


This PDF is a selection from an out-of-print volume from the National Bureau of Economic Research

Volume Title: Executive Compensation in Large Industrial Corporations

Volume Author/Editor: Wilbur G. Lewellen

Volume Publisher: NBER

Volume ISBN: 0-870-14481-2

brought to you by  CORE

provided by Research Papers in Economics

Publication Date: 1968

Chapter Title: The Pattern of Compensation Over Time

Chapter Author: Wilbur G. Lewellen

Chapter URL: <http://www.nber.org/chapters/c9349>

Chapter pages in book: (p. 119 - 153)

THE PATTERN OF COMPENSATION OVER TIME

One approach to an analysis of the compensation of executives is an examination of the changes that have taken place over time in the rewards associated with particular positions within the corporate hierarchy. For example, we might focus on what has happened during the last quarter century to the amount and form of the remuneration of the highest-paid executive in each of the fifty sample companies. It would be relevant to ask such questions as: By how much, on average, have salaries increased since 1940? Has total compensation grown more or less rapidly? Has the growth been steady over this period? Which components of the pay package have been the most valuable and most rapidly growing? These issues will be considered here in terms of the experience of the top executive in each firm in every year and also for the combination of all five positions within those firms for which data were collected. The goal is to determine how well executives have fared since the advent both of high personal income taxes and the post-World War II economic boom and to discover how important rewards other than salary and bonus have come to be for them during this period.

Before-Tax Salaries and Bonuses

We may begin by looking at the most familiar measure of an individual's rewards—his aggregate before-tax current remuneration consisting of salary and bonus payments. Table 1 and Chart 1 summarize the history of these payments from 1940 to 1963 for the two categories of executives. The first column in Table 1 and the upper line in Chart 1 represent the average across all fifty companies of the before-tax salary and bonus

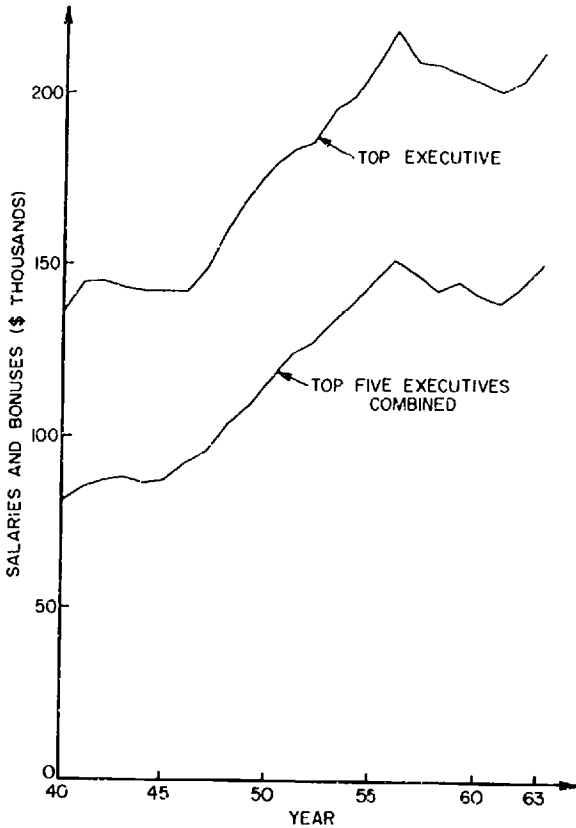
TABLE I
 Average Before-Tax Salaries and
 Bonuses, 1940-63
 (dollars)

Year	Top Executive	Top Five Executives
1940	137,233	81,353
1941	145,281	85,332
1942	145,473	86,825
1943	144,208	87,554
1944	143,612	86,408
1945	142,892	86,852
1946	143,247	92,262
1947	149,446	94,730
1948	161,959	103,295
1949	169,703	108,421
1950	178,452	116,204
1951	183,235	122,664
1952	185,330	125,822
1953	193,556	133,458
1954	197,726	136,752
1955	205,656	143,633
1956	215,767	150,297
1957	207,586	145,848
1958	207,101	140,594
1959	203,708	144,016
1960	200,788	139,744
1961	198,560	137,491
1962	201,622	141,758
1963	210,164	148,553

received by the highest-paid executive in each firm. The lower line and the second column record a similar series for the full sample of the top five executives in every company taken as a group. Thus, in the latter case, the average current remuneration associated with each of the highest-paid positions is computed and then the mean of those five values obtained.

EXECUTIVE COMPENSATION

CHART 1

Average Before-Tax Salaries and Bonuses, 1940-63

The notion of "highest-paid" refers here only to salary and bonus. As was noted earlier, the executive with the largest amount of such payments may not necessarily be the best-rewarded one when the rest of the pay package is taken into account. For the moment, however, rankings on the basis of current remuneration alone provide the data for the averages compiled.

Those averages are rather surprising in the modest rates of growth they suggest. The before-tax current remuneration of the top executive in each company grew from an average of about \$137,000 annually in

1940 to \$210,000 by 1963. At the same time, the five highest-paid men together experienced an increase from slightly better than \$81,000 on average to approximately \$148,500. These changes represent pay raises of 53 and 83 per cent, respectively, over a period of twenty-four years—certainly not very substantial increases by most standards.¹ Between 1940 and 1963 the implied compound annual rates of growth are only about 1.8 and 2.5 per cent for the two groups. The postwar years look somewhat better—the corresponding growth rates from 1945 on being closer to 2.1 and 2.9 per cent per annum—but not significantly so.

Two features of the data are particularly interesting. First, during World War II annual before-tax current remuneration did not increase from its prewar level for either category of executives. A mild advance between 1940 and 1941 is really the only change that is discernible. This result, of course, can be explained by the wage and salary restraint imposed by the federal government during the war.

The postwar pattern, on the other hand, is a much less predictable one: All the growth that took place in the amount of salaries and bonuses received occurred within the ten years from 1945 to 1955; after that point both time series effectively level off. In 1963, average before-tax current remuneration stood at just slightly above its 1955 value in both cases. During the intervening years some fluctuations can be observed. One reason for this is that many of the bonuses involved consisted either of cash payments, which varied in response to the level of a firm's profits, or of shares of stock whose value changed according to stock market conditions. Thus, while salaries were seldom reduced, the bonus component of current remuneration did change from year to year due in part to external circumstances.²

Even if we take this into consideration, however, it is clear that the sample executives' direct current rewards did not increase appreciably from 1955 to 1963. Coupled with the enforced stagnation of the early 1940's, the implication is that whatever growth those rewards displayed over the last quarter century was compressed into a single ten-year period.

¹ For some particularly relevant ones, see Chapter 9.

² Variations also occur because of normal personnel changes within the sample. Executives are continually retiring and being replaced by younger men whose salaries may not immediately match those of their predecessors.

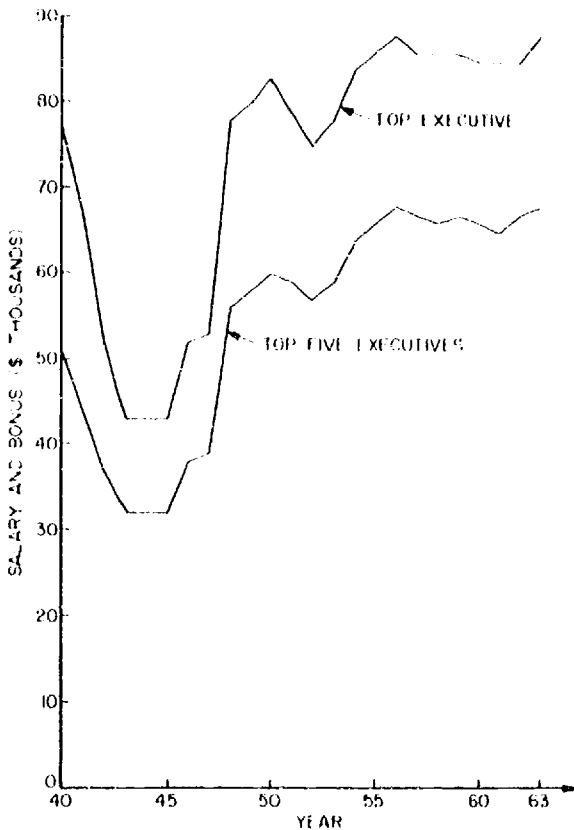
After-Tax Salaries and Bonuses

A similar but more striking story is revealed in the after-tax current remuneration averages tabulated in Table 2 and pictured in Chart 2. The two executive groups are defined in the same manner as before, and once again each series represents the mean values for all fifty com-

TABLE 2
Average After-Tax Salaries and
Bonuses, 1940-63
(dollars)

Year	Top Executive	Top Five Executives
1940	77,143	51,043
1941	67,202	44,085
1942	52,014	36,571
1943	43,036	31,766
1944	42,959	31,642
1945	42,817	31,767
1946	51,591	38,165
1947	53,050	38,889
1948	77,775	55,742
1949	80,269	57,547
1950	83,007	60,364
1951	79,482	59,490
1952	75,445	56,990
1953	77,716	59,380
1954	83,604	64,213
1955	85,637	66,195
1956	88,177	68,043
1957	86,302	67,101
1958	86,152	65,873
1959	85,767	67,113
1960	84,991	65,866
1961	84,524	65,205
1962	85,274	66,787
1963	87,503	67,947

CHART 2

Average After Tax Salaries and Bonuses, 1940-63

panies. This time, however, the effect of quite modest secular increases in pre-tax compensation and the assessment of personal income taxes at rates much higher than those prior to World War II combine to create a history which suggests that the current earnings of senior executives have improved hardly at all since 1940.

In that year the average after-tax salary and bonus received by the highest-paid executive in each sample company was \$77,100. By 1943 this figure had fallen to \$43,000 due to heavy wartime taxes and the ceiling on before-tax payments. It remained at that level until 1946, when lower taxes and growing salaries began to have an effect. In 1948

the prewar after-tax figure was reattained and, in 1950, a peak of \$83,000 reached. At that point, Korean war tax provisions took hold, and, as late as 1953, the typical top executive's disposable income from salary and bonus stood at almost exactly its 1940 level. The only significant increase from then on—except for a brief flurry in 1956—occurred largely because taxes were eventually reduced. By 1963, average after-tax current remuneration came to \$87,500—a gain of just \$10,400 since 1940, or about 13 per cent in twenty-three years.

The story for all five top executives together is somewhat more favorable. Their income declined less during the war, grew more sharply immediately thereafter, and performed marginally better in the 1950's. The average after-tax salary and bonus of this group in 1963 was approximately \$68,000—up from \$51,000 in 1940 and a 33 per cent over-all gain.

As they stand, the figures support the conclusion that is frequently put forward by spokesmen for the interests of executives, i.e., that high taxes have made it impossible for such individuals to be rewarded in a manner comparable to the past because the pretax salary levels necessary to achieve that objective are so great that neither shareholder nor public opinion will countenance their payment.³ On the basis of the data above, this contention is not surprising. It cannot, however, be accepted until all the evidence on compensation is in.

Total After-Tax Compensation

If, instead of considering only current remuneration, we compute the "after-tax current income equivalents" of the other items in the pay package as well, a rather different history emerges. Table 3 and Chart 3 record the relevant figures for the men who in each year between 1940 and 1963 were their firms' highest-paid employees. In this instance, the term "highest-paid" is an accurate designation. The sample depicted is that in which the executives are ranked within their firms

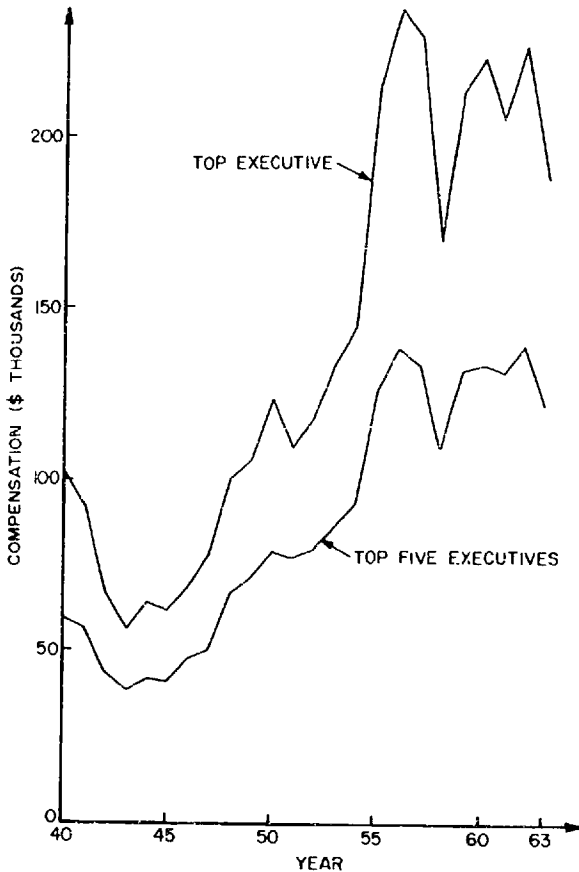
³ See, for example, the testimony in 1955 of the then-president of the DuPont Company, Mr. Crawford Greenewalt, in United States Joint Committee on the Economic Report. *Federal Tax Policy for Economic Growth and Stability: Hearings Before the Subcommittee on Tax Policy*, 84th Congress, 1st Session. Washington, D.C., 1955, pp. 137-164.

TABLE 3
 Average Total After-Tax Compensation,
 1940-63
 (dollars)

Year	Top Executive	Top Five Executives
1940	101,979	59,740
1941	91,535	56,885
1942	65,960	44,375
1943	56,467	38,913
1944	63,673	41,873
1945	61,632	41,329
1946	69,043	47,878
1947	78,317	49,989
1948	99,756	67,444
1949	105,311	70,825
1950	122,790	79,011
1951	109,341	77,316
1952	116,657	79,450
1953	131,782	86,181
1954	143,470	93,076
1955	214,430	125,204
1956	235,674	136,960
1957	227,227	133,315
1958	169,436	109,335
1959	211,049	131,247
1960	221,711	133,249
1961	204,274	131,361
1962	224,889	138,754
1963	187,279	121,039
Average: 1955-63	210,663	128,940

EXECUTIVE COMPENSATION

CHART 3

Average Total After-Tax Compensation, 1940-63

according to their total after-tax income, not just their salaries and bonuses.⁴

Through 1954 the pattern which the data trace out is generally similar to the history of after-tax salaries and bonuses. From its 1940 value, average total compensation fell to a wartime low, rose by about 1948 to its original level, peaked in 1950, and then recovered in 1954 from a brief decline caused by Korean war taxes. In 1955, however, a sub-

⁴ See Chapter 10 for a discussion of variations in executive rankings on the basis of total remuneration vs. salary.

stantial jump in total after-tax compensation occurred. The figures thereafter, while fluctuating from year to year, suggest that this increase was just maintained. In effect, the same "stagnation" that characterized salary and bonus payments in the late 1950's and early 1960's shows up again, but in the form of income levels significantly higher than those observed prior to 1955. The result is a much less pessimistic view of the compensation experience of executives over time, whether we look only at the top executive in every company or at all five for whom data are available.

The explanation, of course, is one that has been anticipated: a persistent trend toward the use—and liberalization—of forms of reward other than salary and bonus. As will be documented in the following section, all the major supplements to salary have been steadily growing in value. This phenomenon is particularly evident in the mid-1950's and appears most strikingly in the remuneration provided by stock options. Approximately two-thirds of the sharp increase in total after-tax compensation from 1954 to 1955 is accounted for by suddenly higher stock option profits arising from the beginnings of the post-Korean war stock market boom.⁵ The volatility of such profits according to market conditions also explains most of the fluctuations in total executive compensation subsequently observed.⁶

Because of those fluctuations, it seems desirable to smooth the stock option data over the interval 1955 through 1963. It was not until then, as we shall see, that options really emerged as a significant item of remuneration. The volatility of the rewards associated with them, however, while an important phenomenon, may tend to obscure some of the longer run trends in *levels* of earnings that are of interest here. The drop in the compensation totals recorded in 1963, for example, is a reflection of the stock market decline of 1962—a decline that was soon reversed.⁷ If 1964 figures were calculated, total compensation would again be observed to rise. An "average" stock option current income equivalent for the later years of the study, therefore, should provide a better basis

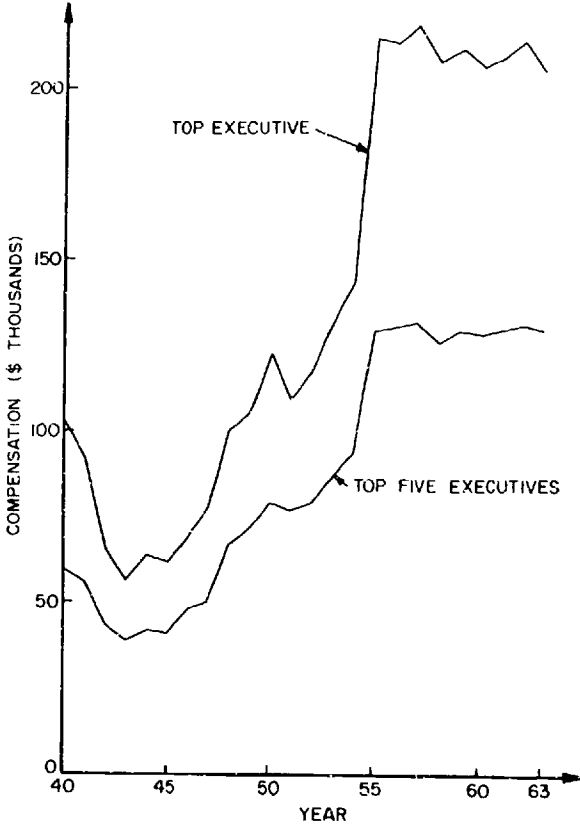
⁵ See below, Table 4 and Chart 5.

⁶ Common-stock-based profit-sharing and deferred compensation plans also contribute elements of instability in this connection.

⁷ The reduced value of option profits shows up with a lag since the valuation techniques employed adjust the relevant current income equivalents only after "reading" the closing market price of the previous year. See Chapter 4.

CHART 4

Average Total After-Tax Compensation (Stock Option Data Smoothed), 1940-63



for identifying increases in remuneration over a long period of time than would choosing any single one of those years as a standard. The result of such averaging appears in Chart 4 for both compensation series, the remaining fluctuations being due to the other items in the pay package.⁸

One question which has a bearing on the validity of this procedure is whether the experience of executives with stock options between 1955

⁸ Average after-tax stock option profits for the top executives in each firm from 1955 through 1963 were \$74,897 per annum. For the top five men, the figure is \$34,261.

and 1963 is a fair indication of that which they are likely to confront in the future. If perhaps those years were unusually good ones for realizing stock option profits, it would be misleading to present the compensation levels thus attained as evidence of an established pattern of growth in executive rewards. Two considerations may, in fact, lead us to believe that these profits should be regarded as unusual: The mid- and late 1950's and early 1960's witnessed one of the most vigorous and sustained increases in common stock prices in our history; and the tax law dealing with employee stock options was changed in 1964 in such a manner as to materially reduce their attractiveness.⁸ It is by no means assured, therefore, that the happy events of recent years will continue. On the other hand, deferred compensation, profit sharing, and savings plans are becoming more valuable over time.⁹ There is even some evidence (Charts 1 and 2) that salaries and bonuses started moving up again in 1962 and 1963 after a pause of several years. And, of course, the same 1964 tax revision which affected stock options also *reduced* rates on current income receipts. In short, if one were to attempt to predict, on the basis of current trends, the amounts of total after-tax compensation to be enjoyed by top corporate executives over, say, the next five years or so, maintenance of the 1955-63 levels would not be difficult to support even though the composition of those totals might well be expected to change. Accordingly, the aggregate figures obtained by smoothing the observed stock option results should be reasonable ones on which to base some longer term conclusions.

What, then, may be said about the experience depicted? For one thing, it is clear that all the growth associated with total executive compensation since 1940 took place within the same ten year interval that generated the entire appreciation in salaries and bonuses—1945 through 1955. Indeed, the situation here is really much stronger. If we "control" for the effect of higher tax rates and eliminate those years in which the pay raises enjoyed by the men in the sample accomplished nothing more than the recovery of after tax reductions they had experienced in previous periods, the only years in which any substantial increase in remuneration occurred that was subsequently maintained were 1950, 1954, and 1955. When this observation is compared with

⁸ See Appendix G.

⁹ See below, Charts 6 and 9.

the results summarized in Charts 1 and 2, a further conclusion is indicated (which will be made clearer in the next section by a breakdown of the pay package into its components): The introduction of sizeable supplements to salary, especially stock options, in the postwar period accounted for virtually *all* the increase in the compensation of top executives during the last quarter century. The slowly rising pretax salaries and bonuses seen in Chart 1 just about offset the effect of higher income taxes and would, by themselves, have left executives little better off in terms of after-tax income than they were in 1940.

Because such supplements did appear, however, our assessment of the pattern of executive rewards over time is rather more favorable than that which after-tax current remuneration alone would suggest. The average annual total after-tax compensation enjoyed by the top executive in each firm in the sample during the period 1955 through 1963 comes to \$210,663. If that is used as a terminal figure, total remuneration turns out to have grown at an annual rate of approximately 3.2 per cent between 1940 and 1963. Up until 1955, the corresponding rate was 4.8 per cent. If only the interval between the war-induced low of 1945 and the plateau reached in 1955 is considered, an annual rate of fully 12.3 per cent is observed. For all five top executives together, average after-tax remuneration from 1955 to 1963 was \$128,940 per annum, and the implied compound annual rates of growth over the three periods indicated were a very similar 3.3, 5.1 and 11.4 per cent, respectively.

A final comment is in order. If we return to the unsmoothed history of Chart 3, it is evident that the aggregate value of the senior corporate executive's compensation package was much more volatile from one year to the next in the later years of the study than it was in the 1940's and early 1950's. It is also true that this volatility is a direct consequence of the manner in which the valuation techniques developed above operate on executives' experiences with stock options and other common stock-oriented rewards. However, the current income equivalents which those techniques generate are regarded here, and were presented earlier, as both accurate and appropriate reflections of the pattern of compensation which is in fact realized by executives. Thus, if the price of a firm's common stock on the market should fall sharply, those in-

dividuals holding options to purchase that stock have thereby suffered a diminution of their existing economic positions just as surely as if they already owned the shares involved. It therefore is necessary to recognize this decline as well as any subsequent gains in the current income equivalent of an option.¹¹ Accordingly, the fluctuations in total compensation depicted are real ones, and they identify a trend which could have important implications.

The issue is frequently raised that corporate executives may not be properly responsive to the welfare of their firms' shareholders now that the era of the owner-manager is past. One answer to such a concern is to point out the sizeable amounts of stock in their companies which, as proxy statements record, almost all senior executives in large firms hold. Even though such holdings seldom approach anything like a majority interest, for many men they are likely to represent a large percentage of their *personal* investment portfolios. Therefore, whatever effect on their behavior an ownership position might be thought of as having, it should be just about as strong under these circumstances as it was in the days before the professional manager appeared. The tendency in recent years to design portions of the compensation package around the firm's common stock—and the results of this policy as evidenced by the increasing variability of rewards—reinforces the tie-in of ownership and management. If a man's remuneration each year is highly sensitive to what happens to the price of his firm's stock, his interest in that price and in the economic well-being of his fellow shareholders cannot help but be intensified. The fact that executive compensation now does in part duplicate the consequences of ownership and the extent to which those consequences are felt by the individuals involved is well illustrated by Chart 3.

Composition of the Package: Top Executive

Separation of total after-tax remuneration into its components highlights and further documents the conclusions offered above. Consider first the experience since 1940 of the highest-paid executive in each

¹¹ That equivalent stream of payments has, as was noted earlier, some built-in smoothing of widely varying stock prices, which helps modify such situations when they do occur.

firm as it is presented in Table 4 and in Charts 5 through 7.¹² From these data, one development very quickly emerges—the traditional salary and bonus payments no longer constitute the bulk of top executives' compensation. Of the total after-tax rewards received by such men during the ten years from 1940 through 1949, 72 per cent was in the form of salary and bonus. In the nine-year interval beginning in 1955, the corresponding figure was only 38 per cent. In fact, for this sample the absolute level of after-tax direct current remuneration has been very little higher since 1955 than it was in either 1940 or the post-war peak year of 1950. This situation coincides with that depicted previously (Chart 2) for the highest-salaried individuals in the same firms. Clearly, corporations have come to rely much more heavily on noncurrent—and less severely taxed—forms of reward for men who are to be compensated at very high levels. The degree to which the emphasis has shifted since the 1940's is nonetheless rather surprising and strongly indicates the inappropriateness of considering only salary and bonus in any discussion of executive rewards.

A second conclusion which the data suggest is also one which, a priori, might not have been anticipated: pensions have become less important in the pay package over the years. From 1940 through 1949 their current income equivalents amounted to 26 per cent of all compensation, but since 1955 the percentage has dropped to 15. It is not that pensions in themselves are less valuable than they used to be; the average annual current equivalents for the two periods are approximately \$20,000 and \$31,000, respectively. It is rather that stock options, deferred compensation, and profit-sharing plans have grown in value much more rapidly. In relation to after-tax salary and bonus alone, pensions have been somewhat larger in recent years than they were in the 1940's—39 per cent vs. 36 per cent—but the changes in the other major components of the pay package which have taken place over time have appreciably diminished the role which pensions play in the over-all structure of rewards.

The pattern of the current income equivalents over the relevant interval is worth noting. Several peaks in the figures can be detected:

¹² In these tabulations, the current income equivalents of deferred compensation and profit-sharing plans are combined in order to reduce the number of categories of compensation that are recorded and make the various tables and charts easier to read. No important conclusions are obscured by this simplification, and it will therefore be maintained in succeeding sections as well.

TABLE 4

Elements of After-Tax Compensation, Top Executives, 1940-63
(dollars)

Year	Total	Salary and Bonus	Pension	Deferred Compensa- tion and Profit- Sharing	Stock Options
1940	101,979	76,517 (75)	25,299 (25)	163 (0)	— (0)
1941	91,535	65,804 (72)	25,424 (28)	209 (0)	98 (0)
1942	65,960	49,627 (75)	16,061 (25)	272 (0)	— (0)
1943	56,467	42,523 (76)	13,675 (24)	269 (0)	— (0)
1944	63,673	41,795 (66)	21,614 (34)	264 (0)	— (0)
1945	61,632	41,221 (67)	20,112 (33)	299 (0)	— (0)
1946	69,043	48,569 (70)	18,951 (28)	1,523 (2)	— (0)
1947	78,317	51,497 (66)	24,150 (31)	2,670 (3)	— (0)
1948	99,756	75,201 (75)	20,883 (21)	2,829 (3)	843 (1)
1949	105,311	78,767 (75)	18,259 (17)	7,242 (7)	1,043 (1)
1950	122,790	79,852 (65)	30,741 (25)	9,755 (8)	2,442 (2)
1951	109,341	74,623 (68)	24,469 (23)	2,238 (2)	8,011 (7)
1952	116,657	71,927 (62)	22,459 (19)	3,755 (3)	18,516 (16)
1953	131,782	73,100 (56)	25,644 (20)	6,975 (5)	26,063 (20)
1954	143,470	78,353 (54)	26,719 (19)	12,610 (9)	25,788 (18)
1955	214,430	79,478 (37)	46,822 (22)	13,514 (6)	74,616 (35)
1956	235,674	81,347 (35)	38,385 (16)	19,425 (8)	96,517 (41)
1957	227,227	80,736 (36)	39,733 (17)	23,507 (10)	83,251 (37)
1958	169,436	80,985 (48)	31,618 (19)	19,488 (11)	37,345 (22)
1959	211,049	82,167 (39)	31,768 (15)	21,749 (10)	75,365 (36)
1960	221,711	80,299 (36)	28,619 (13)	21,546 (10)	91,247 (41)
1961	204,274	80,297 (39)	19,236 (9)	33,922 (17)	70,819 (35)
1962	224,889	79,112 (35)	26,684 (12)	32,265 (14)	86,828 (39)
1963	187,279	83,073 (44)	18,726 (10)	27,398 (15)	58,082 (31)
Averages:					
1940-49	79,367	57,152 (72)	20,443 (26)	1,574 (2)	198 (0)
1955-63	210,663	80,833 (38)	31,288 (15)	23,645 (11)	74,897 (36)

NOTE: Figures in parentheses denote percentages of total each year.

in 1940 and 1941, in 1944 and 1945, in 1950, and in 1955 through 1957. In each case these peaks coincide with a wave either of pension plan adoptions by the sample corporations or of liberalizations in the benefit formulas of plans already in effect. Thus, in the early 1940's most firms were introducing pensions for the first time. Late in World War II a second major surge of adoptions occurred. This was followed in many companies by two rounds of benefit increases, some of which took the form of adding a second and separate pension plan to the existing one. in the early and middle 1950's. It should be noted that the 1944

CHART 5

*Average After-Tax Compensation Breakdown,
Top Executive, 1940-63*

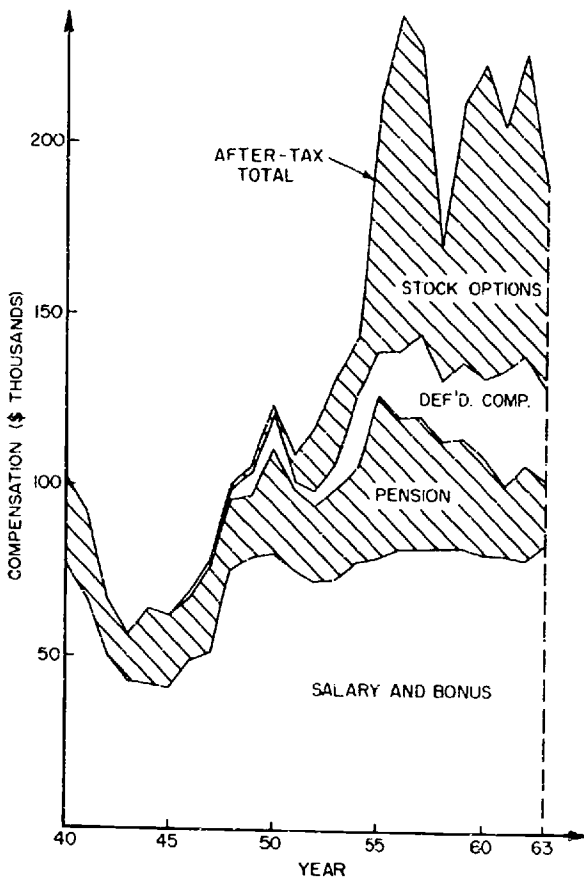
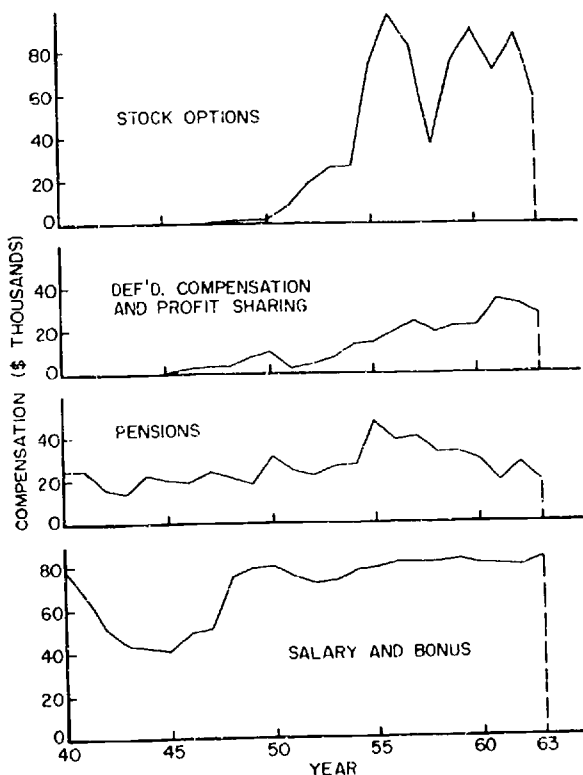


CHART 6

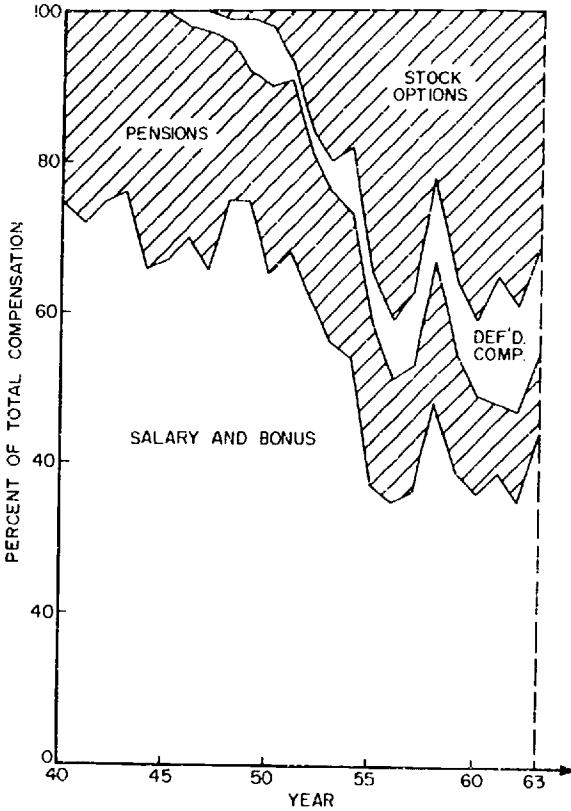
Items of After-Tax Compensation, Top Executive, 1940-63

and 1945 pension current equivalent figures appear less significant than they really are in this connection. Just as many of the pensions adopted during those years were reactions to the wartime ceiling on other rewards and to the high tax rates then in effect, so the pensions themselves were less valuable in after-tax terms because of the impact of the same tax rates on the expected postretirement income they would provide.¹³ The other concentrations of adoptions and benefit increases took place under less constrained circumstances.

¹³ The assumption throughout the computations, it will be recalled, is that the tax rates of the year for which current income equivalents are being determined are expected by the executives under consideration to continue indefinitely. The appropriateness of an assumption of this sort is perhaps most open to question under high wartime tax conditions. The speculations necessary to justify a different set of expectations on the part of the relevant individuals, however, strongly favored maintaining that assumption in every year.

CHART 7

*Average After-Tax Compensation Breakdown, Top Executive
(Percentage Composition), 1940-63*



The fact that the resulting pension history is in consequence a series of cycles around a trend rather than a continually rising function is explained by a phenomenon which was pointed out earlier in the numerical example in Chapter 6. If an executive should happen to be awarded a pension for the first time—or should happen to enjoy a substantial increase in the benefits promised him—in a year when he is nearing retirement age, the current income equivalent of that promise is quite large. Therefore, each time we observe a wave of new pension plans or benefit improvements, the older executives in the sample contribute immediately a very sizeable increase to the aggregate pension current

equivalent figures. Those executives then retire after several years, and the inclusion of their younger replacements in the sample brings the averages back down again, since the effect of a pension change on the latter's annual current equivalents is not so pronounced.¹⁴ All five top executives taken together present a greater range of ages and circumstances, and the variations over time in the pension figures for that group are somewhat more modest, as we shall see. In any event, while peaks in the pension data are valid symptoms of changes in retirement benefit promises, averages over a span of years are better bases from which to draw conclusions about secular trends.

Table 4 and the accompanying charts make evident the growing significance of deferred compensation, profit-sharing, and stock option plans. For all intents and purposes, none of these devices appeared in the compensation package until after World War II. Even as late as 1951 they accounted for just 9 per cent of the total after-tax annual compensation received by the sample executives. Since 1955, however, they have emerged as major elements in the reward structure, generating fully 47 per cent of the remuneration realized in the final nine years of the study. Stock options alone provided 36 per cent of the total and were, in fact, as important a form of reward as salary and bonus during that period. If we look at Chart 5, it seems fair to conclude that the introduction and expanded utilization of these three instruments were the only real sources of growth in top executive compensation over the last quarter century. Salaries, bonuses, and pension benefits combined just about kept pace with the personal income tax increases experienced since the early 1940's and would alone have done little more than preserve the pre-World War II level of managerial remuneration.

The key attribute of the newer deferred and contingent rewards is, of course, their volatility. This characteristic shows up quite explicitly, especially in Chart 6, when the pay package is dissected, but its implications have already been explored and need not be re-examined. Attention should, however, be called to the fact that we now see that approximately half of the typical top executive's total remuneration in recent years consisted of essentially ownership-oriented rewards. Whatever the behavioral consequences of an ownership attitude may be, they

¹⁴ A similar situation was noted in connection with average salary data.

certainly should be encouraged by a compensation framework weighted this heavily in the direction of such devices. The same weighting also has implications in terms of effective tax progression. Since capital gains rates apply to the income generated by most of these arrangements, it is clear that only a slight majority of the after-tax rewards enjoyed by corporate chief executives nowadays come from sources subject to the high marginal rates of the statutory personal income tax schedule.

Composition of the Package: Top Five Executives

The collective experience of the five highest-paid executives in each firm in the sample is generally similar, as is shown by Table 5 and Charts 8 through 10. Total after-tax compensation grew at about the same rate as in the case of top executives, but current remuneration accounted for a greater share of the growth. This result is consistent with the finding above that the salaries and bonuses of successively lower-ranking individuals increased more rapidly over time (see Charts 1 and 2). Thus, even though the supplements to direct current remuneration introduced in the postwar period have become an important part of every executive's pay package, traditional rewards play a larger role the lower the over-all level of compensation in question.

This pattern is evident in all the computations. The aggregate after-tax remuneration received during the period 1955 through 1963 by the individuals included in Table 5 breaks down as follows:

	Per Cent
Salary and bonus	52
Pension	13
Deferred compensation and profit-sharing	8
Stock options	27

This compares with the corresponding figures for *top* executives:

	Per Cent
Salary and bonus	38
Pension	15
Deferred compensation and profit-sharing	11
Stock options	36

TABLE 5

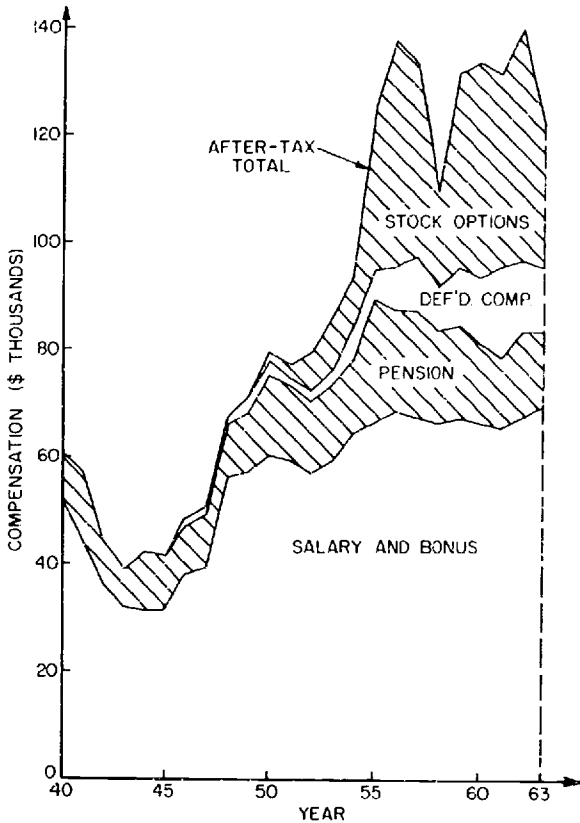
Elements of After-Tax Compensation, Top Five Executives, 1940-63
(dollars)

Year	Total	Salary and Bonus	Pension	Deferred Compensa- tion and Profit- Sharing	Stock Options
1940	59,740	51,044 (85)	8,627 (15)	32 (0)	37 (0)
1941	56,885	44,039 (78)	12,732 (22)	41 (0)	73 (0)
1942	44,375	36,390 (82)	7,923 (18)	54 (0)	8 (0)
1943	38,913	31,550 (81)	7,309 (19)	54 (0)	— (0)
1944	41,873	31,389 (75)	10,432 (25)	52 (0)	— (0)
1945	41,329	31,580 (77)	9,667 (23)	82 (0)	— (0)
1946	47,878	38,055 (80)	9,141 (19)	682 (1)	— (0)
1947	49,989	38,851 (78)	10,455 (21)	680 (1)	3 (0)
1948	67,444	55,636 (83)	10,677 (16)	916 (1)	215 (0)
1949	70,825	57,433 (81)	10,667 (15)	2,476 (4)	249 (0)
1950	79,011	60,266 (76)	14,970 (19)	3,073 (4)	702 (1)
1951	77,316	59,104 (76)	13,943 (18)	1,406 (2)	2,863 (4)
1952	79,450	56,783 (72)	12,826 (16)	2,459 (3)	7,382 (9)
1953	86,181	59,214 (69)	13,993 (16)	3,131 (4)	9,843 (11)
1954	93,076	64,135 (69)	13,519 (15)	5,929 (6)	9,493 (10)
1955	125,204	66,058 (53)	23,274 (18)	5,028 (4)	30,844 (25)
1956	136,960	68,009 (50)	19,045 (14)	8,215 (6)	41,691 (30)
1957	133,315	67,430 (51)	19,807 (15)	9,954 (7)	36,124 (27)
1958	109,335	65,778 (60)	16,964 (15)	8,461 (8)	18,132 (17)
1959	131,247	66,924 (51)	16,583 (13)	11,494 (9)	36,246 (27)
1960	133,249	65,971 (49)	15,447 (12)	11,899 (9)	39,932 (30)
1961	131,361	65,295 (50)	12,944 (10)	16,640 (13)	36,482 (28)
1962	138,754	67,052 (48)	16,112 (12)	12,828 (9)	42,762 (31)
1963	121,039	68,883 (57)	13,922 (11)	12,099 (10)	26,135 (22)
Averages:					
1940-49	51,925	41,597 (80)	9,763 (19)	507 (1)	58 (0)
1955-63	128,940	66,822 (52)	17,122 (13)	10,735 (8)	34,261 (27)

NOTE: Figures in parentheses denote percentages of total each year.

CHART 8

After-Tax Compensation Breakdown, Top Five Executives, 1940-63

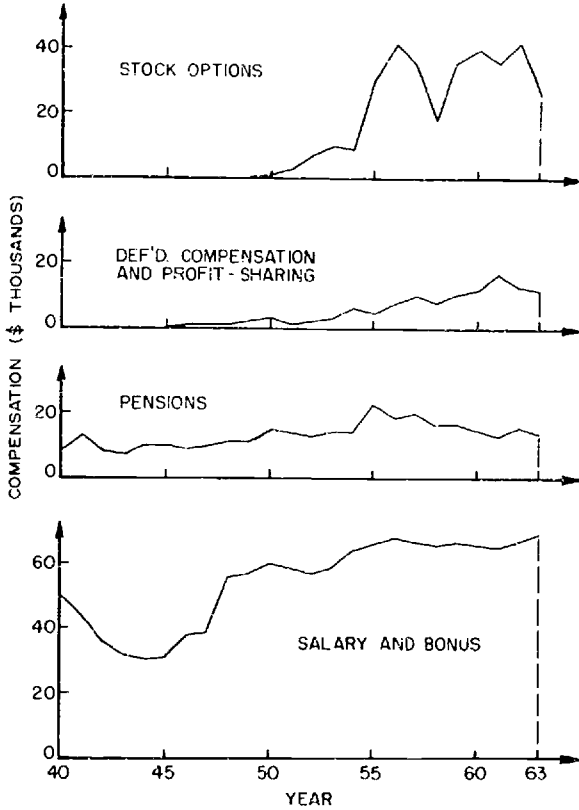


More interesting at the moment, however, is the fact that the same pronounced shift toward ownership-oriented rewards—and away from salary and bonus—has taken place for these men as well. From 1940 to 1949, stock options, deferred compensation, and profit-sharing plans together provided only about 1 per cent of all their after-tax compensation. Pensions supplied 19 per cent, and the remainder was due to salary and bonus.¹⁵ Regardless of which group we choose to consider,

¹⁵ Once again, pensions turn out to have diminished in relative importance over the years, not because of a reduction in their absolute value but because of the more rapid growth of other rewards.

CHART 9

Items of After-Tax Compensation, Top Five Executives, 1940-63



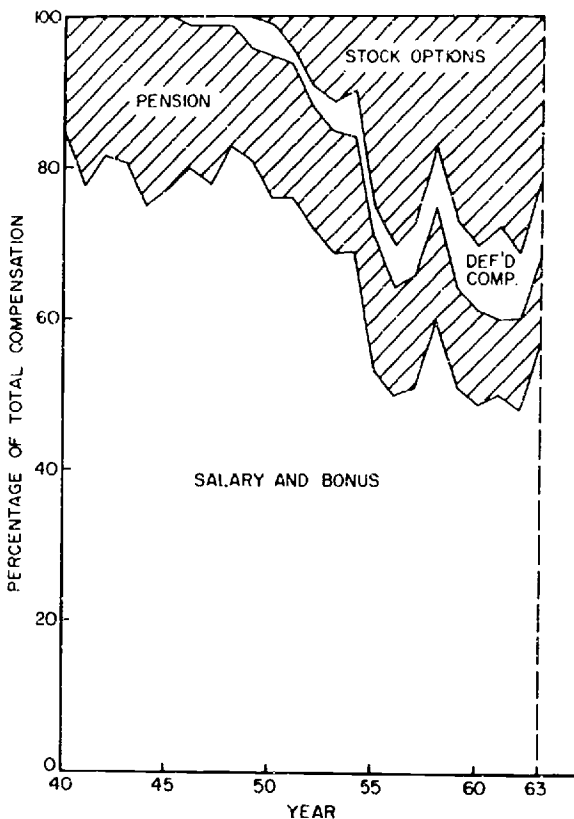
therefore, the historical patterns tell a consistent story. The composition of the pay package has changed significantly over time; it has become more volatile in the process; and its growth in after-tax value is, by and large, a result of innovations in reward.

Before-Tax Current Equivalents

Examination of the before-tax current income equivalents of the various supplements to salary and bonus sharpens these assertions and shows very clearly the impact on executive remuneration of both high ordinary-

CHART 10

*After-Tax Compensation Breakdown, Top Five Executives
(Percentage Composition), 1940-63*



income tax rates and the tax-ameliorating capacity of deferred and contingent arrangements. A computation was made of the amount of before-tax salary and/or bonus that would have been necessary in each year to provide an individual with the level of *total* after-tax income indicated by the averages obtained above for the five executive positions studied. Time series like those constructed for after-tax remuneration were then derived and are presented in Tables 6 and 7 and in Charts 11 through 14.

For example, the question was asked: How much in the way of

TABLE 6

Before-Tax Current Income Equivalents, Top Executives, 1940-63
(dollars)

Year	Salary and Bonus	Pensions	Deferred Compensation and Profit- Sharing	Stock Options	Before- Tax Total
1940	131,364 (65)	69,852 (35)	450 (0)	— (0)	201,666
1941	138,711 (62)	85,518 (38)	703 (0)	330 (0)	225,262
1942	132,679 (53)	113,320 (46)	1,919 (1)	— (0)	247,919
1943	137,631 (38)	217,240 (61)	4,194 (1)	— (0)	359,065
1944	133,399 (27)	348,033 (72)	4,170 (1)	— (0)	485,603
1945	130,063 (28)	321,898 (71)	4,786 (1)	— (0)	456,746
1946	128,263 (47)	134,431 (49)	10,804 (4)	— (0)	273,497
1947	140,486 (42)	174,928 (52)	19,340 (6)	— (0)	334,754
1948	147,436 (58)	91,298 (36)	12,368 (5)	3,681 (1)	254,783
1949	157,589 (56)	82,817 (30)	32,847 (12)	4,731 (2)	277,984
1950	145,900 (43)	139,897 (41)	44,393 (13)	11,113 (3)	341,304
1951	158,164 (33)	226,915 (47)	20,754 (4)	74,281 (16)	480,115
1952	164,667 (25)	248,516 (38)	41,550 (6)	204,885 (31)	659,618
1953	168,893 (20)	294,087 (35)	80,001 (9)	298,892 (36)	841,874
1954	170,712 (20)	275,356 (33)	129,954 (15)	265,761 (32)	841,784
1955	174,647 (11)	503,084 (31)	145,192 (9)	801,719 (49)	1,624,642
1956	181,182 (10)	415,434 (22)	210,233 (11)	1,044,585 (57)	1,851,434
1957	179,045 (10)	428,970 (24)	253,800 (15)	898,814 (51)	1,760,629
1958	179,916 (16)	335,063 (30)	206,519 (18)	395,764 (36)	1,117,262
1959	184,053 (12)	342,546 (22)	234,514 (15)	812,640 (51)	1,573,752
1960	177,517 (10)	308,421 (18)	232,197 (14)	983,349 (58)	1,701,484
1961	177,510 (12)	206,397 (14)	363,963 (24)	759,868 (50)	1,507,738
1962	173,367 (10)	287,262 (16)	348,162 (20)	934,732 (54)	1,743,523
1963	187,517 (14)	200,740 (15)	293,713 (23)	622,630 (48)	1,304,599
Average: 1955-63	179,417 (12)	336,435 (21)	254,255 (16)	806,011 (51)	1,576,118

NOTE: Figures in parentheses denote percentages of total each year.

before-tax salary and bonus would have been required in 1963 to generate for an individual the \$187,279 in aggregate after-tax compensation that was, on average, enjoyed by the highest-paid executive in each sample company? The difference between that figure and the actual (average) before-tax salary and bonus received by such executives

TABLE 7

Before-Tax Current Income Equivalents, Top Five Executives,
1940-63
(dollars)

Year	Salary and Bonus	Pensions	Deferred Compensation and Profit- Sharing	Stock Options	Before- Tax Total
1940	77,072 (78)	21,832 (22)	90 (0)	78 (0)	99,072
1941	82,750 (67)	40,550 (33)	140 (0)	223 (0)	123,664
1942	81,923 (63)	47,537 (37)	382 (0)	54 (0)	129,879
1943	81,066 (48)	86,916 (52)	838 (0)	0 (0)	168,821
1944	80,111 (37)	134,976 (63)	834 (0)	0 (0)	215,922
1945	80,630 (39)	123,361 (60)	1,182 (1)	0 (0)	205,174
1946	87,143 (58)	17,366 (59)	4,465 (3)	0 (0)	148,974
1947	90,160 (55)	67,824 (42)	4,719 (3)	17 (0)	162,722
1948	98,016 (70)	37,079 (27)	3,530 (2)	864 (1)	139,491
1949	102,569 (68)	37,507 (25)	9,893 (6)	1,065 (1)	151,035
1950	101,070 (59)	54,211 (32)	12,384 (7)	2,839 (2)	170,505
1951	113,088 (48)	92,702 (39)	9,600 (4)	21,436 (9)	236,828
1952	117,224 (38)	103,749 (34)	21,176 (7)	65,353 (21)	307,503
1953	124,485 (33)	122,756 (33)	29,577 (8)	95,522 (26)	372,340
1954	127,149 (34)	108,787 (29)	49,687 (14)	83,348 (23)	368,972
1955	132,775 (19)	217,905 (31)	49,699 (7)	297,243 (43)	697,624
1956	138,621 (17)	184,300 (23)	82,651 (10)	409,258 (50)	814,831
1957	136,818 (18)	189,802 (24)	98,946 (13)	353,423 (45)	778,991
1958	132,146 (25)	151,226 (29)	79,590 (15)	162,638 (31)	525,601
1959	135,540 (18)	157,437 (21)	112,345 (15)	353,982 (46)	759,305
1960	132,894 (17)	145,169 (19)	112,644 (14)	392,779 (50)	783,488
1961	130,692 (17)	120,426 (16)	162,271 (21)	349,496 (46)	762,885
1962	135,751 (16)	151,964 (18)	127,237 (15)	426,156 (51)	841,109
1963	141,779 (22)	125,696 (20)	116,719 (18)	257,667 (40)	641,863
Average:					
1955-63	135,224 (18)	160,436 (22)	104,678 (14)	333,627 (46)	733,966

NOTE: Figures in parentheses denote percentages of total each year.

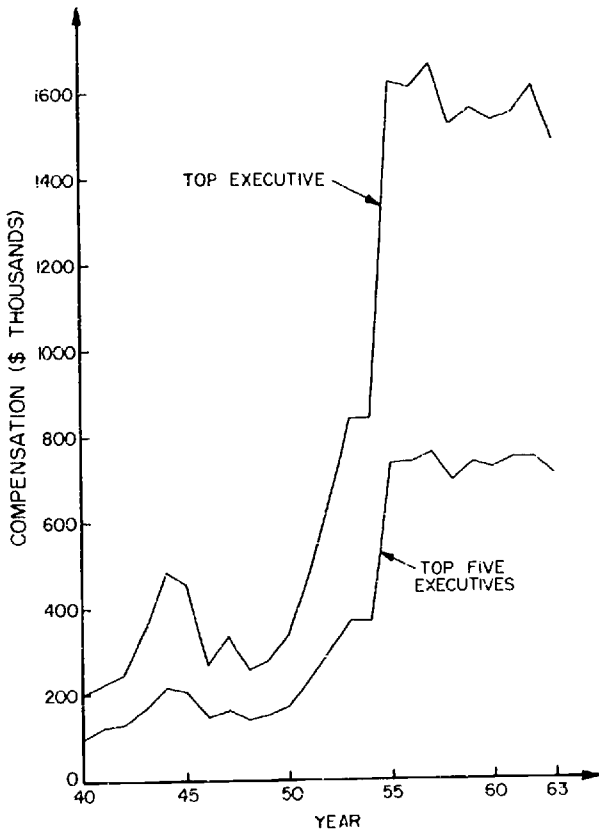
represents the combined before-tax current income equivalent of their deferred and contingent rewards, and can be apportioned among pensions, stock options, and deferred compensation according to the procedure outlined in Chapter 6. These calculations were made for each

year and for all five top executive positions. As before, the stock option data are smoothed over the period 1955-63 in the charts in order to aid the identification of trends.

We see from Chart 11 that the time pattern of the before-tax current equivalents resembles that of total after-tax compensation (Chart 4) but that each change in the figures is accentuated because of the impact of progressive tax rates. In 1940 the typical top executive's entire compensation package was worth to him, in terms of pretax salary, \$201,700. For the top five as a group, the figure was \$99,000. By 1955, and continuing thereafter through 1963, these values had increased to ap-

CHART 11

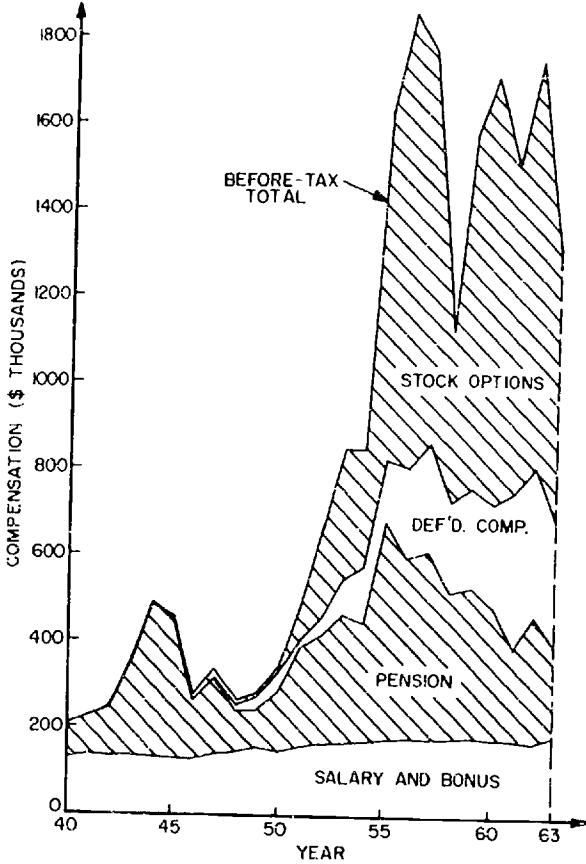
Average Total Before-Tax Compensation (Stock Option Data Smoothed), 1940-63



EXECUTIVE COMPENSATION

CHART 12

Average Before-Tax Compensation Breakdown, Top Executive, 1940-63

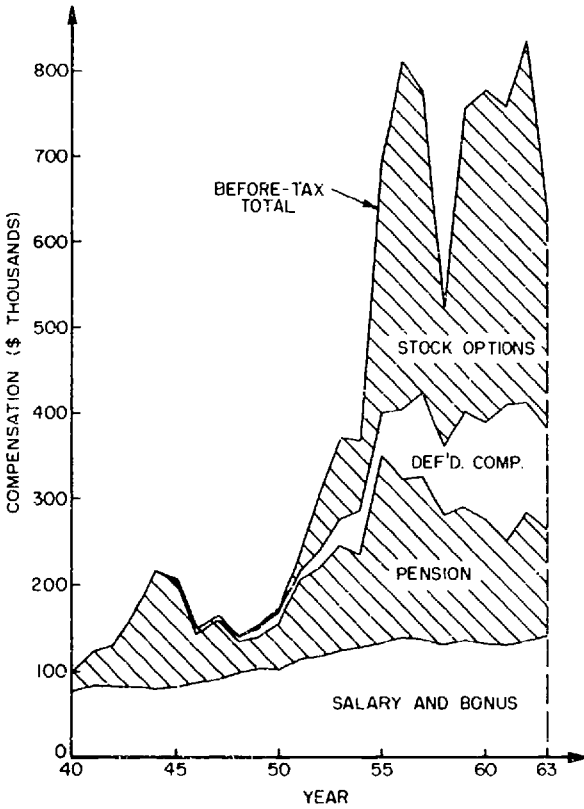


proximately \$1,576,000 and \$734,000, respectively. In effect, a per capita annual salary of over a million and a half dollars would have been necessary in recent years had the corporations in the sample attempted to reward their highest-paid executives as well by salary alone as they were in fact rewarded by all the various arrangements employed.¹⁶ This alternative would have required a level of salary about eight times the

¹⁶ Stock options themselves were worth the equivalent of over \$800,000 per year in pretax salary payments.

CHART 13

Average Before-Tax Compensation Breakdown, Top Five Executives, 1940-63



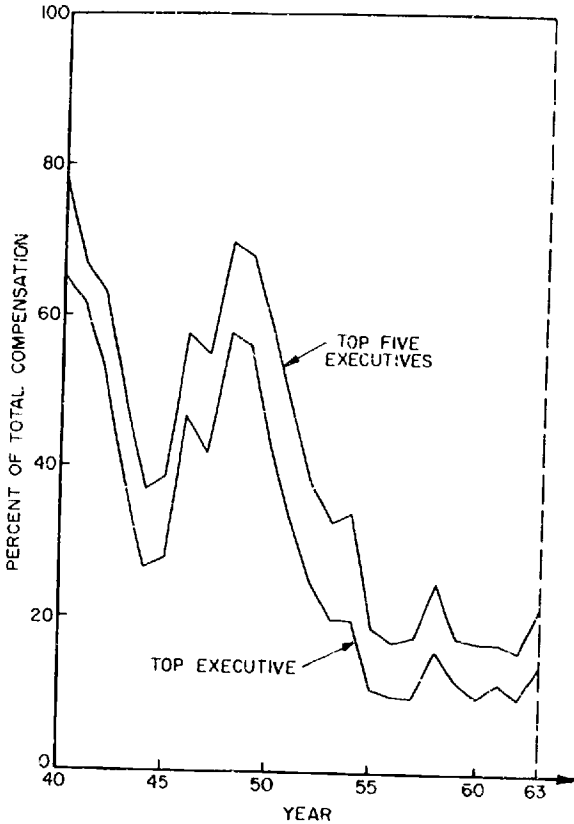
amount actually paid. In the case of the five highest-paid men together, the figure is approximately five times actual salary.¹⁷

The greater significance of deferred and contingent rewards for top executives as compared with the average for the top five shows up again in these before-tax computations. Actual salary and bonus constitute only about 12 per cent of the before-tax total calculated for the

¹⁷ It should be pointed out that if the lower personal tax rate schedule adopted by Congress in 1964 were the applicable one, somewhat smaller total before-tax payments would generate the same levels of after-tax reward. As an offset, of course, the after-tax figures themselves would be higher to begin with for the same reason.

CHART 14

Average Before-Tax Compensation Breakdown: Salary and Bonus as a Percentage of all Compensation, 1940-63



years 1955 through 1963 for the highest-paid man in each firm, but come to 18 per cent for all five combined.

In certain respects other than in their volatility, however, the behavior of the before-tax current equivalents over time does differ from that of their after-tax counterparts. The large jump in compensation in 1955 and the maintenance of the new level are again observed, but the World War II and Korean war years do not follow the previous pattern. The before-tax current equivalent of the total pay package in both periods rises—and, as it turns out, for the same reason that the after-tax figures fell. Even though after-tax compensation declined under

the press of higher tax rates, those tax rates also created a situation in which the amount of salary that would have been necessary to substitute for the relevant noncurrent rewards went up even more. In 1944 and 1945, for example, the wave of pension plan adoptions mentioned above did not generate as much in the way of equivalent after-tax earnings as it would have in the presence of lower taxes, but the results *were* sufficient to cause the before-tax equivalents of all pensions to triple within the space of two years, thereby raising significantly the before-tax current income value of the whole package. The same phenomenon recurs during the Korean war, the impetus in that instance coming primarily from increases in stock option, deferred compensation, and profit-sharing benefits.

These computations point up very dramatically the extent to which the introduction of new types of compensation subject to less severe tax treatment has allowed the heavy burden on direct current payments to be circumvented by corporations. Clearly, had such arrangements not been available, the extremely high salary levels required to duplicate the remuneration thereby provided would not have been forthcoming. Executives, in consequence, would not have been anywhere near as well rewarded as they actually were. If we want to speak of the "impact" of taxes on the compensation of top corporate executives, then, the before-tax current equivalent time series derived here permit two significant—and hitherto undocumented—conclusions: (1) had they been applied to all forms of reward, the steeply progressive personal tax rates of the post-World War II period would almost certainly have prevented any substantial growth in after-tax executive remuneration since 1940; and (2) the tax "loopholes" which pensions, stock options, and other deferred and contingent rewards represent have made possible levels of compensation that in recent years were equivalent in value to salary and bonus payments five to eight times as large as those actually paid.

Summary and Comments

The average annual before-tax salaries and bonuses associated with the five highest-paid executive positions in the nation's largest manufacturing corporations have increased by 83 per cent over the last quarter century. For the top executive in each firm alone, the increase

amounted to 53 per cent. Because of a rise in personal tax rates during the same interval, however, the corresponding after-tax increments come to only 33 and 13 per cent, respectively. As might be anticipated, a more favorable historical pattern emerges when the values of the major supplements to direct current remuneration are included in the comparisons. The *total* after-tax compensation of the executives in the sample has approximately doubled since 1940, implying a compound rate of growth of slightly in excess of 3 per cent per annum. The latter figure, while a substantial improvement on the 1 per cent or so suggested by after-tax salaries and bonuses, is still quite modest.

The growth in compensation levels which did occur was confined entirely to the ten years immediately following World War II. From 1940 to 1945 total after-tax top executive pay declined steadily, and since 1955 has exhibited no appreciable upward trend. Significantly, virtually all the observed increase in earnings is attributable to the introduction of new forms of reward rather than to an expanded utilization of traditional ones. Stock options in particular have been a key item, providing between 25 and 40 per cent of observed aggregate after-tax remuneration over the last decade. The importance of developing techniques for evaluating all the components of the pay package is underscored by these findings. Salary and bonus alone are no longer sufficient guides to executives' compensation circumstances. In fact, in terms of before-tax current income equivalents, other devices have been worth from four to seven times as much as actual salary and bonus in recent years.

A concomitant of this shift in emphasis away from direct current remuneration has been an increase in the year-to-year variability of the value of the compensation package. Since many of the newer rewards utilize shares of the employer corporation's common stock as the compensation medium, changes in market prices have come to exert a strong influence on top executives' earnings. It is not unlikely, therefore, that a greater degree of managerial identification with shareholder interests has been encouraged by these arrangements—a result which prevailing sentiment would applaud.

The substantial increase in personal income tax rates experienced since 1940 has not only contributed to the slow rate of growth of top executives' after-tax rewards but has obviously provided much of the

impetus for the wider use of the other compensation instruments described. Stock options, profit-sharing plans, pensions, and deferred-pay contracts have all been accorded differentially better tax treatment than salary and bonus, and the discovery that they have relegated the latter to a less important compensatory role than in the past is not surprising. What is surprising, however, is the degree to which this has occurred. Nowadays, salary and bonus are not merely less important rewards than before, they are actually minority components of the total pay package for most top executives. It seems fair to conclude that part of this change must have resulted from the favorable stock market conditions of the 1950's and early 1960's rather than from tax considerations alone. Deferred and contingent compensation arrangements would have been much less attractive, and almost certainly have been relied on much less heavily, had they not held out the possibility of very large profits as well as very low taxes. This suggests that if the stock market experience of the last ten or fifteen years is considered unlikely to continue, some revival of direct cash payments can be expected in the near future. A similar line of reasoning also suggests that the same stock market conditions may be at least partially responsible for the lack of growth in salaries and bonuses observed since 1955. The large profits realized by executives from options and other stock-based instruments could well have made increases in direct payments unnecessary in many firms because the levels of reward desired for top management were being attained without those increases.

A second possible explanation for the recent popularity of supplements to current remuneration is their comparative obscurity. While salary and bonus awards to executives are easily understood and can readily be appraised by shareholders when reported on in a firm's proxy statements, the same is not true of other compensation arrangements. By their nature they require for understanding both an informed and a persistent analysis from year to year. Few shareholders are equipped for such an effort, and even fewer are likely to be inclined to pursue it. Thus, a firm that wanted to reward its top executives handsomely but preferred not to advertise the fact might well seek to do so in large part by means other than salary and bonus. The extent to which a desire for concealment is a factor in corporate compensation policy is, of course, pure speculation here. Nonetheless, since the opportunity to

conceal does exist, it would be surprising if it were not taken advantage of somewhere along the line.¹⁸

Finally, a careful approach to financial planning would, in many cases, logically result in a decision to utilize certain deferred and contingent rewards more extensively. For a given level of executive remuneration, it may simply be cheaper from the corporation's standpoint to grant a stock option, for example, than a salary increase. Or, because group annuity contract premium rates are lower than those on individual policies, a company can probably provide retirement income for its employees at a lower cost than that involved in raising their wages and salaries enough to let them make equivalent arrangements on their own. Liquidity constraints could be persuasive in leading certain firms to prefer the postponement of payments permitted by a deferred compensation plan to the immediate cash drain of a salary increase.¹⁹ In short, for any one of several good reasons, it may be more efficient for a firm to utilize forms of reward other than salary and bonus rather extensively. The availability of a wide range of alternative instruments in the postwar period and the concurrent development of improved techniques of financial management could very well have encouraged the sort of restructuring of the executive pay package observed above.²⁰

The evidence presented here, then, provides a comprehensive historical profile of the size and composition of the remuneration accruing to top executives in large manufacturing firms. It is hoped that the data generated are not only valuable in themselves but will contribute to further research in this area by casting up the compensation transaction in a way that allows more meaningful statements about its development and characteristics than have previously been possible.

¹⁸ On the other hand, it must be pointed out that it is also possible that subterfuge of the kind darkly—and perhaps unfairly—hinted at here may be discouraged in some cases by its very effectiveness. If the executives who are to be the beneficiaries of such a policy do not themselves fully understand or appreciate the value of the various supplements to salary they are to be awarded, there is little to be gained by the employer corporation in attempting to trade off such rewards against salary in the compensation package.

¹⁹ Of course, the executives involved—particularly younger ones—may have liquidity constraints of their own which create counterpressures in this respect. For the individuals in the current sample, however, this is not apt to be a problem.

²⁰ In connection with this possibility, the costs of various deferred and contingent compensation arrangements are compared with the costs of their current income equivalents in some detail in Appendix M.