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

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

Publication Date: 1968

Chapter Title: Cross-Sectional Patterns

Chapter Author: Wilbur G. Lewellen

Chapter URL: http://www.nber.org/chapters/c9351

Chapter pages in book: (p. 187 - 226)

CROSS-SECTIONAL PATTERNS

Another perspective on the compensation package can be obtained by looking beyond the collective experience outlined above and focusing on the relationships *among* the executives who comprise the sample. Have the salary differentials between the top five executive positions narrowed or widened over the years? What about total compensation differentials? Do deferred and contingent rewards become more or less important the farther down in the corporate hierarehy we go? Is the pay package more voiatile at higher levels? The answers to these and other questions require a cross-sectional analysis which the preceding chapters do not provide. While such an analysis must still be confined to the small group of senior officers for whom proxy statement compensation information is available, certain trends observed within that group can perhaps be extrapolated to lower management levels as well.

Before-Tax Salaries and Bonuses

Separate before-tax salary and bonus time series for the individuals who received the five largest amounts of such payments in each firm in each year from 1940 to 1963 are recorded in Table 17 and Chart 18. The numbers contained therein represent averages across the sample companies throughout. Table 18 and Chart 19 restate the series in ratio form, using the highest current remuneration payment in every year as a base. Thus, in 1940, the executives with the second largest amounts of salary and bonus in each company received, on average, 61 per cent as much as did the top executives in the same firms in that year. The third-highest-salaried men received 51 per cent as much, and so on down the line.

Two conclusions are immediately suggested by the data. First, the

LABLE 17

		Ł	xecutive Rank	ling				
Year	First	Second	Fhird	Fourth	Fifth			
1940	137.233	83,366	69,603	60,822	51.7.12			
1941	145,281	89.678	71,570	64,059	-14.742			
1942	145.473	91,243	73.944	66,958	56.500			
1943	144.208	93,952	75,929	66.613	57.075			
1944	143.612	92,495	72.860	65,696	57.073			
1945	142.892	91.580	74,200	65,365	60.274			
1946	143.247	99.537	81.691	70,857	65 070			
1947	149.446	101,976	82.401	73,845	65 082			
1948	161,959	110,567	88.182	79,719	76.040			
1949	169,703	116,943	91.554	84.828	70.049			
1950	178.452	127.835	100,472	90,560	83 705			
1951	183.235	135.817	106.432	98,044	89.702			
1952	185,330	137.619	113.319	100,805	92.011			
1953	193,556	145.816	119,312	107.386	101 222			
1954	197.726	149.805	123,476	109.588	101.223			
1955	205.656	157.171	130,730	117.067	107 5.13			
1956	215.767	162,774	136.632	120.898	107.040			
1957	207.586	159,765	132,415	117 402	112.417			
1958	207,101	151.223	126,566	112 099	105.092			
1959	203.708	155,487	133.003	117,075	105.985			
1960	200,788	151.390	130.029	114 097	102.421			
1961	198,560	145.128	126.970	112 484	102.421			
1962	201.622	152,526	134,502	115 635	104.212			
963	210.164	160.684	139.812	122.217	109.890			

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

salary and bonus differentials between the several executive positions become successively greater the higher the level of compensation considered. This relationship holds in virtually every year studied, the only exceptions being the war years 1942, 1943. and 1944, when the gap between the fourth- and fifth-ranking executives was, on average, slightly greater than that between the third and fourth. By far the most striking salary increment in every instance is that between the top executive and the second-ranking man. In fact, this increment alone is larger in all cases than the total salary differential separating the other four men in the sample.

The second phenomenon which appears, however, is a steady narrowing of this gap over time, at least in percentage terms. In the early 1940's the annual salary and bonus awards associated with the first two executive positions in each firm differed by a little more than \$50,000 on average—or by between 35 and 40 per cent of the top executive's pay. During the last nine years of the study, when a plateau of sorts was reached, the \$50,000 differential was still pretty much intact, but it



CHART 18

Average Before-Tax Salaries and Bonuses Profile, 1940–63

ŝ

TABLE 18

Before-Tax Salaries and Bonuses in Relation to Top Executive's Salary and Bonus, 1940–63 (per cent)

		Executive	Ranking	
Year	Second	Third	Fourth	Fifth
1940	61	51	44	40
1941	62	49	44	30
1942	63	51	46	30
1943	65	53	46	01
1944	64	51	46	40
1945	64	52	46	42
1946	69	57	49	46
1947	68	55	49	44
1948	68	54	49	47
1949	69	54	50	47
1950	72	56	51	47
1951	74	58	54	49
1952	74	61	54	50
1953	75	62	55	57
1954	76	62	55	52
1955	76	64	57	57
1956	75	63	56	53
1957	77	64	57	54
1958	73	61	54	51
1959	76	65	57	54
1960	75	65	57	51
1961	73	64	57	53
1962	76	67	57	50
1963	76	67	58	52

CHART 19



Before-Tax Salaries and Bonuses in Relation to Top

constituted then only a 25 per cent increment in total current remuneration between the two positions. Thus, the men at both levels have enjoyed just about the same absolute dollar increase in annual salary and bonus since the early 1940's.

A similar development is reflected in the other three time series. Each of the lower-ranking executive positions gained relative to the highestpaid one. Moreover, they did so in such a manner as to maintain almost exactly the percentage differences among themselves. When the experience of the prewar years 1940 and 1941 is compared with that of the period 1955 through 1963, the average annual salary-plus-bonus of

Rank	1940-41	1955-63	Gain
1	100	100	
2	62	75	13
3	50	64	14
4	44	57	13
5	39	53	13

the top five executive positions in each company expressed as a per cent of the remuneration of the highest-paid officer appear as follows:

In effect, the whole pay schedule has shifted upward in relation to the top executive's current rewards. This pattern shows up even more clearly when the rates of growth over time in the indicated payments are computed. The implied compound annual rates between the terminal years 1940 and 1963 are:

Rank	Annual Growth Rate (per cent)
1	1.8
2	2.8
3	3.0
4	3.0
5	3.0

Essentially the same comparison would be obtained by considering any interval within this period.

After-Tax Salaries and Bonuses

As would be expected, the after-tax current remuneration time series tell a similar and somewhat stronger story, since the influence of a progressive personal income tax schedule is added to narrowing beforetax differentials. Tables 19 and 20 and Charts 20 and 21 present the after-tax data in both absolute and percentage terms, using the same format as above.

Again, the largest increment in average salary and bonus payments occurs between the first two executive rankings. In this case, however, that increment is considerably smaller than its before-tax counterpart.

192

TABLE 19

Executive Ranking Second Third First Fourth Year Fifth 77.143 53.521 45,766 41.159 37.627 1940 67.202 46.395 38.924 35,735 32,173 1941 52.014 38.431 33.423 31,178 27,811 1942 33,698 29,766 27,452 24.878 43,036 1943 33,465 29,190 42.959 27,388 25,210 1944 42.817 33.222 29.418 27.339 26.044 1945 51,591 40.539 35.557 32.312 30.828 1946 41.255 35.865 33.389 30,886 1947 53,050 59,448 50,191 46,489 44,804 77,775 1948 51,535 48.505 45,785 80,269 61,643 1949 65.356 55.072 50.717 47,674 83,007 1950 47,850 64.296 54.611 51.214 79,482 1951 45.752 53,499 49,090 61.167 1952 75,445 48,640 63.772 55.572 51,205 77.716 1953 52,569 83,604 69.175 60,557 55,162 1954 53.737 71.338 62.707 57,560 85.637 1955 56,089 64.277 58.583 88,177 73,094 1956 57.392 56,454 72.346 63.009 86,302 1957 56,591 54.976 61,680 69.967 86.152 1958 58.564 55,394 64.188 71.653 1959 85.767 52.846 57,806 63,003 70.685 1960 84,991 53,798 62.231 56,862 1961 84.524 68,613 54,320 65,123 58.327 1962 85.274 70,896 55.046 57.122 73,419 66.643 1963 87,503

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

TABLE 20

After-Tax Salaries and Bonuses in Relation to Top Executive's Salary and Bonus, 1940–63 (per cent)

		Executive	Ranking	
Year	Second	Third	Fourth	Fifth
1940	69	59	53	49
1941	69	58	53	48
1942	74	64	60	53
1943	78	69	64	58
1944	78	68	64	59
1945	78	69	64	61
1946	79	69	63	60
1947	78	68	63	58
1948	76	65	60	58
1949	77	64	60	57
1950	79	66	61	57
1951	81	69	64	60
1952	81	71	65	61
1953	82	72	66	63
1954	83	72	66	63
1955	83	73	67	63
1956	83	73	66	64
1957	84	73	67	65
1958	81	72	66	64
1959	84	75	68	65
1960	83	74	68	62
1961	81	74	67	64
1962	83	76	68	64
1963	84	76	65	63

CHART 20

Average After-Tax Salaries and Bonuses Profile, 1940-63



In relation to the top executive's rewards, the differential came to 31 per cent in the early 1940's and about 17 per cent from 1955 on. If we compare on that basis the changes over time on the after-tax salary and bonus profile across all five positions, the result (in per cent) is:

Rank	1940-41	1955-63	Gain
1	100	100	
2	69	83	14
3	59	74	15
4	53	67	14
5	48	64	16

CHART 21



After-Tax Salaries and Bonuses in Relation to Top Executive's, 1940–63

Thus, on average, the four men immediately below the top executive in each company experienced substantially more rapid increases in takehome pay than he did. In fact, the absolute as well as the percentage differences declined in every instance (see Table 19). While all these gains were larger than in the before-tax case, the four men still just about maintained their positions relative to each other. The after-tax annual rates of salary and bonus growth from 1940 to 1963 are:

Annual Growth Rate (per cent)
0.5
1.4
1.6
1.6
1.7

None of these, of course, is very great, confirming the judgments made in the last chapter.

Both the before- and after-tax current remuneration data therefore lead to essentially the same conclusions: (1) Salary and bonus differentials increase steadily and sharply as we examine successively higher executive levels within the corporate hierarchy. (2) There is an especially large differential between the first two positions. (3) The latter gap has narrowed significantly in percentage terms over the last quarter century. (4) The annual salaries and bonuses of the four men just below the top executive have not changed appreciably in relation to one another in that time.

Predictably, the second of these conclusions is somewhat weaker on an after-tax basis and the third somewhat stronger—a consequence in both cases of progressive personal income taxes.

The fact that the direct current remuneration of the top executive in each firm has not risen as rapidly over time as that of his immediate subordinates, of course, does not necessarily imply that by a more comprehensive index of performance he has also lost ground to them. It may well be that he has regularly enjoyed more in the way of other rewards than they have and that a different story will emerge when the rest of the compensation package is made a part of the historical comparisons.

Total After-Tax Compensation

Tables 21 and 22 and Charts 22 and 23 present time series from 1940 to 1963 for those executives who received, according to the valuation procedures employed here, the five largest amounts of *total* after-tax

TABLE 21

	Executive Ranking						
Year	First	Second	Third	Fourth	Fifth		
1940	101,979	60,355	50,080	45,262	41,023		
1941	91,535	64,014	51,669	40,964	36,245		
1942	65,960	47,778	40,460	36,278	31,400		
1943	56,467	41,394	35,809	31,930	28,964		
1944	63,673	45,991	37,392	32,689	29,622		
1945	61,632	44,624	37,001	32,942	30,446		
1946	69,043	52,210	42,818	39,201	36,120		
1947	78,317	52,072	44,136	39,500	35,919		
1948	99,756	72,274	60,239	53,740	51,210		
1949	105,311	77,738	62,293	56,901	51,881		
1950	122,790	84,192	69,584	61,925	56,565		
1951	109,341	83,806	72,920	64,304	56,209		
1952	116.657	85,777	73,412	64,281	57,122		
1953	131.782	93,651	78,843	66,983	59,644		
1954	143,470	101,337	83,193	72,480	64,901		
1955	214,711	142,318	114,199	93,925	77,955		
1956	214.054	143,996	114,157	94,262	81,181		
1957	218,872	143,992	118,499	93,073	82,821		
1958	206.987	141,588	113,916	87,065	77,762		
1959	210.581	138,979	124,813	92,399	79,539		
1960	205,361	141,439	116.882	92,892	81,311		
1961	208,352	149,837	112,862	91,533	83,115		
1962	212,958	137,538	120,568	98.234	81,964		
1963	204,094	139,243	124,547	100,965	76,973		
Average:							
1955-63	210,663	142,103	117,827	93,816	80,291		

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

NOTE: Stock option profits averaged, 1955-63.

TABLE 22

		Executive Ranking					
Year	Second	Third	Fourth	Fift			
1940	59	49	44	40			
1941	70	56	45	40			
1942	72	61	55	48			
1943	73	63	57	51			
1944	72	59	51	47			
1945	72	60	53	49			
1946	76	62	57	52			
1947	67	56	50	46			
1948	73	60	54	51			
1949	74	59	54	49			
1950	69	57	50	46			
1951	77	67	59	51			
1952	74	63	55	49			
1953	71	60	51	45			
1954	71	58	51	45			
1955	66	53	44	36			
1956	67	53	44	38			
1957	66	54	43	38			
1958	68	55	42	38			
1959	66	59	44	38			
1960	69	57	45	40			
1961	72	54	44	40			
1962	65	57	46	39			
1963	68	61	50	38			
Average:							
1955-63	67	56	45	38			

Total After-Tax Compensation in Relation to Top Executive's Compensation, 1940-63 (per cent)

NOTE: Stock option profits averaged, 1955-63.

CHART 22



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

compensation in each of the sample companies in each year. The current income equivalents of the various supplements to salary and bonus are included in these figures, and the numbers recorded represent mean values for the entire sample. Stock option profits realized during the period 1955 through 1963 are spread evenly over that period both in the tables and in the charts in order to facilitate interpretation of the results.

The issue raised in the preceding section can therefore be resolved: when the whole pay package is taken into account, the highest-paid executive *does* turn out to have done just about as well in terms of

Exacutive	Average After-Tax	Average After-Tax Compensation	Implied Annual Growth Pate	Compensation as a Per Cent of Top Executive's	
Rank	1940–41	1955-63	(per cent) a	194041	1955-63
1	\$96,757	\$210,663	3.4	100	100
2	62,185	142,103	3.6	64	67
3	50,875	117,827	3.6	53	56
4	43,113	93,816	3.4	45	45
5	38,634	80,291	3.2	40	38

rates of compensation growth as his colleagues. A comparison between the experience of the last two pre-World War II years and the plateau in total remuneration observed from 1955 on shows the following:

^a Based on a twenty-four-year interval, i.e., as if the two averages calculated applied to the terminal years 1940 and 1963.

As was suggested earlier, and as will be confirmed by the compensation breakdown presented below, this result is not difficult to explain. Deferred and contingent rewards have been employed more extensively at higher executive levels. In fact, the extent to which such arrangements appear to have evened out the disparities in compensation growth rates implied by the salary and bonus time series argues strongly for two propositions: first, that corporations make a conscious effort to consider the value of the entire pay package in planning their executives' remuneration; and second, that as part of this effort, they recognize the effect of personal income taxes very explicitly, since the total compensation data tabulated are in after-tax terms throughout. While neither of these is a terribly surprising conclusion, both now have a documentation that has heretofore been lacking.

It should be stressed, however, that it is necessary in this connection to accept the techniques used here to construct "current income equivalents" for supplements to salary and bonus as appropriate—and also to suppose that the corporations in the sample perceive the value of those supplements in much the same way. The former is perhaps easier to justify than the latter. On the other hand, the individuals who in practice make the relevant appraisals are both intelligent and economically sophisticated, and the comparisons at issue have all been cast in

CHART 23





terms of averages across fifty firms and over a period of years. It is not unreasonable, therefore, to expect that the informal, implicit—or even temporarily erroncous—compensation valuation procedures actually employed by these firms will operate to produce a consensus which approximates the "correct" one. The historical evidence certainly points in that direction—and it offers clear support for the hypothesis that the top executive compensation package is comprehensively planned to achieve a specified level of after-tax reward.

The other phenomenon which emerges from the figures concerns the compensation differentials between the five executive positions. The

pattern which the salary and bonus data exhibited again appears: each successive step upward on the corporate ladder carries with it a progressively greater increment in total after-tax remuneration. The increment between the top two positions continues to be by far the most substantial, exceeding the next three combined. In this case, however, the close similarity of the growth rates in the five compensation time series implies that the *absolute* differentials are steadily widening over time:

Increment	Increment in After-Tax Compensation	Increment in After-Tax Compensation	Increment as Per Cent of Top Executive's Compensation	
in Rank	1940-41	1955-63	1940-41	1955-63
1-2	\$34,572	\$68,560	36	33
2-3	11,310	24,276	12	12
3-4	7,762	24,011	8	11
45	4,479	13,525	5	6

Therefore, if only at the senior executive level, the total compensation profile in large manufacturing firms is, except for a scale factor, just about the same now as it was prior to World War II.¹

Composition of the Package

Separation of the pay package into its components further amplifies these conclusions. Tables 23 through 27 depict the make-up over time of the total remuneration associated with the five positions. Chart 24 summarizes that information in its most pertinent form: after-tax salary and bonus as a per cent of all after-tax compensation. The secular trend noted in Chapter 8 toward a diminishing role for direct current remuneration is, of course, still quite apparent. The more interesting feature of the data at the moment, however, is the consistently increasing importance of pensions, deferred pay, profit-sharing plans, and stock options at successively higher compensation levels. That pattern is followed in virtually every year studied and is especially marked from 1955 on.

If we compare the decade of the 1940's with the last nine years

¹ The differentials between positions 2 and 3 and between 3 and 4 have, however, tended to become more alike over the years.

LABLE 23

Year	Salary and Bonus	Pension	Deferred Compensa- tion and Profit- Sharing	Stock Options	Total
1940	76,517 (75)	25,299 (25)	163 (0)	- (())	101.979
1941	65.804 (72)	25,424 (28)	209 (0)	98 (0)	91 535
1942	49.627 (75)	16.061 (25)	272 (0)	- (0)	65.960
1943	42.523 (76)	13.675 (24)	269 (0)	(0)	56.467
1944	41.795 (66)	21.614 (34)	264 (0)	- (0)	63.673
1945	41.221 (67)	20.112 (33)	299 (0)	- (0)	61.632
1946	48,569 (70)	18.951 (28)	1.523 (2)	(0)	69.0.12
1947	51.497 (66)	24.150 (31)	2.670 (3)	- (0)	78 217
1948	75.201 (75)	20.883 (21)	2.829 (3)	842 (1)	90.756
1949	78.767 (75)	18.259 (17)	7.242 (7)	1.043 (1)	105.311
1950	79,852 (65)	30.741 (25)	9.755 (8)	2.442 (2)	122 790
1951	74.623 (68)	24.469 (23)	2.2.38 (2)	8,010 (7)	109 341
1952	7i.927 (62)	22.459 (19)	3.755 (3)	18,516 (16)	116.657
1953	73.100 (56)	25.644 (19)	6.976 (5)	26.063 (20)	131 787
1954	78,353 (54)	26.719 (19)	12.610 (9)	25.788 (18)	143.470
1955	79.478 (37)	46.822 (22)	13.513 (6)	74.616 (35)	14 430
1956	81.347 (35)	38.385 (16)	19.425 (8)	96.517 (41)	235 67.1
1957	80.736 (36)	39.733 (17)	23,508 (10)	83.252 (37)	177 177
1958	80,985 (48)	31.618 (19)	19.488 (11)	37.346 (22)	169 136
1959	82.167 (39)	31.768 (15)	21.749 (10)	75.365 (36)	211.049
1960	80.299 (36)	28.619 (13)	21.546 (10)	01.217./17	
1961	80.297 (39)	19.236 (9)	33 921 (17)	70,810,055	221./11
1962	79.113 (35)	26.684 (13)	32365 (11)	70.019 (33)	204.274
1963	83.073 (44)	18.726 (10)	27.399 (15)	58.087 (31)	224.889
Averages:					111/1 m / /
1940-49	57.152 (72)	20.443 (26)	1571 (3)	102 /05	70.347
1955-63	80.833 (38)	31.288 (15)	23.645 (11)	74,897 (36)	79,567 210,663

Elements of After-Tax Compensation. Top Executive, 1940–63 (dollars)

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

204

. .

TABLE 24

Elements of After-Tax Compensation, Second-Ranking Executive, 1940–63 (dollars)

Year	Salary and Bonus	Pension	Deferred Compensa- tion and Profit- Sharing	Stock Options	Total
	57 715 (87)	7.612 (13)			60.355
1940	46 069 (77)	17 895 (78)	- (0)	50 (0)	64 014
1941	39 191 (87)	8 587 (18)	- (0)	- (0)	47.778
194-	37 473 (78)	8.971 (72)	- (0)	- (0)	41,394
1944	32,601 (71)	13.390 (29)	(0)	- (0)	45,991
1945	33,341 (75)	11.247 (25)	36 (0)	- (0)	44.624
1946	41.213 (79)	9,724 (19)	1,273 (2)	- (0)	52,210
1947	40,958 (79)	10,999 (21)	115 (0)	- (0)	52,072
1948	58,556 (81)	12,553 (17)	1,146 (2)	19 (0)	72.274
1949	60,998 (79)	12,680 (16)	4,009 (5)	52 (0)	77.738
1950	65,179 (78)	15,369 (18)	3.408 (4)	237 (0)	84,192
1951	64,968 (78)	14.523 (17)	2.242 (3)	2.074 (2)	83.806
1952	59.270 (69)	13,636 (16)	5,938 (7)	6,933 (8)	85,777
1953	63,403 (68)	14,982 (16)	4,442 (5)	10,824 (11)	93,651
1954	69.261 (68)	14,964 (15)	7.106 (7)	10.007 (10)	101,337
1955	71,704 (53)	25,320 (19)	5,753 (4)	32,993 (24)	135,770
1956	72,788 (50)	20.158 (14)	i1,509 (8)	41.144 (28)	145.599
1957	71,808 (50)	20.663 (15)	11,981 (8)	38,800 (27)	143.251
1958	69,919 (59)	20.558 (17)	11,570 (10)	16,832 (14)	118,879
1959	67,813 (48)	17,554 (12)	14,071 (10)	43.491 (30)	142,929
1960	71,572 (48)	16,003 (11)	14.323 (9)	48.683 (32)	150,581
1961	68.363 (45)	16.383 (11)	25,550 (17)	40,157 (27)	150.453
1962	72,604 (46)	17.252 (11)	8.140 (5)	59,112 (38)	157.109
1963	72.509 (54)	17.049 (13)	10.144 (7)	34,656 (26)	134,358
Averages:					
1940-49	43,811 (79)	11,361 (20)	658 (1)	15 (0)	55.845
1955-63	71,009 (50)	18,993 (13)	12,560 (9)	39,541 (28)	142.103

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

LABLE 25

Elements of After-Tax Compensation. Third-Ranking Executive. 1940–63 (dollars)

Year	Salary and Bonus	Pension	Deferred Compensa- tion and Profit- Sharing	Stock Options	Toial
1940	46.295 (92)	3.715 (8)	- (0)	70 (0)	50.080
1941	38,935 (75)	12.635 (25)	- (0)	98 (O)	51 660
<u>1942</u>	33.601 (83)	6.859 (17)	- (0)	- (0)	.10.340
1943	30.062 (84)	5.747 (16)	- (0)	- (0)	36.900
1944	29.505 (79)	7.887 (21)	(0)	(0)	37,392
1945	29.229 (79)	7.738 (21)	33 (0)	(1)	27.001
1946	36,245 (85)	6.486 (15)	87 (0)	(0)	27,001
1947	35.874 (81)	7.822 (18)	432 (1)	8 (0)	42.018
1948	51.561 (86)	8.336 (14)	253 (0)	89 (0)	44.130
1949	51,869 (83)	9,801 (16)	572 (1)	52 (0)	67 793
1950	56.004 (80)	12.219 (18)	1.041 (2)	321 (0)	60.504
1951	54,580 (75)	14.941 (21)	1.604 (2)	1795 (0)	72.020
1952	54.270 (74)	12.788 (17)	1.091 (2)	5 263 (7)	72.920
1953	55.664 (71)	14.378 (18)	2.127 (3)	6.675 (8)	70.412
1954	61.179 (73)	10.615 (13)	5.464 (7)	5.934 (7)	78.845
1955	63.116 (58)	19.516 (18)	3.163 (3)	23 193 (21)	109,000
1956	65.479 (56)	14.746 (13)	5.528 (5)	30.081.026	108,988
1957	64.798 (55)	16.740 (14)	8.558 (7)	28 267 (24)	110./34
1958	64.678 (64)	14.209 (14)	6.624 (7)	15.683 (15)	110.302
1959	68,140 (53)	14.697 (11)	13.572 (11)	32.850 (25)	101,195
1960	66.987 (57)	12.483 (10)	9.008 (8)	29.676 (25)	110.154
1961	65.864 (57)	9.648 (8)	8.946 (8)	21.028 (23)	118.124
1962	68.273 (52)	11,989 (9)	11.903 (9)	28.220 (20)	110.386
1963	70.468 (58)	13.476 (11)	12.200(10)	24 731 (21)	130.494
Averages:			,	20001 (21)	4204074
1940-49	38.318 (83)	7 703 (17)	120 (1)	22	
1955-63	66.432 (56)	14.167 (12)	8.834 (8)	32 (0) 28.404 (24)	46.191 117.827

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

206

TABLE 26

Flements of After-Tax Compensation, Fourth-Ranking Executive. 1940–63 (dollars)

Year	Salary and Bonus	Pension	Deferred Compensa- tion and Profit- Sharing	Stock Options	Total
1940	41.713 (92)	3.465 (8)	- (0)	84 (0)	45.262
1941	36,692 (90)	4.174 (10)	- (0)	98 (0)	40.964
1942	31.620 (87)	4.619 (13)	- (0)	39 (0)	36,278
1943	27,583 (86)	4,347 (14)	- (0)	- (0)	31,930
1944	27,502 (84)	5.187 (16)	- (0)	- (0)	32,689
1945	27,699 (84)	5,203 (16)	40 (0)	- (0)	32.942
1946	32,562 (83)	6,123 (16)	516 (1)	- (0)	39.201
1947	33.653 (85)	5.673 (14)	174 (1)	- (0)	39,500
1948	47,334 (88)	6.009 (11)	290 (1)	107 (0)	53,740
1949	49.422 (87)	7.024 (12)	401 (1)	54 (0)	56.901
1950	50,704 (82)	10,179 (17)	786 (1)	256 (0)	61.925
1951	53,097 (83)	9.140 (14)	490 (1)	1.577 (2)	64.304
1952	51,117 (80)	8,458 (13)	1.310 (2)	3,396 (5)	64.281
1953	52.808 (79)	8.123 (12)	1.798 (3)	4,253 (6)	66,983
1954	57.400 (79)	8.333 (12)	3.889 (5)	2,858 (4)	72.480
1055	60 512 (67)	14.892 (17)	1.891 (2)	13.005 (14)	90,301
1956	61.902 (63)	12,525 (13)	3,204 (3)	20.858 (21)	98,491
1920	59 733 (64)	13.090 (14)	3,622 (4)	16.400 (18)	92.844
1058	58 281 (69)	9.886 (11)	2.268 (3)	14,304 (17)	84,740
1959	61,469 (65)	9,488 (10)	4.813 (5)	18,890 (20)	94.660
1060	57 939 (62)	10,596 (11)	7,728 (8)	17.794 (19)	94.057
1960	56 786 (58)	10.203 (11)	7,915 (8)	22.491 (23)	97 <u>.</u> 395
1901	58 544 (58)	14.419 (14)	8.642 (9)	18.497 (19)	100.102
1962	65,768 (72)	11,254 (12)	7.313 (8)	7.422 (8)	91.758
Averages					
1940-49	35,578 (87)	5,182 (13)	142 (0)	38 (0)	40.942
1955-63	60.104 (64)	11.817 (12)	5,266 (6)	16.629 (18)	93.816

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

FABLE 27

Elements of After-Tax Compensation, Fifth-Ranking Executive, 1940--63 (dollars)

Year	Salary and Bonus	Pension	Deferred Compensa- tion and Profit- Sharing	Stock Options	Tota!
1940	37.978 (93)	3.045 (7)	- (0)	(0)	11 022
1941	32.694 (90)	3,530 (10)	·- (())	20 (0)	41.023
1942	27.912 (89)	3.488 (11)	- (0)	- (0)	30.245
1943	25,109 (87)	3.855 (13)	- (0)	- (0)	31.400
1944	25.541 (86)	4.081 (14)	- (0)	- (0)	28,964
1945	26.412 (87)	4.034 (13)	- (0)		27.011
1946	31.688 (88)	4.423 (12)	10 (0)	- (0)	20.446
1947	32,272 (90)	3.630 (10)	8 (0)	9 (0)	36,120
1948	45,529 (89)	5.605 (11)	58 (0)	17 (0)	30,919
1949	46.108 (89)	5,570 (11)	156 (0)	46 (0)	51.881
1950	49.589 (88)	6.343 (11)	379 (1)	254 (0)	56.575
1951	48.262 (86)	6.646 (12)	439 (1)	867 (1)	20.262
1952	47.330 (83)	6,789 (12)	202 (0)	2 802 (1)	20,209
1953	51.096 (86)	6.831 (11)	323(1)	1394(2)	50.44
1954	54,476 (84)	6.964 (11)	582 (1)	2,879 (4)	59,644 64 901
1955	55.481 (72)	9.822 (13)	816 (1)	10.411.71.0	76 631
1956	58.528 (66)	9,409 (11)	1.409 (2)	18.954 (01)	10.031
1957	60.075 (71)	8,810 (10)	2.102 (3)	13.003 (14)	88.300
958	55.025 (76)	8.547 (12)	2355(3)	6.406 (10)	84,889
959	55.032 (70)	9.408 (12)	3.264 (4)	10.633 (14)	72.423
960	53.061 (65)	9.543 (12)	6 872 (8)	12 367 (15)	01 7 45
961	55.163 (62)	9.250 (11)	6 867 (8)	17.019 (13)	81./43
962	56.725 (70)	10.218 (12)	3 185 (4)	11.015 (19)	88.298
963	52,599 (74)	9.103 (13)	3.436 (5)	5.786 (8)	81.174
verages:			• •	8.700 (a)	70,924
940-49	33.124 (89)	4.126 (11)	22 (0)	0	
955-63	55.743 (69)	9.346 (12)	3.367 (4)	9 (0) 11.835 (15)	37.282

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

208

CHART 24

After-Tax Salary and Bonus as a Percentage of Total After-Tax Compensation, 1940–63



recorded, the breakdown of the total after-tax remuneration received in each of those periods is as follows:

Executive	Salary and Bonus as Per Cent of All Compensation				
Rank	1940-49	1955-63			
1	72	38			
2	79	50			
3	83	56			
4	87	64			
5	89	69			

Supplements to salary and bonus therefore turn out to be twice as important in recent years for the top executive in each company as for the fifth-ranking man, and more than twice as important as for his own pre-1950 predecessors.

The same relationship can be seen to hold not only for the several deferred and contingent arrangements combined but for each one individually. While the volatility of stock option profits pulls the comparisons somewhat out of line in certain years, the result is unmistakable if the data are averaged over any period of time: *each* device becomes steadily more valuable in relation to total compensation at progressively higher executive positions. For the interval 1955 through 1963 the profile is: ²

		As a Per Cent of All Compensation			
Executive Rank	Pensions	Deferred Compensation and Profit-Sharing	Stock Options		
1	15	11			
2	13	0	36		
3	12	2	28		
4	12	8	24		
5	12	6	18		
	12	4	15		

If the same items are expressed instead as a percentage of after-tax salary and bonus, the pattern is even more pronounced:

	Value as a Per Cent of Salary a	and Bonus:
Pensions	Deferred Compensation	Stock

29	
L /	0.2
18	93
10	56
13	43
9	28
6	21
	18 13 9 6

² Similar comparisons for other periods would not be meaningful, since it was not until the mid-1950's that many of these arrangements began to be widely used.

210

Executive

The increasing emphasis on stock options in particular has a very powerful effect on the over-all results, since they were by far the most sizeable adjunct to current remuneration during this period. Indeed, they were so profitable that "adjunct" is really too mild a description.

It is also worth noting that the value of an individual's prospective pension benefits increases in importance as compared with his salary and bonus at successively higher levels just as do the other arrangements indicated. This is somewhat unexpected, because in most instances the promised benefits are specified to be a direct function of salary by the provisions of the corporation's retirement plan. The fact that the comparisons here are out an after-tax basis accounts for part of the observed progression (i.e., if pension benefits are proportional to before-tax salary, they will rise steadily in relation to after-tax salary) but certainly not all of it. The rest is apparently a "real" phenomenon resulting from differences in ages, years of employment, career salary patterns. and other factors.

The most likely explanation for such a consistent and unequivocal trend in the composition of the pay package is. of course, a reaction by firms to the heavy personal income tax burden on very large salary and bonus payments. The availability of deferred and contingent compensation devices provides them with an obvious alternative whose attractiveness increases steadily the greater the aggregate remuneration to be generated. The responses which the cross-section data identify are therefore appropriate and predictable ones.

There may, however, be another consideration which has contributed to the popularity of these devices. especially in the case of the top executives of business firms such as those examined here—and it is in connection with the *top* executive that we observe most clearly the role of various supplements in making up for a lag in the rate of growth of direct cash payments. Given the SEC's proxy statement disclosure rules, a large corporation may find it more prudent from the standpoint of shareholder or labor relations to reward its highest-paid employee by relying heavily on deferred and contingent arrangements. Even though the salaries and bonuses of the firm's other senior officials are also published each year, the largest figure reported is likely to command the

most public attention and be the focal point of any criticism. Thus the historical patterns recorded above may in part be a reflection of a concern by corporations with the appearance as well as the substance of the compensation bargain.^a

Variability of Compensation

A final aspect of the pay package which the time series above highlight is the variability of aggregate after-tax rewards from year to year. The fact that an increasing reliance on common stock-based compensation instruments has in recent years caused the value of an executive's remuneration to become more sensitive to market conditions and thereby more volatile has been pointed out on several occasions. Given now a total compensation profile across all five top executive positions, it is possible to examine the relationships among those positions in this dimension as well.

For that purpose, the period from 1955 to 1963 again seems the most appropriate on which to focus. The patterns observed in earlier years reflect the influence both of growth trends in before-tax compensation and of several changes in tax rates. The resulting variability of after-tax rewards at different executive levels in those years is, accordingly, only in small part a function of conscious compensation policy differences. After 1955, however, personal tax rates did not vary, and aggregate executive remuneration effectively reached a plateau. At the same time, those rewards which give rise to most of the volatility in which we are interested finally came into their own. The last nine years of the study therefore provide as "controlled" an environment as we are likely to find for any cross-sectional analysis.

The pattern that emerges from the data for those years is summarized in the tabulation on the following page. It turns out that, in general, the higher an executive's total compensation, the more velatile it is, both in absolute terms and in relation to average pay. This pattern is followed quite consistently as far down as the fourth-ranking executive position in each company, but seems to falter thereafter. A more extensive sample covering a greater range of management levels would

^a A similar point was made in Chapter 8.

212

Executive		Standard		Indexes	
Rank	Mean(µ)	Range(R)	Deviation(σ) ^a	R /µ	σ/μ
1	210,663	66.238	19,793	0.314	0.094
2	142,103	38,230	10,648	0.270	0.075
3	117,827	29.299	8,556	0.249	0.073
4	93,816	15,362	4,408	0.164	0.047
5	80,291	17,376	5,961	0.216	0.074

Total After-Tax Compensation: 1955-63 (dollars) Variability

^a Computed in each instance on the basis of the nine observed deviations from the 1955-63 mean.

therefore be especially useful in this case. Because the importance of ownership-oriented rewards increases steadily at higher ranks, the volatility of aggregate remuneration would normally be expected to display the same tendency. As things stand, however, it is impossible to tell whether the apparent departure from that expectation in the fifthranking position is due to some special set of circumstances related to the particular group of executives studied or is characteristic of an actual levelling-off of the degree of compensation variability at the point indicated.

The extent as well as the pattern of such variability is worth emphasizing. Even during a period when over-all compensation rates reached a plateau, the same executive position within the typical large manufacturing corporation was subject to anywhere from a 16 to a 32 per cent variation in total after-tax remuneration from one year to the next, depending on how well that corporation's performance was received by the investing public. This finding suggests a degree of stock market involvement by the executives affected which should go a long way toward encouraging an entrepreneurial attitude on their part. It is also clear that the much-maligned ⁴ stock option is primarily responsible for this development. A comparison of the fluctuations in the annual stock option "current income equivalents" observed since 1955 with the measures of variability tabulated above for the whole compensation package illustrates the latter point.

⁴ By groups other than executives, that is, See, for example: *The Stock Option Scandal*, Industrial Union Department, AFL-CIO, Washington, D.C., 1959; Erwin N. Griswold, "Are Stock Options Getting Out of Hand?," *Harvard Business Review*, November-December 1960, pp. 49-55.

Executive	Total Compensation		Stock Options		Relative Variabil	
Rank	R_{t}	σı	R_{s}	ú, ^h	R_s/R_t	σ_s/σ_1
1	\$66,238	\$19,793	\$59,171	\$17,181	0.893	0.868
2	38,230	10,648	42,280	10,894	1.106	1 0 2 2
3	29.299	8,556	22,647	6.159	0.773	0.720
4	15,362	4,408	15.069	4,289	0.981	0.720
5	17,376	5,961	13.168	4,099	0.758	0.688

^a Determined according to the nine deviations from the 1955-63 mean stock option current equivalent.

Stock options clearly exerted the major influence during this interval. In fact, the total after-tax compensation of the second-ranking executives would have been even more volatile had other rewards not operated to dampen the fluctuations that resulted from changing option profits.

Executive Ages

While the concern thus far has been with the size and form of the income enjoyed by executives, there are several other characteristics of their employment circumstances which necessarily become apparent in the course of generating data on compensation. Two of these are so easily identified and tabulated, and are sufficiently interesting, that a short digression seems in order.

Table 28 and Chart 25 indicate, for every year from 1940 to 1963, the average (mean) age of the individuals who occupied the five highestpaid executive positions in the companies studied. The figures in parentheses in Table 28 denote the number of men actually represented in the sample in each year at each of those five positions (see Appendix J).

The most striking feature of the resulting history is the fact that top executives in the late 1950's and early 1960's turn out, on average, to be about four or five years older than their predecessors of the early 1940's. The forty-seven men who were the highest-paid individuals in their respective firms in 1963 had an average age of fifty-nine years. In 1940 the comparable figure for the forty-nine men who held similar positions at that time was only fifty-five years. This pattern holds throughout. The executives occupying each of the next three lower

214

TABLE 28

Δ	verage	Age	of	Executives.	. 1940-63
-					

		Ex	ecutive Ranki	ng						
Year	First	Second	Third	Fourth	Fifth					
1940	56 (49)	53 (48)	54 (44)	53 (45)	51 (44)					
1941	56 (49)	55 (48)	54 (47)	55 (46)	52 (45)					
1942	56 (49)	55 (49)	56 (47)	55 (45)	54 (46)					
1943	57 (49)	55 (49)	56 (47)	54 (47)	55 (45)					
1944	58 (50)	58 (50)	56 (48)	55 (47)	52 (46)					
1945	59 (50)	56 (50)	56 (48)	55 (46)	54 (45)					
1946	59 (50)	57 (49)	56 (49)	56 (47)	55 (44)					
1947	59 (50)	57 (49)	57 (49)	53 (47)	54 (46)					
1948	59 (50)	57 (50)	56 (50)	55 (48)	55 (43)					
1949	59 (50)	57 (50)	56 (50)	55 (48)	56 (43)					
1950	60 (50)	58 (50)	56 (49)	57 (49)	56 (46)					
1951	59 (50)	59 (50)	57 (49)	56 (46)	54 (47)					
1952	60 (50)	58 (50)	56 (47)	57 (47)	56 (46)					
1953	60 (50)	60 (50)	56 (46)	55 (47)	55 (40)					
1954	61 (50)	59 (50)	56 (47)	57 (45)	56 (41)					
1955	62 (50)	59 (50)	58 (46)	56 (43)	56 (38)					
1956	61 (50)	61 (48)	59 (46)	56 (42)	55 (31)					
1957	61 (50)	60 (48)	57 (45)	57 (40)	55 (29)					
1958	61 (50)	58 (49)	59 (40)	56 (38)	56 (29)					
1959	61 (50)	58 (48)	59 (38)	56 (32)	55 (29)					
1960	60 (50)	59 (46)	57 (33)	57 (32)	55 (24)					
1961	59 (49)	60 (44)	58 (32)	56 (27)	57 (23)					
1962	60 (48)	59 (40)	59 (30)	57 (24)	58 (19)					
1963	60 (47)	59 (37)	58 (30)	58 (21)	60 (13)					

NOTE: Figures in parentheses denote the number of executives in the sample at each position in each year.

positions in 1963 appear to be approximately five years older than their pre-World War II counterparts, and the typical fifth-ranking executive fully eight years older.

A careful interpretation of these figures is called for before the trend which they signal can be accepted as conclusive, however. By the nature





Average Executive Ages, by Rank, 1940-63

of the process involved in collecting the sample described, the tendency toward an increasing average age in each executive rank over time will almost certainly be somewhat overstated as it stands. The more frequent gaps in the data in the later years of the study result from an inability to reconstruct the early compensation experience of individuals who did not become top executives until very recently. Since such individuals were participants in pension, deferred compensation, and profit-sharing plans for a number of years prior to their appearance in their firm's proxy statements, they had a substantial history of benefit promises which was relevant to an evaluation of their present rewards but was impossible to compile---and which eliminated them from consideration here.⁵ When eventually they did attain important executive positions, they were in most cases, certainly, younger than their immediate predecessors. Therefore, the sample depicted above may consist, in years when it drops significantly below a total of fifty men in a particular rank, of a disproportionate number of older executives. If so, the average ages calculated for those years will be higher than the true averages for a full sample of fifty. Because this situation occurs primarily in the more recent years indicated, an upward bias over time is likely to result.

Perhaps the least ambiguous way to handle this bias is simply to accept as valid only those figures which are generated by a set of observations sufficiently close to a complete sample that there can be little doubt as to their accuracy, or at least sufficiently close that some limits can be placed on the probable extent of their inaccuracy. A rule of thumb that might be appropriate for this purpose is the following: Let us suppose that the executives *missing* from the sample in recent years are five years younger on average than the ones *included*—an assumption which seems a fairly strong one. On that basis, the calculated average age of a sample of size forty will at most be one full year greater than the "real" average age of the whole group of fifty it purports to represent.^a If then the figures tabulated for each executive rank are disregarded past the point where there are no longer forty or more individuals contributing data thereto, it should be possible to make statements about developments to that point at least with considerable confidence.⁷

⁵ This problem was discussed previously in Chapter 7.

Thus, if the average age of a group of forty men is x, the average age of a group of fifty—the last ten of which are aged x = 5—is:

$$x' = \frac{40x + 10(x - 5)}{50} = x - 1.$$

⁷ Problems of this sort should show up only in connection with average age calculations. There is no reason to suspect that the compensation figures derived above might also be distorted to any significant extent. While the current income equivalents of such items as pensions and deferred compensation may be slightly overstated for a sample consisting of a greater percentage of older individuals than the "true" population, salary and bonus levels should be peculiar to the *position* rather than the individual. Further, stock options may well be used less extensively for executives nearing retirement age and, in the aggregate, might be slightly understated here, balancing in the total package any upward bias in the pension and deferred compensation figures. In no case, however, should there he any serious distortions, particularly since there are not many years in which the question arises at all. This contention is supported

The result is a slightly attenuated historical record, but a set of conclusions which are hardly less emphatic than those suggested by the raw data. They may be summarized as follows:

Executive Rank	Last Year with Forty Observations	Calculated Average Age in That Year	Average Age in 1940	Age Increase •	
1	1963	60	56	4	
2	1962	59	53	5-6	
3	1958	59	54	4-5	
4	1957	57	53	3-4	
5	1954	56	51	45	

^a The larger figure is the indicated difference from these tabulations and the lower one that difference reduced by the one-year "maximum" bias likely to result from a sample of only forty executives.

This indicates a mean increase of five years if the reported figures are accepted and four years if the smaller "adjusted" ones are preferred. It seems reasonable to believe, therefore, that the top executives in all five positions in recent years *were* noticeably older than their pre-World War II predecessors.

The other characteristic of the data which is noteworthy is the steady increase in average executive age within each year at successively higher positions. Up to the point where the averages begin to become suspect due to the probable sampling bias discussed, there is a quite consistent four- to five-year age differential between the fifth-ranking executive and the highest-paid man. Such an observation, of course, fits the notion of some sort of normal progression by an individual to higher positions in his firm with increasing age and experience.

If this phenomenon is predictable, however, the general trend toward a higher average age in *all* positions is not. Given that retirement at 65 has become a more common and more formal commitment in recent

by the marked regularity of the pattern of the compensation data among the five executive positions examined. If a bias were present, it should be expected to manifest itself in a more noticeable fashion than any of the computations thus far suggest. In the case of the fifth-ranking executive, for example, the indicated average age rose quite sharply from 1960 to 1963 as the size of the sample simultaneously declined. Nowhere in the compensation time series is there a counterpart of such a phenomenon. When any sudden increases or decreases in remuneration occur, they invariably appear in all five positions—not in just one—and they are of the same order of magnitude throughout.

218

years, the expectation might well be that senior executives would on average be younger now than they were prior to World War II. One conjures up visions of venerable and misanthropic robber barons still clutching the reins of industrial power in those earlier years but being steadily replaced over time by a youthful and energetic meritocracy of professional managers. Nonetheless, the results do not seem to support that particular view of life—indeed, they seem to contradict it.

Of the many possible explanations that might be offered, the one that has the most appeal here because it retains the general outlines of the plot suggested is the following: It could be that although executives frequently remained in active employment beyond age 65 in days gone by, they also assumed their respective positions at an earlier stage in their careers. Suppose that twenty-five years ago the top executive in most firms did not retire until he was age 68, but that he likewise became the top executive when he was only age 50. Under stable conditions a cross section of such individuals would show them to be on average 59 years old. Suppose further that nowadays every top executive retires at age 65 but that he usually does not attain that rank until he is fully 61 years old. The average age of this sort of a group would therefore be 63 years. In short, if the *frequency* of job changes among senior corporate executives has increased over time--more men now being given a chance at the top positions-the results tabulated can be rationalized despite a trend toward earlier retirement.

Job Tenure

Evidence on job tenure that would permit a test of this hypothesis is available within the current sample. The average length of time the individuals who are the five highest-paid executives in each firm typically hold their respective positions can be calculated, and any trends over time in that regard identified. A move toward significantly shorter terms of office since the early 1940's would be expected to emerge if the explanation suggested above is valid.

Table 29 presents the results of such an analysis for six different benchmark years covering the period studied. Thus, in 1950, the men who were the highest-paid executives in the sample companies had, on average, enjoyed that status for 5.1 years previously and would continue

TABLE 29

Executive Ranking	1940	1945	1950	1955	1960	1963
 Average	^r Numbe	r of Yea	- trs in Po.	sition Pr	ior to D	ate
I	-	3.5	5.1	6.0	4.6	4.9
2		2.2	3.2	2.8	3.2	3.4
3	_	1.9	2.1	2.8	2.0	3.0
4		2.0	1.6	2.6	2.5	2.5
5		1.8	1.9	2.1	2.6	3.0
Averag	e Nunb	er of Ye	rars in Pa	osition A	fter Dat	Ċ
1	8.2	5.2	4.6	2.7	1.7	_
2	4.8	3.5	3.0	1.7	1.3	
3	3.4	2.6	2.2	1.3	1.0	
4	3.3	2.2	1.9	1.6	0.9	
5	2.5	2.4	1.6	1.5	1.0	-
Tot	al Numb	er of Y	vars Posi	ition Oco	upicd	
1	n.a.	9.7	10.7	9.7	7.3	n.a.
2	n.a.	6.7	7.2	5.5	5.5	n.a.
3	n.a.	5.5	5.2	5.1	4.0	n.a.
4	n.a.	5.2	5.5	5.2	4.4	n.a.
5	n.a.	5.2	5.5	4.6	4.6	n.a.

Executive Job Tenure, by Position, 1940-63

to do so for 4.6 more—a total of 10.7 years counting 1950 itself.⁸ Since the data do not begin until 1940, of course, there is no record of the number of years served in the various positions prior to that time—and, similarly, no record of tenure past 1963. The 1945 "before" and the 1960 "after" computations are likely to be biased to a certain extent for the same reason.

The total job tenure figures listed at the bottom of the table are the pertinent ones. As it turns out, they do display some tendency to decrease over time, particularly if the 1945 figure is adjusted upward to

⁸ A similar analysis was performed on the basis of executive rankings by salary and bonus rather than total compensation. The results were almost identical.

reflect the attenuation of the data prior to 1940. The trend is hardly a very strong one, however, and is certainly not anywhere near the magnitude necessary to alone bring about a four-to-five-year change in average ages. Moreover, the 1960 figure is biased downward, and its true value would make any over-all trend look exceedingly mild. On the basis of these results, then, some other explanation must be found.

One thing that does stand out in the tabulations is the evidence that the typical top executive has a significantly longer term in office than any of his four closest subordinates. He holds his job, it seems, approximately half again as long as does the second-ranking executive and a little less than twice as long as any of the next three men—all of whom apparently have about the same tenure. This pattern is followed throughout the period under examination and shows no sign of lessening over time. The picture that emerges, therefore, is one of fairly rapid job turnover on the way to the top of the ladder but reasonable stability once it is attained.

By way of final comment, the fact that average top executive age has risen during the last quarter century has a further implication when it is considered in the context of the slow rate of growth of compensation observed over the same interval: not only have executives not experienced very substantial increases in pay, but it now seems to take each individual longer to reach a position where he can actually enjoy such increases as there are.

Differences in Rankings

The likelihood that the ranking of executives within a particular company by the size of their salary and bonus payments may not be the same as that which results from ordering them according to their *total* compensation has been alluded to earlier. The extent to which a difference in the two schedules does exist becomes apparent in the course of generating the cross-sectional comparisons just presented.

A sample consisting of the top five executives in each of fifty companies over a period of twenty-four years will contain at most 6,000 man-years of compensation data. By the nature of the available proxy statement information, 5,300 of those man-years were in fact able to be

compiled and thus comprise the sample analyzed throughout the study.⁶ The question therefore is: In how many instances would the individual occupying one of the 5,300 slots have been in a different position within his firm had the various rankings been constructed using direct cash payments as the relevant criterion ¹⁶ rather than aggregate remuneration? It turns out that there would have been a total of 2,484 such instances, implying that approximately 47 per cent of the time, salary and bonus figures are not good indexes of even the *relative* magnitude of an executive's rewards.

A second approach is to consider the number of "company-years" in which similar discrepancies occur. Out of a possible 1,200 such data units in the sample (fifty companies for twenty-four years each) a different ordering for some or all of the top five executives results in 810 cases, if current remuneration instead of total remuneration is used for the rankings.

There are a number of reasons for these differences. One that might be anticipated is that frequently a senior executive who is nearing retirement is not awarded stock option and incentive plan benefits to the same extent that his lower-salaried, and potentially more mobile. colleagues are. When the impact of those arrangements is considered, his total pay package may well emerge as less valuable than some of theirs.

Another situation is one in which a long-time top executive is kept on for several years past normal retirement age in order to lend his experience and counsel to the new generation. Since his pension benefits are by then fully determined and completely funded, there ceases to be any additional current income equivalent for him on that account,¹¹ and he is often passed over in the granting of new stock options and deferred compensation benefits. He may, however, continue to receive his firm's highest annual salary. Even if he is officially reclassified as a "consultant" and awarded a somewhat smaller annual retainer than his previous salary, he may still stand as one of the top men in the firm if judged on that basis alone, but not according to total compensation.

Differences in rankings can also arise if one executive has an espe-

222

⁹ The process is discussed in Chapter 7. The population is that listed in Table 28 and Appendix J.

¹⁰ As. of course, was done in the presentation of data on the five highestsalaried executives in each company over time.

¹¹ See the discussion of this point in Chapter 2.

cially favorable experience with his stock options, exercising them at a time when the market price of the shares involved is substantially higher than it was when other senior executives took similar action. The effect may be to raise him a notch or two in the total compensation hierarchy as compared with his position in terms of current remuneration. While it could be argued that this change is primarily a result of his investment skill—or good fortune—rather than an expression of the intent of the employer company, it is nonetheless a fact. Such executives do enjoy a higher level of remuneration than their less clever or less fortunate brethren. The value of a stock option necessarily depends in large part on the manner in which it is administered by its recipient and that attribute should be recognized in a scheme of compensation measurement and ranking.¹²

A fourth situation is that in which a difference in ages causes the aggregate remuneration of one executive to exceed that of another whose salary and bonus are somewhat greater. Suppose two individuals differ only slightly in the amount of salary and bonus they receive and in the size of the annual pension benefits they are promised, but the lower-salaried one is older by, say, five years. It is quite possible that, because the current income equivalent of the latter's pension will be spread over a shorter interval of time, it will be enough larger than the one constructed for his colleague to make the total value of his pay package greater. While again this may be considered a peculiarity of the circumstances, it is still true that the older executive, because he is closer to retirement, does in fact enjoy the larger effective reward.

Finally, of course, there is what might be termed the "normal" case: A particular individual's total remuneration turns out to be greater than that of several of his fellow executives having higher salaries and bonuses

¹² The possibility that unanticipated variations in stock option profits might account for certain changes in the rankings has a counterpart in terms of the collective experience of the men in the sample. The "plateau" in total remuneration reached in 1955 may well not have been an *intended* plateau. It could be, for example, that the rewards generated by stock options were unexpectedly large in 1955 and 1956 (see Charts 6 and 9) due to stock market conditions and that, in response, firms reduced the size not only of subsequent option grants but of other rewards in order to permit the remuneration of their top executives to average out over time to levels more like those originally aimed for. If this were the case, the historical record in terms of *desired* compensation might in fact be a steadily rising one during the 1950's even though the actual pattern exhibits a sudden increase followed by a leveling off.

224

simply because his firm quite intentionally—and for whatever reason provides him with more in the way of deferred and contingent arrangements.¹³ These are the instances which perhaps point up most clearly the desirability of adopting a comprehensive view of the pay package in attempting statements about its size and historical development. On the other hand, all the indicated possible causes of a different set of rankings are relevant and legitimate ones. They imply that every dimension of the pay package is important to an evaluation of its profile—and that this profile would be incorrectly drawn anywhere from one-half to two-thirds of the time if salary and bonus alone were used for the purpose.

Summary and Conclusions

Over the last quarter century, the annual salary-plus-bonus differentials between the top executives of large manufacturing firms and each of the men immediately below them in the corporate hierarchy have narrowed. In the case of before-tax current remuneration, this trend has occurred only in percentage terms, but after taxes both relative *and* absolute differentials have diminished. Throughout the period studied, the gap between the top executive and the second-ranking one has remained significantly greater than that between any of the other four positions recorded. In fact, the differentials increase steadily at successively higher levels of salary and bonus in every year.

When the value of the entire pay package is considered, a different history emerges. The total after-tax remuneration associated with each of the five highest-paid executive positions within the sample companies turns out to have grown at approximately the same rates since 1940. In this more meaningful sense, therefore, the senior executive compensation profile has not changed noticeably over time. Interestingly enough, that profile displays the same general characteristic as the salary and bonus schedule: the higher the executive position attained, the progressively greater the successive increases in total remuneration enjoyed.

The reason the two sets of time series differ in their historical implications is obviously the greater reliance on deferred and contingent com-

¹³ Actually, the first two situations cited above really belong in this category as well.

pensation devices at higher levels of total reward. Since 1955, only 38 per cent of the highest-paid executive's aggregate after-tax remuneration has been provided by salary and bonus payments. The comparable figures for the other four top executive positions are 50, 56, 64, and 69 per cent, respectively. *Each* of the major supplements to current remuneration follows a similar pattern: The larger an individual's total compensation, the larger as a per cent of the total are every one of those supplements.

The conclusion these results suggest is that corporations seem to have made a deliberate effort to "undo" the differential effect of progressive personal income taxes on executives.¹⁴ Indeed, that effort comes across in the data as not only deliberate but quite successful, since the persistent salary-and-bonus growth "lag" at the higher-paid executive positions has been very accurately taken care of by other devices.

A consequence of this phenomenon is the fact that the volatility of an executive's rewards increases as he attains successively higher positions within his firm. Stock options and many deferred compensation and profit-sharing plans utilize shares of the employer corporation's common stock as all or part of the compensation medium. The value of a man's pay package can therefore vary substantially from one year to the next depending on changes in investors' evaluations of his firm's performance. During the period 1955 to 1963, when such ownershiporiented rewards came into extensive use, annual changes of 16 to 32 per cent—both positive and negative—in the total remuneration associated with the same position within a firm were not uncommon, even when viewed in terms of the "average" occupant of that position. Stock options in particular accounted for much of this variability.

Information on executives' career experiences indicates that they are typically four to five years older now than were their predecessors of the early 1940's. It also appears that the higher the individual's position in his company, the longer he occupies it—the top executive in each firm enjoying by far the longest tenure of the five considered. In that connection, the size of a man's salary and bonus payments turns out to be a correct index of his standing in his firm in terms of aggregate remuneration in only about half the cases examined.

Several of the observed compensation patterns seem sufficiently well-

¹⁴Or have at least achieved results which are consistent with such an objective.

defined and reasonable that they may be extrapolated to lower management levels. A tendency toward less emphasis on deferred and contingent rewards the smaller the total remuneration to be provided is likely to appear throughout the corporation, since the need to side-sten the impact of graduated personal income taxes diminishes accordingly A steady decrease in the variability of the value of the pay package from vear to year at those lower compensation levels should also follow, although the evidence for senior executives is somewhat ambiguous in this respect. Finally, a schedule of increasing total and current remuneration increments for the individual who climbs to successively higher management positions in his firm is consistent with the usual view of the compensation structure within a corporation. The rest of the story for less visible categories of executives, particularly with regard to the rates of growth of their remuneration over time, is more difficult to speculate about from the evidence available here and requires that their experience be examined directly. The compensation profile at the top of the corporate hierarchy, however, can now be spoken of with some confidence.

226