 percent of the organizations surveyed (n=95) had either a bonus system or piece rate in place in

1989 (Table 1). Piece rates were used in 77.8 percent of the sample, bonuses in 63.2 percent of the sample, and bonuses and piece rates in 55.8 percent of the sample. The rapid abandonment of these traditional compensation practices following the economic transition demonstrates both their embeddedness in the institutions of socialism and their anachronistic character in the market environment of the post-socialist period.

[Insert Table 1 about here]

Given the fundamental changes in the regulatory regime governing wage determination in Poland since 1989, the restructuring of compensation practices has been a high priority in both state-owned and privatized firms. The rapid dissolution of central planning highlighted the mismatch between traditional compensation practices and the new economic environment, prompting to firms to re-evaluate current practices. A recurrent theme in numerous interviews with managers in state-owned and privatized firms was that there was a compelling need to restructure compensation practices that had been in place at the time of the transition. Survey data confirm considerable change in compensation management during the first four years of the Polish transition.

Yet, while there has been change, the change has not been universal and the initial responses have been disparate. With regards to piece rates, managers interviewed during field research often noted the potential mismatch between this compensation practice and the new market environment. With the sudden increase in competition following the introduction of the 1990 economic reform program, firms lost their guaranteed markets and were forced to compete on the basis of costs and quality. Consistent with this, 46 percent of the firms in the sample with

piece rates in place in 1989 (n=74) had eliminated them by 1994. Across all categories of firms there has been a steady departure from piece rate with only a minority of firms in all ownership categories having broad piece rate systems in place that comprise 50 percent of total compensation and cover 50 percent of blue-collar employees in the firm (Figure 1).

[Insert Figure 1 about here.]

Nonetheless, the dissolution of piece rates has not been uniform across all ownership categories of Polish firms. Six of the seven non-employee-owned Polish privatized firms in the sample that had piece rates in 1989 maintained or broadened this system, and the one firm without a piece rate system in 1989 introduced one after its privatization. In contrast, over half the foreign firms with piece rates in 1989 eliminated them, and no firms introduced a piece rate after being acquired by a foreign owner. Although domestic and foreign-owned firms with traditional ownership provide the sharpest contrast with regards to piece rates, a simple cross-tabulation indicates that Polish state-owned and privatized firms were more likely to have broad-based piece rates than were foreign-owned firms (Pearson chi-sq = 5.57,  $p < .05$ ).

Comparable trends were also identified in the changed structure of employee bonuses. During field research, Polish managers verified that the *premia podstawowa*, the traditional pre-1989 bonus system, evolved into a mechanism to supplement the compensation of employees regardless of their performance. What was needed instead, these managers argued, were “real” bonuses that reward the effort of good workers and punish the poor performance of substandard employees. Without a direct means to differentiate pay among workers and to tie directly pecuniary awards to work performed, these managers doubted they could elicit the effort of employees.

Accordingly, Polish firms have attempted to transform the nominally contingent wage system into a genuinely contingent system in an effort to increase the linkage between effort and compensation. Specifically, a number of Polish enterprises replaced the perfunctory *premia podstawowa* with a new “acknowledgment bonus” (*premia uznianowa*). On the surface, the *premia uznianowa* resembles a pay-for-performance scheme increasingly common in the United States. Like reward systems in the United States, this bonus system is intended to elicit particular types of employee behavior through the linkage of individual compensation to individual performance.

On closer scrutiny, however, the Polish *premia uznianowa* is substantively different from pay-for-performance schemes in the United States both in regards to the large size of the rewards in proportion to the base wage and the *ad hoc* criteria used in determining award allocations. This combined with their high level of coverage and monthly award allocation decisions distinguish the *premia uznianowa* from incentive pay systems increasingly common in the United States. In this sense, the Polish bonus system resembles the person-based pay systems Pearce, Branyiczki, and Bakascsi (1994) identified in Hungarian establishments. In both Poland and Hungary, these systems depart from the ideal performance-based systems that provides valued rewards for clear, controllable job behaviors (Lawler, 1981). Rather, a defining feature of the person-based compensation system in Poland and Hungary is the absence of clearly articulated reward criteria. In the case of Poland, first-line supervisors typically are given the responsibility for determining the criteria and the assessment for the allocation of monthly bonuses. While varying somewhat in structure and size from firm to firm, the pool from which these bonuses are drawn range up to fifty percent of the total wage bill. Then, on their own or in consultation with higher-level managers, supervisors allocate bonuses to individual employees.

For over twenty years, U.S.-based researchers have highlighted the problematic nature of award systems that are either arbitrary or lack the appearance of equitability (Lawler, 1971, Kerr, 1975). In Hungary, Pearce, Branyniczki, and Bakasci, confirm similar effects by documenting that person-based award systems are perceived to be unfair by employees. In the Polish firms visited for this study, a number of supervisors recognized the potentially dysfunctional nature of person-based awards and often preferred to allocate *premia uznawowa* equally. Nonetheless, in Poland, as in Hungary, the introduction of person-based compensation should not be viewed as resulting from managerial inexperience or incompetence. Rather, decision-makers in these enterprises insisted that bonuses were preferable to time-based compensation, which rewarded all employees in the job category equally regardless of their work performance. The concern of top managers was not that supervisors could not distinguish top performers from poorer performers, but rather that supervisors would seek to avoid conflict through the equal distribution of rewards. To avoid this, top management in a number of firms went so far to link the bonuses supervisors they themselves receive to the level of differentiation that they make in the allocation of *premia uznianowa* to workers under their supervision.

In the Enterprise Survey, the trend to replace the perfunctory basic bonus with the person-based *premia uznianowa* was clearly evident. As with piece rates, there has been a move away from the pre-1989 bonus system (Figure 2). However, rather than simply replacing this bonus with time-based compensation, management in a number of Polish firms have introduced a bonus system which even more contingent than the one it replaced. Of the 38 firms in the sample that eliminated the *premia podstawowa*, nearly half introduced a new bonus individual bonus system that placed an even greater percentage of pay at risk. Additionally, many of the firms that did not eliminate their pre-1989 bonus already had a highly contingent person-based reward system in

place. In 1994, 35.1 percent of state-owned firms (n=31) and 45.2 percent of domestically owned privatized firms (n=42) surveyed had highly contingent individual bonus systems that covered at least 50 percent of the blue-collar workforce and placed at least 25 percent of employee wage at risk each month.

The introduction of a new individual bonus system in Polish firms contrasts with the strategy pursued by foreign-owned privatized firms. Whereas domestic-owned firms viewed the adoption of market policies as an opportunity to transform the nominal basic bonus into an actually contingent system, foreign-owned firms demonstrated an inclination to replace the nominal bonus system with a simplified fix-pay system. Thus, in 1994 only 13.6 percent of foreign-owned firms in the sample (n=22) had a highly contingent bonus system in place. The fundamentally different choice concerning how to redesign or replace the traditional *premia* raises an important question concerning the factors determining the choice of compensation practices and the meanings of these choices.

[Insert Figure 2 about here.]

### **EXPLAINING DIVERGENT TRENDS IN COMPENSATION**

The initial analysis from the Enterprise Survey indicates that domestic and foreign-owned firms have adopted different compensation strategies in the first years of the economic transition. The higher retention of piece rates and the introduction of the more highly contingent *premia uznianowa* in Polish-owned enterprises contrast with dissolution of piece rates and bonuses in foreign-owned firms. The question remains, however, whether systematic differences in the strategy and structure of foreign-owned and domestic privatized firms account for the divergent approaches to compensation management or whether some either factor co-determinant with national origin of ownership accounts for these differences. In other words, are the divergent



compensation practices between domestic-owned and foreign-owned enterprises simply a function of different product strategies, employee monitoring arrangements, and technology? Or do Polish and foreign-owned firms have fundamentally different approaches to compensation management independent of differences in firm strategy and structure? To assess these questions, the adoption of variable pay systems in Poland is examined below in a multivariate framework.

### *Theoretical Frameworks*

In most previous work, researchers have used a contingency or agency approach to understand the choice of particular compensation practices. Contingency theory suggests a firm's success will depend on the coherence among its strategy, organization, and environment. Applied to compensation, contingency theory predicts that firms will choose compensation practices that match its strategy and, at the same time, function within constraints of its organizational structure and economic environment (Balkin & Gomez-Mejia, 1987, 1990).

Agency theory emphasizes the fit between compensation strategy and employee-monitoring arrangements (Eisenhardt, 1988, 1989; Stroh, Brett, Bauman, & Reilly, 1996). In this view, there is a clear relationship between the cost of monitoring employees and wages. Where monitoring is difficult, firms might to pay above-market efficiency wages to increase the cost of potential job loss to employees. This, in turn, will reduce the likelihood of employee shirking (Groschen and Krueger, 1990; Campbell, 1993). Where technology and/or production strategies lower employee discretion in task execution, the firm has little need to pay above-market wages (Cappelli and Chauvin, 1991). Similarly, the mix of monitoring arrangements and technology will likely determine how wages are paid. Agency theory predicts that fixed (behavioral-based) wages will be paid when employee behavior can be easily observed and/or job tasks are highly

defined. On the other hand, variable compensation will be utilized when monitoring is difficult and jobs cannot be easily programmed.

While contingency theory emphasizes the relationship between firm strategy and compensation practices and agency theory emphasizes the fit between monitoring arrangements and compensation, both approaches may be complementary. There is frequently interdependence among product strategy, economic environment, and socio-technical systems structuring the employment relationship. For instance, high value-added production strategies, sometimes hastened by competitive pressures, frequently rely on employee empowerment and increased work task discretion. Where this is the case, a contingency approach might highlight the fit among the economic environment, firm strategy, and compensation. By contrast, agency theory highlights the fit between employee monitoring arrangements and compensation. Thus, both contingency and agency frameworks, though emphasizing different factors, recognize that company strategy, firm size, product market, and technology will be key determinants of compensation strategy.

### ***Hypotheses and Variable Operationalization***

From a contingency perspective, variable pay schemes could be viewed as being best suited for a high value-added product market strategy. The emphasis on product quality, product mix, and customer service usually associated with high value-added strategies operate most effectively where there are incentives to elicit the discretionary effort of employees (Shuster & Zingheim, 1992). Although the lack of performance metrics distinguish the Polish *premia uznianowa* from pay-for-performance schemes in advanced industrial democracies, a contingency approach would nonetheless predict a positive relationship between the use of the *premia uznianowa* and a high value-added production system. For all its potential liabilities, the *premia*

*uznianowa* provides a means for Polish employers to establish a clear line of sight between rewards and the employer's assessment of effort and performance. The adoption of a highly contingent bonus system is therefore hypothesized to be positively related to a high value-added product strategy.

By contrast, the relationship between piece rates and a value-added strategy is more complex. On the one hand, piece rates work best in production systems for procedures that require a short-time period for completion, are repetitive, and have a designated number of units in a given time period. This would suggest a negative relationship between piece rates and high value-added production strategies since frequent changes in product mix would increase the difficulty and cost of re-pricing of the work tasks, which these changes would require. At the same time, there are documented cases of elaborate piece rate systems complementing successful high value-added product strategies (Chilton, 1994). In general, however, such examples are rare and could be explained, in part, through unique combinations of organizational culture, strategy, and compensation. Thus, it is hypothesized that the adoption of piece rates should be negatively related to the implementation of a high value-added system

To test the hypothesized relationships between strategy and variable pay systems the product strategy of each firm sampled in the Enterprise Survey was assessed. Following Osterman (1994), the operationalization of a high value-added production strategy (HIGHVALUE) is computed from a principal component analysis of three items measuring the relative importance of quality, product variety, and customer service compared to cost competitiveness. A high value on this measure indicates a high-value added product strategy.

Contingency theory also predicts a relationship between firm size and the choice of pay system (Balkin & Gomez-Mejia, 1987). Large firms tend towards more bureaucratic

administrative procedures and are likely to remunerate individuals based on a fixed rate corresponding to positions in a highly articulated job hierarchy. Under such conditions, bonus systems can carry high implementation costs and would therefore appear to be less attractive. Related to this, the success of a bonus system is dependent upon the existence of equitable and credible reward criteria (Lawler, 1981). The establishment and maintenance of these standards is likely to be more difficult in large firms. Accordingly, firm size is hypothesized to be negatively related to the adoption of highly contingent bonuses. Firm size is operationalized as number of people employed in the establishment.

With regards to piece rates, there is no clear relationship between firm size and the use of piece rates in the organization. On the one hand, piece rates would appear to be expensive to administer in a large organization where the simplicity of fixed-rate pay would translate into lower administrative costs. The larger the firm the higher the likelihood that it will have more products, work tasks, and changes in production than otherwise comparable smaller enterprises. As in other areas, however, there may be economies of scale in pricing jobs. Ultimately, the size of the firm is probably less important than the number of work tasks involved in a production and the frequency with which these tasks change. Given the uncertain affect of firm size on the costs of administering a piece rate system, there is no hypothesized relationship between firm size and the adoption of piece rates.

Agency theory, as well, provides specific predictions about the adoption of fixed versus variable pay systems. The basic premise is that the choice between fixed and variable pay will be determined by the ease of monitoring job performance. The greater programmability of job tasks and job pace, the more likely a fixed rate compensation system will be used. In a mass production system, for instance, job performance is a function of the technical specifications of

job design. Under such conditions, a fixed pay system is predicted to be an efficient method of compensation. In batch or customized production, employee monitoring is more difficult and there is a greater likelihood that a bonus system will be utilized. In jobs where employees have influence over job pace, piece rates are more likely to be used. To test these hypothesized relationships, mass production is operationalized as a dummy variable (MASSPROD), where 1 denotes a mass production system, and 0 indicates batch or customized production.

Related but distinct from the production system is the level of employee job discretion. Agency theory predicts a positive relationship between employee discretion and variable pay. This hypothesized relationship holds for both bonus systems and piece rates. From an agency perspective, the same dynamics that make bonuses appropriate in batch and customized production increase their utility when employees have a high level of discretion over work tasks and work pace. Similarly, when workers have discretion over work pace and employers can document individual output, a piece rate would be an efficient means of compensation. A variable measuring employee discretion on the job was computed by a principal component analysis of four measures of employee job discretion. A high value represents a high level of employee job discretion (DISCRETION). A summary of these hypothesized relationships is presented in Table 2.

[Insert Table 2 about here]

Industry dummy variables have been included to measure systematic differences among the four industry categories in the survey sample. Additionally, to measure the independent effect of foreign and state ownership, dummy variables are utilized to denote the ownership status of the firm.

Compensation structures are operationalized separately as the existence of a broad-based piece rate or the existence of a bonus system for blue-collar workers. PRATE is a dichotomous variable designating the use of a piece rate system that covers 50 percent or more of the blue-collar workforce and which accounts for at least 50 percent of pay. BONUS is a dichotomous variable designating the use of a bonus system that comprises at least 25 percent of base pay and covers at least 50 percent of the blue-collar workforce. Two factors influenced the decision to use these thresholds for the percentage of compensation at risk and the percentage of employees covered by these compensation systems. First, the high percentage thresholds reflect the salience of these variable pay systems in the organization. The question of interest in this analysis is the decision to use bonuses or piece rates as the central feature of employee compensation. Second, the precise cut-off points for these dichotomous variables was informed both by the field research and the non-normal distribution of the continuous raw data measures gathered in the Enterprise survey.

The mean values and definitions for the independent and dependent variables are provided in Table 3.

[Insert Table 3 about here]

### *Data Analysis*

To assess the factors leading to the adoption of particular compensation practices, both PRATE and BONUS were regressed on the variables in Table 3. Industry dummy variables should be compared to the light industry dummy variable which appears in the base of the model; state-owned and foreign-owned privatized firms are compared to domestically owned privatized firms in the base of models 2 and 4 (Table 4).

In model 1, no statistically significant relationships were found between the use of piece rates and the experimental variables. This suggests that in this small sample of Polish firms, simple measures of firm strategy, organization, and employee monitoring are not correlated to the decision to utilize piece rates. The effect of national ownership is measured in model 2, which includes the dummy variables representing ownership status of firms. The inclusion of these variables significantly improves the fit of the equation (change in Chi-sq. > 7.38, df = 2, p < .025). This indicates that even when controls are provided for production strategy, firm size, production technology, and employee monitoring there are systematic and fundamental differences in compensation management between foreign-owned and domestic-owned Polish privatized firms. Specifically, model 2 estimates that the odds of domestic-owned firms utilizing piece rates is 12.95 greater than the odds of a foreign-owned firms utilizing widely used piece rates.<sup>3</sup>

Models 3 and 4 provide a comparable analysis of the utilization of bonuses. In this case, consistent with contingency and agency theories, firm size and mass production are negatively related to the use of bonus systems when the ownership dummy variables are not included in model 3. The negative relationship between the use of bonuses and firm size likely reflects the difficulty of making monthly individual performance assessments in large firms. The negative relationship between bonuses and mass production also suggests coherency in compensation management, because in firms dominated by mass production technology there are unlikely to be easily distinguishable individual performance metrics. In model, as well, firms in the chemical and food processing industry are statistically significantly more likely to have a broad-based bonus than firms in light industry, though the reasons for this are unclear.

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<sup>3</sup> The likelihood estimates are calculated as the antilog of the variable coefficients.

Model 4 expands the analysis to include the effect of national ownership. The statistically significant relationships identified in the model 3 remain strong after the inclusion of ownership dummy variables. There was an independent and negative relationship found between foreign ownership and use of broad-based bonuses. The odds of domestic-owned firms utilizing broad-based bonuses are 4.71 greater than the odds of a foreign-owned firm utilizing broad-based bonuses. As with piece rates, the inclusion of the ownership dummy variables improves the fit of the model (Chi-Sq. > 4.61, df = 2 p< .10). Thus, national ownership of firms has a strong influence on the use of a highly contingent bonus system.

[Insert Table 4 about here]

The results from the logistic regression analysis indicate systematic differences in the approach to compensation strategy between foreign and domestic-owned firms in Poland. Polish state-owned and domestic privatized firms are more likely to adopt piece rates and the person-based *premia uznianowa* than comparable foreign-owned firms are. This statistical relationship remains strong even after incorporating controls for firm strategy and structure. While the small sample size may explain the absence of a statistical relationship between the utilization of variable pay and variables specified by contingency and agency frameworks, the preference for these systems among Polish-owned enterprises is clear. The question remains as to the underlying reason for these observed differences.

Insights into this question can be found by exploring the meaning underpinning the approaches to compensation favored by domestic and foreign-owned firms, respectively. During the field research, Polish managers frequently explained that the poor work habits of Polish



employees demanded the use of punitive measures. In numerous interviews, Polish managers emphasized the compelling need to demonstrate to workers the new realities of the market place. For too long, they argued, Polish workers had too much power. Decades of guaranteed employment, in particular, and the privilege place of workers, in general, had bred contempt for honest work and disrespect for managers. Socialism rewarded workers at the expense of intellectuals, and those who did not work hard that expense of those who did.

As a result, these managers tended to view the employment relationship in purely instrumental terms. They argued that financial rewards and punitive measures were the only means to manage employees. Where feasible, individual compensation for specific tasks was a clean-cut and transparent means to compensate employees. Where such piece rates were not feasible or impinged upon quality control, supervisor discretion in the allocation awards was considered a fair substitute. These managers reasoned that since not all workers within the same job and pay category perform at comparable levels, they should not receive the same wage. Indeed, Polish managers frequently expressed puzzlement as to how a fixed-rate wage system could be both effective in eliciting performance and fair to the more conscientious employees. Such a system, in their view, only invited free-riders.

These attitudes were in sharp contrast to the ideas expressed by Polish managers in many foreign-owned firms. In these instances, considerable resources were invested in translating and diffusing corporate mission statements that emphasized the value the organization placed on their partnership with employees. Though the inculcation of a corporate philosophy that places values on employee contributions was unusual by Polish standards, this notion has long been mainstream in advanced industrial societies which have incorporated a human relations paradigm (Guillen, 1996). Though middle level managers were described as usually resistant to these

ideas, many human resource managers had already integrated this new approach. For instance, a senior Polish manager of quality assurance in a large multinational company described how his attitude towards supervising individuals changed: "I used to think that you needed to treat workers like this [he put his right thumb in his left palm and twisted it back and forth]. Now, I realize that you have to talk to people, explain to them, teach them, and persuade them." For this particular manager, the defining moment came during a study tour of Japan and the United States. For others, the mechanism by which these management ideas diffused was less clear.

The extent to which these values have been internalized by Polish managers in foreign-owned firms is reflected in the survey data. While all respondents in the survey were Polish, their assumptions regarding employee motivation and the nature of the employment relations varied systematically as a function of whether they worked for a domestically-owned or foreign-owned firm. Polish managers in domestically-owned firms tended to view this relationship in instrumental terms. Polish managers in foreign-owned firms, by contrast, acknowledged the affinitive nature of work and the social obligations of the firm in the employment relationship.

The mean responses in Table 5 to questions regarding the employment relationship are telling. Despite the small sample size and the short duration for which most of these managers worked for their company's new foreign owners, there are statistically significant differences in their attitudes to both work and workers. Managers in foreign-owned firms were more likely to agree with the statement that work is pleasurable. These same managers estimated that less than half of all workers "work only for money," compared to the estimate of 63.9 percent given by Polish managers in domestic-owned firms. Comparable differences were also found regarding attitudes about the role of the firm in society. In an interesting irony of the post-socialist period, Polish managers in foreign-owned firms were far more receptive to the notion that an important

role of the firm is to care about the personal and family success of its employees than were managers in domestic firms.

[Insert Table 5 about here]

In mature economies where markets are relatively stable and enterprises have information about the relative performance of various management practices and strategies, economic and strategic considerations are likely to have a decisive impact on the choice of compensation practices in a given enterprise. However, the transition from a planned to market economy is characterized by flux and uncertainty. In such conditions, cognitive models may influence the choice of particular management practices. In Poland, where traditional compensation practices were universally viewed as problematic in a market economy, managers could not delay basic changes in compensation management. These choices and the logic underpinning them can tell us much about organizations in the transition period.

## CONCLUSION

The differing views of the employment relationship and their apparent influence on the compensation strategy raise a number of compelling questions. The first concerns the source and depth of the prevailing instrumental view of employee motivation among Polish managers. Undoubtedly, the incentives and norms created under the command economy created a legacy that continues into the current period. Where the Party's exhortation for greater output for the building of socialism in Poland was widely received with cynicism, Polish managers may have concluded that comparable efforts to enhance organizational commitments will likewise be of limited effectiveness. At the same time, the shortage economy created incentives for both management and labor to link tightly work effort and pecuniary rewards. In an economy in

which employees could easily find alternative employment, dismissal was an unimportant sanction, and slack work habits were the norm. Only by providing clear financial incentives did managers find it possible to elicit work effort.

A second related question is how the norms and beliefs about employee motivation might shape other management policies. Compensation is among the most salient management practices opened to revision following the restructuring of the Polish economy. Regardless of whether companies adopt a time-based or contingent compensation system, it is conceivable that the introduction of new compensation systems will anchor other HR practices and will constrain the ability of firms to achieve vertical fit between HR practices and business strategy. Typically, considerable cost and effort is expended to introduce new compensation systems. The institutional pressures underpinning these respective systems are likely to remain important (Eisenhardt, 1988).

Despite the apparent preference for variable pay systems among Polish companies, a question nonetheless remains concerning the durability of these initial patterns. The divergent approach to compensation adopted by foreign-owned companies and the extent to which managers in these firms have already begun to express a competing view of employee motivation demonstrates the permeability of imported management practices. Questions nonetheless remain as to whether these competing approaches will continue to exist. If one approach encroaches upon the other these is also the question as to whether economic performance or the search for legitimacy will spur diffusion of organizational practices.

While these questions are important, the emergent compensation practices in Poland already have shed light on the factors shaping organizational structures. In response to systemic shocks, organizations often lack the information and/or the ability to process information to

assess the relative value of various managerial practices. In this environment, values and belief systems may provide road maps with which to contextualize urgent organizational problems. In domestic-owned Polish organizations these beliefs have manifested themselves in ways markedly different from their foreign-owned counterpart. The relative performance and durability of these competing systems will inform our understanding of compensations and the transition from a planned to market economy.

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## Tables & Figures

**Table 1**

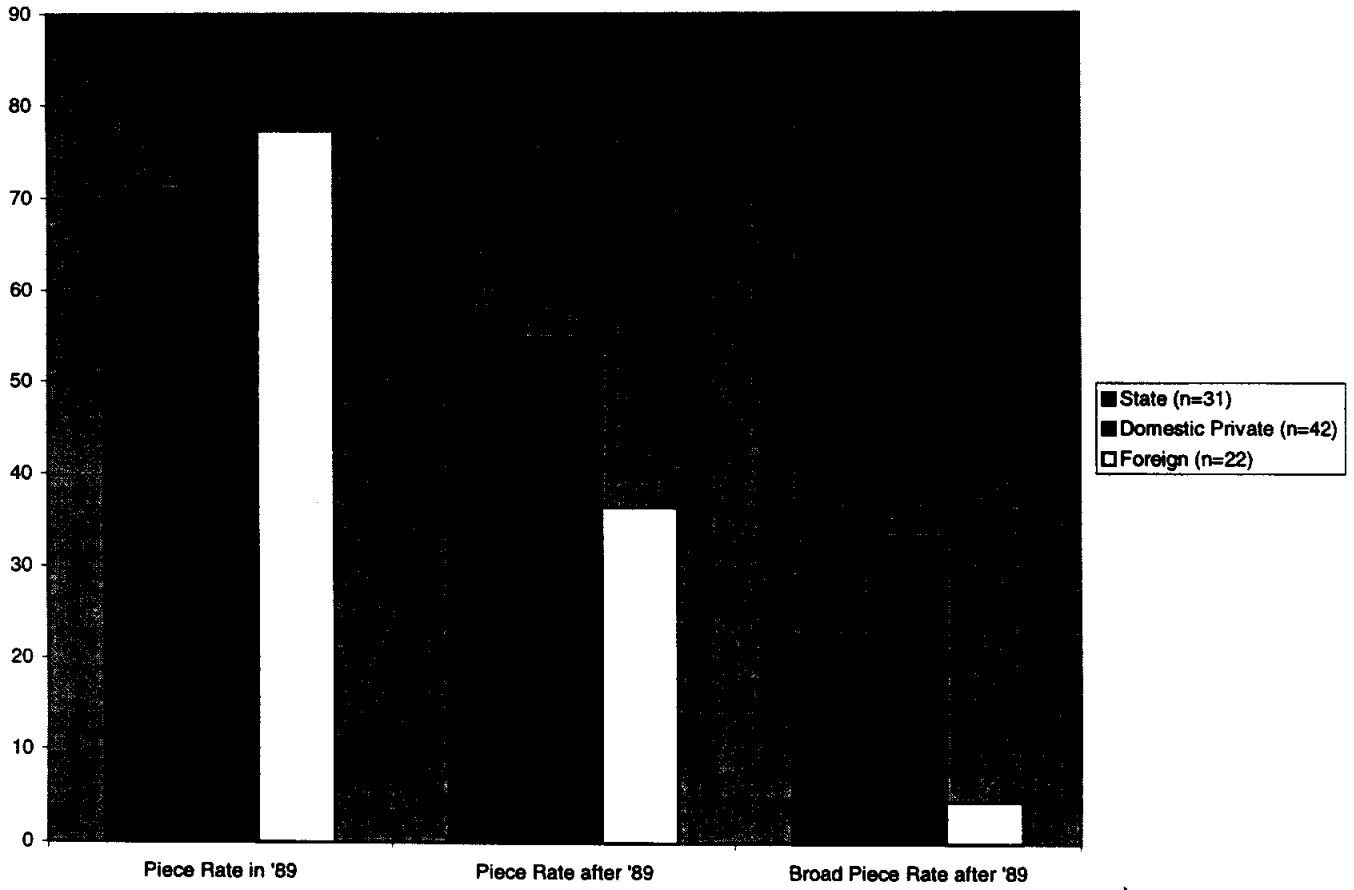
Percentage of firms that used Piece Rates and Bonus in 1989

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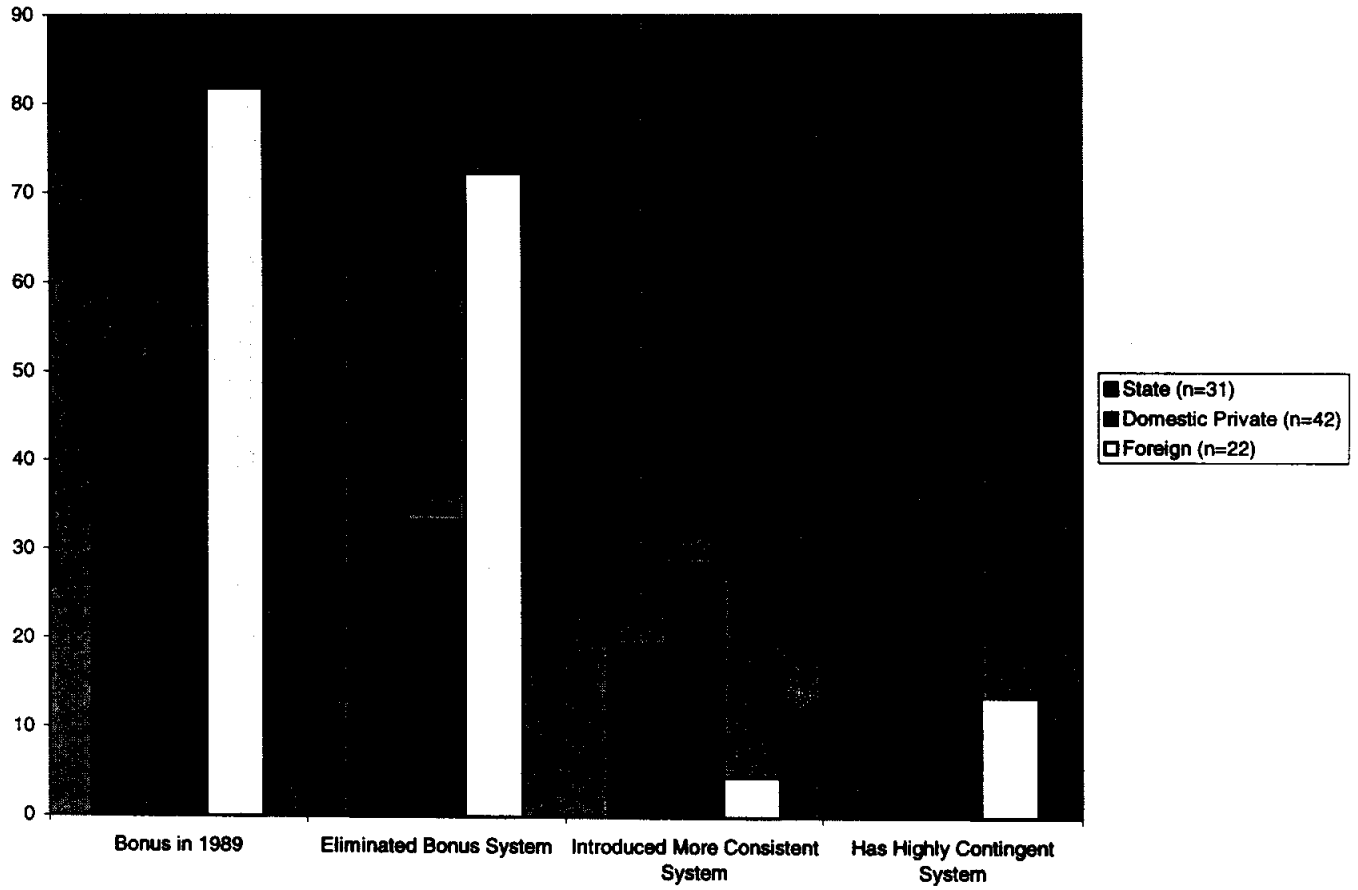
	N=95
Piece Rates or Bonus System	92.6
Piece Rate	77.8
Bonus System	63.2
Piece Rates and Bonus Systems	55.8

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**Figure 1**



**Figure 2**



**Table 2 - Hypothesized Relationships between firm strategy and structure and choice of compensation policy**

	<b>Bonus System</b>	<b>Piece Rate</b>
<b>High value-added production system</b>	Positive	Negative
<b>Firm Size</b>	Negative	Indeterminant
<b>Mass Production</b>	Negative	Negative
<b>Employee Discretion</b>	Positive	Positive

**Table 3 - Definition of Variables**

	<b>Variable Definition</b>	<b>Mean (s.d.)</b>
<b>PRATE</b>	Existence of piece rate that constitutes at least 50 percent of base pay for at least 50 percent of blue collar workforce	.23
<b>BONUS</b>	Existence of a bonus system that puts 25% or more of total compensation at risk and covers at least 50 percent of blue collar workforce	.38
<b>Independent Variables</b>		
<b>HIGHVALUE</b>	Principal component analysis of items that measure the importance of quality, product variety, and customer service compared to cost competitiveness. (The eigenvalue for the first component is 1.754 and this component accounted for 58.5 percent of total variance.)	0
<b>SIZE</b>	Total Number of Employees in 1994	818.67 (784.47)
<b>MASSPROD</b>	Mass production	.37
<b>DISCRETION</b>	Principal component analysis of items that measure degree of employee supervision. (The eigenvalue for the first component is 1.96 and this component account for 49.1 percent of total variation.)	0
<b>MACH</b>	Machine industry	.35
<b>CHEM</b>	Chemical industry	.24
<b>FOOD</b>	Food processing industry	.11
<b>LIGHT</b>	Light industry	.31
<b>STATE</b>	State-owned firm	.33
<b>POLPRIV</b>	Domestic-owned privatized firms	.44
<b>FOREIGN</b>	Foreign-owned Firm	.23

**Table 4 - Logistic Regression Analysis**

	Prate (1)	Prate (2)	Bonus (3)	Bonus (4)
Highval	-.177 (.270)	-.050 (.292)	-.311 (.245)	-.316 (.260)
Size/1000	.102 (.308)	.133 (.336)	-1.227* (.531)	-1.214* (.530)
Massprod	-1.12 (.736)	-1.043 (.757)	-1.835* (.773)	-1.806* (.778)
Discretion	-.150 (.249)	-.254 (.273)	.287 (.244)	.280 (.260)
Machine	-.553 (.641)	-1.026 (.694)	.796 (.619)	.515 (.670)
Chemical	.088 (.726)	-.512 (.841)	1.906* (.833)	1.683* (.851)
Food	1.532 (.998)	.957 (1.04)	2.916** (1.096)	2.560* (1.122)
State		-.459 (.581)		-.901 (.560)
Foreign		-2.561* (1.138)		-1.549* (.782)
Constant	-.940 (.502)	-.106 (.623)	-.124 (.516)	.633 (.639)
N	94	94	94	94
Log-Likelihood Chi-Sq.	97.03	88.93	103.90	98.27

\*p &lt; .05

\*\*p &lt; .01

**Table 5 - MANCOVA Results<sup>a</sup>**

	Mean Response in Polish-owned Firms N=70	Mean Response in Foreign-owned Firms n=22	Univariate F	Standardized Coefficient
Work is pleasurable for people (1= strongly disagree; 5 = strongly agree)	3.07	3.45	2.90~	0.174
An important role of the firm is caring about the successful personal and family life of employees. (1= strongly disagree; 5 = strongly agree)	2.83	3.64	7.52**	0.708
Estimate of the percentage of workers who would slack without supervision	38.0	30.9	1.99	-0.228
Estimate of the percentage of workers who work only for money.	63.4	46.3	6.44*	-0.513

<sup>a</sup>The covariates used in this analysis were age, gender, and Communist Party membership in 1989. The covariates were not statistically related to the dependent variables. Wilks Lambda = .009.

~ p < .01

\* p < .05

\*\*p < .005

## APPENDIX A

### DESCRIPTION OF FIELD SITES

Case	Industry	Ownership Status	Number of Employees
1	Food Processing	Domestic-privatized	400
2	Consumer Electronics	Domestic-privatized	3,000
3	Consumer Electronics	Foreign-owned	3,000
4	Consumer Chemical	Foreign-owned	450
5	Food Processing	Domestic-privatized	1,100
6	Construction	Domestic-privatized	250
7	Construction	Domestic-privatized	340
8	Plastics	Domestic-privatized	230
9	Machine Tool	Domestic-privatized	300
10	Apparel	Foreign-owned	620
11	Construction/Design	Domestic-privatized	350
12	Construction/Design	Domestic-privatized	80
13	Construction/Design	Domestic-privatized	40
14	Construction/Design	Domestic-privatized	200
15	Construction	Domestic-privatized	800
16	Construction	Domestic-privatized	400
17	Consumer Chemical	Domestic-privatized	220
18	Consumer Chemical	Domestic-privatized	170
19	Construction	State-owned	690
20	Consumer Electronics	State-owned	3,100
21	Food Processing	State-owned	240
22	Construction	State-owned	240
23	Heavy Machine	Foreign-owned	3,000
24	Construction	Domestic-privatized	1,100
25	Misc Consumer	Foreign-owned	200
26	Aircraft	State-owned	10,000