

# Determinants Of Reporting Nonrecurring Charges Subsequent To Business Combinations

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## ABSTRACT

*This study examines nonrecurring earnings charges following business combinations and the characteristics that influence their reporting. The study uses a sample of 216 business combinations in which the acquiring firm reported either goodwill or other asset impairments or restructuring charges with respect to a target firm. The results show that changes in the level of CEO cash compensation and institutional ownership are factors that are positively associated with nonrecurring earnings charges in the post-acquisition period. The findings suggest that the transparency of nonrecurring transactions subsequent to a business combination is evident with the expense treatment of acquisition-related costs.*

## 1. INTRODUCTION

This study addresses the following research question: What are the characteristics that influence reporting nonrecurring post-acquisition charges (NRCs)? NRCs are typically one-time earnings charges that may encompass restructuring charges and/or asset impairments. They characteristically occur in connection with a plan of a restructuring of the business segment particularly following an acquisition of another entity. The decision to acquire an entity and later report the downsizing of its operations is not only observable in the public press, but also in financial reports. The charges to earnings, although not frequent, are usually significant. Frequent reporting of NRCs diminishes confidence in the transparency of financial reports and promotes an inefficient capital market system. Improper use of acquisition restructuring reserves, as in the case of Kimberly Clark Corporation and Cendant Corporation has led to Securities and Exchange Commission (SEC) mandated financial statement restatements.<sup>1</sup> Earnings' press releases typically highlight NRCs transactions with the expectation that analysts may ignore the financial effects of the NRCs for valuation purposes.

NRCs have been extensively studied. Literature shows that NRCs are associated with changes in senior management (e.g., Strong and Meyer 1987), NRC firms perform poorly relative to the industry (e.g., Zucca and Campbell 1992; Elliott and Shaw 1988), and NRCs produce lower earnings response coefficients (e.g., Elliott and Hanna 1996). NRC firms are also implicated in using earnings management techniques such as “big baths” and “income smoothing” (e.g., Zucca and Campbell 1992). Stock price reaction to NRCs have produced mixed results ranging from no reaction (e.g., Zucca and Campbell 1992) to positive reaction (e.g., Francis, Hanna, and Vincent 1996), and to a negative stock price reaction (e.g., Elliott and Shaw 1988; and Strong and Meyer 1987). Although these studies produce different outcomes, they consistently emphasize the significant managerial discretion Generally Accepted Accounting Principles (GAAP) provides in the measurement and timing of NRCs. Additionally, as recent GAAP has tightened measurement and reporting issues, still the accounting guidance implies that NRCs are not normal economic events; therefore, separate and prominent disclosures of NRCs facilitate empirical study.

Business combinations<sup>2</sup> are well-publicized events. Equally, the business press publicizes significant downsizing, restructuring, and layoffs following a business combination, especially when coupled with CEO changes. Nevertheless, earlier recognition of these earnings charges means less costs to offset any future revenue, perhaps not only bolstering CEO future compensation, but also stock prices.

Unlike prior research, an examination of NRCs following a business combination provides a unique setting to study NRCs because the responsibility for acquisition decision to the implementation of integration strategies lies with senior management. The CEO coordinates the acquisition team necessary for price negotiations and once the acquisition is complete, the burden shifts to the integration of the acquired operations. This undertaking presents significant challenges and strains on a newly organized firm creating pressure to justify premiums paid to target shareholders through revenue enhancements and cost reductions. Strategic decisions are made, particularly to continue or to exit acquired operations, to justify bid premiums, while adhering to the objectives of the business combination.

The business combination setting is also distinctive because CEOs may be motivated to use business combinations to increase power over greater resources resulting in higher forms of compensation through cash and stock ownership (Jensen 1986). Roll's (1986) hubris theory supports the theory that CEOs are overconfident in their ability to value a target firm and thus their primary motivation to engage in these transactions would be to increase their power domination over a larger firm. The use of cash compensation rewards managers for making new investments while at the same time compensate them for increased risks in managing a larger firm and for the subsequent integration of the combining firms.<sup>3</sup>

Managerial stock ownership is widely used as a mechanism to align managerial with outside interests (e.g., Hubbard and Palia 1995). Although the CEO is primarily responsible for the acquisition decision (Haspeslagh and Jemison 1991), external pressure from institutional investors may influence the integration strategies employed by the acquiring firm. Institutional owners monitor firm performance. They have the ability and resources to do so. Chung, Firth, and Kim (2002) findings show that significant institutional owners deter managers' ability to use discretionary accruals whether income increasing or decreasing for their own benefit. Institutional investors, as well as manager-owners, have a greater incentive to monitor firm performance especially in the aftermath of a business combination to ensure realization of expected revenue and cost synergies.

The primary purpose of this study is to examine whether CEO cash compensation,<sup>4</sup> managerial and institutional ownership, are factors that influence reporting NRCs following a business combination. Other factors, such as, accounting method, CEO turnover, firm performance, size, growth, and history of reporting NRCs are also considered.

In a sample of 216 business combinations that reported NRCs during the post-acquisition period, the empirical analysis finds that CEO compensation and outside institutional ownership, significant factors that influence the acquiring firm to report NRCs subsequent to acquisition. Additionally, this study contributes to the literature by expanding the study of NRCs by finding aspects that are associated with the occurrence of NRCs unique to business combination setting

This paper is organized as follows: Section 2 presents the literature review and hypotheses development. Section 3 presents the research design, including the regression model, and sample selection process. Results are discussed in Section 4. Discussion and conclusions are presented in Section 5.

## **2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

### **2.1 NRCS And CEO Cash Compensation**

The bonus hypothesis predicts that if earnings are already below the target for bonus calculation, management has an incentive to reduce earnings further so that future earnings and bonuses will be greater (Healy 1985). Studies also find that CEO compensation increases when NRCs are reported in connection with general operations because CEOs are encouraged to restructure (e.g., Adut, Cready, and Lopez 2003; Gaver and Gaver 1998; Dechow, Huson, and Sloan 1994). The conclusion reached is that CEO compensation is positively affected when the firm downsizes. Collectively, the conclusion from these studies is that an association between compensation and special items appearing on the income statement exists, but the direction of the association may not be consistent.

Business combinations increase firm size. Managers may be motivated to increase firm size so to increase their sphere of influence and power and thus their compensation. Jensen (1986) argues that managers are motivated to engage in mergers and acquisitions to increase their self-interest in the form of higher stock wealth and compensation. Hubris makes managers overconfident in their ability to value properly a target due to their self-worth, and managers overpay while enhancing their corporate empire. Shleifer and Vishny (1988) also argue that managers are motivated to employ mergers and acquisitions to boost their own compensation. Khorana and Zenner (1998) find a positive relationship between change in executive cash compensation and the change in firm size due to acquisitions, in spite of poor stock performance in the post-acquisition periods.

The recognition of NRCs in connection with business combinations in the form of asset impairments or restructuring charges reflects transactions that result in firm downsizing, in which the acquirer is reducing firm size in the form of removing assets or human capital during the post-acquisition period. Not only does the CEO play a significant role in the acquisition and restructuring decisions, but also these decisions affect CEO compensation (Hayward and Hambrick 1997). Nevertheless, changes in firm size through contracting activities in connection with business combinations may warrant changes in compensation levels. Therefore, the following hypothesis is proposed:

**Hypothesis 1:** CEO compensation changes in the post-acquisition periods are positively associated with those acquiring firms that report NRCs with respect to a target firm.

## **2.2 NRCS And Equity Ownership**

The long established practice of using equity-based compensation aims to better align shareholder and managerial interests. Managerial ownership also acts as a monitoring device so that managers make decisions and take actions that boost shareholder value. Institutional ownership acts as a monitoring device, especially by significant institutional investors. Significant investors are more vigilant in monitoring operations, such as streamlining and reducing costs to establish efficient operations subsequent to acquisition, because these investors have the resources to do so.

The actions of institutional investors have been empirically documented. Mangel and Singh (1993) find that institutional ownership enhances CEO accountability especially through their influence on the determination of CEO cash compensation. Bens (2002) also finds that more information was disclosed of restructuring activities when there is increased shareholder monitoring. Chung et al. (2002) contend that significant institutional investors inhibit managers' use of discretionary accruals. NRCs reflect firm downsizing either through less human or physical capital. Acquisition related synergies should enhance firm performance. Pressures from significant shareholders to do "more with less" will result in improved firm performance following an acquisition. Therefore, the second and third hypotheses are as follows:

**Hypothesis 2:** There is a positive association between NRCs and CEO ownership.

**Hypothesis 3:** There is a positive association between NRCs and institutional ownership.

## **3. RESEARCH DESIGN**

### **3.1. Models**

Univariate tests examine the relationship between NRCs and the independent variables. Multiple regressions are used to examine the association between NRCs and the test variables. An examination of tolerance levels and variance inflation factors of independent variables is used to detect multicollinearity among independent variables. The White test is used to detect heteroscedasticity. The hypotheses predict that there is an association between NRCs and changes in CEO cash compensation, and CEO and institutional ownership. Control variables, based on prior empirical work are also included. The following regression model is used.

$$g(\text{NRC}) = \beta_0 + \beta_1(\text{COMP}) + \beta_2(\text{CEOOWN}) + \beta_3(\text{INSTITUTE}) + \beta_4(\text{METHOD}) + \beta_5(\text{POSINC}) + \beta_6(\text{NEGINC}) + \beta_7(\text{RETURN}) + \beta_8(\text{CEOCHG}) + \beta_9(\text{PERSIST}) + \beta_{10}(\text{SIZE}) + \beta_{11}(\text{AMKTBK}) + \beta_{12}(\text{TMKTBK}) + \beta_{13}(\text{PRIOR}) + \beta_{14}(\text{T}_0 \dots \text{T}_2) + \varepsilon$$

where the dependent variable is as follows:

NRC = Log value of nonrecurring charges that are post-acquisition transactions representing goodwill impairments, other asset impairments, and/or restructuring charges specifically identified with the target firm. The post-acquisition transactions occurred within three years of the acquisition date and affect the acquirers' income<sup>5</sup>. One-time fees or other expenses associated with the acquisition (i.e., legal, accounting, regulatory, etc.) are not considered for this study. Direct acquisition costs are also not included.

The following are the test variables:

COMP = Log value of the dollar change in CEO cash compensation (annual salary and bonus) during the post-acquisition period,

CEOOWN = CEO equity ownership percentage as of acquisition date and

INSTITUTE = Aggregate percentage institutional ownership as filed on Form 13F as of acquisition date.

The control variables are as follows.

METHOD = 1 if the Acquiring firm uses the purchase method of accounting or 0, if the pooling-of-interests method is used to account for the business combination. The purchase method of accounting is the only accepted method for business combinations effective July 1, 2001 (SFAS No. 141)<sup>6</sup>. The debate over which method of accounting is appropriate for business combinations spans decades of research and discussion. Although accounting choice studies document that the pooling-of-interests method creates higher bid premiums (e.g. Robinson and Shane 1990, and Nathan 1988), these premiums are not recognized for accounting purposes.

Pooling may be transparent when it comes to the recognition of the costs associated with business combinations because expense treatment is required. There is little empirical evidence that directly addresses the issue. The pooling-of-interests method requires expensing of all acquisition costs; whereas, under the purchase method only indirect costs are expensed. Further, in purchase accounting, reserves for future losses may be recognized as part of the acquisition with an offsetting increase to acquired goodwill that will not appear as a charge to future earnings unless the goodwill is either amortized<sup>7</sup> or subsequently impaired. Thus, the transparency of NRCs is evident with the use of the pooling-of-interests method for the business combination because the pooling procedure requires expense treatment, which is plainly disclosed.

CEOCHG = 1 if there is a change in the CEO between acquisition date and during the post-acquisition periods, or 0 otherwise. Although earnings management may be directly implicated as a motivation for lacking disclosure of NRCs, at the same time new CEOs may be more likely to place blame for poor performance on the inferior judgments of predecessors. Elliott and Shaw (1988) contend that incoming CEOs consciously overstate losses attributable to their predecessors.

Weisbach (1995) also maintains that CEO changes are important events for corporations because they imply reversals of poor past judgments. Weisbach finds that the probability of divesting a previously acquired entity at a loss increases when there is a different CEO at the time of the initial acquisition.<sup>8</sup> This finding could be interpreted as the acquiring CEO being unwilling to give up on a project because it conveys negative signals as to the initial acquisition decision. Bens (2002) finds less restructuring plan disclosures when the restructuring is preceded by routine changes in CEOs. In Elliot and Shaw (1988), 39% of their write-off sample experience changes in top management. Therefore, it is plausible that most NRCs occur when there is change in the CEO during the post-acquisition period.

PERSIST or earnings persistence is measured as 1 if the firm-years'  $E_{it}/P_{it}$  falls in portfolios 3 through 8, and 0 otherwise.  $E_{it}$  represents earnings in the year of the post-acquisition activity and  $P_{it}$  represents the year-end stock price of the acquiring firm in the year of the post-acquisition transaction. The ranking procedure follows Adut et al. (2003). The procedure assigns all firm-years with negative values of  $E_{it}/P_{it}$  a ranking of 1, and groups all remaining firm-years into nine equal portfolios with assigned rankings of 2 through 10. This procedure initially set forth by (Baber et al. 1998, 1999), assumes that portfolios 1, 2, 9, and 10 have more transitory items in earnings and hence are less persistent than the other middle portfolios. Similar to Adut et al. (2003), restructuring charges, goodwill, and other asset impairments are nonrecurring transactions; therefore, controlling for earnings persistence is particularly critical.

The empirical evidence suggests that poor past performance-type variables and firm size lead to larger write-offs (e.g., Francis et al. 1996; Elliott and Shaw 1988). Variables that capture acquirer firm performance (RET) and size (SIZE) are included in the analysis. Market-to book ratios in pooling deals are greater than purchase method deals (AMKTBK, TMKTBK) and thus are included as control variables (e.g. Nathan and Dunne 1991). Similarly, the model controls for income before NRCs, income taxes, discontinued operations, extraordinary items, cumulative effect of accounting changes is equal to 1 if positive (POSINC) 0, otherwise and 1 if negative (NEGINC) (e.g. Adut et al. 2003 and Gaver and Gaver 1998).

PRIOR is used to control for the history of the acquiring firm in reporting NRCs for the likelihood of reporting NRCs may be influenced by a history of similar past transactions (e.g. Francis, Hanna and Vincent 1996, and Elliott and Hanna 1996). PRIOR is coded as 1 if the acquirer reported a special item (Computstat Item No. A17) in the year prior to the NRC, and 0 otherwise.  $T_0$ ,  $T_1$ , and  $T_2$  are used to control for the year of the NRC, with  $T_0$  being the acquisition year,  $T_1$  is one year following the acquisition, and  $T_2$  represents two years following the acquisition year.

### **3.2 Sample Selection**

The initial sample of merger and acquisition transactions is obtained from Mergerstat with the criteria that the buyer and seller are domestic publicly held companies whose stock trades on a recognized exchange, and who file with the SEC. Additional requirements are that the acquirer obtains control of the target through acquisition of target stock. The sample covers business combinations that are completed during the years 1995 through 1998, inclusive. This procedure provides an initial sample of 1,058 transactions. However, for various reasons, including availability of data on Compustat, and through closer inspection of transactions, the initial sample size for analysis reduces to 638 observations.

Financial statements and footnotes included on either Forms 10-K or 10-Q of the acquiring firm are examined up to three years following a business combination for the reporting of either goodwill or other asset impairments and restructuring charges that are predominantly severance charges. The NRCs are specifically identified with the target firm, and result in an income statement effect for the Acquiring firm.<sup>9</sup> This procedure reduces the sample to 216. NRCs do not include the costs to remove duplicate facilities and general firm restructuring is not considered. Changes in CEO between the acquisition date and post-acquisition periods is determined through examination of proxy statements. Institutional ownership is determined by aggregating ownership as reported on Form 13F as filed with the SEC as of acquisition date. ExecuComp and proxy statements are used to obtain CEO compensation data. All other financial data is obtained from Compustat.

## **4. RESULTS**

### **4.1 Descriptive Statistics**

A distribution of business combinations by year and industry appears in Table 1. Most of the business combination sample is from 1997 and is largely represented by the manufacturing industry.

**Table 1**  
**Distribution of Business Combinations**

*Panel A: Acquisition Values by Year*  
(\$millions)

<u>Acquisition Year</u>	<u>Observations</u>	<u>Mean</u>	<u>Median</u>	<u>Minimum</u>	<u>Maximum</u>
1995	27	2,053	620	34	13,000
1996	50	1,345	229	3	19,500
1997	79	1334	365	9	14,491
1998	60	2,996	335	3	43,158

*Panel B: Distribution by Industry*

<u>Industry</u>	<u>SIC</u>	<u>Acquirers</u>	<u>Targets</u>
Mining	1000-1400	5	6
Manufacturing	2000-3990	73	67
Transportation	4011-4899	10	10
Utilities	4900-4991	8	8
Wholesale & Retail	5000-5990	21	20
Financial Services	6021-6799	53	57
Other Services	7000-8750	<u>46</u>	<u>48</u>
Total		216	216

**Table 2**  
**Descriptive Statistics**

*Panel A: Continuous Variables*

	<u>Mean</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Median</u>	<u>Standard Deviation</u>
<b>NRC</b>	5.453	2.283	15.725	4.530	2.386
<b>COMP</b>	2.981	0.000	4.084	2.964	0.415
<b>CEOOWN</b>	0.029	0.000	0.552	0.001	0.072
<b>INSTITUTE</b>	0.438	0.000	0.935	0.416	0.234
<b>RETURN</b>	0.113	-0.670	1.414	0.113	0.296
<b>SIZE</b>	3.328	1.352	5.809	3.243	0.864
<b>AMKTBK</b>	3.812	0.000	9.279	3.061	2.380
<b>TMKTBK</b>	3.116	0.000	9.743	2.528	2.202

*Panel B: Definition of Variables*

**NRC** The log value of nonrecurring charges that are post-acquisition transactions representing goodwill impairments, other asset impairments, and/or restructuring charges specifically identified with the Target firm. The post-acquisition transactions occurred within three years of the acquisition date (the “post-acquisition period”), are not capitalized direct costs, and included in the Acquirers’ income.

**COMP** The log value of the dollar change in CEO cash compensation (annual salary and bonus) during the post-acquisition period.

**CEOOWN** CEO equity ownership percentage as of acquisition date.

**INSTITUTE** Institutional equity ownership percentage as of acquisition date.

**METHOD** The method used for the business combination accounting, Purchase = 1, Pooling = 0.

**POSINC** Pretax income before special items is positive then 1, otherwise, 0.

**NEGINC** Pretax income before special items is negative then 1, otherwise, 0.

**RETURN** Average Acquirers’ return on common equity during the post-acquisition period.

**CEOCHG** Change in CEO between acquisition date and post-acquisition periods (1=yes, 0=no).

**PERSIST** Firms’ years E/P ratio falls in portfolios 3 through 8, 0 otherwise.

**SIZE** The log value of Acquirer and Target firms’ combined total assets at acquisition date.

**AMKTBK** The Acquirer market-to-book-value of equity ratio at acquisition date.

**TMKTBK** The Target market-to-book-value of equity ratio at acquisition date.

**PRIOR** Acquirer reported special items in year prior to acquisition (1=yes, 0=no).

**Table 3**  
**Pearson Correlation Coefficients**  
*(p-values)*  
**N =216**

	<u>NRC</u>	<u>COMP</u>	<u>CEOOWN</u>	<u>INSTITUTE</u>	<u>METHOD</u>	<u>POSINC</u>	<u>NEGINC</u>	<u>RETURN</u>	<u>CEOCHG</u>	<u>PERSIT</u>	<u>SIZE</u>	<u>AMKTBK</u>	<u>TMKTBK</u>	<u>PRIOR</u>
<b>NRC</b>	1	0.290 ( <i>&lt;.0001</i> )	-0.041 ( <i>0.552</i> )	0.286 ( <i>&lt;.0001</i> )	-0.176 ( <i>0.009</i> )	-0.165 ( <i>0.015</i> )	0.125 ( <i>0.066</i> )	0.040 ( <i>0.558</i> )	-0.097 ( <i>0.153</i> )	-0.027 ( <i>0.689</i> )	0.227 ( <i>0.001</i> )	0.071 ( <i>0.295</i> )	0.027 ( <i>0.689</i> )	-0.042 ( <i>0.537</i> )
<b>COMP</b>		1	-0.287 ( <i>&lt;.0001</i> )	0.274 ( <i>&lt;.0001</i> )	-0.068 ( <i>0.321</i> )	0.029 ( <i>0.675</i> )	-0.037 ( <i>0.583</i> )	0.291 ( <i>&lt;.0001</i> )	-0.123 ( <i>0.071</i> )	0.193 ( <i>0.004</i> )	0.642 ( <i>&lt;.0001</i> )	0.165 ( <i>0.015</i> )	0.119 ( <i>0.079</i> )	-0.038 ( <i>0.574</i> )
<b>CEOOWN</b>			1	-0.173 ( <i>0.010</i> )	0.089 ( <i>0.193</i> )	-0.135 ( <i>0.047</i> )	0.068 ( <i>0.317</i> )	-0.236 ( <i>0.001</i> )	0.026 ( <i>0.701</i> )	-0.196 ( <i>0.004</i> )	-0.294 ( <i>&lt;.0001</i> )	-0.029 ( <i>0.668</i> )	0.015 ( <i>0.830</i> )	-0.025 ( <i>0.718</i> )
<b>INSTITUTE</b>				1	-0.091 ( <i>0.182</i> )	-0.180 ( <i>0.008</i> )	0.151 ( <i>0.026</i> )	-0.170 ( <i>0.013</i> )	-0.048 ( <i>0.482</i> )	0.094 ( <i>0.165</i> )	0.131 ( <i>0.054</i> )	0.073 ( <i>0.282</i> )	0.072 ( <i>0.289</i> )	0.006 ( <i>0.927</i> )
<b>METHOD</b>					1	-0.083 ( <i>0.225</i> )	0.062 ( <i>0.366</i> )	-0.081 ( <i>0.237</i> )	0.071 ( <i>0.293</i> )	-0.156 ( <i>0.021</i> )	-0.145 ( <i>0.033</i> )	-0.416 ( <i>&lt;.0001</i> )	-0.150 ( <i>0.027</i> )	-0.012 ( <i>0.859</i> )
<b>POSINC</b>						1	-0.522 ( <i>&lt;.0001</i> )	0.009 ( <i>0.892</i> )	-0.069 ( <i>0.310</i> )	0.018 ( <i>0.789</i> )	0.328 ( <i>&lt;.0001</i> )	-0.184 ( <i>0.007</i> )	-0.166 ( <i>0.014</i> )	0.305 ( <i>&lt;.0001</i> )
<b>NEGINC</b>							1	0.011 ( <i>0.868</i> )	-0.120 ( <i>0.078</i> )	-0.037 ( <i>0.586</i> )	-0.236 ( <i>0.000</i> )	0.079 ( <i>0.248</i> )	0.118 ( <i>0.083</i> )	0.553 ( <i>&lt;.0001</i> )
<b>RETURN</b>								1	-0.156 ( <i>0.022</i> )	0.058 ( <i>0.398</i> )	0.215 ( <i>0.002</i> )	0.039 ( <i>0.575</i> )	0.019 ( <i>0.784</i> )	0.047 ( <i>0.499</i> )
<b>CEOCHG</b>									1	-0.194 ( <i>0.004</i> )	-0.137 ( <i>0.043</i> )	-0.001 ( <i>0.985</i> )	0.040 ( <i>0.556</i> )	-0.130 ( <i>0.056</i> )
<b>PERSIT</b>										1	0.198 ( <i>0.003</i> )	0.139 ( <i>0.040</i> )	0.045 ( <i>0.510</i> )	-0.013 ( <i>0.848</i> )
<b>SIZE</b>											1	0.021 ( <i>0.753</i> )	-0.001 ( <i>0.987</i> )	0.007 ( <i>0.923</i> )
<b>AMKTBK</b>												1	0.319 ( <i>&lt;.0001</i> )	-0.068 ( <i>0.319</i> )
<b>TMKTBK</b>													1	0.014 ( <i>0.835</i> )
<b>PRIOR</b>														1

See Table 2 for definitions of variables.

Table 2 presents the descriptive statistics. The descriptive statistics show that the mean NRC for all sample firms is \$5.453 (log value) and the mean dollar change in CEO cash compensation during the post-acquisition period is \$2.981 (log value). The mean ownership by CEOs and institutions is approximately 3 and 44 percent, respectively.

The Pearson correlation coefficients among the variables are presented in Table 3.

The variable NRC is positively correlated with COMP ( $p < .0001$ ) and with INSTITUTE ( $p < .0001$ ). There is a negative correlation between NRC and CEOOWN; however, the correlation is not significant. The correlation results indicate that there is a positive association between NRCs and changes in CEO compensation during the post-acquisition period (COMP), and institutional ownership at acquisition date (INSTITUTE).

NRCs are also positively correlated with NEGINC ( $p = 0.066$ ) and with SIZE ( $p = 0.001$ ) and negatively correlated with METHOD ( $p = 0.009$ ) and with POSINC ( $p = 0.015$ ). The correlation results for the control variables indicate that NRCs are positively associated with firm size (SIZE) and with pretax loss before special item (NEGINC and POSINC). The correlation results for the control variables indicate that there is an association between NRCs and the use of the pooling-of-interests method for the business combination (METHOD).

**4.2 Univariate Tests**

**Table 4**  
**Univariate Results**

<u>Samples</u>	<u>No. of Observations</u>	<u>Mean</u>	<u>P-Values</u>
CEO Ownership	113	5.243	
No CEO Ownership	<u>103</u>	5.695	0.164
Total	216		
Institute Ownership	212	5.449	
No Institute Ownership	<u>4</u>	5.829	0.753
Total	216		
Purchase	91	4.964	
Pooling	<u>125</u>	5.815	0.009
Total	216		
Positive Income	103	4.675	
Negative Income	<u>113</u>	5.743	0.015
Total	216		
CEO Change	47	5.015	
No CEO Change	<u>169</u>	5.578	0.153
Total	216		
Persistence	109	5.392	
No Persistence	<u>107</u>	5.522	0.689
Total	216		
Prior NRC	146	5.386	
No Prior NRC	<u>70</u>	5.599	0.537
Total	216		

See Table 2 for definitions of variables.



Table 4 presents the univariate tests. The mean value of NRCs for the pooling-of-interests sub-sample (5.815) is significantly greater than the mean value for the purchase accounting observations (4.675),  $p=0.009$ . Mean values of NRCs for the sub-samples of no CEO ownership, no institutional ownership, negative pretax income before special items, no CEO change, no earnings persistence, and no prior history of special items are greater than their respective comparable sub-samples, but the differences in the means are not significant.

### 4.3 Multivariate Regression Results

#### 4.3.1 Results on Test Variables

Table 5 presents the regression results. The coefficient for the variable COMP is positive and significant at the  $p=0.000$  level. The coefficient for the variable INSTITUTE is positive and significant at the  $p=0.000$  level. CEOOWN is also positive, but not significant. The results show that there is a positive association between NRCs and changes in CEO compensation during the post-acquisition period and institutional ownership. These results support hypotheses H1 and H3.

**Table 5**  
**Regression Results**

<u>VARIABLE</u>	<u>Parameter Estimate</u>	<u>t Value</u>	<u>Pr &gt;  t </u>
INTERCEPT	2.405	4.785	0.000
COMP	1.061	4.771	0.000
CEOOWN	1.107	0.802	0.423
INSTITUTE	1.854	5.213	0.000
METHOD	-1.075	-8.674	0.000
POSINC	-0.572	-1.478	0.140
NEGINC	0.849	1.936	0.054
RETURN	-0.091	-0.394	0.694
CEOCHG	-0.470	-2.633	0.009
PERSIST	-0.787	-5.277	0.000
SIZE	0.384	3.342	0.001
AMKTBK	-0.067	-2.818	0.005
TMKTBK	-0.050	-1.906	0.057
PRIOR	-0.788	-1.979	0.049
T <sub>0</sub>	-1.093	-5.012	0.000
T <sub>1</sub>	-0.858	-4.987	0.000
T <sub>2</sub>	-1.343	-7.525	0.000
F-VALUE	13.830		
ADJUSTED R <sup>2</sup>	0.488		
OBSERVATIONS	216		

See Table 2 for definition of variables.

#### 4.3.2 Results on Control Variables

As expected, the significant negative coefficient for METHOD indicates that NRCs are associated with the use of the pooling-of-interests method for the business combination. Similarly, the significant positive coefficient for SIZE indicates that NRCs are associated with the combined size of the acquirer and target firms. In addition, the significant negative coefficient on PERSIST indicates that NRCs are associated with earnings that are not persistent. Contrary to expectations, there are significant negative associations between NRCs and CEOCHG, and with PRIOR, indicating that NRCs occur when the decision for the business combination and the subsequent downsizing is made by the same CEO and when there is no prior history of reporting special items by the acquiring firm.

## 5. DISCUSSION AND CONCLUSIONS

This study is based on 216 business combinations over a four-year period from 1995 through 1998. The study analyzes those business combinations during a three-year period in which the acquiring firm reported goodwill or other asset impairments, or restructuring charges as they specifically relate to the target firm and affect the acquiring firms' income. The study examines whether the post-acquisition transactions are influenced by the CEO's change in cash compensation during the post-acquisition period or by the equity ownership of the CEO and institutional investors at acquisition date.

The findings show that post-acquisition transactions that reflect acquiring firm downsizing with respect to the target firm are positively associated with changes in the CEO's cash compensation during the post-acquisition period. The results suggest that the magnitude of the post-acquisition transaction is influenced by the CEO's self-interest in the form of cash compensation. Further, the results show that the monitoring effect of institutional investors influences NRCs.

This study is limited to the extent that it only examines acquisition related charges that are recognized as a component of income and does not include acquisition-related costs that are capitalized under the purchase method or charges that may be reported by the target firm during the stub period, which is the period before the completion of the business combination.

This study has several contributions. This study extends previous research of the association between CEO compensation and restructuring activities and finds that CEOs are also encouraged through enhanced compensation to downsize following a business combination. The findings also indicate that greater outside monitoring may lead to frequent financial restructuring following an acquisition.

The results show that the expectation that the purchase accounting method will lead to more NRCs may be misguided because differences in accounting procedures for acquisition-related costs contribute more to transparency than the transaction itself<sup>5</sup>. Therefore, the proposed change by the FASB in the Exposure Draft, Business Combinations, to require expensing of acquisition-related costs may improve the transparency of business combination transactions. A future area of research that may be worthwhile to examine is the frequency and factors affecting the likelihood of post-acquisition NRCs now that acquisition accounting requires use of the purchase method.

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## **EXHIBIT**

Example of NRCs (asset write-down and restructuring charges)

(Excerpt from Harbinger Corp. 1997 Form 10-K, filed with the SEC on March 31, 1998, acquisition of Premenos Technology Corp., a sample observation).

### Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

In connection with the HNS, STI, Acquion, Atlas and Premenos acquisitions, the Company incurred \$2.0 million, \$12.4 million, \$2.5 million, \$2.0 million, and \$15.3 million, respectively, for acquisition related expenses, asset write-downs and integration costs incurred. Approximately \$8.0 million of the costs and expenses incurred in connection with the acquisitions of HNS, STI, Acquion, Atlas, and Premenos were Integration Activity Costs which may recur in other expense categories in the future and may result in an increase in some expense categories as a percentage of total revenues. The Company also incurred \$3.8 million in restructuring charges related to increasing synergies among all operating divisions as a result of recent acquisitions.

Notes to Consolidated Statements.

#### 2. ACQUISITIONS.

On December 19, 1997, the Company acquired Premenos, a Delaware corporation based in Concord, California. In connection with the transaction, which was accounted for using the pooling-of-interests method of accounting, the Company issued 5,358,655 shares of its common stock in exchange for all of the shares of Premenos common stock. All Premenos options and warrants were converted into the Company's options and warrants in accordance with the conversion ratio.

In connection with the Premenos acquisition, the Company incurred a charge of \$15.3 million in 1997 for acquisition related expenses, asset write-downs and integration costs incurred (see Note 15).

#### 15. CHARGE FOR PURCHASED IN-PROCESS PRODUCT DEVELOPMENT, WRITE-OFF OF SOFTWARE DEVELOPMENT COSTS, ACQUISITION RELATED, AND OTHER ONE-TIME CHARGES

The Company incurred \$3.8 million in restructuring charges related to increasing synergies among all operating divisions as a result of recent acquisitions. The restructuring resulted in the termination of 82 employees across several departments including research and development, customer service, marketing, administrative, and finance and other areas. As of December 31, 1997, the Company had actually paid \$261,000 in termination benefits to former employees.

Approximately \$8.0 million of the costs and expenses incurred in connection with the acquisitions of HNS, STI, Acquion, Atlas, and Premenos include certain internal expense allocations which may recur in other expense categories in the future and may result in an increase in some expense categories as a percentage of total revenues. The Company anticipates additional merger related charges totaling \$10-\$15 million in the first quarter of 1998.

## **ENDNOTES**

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<sup>1</sup> In the 1995 merger between Kimberly Clark Corporation and Scott Paper Co., a \$1.44 billion reserve for restructuring charges was established, and in later years allocated to different projects not associated with the merger and eventually systematically

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reversed to earnings. Cendant Corporation, in connection with its 1996 merger with Ideon Group Inc. intentionally overstated merger reserves that are later used for other purposes other than its original intent, including reversals to income as needed. Once Cendant exhausted the Ideon reserve, there was a greater need for the Cendant/HFS merger in 1997 to establish additional inflated merger reserves (see SEC Enforcement Release Nos. 1542 and 1272).

<sup>2</sup> The term *business combination* is synonymous with *mergers and acquisitions* meaning the acquisition by a corporation of a controlling interest in the stock of another corporation.

<sup>3</sup> As an example, see S. Thurm's *The "I Must Do a Merger" Bonus* as reported in The Wall Street Journal dated April 6, 2004, in which the CEO of Juniper Networks received a bonus for new business acquisitions aimed at growth opportunities, and the CEO of J.P. Morgan Chase & Co. was rewarded \$10 million for completing the integration between J. P. Morgan and Chase Manhattan.

<sup>4</sup> The use of cash compensation is crucial to this study (e.g., Dechow et al. 1994; Gaver and Gaver 1998; Adut et al. 2003), because annual cash salary and bonus, unlike equity-based compensation, is readily assignable to a specific reporting period corresponding to the reporting of post-acquisition transactions. Further, cash-based compensation is measurable and not subject to valuation judgments as in the case of equity-based compensation such as options.

<sup>5</sup> In a separate analysis of size-contracting activities following an acquisition, a sample of 855 acquisitions of a controlling interest in another entity during 1994 through 1998, inclusive, reveals 764 contracting transactions were reported through the year 2000. Of that amount, 85% of the size-contracting transactions (restructuring charges, goodwill, and other asset impairments), with respect to the acquired target firm were reported within three years of the acquisition date. Therefore, NRCs through  $t + 2$ , two years following the acquisition year  $t$ , to capture the vast majority of the NRCs.

<sup>6</sup> The FASB is proposing the use of the *acquisition method*, which will supersede the purchase method of accounting for business combinations. The acquisition method limits the capitalization of acquisition-related costs to those that meet the definition of a liability on acquisition date in accordance with SFAS No. 146, *Accounting for Costs Associated with Exit or Disposal Activities*.

<sup>7</sup> SFAS No. 142 *Intangible Assets* effective after December 15, 2001 prohibits amortization of goodwill.

<sup>8</sup> Weisbach (1995) and Ravenscraft and Scherer (1987) found that the circumstances of CEO departures, forced or voluntary, are not significant factors in explaining the likelihood of divestitures.

<sup>9</sup> While examining financial statement footnotes or MD&A disclosures, clear references to the target firm is a requirement for inclusion in the sample. Otherwise, any *other* NRC transactions reported by the acquiring firm were not included. In addition, NRCs must reflect an income statement effect. It is acknowledged that although "reserves" for losses may be accrued for as part of the acquisition cost when the purchase method is used, these items are direct acquisition costs and are not considered NRCs for this study. This situation is generally due to inconsistent and/or inadequate disclosures of the purchase accounting entry under APB No. 16. Further, NRCs may be recognized by the target firm *before* acquisition (known as the "stub period") under *both* accounting methods. Information as to target firm NRCs between acquisition announcement and completion dates is generally not available and thus not included in this sample. See Exhibit A for examples.

<sup>x</sup> See Jennings, Palepu, and Petroni (1999).

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