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# The Relation Between Nonrecurring Accounting Transactions and CEO Cash Compensation

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**ABSTRACT:** This study investigates the role of alternative earnings components in the CEO cash compensation function. We find that cash compensation is significantly positively related to above the line earnings, as long as results are positive. Compensation is shielded from the effects of above the line losses. Similarly, nonrecurring transactions that increase income flow through to compensation, but nonrecurring losses do not. This effect is noted for gains and losses that arise both from extraordinary transactions, discontinued operations and nonrecurring items that do not qualify for below the line presentation. Thus, the data tell a remarkably consistent story: gains flow through to compensation, but losses do not. The classification of the gain or loss on the income statement is of relatively little importance.

**Key Words:** Executive compensation contracts, Permanent vs. transitory earnings, Extraordinary items, Discontinued operations.

**Data Availability:** A list of sample firms is available from the authors and all other data are available from public sources identified in the text.

# I. INTRODUCTION

Prior research documents a strong empirical relation between executive compensation and contemporaneous accounting performance (see, for example, Lambert and Larcker 1987; Healy et al. 1987; Defeo et al. 1989; Sloan 1993; Dechow et al. 1994;

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Natarajan 1996; Baber et al. 1997). Sloan (1993, 56) argues that accounting performance measures are used in compensation contracts to shield executives from market-wide fluctuations in firm value that are beyond their control. Early studies examine the association between compensation and aggregate accounting performance measures, such as net income (Defeo et al. 1989), or return on equity (Lambert and Larcker 1987). Banker and Datar (1989) explain that the demand for aggregation arises because basing pay on the myriad of underlying transactions that comprise net income is costly and impractical. More recently, however, Natarajan (1996) has argued that shareholders use components of earnings (such as cash flow measures) as a basis for contracting when these components provide information about the manager's action that goes beyond the bottom line result. The investigation of the degree to which components of earnings are informative about managerial actions, and therefore priced in the managerial labor market, parallels the inquiry into the role of cash flows and accruals in firm valuation (Rayburn 1986; Wilson 1986; Bernard and Stober 1989; Dechow 1994).

Natarajan (1996) focuses on the degree to which components of earnings are used in optimal compensation contracts. A closely related line of research asks whether certain transactions are removed from the earnings number for the purposes of managerial performance evaluation. For example, some transactions have a greater potential for managerial manipulation than others, and are therefore likely to be less useful for performance evaluation (Dechow et al. 1994, 140). Other items are the result of exogenous events, such as those related to mandatory changes in accounting principles (Kren and Leauby 1997). Transactions also vary in terms of their implications for sustainable firm value. Baber et al. (1997) contend that transitory events receive less weight in pay determination in order to focus the executive's attention on activities that increase permanent earnings. More generally, Clinch and Magliolo (1993) observe that components of earnings relate differently to CEO performance, and therefore will not enter into the compensation function identically.

In theory, any observable transaction can be included in the terms of managerial compensation contracts. In practice, however, it is not clear that boards of directors go to the trouble of tailoring bottom line earnings for contracting purposes. Empirical research on this question has produced conflicting results. Abdel-khalik (1985) reports that managers are not penalized for the income-decreasing effects of a switch to the LIFO method of inventory valuation. Healy et al. (1987) find just the opposite result. Dechow et al. (1994) document that CEOs' cash compensation is shielded from the negative effects of restructuring charges. However, Defeo et al. (1989) find that accounting gains associated with equity-for-debt swaps receive no special treatment in the compensation function. Healy et al. (1987) report that after a switch from accelerated to straight-line depreciation, CEO salary and bonus payments are based on reported earnings, rather than earnings re-computed using the original methods. In contrast, Kren and Leauby (1997) find that executive compensation is shielded from the income-decreasing effects of SFAS No. 106.

Thus, after more than a decade of research, the question of whether compensation committees systematically look beyond the bottom line in setting executive pay remains unanswered. Further, it is doubtful that another study of a particular accounting transaction will settle this debate. Our strategy is to step back from the details of individual transactions. Instead, we concentrate on a very simple partition of net income: "above the line" vs. "below the line" items, where below the line items are defined as the results of discontinued operations and extraordinary items.\(^1\) We contend that if distinctions are not made at this

A third below the line item, the cumulative effect of a change in accounting principal, is included as part of extraordinary items in the Compustat database, which is used in the subsequent analysis

very general level, then it is very unlikely that more subtle differentiations among transactions are made in evaluating managerial performance.

Our partition of income into above and below the line items can provide insight into the differential treatment of permanent and transitory earnings components in the compensation function. Smith (1993) observes that a recent theme of capital markets research is that stock prices are less sensitive to the transitory component of earnings than they are to permanent earnings.<sup>2</sup> This raises the question of whether compensation committees incorporate the stock market's distinction between permanent and transitory earnings in determining executives' pay. Baber et al. (1997) report that the weight on earnings in the compensation function is directly related to earnings persistence, which they view as evidence that earnings persistence is reflected, not only in the capital market, but also in the managerial labor market. To the extent that the above and below the line earnings partition corresponds to the true delineation of permanent and transitory earnings components, our study provides an alternative and potentially corroborating test of this proposition. Further, the fact that these transactions include both gains and losses allows us to test whether the effects of income-increasing and income-decreasing items are treated differently in performance evaluation. Dechow et al. (1994, 155) acknowledge that their study focuses only on losses, where differential treatment in the compensation function results in higher compensation for the executive. They conjecture that a much different scenario is possible for accounting gains, and call for additional research on this issue.

Most firms do not disclose the details of the compensation contracts of their top executives. However, Gaver et al. (1995) report that extraordinary items are explicitly excluded from the earnings definition used for bonus determination by only 10.5 percent of a sample of firms disclosing their bonus formula. The results of discontinued operations are excluded from earnings measurement by only 1.2 percent of the Gaver et al. (1995) sample. Thus, for the overwhelming majority of firms that disclose contractual information, the bonus formula specifies bottom line net income (sometimes before income taxes) as the relevant performance measure. However, the bonus formula only indicates the amount which can be transferred to a bonus pool. Actual awards to individual executives can be adjusted by the compensation committee for the effects of extraordinary items or discontinued operations, even if these items are not explicitly identified in the bonus formula.

To test for differential weights on earnings elements in the compensation function, we regress CEO cash compensation on (1) above the line earnings. (2) below the line items that increase income, and (3) below the line items that decrease income. Our sample consists of 376 large public companies with time-series data from 1970 through 1996. We estimate firm-specific regressions and then assess significance levels for the mean of the estimated parameters across sample firms.

The results indicate that cash compensation is significantly positively related to above the line earnings, as long as results are positive. Compensation is shielded from the effects of above the line losses. We find no distinction between the weights on above the line earnings (when positive) and below the line gains. Both are significantly positively related to cash compensation. The weight on below the line losses, however, is insignificantly different from zero. These conclusions apply equally to below the line items defined as

Dechow et al. (1994) note that extraordinary items are excluded from earnings in the bonus computations of only five percent of their sample.

<sup>&</sup>lt;sup>2</sup> Examples are Lipe (1986), Barth et al. (1992), Givoly and Hayn (1992), Ohlson and Penman (1992), Strong and Walker (1993), Ramakrishnan and Thomas (1995) and, most recently, Hogan and Jeter (1997). Hogan and Jeter find that the market response to earnings is stronger when restructuring charges are removed.

either extraordinary items or the results of discontinued operations. We also investigate the treatment of unusual transactions that do not qualify for below the line reporting because they do not meet the definition of an extraordinary item.<sup>4</sup> Although the coefficients on these transactions are significantly positive for both gains and losses, the weight on gains significantly exceeds the weight on losses.

Analysis of our data reveals that 1992 and 1993 are unusual years, with roughly half of our sample firms reporting below the line items. This occurs because a large number of firms were compelled to adopt SFAS No. 106 (*Employers' Accounting for Postretirement Benefits other than Pensions*) in those years. We reestimate our models with 1992 and 1993 data omitted, and find that our inferences from the full data set generally stand. The only modification is that the weight on above the line unusual losses becomes insignificant. We also reestimate our compensation regressions for the subset of firms with a single CEO, since the weights on earnings elements could exhibit within-firm variance for firms with multiple CEOs during the time period investigated. The results are qualitatively identical to those for the full sample.

Thus, the data tell a remarkably consistent story: gains flow through to compensation, but losses do not. The position of the transaction on the income statement is of relatively little importance. If above vs. below the line disclosure conveys information about the effect of the item on permanent earnings, the results suggest that this distinction is not emphasized in compensation decisions. Although this favorable (to the executive) state of affairs could stem from managerial entrenchment, an alternative explanation for shielding CEO compensation from the effect of losses is that the board wishes to avoid penalizing managers for engaging in activities that result in current period losses, yet improve the long-term prospects of the firm (such as abandoning unprofitable operations). This, of course, does not explain why transitory gains should be weighted as heavily as the more persistent income from core operations. However, the observed compensation strategy might still be a rational response to competitive conditions in the managerial labor market if it increases the firm's ability to attract and retain top managerial talent.

The remainder of the study is organized as follows. In section II, we delineate our method for testing the hypothesis that above and below the line earnings components receive differential treatment in the compensation function. We describe the sample and data in section III. We present our results in section IV, and provide a summary and discussion of the results in section V.

# II. METHOD

The study investigates the relation between accounting earnings and the cash compensation of corporate CEOs. We focus on the CEO for three reasons. First, the CEO has overall responsibility for the performance of the firm and any distinction between permanent and transitory components of earnings is most likely to be made at this level. Second, compensation data is relatively accessible for the CEO from *Forbes* surveys and through proxy statements filed with the SEC. Third, most prior studies have also focused on CEO compensation, which facilitates comparison of our results to those of other studies in the literature

Cash compensation, defined as base salary plus annual bonus, excludes several components of compensation, such as stock option compensation and long-term performance awards that are contingent on earnings. However, previous researchers (such as, Murphy

<sup>&</sup>lt;sup>4</sup> These transactions are aggregated and reported as "special items" by Compustat (data item 17).

1985; Lambert and Larcker 1987; Defeo et al. 1989) observe that cash compensation represents a material portion of a CEO's yearly compensation.<sup>5</sup> Additionally, bonus plans typically specify annual earnings as the relevant performance measure, whereas other forms of compensation do not. Thus, it is likely that cash compensation will be more sensitive to annual accounting numbers than other forms of compensation (Lambert and Larcker 1987; Sloan 1993).<sup>6</sup> Finally, and especially relevant to this study, Baber et al. (1997) report that earnings persistence significantly influences CEO cash compensation, but is not significantly related to the level of stock-based compensation components.

To assess the impact of alternative earnings elements on CEO cash compensation, we estimate the following model:

$$COMP_{it} = \alpha + \beta_1 INCBED_{it} + \beta_2 INCBED_{it} + \lambda_1 NRGAINS_{it} + \lambda_2 NRLOSSES_{it} + \epsilon_{it}$$
(1)

where:

COMP<sub>it</sub> = the case compensation (salary and bonus) of the CEO of firm i in year t, in inflation-adjusted dollars;

 $INCBED_{it}$  = earnings before extraordinary items and the results of discontinued operations for firm i in year t, in inflation-adjusted dollars;

INCBED-<sub>it</sub> = earnings before extraordinary items and the results of discontinued operations for firm 1 in year t (in inflation-adjusted dollars) if the amount is negative, and zero otherwise<sup>7</sup>;

NRGAINS<sub>it</sub> = the sum of extraordinary items and the results of discontinued operations reported by firm i in year t, if the combined amount is positive (zero if no nonrecurring items are reported, or if the sum is negative), in inflation-adjusted dollars;

NRLOSSES<sub>it</sub> = the sum of extraordinary items and the results of discontinued operations reported by firm i in year t, if the combined amount is negative (zero if no nonrecurring items are reported, or if the sum is positive), in inflation-adjusted dollars.

Equation (1) provides insight into the disparate weighting of above the line (INCBED, INCBED-) and below the line (NRGAINS, NRLOSSES) earnings components, allowing for differential treatment of gains and losses. The results of prior research (for example, Healy et al. 1987; Dechow et al. 1994; Natarajan 1996) indicate that  $\beta_1$ , the weight on above the line earnings, will be positive and highly significant. The coefficient on INCBED-,  $\beta_2$ , indicates how the relation between cash compensation and above the line earnings is altered in loss years. A significantly negative coefficient, for example, would

<sup>&</sup>lt;sup>5</sup> Defeo et al. (1989) report that cash compensation typically represents between 70 and 80 percent of total annual CEO compensation. Lambert and Larcker (1987) estimate that salary and bonus account for between 80 and 90 percent of total compensation.

<sup>&</sup>lt;sup>6</sup> Although performance plans are also based on accounting results, performance is measured over a multiple-year period. This will have the effect of naturally dampening the effect of nonrecurring items occurring in a single year. Thus, it will be less likely that compensation committees will go to the trouble of excluding these items from the measurement of earnings for the purpose of determining performance awards

<sup>&</sup>lt;sup>7</sup> The variable INCBED: is equivalent to the product of a dummy variable which takes on the value of one when earnings before extraordinary items is negative and is zero otherwise, and the variable INCBED. INCBED: is included in the model because the relation between CEO cash compensation and earnings is expected to differ in years when net income is positive vs. loss years.

indicate a material dampening of the effect. The distinction between above and below the line earnings components is assessed by comparing the slope coefficients for nonrecurring items ( $\lambda_1$  and  $\lambda_2$ ) to  $\beta_1$ . Under the null hypothesis that no distinction is made between permanent and transitory components of earnings,  $\lambda_1$  and  $\lambda_2$  are expected to be positive and at least as large as  $\beta_1$ . Coefficients on nonrecurring items which are positive, but significantly lower than  $\beta_1$  indicate that compensation is partially insulated from transitory items. Finally, coefficients on nonrecurring items that are insignificantly different from zero indicate that these transactions are completely removed from earnings for the purpose of setting CEO cash compensation.<sup>8</sup>

We estimate equation (1) using firm-specific, time-series regressions. This approach is consistent with Antle and Smith (1985), Lambert and Larcker (1987), Healy et al. (1987), Defeo et al. (1989), Dechow et al. (1994) and Natarajan (1996). Firm-specific, rather than cross-sectional, regressions are used because prior research suggests that parameters of compensation regressions vary considerably across firms. Additionally, Murphy (1985) contends that cross-sectional regressions of compensation on performance are misspecified because they omit executive-specific factors that influence compensation. Dechow et al. (1994) observe that regressions of compensation on earnings using ordinary least squares techniques can result in serially correlated residuals. To eliminate any serial dependence in the residuals, we employ the two-step full transform method used by Natarajan (1996).9 We compute t-statistics for each parameter in equation (1) for each sample firm. The t-statistics are then aggregated across sample firms to form a z-statistic for each parameter, in the manner described by Dechow et al. (1994, 149–150). The z-statistics, which are distributed asymptotically as standard normal variates, are used to assess statistical significance.<sup>10</sup>

### III. SAMPLE AND DATA

Our sample consists of 376 firms which are represented in the *Forbes* annual CEO compensation surveys. *Forbes* reports salary and bonus data (obtained from the firm's proxy statement) for CEOs of firms in any of their top 500 listings (top 500 in terms of assets, sales, market value or net income). We examine surveys beginning in 1971 (reporting 1970 data) and ending in 1997 (reporting 1996 data). Thus, there is a maximum of 27 years of compensation data available for each firm. Each annual survey covers between 737 and 850 firms and there is considerable overlap in the identities of the firms surveyed from year to year.

We require a minimum of 15 years of compensation data for a firm to be included in our sample. Additionally, the firm must report at least one nonrecurring item during its compensation time series, and have the data on Compustat necessary to estimate equation

<sup>9</sup> Natarajan (1996) indicates that the two-step full transform method is superior to the Cochrane-Orcutt procedure for eliminating residual dependence because no observations are lost in differencing. However, our results are similar with and without the full transform adjustment. This is also the case in Healy et al. (1987) and Defeo et al. (1989), where the Cochrane-Orcutt procedure is used.

<sup>&</sup>lt;sup>b</sup> These predictions parallel the discussion in Dechow et al. (1994, 142). Dechow et al. (1994) find that the weight on restructuring charges is significantly *negative*. This suggests that compensation committees go beyond shielding executives from a decrease in pay associated with these losses; CEO cash compensation actually increases when restructuring charges are reported.

The formula for computing the z-statistics is given in table 4. Our calculation of the z-statistic assumes that the correlation among the firms' t-statistic is zero (i.e.,  $\bar{r} = 0$ ). Our justification for this assumption is that the mean of the 90,500 pairwise residual correlations from the 376 firm regressions is 0.134, indicating that the degree of cross-equation correlation is low. Fewer than 15 percent of the pairwise correlations differ significantly from zero at the 0.05 level. Average correlation p-value is 0.413.

(1).<sup>11</sup> This leaves us with 376 firms and 8,049 firm-years available for analysis. The mean and median number of years of compensation data for the firms in our sample is 21.4 years and 22 years, respectively.<sup>12</sup> Firms reported a mean (median) of 2.6 (2) nonrecurring gains during their compensation time series. The corresponding mean and median for nonrecurring losses are 2.3 (2). We also note the identity of the firm's CEO in each year, as reported by *Forbes*. Sample firms had a mean (median) of 5.7 (5) CEOs during the time period analyzed.

Earnings information and other descriptive financial data for sample firms are obtained from Compustat. The variable INCBED is Compustat data item 18 (earnings before extraordinary items and discontinued operations). The variable INCBED- takes on the value of INCBED in loss years, and is zero otherwise. To construct NRGAINS and NRLOSSES, we add Compustat data items 192 (extraordinary items) and 66 (discontinued operations). NRGAINS is the sum of these items if positive, and is zero otherwise. Conversely, NRLOSSES is the sum of these items if negative, and is zero otherwise. All compensation and earnings data are converted to constant dollars using a CPI adjustment.<sup>13</sup>

An analysis of the sample by two-digit SIC codes reveals that virtually all industries are included in the sample. The highest concentrations of sample firms are in the electrical and natural gas industry (53 firms, 14.1 percent of sample), the chemical industry (38 firms, 10.1 percent of sample), the insurance industry (24 firms, 6.4 percent of sample), and the food industry (21 firms, 5.6 percent of sample). Not surprisingly, sample firms are large. We compute the mean asset size (Compustat data item 6) in inflation-adjusted (1982–1984) dollars for each firm in the sample across the time series of years analyzed for that firm. The grand mean for the sample is \$7.213 billion, which places sample firms in the ninth decile of the asset distribution for all Compustat firms in 1983. Similarly, we compute the mean return on assets for each firm in the sample across the time series of years analyzed for that firm. The grand mean for the sample is 5.5 percent, which places sample firms in the fifth decile of the ROA distribution for all Compustat firms in 1983. Figure 1983.

As reported in the last line of table 1, analysis of the earnings data reveals that non-recurring items (extraordinary items or discontinued operations) occur in 23 percent of all firm-years. The bulk of these are extraordinary items. For our sample, the incidence of nonrecurring items has steadily increased from relatively low levels (about 12 percent) in the mid-seventies. The highest rates occur in 1992 and 1993, when just over half of the 517 firm-year observations include below the line earnings components. However, this phenomenon does not persist into the most recent sample years, with only about 22 percent

To construct the sample, we begin with the 1983 Forbes survey, which is the midpoint of the sample period. We identify an initial sample of 743 firms with at least ten years of (not necessarily consecutive) compensation data by visually examining surveys before and after 1983. This process is complicated by the fact that the firms surveyed change from year to year due to mergers, bankruptcies, name changes and changes in firm size. To enter into the final sample, the firm must have at least 15 annual observations, representing a full year of compensation data for a single CEO. We identify 471 firms that pass this initial screen. Firms must also have nonmissing Compustat data item 18 (earnings before extraordinary items and discontinued operations) and at least one nonrecurring item during their compensation time series. This leaves us with 376 firms and 8,049 firm-years.

Admittedly, this selection procedure biases our sample toward larger, more established corporations. The need for a fairly long time series of compensation data also imparts a survivorship bias to the data, and necessitates the somewhat questionable assumption that compensation practices remain stable over time. Sloan (1993, 68) (who also studies *Forbes* firms) argues that these companies constitute a significant part of the total market value of all New York Stock Exchange firms, and are therefore worth studying in their own right.

The consumer price index for all urban consumers (CPI-U), published by the Bureau of Labor Statistics, is used to convert nominal amounts to constant dollars. The base period for the CPI-U adjustment factor is 1982–1984.

<sup>14</sup> Return on assets is defined as income before extraordinary items in fiscal year t (Compustat data item 18) divided by the total assets at the end of fiscal year t (Compustat data item six).

TABLE 1
The Incidence of Nonrecurring Earnings Items for 376 Sample Firms (8,049 Firm-Years) Between 1970 and 1996<sup>a,b</sup>

	Total	Firms Reporting Nonrecurring Items		Firms Reporting Extraordinary Items		Firms Reporting Discontinued Operations	
Year	Number of Firms	Number	Percent	Number	Percent	Number	Percent
1970	263	45	17.1	42	16.0	6	2.3
1971	274	75	27.4	71	25.9	11	4.0
1972	267	59	22.1	53	19.9	16	6.0
1973	297	39	13.1	34	11.4	10	3.4
1974	309	41	13.3	26	8.4	18	5.8
1975	313	26	8.3	12	3.8	16	5 1
1976	323	31	9.6	17	5.3	16	5.0
1977	323	48	14.9	33	10.2	17	5.3
1978	330	44	13.3	29	8.8	16	4 8
1979	324	49	15.1	38	117	13	4.0
1980	331	55	16.6	42	12.7	15	4.5
1981	324	60	18.5	40	12.3	24	7.4
1982	344	90	26.2	65	18.9	30	8.7
1983	343	78	22.7	51	14.9	34	9.9
1984	353	84	23.8	49	13 9	40	11.3
1985	331	93	28.1	47	14.2	53	16.0
1986	332	109	32.8	77	23.2	54	16.3
1987	304	103	33.9	77	25.3	42	13.8
1988	297	93	31.3	63	21.2	41	13.8
1989	299	77	25.8	34	114	46	15.4
1990	271	51	18.8	22	8.1	34	12.5
1991	275	70	25.5	44	16.0	29	10.5
1992	263	140	53.2	135	51.3	28	10.6
1993	254	130	51.2	118	46.5	23	9.1
1994	240	58	24.2	42	17.5	24	10.0
1995	233	52	22.3	27	11.6	28	12.0
1996	232	47	20.3	19	8.2	32	13.8
Total Firm-years: 8,049		% Firm-years with Nonrecurring Items: 23.0		% Firm-years with Extraordinary Items: 16.2		% Firm-years with Discontinued Operations: 8.9	

### TABLE 1 (Continued)

of sample firms reporting nonrecurring items during the 1994 through 1996 period. Further, the representation of extraordinary items and discontinued operations is roughly equal during these years.

Table 1 indicates that the bulge in below the line items noted in 1992 and 1993 is attributable to a large number of firms reporting extraordinary items in these years. However, Compustat data item 66, "extraordinary items," actually includes both extraordinary items per se, and the cumulative earnings effect of changes in accounting principles. Analysis of footnote disclosures for sample firms in 1992 and 1993 reveals that compliance with SFAS No. 106 (Employers' Accounting for Postretirement Benefits other than Pensions) is the reason for the dramatic increase in below the line items reported in these years. Since 1992 and 1993 are somewhat atypical years, we estimate equation (1) using both the full data set, and also after omitting observations from 1992 and 1993.

In table 2, income-increasing and income-decreasing nonrecurring items are analyzed separately. The sample medians, reported in the last row of the table, indicate that income-increasing items tend to be somewhat smaller (in absolute value) than income-decreasing items. The median inflation-adjusted amount of income-increasing nonrecurring items shows a general increase over the sample period, with the smallest median amount reported in 1970 (\$2,835,000) and the largest median amount reported in 1996 (\$84,130,000). Although the absolute magnitude of the income-decreasing nonrecurring items varies across sample years, the largest write-offs tend to occur later in the time frame. Again, 1992 and 1993 are notable years, with 112 firms reporting income-decreasing nonrecurring items with a median of -\$87,803,000 in 1992, and 80 firms reporting income-decreasing nonrecurring items with a median of -\$49,856,000 in 1993. Both income-increasing and income-decreasing nonrecurring items have a significant impact on net income, with a median ratio of income increasing (decreasing) nonrecurring items to earnings before non-recurring items of 11 percent (13 percent). In the last row of the table, indicate that income-increasing and income-decreasing nonrecurring items to earnings before non-recurring items of 11 percent (13 percent).

We compute the mean CEO cash compensation, in inflation-adjusted dollars, for each firm in the sample across the time series of years analyzed for that firm. The grand mean for the total sample is \$622,578. The distribution of mean cash compensation for sample firms ranges from a low of \$83,452 (paid by Berkshire Hathaway) to a high of \$2,558,786 (paid by Walt Disney). For comparison, Fox (1985) reports that the median salary and bonus payment made to CEOs in a broad survey of manufacturing companies in 1983 is

<sup>&</sup>lt;sup>a</sup> Nonrecurring earnings items are defined as the sum of extraordinary items (Compustat data item 192) and the results from discontinued operations (Compustat data item 66)

<sup>&</sup>lt;sup>b</sup> The sample consists of 376 firms that have at least 15 years of compensation data available from *Forbes* between 1970 and 1996, and have nonmissing Compustat data item 18 (income before extraordinary items and discontinued operations) and at least one nonrecurring item during their compensation time series.

<sup>&</sup>lt;sup>c</sup> The sum of the number of firms reporting extraordinary items and the number of firms reporting discontinued operations can exceed the number of firms reporting either type of nonrecurring item because firms can report both items in the same year.

<sup>15</sup> Again, these amounts are largely attributable to charges related to the adoption of SFAS No. 106 for the accounting for post-employment benefits other than pensions.

<sup>&</sup>lt;sup>16</sup> To compute these ratios, only observations where earnings before nonrecurring items is positive are used.

TABLE 2
Analysis of Income-Increasing and Income-Decreasing Nonrecurring Earnings Items (NRI) for 376 Sample Firms (8,049 Firm-Years) Between 1970 and 1996<sup>a,b</sup>

	Income-Increas	ing NRI	Income-Decreasing NRI			
Year	Median Dollar Amount' (Number of Firms) <sup>d</sup>	Median % of Earnings before NRI°	Median Dollar Amount (Number of Firms) <sup>d</sup>	Median % of Earnings before NRI		
1970	\$ 2,835 (25)	5.36	\$ -20,389 (20)	-18.90		
1971	3,630 (38)	5.11	-16,691 (37)	-19.24		
1972	4,529 (25)	3.25	-7,864 (34)	-10.85		
1973	10,770 (27)	8 00	-8,336 (12)	-6 33		
1974	6,180 (22)	9.25	-12,556 (19)	-7.12		
1975	4,414 (12)	3.40	-14,329 (14)	-21.93		
1976	6,945 (23)	4.90	-6,131 (8)	-9.18		
1977	8,581 (33)	7.66	-6,639 (15)	-4.48		
1978	13,777 (24)	8.42	-6,663 (20)	-4.90		
1979	15,326 (39)	8.09	-14,939 (10)	-14.92		
1980	16,930 (30)	9.72	-10,671 (25)	-12.40		
1981	15,313 (35)	9.59	-10.644 (25)	-5.88		
1982	15,212 (52)	11.48	-21,885 (38)	-9.62		
1983	16,240 (48)	13.80	-10,205 (30)	-8.82		
1984	18,479 (47)	19.08	-25,863 (37)	-18.25		
1985	27,033 (56)	15.51	-54,237 (37)	-33.05		
1986	48,582 (64)	36.72	-14,142 (45)	-9.70		
1987	26,668 (72)	14.07	-13,204 (31)	-10.67		
1988	28.751 (69)	13 10	-23,352 (24)	-7.88		
1989	20,161 (51)	12.35	-16,844 (26)	-12.99		
1990	14,767 (33)	13.97	-17,069 (18)	-5.90		
1991	13,502 (26)	15.81	-22,944 (44)	-22.40		
1992	25,509 (28)	10.60	-87,803 (112)	-55.55		
1993	24,913 (50)	10.31	-49,856 (80)	-15.12		
1994	21,636 (17)	16 88	-7,085 (41)	-4.47		
1995	48,556 (19)	44.54	-19,423 (33)	-7.54		
1996	84,130 (23)	16.35	-11,887 (24)	-5.13		
Sample Median:	\$ 16,329 <sup>t</sup> (988)	10.98 <sup>g</sup>	\$ -20,985 <sup>f</sup> (859)	-13.00g		

## TABLE 2 (Continued)

- <sup>a</sup> Nonrecurring earnings items are defined as the sum of extraordinary items (Compustat data item 192) and the results from discontinued operations (Compustat data item 66)
- <sup>b</sup> The sample consists of 376 firms that have at least 15 years of compensation data available from *Forbes* between 1970 and 1996, and have nonmissing Compustat data item 18 (income before extraordinary items and discontinued operations) and at least one nonrecurring item during their compensation time series.
- <sup>c</sup> All amounts are in thousands of dollars and are adjusted to 1982–1984 constant dollars using the consumer price index.
- <sup>d</sup> The number of firms in each sample year that reported income increasing (decreasing) nonrecurring earnings items is reported in parentheses.
- <sup>e</sup> Earnings before nonrecurring items is Compustat data item 18. The cross-sectional median of the ratio of non-recurring items to earnings before nonrecurring items (expressed as a percent) is reported for each year in the sample period. The ratio is only calculated for firm-years where earnings before nonrecurring items is positive.
- <sup>7</sup> The median inflation-adjusted reported nonrecurring gain (loss) for the 988 (859) firm-years where a gain (loss) is reported
- gen the median ratio of nonrecurring gain (loss) to earnings before nonrecurring items for all firm-years where a gain (loss) is reported. The ratio is only calculated for firm-years where earnings before nonrecurring items is positive.

\$408,000.<sup>17</sup> Additional summary statistics for the average annual CEO cash compensation and corporate earnings data across sample firms are reported in table 3.<sup>18</sup>

### IV. RESULTS

To investigate whether above and below the line earnings components receive differential treatment in the compensation function, we estimate equation (1) for each firm in the sample. Table 4 reports descriptive statistics for the cross-sectional distributions of the estimated regression parameters. Panel A presents results for the case where nonrecurring items are defined as the sum of extraordinary items and discontinued operations. The z-statistic of 53.82 associated with the coefficient on INCBED indicates that, as expected, CEO cash compensation is significantly positively related to above the line earnings. Additionally, the significantly negative average coefficient on INCBED- (z-statistic of -13.93) means that the normally positive association between cash compensation and above the line earnings is significantly reduced in loss years. Comparison of median coefficients on INCBED (1.15) and INCBED- (-1.06) shows that the relation is essentially nullified when above the line earnings are negative. In fact, the average sum of the estimated  $\beta_1$  and  $\beta_2$  coefficients (not reported in table 4) is -1.54, with an associated z-statistic of -6.32. This suggests that the function relating CEO cash compensation to above the line earnings is kinked at zero, with compensation actually increasing in losses. <sup>19</sup>

The average coefficient on nonrecurring gains,  $\lambda_1$ , is positive and the associated z-statistic of 9.11 indicates that the result is highly significant. No significant difference is

<sup>&</sup>lt;sup>17</sup> The median salary and bonus payments to CEOs in the utilities, banking and insurance industries in 1983 are \$228,000, \$220,000 and \$222,000, respectively.

<sup>&</sup>lt;sup>18</sup> The mean value for salary and bonus compensation of \$634,961 reported in table 3 is a simple mean which weights all firm-year observations equally. The grand mean of \$622,578 reported in the text is a cross-sectional mean of the firm time-series averages

To investigate this anomalous result, we include a dummy variable to allow for a change in fixed salary in loss years. The coefficient on the loss dummy is insignificantly different from zero, indicating that, on average, fixed salary remains unchanged when a loss occurs. Additionally, the modified specification nullifies the apparent rewards for incurring losses. When the dummy variable is added, the sum of the coefficients on INCBED and INCBED- becomes insignificantly different from zero. In our opinion, the conclusion that compensation is increasing in losses cannot be reliably inferred from the data.

TABLE 3
Summary Statistics for Annual CEO Cash Salary and Bonus Payments, Earnings Before Nonrecurring Items, and Income-Increasing and Income-Decreasing Nonrecurring Earnings Items Made by 376 Sample Firms Between 1970 and 1996<sup>a,b</sup>

Variable	Firm- Years	Mean	Standard Deviation	First Quartile	Median	Third Quartile
Salary and bonus <sup>d</sup>	8,049	\$634,961	\$441.690	\$375,254	\$545,455	\$773,196
Earnings before nonrecurring items <sup>c</sup>	8,049	259,317	567,339	66,770	132,828	263,636
Income-Increasing NRI <sup>t</sup>	988	53,567	141,959	5,122	16,329	48,530
Income-Decreasing NRIf	859	-102,506	387,702	-73.358	-20,985	-5,904
Extraord. Gains <sup>g</sup>	702	44,442	137,530	4,331	14,830	35,690
Extraord. Losses <sup>g</sup>	605	-116,065	455,100	-67,128	-18,532	-5,477
Income-Increasing Disc. Ops. <sup>h</sup>	372	68,277	143,117	5,762	17,751	64,196
Income-Decreasing Disc. Ops. <sup>h</sup>	344	-62,846	118,408	-68,748	-21,554	-7,261

<sup>&</sup>lt;sup>a</sup> The sample consists of 376 firms that have at least 15 years of compensation data available from *Forbes* between 1970 and 1996, and have nonmissing Compustat data item 18 (income before extraordinary items and discontinued operations) and at least one nonrecurring item during their compensation time series.

detected between the weights on above the line earnings ( $\beta_1$ ) and nonrecurring gains ( $\lambda_1$ ). The implication is that nonrecurring gains flow completely through to compensation. In contrast, the average coefficient on nonrecurring losses ( $\lambda_2$ ) is insignificantly different from zero (z-statistic of -1.41). This suggests that nonrecurring losses are removed from the earnings number used to determine CEO cash compensation. Tests of differences indicate that the weights on both above the line earnings ( $\beta_1$ ) and nonrecurring gains ( $\lambda_1$ ) significantly exceed the weight on nonrecurring losses ( $\lambda_2$ ).

One way to assess the economic significance to the CEO of shielding compensation from nonrecurring losses is to multiply the median inflation-adjusted nonrecurring loss for the sample (-\$20,985,000; table 2) by the median coefficient on nonrecurring gains

<sup>&</sup>lt;sup>b</sup> All amounts are adjusted to 1982–1984 constant dollars using the consumer price index.

The number of firm-year observations used to compute the summary statistics.

d Cash salary and bonus data for the CEO are obtained from annual Forbes surveys.

<sup>&</sup>lt;sup>e</sup> Earnings before nonrecurring items is Compustat data item 18. Amounts are in thousands.

<sup>&</sup>lt;sup>1</sup> Nonrecurring earnings items (NRI) are defined as the sum of extraordinary items (Compustat data item 192) and the results from discontinued operations (Compustat data item 66). Amounts are in thousands.

g Compustat data item 192 Amounts are in thousands

<sup>&</sup>lt;sup>h</sup> Compustat data item 66. Amounts are in thousands.

TABLE 4

Descriptive Statistics from 376 Firm-Specific Regressions of CEO Cash Compensation on Earnings Components<sup>a</sup>

$$COMP_u = \alpha + \beta_1 INCBED_u + \beta_2 INCBED_u + \lambda_1 NRGAINS_u + \lambda_2 NRLOSSES_u + \varepsilon_u^b$$

Panel A: Nonrecurring Items Defined as the Sum of Extraordinary Items and the Results of Discontinued Operations

	Mean (n)'	z-statistic <sup>d</sup>	Lower Quartile	Median	Upper Quartile	Differences (n)	z-statistic
α	379.74 (376)	79.53	215.17	354.90	515.35	$\beta_1 - \lambda_1$ (318)	1.24
$\beta_1$	1.80 (376)	53.82	0.33	1.15	2.35	$\beta_1 - \lambda_2$ (302)	14.94
$\beta_2$	-2.99 (164)	-13.93	-4.54	-1.06	0.31	$\lambda_1 - \lambda_2$ (246)	5.27
$\lambda_1$	4.90 (318)	9.11	0.48	0.67	3.66		
$\lambda_2$	-1 93 (302)	-1.41	-1.39	-0.01	1.31		
Adj. R <sup>2</sup>	0.57 (376)		0.39	0.58	0 74		

$$COMP_{ii} = \alpha + \beta_{1}INCBED_{ii} + \beta_{2}INCBED_{ii} + \lambda_{1}EXTRAGAIN_{ii} + \lambda_{2}EXTRALOSS_{ii} + \lambda_{3}DISCGAIN_{ii} + \lambda_{4}DISCLOSS_{ii} + \varepsilon_{ii}^{f}$$

Panel B: Extraordinary Items and the Results of Discontinued Operations Estimated Separately

	Mean (n) <sup>c</sup>	z-statistic <sup>d</sup>	Lower Quartile	Median	Upper Quartile	Differences (n)	z-statistic
α	377.86 (376)	78.57	211.28	344.84	519.17	$\beta_1 - \lambda_1$ (260)	0.82
$\beta_1$	1.79 (376)	53.20	0.34	1.14	2.30	$\beta_1 - \lambda_2$ (268)	12.04
$oldsymbol{eta}_2$	-1.68 (164)	-12.84	-4.69	-1.06	0.34	$\beta_1 - \lambda_3$ (162)	-0.70
$\lambda_1$	-3.77 <sup>e</sup> (260)	4.41	-1.65	0.27	3.81	$\beta_1 - \lambda_4 $ (145)	7.60
$\lambda_2$	-2.63 (268)	-1.57	-1.69	-0.06	1.61	$\lambda_1 - \lambda_2$ (179)	3.45
$\lambda_3$	3.37 (162)	8.95	-0.21	1.31	5.55	$\lambda_3 - \lambda_4$ (96)	4.48
$\lambda_4$	3.13 <sup>e</sup> (145)	-0.20	-1.40	0.29	2.30		
Adj. R <sup>2</sup>	0.58 (376)	<del></del>	0.42	0.60	0.75		

### TABLE 4 (Continued)

$$COMP_{n} = \alpha + \beta_{1}INCBED_{n} + \beta_{2}INCBED_{n} + \lambda_{1}NRGAINS_{n} + \lambda_{2}NRLOSSES_{n}$$
  
  $+ \lambda_{3}SPECIALGAIN_{n} + \lambda_{4}SPECIALOSS_{n} + \varepsilon_{n}^{R}$ 

Panel C: Special Items Estimated Separately

	Mean (n)'	z-statistic <sup>d</sup>	Lower Quartile	Median	Upper Quartile	Differences (n)	z-statistic
α	343.89 (376)	69.74	188.99	311.93	460.02	$\beta_1 - \lambda_1$ (318)	1.59
$\beta_{\iota}$	1.98 (376)	56.82	0.41	1.34	2 72	$\begin{array}{c} \beta_1 - \lambda_2 \\ (302) \end{array}$	14.41
$\beta_2$	0.73 <sup>e</sup> (118)	-7.52	-2.86	-0.42	2.10	$\beta_1 - \lambda_3$ (264)	-4.63
$\lambda_{\iota}$	7 64 (318)	8.16	-0.88	0.49	3.68	$\beta_1 - \lambda_4$ (302)	18.14
$\lambda_2$	-2.35 (302)	-0.26	-1.25	0.07	1.63	$\lambda_1 - \lambda_2$ (249)	4.50
λ,	4.75 (264)	13.92	-0.02	1.51	4.95	$\lambda_3 - \lambda_4$ (234)	7.37
$\lambda_4$	$-0.93^{c}$ (304)	3.96	-0.96	0.17	1.11		
Adj. R <sup>2</sup>	0.63 (376)	_	0 47	0.65	0.81		

<sup>&</sup>lt;sup>a</sup> The sample consists of 376 firms that have at least 15 years of compensation data available from *Forbes* between 1970 and 1996, and have nonmissing Compustat data item 18 (income before extraordinary items and discontinued operations) and at least one nonrecurring item during their compensation time series.

COMP<sub>it</sub> = the cash compensation (salary and bonus) of the CEO of firm 1 in year t, in inflation-adjusted dollars.

 $INCBED_{it}$  = earnings before extraordinary items (Compustat data item 192) and the results of discontinued operations (Compustat data item 66) for firm i in year t, in inflation-adjusted dollars.

INCBED- $_{ii}$  = earnings before extraordinary items and the results of discontinued operations for firm i in year t (in inflation-adjusted dollars) if the amount is negative, and zero otherwise.

 $NRGAINS_{\pi}$  = the sum of extraordinary items and the results of discontinued operations reported by firm i in year t, if the combined amount is positive (zero if no nonrecurring items are reported, or if the sum is negative), in inflation-adjusted dollars

NRLOSSES<sub>it</sub> = the sum of extraordinary items and the results of discontinued operations reported by firm i in year t, if the combined amount is negative (zero if no nonrecurring items are reported, or if the sum is positive), in inflation-adjusted dollars

$$Z = \frac{1}{\sqrt{N}} \sum_{j=1}^{N} \frac{t_{j}}{\sqrt{k_{j}/(k_{j}-2)}} / \sqrt{1 + (N-1)\bar{r}}$$

<sup>&</sup>lt;sup>b</sup> Variables used in this model are defined as follows.

<sup>&</sup>lt;sup>c</sup> The number of firm-specific parameters that are used to compute the statistics.

<sup>&</sup>lt;sup>d</sup> The formula for calculating the z-statistic is explained by Dechow et al. (1994, 149-150). The formula is:

# **TABLE 4 (Continued)**

where  $\tilde{r}$  is the mean correlation among the sample firms' t-statistics and  $k_j$  is the degrees of freedom in the regression for firm j. The calculated z-statistics assume  $\tilde{r}=0$  because the pairwise cross-equation residual correlations are generally not significantly different from zero (see footnote 10)

<sup>e</sup> The mean parameter and associated z-statistic have differing signs due to a few firm-specific coefficients that are atypical and large in absolute value

<sup>1</sup> Variables used in this model are defined as follows:

EXTRAGAIN<sub>n</sub> = income-increasing extraordinary items (Compustat data item 192) reported by firm i in year t, in inflation-adjusted dollars, or zero if none are reported

EXTRALOSS<sub>n</sub> = income-decreasing extraordinary items reported by firm i in year t, in inflation-adjusted dollars, or zero if none are reported

DISCGAIN<sub>n</sub> = the results of discontinued operations (Compustat data item 66) that increased income for firm 1 in year t, in inflation-adjusted dollars, or zero if none are reported.

 $DISCLOSS_n$  = the results of discontinued operations that decreased income for firm 1 in year t, in inflation-adjusted dollars, or zero it none are reported

COMP<sub>a</sub>, INCBED<sub>a</sub> and INCBED-<sub>a</sub> are defined as in footnote b

g Variables used in this model are defined as follows:

INCBEDit = earnings before extraordinary items (Compustat data item 192), the results of discontinued operations (Compustat data item 66), and special items (Compustat data item 17) for firm in year t, in inflation-adjusted dollars

INCBED-<sub>n</sub> = earnings before extraordinary items, the results of discontinued operations, and special items for firm 1 in year t (in inflation-adjusted dollars) if the amount is negative, and zero otherwise.

SPECIALGAIN<sub>ii</sub> = income-increasing special items (Compustat data item 17) for firm 1 in year t, in inflation-adjusted dollars, or zero if none are reported.

SPECIALOSS<sub>n</sub> = income-decreasing special items for firm i in year t, in inflation-adjusted dollars, or zero if none are reported

COMP<sub>a</sub>, NRGAINS<sub>a</sub> and NRLOSSES<sub>a</sub> are defined as in footnote b

(0.00067; table 4, panel A).<sup>20</sup> This amount represents the median decrease in cash compensation that would be experienced by the CEO if nonrecurring losses and nonrecurring gains were afforded identical treatment. The result, -\$14,060, is only 2.6 percent of median CEO cash compensation (\$545,455; table 3), which does not appear to be a particularly material amount. On the other hand, the product of the *mean* nonrecurring loss for the sample (-\$102,506,000; table 3) and the *mean* coefficient on nonrecurring gains (.00490; table 4, panel A) is -\$502,279, which is 79 percent of average CEO cash compensation (\$634,961; table 3). Thus, the policy of shielding CEO pay from nonrecurring losses appears to represent an economically meaningful degree of protection for some executives.

The regression results reported in panel A are based on equation (1), which combines extraordinary items and the results of discontinued operations into an aggregate measure of nonrecurring transactions. We dissect this result by estimating equation (2), which allows extraordinary items and discontinued operations (divided into gains and losses) to have unique slope coefficients.

$$COMP_{it} = \alpha + \beta_1 INCBED_{it} + \beta_2 INCBED_{it} + \lambda_1 EXTRAGAIN_{it} + \lambda_2 EXTRALOSS_{it} + \lambda_3 DISCGAIN_{it} + \lambda_4 DISCLOSS_{it} + \varepsilon_{it}$$
 (2)

The variables COMP, INCBED and INCBED are all defined as in equation (1);

The median coefficient of 0.67 reported in table 4 is obtained when earnings items are reported in thousands of dollars. The appropriate multiplier for nonrecurring losses in dollars is therefore 0.00067

EXTRAGAIN and EXTRALOSS are income-increasing and income-decreasing extraordinary items, respectively; and DISCGAIN and DISCLOSS are the results of discontinued operations, also separated according to their directional effect on income.

The results of estimating equation (2) for the 376 sample firms, reported in panel B of table 4, echo the aggregate results presented in panel A. Gains, both from extraordinary items and discontinued operations, flow through to CEO cash compensation, but losses do not. The z-statistic on  $\lambda_1$ , the slope coefficient on extraordinary gains is 4.41, and the z-statistic on  $\lambda_3$ , the slope coefficient on income-increasing discontinued operations is 8.95. In contrast, the slope coefficients on extraordinary losses and income-decreasing discontinued operations are insignificantly different from zero (z-statistics of -1.57 and -0.20, respectively). No significant difference is detected between the weight on above the line earnings ( $\beta_1$ ) and the weights on below the line gains ( $\lambda_1$  and  $\lambda_3$ ). However, the weight on above the line earnings significantly exceeds the weights on below the line losses ( $\lambda_2$  and  $\lambda_4$ ). Likewise, the weights on below the line gains exceed the weights on below the line losses.

In equations (1) and (2) we assume that the above and below the line income statement dichotomy appropriately classifies recurring and nonrecurring earnings elements. However, we recognize that above the line earnings includes some transactions that are not necessarily expected to recur. Items which are unusual, but do not meet the requirements for below the line disclosure, are classified as special items by Compustat (data item 17).<sup>21</sup> To investigate the treatment of these transactions, we estimate equation (3).

$$COMP_{it} = \alpha + \beta_1 INCBED_{it} + \beta_2 INCBED_{it} + \lambda_1 NRGAINS_{it} + \lambda_2 NRLOSSES_{it} + \lambda_3 SPECIALGAIN_{it} + \lambda_4 SPECIALOSS_{it} + \varepsilon_{it}$$
(3)

In equation (3), INCBED and INCBED- are modified from their original definitions in equations (1) and (2) by removing the effects of special items. The variables NRGAINS and NRLOSSES are identical to their counterparts in equation (1): the sum of extraordinary items and the results of discontinued operations, segregated into gains and losses. The variables SPECIALGAIN and SPECIALOSS represent Compustat special items, also classified by their effect on income.

The results of estimating equation (3) for the 376 sample firms are reported in panel C of table 4. The estimated coefficients and associated z-statistics on INCBED, INCBED-, NRGAINS and NRLOSSES tell a story that is consistent with that of panel A. That is, the relation between cash compensation and above the line earnings is significantly positive, although the association is significantly reduced in loss years. Nonrecurring gains flow through to compensation (the z-statistic on  $\lambda_1$  is 8.16), but nonrecurring losses do not (the z-statistic on  $\lambda_2$  is -0.26). The average weight on income-increasing special items is significantly positive (z-statistic of 13.92), indicating that the treatment of these items is similar to that afforded to extraordinary gains and discontinued operations that increase income. The weight on income-decreasing special items is also significantly positive (z-statistic of 3.96). This is the first evidence that losses flow through to CEO cash compensation. However, the weight on special losses ( $\lambda_4$ ) is significantly lower than the weights both on above the line earnings ( $\beta_1$ ) and on special gains ( $\lambda_3$ ), indicating that at least some

<sup>&</sup>lt;sup>21</sup> For our sample, we have 879 firm-years (264 firms) where an income-increasing special item is reported, and 1,058 firm-years (304 firms) where an income-decreasing special item is reported. The mean (median) income-increasing special item is \$48,466,000 (\$16,158,000). The mean (median) income-decreasing special item is -\$163,048,000 (-\$41,813,000).

shielding takes place. When special items are removed from above the line earnings, the relation between compensation and above the line earnings becomes insignificant in loss years (the mean sum of the weights on INCBED and INCBED- is insignificant). An interpretation is that the CEO receives a fixed salary (the intercept term in our models), but no bonus compensation when performance is negative.

As discussed in section III, 1992 and 1993 are unusual because roughly half of the 517 firm-year observations in these years include below the line earnings components. Most of these relate to the adoption of SFAS No. 106. To assess the influence of these observations on our results, we reestimate the regressions in table 4, this time omitting data from 1992 and 1993. For the most part, the results are qualitatively unchanged. The only difference is in the results for equation (3). With 1992 and 1993 observations omitted, the coefficient on special losses is insignificant. Thus, the findings are unwavering; gains flow through to compensation, and losses are screened out.

As a final check, we identify 189 sample firms that had a CEO in office for at least ten years. We then reestimate equations (1) through (3), restricting the data set to observations for a single CEO for each firm. We perform this analysis because slope coefficients in compensation functions are likely to be both firm- and executive-specific. Even after this restriction, however, the results are qualitatively identical to those reported in table 4; executives profit from gains and are shielded from losses.

### V. SUMMARY AND DISCUSSION

Prior research consistently documents a significantly positive relation between CEO cash compensation and reported accounting earnings. What is not well understood is how components of earnings enter into the compensation function, if at all. To address this question, we concentrate on a simple partition of net income: above the line and below the line items, where below the line items are defined as the results of discontinued operations and extraordinary items. We assume that this classification provides a rough proxy for the true delineation of the permanent and transitory components of earnings.

We conduct firm-specific regressions of CEO cash compensation on (1) above the line earnings, (2) below the line items that increase income, and (3) below the line items that decrease income. Our sample consists of 376 firms that have at least 15 years of compensation data available from *Forbes* between 1970 and 1996, have earnings data available from Compustat, and have at least one nonrecurring item during their time series of compensation and earnings data. In all, we have 8,049 firm-years available for analysis, with below the line gains or losses reported in 23.0 percent of all firm-years.

We find that cash compensation is significantly positively related to above the line earnings, as long as results are positive. Compensation is shielded from the effects of above the line losses. Similarly, below the line transactions that increase income flow through to compensation, but below the line losses do not. This effect is noted for gains and losses that arise both from extraordinary transactions and discontinued operations. Further, unusual gains that do not qualify for below the line treatment are significantly positively weighted in the compensation function. Compensation is shielded from unusual losses. Thus, the data tell an invariable story: gains flow through to compensation, but losses do not. The position of the transaction on the income statement is of relatively little importance. If above vs. below the line disclosure conveys information about the effect of the item on permanent earnings, the results suggest that this characteristic is not emphasized in compensation decisions.

Our findings indicate that compensation committees distinguish among the transactions comprising net income in determining executive pay, and these distinctions tend to favor

the executive. There are several reasons why this might occur. One possibility is that managers have superior bargaining power in compensation negotiations, perhaps because there are few close substitutes for CEOs with firm-specific knowledge and experience. Thus, a favorable contract is offered to avoid the decrement in firm value that would occur if the CEO left the firm. This argument is not entirely persuasive, however, because firms in our sample changed CEOs about once every four years, and executives can only make credible threats of quitting if their talents can be deployed in another firm. All the same, if this type of implicit contract is used by peers, the firm might be compelled to offer similar terms in order to attract and retain talented CEOs. Another explanation for the observed practice of protecting executives from nonrecurring losses and rewarding them for nonrecurring gains is that, on average, nonrecurring items reflect managerial decisions that increase the value of the firm, and managers are rewarded for these decisions. This explanation, of course, only applies to nonrecurring charges that are under the manager's control. A potential rationale for immunizing the contract from strictly exogenous losses, such as extraordinary losses associated with natural disasters, is to avoid imposing undue risk on the executive.

This study provides evidence that compensation committees look beyond bottom line earnings in setting bonus and salary awards to CEOs. Additional research, perhaps in the form of a field study, could provide additional insights into the process by which compensation is determined, and the aspects in which the types of accounting information useful for compensation contracting differ from the accounting numbers used for valuation purposes.

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