

**FIRM PERFORMANCE: DOES EXECUTIVE
COMPENSATION REALLY MATTER?**

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Public skepticism about executive pay and its relationship to the performance of the firms they manage has a long history. Sixty years ago, back in 1939, President Roosevelt, addressing Congress and a national radio audience, inveighed against corporate executives as part of the forces of "entrenched greed" (Fortune, 1939). Four days after his speech, the U.S. Treasury Department published a list of names of individuals reported to be paid above \$15,000 at U.S. corporations. In the same year, Fortune also reported the results of an opinion poll; "...over half of those responding felt executive of large corporations were paid too much." Since that time detailed disclosure of the compensation of the highest paid individuals in publicly held firms has been legally required. And executive pay continues to evoke skepticism in the press.

While preparing to write this chapter, we sampled sixty years of media accounts and opinion polls regarding executive compensation. Five recurring themes emerged:

- U.S. corporate executives are overpaid; their high level of compensation arouses ethical concerns over excessive pay;
- Corporate policies which determine executive pay ignore the interests of shareholders;
- Employment agreements, such as golden parachutes, shield executives' pay from the sacrifices and risks faced by other employees and often run counter to the long term interests of the firms and
- Executive compensation simply does not make much sense; factors that might be expected to have an effect--company performance and size; the riskiness of the business, the experience and training of individuals--do matter but not as much as expected;

- Changes in an executive's pay are unrelated to changes in the performance of firms they manage.

The contemporary press reads like updated versions of these sixty year old themes. Each Spring, the media publishes some variation on: "Corporate leaders took home fatter pay checks last year... Did shareholders get their money's worth?" or "Top Executive Pay Peeves the Public: Are They Really Worth The Money" (See for example, Business Week, 1984, 1985, 1986, 1988; Wall Street Journal 1985, AFL-CIO, 1988, Crystal, 1988a,b; Loomis, 1984.) Fortune recently commissioned a study entitled "The Wacky, Wacky World of CEO Pay" (Crystal, 1988a). Over 75% of the American public believes that top corporate executives are not worth the compensation they receive, according to a Lou Harris poll (Business Week, 1984). Ironically, the specter of increased Congressional and SEC regulation emanates from the very consultants who advise compensation committees on executive pay and whose fees are based in part on the billing revenues generated by that advice (Loomis, Fortune, 1984).

In the earliest press accounts, except for a few well selected examples, these themes are based more on exhortation than evidence. In recent years, articles appearing in Business Week and Fortune include extensive data, details on the form of pay (e.g., base, annual cash bonuses and stock options) and employ more sophisticated analysis. Nevertheless, the recent writers are no less critical of executive pay practices (Crystal, 1988a,b).

Conflicting views seldom get much coverage. Evidence supporting various views is published in academic journals (Ehrenberg & Milkovich, 1988; Baker, Jensen & Murphy, 1988). Perhaps the lack of wider coverage is attributable to researchers propensity to write only for each other.

The evidence and conclusions are often embedded in statistical analysis inaccessible to the public. Perhaps because they are sensitive to their Universities reward systems, researchers seldom translate their studies for the press or the public. A few notable exceptions do exist. For example, Murphy (1986) summarizing his extensive research in the Harvard Business Review, concluded that "On average, compensation policies encourage to act on behalf of their shareholders and to put in the best managerial performance they can."

Purpose of This Chapter

Our task in this chapter is to discuss what is known or at least strongly supported by the empirical research on executive compensation. Upon reading this chapter, the reader should be able to cull beliefs from the evidence regarding executive pay. We also argue that a strategic perspective on executive pay requires research that looks beyond how much executives earn. Rather research is required to better understand (1) the relationships between risks and returns in executive pay plans and (2) how to improve the link between executive pay and the performance of the firms they manage.

EXECUTIVE COMPENSATION: MORE COMPLEX THAN MEETS THE EYE

At the outset, it is useful to stress that executive compensation is multidimensional (Patton 1956, Ellig 1982, ACA 1988). For the purposes of this chapter, three dimensions, pay levels, forms and structures provide a useful framework. It will allow us to examine what is known in the research. Also embedded within this framework are the risk and return relationships that are fundamental to managing executive compensation.

According to managers and consultants in this field the relationships between the risks executives face and the returns they receive are essential to insure the availability of critical executive talent and to influence executive performance (Crystal 1988b, Cooke 1988).

Pay level refers to the dollar amount of total compensation paid; the total financial returns received by an executive. It is the dimension of executive pay most often reported by the media. A survey of total cash compensation (salary and bonus) for the top five executives is shown in Exhibit 1 (Conference Board, 1988). Level includes the value of all forms of pay; base salary and annual cash bonus as reported in Exhibit 1, plus long term incentives, perks, golden parachutes, and other benefits.

In addition to level, executive pay also varies by the forms in which it is paid. Common forms include base, annual cash bonus, long term incentives such as stock options and appreciation rights, perks such as club memberships and other benefits. Exhibit 2 shows some of the variations in annual bonuses as a percent of base salary. Note that 12% of the chief executives receive 100% or more of their base in the form of cash bonus; whereas the median bonus for executives was 62% of base. Obviously pay systems differ in terms of the relative importance of each pay form--in the data in Exhibit 2 the middle 50% range of Chief Executives receive from 43 to 78% bonus awards. Similar differences are reported in surveys of long term incentives and perks (Cooke, 1988).

Equally apparent is that alternative pay forms differ in the degree of risk and returns they offer. For example, pay plans that are highly leveraged with annual bonuses (e.g. those CEO's in Exhibit 2 with 100% bonuses) are probably more risky than less leveraged plans (e.g. CEOs with the 9% bonuses in Exhibit 2).

Exhibit 1
1987 Total Compensation
(Salary + Bonus)

Compensation Rank	Median	Differential to Highest	Compensation Rank	Median	Differential to Highest
<u>Manufacturing (254 firms)</u>			<u>Commercial Banks (93 firms)</u>		
Highest paid	\$642,000		Highest paid	\$412,000	
Second	400,000	62.3%	Second	260,000	63.1%
Third	320,000	49.8	Third	215,000	52.2
Fourth	283,000	44.1	Fourth	185,000	44.9
Fifth	252,000	39.3	Fifth	166,000	40.3
<u>Trade (33 firms)</u>			<u>Insurance (91 firms)</u>		
Highest paid	\$413,000		Highest paid	\$398,000	
Second	318,000	77.0%	Second	255,000	64.1%
Third	268,000	64.9	Third	195,000	49.0
Fourth	212,000	51.3	Fourth	167,000	42.0
Fifth	195,000	47.2	Fifth	150,000	37.7
<u>Energy (31 firms)</u>			<u>Utilities (111 firms)</u>		
Highest paid	\$525,000		Highest paid	\$355,000	
Second	400,000	76.2%	Second	218,000	61.4%
Third	359,000	68.4	Third	171,000	48.2
Fourth	213,000	40.6	Fourth	149,000	42.0
Fifth	200,000	38.1	Fifth	142,000	40.00

Adapted from Human Resources Briefings Conference Board, 4, 10, Oct. 1988, p. 1.

Differential is the ratio of each level to the highest paid by industry group.

Exhibit 2

Annual Bonus Awards as Percent of Base Salary

1984 Bonus Awards (Percent of Salary)	Chief Executives		Second Highest Paid		Third Highest Paid		Fourth Highest Paid		Fifth Highest Paid	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
100% or more	13	12%	10	9%	8	7%	8	7%	10	9%
90-99	4	4	2	2	2	2	2	2	2	2
80-89	9	9	5	5	5	5	4	4	3	3
70-79	17	16	16	15	12	11	7	6	10	9
60-69	16	15	12	11	14	13	15	14	11	10
50-59	14	13	21	19	18	17	20	18	14	13
40-49	12	11	17	16	18	17	20	18	22	20
30-39	8	7	11	10	15	14	17	16	13	12
20-29	9	8	7	7	9	8	10	9	14	13
Less than 20%	7	6	7	7	8	7	6	6	10	9
Total	109	100%	108	100%	109	100%	109	100%	109	100%
Median Bonus	62%		57%		53%		50%		47%	
Middle 50% Range	43-78%		41-72%		39-70%		36-65%		32-69%	
1983 Median Bonus	58%		55%		50%		50%		44%	

Source: Top Executives Compensation in U.S. Based Multinationals 1986 editions,
Conference Board, Bulletin 191.

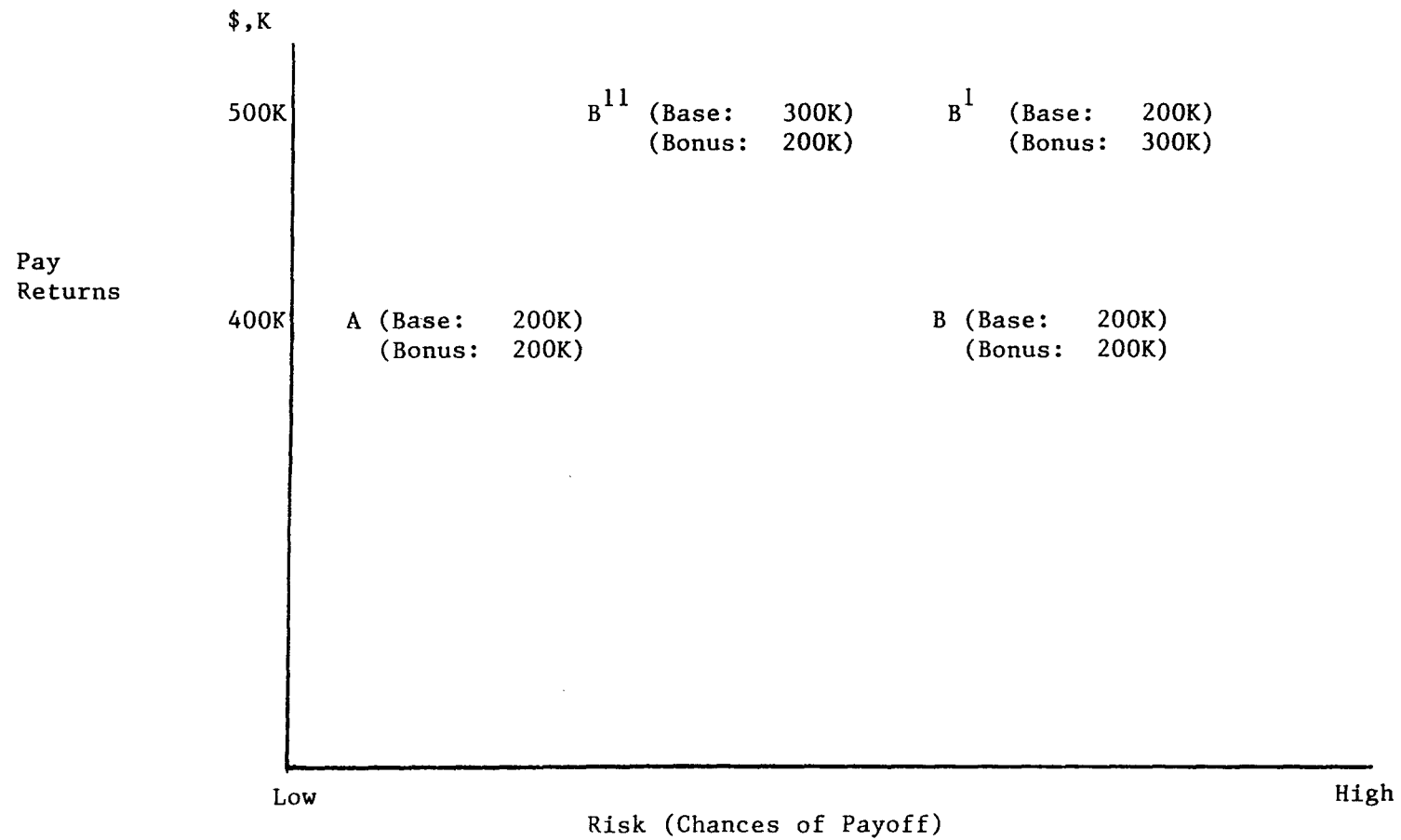
Risks however, involves the chances of receiving the returns. Presumably more difficult performance targets are associated with the greater bonuses. Exhibit 3 illustrates the risk-return tradeoff inherent in pay systems. Executives A & B pay plans are identical (base \$200K bonus \$200K); but B's performance targets make it a more risky plan. Hence, to get B to undertake that risk may require a greater return (B¹: \$350K bonus) or an increased base salary (B¹¹: \$300K base and \$200K bonus) thereby lowering the risk. The point is that the risk in executive pay plans refers to the chances of receiving the pay and depends on the performance targets established in the plan.

The third dimension of executive pay, structures, directs attention to decisions about differentials. These include pay differences among each individual on the executive team as well as the ratio of the lowest paid employee to the highest paid executive. Note that in the data shown in Exhibit 2, the differentials of the four highest paid executives to the CEO's pay differs across industry groups. Firms in manufacturing, insurance and banking maintain wider cash differentials among executives than firms in trade and energy (Conference Board 1988). Similar differences occur across firms within a single industry (Rabin 1987).

From a strategic perspective, level, forms, structure and the risk-return relationship provide a framework for analyzing executive compensation. For example, the level of pay offered by competitors for executive talent is believed to affect the firm's ability to attract qualified executives and hang on to them (Ellig 1982). Consequently, attention is focused on positioning the level of pay relative to competitors. But the degree of risk involved in competitors pay levels

Exhibit 3

Risk-Return Tradeoffs in Pay Systems



also needs to be considered. The risk-return tradeoffs involved in a pay system may act as a signal to executives. It communicates the risk taking behaviors the firm values as well as the firm's pay for performance philosophy.

Decisions about the composition of various forms of pay focus on several critical policies. These include the firm's pay-for-performance philosophy, its short and long term emphasis, and its focus on growth, market share, and return on shareholder value. For example, the firm's pay-for-performance philosophy is reflected in the ratio of performance-based pay (e.g., bonuses and performance shares) to base or total compensation. The short/long term emphasis is reflected in its ratio of annual cash bonus to performance share, (admittedly difficult, though not impossible, to value). However, caution is required because the different pay forms may act differently under different conditions. Consider an executive compensation agreement that includes base, annual cash bonuses based on financial performance, and annual restricted stock grants negotiated for each year of a five year term covered by the agreement. Under this plan, a poor performance year may yield no cash bonus, but the executive may still receive significant returns from the stock grants. The effects of the stock grants, negotiated as part of the five year agreement to attract or retain the executive, may be so large as to swamp any short term leverage intended through the cash bonus. All things being equal, the poor financial performance will be reflected in the value of the stock, and the executive does face lost opportunity by not being granted the cash bonus. But all things are seldom equal, and the relative value of the stock in any period can offset the value of the lost bonus.

The point here is that the mix of pay forms translates into risk-return tradeoffs for an executive. It is analogous to a portfolio of investments, with risks and returns associated with each investment in the portfolio as well as an aggregated risk-return for the total portfolio. To assess the risk-return tradeoffs inherent in any pay system requires that the returns from all forms be examined.

The third dimension, structures, focuses on to decisions about differences in pay within an organization. Differences in the short-long term provisions and golden parachute agreements among the individual members of an executive team are examples. From a strategic perspective, more egalitarian policies--"we are all in this together"--translate into smaller differences among members of the executive team in terms of the compensation levels, forms, and risks. Less egalitarian policies imply greater differences. Surprisingly very little is known about the effects of different structures on executive behaviors or on their firms' performance. Some economists have modeled executive pay as if it were a "tournament" or competition among players (Lazear and Rosen 1981, Bull, Schutter & Weigett, 1987). Their analysis focuses on the size of the differentials between the "winners" (top executive) and the rest of the field (presumed to be the other executives). They argue that sizeable differentials for the top position are required to motivate executives to compete and investment "game." But top executives often bring in their own teams, and encourage "losers" to play in other organizations. So it is not clear what the observed differentials (such as those reported in Exhibit 2) actually affect. And if the current work on high commitment-high involvement organizations has any merit, cooperation, not competition among team members, is a more desirable state (Lawler 1988, Walton 1987, Klingel

& Martin 1988). If teamwork, commitment and risk sharing among production and staff employees, has payoffs; presumably the same logic applies to executives.

Another structural issue is the highly visible and publicized gap between returns received by executives and those received by other employees. A recent study reported that a European CEO's pay was 6 to 8 times that of an entry professional compared to a ratio of 14 in the U.S. (TPF&C, 1988). This gap is most obvious when significant cash bonuses are paid to executives at the same time concessions are demanded from other employees. The effects of these differences on workforce performance and attitudes are also not well researched. But a good bet is that the results are not positive.

In summary, executive compensation can be examined in terms of the level of returns, the compensation of different pay forms in the plan (risk-return relationships), and the pay differences among individual executives. A strategic perspective considers the entire pattern of pay decisions (Milkovich, 1988). Thus, a strategic issue for executive pay in the 1990's is not only how much executives earn, but what risks are associated with the higher levels of pay. What risk-return tradeoffs are involved? Does higher executive pay imply a substantially greater risk for executives? Is performance rewarded? And how are executives compensated in comparison to the rest of the work force? It is to what is known about these questions that we next turn.

THE RESEARCH

Much of the early research on executive compensation focused on the sales versus profit debate (Ciscel & Carroll 1980). At its heart, the

issue was whether executive pay policies encouraged pursuit of revenue and growth or the shareholders' financial well being. The earliest research, dating back to the fifties, examined whether sales or reported profits was more highly correlated with the level of cash compensation (base and annual bonus). The results yielded mixed conclusions. In the main, the level of cash compensation is correlated with both the level of sales and profits, although sales tends to be more important in most studies. The empirical results suggest that a firm with ten percent larger sales will pay its executives an average of 3 percent more (Baker, Jensen & Murphy 1988). These results are not too surprising when we consider the majority of executive pay surveys. These surveys, tailored for firm's compensation committees, emphasize cash compensation (base plus bonus) in relation to firms' revenues. Hence, the findings of strong relationships between revenues and cash compensation.

Another obvious explanation is that larger firms may employ more qualified executives and are able to pay them more. The finding of 10% sales growth to 3% greater cash compensation has lead some researchers to observe "...that executives can increase their pay by increasing their firm's revenues even when the increase in size reduces their firm's market value. This could explain some of the vast amount of inefficient expenditures of corporate resources on diversification programs that have created large conglomerates over the last twenty years." (Baker, Jensen, Murphy 1988, p. 609).

More recently, a wave of studies extended this interest in sales versus profit objectives by analyzing whether other factors affected executive compensation. Generally these studies report that the industry in which a firm operates is related to cash compensation paid to its executives.

On average, industries paying highest to lowest are manufacturing, energy, banking, insurance, utilities and trades (Conference Board, 1988). Firms in the mature or later product cycles tend to pay higher cash compensation than those in earlier start upstages which offer great amounts of stock options and ownership (Gomez-Mejia & Balkin 1987). And firms controlled by a few dominant stockholders (contrasted with "management-controlled firms") exhibit stronger links between financial returns and executives' cash compensation (Gomez-Mejia, Tosi, & Hinkin, 1987).

In short, the research suggest that on average, executive pay levels are correlated with levels of revenues, profits, industry, product life cycle and type of ownership.

However, these studies offer little practical guidance. At best, they report "what was" or "what is", but are limited in four very serious ways. First, the majority of this research says nothing at all about "what if" an executive's pay system has a particular pay level, a given risk level or a particular structure. These issues are simply not well addressed by researchers. Second, these studies are usually restricted to cash compensation levels. This ignores other performance based forms such as stock options or performance shares or even complex employment contracts which may reduce or even eliminate the performance link and risk which an executive faces. For example, Rabin (1987) found that the use of employment agreements on average, is associated with lower performance levels as measured by ROE, shareholder value and sales. The third limitation of this research, is that many studies do not attempt to account for differences in the composition of pay forms, where the degree of risk and the link to performance may differ. Hence, we are not able to answer questions about whether firms which utilize more risky pay systems

experience different performance. The fourth limitation of much of the existing research involves the measurement of time. Crystal (1988b) discusses the lag in time between policy decisions and results. However, the research approach most commonly employed is to analyze pay and performance at the same points in time. If we are interested in the effects of compensation, a "time series" approach which includes appropriate time lags is required. If, for example, we are interested in the effects of long term incentives, then the performance we are interested in is "tomorrow's performance." It is incorrect to look at the relationship between today's performance and today's pay.

In short, to document a correlation between cash compensation today and today's performance is not in itself evidence of complex executive pay systems impact on corporate performance. The inquiry must recognize (1) the complexities in executive pay; (levels, forms, structures and risk-return relationships), (2) measure total not just cash compensation, and (3) consider the time lags involved.

More recent studies are beginning to overcome many of these shortcomings. Several recent studies have documented a strong positive relationship between CEO pay (measured as cash compensation) and firm performance (measured by changes in shareholder wealth as well as accounting measures). The common result is that firm performance alone is associated with relatively small year to year changes in CEO pay. Rate of return on common stock, for example explained at most 8% of the percentage changes in CEO bonus and salary (Baker, Jensen & Murphy 1988).

Another study, incorporating a series of time lags covering the short, medium and longer terms, found that executive pay systems, characterized by pay return, risk and structure, was related to the firms' future

financial results (Rabin, 1987). The pay system in its entirety, (that is--more than just pay level) explained a significant portion of the variation in the future financial performance of firms. These effects differed across industries, time periods and performance measures. One implication of these findings is that it may be more efficient to emphasize one form of pay over another, depending upon the desired performance objective and industry. For example, within high technology firms, less emphasis on pay levels may be balanced by greater attention to performance based and risky forms of pay (Rabin, 1987). This study also found that within some industries, (e.g., manufacturing machinery) the use of employment agreements was associated with a decline in performance over time. Finally, this study reported that stock options did not seem to have any effects on firm performance, and the level of base compensation was negatively related to profits and growth in some industries. All to say, these results support our contention that executive compensation is more complex than meets the eye.

Very recently, some researchers have begun to analyze the relationship between executive pay systems and the firm's financial policy as distinct from its financial performance. The premise is that a strategic approach to executive pay should include the financial and strategic policies made throughout the organization. Recent evidence in four separate studies found that executive pay policy is related to other corporate level policies. One study found a strong relationship between the dividend policies which firms pursue over time and their disclosure of executives' base salary and annual bonuses (Rabin 1988). Another study found that capital structure decisions--debt ratios --are negatively related to management's shareholding (Friend & Pang 1988). These authors suggest

that this reflects the greater nondiversifiable risk of debt to top management than to shareholders. Another study analyzed the relationship between common stock and option holding of managers and the choice of investment and financing decisions by firms (Larcker 1983). These findings offer support to a positive relationship between the security holdings of managers and the changes in firm performance, financial leverage. Relationships have also been found between the choice of accounting schemes and the type of executive bonus plans (Larcker, 1983). In short, the empirical evidence of these studies support the proposition that executive pay policy are related to firm financial policy decisions and performance results. They also offer support to those who argue that executive pay policies can support overall business strategy.

Virtually all these studies find that changes in executive compensation are positively correlated with financial performance measures. These findings do not support the concern, widely reported in the press, that executives do not pursue objectives consistent with the interest of the owners of the corporation. Rather, the findings from the recent research suggest that executives' compensation does seem to be designed in ways related to the economic performance of their firms.

Another recent stream of research focuses on whether particular forms of executive pay are associated with improved returns to shareholders. Labelled "event" studies, they analyze the stock market's reaction to the announcement of a specific event. The premise underlying this research is that markets react to managerial decisions that affect cash flows-- positive decisions yield increases in shareholder wealth. And changes in shareholder wealth (stock prices) are interpreted as changes in firm performance.

Applied to executive compensation, these studies have examined the market's reaction to the announcement of specific short or long term incentive schemes, executive turnover and replacements, and golden parachutes (Bhagat, Brickley & Lease, 1985, Brickley, Bhagat & Lease, 1985, Larcker, 1983, Lambert & Larcker, 1985),

The findings indicate that the market does react between one to two percent of total shareholder value to announcements of changes in executive pay plans. Two possible explanations can be given for these findings. The first is that different forms of pay do act as incentives that affect executive decisions and, consequently, shareholder wealth. One study, for example, reported that the adoption of long term performance share plans were followed by increases in capital investments (Larcker, 1983). Another possibility is that changes in executive pay plans are made in anticipation of improved earnings. In this view, changes in pay schemes are a form of insider information that signal changes in the firm's financial fortunes. Other explanations, such as changes in tax regulations and accounting conventions, may also account for the observed changes in both executive pay and stock values.

On balance, caution is required when drawing conclusions from these "events" studies. These studies do find an association between the adoption of particular forms of executive pay (golden parachutes, stock option grants, etc.) and higher stock market returns. But note that these forms of pay are designed to affect decisions that will improve the long-term performance of the firm, yet the stock price changes associated with these events are measured in the short term. Only one study, on changes in capital investment policies, found that executive decisions were altered by adopting different forms of pay (Larcker, 1983).

CONCLUSIONS SUPPORTED BY THE RESEARCH

To summarize, a growing body of research evidence supports conclusions that run counter to many of the themes found in the popular press. These are:

1. Executive's pay levels are related to their firm's economic performance. Despite the anecdotes of exception in the press, within the majority of firms, the level of compensation is, on average, related to a wide variety of performance measures, including shareholder wealth, sales profits, and return on equity. And changes in pay levels are, on average, related to changes in these performance levels.
2. Differences in the riskiness of pay systems seem to be related to firms' financial performance. Employment agreements, percentage of annual bonus and the use of stock options are all related to differences in financial results. The degree of these relationships vary by industry group and timing of the effects.
3. Executive compensation plans do matter to the investment community and stockholders. Different forms of pay may "signal" the overall strategic position of firms to investors. Therefore, changes in compensation plans may inform investors of impending changes in the firm's value and may act as incentives that affect executive decisions.
4. Executive pay levels are related to specific firm characteristics, including firms' revenues product markets strategies, stage of development, and the industry in which it competes.

In concluding this section, it is useful to note what these findings do not allow us to conclude.

First, note we emphasize association not causation--executive pay levels are related to (do not cause) their firms' economic performance. Firms' financial performance and consequently their abilities to pay, do affect the rate at which all employees including executives are compensated. And compensation plans with appropriate risk-return links may act as incentives that affect executive decisions. The research offers documented evidence for a relationship between pay and performance--but not causation.

Next, the research offers very little guidance on which to base decisions about the executive pay. At best, it reports "what was" or "what is", but we have yet to directly examine questions about the "what if's". For example, under what conditions is the payoff from a high risk-high return plan (e.g., low base pay with high performance targets and incentives) superior to a low risk-high return plan (e.g., high base with a high probability of receiving bonuses and stock grants). These are perhaps the most useful, yet the most difficult questions to answer. We turn next to a brief agenda for research in executive compensation in the 1990's.

RESEARCH AGENDA: WHAT WE NEED TO KNOW

Research clearly indicates that the issue of executive pay and firm performance is far more complex than the media has presented it. Not only is pay level important, but so are the risks underlying alternative forms of pay. Risk focuses on the pay-performance link. The difference in financial performance across firms may be traced in part to differences in executive compensation risks and returns executives face. Ignoring the riskiness of pay systems may lead to misleading conclusions.

The effects of the structure or hierarchy of executive compensation, both within the executive team and between executives and the rest of the work force, need to be better understood. If the executives in an organization are to constitute more than a collection of individuals competing for the top job, then the effects of pay differences among the individual executives need to be better understood. And, as noted earlier, the impact of significant gaps between executive and employee pay is a topic on which speculation is rife, but research is rare.

It is noteworthy that no studies exist on how the level of executive compensation affects economic performance. We do not know, for example, whether paying higher salary levels designed to attract and retain key executives really pays, whether promoting executives from within really pays, whether different risk-return tradeoffs in pay for performance plans really do attract executives who are more (or less) prone to take risks. And we do not know if any of these subsequently affect firm performance.

The state of knowledge in executive pay research brings to mind the conclusions of Harry Truman's advisors: on the one hand, we do know that executive pay is related to firm performance. On the other hand, very little is known about the complex pay-performance relationship; how does pay affect performance; more is involved than how much an executive gets paid, and much more remains to be learned.

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