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STOCK OWNERSHIP AND INCOME: LARGE MANUFACTURERS

SEVERAL DIMENSIONS of senior corporate executives' holdings of their employer firms' common shares are of concern in appraising the management-shareholder relationship. The magnitude of the relevant equity investments, the pattern of increases in those investments over the years, and the associated dividend and capital appreciation returns, are among the most significant features of the historical record. The experience of the top management group in the fifty firms which constitute what has been designated here the "large manufacturing" sample will be the initial focus for an examination of that record.

Stockholdings

The men in the indicated sample turn out to have been shareholders of substantial proportions in their own companies. Table 13 lists the means of the market values of the pertinent holdings as of the start of every year from 1940 to 1963. The figures were obtained by multiplying January 1 stockholdings by the corresponding January 1 market prices,[1] and data are presented for the average of both the highest-paid, and the five highest-paid, executive positions in each firm. Chart 11 depicts the findings.

We observe that during the early 1940's, the typical portfolio commitment to the common shares of one's own company ran in the neighborhood of $400,000 to $600,000 per capita for the group examined. While, even at that level, these were clearly not inconsequential investments, the same averages had reached as much

[1] Actually, the immediately preceding December 31 closing prices were used, as was noted in the methodological discussion in Chapter 2.

TABLE 13

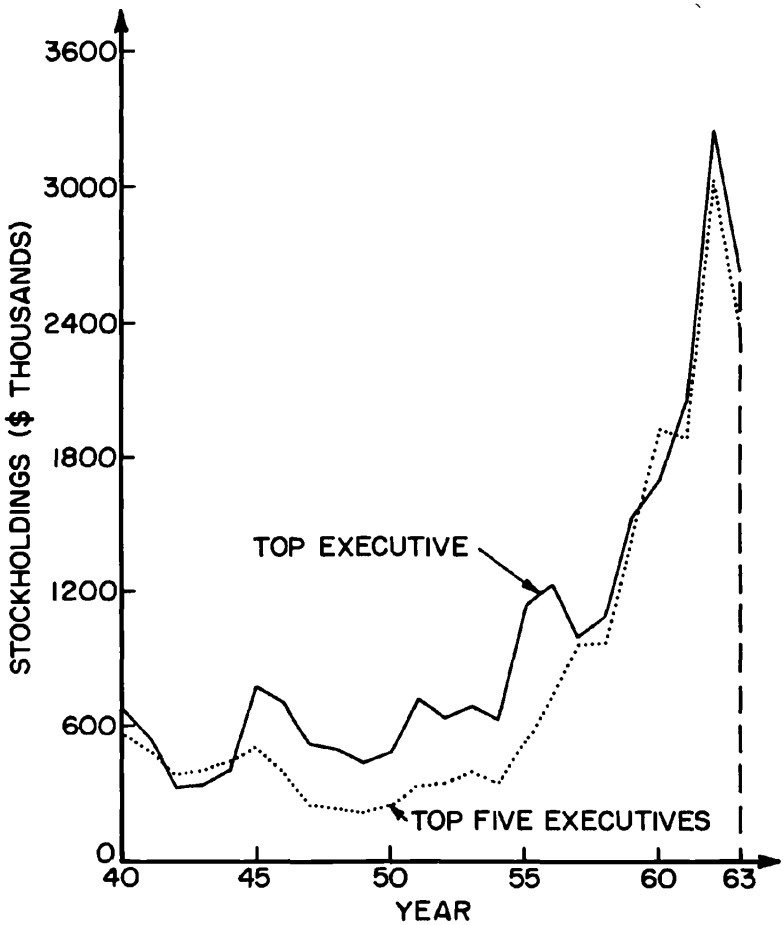
Average Market Value of Executive Stockholdings: Large Manufacturing Sample, 1940–63 (amounts in dollars)

Year	Top Executive	Top Five Executives
1940	682,502	574,743
1941	544,599	482,267
1942	315,819	363,013
1943	333,339	392,891
1944	385,107	427,821
1945	776,553	492,254
1946	708,668	389,629
1947	511,150	238,310
1948	486,597	231,318
1949	421,314	201,886
1950	469,428	232,994
1951	720,040	321,783
1952	640,840	344,438
1953	687,144	383,363
1954	634,474	341,437
1955	1,131,830	522,320
1956	1,346,068	733,359
1957	989,553	962,243
1958	1,077,381	973,250
1959	1,523,092	1,461,881
1960	1,685,288	1,932,440
1961	2,050,280	1,879,604
1962	3,256,440	3,033,896
1963	2,624,557	2,365,847

NOTE: Figures are as of January 1 of each year.

CHART 11

MARKET VALUE OF EXECUTIVE STOCKHOLDINGS:
LARGE MANUFACTURING SAMPLE, 1940-63



as $2 million to $3 million per executive by the early 1960's. This kind of exposure to the contingencies of ownership would be difficult to reject out of hand as unlikely to have some influence on the managerial decision process; it should engender some sympathy and concern for the welfare of shareholders. There appears to be no striking difference in the figures for the top and top-five categories shown, suggesting that the chief executive in a firm is by no means the only individual whose income permits him to indulge a taste for what amounts to investing in his own abilities.[2] Similarly, the volatility of the two sets of annual averages, especially in the later years tabulated, implies that both officer categories have been subject to strong and direct securities market effects on personal net worth.

Dividend Income

The dividend receipts occasioned by the recorded ownership patterns have played an important role in the executive income structure. Table 14 indicates that mean annual pre-tax dividends for the sample were in the $30,000 range prior to World War II; that they declined to approximately half that figure during the war; but that by 1963, they had risen steadily to a rate of slightly over $70,000 per man. Again, the disparities between the top and top-five findings are minor.

The relationship between these receipts and the before-tax salary-plus-bonus earnings of the same individuals is portrayed in Table 15. At the levels in question, dividends averaged roughly one-third of direct cash compensation in the early 1960's for the highest-paid executive in each company, up from 20 per cent or less in the early 1940's. The counterpart gain for the five highest-paid combined was from an initial one-third to just under one-half by the end of the interval studied. The point was made earlier that in estimating effective tax rates on managerial pay in the compensation calculations, income from sources other than employment was set equal to 15 per cent of the man's salary-plus-bonus payments for the year.[3] The numbers in Table 15 obviously imply that such an estimate is too conservative, unless it can be argued that fairly sizeable interest deductions from taxable income arise from personal loans undertaken to support investments of the magnitude at issue. That argument *will* be accepted here, for the reasons discussed in Chapter 2, but a

[2] Were the men ranked within companies by the size of their stockholdings instead of their total after-tax compensation, a sharper gradient in the ownership averages by position would, of course, emerge.

[3] See pp. 27–30.

TABLE 14

Average Dividend Receipts:
Large Manufacturing Sample, 1940–63
(amounts in dollars)

	Top Executive		Top Five Executives	
Year	Before Taxes	After Taxes	Before Taxes	After Taxes
1940	29,976	17,749	30,815	17,639
1941	28,253	13,808	30,331	14,368
1942	16,658	6,101	20,490	7,820
1943	16,135	4,976	18,379	5,836
1944	17,911	5,511	21,742	6,781
1945	34,287	10,263	21,579	6,685
1946	23,669	9,280	13,343	5,326
1947	27,150	10,297	12,580	5,178
1948	30,589	15,870	14,035	7,656
1949	31,730	16,026	14,533	7,678
1950	37,602	18,880	18,598	9,567
1951	43,068	20,385	18,848	9,514
1952	31,675	13,913	18,151	8,506
1953	32,689	14,512	18,839	8,886
1954	38,665	18,080	20,644	10,012
1955	50,559	22,918	23,090	11,051
1956	50,799	23,234	27,728	13,294
1957	33,803	15,079	30,436	14,416
1958	40,919	18,100	33,823	16,417
1959	41,662	18,404	36,044	17,506
1960	43,292	19,287	41,210	20,602
1961	44,756	19,810	45,595	22,238
1962	56,780	23,825	65,924	30,640
1963	73,466	31,212	71,363	32,755

TABLE 15

Mean Before-Tax Dividend Receipts as a Per Cent of Mean Before-Tax Salary Plus Bonus: Large Manufacturing Sample, 1940–63

Year	Top Executive	Top Five Executives
1940	22	38
1941	20	36
1942	12	24
1943	11	21
1944	13	25
1945	26	25
1946	18	15
1947	19	13
1948	20	14
1949	19	13
1950	22	16
1951	26	16
1952	18	14
1953	19	14
1954	22	15
1955	28	16
1956	27	18
1957	18	20
1958	22	24
1959	22	25
1960	23	29
1961	24	33
1962	31	46
1963	37	48

sensitivity analysis of the possible consequences of its being inappropriate will be presented below.

Those consequences relate primarily to the after-tax dividend record, which is also presented in Table 14. If executives' total currently taxable income has been understated, both the listed figures and the after-tax salary-plus-bonus receipts calculated previously will err on the high side, i.e., the attendant personal tax liabilities will have been determined in conjunction with too low a set of progressive individual marginal rate brackets. Assuming for the moment that no substantial errors have, in fact, been introduced, we find that post-tax dividend inflows grew from about \$15,000 annually for senior executives in 1940 and 1941 to \$30,000 or more by 1963.

Capital Gains

The complementary item of ownership income consists of the annual capital gains generated by the stockholdings involved. In conformity with the viewpoint expressed in Chapter 2, accrued as well as realized gains—and losses—are taken to be relevant to an appraisal of the secular impact of those holdings on personal net worth. Accordingly, the annual pre-tax increments to executives' wealth occasioned by their equity investments in their companies' common shares are shown in Table 16, together with the after-tax increments which are implied by the effective capital gains tax rate of 15 per cent that was decided upon earlier as an appropriate estimate.[4] Chart 12 depicts the after-tax figures.

Unquestionably, the annual magnitudes are impressive, particularly in the more recent years tabulated. Post-tax gains and losses were generally in the \$40,000 to \$60,000 per capita range during the early 1940's, but from the mid-1950's on, have expanded to anywhere from \$100,000 to \$750,000 each year for the typical executive. The feeling here is that changes in wealth on that scale should at least begin to sensitize even the most callous professional manager to the

[4] This estimate, it will be recalled, is less than 25 per cent as a reflection of the deferral of tax liabilities on accrued gains and the possibility of tax avoidance through retention of the stock until death. See pp. 25–27, and Bailey, *op. cit.*

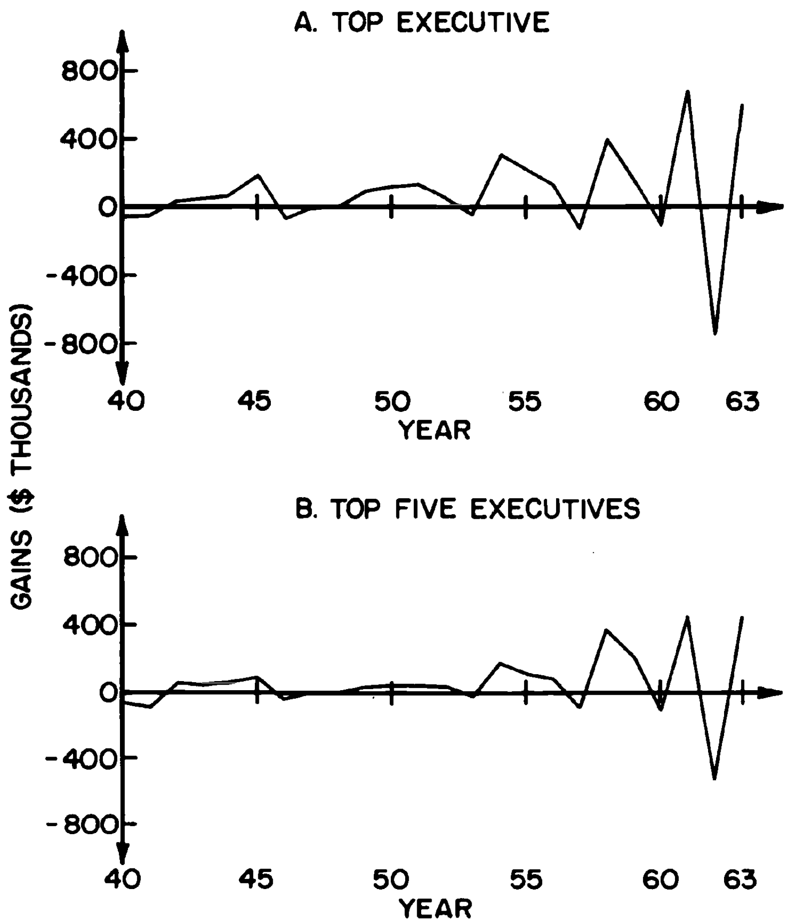
TABLE 16

Average Capital Gains:
Large Manufacturing Sample, 1940–63
(amounts in dollars)

Year	Top Executive: Before Taxes	Top Executive: After Taxes	Top Five Executives: Before Taxes	Top Five Executives: After Taxes
1940	−72,006	−61,205	−74,851	−63,623
1941	−61,455	−52,236	−102,100	−86,785
1942	41,617	35,374	73,838	62,762
1943	54,872	46,641	59,689	50,735
1944	72,792	61,873	75,313	64,016
1945	212,559	180,675	119,889	101,905
1946	−84,011	−71,409	−47,537	−40,406
1947	8,476	7,204	5,312	4,515
1948	7,139	6,068	−3,417	−2,904
1949	98,613	83,821	42,310	35,963
1950	148,628	126,333	67,403	57,292
1951	159,230	135,345	54,581	46,393
1952	57,569	48,933	40,839	34,713
1953	−58,305	−49,559	−23,930	−20,340
1954	368,532	313,252	209,798	178,328
1955	267,233	227,148	124,859	106,130
1956	158,906	135,070	97,976	83,279
1957	−149,881	−127,398	−98,778	−83,961
1958	458,493	389,719	451,948	384,155
1959	193,374	164,367	263,113	223,646
1960	−119,204	−101,323	−122,066	−103,756
1961	786,968	668,922	547,128	465,058
1962	−885,513	−752,686	−630,360	−535,806
1963	725,238	616,452	549,239	466,853

CHART 12

AVERAGE ANNUAL AFTER-TAX CAPITAL GAINS:
LARGE MANUFACTURING SAMPLE, 1940-63



shareholder viewpoint. The price fluctuations which have occurred in the securities markets since 1963 suggest that comparable annual figures would emerge if the data were extended to the present.[5]

While these findings, as they stand, identify a rather strong ownership-management income relationship, a still more accurate appreciation of that phenomenon can be provided. There is the possibility that in aggregating the various increments to personal net worth across the sample within a given year, declines in the market value of certain executives' stockholdings may offset concurrent increases experienced by their counterparts in other firms. A $100,000 capital loss by one man, for example, may cancel, in the totals, a $100,000 gain by another and lead to an under-reporting of the actual per capita change in wealth for the group.[6] On that chance, the *absolute* values of the respective annual increments were averaged and the results are displayed in Table 17. We observe that the majority of the figures are raised by this procedure, but not to any substantial degree. Apparently, the stock prices of the fifty corporations examined moved fairly consistently in the same direction throughout the interval under scrutiny. Because the absolute figures seem to address the issue of over-all impact on executives somewhat more precisely and more conveniently than do the net figures contained in Table 16, the former will be utilized hereafter in most instances when establishing comparisons with executives' compensation.

Compensation and Ownership Income

Perhaps the most illuminating such comparison is that offered by Tables 18 and 19, where the major components of executive income are brought together. On the one hand are tabulated the mean annual

[5] It may be noted that the before-tax capital gains listed do not simply represent the successive differences in the January 1 shareholdings from Table 13. They represent instead the capital gains enjoyed—or losses suffered—during the year under consideration by the individuals who, at the *beginning* of that year, occupied the five highest-paid positions in the sample companies. Since the following January 1 frequently finds a new set of men in those positions, their holdings will not ordinarily have the same market value on that date as the holdings of the group which immediately preceded them.

[6] This problem was discussed earlier, in Chapter 2.

TABLE 17

Average Absolute Capital Gains:
Large Manufacturing Sample, 1940–63
(amounts in dollars)

	Top Executive		Top Five Executives	
Year	Before Taxes	After Taxes	Before Taxes	After Taxes
1940	75,291	63,997	77,917	66,229
1941	65,152	55,379	104,467	88,796
1942	69,849	59,371	95,118	80,850
1943	99,511	84,584	82,691	70,287
1944	74,061	62,951	76,952	65,409
1945	212,559	180,675	119,889	101,905
1946	100,057	85,048	63,702	54,146
1947	95,481	81,158	34,113	28,996
1948	39,586	33,648	18,173	15,447
1949	113,136	96,165	48,447	41,179
1950	160,524	136,445	74,243	63,106
1951	181,903	154,617	66,374	56,417
1952	92,765	78,850	54,936	46,695
1953	99,107	84,240	46,732	39,722
1954	368,532	313,252	209,798	178,328
1955	284,683	241,980	132,545	112,663
1956	244,543	207,861	148,443	126,176
1957	183,564	156,029	178,707	151,900
1958	459,454	390,535	456,111	387,694
1959	261,945	222,653	351,440	298,724
1960	400,462	340,392	466,927	396,887
1961	811,500	689,775	747,756	635,592
1962	926,982	787,934	786,985	668,937
1963	739,938	628,947	559,936	475,945

TABLE 18

Compensation and Ownership Income: Large Manufacturing Sample, 1940–63; Average for the Top Executive in Each Firm

	Compensation		Ownership Income		Comparison	
Year	(1) After-Tax Fixed-Dollar Remuneration	(2) After-Tax Stock-Based Remuneration	(3) After-Tax Dividend Income	(4) Absolute After-Tax Capital Gains	(5) [(3)+(4)] / [(1)+(2)]	(6) [(2)+(3)+(4)] / (1)
1940	$ 98,755	$ 3,224	$17,749	$ 63,997	0.802	0.860
1941	88,776	2,759	13,809	55,379	0.756	0.810
1942	63,864	2,096	6,101	59,371	0.993	1.058
1943	54,467	1,994	4,976	84,584	1.586	1.681
1944	62,353	1,314	5,511	62,951	1.075	1.119
1945	60,682	950	10,263	180,675	3.098	3.162
1946	68,295	748	9,280	85,048	1.366	1.392
1947	77,693	624	10,297	81,158	1.168	1.185
1948	97,379	2,375	15,870	33,648	0.496	0.533
1949	99,450	5,861	16,026	96,165	1.065	1.187
1950	113,944	8,846	18,880	136,445	1.265	1.441
1951	99,317	10,024	20,385	154,617	1.601	1.863
1952	96,563	20,094	13,913	78,850	0.795	1.169
1953	102,072	29,710	14,512	84,240	0.749	1.259
1954	110,582	32,888	18,080	313,252	2.309	3.294
1955	130,450	83,980	22,918	241,980	1.235	2.674
1956	125,208	110,466	23,234	207,861	0.980	2.728
1957	127,552	99,675	15,079	156,029	0.753	2.123
1958	115,935	52,872	18,100	390,535	2.420	3.981
1959	121,837	92,173	18,404	222,653	1.126	2.735
1960	116,445	108,408	19,287	340,392	1.600	4.020
1961	111,100	96,019	19,810	689,775	3.426	7.251
1962	115,906	112,326	23,825	787,934	3.557	7.973
1963	107,596	82,228	31,212	628,947	3.478	6.900
Averages:						
1940–44	$ 73,643	$ 2,277	$ 9,629	$ 65,256	0.986	1.048
1960–63	112,762	99,745	23,534	611,762	2.990	6.519

TABLE 19

Compensation and Ownership Income:
Large Manufacturing Sample, 1940–63;
Average for the Top Five Executives in Each Firm

	Compensation		Ownership Income		Comparison	
Year	(1) After-Tax Fixed-Dollar Remuneration	(2) After-Tax Stock-Based Remuneration	(3) After-Tax Dividend Income	(4) Absolute After-Tax Capital Gains	(5) $\frac{[(3)+(4)]}{[(1)+(2)]}$	(6) $\frac{[(2)+(3)+(4)]}{(1)}$
1940	$56,904	$ 2,769	$17,639	$ 66,229	1.405	1.523
1941	54,757	2,262	14,368	88,796	1.809	1.925
1942	42,787	1,759	7,820	80,850	1.991	2.113
1943	37,486	1,534	5,836	70,287	1.951	2.072
1944	40,787	933	6,781	65,409	1.730	1.793
1945	40,780	667	6,685	101,905	2.620	2.679
1946	46,974	945	5,326	54,146	1.241	1.286
1947	49,306	601	5,178	28,996	0.685	0.705
1948	66,028	1,400	7,656	15,447	0.343	0.371
1949	68,202	2,575	7,678	41,179	0.690	0.754
1950	75,146	3,849	9,567	63,106	0.920	1.018
1951	72,843	4,524	9,514	56,417	0.852	0.967
1952	70,791	8,760	8,506	46,695	0.694	0.904
1953	74,242	11,740	8,886	39,722	0.565	0.813
1954	80,811	12,456	10,012	178,328	2.019	2.485
1955	90,332	34,679	11,051	112,663	0.990	1.753
1956	89,153	47,212	13,294	126,176	1.023	2.094
1957	90,023	42,820	14,416	151,900	1.252	2.323
1958	84,322	24,623	16,417	387,694	3.709	5.084
1959	85,779	45,383	17,506	298,724	2.411	4.216
1960	83,727	49,737	20,602	396,887	3.128	5.580
1961	81,657	50,015	22,238	635,592	4.996	8.669
1962	85,854	53,390	30,640	668,937	5.024	8.770
1963	84,357	37,191	32,755	475,945	4.185	6.471
Averages:						
1940–44	$46,544	$ 1,851	$10,489	$ 74,314	1.752	1.862
1960–63	83,899	47,583	26,559	544,340	4.342	7.372

after-tax earnings experienced in the form of employee remuneration by the men in the sample. They are comprised of the fixed-dollar and stock-based rewards treated in Chapter 3, the sum of which defines total after-tax compensation each year at each position. On the other side are the two elements of the same individuals' direct ownership benefits—the mean after-tax dividend receipts and the absolute after-tax capital gains just recorded. The relationships between these four sources of increments to personal net worth permit a comprehensive assessment of the role which ownership-related items play in the combined structure of managerial income.

The figures very clearly document the preeminence of stock-associated returns. Annual ownership income flows roughly matched total annual compensation for the highest-paid executives in the fifty firms in the early years studied (column 5 of Table 18). By the 1960's, however, the balance had shifted to approximately three-to-one in favor of dividends and capital gains. For the five highest-paid men as a group (column 5 of Table 19), the proportions are approximately two-to-one and four-to-one, respectively.[7] In addition to the fact that in almost *every* year the level of executives' participation in ownership returns is substantial, the historical trend runs counter to the usual view that a steady process of disengagement has occurred as a result of the professionalization of management. It will be recalled, of course, that the category of firms in question—large organizations with a wide public stock distribution and no dominant shareholder bloc—is precisely that which is most often cited as an extreme example of allegedly deleterious ownership-management separation.

The comparisons indicated, however, still understate the case. Because a portion of senior executives' earnings is itself attributable to stock-based arrangements, the appropriate focus for our purposes here should be the relationships tabulated in column 6 of the two tables. While little different from their counterparts in column 5 in

[7] The relatively greater importance of ownership elements for the top-five officer contingent follows from the evidence that the stockholding gradient in the managerial hierarchy is less pronounced than is the compensation gradient. See Tables 2 and 13.

the 1940's, these figures show that the changes in managerial net worth generated by the combination of annual dividends, capital gains, and stock-related pay schemes outweighed the only real non-ownership income source—fixed-dollar rewards—by ratios of anywhere from six-to-one to eight-to-one during the early 1960's. We, therefore, are dealing with a group of individuals who are frequently confronted with annual per capita employer-company increments to personal wealth in the $700,000 range after taxes, more than $600,000 of which can be traced in some fashion to dividend payments and market share price changes. On its surface, this does not seem the kind of circumstance which would lead one to believe that executives are apt to become indifferent to the legitimate interests of shareholders. Indeed, over time, the apparent tendency is toward a growing harmony of pecuniary objectives.

Sensitivity of the Results

The issue was raised earlier that certain of the assumptions made, and parameters chosen, in performing the computations on which the foregoing comparisons are based might reasonably be open to argument. The stipulation that 15 per cent rather than 25 per cent was a fair approximation of the effective capital gains tax rate for executives, and that their current taxable income from sources other than employment amounted to 15 per cent of direct cash salary and bonus receipts, were the two major points of concern. The second of these was, as we have seen, cast into particular doubt by the evidence of sizeable dividend income on the part of senior management. The question which must be addressed, then, is whether a different decision about either parameter would significantly alter the tone or strength of the findings just presented.

In that regard, we may inquire initially as to the impact of specifying instead the full statutory capital gains rate of 25 per cent, which would cause a uniform reduction in the after-tax figures representing the dominant portion of executives' "ownership income" flows. The following summary indicates the consequences for both the very earliest and the very latest years covered by the study:

OWNERSHIP INCOME AND COMPENSATION, 1940–44 AND 1960–63

Item	Annual Averages: Top Executive 1940–44	Top Executive 1960–63	Top Five Executives 1940–44	Top Five Executives 1960–63
After-Tax Dividends Plus Absolute After-Tax Capital Gains:				
a. 15% Gains Tax Rate	$74,885	$635,296	$84,803	$570,899
b. 25% Gains Tax Rate	57,578	539,790	65,571	480,300
Ratio of Dividends Plus Absolute Gains to Total After-Tax Executive Compensation:				
a. 15% Gains Tax Rate	0.986	2.990	1.752	4.342
b. 25% Gains Tax Rate	0.885	2.651	1.572	3.855
Ratio of Dividends Plus Absolute Gains Plus Stock-Related Compensation to Fixed-Dollar Compensation				
a. 15% Gains Tax Rate	1.048	6.519	1.862	7.372
b. 25% Gains Tax Rate	0.944	5.880	1.674	6.608

While the relative importance of ownership income necessarily diminishes under the revised tax assumption, the change is quite modest and the orders of magnitude of the key ratios are still more than adequate to support the basic contention of the analysis. Since 25 per cent is, of course, the maximum possible capital gains rate, the comparison offered here is the *least* favorable one that could be generated.

Equally reassuring results emerge from considering the potential effect of having underestimated executives' total currently taxable income. As has been discussed, too low a prediction of that figure would lead to imputations of too light a tax burden on salary and bonus payments as well as on the dividend receipts executives enjoy, causing, perhaps, a distortion in the relationships between the several items. A convenient way to test that possibility is simply to reduce both income components by a given percentage, and to examine the changes thereby produced in the comparative weights of top management's ownership returns and compensation. If we concentrate again on the key early-1940's and early-1960's periods, lowering in each instance after-tax salary plus bonus earnings (from Table 3) and after-tax dividends (Table 14), first by 10 per cent and then by 20 per cent across the board, the outcome is as portrayed in Table 20.

Whereas an increase in the assumed effective capital gains tax rate operated to dilute slightly the conclusions drawn on the preceding pages, the recognition of possible higher ordinary tax liabilities turns out to *reinforce* those conclusions very consistently. The original ratios of ownership-connected income elements to nonownership earnings are raised in every instance by the revisions. The explanation lies simply in the fact that salaries and bonuses comprise a larger share of both total and fixed-dollar managerial compensation than do dividends of aggregate ownership returns. Any change in parameters which creates a heavier tax burden on ordinary income receipts will therefore end up augmenting the relative weight of ownership items vis-à-vis employee compensation.

The approach taken here in attempting to assess the possible extent of such changes is merely a proxy for the fuller procedure of actually changing the "outside income" estimate of 15 per cent, redoing the various tax calculations, and coming up with a new set of comparisons on the basis of the modified figures. Since the effect of that procedure would necessarily be to reduce after-tax salaries, bonuses, and dividends in matching proportions, the simpler test implemented in Table 20 serves our purposes as well. Certainly, a 20 per cent drop in the after-tax figures would require a substantial increase in assumed taxable income in order to generate the higher tax levies which are implied. The consequent changes in the several ownership-compensation ratios may, accordingly, be interpreted as the extremes of the range of potential revisions. In any event, it is clear that if errors have been made in specifying too low an effective capital gains tax rate, and too low a taxable income estimate, those errors are offsetting and will, in combination, have a very minor impact on the compari-

TABLE 20

Impact of Changes in Tax Estimates: Large Manufacturing Sample, 1940–44 and 1960–63

Item	Annual Averages			
	Top Executive		Top Five Executives	
	1940–44	1960–63	1940–44	1960–63
After-Tax Salary Plus Bonus:				
a. Original Values	$55,226	$ 81,145	$38,856	$ 66,904
b. Less 10%	49,703	73,031	34,970	60,214
c. Less 20%	44,181	64,916	31,085	53,523
After-Tax Dividend Income:				
a. Original Values	9,629	23,534	10,489	26,559
b. Less 10%	8,666	21,181	9,440	23,903
c. Less 20%	7,703	18,827	8,391	21,247
Total After-Tax Compensation:				
a. Original Values	75,920	212,507	48,396	131,483
b. With Salary Down 10%	70,397	204,393	44,510	124,793
c. With Salary Down 20%	64,875	196,278	40,625	118,102
Total Ownership Income: [a]				
a. Original Values	74,885	635,296	84,803	570,899
b. With Dividends Down 10%	73,922	632,943	83,754	568,243
c. With Dividends Down 20%	72,959	630,589	82,705	565,587
Ratio of Ownership Income to Total Compensation:				
a. Original Values	0.986	2.990	1.752	4.342
b. With 10% Adjustments	1.050	3.097	1.882	4.553
c. With 20% Adjustments	1.125	3.213	2.036	4.789
Ratio of Ownership Income Plus Stock-Related Compensation to Fixed-Dollar Compensation:				
a. Original Values	1.048	6.519	1.862	7.372
b. With 10% Adjustments	1.119	7.001	2.007	7.976
c. With 20% Adjustments	1.202	7.566	2.181	8.695

[a] Using absolute capital gains figures.

sons at issue. For that reason, the original evidence seems an appropriate basis for the analysis.

Dispersion of the Data

A rather different sort of sensitivity test does, however, suggest the need for caution in relying entirely on the figures as they stand. Thus far, we have been dealing exclusively with mean values for the sample as measures of a "typical" executive's experience. In that light, if it should turn out that in particular years a small number of individuals within the group studied have owned extraordinarily large amounts of their firms' stock, those holdings might well influence the averages disproportionately. Because the sample does include various firms—DuPont, IBM, Firestone Tire, General Tire, and several others—with some degree of family owner-manager tradition, and the often attendant element of inherited wealth, the chance of a few scattered large equity portfolios distorting the findings cannot be ignored.

To guard against overstating the argument, it appears desirable, therefore, to identify and segregate any such extreme observations. For that purpose, the standard deviations of the distributions across the fifty corporations of the stockholding market values within each of the five executive positions were computed for each of the twenty-four years examined. All individuals whose holdings in a given year exceeded by two standard deviations or more the original means for their positions were then removed from the sample in that year and a new mean calculated from the remaining figures. A two-standard-deviation hurdle was chosen quite arbitrarily, reflecting its wide use in statistical testing as a criterion for specifying extreme cases. The effect, as it happened, was to eliminate from consideration an average of just over two executives at each level in the hierarchy in every year, giving rise to a reduction of roughly 5 per cent in the initial population throughout.[8] Because, in all instances, the outcome of

[8] The revised sample contains 4,996 man-year observations, down from an initial 5,241. As indicated previously, a complete sample would consist of 6,000 man-years (see Chapter 2).

subtracting two standard deviations from the original mean was a negative number, deletions from the sample occurred only at the upper end of the various annual shareholding distributions.

Ownership and Income: Revised Figures

The influence of those extraordinary values is apparent from Table 21, which lists the revised January 1 stockholding means. When these figures are compared with their counterparts in Table 13, we find that a diminution in the averages of anywhere from one-third to one-half has occurred. It would seem that, in fact, a small number of unusually large ownership positions *have* had a powerful effect. On the other hand, it is also evident that the reduced means are in no sense trivial, documenting as they do investments by senior executives in their own companies which run in excess of $1 million per capita in the later years investigated. Personal portfolio commitments of that magnitude, while unquestionably more modest than the original $2 to $3 million levels, still seem sufficient to support the underlying hypothesis of a strong and direct pecuniary link between owners and managers.

The separate elements of that link, according to the new data, are recorded in Appendix D. The dividend payments involved are down by one-third to one-half from the full-sample figures, averaging, after taxes, approximately $16,000 annually at the top executive position, and $14,000 for the top five together, in the early 1960's. The original values for both categories (Table 14) were generally in the $25,000 annual range during the same period. In addition, there is considerably less volatility in the year-to-year figures than was true before—a result which applies also to the revised stockholding market value time series. Thus, the more sizeable individual equity investments on the initial list were apparently among the more sensitive to external market conditions.

The capital gains and losses tabulated in the Appendix reflect this characteristic. The revised average absolute annual after-tax amounts are in the $30,000 to $60,000 bracket in the early 1940's, and vary

TABLE 21

Average Market Value of Executive Stockholdings: Large Manufacturing Sample, 1940–63; Extreme Values Deleted (amounts in dollars)

Year	Top Executive	Top Five Executives
1940	458,756	269,857
1941	346,365	203,914
1942	184,943	168,376
1943	179,293	155,407
1944	217,188	153,379
1945	495,168	199,317
1946	448,317	209,776
1947	305,723	134,459
1948	251,441	125,165
1949	271,248	116,639
1950	270,111	130,146
1951	468,367	194,719
1952	437,972	213,144
1953	414,473	222,259
1954	412,506	211,562
1955	808,255	365,578
1956	964,652	488,815
1957	744,453	556,992
1958	709,390	531,028
1959	1,044,818	807,896
1960	1,088,689	973,436
1961	1,134,304	795,573
1962	1,164,526	1,024,326
1963	1,152,847	861,286

NOTE: Figures are as of January 1 of each year.

from \$150,000 to \$300,000 after 1960.[9] The latter figures, in particular, represent a substantial decline from the \$500,000 or better yearly changes in wealth identified on our first pass through (Tables 16 and 17). The question, then, is whether the new findings vitiate the contention that ownership-related returns dominate the managerial income structure.

Compensation: Revised Figures

In addressing that question, it is necessary, in the interest of consistency, to perform for other income sources the same operation with regard to extremes that was applied to executives' ownership positions. Specifically, meaningful comparisons of the revised dividend and capital gains time series with employee compensation data require first the identification and deletion of extraordinary values in the annual distributions of compensation across the fifty-firm sample. A plus-or-minus 2σ cutoff standard, when imposed on the total after-tax executive pay population at each position each year, yields a reduction in sample size of approximately 6 per cent: from an original 5,241 down to 4,933 observations. Despite the somewhat larger number of deletions on this scale than was true of the stockholding profile, it happens that the impact of their removal on the subsequent averages is rather milder. Thus, there are a few more relatively unusual values in the remuneration figures, but they turn out to be *individually* less extreme than their ownership counterparts. Once again, however, all the unusual cases occur at the top of the relevant distributions, none at the lower end.

The revised annual remuneration means, and the division of those sums between fixed-dollar and stock-based rewards, are shown in Appendix D. While the total pay figures are perhaps 10 to 15 per cent below the initial averages listed in Table 2 above, they continue to suggest that aggregate executive earnings a little better than doubled during the interval examined. They also retain a fairly pronounced volatility from year to year after the mid-1950's, and document a shift

[9] These are, as before, January 1 to December 31 increments, and the effective capital gains tax rate is assumed to be 15 per cent.

over time of approximately the same dimensions toward ownership-oriented forms of compensation. Were these numbers to be used in place of the original calculations, therefore, our conclusions about the historical development of executive pay policies in large manufacturing enterprises would not be noticeably altered.

Compensation and Ownership Income: Revised Comparisons

On the other hand, the relationships between the modified remuneration averages and the similarly defined ownership income figures do suggest some departures from the earlier patterns observed. To begin with, dividends now appear to be markedly smaller in comparison with executives' salary-plus-bonus receipts than was indicated previously. Table 22 provides the evidence. We see that pre-tax dividend income from holdings of employer-company shares ran from 12 to 15 per cent of aggregate direct cash compensation immediately prior to World War II, rising to slightly above 20 per cent in the early 1960's. The original proportions (Table 15) were, in most instances, nearly twice as great. Notwithstanding these declines,[10] dividends still emerge as a significant earnings source. The new figures also display rather more stability than did their predecessors, changing from period to period in a less abrupt manner.

The full comparison between ownership returns and employee remuneration according to the revised data is presented in Tables 23 and 24 for the top, and top-five, managerial categories, respectively. We find after-tax dividends plus absolute after-tax capital gains averaging about three-fourths of annual after-tax pay for both groups in the first few years shown, but rising to some one and one-fourth to one and three-fourths times compensation from 1960 on (column 5 of the tables). When stock-based rewards are—as they logically should be—combined with direct ownership income (column 6), however, the ratios of those flows to fixed-dollar earnings once more

[10] Which, parenthetically, would tend to ameliorate the earlier concern that estimates of executives' total taxable income from all current sources may have been too conservative.

TABLE 22

Mean Before-Tax Dividend Receipts as a Per Cent of Mean Before-Tax Salary Plus Bonus: Large Manufacturing Sample, 1940–63; Extreme Values Deleted

Year	Top Executive	Top Five Executives
1940	14	15
1941	12	13
1942	8	11
1943	8	10
1944	10	9
1945	16	10
1946	13	9
1947	11	7
1948	11	8
1949	12	8
1950	13	10
1951	16	10
1952	13	9
1953	12	9
1954	15	10
1955	22	13
1956	20	13
1957	14	14
1958	16	16
1959	16	17
1960	16	18
1961	21	19
1962	20	22
1963	23	22

TABLE 23

Compensation and Ownership Income: Large Manufacturing Sample, 1940–63; Average for the Top Executive in Each Firm, Extreme Values Deleted

	Compensation		Ownership Income		Comparison	
Year	(1) After-Tax Fixed-Dollar Remuneration	(2) After-Tax Stock-Based Remuneration	(3) After-Tax Dividend Income	(4) Absolute After-Tax Capital Gains	(5) [(3)+(4)] / [(1)+(2)]	(6) [(2)+(3)+(4)] / (1)
1940	$ 81,524	$ 3,435	$11,169	$ 50,930	0.731	0.804
1941	75,202	2,876	8,150	43,888	0.666	0.730
1942	58,898	2,185	4,139	31,422	0.582	0.641
1943	52,106	2,079	3,479	64,912	1.262	1.352
1944	56,226	1,369	4,067	42,549	0.809	0.853
1945	55,414	989	6,557	138,680	2.575	2.639
1946	65,348	530	6,832	60,183	1.017	1.034
1947	66,742	664	5,902	40,840	0.693	0.710
1948	91,762	2,474	8,982	18,660	0.293	0.328
1949	92,778	4,960	9,882	49,453	0.607	0.693
1950	106,414	8,378	11,134	83,382	0.823	0.967
1951	94,955	2,522	12,255	71,881	0.863	0.913
1952	92,647	7,910	9,436	68,312	0.773	0.925
1953	101,396	12,970	9,399	47,816	0.500	0.692
1954	105,101	22,990	12,163	219,579	1.809	2.424
1955	119,424	64,855	17,630	187,706	1.114	2.262
1956	124,397	80,061	17,108	166,231	0.897	2.117
1957	128,601	80,437	12,029	122,769	0.645	1.674
1958	109,804	38,769	13,111	299,595	2.105	3.201
1959	119,954	71,946	13,259	122,346	0.707	1.730
1960	115,639	82,178	13,222	227,185	1.215	2.790
1961	111,520	73,473	17,228	314,755	1.795	3.636
1962	116,356	80,575	15,162	155,047	0.864	2.155
1963	107,672	58,708	19,301	185,759	1.232	2.450
Average:						
1940–44	$ 64,791	$ 2,389	$ 6,201	$ 46,740	0.788	0.854
1960–63	112,797	73,734	16,228	220,687	1.270	2.754

TABLE 24

Compensation and Ownership Income
Large Manufacturing Sample, 1940–63;
Average for the Top Five Executives
in Each Firm, Extreme Values Deleted

	Compensation		Ownership Income		Comparison	
Year	(1) After-Tax Fixed-Dollar Remuneration	(2) After-Tax Stock-Based Remuneration	(3) After-Tax Dividend Income	(4) Absolute After-Tax Capital Gains	(5) $\frac{[(3)+(4)]}{[(1)+(2)]}$	(6) $\frac{[(2)+(3)+(4)]}{(1)}$
1940	$51,646	$ 1,561	$ 7,361	$ 30,165	0.705	0.757
1941	47,621	1,900	5,515	25,136	0.619	0.684
1942	40,115	1,210	3,867	28,230	0.777	0.830
1943	36,404	688	2,986	34,138	1.001	1.039
1944	38,264	726	2,828	24,791	0.708	0.741
1945	38,227	612	2,901	52,511	1.427	1.466
1946	43,722	587	3,246	26,115	0.663	0.685
1947	44,464	641	2,883	16,076	0.420	0.441
1948	62,150	1,424	4,511	8,329	0.202	0.230
1949	62,792	1,685	4,583	21,000	0.397	0.434
1950	69,571	2,708	5,814	39,482	0.627	0.690
1951	68,022	2,133	5,824	32,513	0.546	0.595
1952	66,010	5,075	5,300	31,583	0.519	0.636
1953	70,285	6,964	5,589	24,297	0.387	0.524
1954	72,983	10,599	6,875	120,278	1.521	1.887
1955	81,950	27,056	8,520	87,516	0.881	1.502
1956	86,675	34,611	9,445	87,703	0.801	1.520
1957	87,355	30,747	9,657	101,716	0.943	1.627
1958	80,376	16,555	10,892	214,220	2.322	3.007
1959	83,449	33,383	11,518	136,188	1.264	2.170
1960	82,172	36,811	12,173	181,309	1.626	2.803
1961	81,272	34,371	12,341	231,646	2.110	3.425
1962	83,489	37,140	14,743	171,248	1.542	2.673
1963	82,060	23,797	15,492	148,349	1.548	2.287
Average:						
1940–44	$42,810	$ 1,217	$ 4,511	$ 28,492	0.750	0.799
1960–63	82.248	33,030	13,687	183,138	1.707	2.795

rise substantially, at least in the later years depicted. From 1960 through 1963, dividends, capital gains, and stock-connected compensation items together outweighed nonownership income by almost three-to-one in the totals.

Either set of revised figures, therefore, reconfirms the view that the bulk of annual managerial income attributable to employer companies emanates from sources whose exploitation by management is consistent with the advancement of shareholder interests. While we could engage in a more exhaustive range of similiar—perhaps progressively more detailed—"sensitivity" tests, it does not seem useful to belabor the point, given the pattern of results we can see developing.[11] Ownership-related income elements turn out, under a wide range of computational approaches, to provide anywhere from two out of every three to six out of every seven dollars' worth of observable increments to personal wealth experienced in recent years by the senior executives of large, publicly held manufacturing corporations.[12] The inference here is that this circumstance augurs well for the kind of active congruence of management and stockholder objectives on which the profit-maximizing hypothesis of conventional economic models depends.[13]

Executive Ownership Proportions

The prevailing belief that professional managers have become increasingly *less* involved in ownership over time does, however, have a degree of empirical backing which merits our attention. It happens, as Table 25 documents, that the *fraction* of his employer firm's common stock which the typical highly paid corporate officer owned indeed declined between 1940 and 1963, even though the associated annual income flows sharply increased. Thus, on January 1, 1940,

[11] We could also reexamine these new comparisons by stipulating a 25 per cent effective capital gains tax rate and a higher taxable outside income assumption. Neither analysis would, as they did not before, have much impact on the findings.

[12] The holdings by executives of shares in corporations other than their employer's have not, of course, been included in these comparisons for lack of the requisite data. This issue will be addressed in Chapter 7.

[13] Or, equivalently, share-price-maximizing. See the discussion in Chapter 1.

TABLE 25

Trends in Proportionate Ownership:
Large Manufacturing Sample, 1940–63

	1940	1963
Full Sample		
Mean per capita stockholdings:		
Top executives	$682,502	$2,624,557
Top five executives	$574,743	$2,365,847
Implied total holdings:		
50 top executives	$34,125,100	$131,227,850
250 top five executives	$143,685,750	$591,461,750
Total market value of the 50 sample corporations	$13,585,895,000	$101,077,471,000
Fraction of total owned by executives:		
Top executives	0.2512%	0.1298%
Top five executives	1.0576%	0.5852%
Reduced Sample with Extreme Values Deleted		
Mean per capita stockholdings:		
Top executive	$458,756	$1,152,847
Top five executives	$269,857	$861,286
Implied total holdings:		
50 top executives	$22,937,800	$57,642,350
250 top five executives	$67,464,250	$215,321,500
Total market value of the 50 sample corporations	$13,585,895,000	$101,077,471,000
Fraction of total owned by executives:		
Top executives	0.1688%	0.0570%
Top five executives	0.5703%	0.2130%

the mean per capita stockholdings of the respective chief executives of the fifty companies in the sample were $682,502 in market value terms. The total holdings for fifty such individuals would therefore have amounted to $34,125,100. This latter figure represented just over one-quarter of 1 per cent of the aggregate market value of all fifty corporations' outstanding common shares on January 1, 1940. By January 1, 1963, the per capita top executive equity investment had risen to $2,624,557, but the combined market value of the sample companies had risen at a sufficiently more rapid pace so that those higher individual holdings came to only about one-eighth of 1 per cent of the corporate total, indicating a reduction of roughly one-half in the proportionate ownership shares under consideration.

Data for the top five executives together—which show a somewhat milder secular decrease in percentage ownership—are also presented in the table, as are comparisons for both executive categories using the per capita stockholdings implied by the deletion of extreme individual values. Whatever the focus, there is no doubt that the relative size of senior management's holdings did, in fact, diminish during the quarter-century period studied. Evidence of this sort would appear to be the genesis of the concern that executives may have become progressively less sensitive to shareholder aspirations over the years.

The contention here is that this interpretation misses the point. The issue is not how much of his company a professional manager owns; the issue is how important that portfolio is in relation to his *personal* income opportunities. Ownership positions on the order of one-tenth of 1 per cent may seem trivial as judged by the voting power they confer at an annual shareholders' meeting, but ownership positions of $2.5 million which can produce capital gains and dividends amounting to $500,000 yearly do not seem trivial in the context of a compensation package totaling only $200,000, half of which is itself stock-price dependent. Because the market value and the income consequences of top executives' equity investments in their own firms have grown at a substantially faster historical rate than their non-ownership sources of reward as employees, the net result, as seen here, is a marked *gain,* rather than a loss, in ownership income sensitivity at the individual managerial level. As long as that phenomenon persists, the proportionate ownership fractions involved—while perhaps intriguing to identify—are analytically redundant and very likely misleading as well.

Portfolio Activity

The argument was made earlier that, in specifying an effective tax rate on executives' capital gains from holdings of their firms' stock, we could assume such gains to be primarily long-term in nature. The stock ownership data on which the analysis of the current chapter is based substantiate that claim. An examination of the 5,241 separate man-years of compensation and shareholding experience which comprise the full large-manufacturing sample indicates that in only 2,269 of those intervals—approximately 43 per cent—was there *any* trading at all by the executive in his employer's securities during the year. Moreover, in 1,453 of these situations, the trades observed involved net *additions* to holdings within the year, leaving just 816 instances in which a net sale of shares occurred.[14] This represents a mere 16 per cent of the total number of man-years at issue between 1940 and 1963.[15] That degree of turnover in top management's portfolio clearly fails to support the view that executives are doing much manipulating of their firms' stock, or that they are profiteering very heavily in response to inside information. It also suggests that the great majority of trades which take place necessarily satisfy the waiting period requirements for capital gains tax treatment.[16] Thus, senior manufacturing officers do not, in fact, revise their holdings very frequently; in particular, they do not sell very often; and the secular declines we find in percentage ownership of employer-company stock must, therefore, result from the replacement of retiring executives by successors whose holdings are somewhat smaller

[14] In making these calculations, of course, the impact of stock splits and stock dividends was considered. A man whose holdings rose from 1,000 shares to 1,050 shares in the course of a year wherein a 5 per cent stock dividend was paid by his company was, for example, not counted as having experienced a change in ownership.

[15] The proportionate number of *individuals* who sold shares on balance during their careers is almost exactly the same. Only 90 out of the 552 on the list, or again 16 per cent, left the sample—i.e., died, retired, or resigned—owning fewer shares than when they entered it.

[16] The SEC strictures on short-term trading profits by corporate directors, and the consequent vulnerability of such profits to shareholder legal action, undoubtedly have played a part in discouraging rapid turnover.

to begin with, rather than from a liquidation of holdings over time by given individuals.[17]

Summary

The investments by the top executives of large, publicly held industrial enterprises in the common shares of their own firms are much more substantial than is generally supposed, running to more than $2 million per capita in recent years. The significance of those investments is perhaps best measured by the predominance of the attendant capital gains and dividends in the aggregate income profile of the men in question—a finding which is reinforced by the evidence that a sizeable fraction of employee remuneration is itself attributable to stock-related pay schemes. An investigation of the historical relationships involved reveals that this phenomenon has become progressively stronger since 1940, surmounting a trend toward a rather lower *relative* level of participation in ownership by top management, as judged by the proportionate share of total company common stock owned. The modest secular rate of increase in executive compensation, coupled with steadily higher dividend payments and an exuberant securities market, accounts for these observations.

While certain of the conclusions offered depend for their precise dimensions on the set of environmental parameters chosen for the requisite computations, tests of alternative choices and alternative procedures have been seen not to alter the thrust of the analysis. The corporations included in the sample under examination are representative of the class of enterprises for which concern is most frequently expressed regarding the separation of management and

[17] Whatever the incentives or pressures not to trade, the one-year-in-six frequency of share liquidation we observe implies that the effective capital gains tax rate of 15 per cent assumed here may indeed be a bit high. The Brookings Institution study cited earlier (Bailey, *op. cit.*) estimated that a four-year holding period is typical of the mass of investors, and that an 8 to 9 per cent effective capital gains tax rate would be indicated by such a turnover pattern. Since executives apparently trade even less often, the effective tax rate for them may well be still lower than Bailey's figure. If so, it would mean that the size of management's after-tax ownership income has been noticeably understated here.

shareholders, and its effect on company direction. The data described do not, of course, completely nullify that concern. They do, however, establish the existence and strength of an income link which has not been adequately recognized or appreciated, and which does offer some support for the traditional model of the firm.