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Volume Title: Executive Compensation in Large Industrial Corporations

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Volume Publisher: NBER

Volume ISBN: 0-870-14481-2

Volume URL: http://www.nber.org/books/lewe68-1

Publication Date: 1968

Chapter Title: Summary

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Chapter URL: http://www.nber.org/chapters/c9354

Chapter pages in book: (p. 278 - 285)

## SUMMARY

Both the size and the structure of the senior corporate executive's compensation package have undergone substantial and important changes over the last quarter century. While this is perhaps not an unanticipated conclusion, neither the dimensions nor the pace of these changes have been thus far adequately stressed. The objective here has been to remedy this deficiency by developing and applying techniques of valuation which provide an accurate and comprehensive measure of the worth of the pay package to its recipient at any point in time. Because of their key role in the business community in general, and their influence on patterns of compensation policy in particular, the senior officers of fifty of the country's largest manufacturing corporations were chosen as the focus for the study. In all, the sample included data on the experience of approximately 550 executives and covered some 8,000 man-years' worth of compensation history, giving rise to a record of secular changes which begins in 1940 and continues through 1963.

## The Findings

While top executives' salary and bonus income has increased by 83 per cent before taxes and 33 per cent after taxes since 1940, their aggregate after-tax remuneration has approximately doubled. Deferred and contingent rewards, which now comprise about half the compensation package, have accounted for the major portion of this increase. The restricted stock option, created by tax legislation in the early 1950's, has been an especially important item, providing nearly one-third of all after-tax remuneration enjoyed by senior executives in recent years. As a result of this development and the concomitant growth in the popular-

ity of other forms of reward that utilize shares of the employer corporation's common stock as the compensation medium, the year-to-year volatility of the value of the managerial pay package has increased substantially over time, and the individual executive's earnings have become more closely linked to the market fortunes of his firm's shareholders. Because such rewards began to come into wide use primarily in the late 1940's and early 1950's, most of the growth in pay we observe occurred within the ten years immediately following World War II.

That growth has not, however, been very impressive in comparison with most historical indexes. In the aggregate, the sales, assets, profits, and market value of the corporations for which the executives in the sample worked grew much more rapidly than either the salaries and bonuses or the total compensation of those executives. Other important professional groups—physicians, lawyers, and dentists—have also done better over time; their 1963 after-tax incomes ranged from 2.4 to 3.2 times the corresponding 1940 figures as compared with 2.1 for top executives. Manufacturing production workers earned 3.6 times as much after taxes in 1963 as in 1940, and the take-home pay of the individuals at the bottom of the corporate managerial hierarchy-recent MBA graduates-increased by approximately 400 per cent. Upon adjusting for price changes, in fact, it turns out that the senior executives in our sample were no better off in 1963 than in 1940 in terms of real aftertax income. In large part, these developments can be attributed to a sharp rise in personal tax rates, which has had a particularly severe impact on high-income groups such as executives. It seems likely, however, that the nature of the compensation bargaining process and the publicity given top executive rewards by the proxy statement reporting requirements of the SEC have also contributed downward pressures.

Looking in cross section at the remuneration enjoyed by the five highest-paid executives in each of the firms in the sample, we find that the salary and bonus differentials between the top executive and his four closest subordinates have narrowed considerably over the last twenty-five years. The typical second- through fifth-ranking executives in large manufacturing corporations now receive, respectively, 75, 64, 57, and 53 per cent as much before-tax salary and bonus as their firm's senior officer. In 1940–41 the figures were 62, 50, 44, and 39 per cent. Despite these changes, it remains true that both the absolute and percent-

age gaps between successive positions increase steadily as the individual climbs the executive ladder.

The history of the more pertinent aggregate remuneration profile is quite different. When the values of the various supplements to salary and bomis are considered, the percentage compensation differentials among the top five executive positions prove to be almost exactly the same in recent years as they were in the early 1940's. In relation to the total after-tax earnings of the highest-paid executive, those for the other four positions studied came to 67, 56, 45, and 38 per cent for the interval 1955-63 as compared with 64, 53, 45, and 40 per cent in 1940-41. Taken in conjunction with the salary and bomis time series, this phenomenon suggests strongly that the corporations in the sample not only plan their compensation packages in a comprehensive manner, but have been guided in so doing by a desire to maintain the after-tax structure of rewards in the senior executive ranks intact in the face of substantial increases in personal tax rates. The remarkable stability of the structure during a period in which the rewards in question doubled in size seems to attest either to the skill or the good fortune connected with that effort

This result was, of course, achieved by a policy of utilizing more extensively at higher executive levels the less heavily taxed deferred and contingent compensation arrangements as adjuncts to salary and bomis payments. The value of each of the major instruments in that category—pensions, stock options, deferred compensation, and profit-sharing plans—increased steadily in importance from the fifth-ranking to the top executive position in every year considered. Between 1955 and 1963, for example, 31, 36, 44, 50, and 62 per cent of all after-tax remineration associated with the five positions—in ascending order—was generated by means other than direct cash payments. Since many of these arrangements depend for their value on the market price behavior of the corporation's common stock, the volatility of the pay package also increased correspondingly. Not surprisingly, stock options accounted for most of the fluctuations observed.

In collecting the data for these comparisons, information as to the ages of the executives and their terms in office necessarily became available. It was found that the individuals who occupied each of the top five positions in the sample corporations in the early 1960's were ap-

proximately five years older on average than were their predecessors of the early 1940's. The mean length of time the various positions were held by the same individual also appears to have diminished slightly.

When the cross-sections are viewed in terms of intercompany patterns of reward, we discover that executive compensation practices vary much less widely than do the measurable attributes of the employer corporations themselves. The dispersion in the sample of both salary and bonus and aggregate remuneration levels among senior executives is substantially smaller than that displayed by the assets, sales, profits, and market values of their firms—a phenomenon which is more pronounced now than it was twenty-five years ago. In addition, the conclusion arrived at earlier, that over time the earnings of top executives have not kept pace with the expansion of the corporations for which they work, is reinforced when that comparison is made on a company-by-company basis. In only about 10 per cent of the cases examined did the compensation associated with the senior executive position in a given firm grow as rapidly between 1940 and 1963 as even the most sluggish index of the company's growth.

The dominant role of deferred and contingent rewards in the pay package is underlined by the poor performance of corporate salary and bonus scales as predictors of total compensation levels. There are sharp and consistent differences between the schedules obtained by ranking firms according to the amount of direct current remuneration received by their top executives and those constructed from the corresponding aggregate remuneration figures. The resulting rank correlation coefficients are typically on the order of .4 to .6, and have declined over the years as supplements to salary and bonus have increased in popularity and value. A similar story emerges from a comparison of salary and bonus and total compensation growth rates since 1940. The coefficients calculated by matching those two sets of rankings run anywhere from .1 to .4 and satisfy significance tests at the .01 level only in scattered instances.

There is considerable evidence, on the other hand, that top executive earnings and employer-company size are directly related. Insofar as there is a difference in the degree to which such a relationship appears among the various criteria tabulated, a firm's profits seem a somewhat better predictor of the probable magnitude of its senior officers' re-

wards than do either its assets, its sales, or the market value of its common stock. The connection between executive salaries and bonuses and each of those items is consistently stronger than between the latter and the same individuals' total after-tax remuneration. We also have some indication that the larger and more profitable the corporation, the more it makes use of supplements to salary and bonus for its senior executives—a phenomenon which, while persistent, is sufficiently mild that it could be as much a result of certain technical features of the compensation process as a policy decision in its own right. It is clear, however, that the firms in the sample which provide their top management with the highest levels of aggregate remuneration are precisely those which utilize such supplements most extensively.

## The Current Equivalents

The key to the analysis, of course, is the concept of a "current income equivalent" for each deferred and contingent compensation arrangement in the pay package. Upon the design and implementation of these indexes of the worth of such instruments as pension plans, stock option grants, and deferred compensation contracts rests the validity of the conclusions summarized above. The principles underlying their development throughout have been that (1) it is possible to cast up as an alternative to every noncurrent form of reward a stream of salary payments between which and the reward itself the executive would be indifferent, and (2) that "indifference" is most appropriately defined in terms of after-tax present values. An attempt has been made in each instance to duplicate in the current equivalent not only the compensatory achievements but the volatility and incentive features of the device being evaluated. The early chapters of the study spell out the particulars of that effort. The contention is that a corporation could, if it chose, substitute for any one of the arrangements considered the hypothetical series of salary payments which constitute its indicated current equivalent without diminishing either the earnings or the dedication of the firm's executives. In that sense the total of these equivalents provides an accurate and meaningful measure of the value of a compensation package which consists in fact of a wide variety of quite dissimilar components. Fortunately, this total turns out-at least insofar as the present sample is concerned-to be affected very little by rather broad changes in assumptions as to the characteristics of the environment in which rewards are received and the nature of executives' market alternatives. It therefore should be possible to have some confidence that the numbers generated permit an accurate appraisal of the historical record.

## Additional Research

As has been suggested at several points along the way, the analysis presented falls considerably short of exhausting the opportunities for research in this area. For example, the question of the relationship between employer-company size and top executive pay was examined only tentatively here. Because of the likely impact on the compensation decision both of other characteristics of the individual firm and certain features of its environment, the attempts thus far made to isolate the influence of corporate size or profitability per se have not been very successful. Moreover, they have dealt only with salary and bonus awards rather than with the total pay package. Now that it is possible to speak in terms of the latter, the way is open to collect and process the additional data which will permit these other factors to be recognized and a more meaningful analysis undertaken.

A second item of interest is the compensation experience of executives who occupy positions in the corporate managerial hierarchy below those which comprise the current sample. There is reason to believe that many of the conclusions which emerge from the historical record of senior executives' rewards may not hold for lower-level administrators. The major obstacles to further research in this area are the difficulty in obtaining comprehensive and reliable data and the question of accurate job definition. Since the information available in proxy statements covers just the top few men in each firm, the economic circumstances of subordinate officials can be investigated only by securing the cooperation of a group of interested companies and acquiring the necessary data directly from them. This having been done, the problem then is to make sure that the data provided relate to the same sort of positions in each firm and that those positions remain intact throughout the time period studied. While not impossible, this is plainly a harder task than that tackled here.

An issue raised in connection with the incentive aspects of various

forms of reward—the pattern of stock holdings among top executives—also deserves further attention. The extent to which such individuals normally maintain a significant ownership interest in their respective firms is important to the argument that compensation arrangements utilizing shares of the employer corporation's common stock should be made available in order to encourage a greater degree of identification with shareholder objectives—and to the argument that there is not now sufficient such identification. Fortunately, data pertaining to stock holdings are published annually in corporations' proxy statements and are supplemented monthly by an SEC record of their officers' transactions. A sample of executives like that compiled for the present study is a natural starting point.

A somewhat different but equally compelling problem concerns the attitudes and reactions of the two parties to the compensation bargain. Whether in most cases the executive and the employer company both have an accurate appreciation of the value of the various deferred and contingent rewards in the pay package is clearly going to have an effect on the nature of the settlements they produce. Given the techniques developed above for making such appraisals for a broad range of devices, it would be of interest to determine how close the perceptions of executives and compensation administrators actually are to these figures, to what extent and in what manner ex ante estimates of compensatory value are made, whether either party attributes differential incentive features to the several instruments employed, and how large a factor cost comparisons are in the decisions. In short, we need a better understanding of the compensation process as it is viewed from the inside in order to test the external evaluation presented here.

Finally, the same sort of historical and cross-sectional analysis performed for large manufacturing corporations should be expanded to encompass other important categories of business activity. The compensation experience of the top executives of public utility companies, of financial institutions, of firms engaged in retail trade, of transportation companies, and of a sample of smaller manufacturing enterprises may or may not differ significantly from that depicted above but, in any event, is relevant to a comprehensive appraisal of the secular growth and current pattern of managerial remuneration in the community. The tech-

niques employed in the present study are directly transferable to such an investigation.

The twofold objective here, therefore, has been to develop a flexible conceptual framework in which the value to an individual executive of the many disparate components of his pay package can be measured and to apply that framework empirically in order to determine the manner in which corporations have recast their compensation policies over time in response to changes in the tax laws and in the economic environment. It is hoped that both the approach taken and the findings presented provide a basis and an incentive for additional research.