

PAY, PERFORMANCE, AND PARTICIPATION

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Abstract

Our chapter identifies key dimensions on which organizations make employee compensation decisions and examines the emerging research evidence on the consequences of such decisions for attitudes, behaviors, and organization performance. We provide some general suggestions that may prove helpful in future research. First, there is increased recognition that pay decisions take place in the context of implicit or explicit contracts between employees and specific organizations. As a result, we encourage researchers to continue to give greater attention to the role of organization differences in compensation. Second, because pay is multidimensional, attention should not be restricted to organization differences in pay level. Organization differences in benefits, structure, and means of recognizing individual employees contributions also warrant attention. As an example of how the focus can be expanded, we provide new empirical evidence on organization differences in the market sensitivity of pay structures. Third, we note that the success of pay programs depends not only on decisions about pay per se, but also the process used in making communicating, and administering such decisions. More broadly, the influence of contextual factors, such as the nature of other employee relations practices (e.g., staffing, development, employment security), needs to be considered to a greater extent in compensation research. In addition to these broad suggestions, we provide specific ideas on future research directions throughout the chapter.

Key Terms

Pay Level, Pay Mix, Pay Structure, Market Sensitivity, Participation in Decision Making, Employee Benefits, Compensation Communication

The employment relationship can be thought of as an exchange process where employees provide contributions such as skill and effort in return for various inducements from the employer (March & Simon, 1958). This relationship has been conceived as a contract, either explicit (as in a written collective bargaining agreement) or implicit, that carries reciprocal obligations and returns for both parties (Azariadis, 1975; Barnard, 1936; Rousseau, 1990; Simon, 1951; Williamson, Wachter, & Harris, 1975). Policies having to do with employee relations, employment security, and compensation, which might otherwise be difficult to explain, are sometimes more readily understood in this context.

The focus of this chapter is on pay or compensation (the terms used interchangeably here), a key issue in most employment relationships. From the perspective of the employee, pay has an important influence on standard of living, status, and security. Less direct forms of compensation such as health care, pensions, and other benefits also have an important impact on employees' well-being. From the employer's point of view, compensation is both a major cost of doing business that needs to be controlled, and an investment that must generate adequate returns in terms of employee attitudes, skills, behaviors, and organization performance.

A major task from a human resource management and industrial relations perspective is to understand how to design and administer compensation policies that best meet the goals (partly overlapping, partly conflicting) of employers and employees in the employment exchange. As, however, the most recent review of compensation and performance published in an IRRA research volume (Ehrenberg & Milkovich, 1987) noted, there have been significant gaps in the knowledge needed to do so: "Our survey of the literature on the relationship between the compensation policies a firm pursues and its economic performance leads us inevitably to the conclusion that we know very little about it" (p. 113).

Although there remains, of course, a great deal to learn, some progress has been made in the years since the Ehrenberg and Milkovich review. In the present chapter, we survey some of the recent evidence on pay and performance. An earlier paper of ours (Gerhart & Milkovich, forthcoming) provides a comprehensive review of the measurement, determinants, and consequences (including performance) of compensation decisions. We draw on that review to some extent here.

The present chapter has three defining features. First, we emphasize that compensation decisions and employment contracts occur in the context of specific (and differing) organizations. An implication for research is that organization differences in pay decisions should be an important focus, as should the determinants and consequences of such differences. Empirically, this means that more data need to be

collected using the organization as the sampling unit.

Moreover, because pay is multidimensional (Ehrenberg & Milkovich, 1987; Heneman, 1985; Heneman & Schwab, 1979), breaking out into level, structure, individual pay determination, benefits, and administration issues, organization differences on each dimension need to be identified and evaluated in terms of their significance. To the degree that such differences are large, their determinants and consequences warrant study.

Second, to reinforce our points regarding the importance of organization differences and the need to look beyond pay level, we present new empirical evidence on organization differences in the market sensitivity of their internal pay structures.

A third and final focus is on the potential importance of process or administration issues in the success or failure of pay decisions (Gerhart & Milkovich, forthcoming; Gomez-Mejia & Balkin, 1992). Employee participation in decision-making (PDM) receives the bulk of our attention in this area, partly because general PDM research is fairly extensive and partly because of the important role attached to it in a recent volume of review essays on pay and productivity (Blinder, 1990). In addition, however, we discuss the potential importance of communication and fairness in the compensation area. The fact that employment relationships or contracts are often of a long-term nature reinforces the importance of such issues. In administration, as in the other areas of compensation, organization differences may be significant.

The chapter begins with a brief discussion of the general trend toward organization level research in compensation. We then proceed to each dimension (i.e., pay level, pay mix, etc.) in turn, focusing, where available, on evidence regarding organization differences. Similarly, research on the performance consequences of such differences is covered to the extent such work exists. Because the bulk of this research has been conducted in the area of pay mix (or individual pay determination), a sizeable portion of the review is devoted to pay mix issues.

THE RESURGENCE OF INTEREST IN ORGANIZATION DIFFERENCES

The growing recognition and consensus that compensation research needs to focus more on organizations and how they differ is, of course, consistent with the work conducted during the 1940s and 1950s by a group of economists that Segal (1986) has referred to as "post-institutionalists" (e.g., Dunlop, 1957; Lester, 1946; Reynolds, 1951). Their focus was on the "actual operation of the labor market" (Segal, p. 389), which led to many of the assumptions of neoclassical economics being questioned. On both the supply and demand side, empirical observation identified factors that reduced the degree of pure competition,

and thus, the extent to which firms' decisions were dictated by market forces. As a result, the post-institutionalist model emphasized that firms enjoyed a significant degree of discretion in choosing how much to pay their employees. However, with important exceptions (e.g., Doeringer & Piore, 1971; Thurow, 1975; Williamson, 1975), this interest among economists in organizational differences seemed to have been relatively dormant during the 1960s and into the mid 1980s.

Among the recent developments are empirical work by Groshen (1988, 1991), Leonard (1988), and Gerhart and Milkovich (1990) on organization differences in pay level and by Gerhart and Milkovich (1990) and Brown (1990) on organization differences in the extent to which variable pay systems are used. In addition, numerous special journal issues have appeared on compensation, often focusing on organization differences. Examples include: the "New Economics of Personnel" (Journal of Labor Economics, October 1987), "The Economics of Human Resource Management", (Industrial Relations, Spring 1990) and "Do Compensation Policies Matter?" (Industrial and Labor Relations Review, February 1990). The Brookings Institution (Blinder, 1990) recently published a series of papers by economists and other scholars that reviewed the effectiveness of pay programs such as profit-sharing, employee ownership, and so forth. A report on pay for performance recently published by the National Academy of Sciences (Milkovich & Wigdor, 1991) places a good deal of emphasis on the importance of organization differences in studying pay.

Sociologists too have called for researchers to "Bring the firms back in" (Baron & Bielby, 1980; Tolbert, 1986). Administrative Science Quarterly (1990, p. 391) recently issued a call for papers to be published in a special issue on the "Distribution of Rewards in Organizations." The desired emphasis was on "papers that examine reward-allocation processes or outcomes within one or more organization contexts" (p. 391). In the comparable worth area, Hartmann, Roos, and Treiman's (1985) basic research agenda emphasized the "need to understand better how wages are set within enterprises" because "although many assumptions are made about the impact of market forces and competition...little research on wage determination within firms has been undertaken" (p. 7). Thus, dominant models such as human capital in economics and status attainment and segmented labor markets in sociology may be giving way to a more organization-based research focus.

In contrast to some other fields, human resource management has traditionally worked under the assumption that organizations choose different employment policies and that the organization is the appropriate unit of analysis in empirical research. There is little debate about whether significant organization differences exist and little interest in showing that if such differences do exist, it must be for efficiency reasons. Instead,

the focus is on developing and testing descriptive models in human resource strategy (including compensation strategy) (Dyer & Holder, 1988; Milkovich, 1988; Balkin & Gomez-Mejia, 1987; Foulkes, 1980; Gomez-Mejia & Welbourne, 1988; Gomez-Mejia & Balkin, 1992; Salter, 1973; Weber & Rynes, 1991). A second focus is to use this work to build prescriptive models that will inform managers' employment policy decisions and implementation.

ORGANIZATION DIFFERENCES IN PAY: RECOGNIZING MULTIPLE DIMENSIONS

Although the bulk of theory and research has focused on organization differences in pay level, as discussed earlier, this is only one of several dimensions of compensation. Further, emerging evidence suggests that organization differences in pay level may be less pronounced than differences on some of the other dimensions.

For example, in the Gerhart and Milkovich (1990) study mentioned earlier, organization differences in pay mix were significantly larger and less well explained by industry, size, and financial performance differences than were differences in pay level. Why might this be the case? One explanation rests on the idea that there are important product market and labor market constraints on pay level, but not on pay mix. If an organization's labor costs are higher than those of its competitors, this may be reflected in higher product prices and, depending on demand elasticity, less ability to compete in the product market. In addition, there may be a floor below which labor costs cannot be driven without compromising the ability to hire and retain employees of adequate quality. Taken together, the organization's range of discretion may be relatively limited in setting pay level. On the other hand, at any particular pay level, an organization can deliver pay with any number of different programs (e.g., merit pay, team awards, profit-sharing). Thus, pay mix decisions may not be subject to the same degree to product and labor market constraints.

Gerhart and Milkovich (1990) also found that organization differences in pay mix were related to subsequent differences in profitability. Specifically, organizations that relied more heavily on variable pay plans such as short term bonuses and long term incentives over a period of several years performed better than those relying more heavily on base pay. The relatively large organization differences, the theoretical flexibility in making pay mix decisions, and the consequences of such decisions for organizational performance all suggest that the real action in compensation research of the future will pertain to the issue of how pay is delivered (e.g., pay mix), not the amount of pay (pay level). More broadly, a focus on pay delivery (or form) suggests that organization differences in structure and benefits decisions should also provide fertile research ground.

We begin with a discussion of organization differences in pay level and then move on to the other dimensions.

Pay Level

Ehrenberg and Milkovich (1987) defined pay level as the "average compensation paid by a firm relative to that paid by its competitors" (p. 89). Pay level is a characteristic of the organization (e.g., Heneman & Schwab, 1979; Mahoney, 1979a). Conceptually, the term "compensation" includes any direct or indirect payments to employees, such as wages, bonuses, stock, and benefits. In most research, however, only the base wage or salary is typically measured.¹ Another limitation of most research is the use of cross-sectional data, which ignores the fact that organizations may differ in the timing of compensation payouts over employees' careers.

Traditionally, much of the literature on pay level has focused on industry differences (Krueger & Summers, 1988), but more recent work has turned to an examination of organization differences. Although the findings are somewhat mixed, it seems fairly clear that there are often substantial differences in pay level between organizations within industries (Groschen, 1986, 1988, 1991). The least supportive evidence for organization differences comes from a study by Leonard (1988) of one industry (California electronics firms). The highly competitive nature of this industry may have reduced organization differences. Groschen's research using other industries, however, suggests that organization differences in pay level are of a significant magnitude and persist over time. Leonard (1990), although not placing much importance on them, also found nontrivial organization differences in pay level in a sample of executives from a broad range of industries. Finally, Gerhart and Milkovich (1990), using the Cornell Center for Advanced Human Resource Studies (CAHRS) compensation data base, found significant and stable employer differences in pay level over a five year period among 16,000 top and middle managers in over 200 organizations and many different industries.

Note that these findings do not indicate that market forces are unimportant. To the contrary, labor market and product market variables explain a substantial amount of the variance in individual pay (e.g., 78 percent in the Gerhart & Milkovich, 1990 study).² However, the findings also strongly suggest that within the constraints imposed by market pressures, organizations have considerable discretion in choosing pay level policies.

Why do employers exercise this discretion? A satisfactory answer must await the development of an accepted contingency theory. In lieu of this, we briefly describe two general frameworks that have received significant attention: efficiency wage and strategy models.

Efficiency Wages

The basic idea behind efficiency wages is that organizations may choose pay levels that exceed the market clearing rate as a way of achieving greater efficiency. Four different variants (sorting, shirking, turnover, gift exchange) of the model explain how this might work (see Groshen, 1988).

Sorting by Ability (or Adverse Selection). Some employers may choose higher rates of pay as a means of hiring and retaining higher ability employees. At least two assumptions are required. First, the employee selection system must have sufficient validity. Second, of course, the gain in employee performance must exceed the added compensation cost. This might occur, for example, in an organization where technology or work design is especially sensitive to employee ability.

Shirking/monitoring and turnover. Because worker productivity is often difficult to measure, workers may have an incentive to "shirk." However, as a counter-incentive, an organization can pay the worker more than can be obtained elsewhere, which should reduce shirking because the employee will not want to risk losing this premium wage (Yellen, 1984; Shapiro & Stiglitz, 1984). If all firms raise wages, job loss may further result in unemployment. In this sense, "unemployment plays a socially valuable role in creating work incentives" (Yellen, 1984).³

Gift exchange/sociological morale. Social conventions are the driving force here (Yellen, 1984). Akerlof's (1984) "partial gift exchange" model suggests that "some firms willingly pay workers in excess of the market-clearing wage; in return they expect workers to supply more effort" (p. 79, 1984). Or, as Yellen describes it, firms pay "workers a gift of wages in excess of the minimum required, in return for their gift of effort above the minimum required" (p. 204). Akerlof cites Adams (1965) work on overreward inequity as empirical support. He also notes, however, that "not all studies reproduce the result that 'overpaid' workers will produce more" (p. 82).

We make the following observations on efficiency wage models. First, one interpretation of such models is that if organizations behave in a particular way, it must be for efficiency reasons. Because there is always the possibility that decision-makers have access to information not available to the researcher, this will always be difficult to prove or disprove. However, we believe it is more useful to leave open the question of whether actions are necessarily efficient and let the data provide, to the extent possible, an empirical assessment of what is efficient and what is not. As the so-called post-institutionalists (Segal, 1986) of the 1940s and 1950s demonstrated, it may be unrealistic to assume that efficiency (narrowly defined) is the only criterion used in making compensation decisions.

Second and related, empirical tests of efficiency wage theory remain few and far between. In designing empirical research, it will be particularly important to measure the key constructs of the theory to provide a valid test of the theory's predictions. Thus, the need for monitoring, amount of monitoring, and the likely cost of job loss should be defined and measured.⁴

Although progress in this respect has been limited, there have been some interesting empirical studies beginning to appear. For example, Capelli and Chauvin (1991) suggest that the basic efficiency wage hypothesis is that "a wage premium may change employee behavior in ways that benefit the firm" (p. 6). They tested the hypothesis that unionized manufacturing employees would be less likely to resolve workplace problems or conflicts using methods that risked job loss when the costs of job loss were high. Specifically, the grievance procedure was expected to be used more, while absenteeism and shirking would decline. Cost of job loss was measured as the size of the wage premium (relative to the local market) and the magnitude of the local unemployment rate. Plants located in different geographic regions and local labor markets provided the variance in cost of job loss. Their hypothesis was supported. However, two issues with the study should be noted. First, shirking was not directly measured. Instead, it was proxied by the percentage of workers dismissed for disciplinary reasons). It is possible that employee behavior did not change, but managerial behavior did. The weak labor market may have led to management being more aggressive in terms of work rules, discipline, and so forth. If so, more use of the grievance system (as observed here) could be an outcome. This suggests the desirability of measuring employee shirking directly in future studies. Second, the study did not indicate whether the greater use of the grievance system in the presence of wage premiums and high unemployment rates was efficient in any sense.

Groshen and Krueger (1990) tested the idea that wage premiums would be larger in hospitals with fewer resources allocated to supervision (measured as the percentage of supervisors) because self-supervision (or self-monitoring) would be greater. In support of their hypothesis, wage level was indeed negatively related to amount of supervision. However, as they noted, other models could also account for this finding. For example, organizations that hire lower quality workers would pay them less and might need to compensate for their lack of ability by having more or closer supervision. Again, actual measurement of the central construct (self-monitoring) in future research would help clarify such results (e.g., Conlon & Parks, 1990).

Although specific tests of the partial gift exchange form of efficiency wage theory have not been conducted, equity theory research is very relevant. Briefly, it suggests that paying employees more than they

might initially think they deserve does not have much effect on long-term behavior. One reason is that people appear to be very adept at re-adjusting their self-assessments of worth (upwards of course). Consequently, the feeling of overreward inequity or guilt may often be transitory as would be any increase in effort to compensate for it (Miner, 1980).

Strategy

The general idea behind the strategy perspective is that organizations facing similar internal and external environments have the discretion to choose different compensation policies (Gomez-Mejia & Welbourne, 1988; Lawler, 1990; Milkovich, 1988; Weber & Rynes, 1991). Moreover, pay level is only one of several pay dimensions on which important choices need to be made. Different pay strategies that vary along the level, mix, structure, and benefits dimensions are thought to be appropriate for different types of organizations. The main contingency approaches to date have focused on matching different pay strategies based on an organization's stage in the life cycle (e.g., Balkin & Gomez-Mejia, 1987) or its pattern of diversification (e.g., Kerr, 1985). (See Milkovich 1988, Gerhart & Milkovich, forthcoming and Gomez-Mejia & Balkin, 1992 for reviews.) In contrast to an efficiency wage perspective, the focus is not limited to pay level and there is no assumption that the current pay practices of organizations are necessarily efficient. Rather, it is viewed as an empirical question. Unfortunately, as with the efficiency wage model literature, such evidence is rare. (See Gomez-Mejia, 1992 for a recent exception.)

Although we are not yet to the point of being able to identify and measure all of the relevant contingency factors, so we can enter them into our computerized expert system (along with a compensation strategy) and have the predicted consequences output to us, we can identify the other major compensation decision areas and some of the important issues that need to be addressed within each.

Pay Mix

General Issues

Pay mix focuses on how rather than how much employees are paid. Programs such as merit pay, individual incentives, gainsharing, and profit-sharing are some of the more common ("pay for performance") programs discussed in this context. Single rate systems and pay linked to seniority are other examples of relevant programs. The Gerhart and Milkovich (1990) study reviewed earlier suggests that organization differences in pay mix may be relatively large and important in influencing organization performance. Pay mix can have two general types of effects on employee and organization performance (Gerhart & Milkovich, forthcoming). First, pay mix can provide incentives and reinforcements for particular behaviors among current

employees. This tends to be the focus of psychological models such as expectancy theory and reinforcement theory, as well as the focus of agency theory in the economics and finance literatures. Research on the effects of pay programs like merit pay, gainsharing, profit-sharing and the like typically work from this conceptual framework.

Nevertheless, pay mix also has the potential to influence the composition of the current workforce, just as pay level is hypothesized to do under efficiency wage models. For example, an organization that links pay closely to individual or organization performance may send a different signal (Spence, 1973) to applicants than one with a weaker pay-performance link (Bretz, Ash, & Dreher, 1989; Brown, 1990; Hannon & Milkovich, 1992; Lazear, 1986; Rynes, 1987), resulting perhaps in the two organizations having different types of workforces in terms of ability, risk aversion, and so forth. Similarly, different pay systems may contribute to different types of employees being retained (e.g., Gerhart, 1990).

Another issue that arises in examining the pay mix literature has to do with the appropriate degree of individual versus group emphasis in pay program design. Deming (1986) has been a vocal critic of pay programs that focus heavily on rewarding individual level goal achievement. Two of his criticisms are mentioned here. First, he believes that any individual's performance is largely a function of numerous "system" factors (e.g., management, supervision, technology), which tend to be beyond the individual's control. Thus, it is both unfair and unwise to evaluate individual performance. Second, an individual focus discourages teamwork. As he puts it, "Everyone propels himself forward, or tries to, for his own good, on his own life preserver. The organization is the loser" (p. 102).

Team or group based pay plans may increase in importance for a number of reasons. First, comparisons with Japanese organizations suggest that teams play a greater role in the production process. For example, the MIT study of the automobile industry (Womack, Jones, & Roos, 1990) found that 69 to 70 percent of workers in Japanese plants in Japan and in North America worked in teams, compared with 17 percent in U.S. owned plants in North America. The strong productivity growth of the Japanese economy and its well-publicized achievements in industries such as automobiles have contributed to an interest in team-based approaches in the U.S. In addition, changes in manufacturing technology (e.g., advanced manufacturing technologies such as just-in-time, flexible manufacturing) have led to teams, interdependence, flexibility, and decentralization being more important. These factors may not fit well with the traditional focus on individual-based reward systems (Gerhart & Bretz, forthcoming).

A recent study by Dyer and Blancerio (1992) provides some evidence on what the future may hold.

They used a Delphi technique to obtain projections from 57 panelists regarding how the workplace of a hypothetical service company would differ in the year 2000 from today's workplace. Most respondents were corporate human resource executives (56%), academics (18%), or consultants (12%). For all employee groups, they found that the importance of individual merit in pay increase decisions was expected to decrease, while workgroup performance was expected to become more important (see Table 1). In addition, their results indicated a substantial shift toward the use of variable pay, especially plans that tie pay to firm and business unit results.

Insert Table 1 about here

Nevertheless, experience suggests the need for caution in evaluating such predictions. For example, in a related study of 12,000 experts worldwide conducted for IBM by Towers Perrin consulting, similar results were found in the U.S. sample. But, ironically, over 80 percent of the 300 Japanese respondents agreed that greater emphasis on individual merit pay was a strategy that would enhance their competitive advantage. As such, those wishing to emulate the Japanese are faced with something of a quandary.

In addition, it would be unwise to ignore the fact that individuals differ in terms of their abilities and skills. When individual differences are not recognized, high performers may move to a situation where such differences are recognized (e.g., Gerhart, 1990; Weiss, 1987). Sports analogies are of some interest because there are numerous examples of great individual performers being much more highly paid than others on the team, yet this does not preclude teamwork or success. Rather, in many cases, teammates recognize that the team would not be nearly so successful if that person were to leave.⁵ Both teamwork and individual performance probably need to be recognized.

Evidence on Specific Pay Mix Programs

Most empirical research has focused on the impact of pay programs on current employees. Several literature reviews of such programs have appeared since the Ehrenberg and Milkovich IRRA review chapter. We make use of these and the Gerhart and Milkovich (forthcoming) chapter to highlight the evidence regarding specific pay plans.

Merit Pay. Although basing the pay of managers and professionals on merit or performance is typically the stated policy in organizations (Bretz, Milkovich & Read, 1989), questions have been raised about the extent to which this policy is actually carried out in practice (Lawler, 1989; Konrad & Pfeffer, 1990; Medoff & Abraham, 1981; Teel, 1986). There has been no comprehensive study of a wide range of organizations that would provide the necessary evidence, but it may be safe to assume that organizations

differ significantly in the degree to which pay and merit are closely linked. Moreover, in evaluating the research that is available, Gerhart and Milkovich (forthcoming) suggested that much of it has approached the issue in a less than optimal fashion for two reasons. First, most of the studies have used cross-sectional data, despite the fact that even small differences in pay can accumulate into large differences over a career (Gerhart & Milkovich, 1989; Gerhart & Rynes, 1991) and similarly, even "small" links between pay and performance can compound into significant links over several years (Gerhart & Milkovich, forthcoming; Milkovich & Milkovich, 1992). Second, and related, performance can have substantial effects on lifetime earnings through its effect on promotion rates. When these factors are considered, the estimated link between pay and performance is usually significantly larger. However, we do not really have any good evidence on the extent to which employees evaluate pay packages in terms of career earnings.

Merit bonuses (not added into base pay), in contrast, are designed to more closely link current pay to current performance because an employee has to re-earn the bonus each year (Newman & Fisher, 1992). This approach is sometimes suggested as a way to increase "pay for performance" and enhance motivation. Another suggested advantage is the fact that fixed costs are kept lower and salary growth can be more readily controlled. Not surprisingly, however, employees typically do not react favorably to such plans and it is not clear such an approach makes sense in the context of long term employment relationships where employee commitment is a goal.

The empirical evidence on the consequences of merit pay is almost non-existent (Milkovich & Wigdor, 1991). An exception is a study of managers in a single organization by Kahn and Sherer (1990). They found little effect of merit pay, per se, on subsequent performance, but did find that managers who had bonuses closely linked to their performance had higher subsequent performance levels. Obviously, more such work needs to be done.

Individual Incentives. There is plenty of evidence that individual incentives can have substantial effects on employee behaviors and attitudes. The problem, however, is that not all the effects are positive. Quantity of production can often be raised (for reviews see Dyer & Schwab, 1982; Locke, Feren, McCaleb, Shaw, & Denny, 1980), but may come at the expense of quality, a major problem, particularly in view of the current emphasis on "total quality management." Individual incentives also fit poorly with team-based production and are not applicable to most white collar jobs. Another common roadblock stems from the difficulty in developing production standards and rates that are accepted as fair by both management and workers over the long run and the fear of job loss if productivity increases dramatically. Perhaps as a

consequence, individual incentives have been used successfully in only a fairly small number of cases and their use continues to decline (Mitchell et al., 1990).

Profit-sharing. Under profit-sharing, payouts are based on organization-wide profits. The plan has two potential advantages. First, it may provide an incentive for employees to act in the best interests of the organization, rather than pursuing narrower goals. Second, by making a portion of compensation vary with organization profits, an organization can align its labor costs more closely with its ability to pay. Thus, during business downturns, it has fewer fixed labor costs.

Weitzman and Kruse (1990) have provided a comprehensive review of profit-sharing research. Based on previous attitude surveys, they concluded that both employees and employers believe that profit-sharing has positive effects on organization performance. Further, they found consistent evidence of statistically significant and positive links between profit-sharing and organization performance, usually defined as value added.

Nevertheless, Gerhart and Milkovich (forthcoming) raised some issues that might temper the positive evaluation reached by Weitzman and Kruse. As one example, the use of value added as a dependent variable carries potential risks because it is not a measure of physical productivity. Instead, it is defined as the degree to which the price of a product exceeds the cost of factor inputs (e.g., labor). Obviously, the price of a product can be influenced by factors other than productivity. Weitzman and Kruse seem to recognize this and other potential problems with the profit-sharing literature. They note that "A limitation of the econometric studies is that they shed little light on the mechanisms through which profit sharing may affect productivity" (p. 139).

The reason for interpreting the profit-sharing research cautiously is that there are both conceptual problems and roadblocks that have arisen in practice. For example, from a motivational point of view, it is not clear that any single employee will see much link between his or her performance and the organization profits because of the large number of people and factors that influence profits (ie., "line of sight" problem). This, together with the "free rider" problem suggest that the motivational effect of such a plan may be limited. In addition, the attempt to make labor costs vary with business conditions has also not worked out in a number of cases (e.g., the DuPont Fibers unit case). Employees often think profit-sharing is fine when profits are good because the profit-sharing payments are just "gravy." However, when profits go down and their pay goes down, serious opposition can arise and plans may be scrapped. It is also possible that the introduction of this sort of risk into employee pay packages may require a compensating wage differential

(Abowd & Ashenfelter, 1981). Otherwise, employees may gravitate toward organizations that do not require them to bear such risks. The "signalling" effects of these plans on applicants attitudes and behaviors needs to be investigated

Finally, whatever its performance consequences, we note that profit-sharing has also been proposed as a means of enhancing employment stability (Weitzman, 1984, 1985). The basic idea is that it provides a way for organizations to reduce labor costs during business downturns without necessarily reducing headcount. The research to date seems to support this hypothesis (Chelius & Smith, 1990; Kruse, 1991; Gerhart, 1991).

Employee Ownership

Stock Options. Stock options permit employees to purchase stock at a fixed price. In the past, they have been primarily reserved for executives, but some organizations like Pepsi-Cola now give them to all employees. If the stock price increases, the options can be exercised at the lower price and the employee makes a profit upon selling the stock. Thus, like profit-sharing, payouts are based on a measure of organization performance. The potential advantages and disadvantages are also similar. One additional aspect that deserves mention is the cost of stock options. Sometimes, organizations seem to treat them as having no cost. In theory, however, they may dilute the value of existing stock or reduce the amount of earnings allocated to profits. In fact, the Financial Accounting Standards Board (FASB, overseen by the Securities and Exchange Commission) is currently looking into this issue (Cowan, 1992). It is considering changing accounting rules so that options are charged to compensation expense like other forms of compensation.

ESOPS. Employee stock ownership plans (ESOPS) in the U.S. are defined in the Internal Revenue Code and the Employee Retirement Income Security Act and enjoy a number of tax/financing advantages (Conte & Svejnar, 1990). They have also been used as a takeover defense under the assumption that the employee voting block will be supportive of the management team. ESOPs are unique in several respects, including the requirement that plan participants (i.e., employees) be permitted to vote their securities if they are registered on a national exchange (Conte & Svejnar).

As with other organization-wide plans such as profit-sharing and stock options, the motivational impact of stock ownership is open to question because the employee may see little connection between his or her own performance and the stock performance. Nevertheless, the research to date has been "encouraging" (Hammer, 1988). As is probably the case with other plans (e.g., profit-sharing), however, there is some concern about simultaneity--that actual or expected good stock performance may result in the establishment of ESOPs (Hammer, 1988).

An important and recurring finding is that there are greater beneficial effects of ownership in cases where employees participate in decision-making (Conte & Svejnar, 1990; Hammer, 1988). Similarly, Pierce, Rubinfeld, & Morgan (1991) suggest that employee ownership is most likely to influence motivation, attitudes, and behaviors when the "employee-owner comes to psychologically experience his/her ownership in the organization." Klein (1987) reports that employee satisfaction under ESOPs is related both to the monetary and participation components.

Areas of concern with ESOPs include (a) ownership stakes that do not translate into voting rights, (b) the difficulty in diversifying employee pay (or investment) risk, and (c) the cost to other stockholders that arises from the dilution of share value when ESOP shares are not purchased on the market ("Unseen Apples and Small Carrots", 1991).

Gainsharing. In contrast to the typical profit-sharing plan, gainsharing payouts are (a) typically linked to group or plant rather than organization-wide performance, (b) based on productivity rather than profits, and (c) distributed more frequently and not deferred. Taken together, these differences suggest a greater motivational impact for gainsharing because a payout criterion like group or plant productivity is likely to be seen as more controllable by employees than something like organization-wide profits. Not surprisingly, the evidence indicates that gainsharing has a positive impact on performance (Hatcher & Ross, 1991; Kaufman, 1992; Schuster, 1984a; Wagner, Rubin, & Callahan, 1988).

Although gainsharing appears to have a positive influence on the performance of current employees, a potential concern stems from our earlier discussion regarding its effects on workforce composition and some initial empirical evidence that high individual performers may not be more likely to leave under such plans (e.g., Weiss, 1987). If this finding is replicated, research will be needed to evaluate the potential trade-off between (negative) workforce composition effects and (positive) effects on current (or remaining) employees. Alternatively, research might focus on the optimal blend of plans (e.g., merit pay, promotion) that reward individual performance and those that reward group performance (e.g., gainsharing).

Other research issues concern the conditions under which gainsharing is most effective. Gowen and Jennings (1991, p. 148) suggest that three "socio-psychological conditions--employee identification, ownership, and commitment" are important characteristics of effective gainsharing programs. Similarly, Hatcher, Ross, and Collings (1991) propose a model where "employee support for gainsharing" has three determinants: plan-instrumentality beliefs, affective organizational commitment, and trust. Such hypotheses again underscore the potential importance of non-compensation factors in determining the success of compensation programs, an

issue we cover in more depth in a later section.

Pay Structure

Pay structures can be defined in terms of the "array of rates paid for different work within a single organization." In addition, they "focus attention on the levels, differentials, and criteria used to determine those pay rates" (Milkovich & Newman, 1990, p. 31). To date, much of the empirical research has focused on relative pay (i.e., differentials), defined, for example, as the ratio of a position's pay to adjacent positions in the hierarchy (Jaques, 1961; Mahoney, 1979b) or to the average pay of other positions in the structure (Pfeffer & Davis-Blake, 1987). As with pay mix, organizations may have considerable discretion in designing pay structures because many different structures are possible given a particular overall labor cost.

The evidence on organization differences in structure is sparse. However, a recent study by Pfeffer and Davis-Blake (1990) used a sample of colleges and universities to model the determinants of salary dispersion (coefficient of variation). Using roughly 20 predictors, including tenure dispersion, percent women, the distribution of jobs, and size, they obtained R^2 's of .30 and .46, depending on the time period. By implication, there remain large unexplained organization differences in salary dispersion, especially compared to a pay dimension such as level, for which R^2 's are typically considerably higher (e.g., Gerhart & Milkovich, 1990).

Much of the literature on structures is based on the idea of an internal labor market (ILM). Work by Kerr (1954) and others "attacked the uncritical application of the textbook model of supply and demand to the ILM" (Wachter & Wright, 1990, p. 241). Compared to the external labor market, an ILM allocates and prices labor (i.e., employees) on the basis of policy, rules, and procedures, and less on the basis of supply and demand. Market forces in an ILM are largely indirect, except for ports of entry jobs. Although Doeringer and Piore (1971) incorporated both efficiency and institutional explanations for ILMs, most of the subsequent economic literature has stressed the efficiency advantages of ILMs (e.g., Azariadis, 1975; Becker, 1964; Williamson, Wachter, & Harris, 1975; see Wachter & Wright, 1990 and Ehrenberg & Smith, 1987 for reviews). An important starting point for most such models is that employees and organizations "incur substantial sunk cost investments...[which] are not easily portable across firms....Minimizing these sunk cost losses encourages the parties to maintain their ongoing relationship" (Wachter & Wright, p. 243).

The existence of a long-term employment relationship means that structures must be designed not only with incentive effects in mind (e.g., Lazear & Rosen, 1981), but also with the goal of achieving equity, fairness, and the favorable reputation that follows. Less complete information being held by one party than

by the other (i.e., asymmetric information) might permit "strategic behavior" (i.e., not abiding by the implicit contract). Wachter and Wright (1990) suggest that "Perhaps the most important disincentive for strategic behavior is the repeated nature of the ILM relationship. Repeated transactions are less subject to opportunism than are short-run relationships" (p. 253).

Although the preceding literature explains ILMs in terms of their efficiency advantages, little attention is given to how ILMs vary across organizations or what specific decisions are most consequential for organization performance. The administrative literature (e.g., Belcher & Atchison, 1987; Lawler, 1980; Milkovich & Newman, 1990; Wallace & Fay, 1988), for example, suggests that numerous specific decisions are required, including: using job- or skill-based structures, the number of separate structures, the number of steps or levels in a structure, the rate of progression through the structure, and the degree to which pay differentials represent the external market or use some other criterion (e.g., internal consistency). Little is known about organization differences in such decisions, let alone their potential implications for performance (Gerhart & Milkovich, forthcoming).

New Evidence on Organization Differences: Market Sensitivity

To help remedy the lack of empirical evidence on organization differences in pay structures, we provide new results on organization differences with respect to the market sensitivity of their pay structures. The compensation literature has long recognized the importance of both external competitiveness and internal consistency objectives. The former refers to comparisons between what the organization pays for a particular job or skill and what other organizations pay. Internal consistency, by comparison, focuses on within-organization comparisons of pay for different jobs or skills.

Although the two policies may go hand in hand, they may also conflict. For example, an internal consistency orientation might argue for vice presidents being paid the same, regardless of the labor market (e.g., finance, human resources, research and development) or product market (e.g., aerospace, consumer products). Such a policy may make the most sense in cases where the vice presidents make lateral moves across functional job areas or business units or where cooperation between vice presidents is important (Carroll, 1987). However, if other organizations (the "market") tend to pay vice presidents in finance and/or consumer products more, there will be pressure to move away from internal consistency toward an external competitiveness focus. Otherwise, it may be difficult, for example, to attract and retain vice presidents of finance in the consumer products business. In such organizations, labor market and product market factors would play a more important role in pay-setting.⁶ In this sense, the pay structure would display more market

sensitivity.

The focus of the empirical results reported here were obtained as part of the third author's Master's thesis (Murray, 1992), and focus on the question of whether organizations differ significantly in the degree to which they pursue an external competitiveness or market sensitivity strategy, as is suggested by policy-capturing research of compensation professionals (Weber & Rynes, 1991). If so, future research could try to ascertain the reasons for such differences and their possible consequences for organization performance.

The data are from the Cornell University Center for Advanced Human Resource Studies Compensation Database. There are 78,503 observations pooled across multiple years (1981 through 1985) on top and middle level managers in 282 firms. To be included in the sample, an organization had to report data on at least 75 employees in at least two different years.

The measure of market sensitivity was derived in two steps. First, a market-wide equation was estimated using cash compensation (base salary + short term bonus) as the dependent variable. Second, for each organization, the predicted cash compensation from this general equation was matched with the actual cash compensation values to obtain an R^2 (or coefficient of determination). This, in turn, was used to measure the correspondence between an organization's pay structure and that of the market as a whole--in other words, its market sensitivity. To capture product market influences, the general equation included industry dummy variables, as well as size (sales, employees). Labor market influences were accounted for by including occupation dummy variables, level of responsibility, general and firm-specific experience, and years of education.

The results indicated that the mean of the market sensitivity index was .78 with a standard deviation of .08. With a normal distribution, the 95 percent confidence interval would run from .62 to .96, indicating a significant range in market sensitivity. An analysis of variance using organization dummies as the independent variables was statistically significant ($F_{281,78211} = 357.68$), reinforcing the finding of significant organization differences in market sensitivity.

An important criterion in assessing whether patterns are strategic is to examine their stability over time (Mintzberg, 1987). To pursue this issue, market sensitivity indexes from 1981 and 1984 were used to obtain a measure of stability. The correlation between the two years was .44. Thus, organization differences in market sensitivity show some stability, but also significant change. However, it should be recognized that there is considerable movement of employees into and out of the organizations included in this sample. For example, using the same sample, Gerhart and Milkovich (1990) reported that about 50 percent of employees

present in 1981 were not present as of 1985. Combined with the fact that the R^2 's are based on modest sample sizes, there may be a fairly low ceiling on the amount of stability that could be found.⁷ All things considered, we suggest that the results indicate significant and relatively stable organization differences in market sensitivity. Given the potential consequences of internal consistency and external competitiveness discussed above, this probably calls for work that explores the organization performance consequences of such differences.

Benefits

Employee benefits add an average of \$.38 on top of every \$1.00 of payroll (U.S. Chamber of Commerce, 1991), accounting for about 28% of total compensation (EBRI, 1992). Therefore, any discussion of organization differences in pay must consider differences in benefits. From publicly available data focussing primarily on industry differences, we know that spending for benefits is highest in manufacturing (31.9%) and lowest in retail trade (22.5%). However, as with pay structures, much of the evidence about organizational differences in benefit costs, forms, and levels of coverage, and their possible consequences may only be available in the surveys conducted by private consulting firms. For example, Hewitt (1992) reports that two-thirds of the manufacturers in their survey (approximately 200) provide comprehensive medical care with deductibles. Individual deductibles of \$200 (23 percent of the plans) and \$100 (29% of the plans) are most common. Family deductibles varied from \$200 (12% of the plans) to \$400 (12% of the plans). Employee monthly contributions for single coverage ranged from none (46%) to \$50 and greater (12%).

Both level and growth of benefit costs are noteworthy. In 1935 benefits accounted for less than one percent of total compensation costs. By 1953 their share was 16%, by 1980 it was 27%. The types of coverage also changed. In 1960, employers spent 1.1 percent of total compensation on health care, 4.8 percent for retirement, and 2.1% on other forms. In contrast, in 1990, health care accounted for 6.4%, retirement 8.1%, and other forms 2.2% (EBRI, 1992).

Although there is evidence of a recent slowdown in overall benefit growth relative to total compensation, even the most casual observer must be aware that health care costs are the notable exception. According to one survey, the cost of health care increased 21% (to \$2313 per employee in 1990, following increases of 20.4 percent and 17 percent in 1989 and 1988, respectively) (Foster Higgins, 1991). The U.S. spends about 12% of its gross domestic product on health care, the largest percentage amount of any developed country.

Despite this large and increasing expenditure of resources, there are 37 million U.S. citizens (14.8%

of the population) who do not have public and private health care. Most conventional quality indices such as infant mortality (U.S. ranks highest among developed countries) life expectancy (U.S. ranks sixth out of six countries for men, fourth for women) and office waiting time per visit (14 minutes) raises questions about the return on the nation's investment in health care. Finally, according to public opinion polls, U.S. citizens are less satisfied with their health care system and more likely to say it needs fundamental change than citizens in other developed countries.

Public policy regarding employee benefits is beyond the editor's charge for our chapter. However, one only needs to consider the effects of changes in the tax code or of the wage and price controls in the 1940's and 1950's to realize that the current public policy debate on health care will shape the costs, forms, and levels of coverage of benefits offered employees. Further, the GAO recently noted that full taxation of benefits could raise \$91 billion in new tax revenues and... "go a long way toward improving equity" between benefit recipients and nonrecipients (GAO, 1992). They also noted that it may lead to fewer benefits provided by employers. However, given the virtual absence of research on organization differences, public policy formulation will not be well informed about the effects that differences in benefits have on employee behaviors or organization performance.

Employee Perceptions and Preferences

Evidence suggests that employees seriously underestimate the financial value of their benefits and in some cases are even unaware of their existence. In one study, employees were asked to recall which types of benefits they received; the average response was only about 15% of the total number of benefits (reported in Milkovich and Newman, 1990).

The Wilson et al. (1985) study focused on employees' perceptions of their health care insurance benefits. Employees were knowledgeable about their own contributions, but not about those made by the employer. Over 90% of the employees underestimated both (a) the cost to the employer and (b) what it would cost them to provide the benefits on their own. For example, for one health plan, employees estimated the employer cost to be \$22 (the actual cost was \$64) biweekly and the market value to be \$48 (versus an actual value of \$169). In fact, some employees believed that the employer made no contribution at all to their health insurance coverage.

One interpretation of such findings is that employers may, to put it bluntly, be throwing away money on benefits. If employees do not know the benefits exist or fail to attach value to them, the benefits cannot influence their attitudes or behaviors in any positive fashion. As Lawler (1981) has suggested, any action that

would enhance employee knowledge would help strengthen the impact of benefits. He advocated increasing employee choice (e.g., by using cafeteria or flexible benefits plans) as one approach. Organizations have in fact moved in this direction, with 61 percent now offering such plans, according to the Hewitt survey of 944 large organization (Hewitt, 1991). Preliminary evidence suggests that flexible benefits do positively influence benefits satisfaction (Barber, Dunham, and Formisano, 1990). Other actions aimed at enhancing employee knowledge include greater use of copayments and deductibles. The effects of such approaches await evaluation.

There is longstanding evidence of significant employee differences in benefit preferences (Nealey, 1963; Mahoney, 1964; Nealey and Doodale, 1967; Huseman et al., 1978; Davis, Giles, and Field, 1985 and 1988; Stonebraker, 1985). Although interpreting these results is often complicated because of a lack of adequate controls (e.g., differences in the experience or use of different forms, employer differences in benefits packages and communication approaches), some findings seem robust (and perhaps even obvious to some): older workers tend to place more value on pensions, women tend to prefer more time off, and the number of dependents is related to the desire for health insurance.

Such employee differences, of course, lend greater weight to the need for offering employees a choice in the design of their benefits package. The increasing diversity of the workforce further reinforces this suggestion. Employers hope that flexible benefits plans will help control costs and enhance employee satisfaction by increasing employee knowledge and improving the fit between employee preferences and benefits.

Survey and anecdotal evidence suggest that employee reactions to flexible plans are positive and that medical care costs are lower under such plans. However, little empirical research has taken advantage of the field opportunities offered by employers' shift to flexible plans (see Barber et al. for an exception). Little is known about why some employers shift and others do not. Even less is known about how employees make the choices that are so fundamental to such plans, or whether different choices are made (Barringer, Milkovich, and Mitchell 1991).

Barringer et al. (1991) studied the actual decisions made by employees (n=1,500) among six health care options under a flexible benefit plan offered by a large manufacturing company. Employee choices were modelled as a function of employee and plan characteristics. Results indicated that employee decisions among multiple health plans were significantly influenced by option costs (i.e., premium, deductibles, and coinsurance amounts) and employee demographics (i.e., employees' age, income, marital status, and gender). As age and

salary increased, the probability of selecting a reduced (less expensive) level of health care coverage decreased. The probability of selecting a lower cost alternative was greater among married employees and female employees.

Another study conducted by IBM reported that the selection of high coverage options did not drop when employee costs were raised, but employee satisfaction with their health care benefits actually increased. Simultaneously, the organization had launched a massive communication effort, including take-home videos. These findings suggest that employee expectations about their benefits are adaptive and communication efforts may have an influence. In addition, communication and employee involvement may be all the more important, since apparently employees underestimate the value and may not even be sensitive to organization differences in benefits. Increasing the knowledge through communication and involvement may increase benefit value to employees. In a recent study, knowledge and satisfaction with benefits increased for employees who used computer-based spreadsheets and an expert system compared to employees who did not have access to these decision aids (Hannon, Milkovich, and Sturman, 1992).

Satisfaction, Attraction, and Retention.

Benefits are believed to influence everything from employee satisfaction, health, and well-being to the decision to join and remain with an organization. Again, with some exceptions, research into the consequences of employee benefits is lacking.

Heneman and Schwab (1985) and others have found that satisfaction with benefits is a separate and independent dimension of pay satisfaction. Other findings suggest that benefit satisfaction increases with improved coverage and decreases with cost shifting to employees (Dreher, Ash, and Bretz, 1988). A more complete review of this research is in Gerhart and Milkovich (forthcoming).

Benefits are also believed to influence job choice decisions. The typical study involves asking graduate students to rank order the importance attached to various factors influencing their job choice (see Huseman, et al., 1975). Benefits' last place rank is consistent with employees' tendency to underestimate their value (Mahoney, 1964; Huseman, et al., 1978; Pergande, 1988). In a recent Gallop poll, respondents claimed that they would require \$5000 more in extra pay to choose a job without pension, health, or life insurance.

There is increasing evidence that pensions and health care reduce voluntary turnover (Schiller and Weiss, 1979; Mitchell, 1982, 1983). Schiller and Weiss reported that turnover was not only influenced by the existence of pensions but also by vesting and employee contributions. Mitchell found that pensions were less

likely to influence the turnover of women than men (1982). Luzadis and Mitchell (1991), using the longitudinal file of collectively bargained pension plans, reported that the nature of pension plans acts as an incentive to encourage workers with high tenure to retire. They suggested that employers, through the design of their pension and retirement incentives, can shape the demographic composition of their workforce. However, a problem is that the optimal configuration (experience, age, etc.) is seldom attended to. Rather, the objective is more often simply to reduce labor costs (i.e., replacing older, more expensive employees with younger, less expensive ones). The effects on overall economic performance needs to be examined.

Explanation of Differences

The recurring theme of this chapter is to put the organization back into research on employee compensation. This is particularly important in the case of increasing our knowledge about employee benefits. Explanations of organizational differences in benefits can be derived from a number of different economic and organizational theories. Barringer and Milkovich (1992) examine how current theories, drawn from economics and organizational behavior, explain the observed patterns in the adoption and design of a specific benefit practice--decisions about flexible benefits.

Flexible benefits were only offered by 17 major U.S. employers in 1981 and only 99 by 1983, but by 1992 over 1400 plans had been implemented. Survey evidence suggests that the incidence is highest in the service industry. Sixty-three percent of the top 100 commercial banks, 46% of the top 50 financial firms, and 46% of the top 50 utilities currently offer flexible plans (Hewitt, 1992). This is also evidence of considerable variation in the design of these plans.

How do different theories account for this diffusion of flexible benefits? Barringer and Milkovich (1992) consider agency and transaction cost models from economics as well as institutional and resource dependency models from organization behavior. All rest on the premise that organization performance can depend on motivating important employee behaviors, and while they are not in complete agreement, all suggest that the ease of monitoring work effort is important. On the other had, these theories disagree on the extent to which organization decisions are influenced by external versus internal conditions. The institutional model suggests that employment relationships are determined primarily by forces in the organization environment such as tax code changes, industry competitiveness, and labor market patterns. In contrast, the resource dependency, agency, and transaction cost perspectives all presume that internal conditions affecting contingencies in employment relationships primarily determine how an organization will design its compensation, including benefits.

Assumptions about the determinants of organization decisions about practices such as flexible benefits vary widely across models. Two conflicting themes emerge: decisions about the adoption and design of an innovation are rationally related to pressures in the environment; or organizations base their decisions on what others are doing (i.e., benchmarking), regardless of the effects on firm performance.

Consistent with the first theme, the resource dependence, agency, and transaction cost perspectives all imply that organizations can improve productivity by adopting practices that will motivate employees' work and attendance behaviors. Explanations of firms' decisions about flexible benefit plans thus require an examination of the factors related to the extent of organizations' reliance on and control or influence over these important behaviors. In contrast, the institutional perspective implies that organizations are less concerned with improving technical efficiency than with reaching an accommodation with their environment. This theory suggests that an organization's "field" as well as factors related to pressures to conform and organizations' immunities to these pressures can help explain decisions about flexible benefits plans.

None of the theories seem to offer a complete explanation of firms' decisions about flexible benefits plans. The institutional model does not consider "late adoption" decisions that may be related to rational considerations. Further, application of this model may be difficult because of an organization's field is not easily identified, and because the criteria are unclear for determining when institutional forces begin to exert more influence than rational, performance-related considerations. The resource dependence, agency, and transaction cost perspectives seem to be more helpful in explaining the design than the incidence of flex plans, and each seems to focus narrowly on a single aspect of the employment relationship. Thus, for example, the transaction cost perspective focuses on the firm-specificity of work skills and the ease of monitoring productive efforts, and does not consider other factors (e.g., task uncertainty, task centrality) that would also make high turnover and low work motivation costly. If expanded, however, the transaction cost approach might prove to be the most parsimonious of all the models, since it recognizes not only the importance of efficiency as an important guiding force, but also the impact of environmental constraints beyond the organization's control. It could therefore incorporate the constraints imposed by institutional environments, as well as those imposed by contingencies in employment relationships that are implied by the resource dependence and agency models.

Benefits provide a unique context for testing a variety of economic and organization theories. Hypotheses about the determinants and consequences of organization differences in benefits can be derived. There is sufficient evidence that significant differences among organizations exist. Further, the dramatic

changes currently underway in the benefits organizations offer provide research opportunities. Their increasing cost only adds to the timeliness of benefits research.

So what are the potential barriers? First, the data requirements are considerable, since numerous variables are implied by the theories, and large longitudinal sample sizes are required. Moreover, testing hypotheses regarding organization differences requires data across several firms. Obtaining benefits data is proving to be a challenge, since some firms consider it proprietary, and not all of it is well documented in existing information systems. Nevertheless, our survey of the research leads us to conclude that compared to the rest of compensation, we know very little about how employee benefits are determined or what their effects are. The opportunity to make a contribution by informing decision makers and adding to the body of knowledge is substantial.

PROCESS ISSUES: PARTICIPATION AND COMMUNICATION

Lawler (1980, p. 33) suggested that there was too often an assumption in employee compensation research and practice that "if the right technology can be developed, the right answers will be found." But, he argued that "there are no objectively right answers," and thus, process factors such as participation and communication are also important. The distinction between distributive equity and procedural equity (e.g., Greenberg, 1986; Folger & Konovsky, 1989) similarly suggests the need to treat outcomes and the process used to decide on (and administer) such outcomes as somewhat independent issues. Textbooks and chapters in the employee compensation field now regularly point to process issues as a key strategic decision area (Gerhart & Milkovich, forthcoming; Gomez-Mejia & Balkin, 1992; Lawler, 1980, 1990; Milkovich & Newman, 1990). Economists too have begun to focus more attention on the likely importance of process issues (Blinder, 1990).

Consistent with our earlier discussion of compensation dimensions, there seem to be substantial differences in the decisions made regarding participation and communication both within (e.g., Cutcher-Gershenfeld, 1991) and between organizations (Goll, 1991). The latter study suggests that environmental conditions (e.g., foreign and domestic competition, deregulation, industry structure) are not very helpful in explaining differences between organizations in the degree of participative decision making. In contrast, top management ideology and values did explain a significant portion of such differences. Therefore, management may have considerable discretion in its decisions regarding employee participation in decision making and other aspects of general employee relations. (On this point, see also Kochan, Katz, & McKersie, 1986;

Kochan & Dyer, 1992; Lewin, 1987).

We focus on two process related issues: participation in decision making and communication/information sharing.

Employee Participation in Decision Making

Levine and Tyson (1990) summarized two "economic" models of participation in decision making (PDM). The first is based on an agency theory approach. Delegation of decision making by a principal to an agent raises the question of how the principal can encourage the agent (whose interests differ to some degree) to act in the best interests of the principal (i.e., the agency problem). As the number of decision makers increases, so do monitoring costs (Jensen & Meckling (1979) and transaction costs (Williamson, 1975). Thus, from this perspective, PDM would be inefficient. However, Levine and Tyson argue that both the agency and transactions costs frameworks can be extended to incorporate the fact that employees have knowledge about the workplace and behavior of fellow employees that managers do not and PDM may increase the communication of such information. The implication seems to be that employees will engage in self- and peer-monitoring.

But, as Levine and Tyson (1990) point out, there is the question of why employees would be motivated to share information and facilitate monitoring. Based on economic theory's focus on monetary incentives, the experiences of other industrialized nations (e.g., Japan), and psychological theories of PDM, they suggest that four factors are necessary for PDM to succeed: "gainsharing" (to provide a monetary incentive), and three actions geared toward building an environment that fosters trust and cooperation: long-term employment relations, measures to build group cohesiveness, and guaranteed individual rights for employees.

Perhaps the most influential psychological theory of PDM and its consequences is the Locke and Schweiger (1979) model, which is built around an expectancy theory perspective (Vroom, 1964). PDM is hypothesized to increase productivity and quality by enhancing both employee ability and motivation. Ability effects occur through the greater sharing of information, which provides a better understanding of the job and a greater opportunity for employees to contribute ideas for improvement. Motivation is enhanced because of a greater sense of control, ego involvement, group pressure and support, and higher goals. These, in turn, reduce resistance to change and increase commitment to decisions and changes. Finally, there can also be positive effects on attitudes for those who value empowerment, respect, independence, and so forth. These effects may also contribute to lower levels of absenteeism, turnover, and conflict. (See Hammer, 1988 for a

related model in the context of gainsharing.)

Discussions of PDM in the compensation literature often take a relatively narrow focus, usually emphasizing employee involvement in the design and implementation of pay policies (Gomez-Mejia & Balkin, 1992). Greater involvement has been linked to higher pay and job satisfaction (Jenkins & Lawler, 1981), presumably because employees have a better understanding of and greater commitment to the policy when they are involved (Gomez-Mejia & Balkin, 1992).

More broadly, however, PDM may have important effects on effectiveness that go beyond its role in facilitating the success of pay programs. According to Blinder (1990), for example:

worker participation apparently helps make alternative compensation plans...work better--and also has beneficial effects of its own....It appears that changing the way workers are treated may boost productivity more than changing the way they are paid... (pp. 12-13).

Looking beyond the compensation literature, there has been a substantial effort to document the effects of employee participation. Several literature reviews have examined the relationship between employee participation in decision making and outcomes such as performance and satisfaction (e.g., Cotton, Vollrath, Froggatt, Lengnick-Hall, & Jennings, 1988; Gershenfeld, 1987; Levine & Tyson, 1990; Locke & Schweiger, 1979; Miller & Monge, 1986; Wagner & Gooding, 1987). These reviews suggest several conclusions. First, participation seems to have a small to moderate positive relationship with both performance and satisfaction. Second, however, the magnitude of these relationships seems to vary significantly depending on how participation and the outcome variables are measured. When both are based on employee self-reports, the relationships with performance and satisfaction appear to be four times as large on average (Wagner & Gooding, 1987). Thus, studies relying exclusively on self-report data need to be interpreted cautiously because they may significantly overestimate the strength of the participation effect.

A third conclusion, suggested by both Cotton et al. (1988) and Levine and Tyson (1990) is that different forms of participation may have very different effects. (See Leana, Locke, & Schweiger, 1990 for a criticism of this conclusion and the rebuttal by Cotton and his colleagues, 1990). Both reviews include a number of types of participation studies such as Scanlon and employee ownership plans that were excluded in the aforementioned meta-analyses (because of the confound between participation and other factors like pay). For example, Levine and Tyson (1990) conclude that "Participation is more likely to produce a significant, long-lasting increase in productivity when it involves decisions that extend to the shopfloor and when it involves substantive rather than consultative arrangements" (p. 204).*

A recent study by Cutcher-Gershenfeld (1991) provides some interesting evidence on the effects of broad changes in workplace relations, which he defined in terms of conflict and conflict resolution, shop-floor cooperation, formal and informal autonomous worker activity, and information sharing. Using longitudinal data on 25 work areas at Xerox, he found that higher levels of these workplace relations variables were associated with lower costs, as well as improvements in cost and quality.

Blinder's (1990) suggestion that employee PDM may have a greater impact on organization effectiveness than pay decisions, *per se*, raises the broader issue of the importance of pay decisions relative to other employee relations decisions such as broad PDM. In addressing this issue, it is useful to re-visit the literature on gainsharing. In that context, the question has been raised about the degree to which it is the monetary component or the contextual conditions like participation that contribute to increased performance levels (Hammer, 1988; Milkovich & Wigdor, 1991; Mitchell, Lewin, & Lawler, 1991).

Although it is difficult to find studies that disentangle pay and non-pay program effects, some evidence clearly supports the idea that pay is only one part of the story. For example, Pritchard, Jones, Roth, Stuebing, and Ekeberg (1988) conducted a 23 month study of the effect of gainsharing incentives, goal setting, and feedback in 5 separate organizational units at an Air Force base in the southwest United States. Although it is not completely clear from the article, the goals and feedback components appeared to include participative elements, in addition to information sharing. They used a baseline period of 8 months, followed by 5 months of feedback only, 5 months of feedback + goal-setting, and finally, 5 months of feedback + goal-setting + incentives. They observed large increases in productivity due to feedback alone (50% over baseline), feedback + goal-setting (75% over baseline), but little additional effect of incentives. Although it is probably incorrect to interpret the results as meaning that pay, *per se*, is not important (Pritchard et al. note the possibility of ceiling effects on performance and that incentives may have been necessary to sustain the substantial feedback and goal-setting effects over the longer run), the study does reinforce the notion that pay is not the only means of influencing behavior.

That said, however, evidence (some of which was reviewed earlier) indicates that pay alone can have important effects on behavior. Schuster (1990) has argued that gainsharing plans have often worked well in cases where the main (or entire) focus was on the monetary aspect, unaccompanied by employee involvement or participation. Consistent with this argument, a recent literature review (Kaufman, 1992) of several Improshare plans, which emphasize pay, but not employee involvement (see Fein, 1981 for a description of the program), found positive effects on employee performance.

Similarly, Wagner et al. (1988) studied the implementation of a nonmanagement group incentive payment plan that appeared to encompass little beyond changes on the monetary dimension and found a substantial increase in productivity, as well as significant declines in labor costs and grievances. They noted, however, that employees had positive experiences with incentive plans in other company plants, which may have generated greater trust in management and, in turn, more successful implementation of the new pay plan. In other words, we again see that both pay and the accompanying non-pay context may matter.

Gowen and Jennings (1991, p. 162) argued that previous studies "have not examined the effects of participation independent of the effects of other pay plan attributes." Their study of several departments in an automotive parts plant found that adding a participation component (monthly meetings with management to discuss the gainsharing plan and ways of increasing productivity) to a gainsharing pay incentive plan raised productivity.

Hatcher et al. (1991) note that many gainsharing plans (e.g., Scanlon) incorporate a formal employee suggestion system. Ideas for cutting costs, changing work methods and so forth can be solicited and later evaluated by teams of management and nonmanagement employees for possible implementation. Hatcher et al. focused on identifying the factors that motivate employees to submit suggestions. An interesting finding was that the desire to earn a monetary bonus appeared to be much less important than a number of non-pay factors, particularly the desire for influence and control in how their work was done. They suggest that this finding "fails to support the position that gainsharing works by appealing exclusively to the financial interests of employees via the bonus" (p. 32).

Mitchell et al. (1990) examined the effects of what they termed economic participation (coverage by profit-sharing, gain-sharing, stock options, ESOPs, and production bonus or incentive plans) and noneconomic participation (i.e., of the type studied in the general participation literature) on productivity (net sales per employee) and profitability (return on investment and return on assets) using responses from 495 business units.⁹ Cross-sectional regressions found support for positive effects of non-economic participation on productivity, but not on profitability. Economic participation was not related to either profitability or productivity, although breaking out the separate programs provided some evidence of positive effects of profit-sharing on each. Trend regressions, in comparison, provided consistent support for the effects of both types of participation on profitability and productivity. As such, the results again suggest the importance of both pay and accompanying process factors such as participation.

Communication and Information Sharing

Gerhart and Milkovich (forthcoming) suggest that the way pay information is communicated to employees may have a significant effect on their attitudes and behaviors. Communication can pertain to either distributive or procedural aspects of compensation decisions. With respect to the former, for example, some organizations choose to carefully manage information regarding how pay compares with that of other relevant organizations. Employee reactions are likely to depend not only on their actual pay, but also on what comparisons they believe are relevant and the information that is available. Consequently, Capelli and Sherer (1990) found, for example, that the lowest paid employees were actually the most satisfied with their pay because they used different comparisons.

Effective communication about procedural issues can also be important. A fairly dramatic example in this regard was provided by Greenberg (1990). He found that employee theft increased significantly after a 15% across the board pay cut was instituted. Most interesting, however, was that the manner of communicating the pay cut had a substantial impact on both pay equity perceptions and actual theft rates. With the "adequate explanation" experimental group, management provided a significant degree of information to explain the rationale behind the pay cut. It also made a point of expressing its remorse. The "inadequate explanation" group received much less information and no indication of remorse. The control group received no pay cut (and thus no explanation). Although the control group and two experimental groups began with the same theft rates and equity perceptions, after the pay cut, the theft rate was 54% higher in the adequate explanation group than in the control group. But, in the "inadequate explanation" condition, the theft rate was 141% greater than in the control group.

Two studies by Morishima examined the effects of information sharing on the wage negotiation process (1991a) and firm performance (1991b). Comparing his survey results from Japan to those of Kleiner and Bouillon (1988) who used U.S. data revealed that information on firm profitability, employee productivity, and labor cost was much more likely to be shared with workers in Japan than in the U.S. Morishima suggests that there are at least two potential effects of such information. One is that workers will use such information to make greater wage demands and obtain a greater share of the organization's profits. Alternatively, the sharing of information may engender greater goal alignment, trust, cooperation, and a reduction in the union's information disadvantage in negotiation. The result may be greater ability and motivation to perform effectively (see Locke & Schweiger model above), as well as greater "responsibility" in terms of avoiding wage demands that could detract from the long term viability of the organization. Of course, the greater commitment to employment security (i.e., the long term relationship) in Japan would

presumably play an important role here.

Morishima's (1991a, 1991b) findings generally support the notion that information sharing influences both wage negotiations and organization performance. Information sharing decreased the (a) length of negotiations, (b) the union's initial percentage wage increase demand, and (c) the final percentage wage increase settlement. In addition, there were improvements in labor cost, productivity, and profitability. Interestingly, the Klein and Bouillon (1991) study found that information sharing led to higher wages and benefits using U.S. data. Morishima (1991b, p. 482) suggests that the difference in results may be due to the fact that other aspects of industrial relations in many U.S. organizations does not include other aspects (e.g., employment security) of "the comprehensive labor relations strategy used by Japanese management" and that "a piece-meal application of Japanese industrial relations techniques" is not likely to be successful in the U.S.

A final note concerns the possibility of inconsistent trends in employee relations and the design of pay programs. There is much discussion of late around the idea of employee "empowerment"--giving employees the resources they need to make more key decisions. Recall that Levine and Tyson emphasized the importance of long-term employment relations, group cohesiveness, and individual rights for employees in building an environment conducive to PDM. Yet, Dyer and Blancero (1992) Workplace 2000 study found an expectation among respondents of growth in the use of part-time, temporary, and fixed term contract employees, especially at lower levels in the organization. A significantly smaller percentage of employees were expected to spend their entire careers with the organization in the future.

At the same time, Dyer and Blancero (1992) Workplace 2000 study found that HR experts anticipated greater use of variable pay, and a shift to group and organization criteria in determining the payouts. A theme of the present paper has been that compensation operates in the context of a relatively long term employment relationship or contract. In fact, this may be a precondition for employee acceptance of risk in their pay packages, their willingness to incorporate group and organization goals, and their active acceptance of participative arrangements. One interpretation of these trends (Dyer, cited in Bureau of National Affairs, 1992) is that as an employee, "your employment is more at risk and your pay is more at risk." At the same time organizations are pursuing this transfer of more risk to employees, organizations are trying to send the message that they "want dedication to the company with high levels of quality, quantity, innovation, speed, and adaptiveness." The bottom line is that there may be "an imbalance."

CONCLUSIONS AND SUGGESTED RESEARCH DIRECTIONS

Our review suggests that there has been a renewed emphasis on the importance of organization-based

research on the determinants and consequences of employee compensation decisions. There has also been a good deal of recent empirical work, as well as helpful literature reviews that have contributed significantly to our understanding of the consequences of specific pay for performance programs (e.g., profit sharing, gainsharing, etc.). In general, the research supports the effectiveness of such programs (relative to situations where pay is not linked to performance). However, there are several areas that require further study.

First, there is almost no research that compares the relative effects of different pay for performance programs (Milkovich & Wigdor, 1991). Similarly, there has been little empirical research that identifies the conditions most conducive to the success of different programs (or combinations of programs). In other words, further development and testing of contingency theories is greatly needed (Gerhart & Milkovich, forthcoming; Gomez-Mejia & Balkin, 1992).

Second, the focus of the great majority of research (except in the pay level area) has been on the effects of pay programs on the attitudes and behaviors of current employees. However, it is also quite possible that different pay programs have very different effects on self-selection by employees. Consequently, the composition of the workforce (and its corresponding abilities, attitudes, etc.) may differ significantly across different pay programs.

Third, although there is now a substantial body of evidence regarding the importance of organization differences in pay level, as well as a developing literature on pay mix differences, systematic examination of the magnitude of organization differences in pay structures and benefits is almost non-existent. Consequently, evidence on the performance consequences of such differences is also quite limited.

Fourth, in designing empirical research on organization differences in pay decisions and their consequences, several factors should be kept in mind. For example, although we have focused on "organization" differences, substantial variation in pay decisions can exist within organizations as well. Groups, plants, and business units within a single organization can work under very different employment or compensation arrangements. There are also potential advantages in using within-organization designs (e.g., the ability to control for factors specific to the organization as a whole). In addition, to strengthen causal inferences, there is a need to study the process by which pay decisions influence distant outcomes such as organization performance. This means including potential mediating variables such as employee attitudes and behaviors, as well as quality and productivity measures. Further, the use of longitudinal data is helpful in distinguishing between transitory and lasting effects of changes in compensation programs.

Fifth, there are many assumptions and beliefs regarding trends in the employment relationship and the

design of compensation. For example, there is a good deal of discussion about the growth in team-based production, variable pay, and moving away from individual level performance in making pay decisions. Down the road, evidence that documents or refutes past predictions would be useful in providing additional perspective on the accuracy of such predictions.

Sixth, based on both the literature and discussions with compensation professionals, it is clear that the monetary component of pay programs is only one part of what is important in influencing employee attitudes and behaviors and organization performance. Process issues such as participation in decision making and communication also appear to be critical in many cases. It would be useful to obtain a better understanding of the interplay between the process and monetary components. For example, to what extent are their effects additive or interactive?

Finally, we note that there are several areas not addressed in this chapter such as executive pay, international aspects of compensation, and equal employment opportunity issues. We refer readers to Gerhart and Milkovich (forthcoming) for a discussion of these issues. That chapter also contains a heuristic model of the determinants and consequences of employee compensation decisions. Further information on other important aspects of compensation such as tournament models and agency theory is provided in companion chapters in this volume.

Table 1
Projections of the Basis of Pay

% Pay Increase Based On:	Executives		Managers		Professional /Technical		Support Staff	
	<u>1991</u>	<u>2000</u>	<u>1991</u>	<u>2000</u>	<u>1991</u>	<u>2000</u>	<u>1991</u>	<u>2000</u>
Individual Merit	100%	83%	100%	80%	100%	72%	100%	71%
Individual Seniority	0	1	0	1	0	1	0	3
Pay for Knowledge	0	3	0	4	0	15	0	14
Workgroup Performance	0	13	0	15	0	12	0	12

Source: Dyer and Blancero, 1992, p. 64

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Footnotes

1. There are other considerations in measuring pay level. Organizations often have multiple pay levels, varying across business units (product markets) and functional or skill groups (labor markets). Further, studying pay level with cross-sectional data may pose a problem if organizations differ in the sequencing of workers' pay (e.g., Ehrenberg & Smith, 1988, p. 421; Lazear, 1979; Wachter & Wright, 1990). More broadly, money is only one of many aspects of an employment relation. Other relevant factors include security, challenge, co-workers, and so forth.

2. Institutional theories (e.g., Zucker, 1987) also emphasizes the pressures (in this case, normative rather than market) on organizations to adopt policies that are similar to those of other organizations. Thus, it would seem to suggest relatively few differences in organization pay practices. As such, the findings regarding organization differences in pay level, and to a greater degree, pay mix (discussed above), are inconsistent with the theory.

3. Many readers will note the resemblance of this idea to Marxist discussions of the role of the "reserve army."

4. One possibility is to measure shirking using confidential self-assessments (e.g., Judge, 19__) or peer assessments. Alternatively, laboratory experiments provide ample opportunity for measuring such constructs (e.g., Conlon & Parks, 1990).

5. Some examples include: Mark Messier and the New York Rangers (hockey), Michael Jordan and the Chicago Bulls (basketball), and Roger Clemens and the Boston Red Sox (baseball).

6. Note that another possible outcome is that both internal equity and external equity (in a sense) are achieved by paying employees who command a premium in the market at the market rate and paying other employees at the same level (i.e., "overpaying them"). This, of course, could prove very costly and make it difficult to compete in the product market (Lawler, 1986).

7. The stability is less than that found by Gerhart and Milkovich (1990) for base pay and pay mix dimensions. However, they focused on organization averages, which are probably inherently more stable than an R^2 -based index.

8. Levine and Tyson define consultative arrangements as providing an opportunity for employees to express opinions, but management makes the decision. Quality circles are one common example. In contrast, substantive participation, although concentrating on the same types of issues, provides greater employee influence. An example would be formal work teams that are able to organize their work with minimal supervision.

9. The final response rate for this data set was 6.5 percent and may raise concerns regarding selection bias (Ehrenberg, 1990). Another concern raised by Ehrenberg is that the degree of economic and non-economic participation may be endogenous. In the present study (and many others), this raises questions about the direction of causality.