

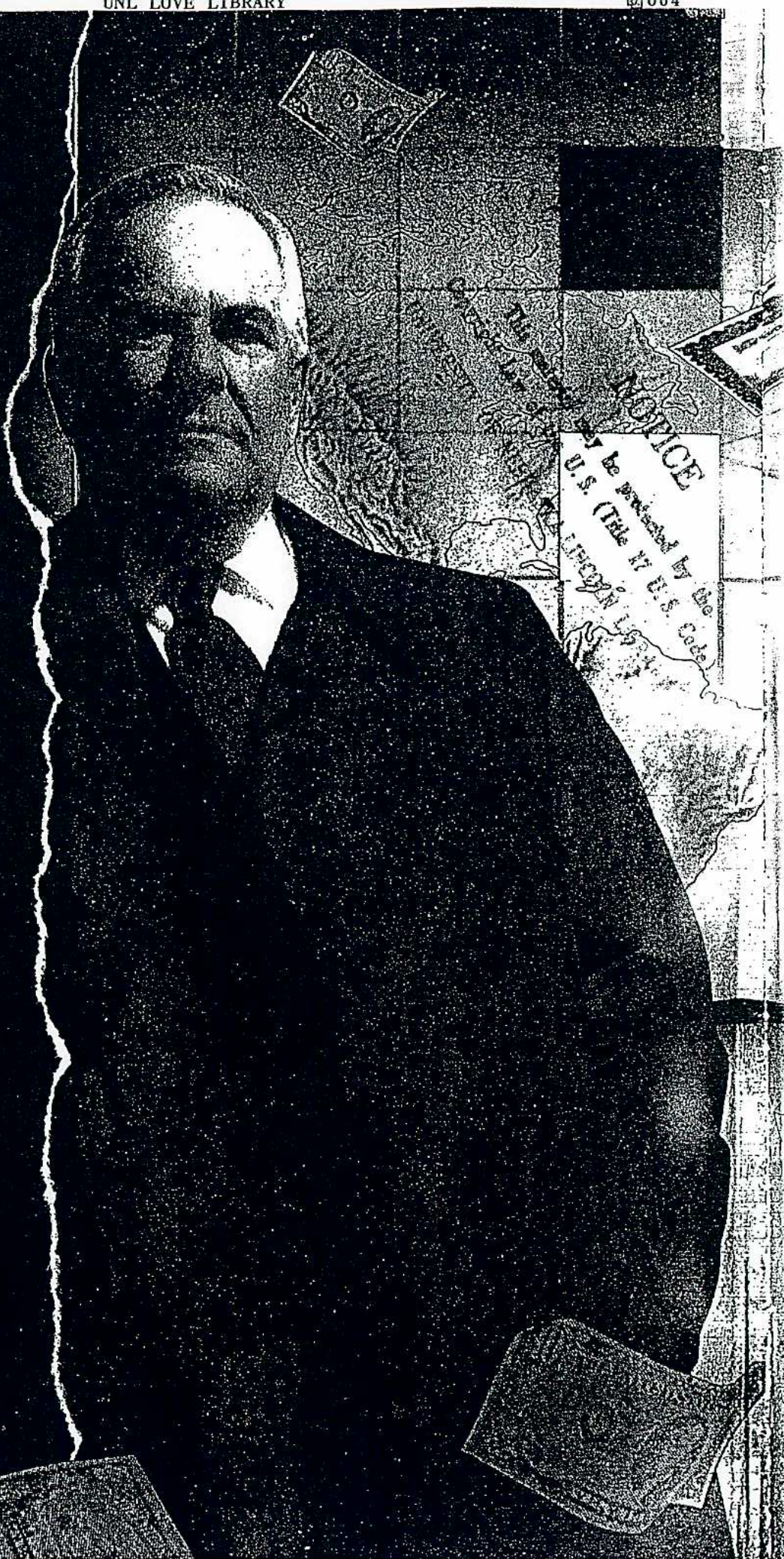
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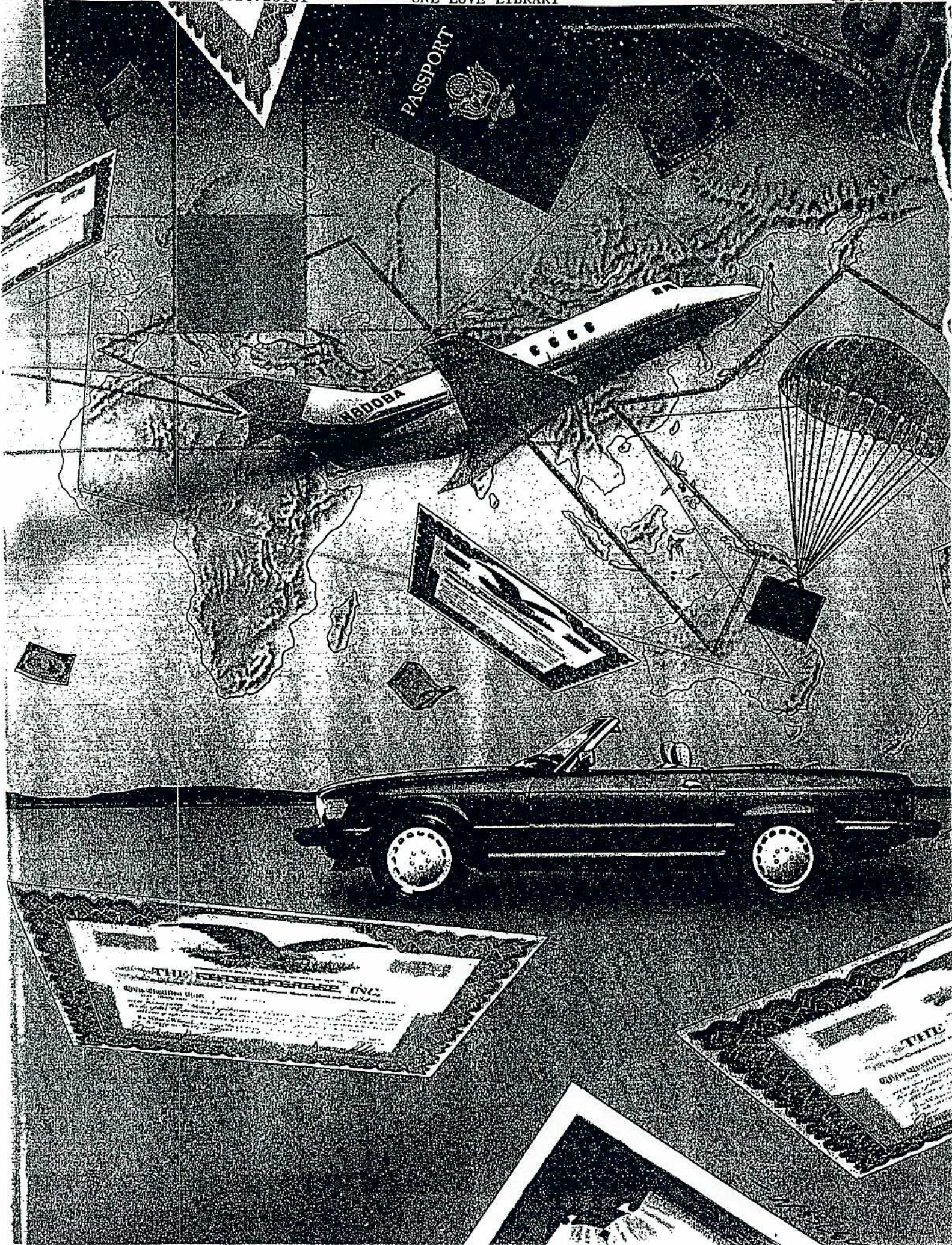
PAY, PERKS, AND PARACHUTES

DOES INCENTIVE PAY
AFFECT PERFORMANCE?

By
Paul Milgrom
and
John Roberts

*From Economics,
Organization and Management,
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EXECUTIVE COMPENSATION HAS BECOME THE FOCUS OF INTENSE PUBLIC concern and debate in the United States, where the compensation of CEOs in large firms has grown much faster than the gross national product, corporate earnings, or the average worker's pay. Each year, *Fortune*, *Forbes*, *Business Week*, and even the daily newspapers carry stories reporting the pay received by CEOs at leading firms. Shareholders are voicing their concerns about excessive executive compensation at annual meetings, institutional investors are pushing for reforms at specific companies, and recently Congress has been making noises about limiting executive pay.

Part of the general interest in executive earnings may be curiosity about other people's incomes or pure jealousy about the spectacular sums received, but there are substantive issues involved as well. Do the paychecks of senior executives motivate them to do a good job running the companies entrusted to them? Or are the often huge amounts they receive in fact the result of managerial moral hazard, with the CEOs lining their pockets at the expense of their firms' owners?

According to *Business Week's* 1991 survey of 365 of the largest publicly held corporations in the United States, the total compensation of the CEOs of these firms grew 212 percent during the decade of the 1980s. This was four times the growth in pay of the average factory worker and three times that of the average engineer. The average salary and bonus of the CEOs in the survey reached \$1.2 million per year in 1990 and, when long-term compensation through stock options and other plans is included, the average total compensation climbed to \$1.95 million. It would take the average factory worker 85 years at 1990 pay rates to earn this amount, and the average engineer 45 years. Despite the recession, the numbers for 1991 are comparable.

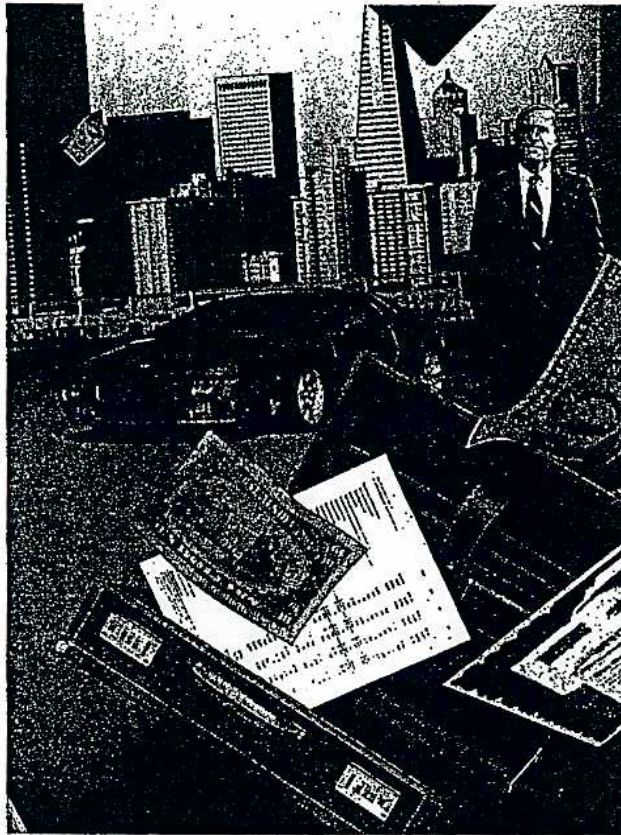
Hidden in these figures are some truly exceptional sums of money. In 1990 Stephen M. Wolf received \$18.3 million as CEO of UAL, the parent company of United Airlines. Of this figure, \$1.12 million was salary and current bonus; the rest came through realized gains on stock-based, long-term incentive plans. John Sculley of Apple Computer earned \$16.7 million in 1990; Paul Fireman of Reebok, the athletic shoe company, received \$14.8 million. These figures are dwarfed, however, by the \$78 million paid by Time Warner to Stephen J. Ross, its chairman and co-CEO. Most of this was a \$75-million bonus awarded in connection with the merger of Time Inc. with Warner Communications, the entertainment company Mr. Ross headed. Even more spectacular was the \$186 million received by Donald A. Pels when his company, LIN Broadcasting, was merged into McCaw Cellular Communications and he exercised his stock options. Overall, the 25 best-paid executives on the *Forbes* list, which excluded Mr. Pels, averaged over \$12 million apiece in 1990.

The pay patterns and levels for CEOs in the largest U.S. corporations differ radically from those of the CEOs of comparable firms in other countries and the heads of smaller (but still substantial) U.S. firms. According to Graef Crystal, a former compensation consultant now at the University of California, the average CEO of a very large Japanese firm (the equivalent of \$30 billion in sales) earns about 17 times what the average Japanese worker does. For comparable firms in France and Germany, the figure is about 24 times. In the United States, it is 109. An extreme example comes from the oil industry: In 1987 Exxon and Royal Dutch/Shell had about equal sales and equal profits. Both firms are leading international petroleum companies and are involved in a similar range of activities. The head of the U.S.-based Exxon was paid \$5.5 million; the CEO of its European competitor received \$500,000.

In smaller U.S. firms, CEOs are still paid more than their Japanese or European counterparts, but the differences are much less extreme. According to surveys by Towers, Perrin, Forster & Crosby, a compensation consulting firm, the CEO of the average U.S. firm with sales of \$250 million receives about \$600,000 a year (including an estimated value of various benefits and perquisites). The head of a comparably sized Japanese or European firm receives about one-half to two-thirds as much. Another Towers Perrin study indicated that the average Canadian CEO receives about 65 percent of the pay of a typical U.S. chief executive.

The major difference between the compensation of the heads of major U.S. firms and their counterparts in both large foreign firms and smaller U.S. firms is long-term incentive compensation tied to stock price performance: direct stock awards, options, stock appreciation rights, and so on. Such plans became almost universal in large U.S. firms in the 1980s but are rare elsewhere. Executives in smaller U.S. firms usually receive a salary plus perhaps a bonus based on annual accounting measures, such as current profits or return on investment. Similarly, the various long-term incentive-pay schemes afforded to heads of large U.S. corporations are essentially absent in Japan and continental Europe. The resulting income difference is especially striking in France, where a number of the largest firms are state-owned and their executives are (at least by U.S. standards) paid quite modest amounts. In the United Kingdom, however, there has been more of a move toward long-term incentive pay, and large performance-based incentives are common in Hong Kong.

Knowledgeable observers of U.S. executive compensation consider these long-term programs the source of the relative jump of CEO pay in the 1980s. In 1980 the relative pay of CEOs, engineers, and factory workers bore about the same relationship to one another as they had 20 years before. In the 1980s the pay of the engineers and factory workers grew at essentially the same rate, whereas that of the CEOs grew four times as fast. *The Wall*



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Street Journal reports that long-term incentives now account for 36 percent of total compensation for CEOs of large U.S. companies. Annual bonuses contribute another 25 percent, while straight salary accounts for the remaining 39 percent.

Despite the popular focus on the amount of executive pay, the most important issue is not how much CEOs get. While some are paid immense amounts (even when their firms' shareholders fare poorly), their pay is on average only a tiny fraction of the earnings of the firms they head. Rather, the key question is whether the design and form of CEO pay motivate executives to advance society's interests by creating value.

The compensation of the senior executive officers of a corporation is set by the firm's board of directors. Shareholders have no direct say in the matter, and the U.S. Securities and Exchange Commission's policies have generally allowed companies to keep compensation issues from being the subject of shareholder votes. (This may change, however, under recently proposed SEC regulations.) The directors usually appoint a compensation committee charged with recommending executive compensation to the board as a whole.

Often, but not always, the committee is composed exclusively of outside directors, who are not officers of the corporation. The board of directors is supposed to represent the interests of the stockholders in setting executive pay (as in other matters), but there are real questions about whether and how well they can do this when the shareholders' interests are in conflict with the CEO's.

Critics of executive compensation believe the mechanism has been captured by the executives themselves for their own benefit. Corporate officers are not supposed to have a direct role in the deliberations and decisions regarding their own pay. Nevertheless, they may have great influence over the process. The compensation consultants who advise the board are often hired by the CEO. The outside directors themselves are effectively nominated by the CEO, they must rely on the executives for most of the information they receive, and they need good relationships with the officers if they are to function well in guiding corporate policy. Often, directors share similar backgrounds and interests with the firm's executives. Most frequently, they are CEOs of other firms. Moreover, outside directors who are not CEOs may well derive a significant portion of their incomes from their directorships.

Korn/Ferry International, an executive recruiting firm, told *Business Week* that in 1990, the average outside director of a major U.S. firm was paid over \$32,000 as a retainer and for attending board meetings, and many firms were even more generous. For example, PepsiCo paid each of its outside directors \$78,000 in 1990. Most firms paid extra for serving on board committees, and many firms made stock grants to their directors, gave them insurance and retirement benefits, and even gave them free samples of the company's product — for example, a new car every six months at General Motors. The results could be substantial: According to the *Wall Street Journal*, the dean of Northwestern University's Kellogg School of Management earns at least a third more in direct compensation from his service on several boards than he does from his regular job. In any case, directors' compensation is rarely linked explicitly to performance. In this context, critics wonder how much weight compensation committees, even when composed of outsiders, give to stockholders' interests compared to those of the executives whose pay they are setting.

The upshot, critics claim, is a system in which CEO pay rises at unconscionable rates, in good times and bad, for the most part independently of performance. To these critics, the pay itself is

not only unjustifiable, it also has destructive effects on employee morale and ultimately on the trust that society has in the legitimacy of business.

Other observers argue that CEOs are worth every cent they make. They say that CEOs can have a tremendous effect on the performance of their firms and that they in fact collect a very small part of the gains that are generated when they make the firms perform well for stockholders. These observers worry that corporate CEOs are in fact not adequately compensated, both in absolute terms (compared with alternative opportunities in such fields as investment banking or entrepreneurship) and, more importantly, in terms of the explicit incentives they receive to improve corporate performance.

A recent study by Michael Jensen and Kevin Murphy of Harvard estimates that every extra \$1,000 of shareholder wealth in a corporation brings only 1.35 cents more current pay to the CEO. Of course, there are many other elements of personal financial concern to a CEO than current salary and bonus. To take account of these, Jensen and Murphy estimated the relation between changes in shareholder returns and CEO wealth — current salary and bonus, plus change in the value of stock and stock options held by the CEO, plus any lasting effects that increased current compensation might have on future pay and retirement benefits. Even allowing for the impact of performance on the probability of being fired, the largest figure they could generate was a \$3.25 gain for the CEO for each \$1,000 increase in shareholder wealth.

Jensen and Murphy argue that these figures are too small to provide adequate performance incentives. For example, consider a CEO contemplating whether to use \$1 million of the firm's resources on some pet

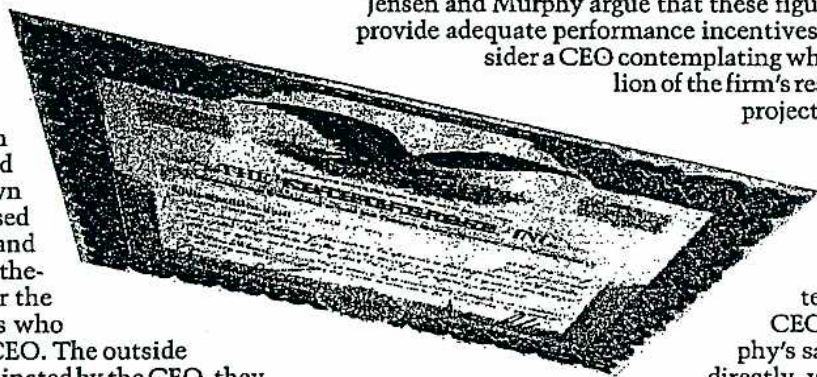
project — perhaps an endowed chair to support research and teaching at the university the CEO attended. The median CEO in Jensen and Murphy's sample would find it directly worthwhile to give away \$1 million of shareholders' money if the project brought \$3,250

in personal pleasure to the executive. If the CEO has no substantial ownership stake in the firm, the breakeven occurs at \$750 — less than a single morning's pay for Jensen and Murphy's median executive. Ethical considerations aside, it might be quite tempting to spend the shareholders' money this way. Of course, the same sort of calculations apply even to less worthy diversions of funds.

The real question, however, is not whether or how much pay varies with performance. As study after study has shown, it surely does on average, if perhaps only weakly. The fundamental issue is whether pay affects performance. Can we determine whether executive incentives actually work? Do stronger incentives improve corporate performance?

Investors seem to think so. Research indicates that the stock markets respond positively to the adoption of both short-term and long-term incentive programs for senior executives. Sophisticated, knowledgeable investors bid up the stock of firms that strengthen incentives for senior executives. In fact, in leveraged buyouts, when ownership becomes concentrated in the hands of professional owners, the new owners tie executive compensation very closely to results by giving management significant ownership shares.

Nevertheless, there is little other evidence, chiefly because data collection is so difficult. Researchers need to observe changes in total compensation — including salary, bonuses, stock options,



Golden parachutes and the stock market

GOLDEN PARACHUTES are contracts that give large severance payments to senior executives who lose or leave their jobs following a merger or takeover. They became very widespread in the United States during the 1980s, especially as the decade progressed and the perceived threat of successful hostile takeovers loomed larger. The largest golden parachutes generated huge sums for their possessors: P. Ross Johnson, the former CEO of RJR Nabisco, received \$53.8 million following the leveraged buyout of the firm by Kohlberg, Kravis and Roberts, and the vice-chairman received another \$45.7 million.

Golden parachutes have been attacked as another example of executive greed catered to by compliant boards of directors. They have been accused of weakening managerial incentives by reducing the threat that an ill-run company will be taken over and non-performing managers fired. In contrast, they have been rationalized as aligning executives' and stockholders' interests. Severance pay helps deter executives from resisting takeover attempts that would be costly for them but advantageous for stockholders.

One potential way to decide between these competing views is to consider the reaction of the stock market to adoption of a golden parachute provision. A study by Business School accounting professor Richard A. Lambert and David F. Larcker found that firms announcing such plans between 1975 and 1982 saw their share prices rise around the announcement dates more than might otherwise have been expected. Thus, at least in this early period, the market responded favorably to the adoption of golden parachute plans. A comparable study covering later periods has not been done.

The favorable market reaction does not necessarily imply that golden parachutes are actually in stockholders' interests, however. The adoption of a golden parachute might be taken by the market to mean that the firm's executives and board had received private information that the company was a likely target of a takeover attempt. Given that shareholders in firms that were acquired in hostile takeovers in the early 1980s realized average gains on their stockholdings of 40 to 60 percent, any indication that a takeover was likely ought to have driven up stock prices, even if the parachute provision itself was contrary to shareholder interests.



outright stock awards, and stock appreciation rights — in relation to subsequent changes in company performance. So far, this has not been done. However, recent research by John Abowd of Cornell goes part way. His study of some 16,000 executives in 250 large U.S. corporations between 1981 and 1986 found that increases in the sensitivity of either the executives' annual raises or their bonuses to current shareholder rate of return were associated with an increase in the shareholder rate of return the following year. Abowd's study did not, however, take account of long-term incentive plans or examine their impact.

An entirely different approach to the question arises from the observation that German and Japanese CEOs receive few or no long-term performance incentives of the kind common in the United States, and yet large companies in these countries often perform much better than their American counterparts. For example, W. Edwards Deming, the American statistician whose quality-control methods are a key feature of Japanese manufacturing, criticizes most incentive plans as being dysfunctional. Deming sees them as focusing executives' attention on narrow numerical goals rather than on the long-term health of the company. Various senior Japanese executives have also been highly critical of American executive compensation practices.

There is certainly a nice irony, as well as an important puzzle, in the apparent negative correlation internationally between the prevalence of performance incentives and level of performance. Nevertheless, changing to the Japanese practice is not necessarily desirable in North America. Japanese pay practices fit the Japanese system, but the systems differ. There is no obvious reason to believe that Japanese executive compensation would fit with the rest of the U.S. system and work here.

First, the job of the CEO in a typical Japanese firm is markedly different from that of a U.S. company's chief executive. Japanese firms traditionally push decision-making power and responsibility down the hierarchy. They rely more on consensus and bottom-up planning, with plans and proposals originating at low levels and working their way up to the executive offices. They do not often go outside to hire hotshot executives to turn the company around. The CEO in this system is supposed to represent the company and its values, not run it in the American sense.

Moreover, Japanese firms are not obviously run solely in the interests of their shareholders. Indeed, Japanese CEOs do not even profess to believe that they should be: The interests of the employees (in job security, opportunities for advancement, and so on) are seen as being of at least equal importance. This means that the long-term growth of the company, rather than shareholder returns, is a prime consideration in Japan.

Third, the period when American industry got into its worst trouble and lost so much of its international competitive position was before the now-popular long-term incentive plans were adopted. At that time, U.S. executives' pay was much less closely aligned with shareholder concerns. Is there any reason to believe that going back to the practices of that era would be an improvement?

Certainly, it is very hard to decide whether CEO pay provides appropriate and adequate incentives. Even if high pay is an effective motivator in average cases, one still might be concerned about the individual cases where pay and performance seem divorced. The general pattern may be that executives' pay is responsive to performance and that performance in turn is positively affected by the incentives that corporate leaders receive. It may even be the case that executive compensation systems are on the average quite appropriately designed and calibrated. Nevertheless, there are plen-

ty of examples in which whatever performance incentives were in place did not motivate the chief executives in question to pursue much of anything other than their own narrow interests. Moreover, the boards of directors have often sat by as these CEOs led their companies to decline and even to ruin, all the while giving them handsome raises.

It is not surprising, then, that some observers see high levels of pay as unjustified — the outcome of managerial greed unfettered and even abetted by compliant boards of directors. The evidence currently available suggests that, in U.S. firms, CEO pay responds to firm performance, and that linking CEO pay to performance positively affects firm performance. But whether the pay-performance link is great enough and whether the improved performance is worth the cost is likely to be debated for some time.

About the Authors



Paul R. Milgrom, PhD '79, entered the Business School in 1975 as an MBA student. He was lured into the doctoral program by faculty who saw his potential as a researcher and teacher. Milgrom is now a professor of economics in the School of Humanities and Sciences and, by courtesy, in the Business School.



John Roberts, Jonathan B. Lovelace Professor of Economics, served as associate dean for academic affairs from 1987 to 1990 and is currently a fellow at the Center for Advanced Study in the Behavioral Sciences at Stanford. He will return to the Business School faculty fall quarter.

Milgrom and Roberts have collaborated on some 20 articles and papers. *Economics, Organization and Management* (Prentice Hall, 1992), from which this article is excerpted, is the first book they have coauthored.

View from the middle

A

LARGE PART OF THE PAY FOR MIDDLE-LEVEL managers is tied to the breadth and significance of their responsibilities. These in turn are often measured by the number of people reporting to the manager. The system leads to perverse incentives. The only way for a manager to get a substantial raise is to increase his or her responsibilities. One obvious way to do this is to increase the number of subordinates. This creates an incentive to add staff. Then, as noted by Jane Hannaway of Stanford's School of Education, a second perverse effect enters. Each extra staff person creates work that justifies hiring still others! Thus, massive staffs come into being, with everyone working very hard for long hours, busy keeping one another busy.

To counter these tendencies toward bureaucratic expansion, many firms are attempting to divorce managers' base-pay levels from the number of staff reporting to them. They are also seeking to increase the role of incentive pay tied to measured performance, for example through management-by-objective plans, where control of staff costs are explicit goals figuring into the determination of the bonus. What little evidence exists indicates that incentives work at these levels.

Perhaps the major incentive for most middle-level managers, however, still comes through the possibility of promotion. A firm's removal of layers of management reduces both the frequency with which promotions can be gained and the number of promotions that can be won. The leveling of organizational hierarchies has also probably increased the relative number of people at the lower rungs of the ladder and, correspondingly, decreased the chances of winning promotion. But any such negative incentive effects may have been offset by the impact of the recent increases in CEO compensation; increasing the ultimate prize may have increased middle-level managers' incentives to keep competing for promotions.