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Keywords

CAHRS, ILR, center, human resource, job, worker, advanced, labor market, compensation, employment, stability, human capital, investment, management, dollar, consumer price index, employee, resource

Comments

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**EMPLOYMENT STABILITY UNDER DIFFERENT
MANAGERIAL COMPENSATION SYSTEMS**

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This paper has not undergone formal review or approval of the faculty of the ILR School. It is intended to make the results of Center research, conferences, and projects available to others interested in human resource management in preliminary form to encourage discussion and suggestions.

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ABSTRACT

Compensation design may influence the extent to which managerial decision-makers take a long-term perspective in managing important resources like employees. I hypothesize that organizations relying more heavily on long-term compensation incentives exhibit greater stability in employment, perhaps because of a greater concern among management with long-term effectiveness. I also hypothesize that employment stability is more feasible when employees are covered by variable pay plans, which permit labor cost reductions without cuts in employment. Using multiple years of employment, financial performance, and managerial compensation data on 156 organizations, support is found for both hypotheses.

INTRODUCTION

Research shows that organizations differ significantly in their managerial compensation strategies (Gerhart & Milkovich, 1990). Although there are some differences in pay level, the most substantial differences appear to be in pay mix. Gerhart and Milkovich found that organizations differed widely in terms of their emphasis on bonus pay relative to base pay and in the percentage of managers eligible for long-term incentives. Further, they found that organizations higher on these pay mix (or variable pay) dimensions exhibited better financial performance than organizations that paid a greater share of compensation in the form of base pay. These findings are consistent with agency theory and expectancy theory predictions concerning the positive behavioral effects of performance contingent pay.

Financial performance is, however, only one of many important dimensions of organizational effectiveness and the importance of these multiple dimensions may vary among different stakeholders. Employment stability (and security) is an organization outcome that is likely to be important from both employee and public policy perspectives. Additionally, as discussed below, employment stability may have a number of long term efficiency advantages that may translate into long term benefits for shareholders. Note that employment stability does not pertain to staffing level, but rather to the degree of fluctuation in staffing level over time that is not attributable to fluctuations in product demand (because labor is a derived demand).

In the present paper, I examine the role that compensation strategy plays in the achievement of employment stability. Both expectancy theory and agency

theory argue that compensation and reward systems are crucial for energizing, directing, and sustaining behavior. Similarly, the managerial compensation literature supports the notion that managerial behavior is significantly related to the contingencies built into the managerial pay package, which may importantly influence, for example, the relative degree of short term vs. long term orientation of managers (Gomez-Mejia & Welbourne, 1989; Rappaport, 1978; Salter, 1973; Stonich, 1981). Thus, decisions affecting employment stability may also depend on the design of managerial compensation packages. Compensation may, however, influence employment stability in another way also. To the extent that employees' pay is variable (e.g., profit-sharing) rather than fixed (e.g., base salary), organizations can achieve a degree of labor cost reduction without employment reductions (Weitzman, 1984). In such cases, management will have greater discretion to pursue an employment stability objective. My goal is to examine the relation between employment stability and these two dimensions of organization compensation strategy in U.S. organizations.

It is difficult to study employment stability without closely examining the case of Japan. Thus, before turning specifically to the possible link between compensation strategy and employment stability, it may be useful to discuss why some organizations in both the U.S. and Japan pursue employment stability as a key objective. This discussion will, however, begin to illustrate the potential importance of compensation in such decisions.

Employment Stability in the U.S. and Japan

A common criticism of American management in general is that it focuses too much on short-term performance rather than the long-term success of

the organization (Business Week, 1986; Hayes & Abernathy, 1980; Marshall & Briggs, 1989, pp. 461-465; Reich, 1983, pp. 140-172). By contrast, the Japanese are seen as having a more long-term orientation in their managerial decision-making (Hill, Hitt & Hoskisson, 1988; Jacofsky, Slocum & McQuaid, 1988). One reason for taking note of the Japanese management approach to such issues is their high rate of productivity growth. Neef and Thomas (1988) found that during the 1960-1987 period, Japan's output per hour grew at an annual average rate of 7.7%, compared to 2.8% for the U.S.

Part of the explanation for the Japanese success story is thought to be found in their management of human resources. Japanese companies are often described as treating employees not as a cost factor to be minimized, but as a valuable resource that warrants careful investment and development over the long term. One indicator of this philosophy is the shushin koyo or lifetime employment system, which covers 30% or more of Japanese employees and appears to be continuing to become more widespread (Dore, Bounine-Cabale, & Tapiola, 1989, p. 61).

To be sure, there are also American companies that engage in what Dyer, Foltman, and Milkovich (1985) refer to as employment stabilization practices.¹ However, several types of evidence suggest that long-term employment with a single company is much less prevalent in the United States. First, the average Japanese worker holds about 5 jobs before retiring, whereas an American worker holds an average of 10-11 jobs prior to retirement (Hashimoto & Raisian, 1985). Second, retention rates are significantly higher in Japan than in the United States. For example, among male workers ages 20-24 with 0-5 years of tenure,

45% were still with the same employer 15 years later in Japan, compared with 13% in the United States (Hashimoto & Raisian). Third, the median firm tenure among private sector male workers is about twice as high in Japan as in the United States (Hashimoto, 1990). Fourth, Dyer et al. estimated that "no more than two or three dozen" United States employers had the type of employment stabilization practices they studied and even some of these employers have since abandoned the practice (Kochan, MacDuffie, & Osterman 1988).² Kanter (1989, p. 321), in fact, claims that "long-term employment is rapidly disappearing" in the U.S. Finally, and perhaps most telling, the ratio of quits/dismissals in the 1975-1985 period for manufacturing ranged from 5-11 in Japan, compared to 0.1 to 0.4 in the U.S. (Hashimoto, 1990a).³

Why Pursue Employment Stability?

Early explanations of employment stability in Japan focused on culture and custom (Abegglen, 1958; Kerr, Dunlop, Harbison, & Myers, 1960). For example, Abegglen argued that "the Japanese factory seems family-like in its relations" and explained this as a "consistent and logical outgrowth of the kinds of relations existing in Japan prior to its industrialization" (p. 130, cited in Shirai & Shimada, 1978, p. 244). Similarly, Kerr et al. (p. 146) argued that "the non-temporary Japanese worker has been as bound by custom to his employer as if he were in the closed circle of a preindustrial tribe. He would not think of seeking alternate employment, nor would his employer ever try to dismiss him. He has permanent membership in the enterprise" (cited in Shirai & Shimada, pp. 245-246).

Subsequent interpretations, however, have often focused more on the

efficiency reasons for lifetime employment in Japan, as well as the specific features of the Japanese system that serve to reinforce it (Levine, 1958; Taira, 1970; Cole, 1971; Dore, 1973; for reviews, see Shirai & Shimada, 1978 and Lincoln & Kalleberg, 1985). Employment stability is believed to result in Japanese employees being more flexible about their work roles and assignments, more involved in their jobs, and more committed to the success of the organization.⁴ In addition, the organization avoids losing its investments in human capital, especially that of an organization-specific variety.

Dore et al. (1989) argue that "the most important source of flexibility for the Japanese firm lies in the flexibility with which it can use its human resources" (p. 50). They contend that the lifetime employment commitment leads to:

a long-term membership in the firm. Managers and workers can share the assumptions about the nature of their employment contract--they are 'members' of the firm, hired to do whatever, from time to time, needs doing in the firm's interest--not just to perform a narrowly prescribed range of duties spelled out in a job description or evaluated in a job evaluation scheme" (p. 51).⁵

One Japanese perspective on contrasting U.S. practices came from Samadi Wada, Vice-president, Sony America: "I understand why some American companies fail to gain the loyalty and dedication of their employees. Employees cannot care for an employer who is prepared to take their livelihood away at the first sign of trouble" (Tomasko, 1990, p. 255).

Two other pillars of the prototypical Japanese employment system appear

to facilitate employment stability and the associated flexibility: enterprise unions and the bonus system. Enterprise unions, although influenced by other collective bargaining agreements, do not formally engage in industry-wide bargaining, thus allowing more flexibility in the agreements reached between particular employers and unions. In addition, contracts are typically for a length of one year, which is shorter than the typical duration (three years) in the U.S. Both factors presumably contribute to greater flexibility in base wages among Japanese (vs. U.S.) employers.

The third pillar (and another important source of labor cost flexibility) is the Japanese bonus system. According to Hashimoto (1990, p. 257), as of 1985, production workers in manufacturing in Japan received, on average, 26% of their direct annual pay in the form of bonuses. In contrast, U.S. production workers received an average of 0.5% of their pay in the form of bonuses. Although there has been a recent increase in the use of bonus payments in the U.S., the difference between the two countries continues to be substantial.

The net result of the enterprise unions (and associated wage flexibility) and bonus system appears to be greater pay flexibility in Japan, compared to the U.S. For example, Gordon (1982) found that the variability in manufacturing quarterly pay changes (including bonuses in Japan) was 1.9 to 2.9 times larger in Japan than the U.S. during the 1963-1980 period.

In addition to flexibility through increased employee commitment and involvement, a second potential efficiency advantage of employment stability is the preservation of investments in employees (human capital). As Business Week put it, workforce reductions save money in the short-run, but "no one

knows the long-term effects of liquidating such huge investments in human capital" (1986, p. 43). Human capital can be general or firm-specific (Becker, 1962; Williamson, 1975). Acquiring firm-specific skills often requires learning-by-doing, which helps explain the existence of internal labor markets characterized by limited entry from the external labor market and promotion from within policies. These firm-specific skills may be of a technical nature, but non-technical skills such as the interpersonal relations or political savvy acquired over time that enable one to "work the system" to accomplish objectives may be at least as important, especially for managers (Perry, 198_; Tomasko, 1990). Obviously, investments in these firm-specific skills are lost when employees leave the organization.

The focus on commitment, involvement, and investment can also be found in the human resource (HR) strategy literature. For example, Dyer and Holder (1988) describe three basic HR strategies. The inducement strategy seeks to elicit very high levels of reliable role behavior, but initiative, innovation, and creativity are at best minor concerns. Pay is the main motivator. The investment and involvement strategies are quite different. The former focuses heavily on employee quality through selection and development. The latter focuses on the empowerment of employees. However, both the investment and involvement strategies seek to encourage employee initiative, innovation, creativity, and flexibility in the face of technological change. One key requirement in obtaining these objectives is a high level of organization commitment on the part of employees. As Dyer and Holder note, avoiding layoffs is therefore very important under both the investment and involver

strategies.

Thus, in both the U.S. and Japan, some organizations seek employment stability as a means of achieving high commitment, high involvement, and flexibility among their workforces. Employment stability may also have a positive impact on the reputation of the organization, which in turn, may help in attracting and retaining employees. Somewhat related, employment stability helps organizations avoid procyclical hiring and the higher associated costs of facing greater competition in the labor market that stems from attempting to fill positions at the same time as other organizations (Greer & Stedham, 1989).

Given all the potential benefits of employment security, why don't more organizations, especially in the U.S., seek to maintain greater employment stability? One answer, of course, is that employment reductions represent a quick and easily measurable way of reducing direct labor costs, which typically represent the largest single operating cost category for an organization. In some cases, the tendency to make these cuts may be reinforced by pressures from security analysts. For example, the Wall Street Journal (1990) reported that "[securities] analysts said that Digital should cut 20% of its work force" to bring revenues per employee up to a more acceptable level. Most costs of such programs (e.g., severance pay, outplacement services) are usually taken during one quarter in the form of a one-time charge. In subsequent quarters, an organization can claim substantial cost reductions resulting from the lower headcount (see Tomasko, 1990, p. 197 for examples).⁶

Although the immediate stock market reaction to such a move can be positive, the long term consequences and market reaction are less certain. For

example, it is not clear at what point workforce reductions might cause revenues to suffer. Kanter (1989) notes that in workforce reductions, sometimes the "tasks haven't disappeared, just the people to do them" (p. 99). The direct quantifiable costs such as severance pay, unemployment insurance taxes, outplacement services, administrative costs, and continuation of health insurance and other benefits (Bolt, 1985; Ward, 1982) can also be quite large. The U.S. General Accounting Office (1985), in fact, concluded that the costs of layoffs often outstrip even the direct short-term monetary savings.

In discussing costs and benefits, it may be useful to reiterate that employment stability does not necessarily lead to overstaffing (and lowered revenues per employee ratios). In fact, under the "just in time" system of some Japanese organizations, quite the opposite is true. The just in time system "seeks to leave every plant with just enough--and only just enough--human and material resources to keep its production process going" (Fucini & Fucini, 1990, p. 36). Thus, for example, the Mazda automobile plant in Flat Rock, Michigan is claimed to operate with approximately 15% fewer workers than comparable U.S. plants.

The Flat Rock Mazda plant, and Japanese transplants in general, are interesting cases because they highlight some of the trade-offs U.S. employees under the Japanese system. As described above, in return for the commitment to employment stability, management expects high levels of commitment and flexibility from its workers. In concrete terms, this may include an agreement to work at a very fast pace, which may have detrimental effects on safety and health. It may also include pressure to forego vacation time and the expectation

that employees be willing to work overtime on an hour's notice (Fucini & Fucini, 1990, pp. 154-155). However one evaluates this trade-off, it does seem clear that such a system provides the opportunity for stable employment if management is so inclined.

The Role of Compensation in Employment Stability

Given the substantial costs to organizations and employees of excessive employment instability, what explains the relatively large degree of employment instability in the U.S.? Two general explanations are examined here, both of which have to do with the nature of the design of compensation systems.

First, U.S. managers may have less opportunity to reduce labor costs without workforce reductions because pay is still largely a fixed cost in the U.S. Consistent with the experience in Japan, Weitzman (1984) has argued that linking employee pay to profits (e.g., using bonuses) contributes to employment stability because it permits labor costs to decline automatically in poor economic times. Otherwise, wages (particularly in the U.S.) tend to be "sticky downward," thus encouraging employment reductions as a means of reducing labor costs. Empirical support for the employment stability enhancing effects of variable pay (e.g., the use of bonuses) has been found in both Japan (Freeman & Weitzman, 1987) and the U.S. (Chelius & Smith, 1990), although the latter study focused on economic downturns and had limited control of human capital investment. Without controlling for human capital, one cannot rule out the possibility organization differences in employment stability result from different levels of investment in human capital.

Second, the often lamented short-term orientation of U.S. managers

(Hayes & Abernathy, 1980) may also suggest less concern among U.S. managers with decisions (like employment stability) that may have serious long-term rather than short-term consequences. In Japan, management's commitment to employment stability may be partly reflect the influence of the country's culture. Stonich (1981) argues that "long-term perspectives are easy to maintain in such an environment because the manager identifies with the interests of the group" (p. 348).

By contrast, in the U.S., where a more individualistic culture may be less likely to encourage employment stability, it may be necessary to focus more attention on organization differences in factors such as the structure of managerial compensation in explaining managerial behavior and decisions (Stonich, 1981). There has long been a concern that U.S. managers do not necessarily act in the best interests of other stakeholders (Berle & Means, 1932). Agency theory, in fact, starts with the assumption that the interests of principals (owners) and agents (managers) may not ordinarily be the same, and that the design of the compensation system offers an important means of aligning the goals of managers with those of owners. Evidence does indeed suggest that owners choose different compensation strategies than do managers, with incentives being more aligned with the interests of owners in owner-controlled organizations (Gomez-Mejia, Tosi & Hinkin, 1987; Tosi & Gomez-Mejia, 1989).

One important dimension of compensation strategy is the degree to which it encourages managers to focus on long-term vs. short-term objectives (Gomez-Mejia & Welbourne, 1989; Rappaport, 1978; Salter, 1973; Stonich, 1981). Rappaport (1978) has argued that short-term managerial incentives may have

detrimental consequences for long-term performance. Investments in areas such as research and development and employee development that may generate improved future performance may be bypassed in favor of generating higher quarterly or annual earnings. Cook (1990) has recommended using plans that focus on long-term objectives as a means of getting managers to think like owners. The announcement of such plans seems to elicit positive reactions from the stock market (Brickley, Bhagat, & Lease, 1985). These types of plans may also foster a greater concern for long-term investments in employees and thus, employment stability.

To achieve stability, employment levels must be carefully managed not just in poor economic times, but in good times as well (Dyer et al., 1985). During business downturns, for example, demand side actions could include raising inventory levels. On the supply side, hiring freezes, cuts in overtime, early retirement incentives and so forth may be used. During business upturns, demand side actions might include avoiding short-run or cyclical business and making sure not to take on new business at too fast of a pace. On the supply side, employment stability can be enhanced by careful control of hiring requisitions and greater use of overtime. (See Dyer et al. for a comprehensive review.)

Dyer et al. (1985) identified the philosophy of top management as a key determinant of employment stability practices. Agency theory suggests that compensation design, in turn, is likely to be an important influence on the philosophy of top management and the organization's culture in general (Kerr & Slocum, 1987). As discussed, compensation design can contribute to a greater

long-term orientation among managers, which in turn, may make encourage them to engage in the specific employment stability actions described above.

Hypotheses

My focus in this paper is on the possible link between managerial compensation strategy and employment security. At least two aspects of compensation are relevant and have the potential for independent effects on employment stability: (a) the extent to which labor costs are fixed (versus variable) costs, and (b) the degree to which the system encourages a long-term orientation among managers who make employment decisions that affect others.

First, as described above, employment stability is likely to be greater where the compensation system provides an alternative to layoffs in reducing labor costs during poor economic times. Variable pay plans are often used as a way of (as the term indicates) reducing fixed costs. Thus, where a portion of pay depends on organizational performance (e.g., profitability), labor costs will automatically decline during periods of low profitability, thus reducing the need for cutting costs through employment reductions.

Second, a main thesis of the present paper is that in organizations where the compensation system encourages a long-term orientation, employment stability is likely to be greater. This long-term orientation may include a similarly long-term, developmental approach to managing human resources, which may often be reflected by an employment stability practice.

The preceding discussion suggests that compensation design may have consequences for employment stability. Two specific hypotheses flow from this discussion:

H₁: Employees will experience greater employment stability to the extent that their own pay is variable (e.g., based on bonuses) rather than fixed (e.g., base).

H₂: Employees will experience greater employment stability to the extent that the pay of decision-makers is tied to long-term objectives of the organization.

METHOD

Sample

A large well-known compensation consulting firm provided survey data collected during 1981, 1982, 1983, 1984, and 1985, pertaining to over 20,000 top and middle level executives and managers in over 300 business units and firms in each year. Roughly 95% designated themselves as freestanding companies. The consulting firm collected the data by sending a questionnaire each year to each organization asking that data on a representative sample of jobs, managerial levels, and business units be provided. Each organization was encouraged to report data on at least 75 incumbents and most did so.

To be included in the final sample, an organization had to participate in the survey for at least 3 years and be in a 2-digit or 3-digit S.I.C. industry that had at least 1 other organization. As a result, the final sample contains 156 organizations. As described below, individual data were used to generate organization averages do describe compensation practices. These averages were based on over 10,000 individual level observations in each year.

The job families in the survey covered a broad range (e.g. top executives, profit center heads, legal, employee relations, manufacturing,

marketing, finance, government relations, information systems, research and development/engineering, planning/acquisitions, general management, and materials). As an example of the range of positions within job families, in employee relations, data were collected on jobs ranging from the top personnel executive (1985 average pay = \$96,704) down to personnel manager (a generalist under direct supervision of the top personnel executive, 1985 average pay = \$60,821).

Analyses and Measures

The dependent variables were the coefficient of variation (CV) for total organization employment and the CV for exempt organization employment.

Note that the coefficient of variation is defined as the standard deviation divided by the mean. Thus, for example, an organization with total employees of 10,000 in 1983, 11,000 in 1984, and 9,000 in 1985 would have a CV for total employment of .08 ($816/10,000$).

The CV for employment is used because as Dyer et al. (1985) have argued, organizations that have employment stability practices, seek both downward and upward stability. In other words, not only do such organizations attempt to avoid layoffs in business downturns, they also avoid staffing up too quickly during business upturns. The CV in employment captures both aspects of employment stability.

Independent variables were also defined at the organization level and fell into three sets: compensation, organization financial performance, and industry.

Compensation strategy variables included managerial base pay, the use of long-term incentives (LTI), 1 = yes, 0 = no), and the ratio of bonus to base pay.

All variables measured in dollars were scaled in 1980 dollars using the Consumer Price Index.

It is important to note, however, that the preceding compensation variables were adjusted for important individual (or human capital) and job factors. (See Gerhart & Milkovich, 1990 for additional information.) Human capital variables included years of education, years of potential labor market experience (age - years of education - 6)², firm tenure, job tenure, and squared terms for the latter three variables, consistent with human capital theory's prediction of diminishing returns to experience (negative signs on the squared terms). This adjustment is important because otherwise, organization differences in employment stability could arise from different levels of investment in human capital, particularly firm-specific human capital. Adjustments were also made for two job characteristics measures: (a) the number of reporting levels from the board of directors to the position of the incumbent, and (b) the number of management levels supervised.

The following equation was estimated:

$$Y_{it} = X_{it}B + e_{it} \quad (1)$$

where Y is a vector of observations on a compensation dependent variable for i persons at time t (i.e. data are pooled across years). X is a matrix of observations on individual and job factors, B is a coefficient vector, and e is an error term that includes unmeasured causes of Y.

Each of the compensation variables (organization base pay, organization bonus/base, and organization long-term incentive eligibility) were defined as the organization's average residual (i.e., the organization average of the e_{it} s) for that

compensation variable over the period of the study. (The first year of compensation data came from the year prior to the first year in which employment was measured and the last year of compensation data came from the year preceding the last year in which employment was measured.) Thus, for example, in the case of base pay, individual employees with positive residuals from (1) are paid more than would be predicted from their individual and job characteristics. If positive residuals for employees within a particular organization tend to be positive, then that organization's average residual would also be positive. The implication would be that the organization pays a base salary that is above the market defined by the organizations in the survey.

Gerhart and Milkovich (1990) found that these adjusted organization averages were stable over time, indicating, for example, that organizations with high adjusted variable pay in one time period were also likely to have high adjusted variable pay several years later. This stability evidence is consistent with Mintzberg's (1978) definition of a realized strategy, "a sequence of decisions in some area [which] exhibits consistency over time" (p. 935). Gerhart and Milkovich also found significant convergence between these realized compensation strategies and intended pay policies.

The second set of independent variables was designed to control for variation over time in organization performance, in recognition of the fact that labor demand is derived from the organization's product demand and financial health. These variables included the CV of sales, CV of profits, CV of stockholders' equity, and the CV of total assets. Each of these variables was measured one year prior to the measurement of employment.

The third set of independent variables were Industry categories (dummy variables). Organizations were classified into either 2-digit SIC codes, or where possible, into the more precise 3-digit categories.

The following equation was estimated to examine the impact of compensation design on employment stability:

$$\text{CV Employment}_j = \text{CV Perf}_j W + \text{Comp}_j Z + u_j \quad (2)$$

where CV Employment is a vector of observations on j organizations' employment variability (total or exempt), CV Perf is a matrix of observations on organizations' variability in organization financial performance, Comp is a matrix of observations on the average adjusted compensation variables, W and Z are regression coefficient vectors, and u is an error term that includes unmeasured causes of employment variability. In some cases, industry controls are also added to equation (2).

Hypothesis 1 is tested using the CV of exempt employment as the dependent variable in equation (2) because information on base pay and bonuses (and thus on the extent to which pay is fixed vs. variable) is available only for exempt employees in our sample. Hypothesis 2 is tested using the CV of total employment as the dependent variable, because in organizations where management is compensated for taking a long-term perspective, they may be more likely to make decisions that maintain employment stability among their employees. Both hypotheses are tested with all three compensation variables in the model to control for pay level. One-tailed statistical significance tests are used in evaluating the effects of variation in organization performance and in testing the hypotheses. Otherwise, two-tailed tests are applied.

RESULTS

Table 1 reports estimates of equation (2) with and without industry controls using both the CV of exempt employment and the CV of total employment as dependent variables. The statistically significant negative coefficient estimates for bonus/base suggest that exempt employment is less variable in organizations that rely more heavily on bonuses in paying their top and middle managers. The statistically significant coefficient on LTI in the last CV of exempt employees equation suggests also that exempt employment is less variable to the extent that its compensation is in the form of long term incentives. Both findings support hypothesis 1, suggesting that those on variable pay (including long-term incentives) may be less subject to employment cutbacks. In other words, management itself may be less vulnerable to employment instability if its own compensation is variable, moving in conjunction with the organization's ability to pay.

The negative coefficient on LTI in the CV of total employment equations indicates less variation in employment in organizations that rely more heavily on long term incentives for their top and middle level managers. This finding is consistent with hypothesis 2, indicating that an emphasis on long-term incentives may encourage managers to manage fluctuations in the employment of others more carefully.⁸ However, the nonsignificant coefficient on the bonus/base ratio in the same equations does not provide any direct evidence that encouraging managers to focus on short-term results contributes to volatility in total employment. One possibility is that the bonus/base ratio for top and middle managers is positively associated with the bonus/base ratio for lower level

employees. If so, any positive effect on variation in total employment of a short-term focus among top and middle managers might be offset by a reduced need to control labor costs through workforce reductions because employees' pay is also variable in the short-run, making total labor costs somewhat flexible, even without changes in employment level.

None of the base pay coefficients were statistically significant, perhaps suggesting that pay level may not be an important determinant of employment stability. Note, however, that pay level may have effects on employment level because, for example, organizations may substitute capital for labor when the latter is expensive. Moreover, even if employment level remains the same, its composition may change to include different employees in different parts of the country (or in other countries) who accept lower pay.

Other results indicate that variation in sales may be more important than variation in profits, assets, or stockholders' equity in determining employment stability. The weak coefficient on the CV of profits, however, may be partly an artifact of the particular analyses used here because negative mean profits over time would result in a negative CV for profits. The problem is that a negative CV does not indicate a lack of variability. Therefore, the equations were re-estimated after dropping organizations having negative CVs for profits. This alternative estimation procedure left the coefficients on the compensation variables largely unchanged, but increased the magnitude of the coefficient on the CV of profits variable. For example, in the model for CV of total employment (with industry controls), the coefficient increased seven-fold to .014 (t = 2.34).⁹

DISCUSSION

During the 1960-1987 period, productivity grew in Japan at an annual average rate of 7.7%, compared to 2.8% for the U.S. (Neef & Thomas, 1988). Although many factors may contribute to this differential (e.g., cost of capital, age of physical plant, cultural homogeneity), a good deal of attention has been focused on the role of Japan's employment system, an important aspect of which is lifetime employment for approximately 30% of the labor force. Although there are also U.S. organizations that practice employment stability, evidence provided earlier suggests that the average Japanese employee is significantly less likely to be involuntarily terminated than the average U.S. employee.

Although the precise role of employment stability in Japan's success cannot be established, the differences between the U.S. and Japan raise the following questions: Why is there so much less employment stability in the U.S.? What factors account for employment stability differences between U.S. organizations? I suggested that compensation strategy was an important factor, especially in explaining differences between organizations within the U.S. This general hypothesis was supported by the following results.

First, exempt employees experienced less employment variability to the extent that their pay was variable. In contrast, exempt employees receiving the bulk of their pay in the form of a base salary were more susceptible to fluctuations, perhaps because their labor costs were not as flexible downward. Consequently, in poor economic times, it is difficult to reduce their labor costs without workforce reductions. In contrast, where pay is variable, depending on short- or long-term organization performance, labor costs are automatically

reduced somewhat during economic difficulties without employment reductions. These results are consistent with previous research (Chelius & Smith, 1990; Freeman & Weitzman, 1987) and provide support for Weitzman's (1984) share economy model.

Second, total employment fluctuated less when top and middle managers were encouraged to take a long-term view by an emphasis on long-term incentive plans in the compensation system. It may be that management is more concerned with protecting investment in human capital and building employee commitment/involvement when the compensation system is more oriented toward rewarding long-term organization success. Under such conditions, they may, for example, be more likely to engage in the kinds of specific employment stabilization actions described by Dyer et al. (1985).

More generally, this evidence is consistent with the general agency theory prediction that compensation is an important tool for aligning the interests of managers with those of owners. The findings are also consistent with the emphasis in the compensation literature on the power of compensation design for determining the time horizon taken by managers (Gomez-Mejia & Welbourne, 1989; Rappaport, 1978; Salter, 1973; Stonich, 1981).

Further, it is worth noting that these compensation strategy effects were obtained after controlling for other potential key determinants of employment stability such as level of investment in human capital and the product demand and financial health of the organizations. Therefore, despite the fact that labor is a derived demand, it appears that managers still have considerable discretion in their decisions regarding employment. This range of discretion may be broader

in organizations that rely more heavily on variable pay. Moreover, within this range of discretion, the time orientation of management's compensation design may be an important determinant of employment decisions.

The present study adds to the general case for the critical importance of compensation in explaining important attitudes and behaviors. We have evidence that compensation design influences organizational performance (Gerhart & Milkovich, 1990), individual performance in both manual (see Dyer and Schwab, 1982 for a review) and managerial jobs (Kahn & Sherer, 1990), retention of high performers (Gerhart, 1990), pay satisfaction (see Heneman, 1985 for a review), and now, employment stability.

There are several limitations and areas where future research would be useful. First, the approach of the present study implies that compensation influence organizational culture and managerial objectives, which in turn, influences managerial behaviors and thus, organization outcomes like employment stability. The causal process, however, may well be more complex. For example, a particular culture and organization strategy may influence the design of the compensation system. As one example, Milkovich, Gerhart, and Hannon (forthcoming) suggested that greater research and development intensity in an organization contributed to a greater use of variable pay, especially long-term incentives, for managers.

Narrower managerial objectives may also influence the design of the compensation system, especially in management-controlled organizations (Gomez-Mejia et al., 1987). In these organizations, top managers may have considerable influence on the composition of the board of directors and the compensation

committee, both of which influence top managers' pay. In fact, O'Reilly, Main, and Crystal (1988) found that the compensation levels of the members of these two groups were strongly associated with the pay of the CEO. Some interpret this to mean that managers from different organizations approve lucrative pay plans for each other and then use these pay plans of others to justify higher pay for themselves (Fortune, 1990).

Second, cross-country comparisons of compensation, organization performance, and employment stability would be of great interest. The descriptive information reviewed here, of course, suggests significant country differences in employment stability. Additionally, it seems clear that both pay and purchasing power are substantially higher in the U.S. than anywhere else (Modic, 1989, Nelson-Horchler, 1990). Differentials between top management and the average manufacturing worker also seem to differ significantly from country to country. In the U.S., the average CEO makes 35 times as much as the average manufacturing employee. In Japan and Europe, the comparable ratios are 15 and 20, respectively (Nelson-Horchler, 1990). It would be useful to more systematically examine the possible consequences of these national differences in compensation practices.

Third, although the Japanese experience suggests the possible benefits of an employment stability strategy, it would be useful to obtain data on possible performance differences between U.S. organizations having different employment stability practices. This question could be studied most effectively by using longitudinal data because actions geared toward the long run (e.g., building employee commitment through employment stability) will, by definition, have the

most visible payoffs in the long-term. In fact, such actions may carry significant short-term costs.

We also need to develop a theory that explains when an employment stability strategy would make most sense (i.e., a contingency theory). As one example, the Japanese tend to couple employment stability with extremely careful applicant screening and employee selection in both Japan (Hashimoto, 1990a) and the U.S. (Business Week, 1988). The likely explanation is that where employees cannot be terminated easily, more care is necessary in selecting employees. The Dyer and Holder (1988) paper offers some additional ideas regarding the types of human resource and organization strategy combinations that make sense.

Whatever its consequences for organizations' financial performance, it is clear that employment stability is also an important objective in its own right, especially among employees concerned about their own jobs and among those concerned with public policies dealing with worker displacement and job loss. A recent Bureau of Labor Statistics survey reported that 4.6 million workers, 20 years and older and having at least 3 years of tenure with an employer, had been displaced in the 1983-1987 period (Herz, 1990). Of this group, 72% were re-employed by 1988. In this subset, the average nominal earnings loss was 14%, exclusive of benefits.¹⁰ These displacements took place in an expansionary period. The number of displacements and size of economic losses were greater during the downturn of the early 1980s (Flaim & Sehgal, 1985). These findings lend further importance to understanding the causes of employment stability.

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Table 1

Variation in Employment, Variation in Organization Performance, and Managerial Compensation

Variable	Mean	Dependent Variable			
		CV Total Employment	CV Total Employment	CV Exempt Employment	CV Exempt Employment
CV Total Employees	.10				
CV Exempt Employees	.13				
CV Profits	-.08	.002 (0.76)	.002* (1.31)	.002 (0.61)	.002 (0.78)
CV Sales	.11	.307** (3.47)	.302** (4.00)	.256** (2.07)	.225** (2.23)
CV Assets	.14	.082 (1.12)	.052 (0.85)	.145* (1.41)	.122* (1.48)
CV Equity	.16	.064** (1.93)	.054** (1.94)	.021 (0.45)	.052* (1.39)
LTI	.00	-.053** (1.80)	-.065** (2.57)	-.046 (1.11)	-.058** (1.70)
Log Base	.00	.012 (0.26)	.014 (0.39)	.055 (0.84)	.065 (1.34)
Bonus/Base	.00	.066 (0.77)	-.023 (0.32)	-.222** (1.84)	-.184** (1.93)
Industry		Yes	No	Yes	No
Controls					
R ²		.450	.257	.326	.164

N = 156 organizations

Note: LTI, Log Base, and Bonus/Base are adjusted organization averages (see text).

* p < .10, one-tailed

** p < .05, one-tailed

FOOTNOTES

1. In both countries, "regular" employees are buffered from product demand fluctuations in many organizations through the use of temporary workers, subcontracting, etc.

2. Only recently (January 1991), Digital Equipment Company announced its first layoffs.

3. As a recent example of the Japanese commitment to employment security, consider that the three largest Japanese steel companies plan workforce reductions totalling 40,000 in a 3-year period in response to modernization and reduced capacity. But, they plan to accomplish the reductions without laying off any employees (Mroczowski & Hanaoka, 1989).

4. However, as Lincoln and Kalleberg (1985) found, difficulties in cross-cultural comparisons of self-reports may make it difficult to detect the hypothesized differences in reports of commitment. One possible explanation may stem from the fact that higher commitment would be most likely among Japan's "regular" workforce, which composes about 30% of the total workforce. Lincoln and Kalleberg did not limit their Japanese sample to regular workers.

5. Osterman (1987) notes that the General Motors/Saturn-United Auto Workers (UAW) contract contains the following language: "Saturn recognizes that people are the most valuable asset...Accordingly, Saturn will not lay off Saturn members [regular employees] except in situations arising from unforeseen or catastrophic events or severe economic conditions." In return, the UAW has, for example, agreed to a very small number of job classifications, which gives General Motors greater flexibility in work assignments.

6. From a public policy perspective, employment stability is also a desirable goal. The effects of job loss on individuals can be serious in economic (Jacobson, 1984; Gerhart & Jarley, 1987) as well as medical and psychological terms (Brenner, 1976, cited in Reich, 1983, p. 204).

7. In cases where a direct measure of years in the labor force is not available, this formula is used in the economics literature to estimate the number of years that a person could have participated in the labor force.

8. Adding the means for the performance variables and employment over the study period did not change the pattern of results.

9. Support for hypotheses 1 and 2 was also robust to adding controls for levels of employment, sales, profits, assets, and equity during the study period.

10. This loss estimate does not incorporate the earnings losses incurred while in between jobs. Psychological consequences (mentioned earlier) are another consideration. About 70% of the total 109 million U.S. employees have 3 years or more of tenure with their current employer (Carey, 1988, p. 11). Thus, 4.6 million displacements represent about 6% of this group.