

THE ASSOCIATION BETWEEN INSTITUTIONAL OWNERSHIP AND THE LIKELIHOOD OF THE FIRM REPORTING NON-RECURRING CHARGES

Uma Velury*, Gregory Kane**

Abstract

This paper examines the association between the level of institutional ownership and the likelihood of the firm reporting non-recurring or unusual charges. The increase in the magnitude and frequency of one-time charges has caused confusion and debate in the media (WSJ 2001). This paper posits that increased monitoring on the part of influential stakeholders (e.g., institutional investors) causes management to take corrective actions which leads to the reporting of these charges. If this is the case, non-recurring charges may be informative and value-relevant in the sense that they signal restructuring activity that will likely improve the degree of efficiency in which corporate assets are invested. The results support the hypothesis and indicate that the likelihood of management reporting non-recurring charges is positively and significantly associated with the level of institutional ownership.

Keywords: Institutional ownership, Non-recurring charges, Negative Special Items.

*Ph.D., Professor, University of Delaware, Newark, DE 19716, Work: (302) 831-1764

E-mail: uvelury@udel.edu

**Ph.D., Professor, University of Delaware, Newark, DE 19716, Work: (302) 831-6826

E-mail: kane@udel.edu

1. INTRODUCTION

The purpose of this paper is to investigate if the likelihood of the firm reporting non-recurring charges is associated with the proportion of institutional ownership in the corporate base. Non-recurring charges (or special item charges as often referred to) are any one-time losses or write-offs that are either unusual or infrequent but not both.¹ Examples of these charges are severance pay related to employee-layoffs, restructuring charges related to streamlining of operations, or charges related to asset impairment. There has been an increase in the frequency of the companies reporting such charges. Elliott and Hanna (1996) report that in 1975 only 5% of all firms listed on the Compustat database reported material non-recurring charges. The percentage of companies reporting such charges increased to 21% by 1993. The “recurring non-recurring charges” have caused confusion and debate in the media regarding the nature of these charges (e.g., WSJ 2001).

This study posits that the likelihood of the reporting of these charges can be explained, in part, by the rise in institutional ownership² in the United States. Institutional ownership arguably plays a significant role in corporate governance. In 1992 institutional ownership exceeded 50% of the total U.S. capital market compared to 15.9% in 1965 (Eakins 1995). This increase in institutional ownership has arguably translated into an increase in corporate governance. Black (1990) argues that institutional holdings are now so large that they cannot be sold without adversely

affecting the price of the stock. Hence, institutions are becoming long-term investors that take a more active role in corporate governance matters. These views are consistent with Shleifer and Vishny (1986) who present a model in which owners of large blocks of shares have greater incentive to monitor.

In addition to incentives, institutional investors have the power to monitor management. This power is derived from the voting power that institutions have due to large blocks of shares they own or correctly pricing the stock in capital markets.³ Several academic studies have documented the positive impact of institutional ownership in equity contexts (e.g., McConnell and Servaes 1990; Brous and Kini 1994; Smith 1996). These studies support the theory that lower agency costs translate into greater market value of equity.

This study posits that a high level of institutional ownership in the corporate base leads to a close monitoring of management, which results in management constantly evaluating its projects. This assertion is supported by Useem (1996) who notes that institutional investors often meet with management to discuss company strategies and operations. Such meetings may result in actions on the part of management such as restructuring and write-offs of impaired assets when the firm’s performance is either unsatisfactory or can be improved further by taking appropriate actions. If this is true, then the likelihood of the firm reporting such charges should be related to the level of institutional ownership. Firms with a high (low) level of institutional ownership should be

positively (negatively) associated with the likelihood of reporting such charges.

Prior research examining charges related to special items has focussed on the magnitude of the charges to investigate their discretionary nature (e.g., Rees et al 1996). The findings of these studies have generally indicated that non-recurring charges are related to firm-specific economic conditions (Rees et al 1996; Elliott and Hanna 1996). These studies, however, have not investigated the impact of the presence of institutional shareholders on the reporting of these charges. The present study posits that increased monitoring by sophisticated investors leads to a greater evaluation of existing projects by management. Such evaluations may result in management taking certain actions, including the reporting of non-recurring charges. If this is the case, non-recurring charges may be informative and value-relevant in the sense that they signal restructuring activity that will likely improve the degree of efficiency in which corporate assets are invested.

Furthermore, such an association would also indicate that firms with higher levels of institutional ownership are likely candidates for certain actions, which are typically considered to be non-recurring under Generally Accepted Accounting Principles (GAAP). An example of such a “non-recurring action” is restructuring activity. The threshold at which firms might choose to restructure varies cross-sectionally. However, such a threshold would be lower for firms with high institutional investors, who are likely to insist that management take preventive actions rather than corrective actions.

This study examines if the likelihood of the firm reporting charges related to special items is related to the level of institutional ownership in the corporate structure. Specifically, this study investigates if the likelihood of the firm reporting such charges is related to institutional ownership, after controlling for other factors that have been identified by prior research including the firm’s economic conditions and proxies for management’s incentives in reporting non-recurring charges.

The results indicate that the likelihood of the firm reporting such charges is positively related to its level of institutional ownership. These findings are consistent with the view that the presence of influential stakeholders (i.e., institutional investors) is likely to result in greater monitoring which prompts management to take actions to improve current operations that result in the reporting of non-recurring charges. The results also indicate that the likelihood of the firm reporting such charges is positively associated with firm size, leverage, default risk and a decline in firm-specific economic conditions.

The remaining paper is organized as follows. Section II develops hypothesis and reviews the background literature. Section III discusses the research methodology and measurement of variables. Section IV discusses the results and the final section provides the conclusions.

II. BACKGROUND AND HYPOTHESIS

Background

Several academic studies have examined factors associated with the reporting of non-recurring charges or charges related to special items. These studies have found evidence that the reporting of these charges is associated with a decline in economic conditions (Elliott and Shaw 1988), conditions of asset impairment (Francis et al.1996) and management incentives as well (Francis et al. 1996). Prior research has also found evidence which indicates that management reports these charges to smooth earnings and also to take an earnings bath (Kinney and Trezevant 1997).

This study posits that an increase in institutional ownership in the capital markets has led to institutional activism. Therefore, management of firms that have high institutional ownership is likely to be under greater scrutiny from large investors and is therefore more likely to take proactive actions to improve future profitability. Such actions might include employee layoffs in response to decreased demand for the firm’s products, discontinuance of product lines, closing unprofitable plants etc. If such actions are needed and not taken in a timely manner by the management then larger investors can resort to other corporate governance practices through their voting power.

None of the academic studies, to date, have examined if the likelihood of the reporting of non-recurring charges is associated with the presence of influential stakeholder. Specifically, prior research has not examined if the presence of certain types of influential stakeholders (e.g., institutional investors) motivates management to take corrective actions and thereby report these charges. In the absence of sophisticated investors, although firms might not be performing well, management might be reluctant to report such charges and lower current earnings. Based on the above, the following hypothesis is proposed:

H1: The likelihood of a firm reporting charges related to special items is positively associated with the proportion of its common stock owned by institutional investors.

III. RESEARCH DESIGN

The sample consisted of all publicly traded firms on AMEX, NYSE and NASDAQ for the period 1992-1996. The sample period was restricted to the years 1992-1996 to avoid confounding events that may have influenced the durable relation between institutional ownership and the reporting of special items, an important area within the domain of accruals, generally. These events include the bull market of 1996-1999, during which time average price-earnings ratios exceeded 30 in the United States, arguably unleashing a rash of incentives for earnings

management that do not normally exist. The sample period also excludes the years 2000 subsequent. During this “post-bubble” period, political events, such as Sarbanes-Oxley, accounting changes, such as the pervasive number of restatements, and economic forces, such as the near collapse of the American financial system, all induce confounding effects that may have distorted the underlying long-term association between institutional ownership and special items which we sought to identify. The sample was also restricted to firms that had information on all financial variables on COMPUSTAT database and

institutional ownership information on DISCLOSURE database. This process yielded 1,907 firms that reported negative special items in the period of interest and 4,392 that did not report negative special items.

Research Model

To test the hypothesis, two groups of firm-years were examined: one that reported non-recurring charges (treatment group) and the other that did not report any such charges (control group). The following model was examined:

$$GROUP_{it} = \alpha_0 + \alpha_1 PIH_{it} + \alpha_2 D_CHEARN + \alpha_3 D_EARN + \alpha_4 DISTRESS + \alpha_5 D_CHSALE_{it} + \alpha_6 LTD_{it} + \alpha_7 SIZE_{it} + \alpha_8 MAXDECR + \alpha_9 MAXINCR \quad (1)$$

where, for i at time t ;

$GROUP$	=	1 if the firm i reports income-decreasing special items in year t ; 0 otherwise;
PIH	=	Number of shares held by institutional investors divided by total number of outstanding shares;
D_CHEARN	=	1 if income before special items (net of tax) is less than prior year's income from continuing operations; 0 otherwise;
D_EARN	=	1 if income from continuing operations before special items (net of tax) is less than zero; 0 otherwise;
D_CHSALE	=	1 if percentage change in sales from prior year is less than zero; 0 otherwise;
$DISTRESS$	=	Altman Z score of distress;
LTD	=	Long term debt / total assets;
$SIZE$	=	measured as log of market value of equity;
$MAXDECR$	=	1 if the firm if the firm was in extreme negative earnings deviation; 0 otherwise.
$MAXINCR$	=	1 if the firm if the firm was in the extreme positive earnings deviation; 0 otherwise;

A positive and significant α_1 would indicate that the likelihood of the firm reporting non-recurring charges is related to institutional ownership.

Measurement of variables:

Special Items

The Compustat database broadly defines special items (data item # 17) as “unusual or nonrecurring items presented above taxes”.⁴ Similar to Elliott and Hanna (1996), this study focuses only on negative special items.⁵ The sample was limited to include firms that either reported negative special items or did not report any special items. The dichotomous dependent variable was coded one if the firm reported negative special items, otherwise zero.

Institutional Ownership

The Percentage of Institutional Holdings (PIH) was calculated as close to the beginning of the fiscal year as possible. Because institutional ownership data are filed with the SEC at the end of each calendar quarter, institutional holdings are measured at the end of the

calendar quarter preceding the beginning of the firm's first fiscal quarter. For instance, if a firm's fiscal year began on August 1, 1995, the PIH as of June 30, 1995, was considered the PIH for the fiscal year August 1, 1995 through July 31, 1996.

Control Variables

Elliott and Hanna (1996) note (pp. 143), “ a series of economic pressures leads a firm to restructure itself aggressively by closing plants, rearranging and relocating productive sites, shedding businesses, seeking concessions from debtors, or seeking new opportunities.” Second, as noted by Kane and Richardson (2002), when firms undergoing financial distress take actions to contract their investment base, they are more likely to mitigate the conditions of stress compared to firms that choose to expand. Collectively, these studies imply that charges related to special items are likely to be related to economic pressures and financial distress. Therefore, this paper controls for firm-specific economic conditions.

The following proxies were considered to be important indicators of firm-specific economic conditions: (a) percentage changes in sales from prior

year (b) firm's income from continuing operations before special items (c) deviation of current earnings compared to prior year's earnings and (d) the current default risk. A decline in sales, a loss of profitability, a reduction in the level of earnings or a high default risk are considered to be conditions for which management is likely to take corrective actions. D_CHSALE was coded as a dichotomous variable to denote reduction/increase in percentage change in sales from previous year. D_EARN was set equal to one if the income from continuing operations before special items (net of tax)⁶ was negative, otherwise it was set equal to zero. D_CHEARN was set equal to one if the firm's income from continuing operations before special items (net of tax) was lower/equal or higher than last year's income from continuing operations, otherwise zero. The default risk was measured using Altman Z Score (ZSCORE).⁷ Because it is difficult to speculate *a priori*, at which earnings threshold or at what percentage decline in sales management is likely to take corrective actions, D_CHSALE, D_CHEARN and D_EARN were coded as dichotomous variables. In other words, a loss situation or a reduction in earnings compared to the previous year or a reduction in percentage change in sales were considered be conditions likely to prompt corrective actions.

A high level of debt is indicative of how close management is to violating debt covenants. Management of firms that are close to violating debt covenants might sell appreciated assets to increase reported income. Conversely, management of firms with low levels of debt is likely to enjoy greater latitude in reporting negative charges. Similar to DeFond (1992) and Craswell et al. (1995), debt (DEBT) was measured as long-term debt divided by total assets.

Management's ability to report special item charges is also a function of the assets available to be written off. For instance, a small firm with low levels of inventory or receivables is unlikely to consider writing off these assets. Thus, larger firms have greater likelihood of having these charges. This study measures firm size (SIZE) as log of market value of equity.

Kinney and Trezevant (1997) find that firms with extreme earnings deviations are more likely to report special items than are other firms. They find that firms with the most positive earnings deviations from prior year and firms with the most earnings disappointments are likely to report negative special items. This study controls for these two conditions by dividing the sample into deciles based on the earnings deviation from the prior year before considering special items, i.e., CHEARN. The firms in the two extreme groups (i.e., decile one and decile ten) were considered to be the most likely to take an earnings bath or to smooth earnings. MAXINCR, was coded one if the firm was in the extreme positive deviation group, otherwise zero. MAXDECR was coded one if the firm was in the extreme negative earnings deviation group,

otherwise zero. Table 1 defines the variables in the study.

[INSERT TABLE 1 ABOUT HERE]

IV. Results

Descriptive Statistics

Table II provides descriptive statistics for both groups, i.e., the group of firms reporting charges related to special items as well as the group of firms not reporting such charges. As indicated in Table II, the firms that report negative special items are statistically larger in size, have higher percentage of institutional ownership and have a higher debt to assets ratio. Contrary to expectations, firms reporting negative special items also report higher level of profits (EARN) and higher profits compared to prior year (CHEARN).

[INSERT TABLE II ABOUT HERE]

Descriptive Univariate Correlations

TABLE III presents Pearson and Spearman correlation coefficients. With the possible exception of SIZE and PIH, none of the variables are highly correlated, suggesting that multicollinearity is not a problem.

[INSERT TABLE III ABOUT HERE]

PIH and Negative Special Items

Table IV reports the results of the logistic model. The results of Model 1 are shown in Column 2. It can be seen that firms with a higher level of institutional ownership are more likely to report negative special items. These results support H1. It is likely that management of firms with high levels of institutional ownership are under pressure to be proactive in evaluating current projects and terminating the least successful.

[INSERT TABLE IV ABOUT HERE]

Control Variables

The results in table IV indicate that D_EARN and D_CHEARN are both positively and significantly related to the probability that the firms would report negative special items. The negative and significant coefficient of ZSCORE indicates that firms reporting charges related to special items are also more likely to be experiencing a greater default risk. Collectively, these results suggest that firms reporting charges related to special items experience conditions of economic decline.

Consistent with Elliot and Shaw (1988), the results show that firms that report negative special items are more leveraged. It is likely that as the ratio

of debt to assets increases, creditors monitor their investment more actively and advise management on current projects.

The results also indicate that larger firms are more likely to report charges related to special items. These findings suggest that a greater asset base and the existence of more complex assets (e.g., accounts receivable) give rise to the likelihood of some of these assets being written off as impairment occurs. Furthermore, the performance of larger firms is likely to be scrutinized in the media and management of such firms takes proactive actions including restructuring unprofitable units or segments.

The positive and significant coefficients of MAXDECR suggest that management of firms that experience negative earnings deviations from prior years are more likely to report these charges than management of firms that do not experience negative extreme earnings deviation. These results indicate support for the notion that firms that report these charges also take an earnings bath. The coefficient of MAXINCR, however, is not significant, which suggests that firms that report non-recurring charges do not report these charges to smooth earnings.

Big Six Auditor and Negative Special Items

This study further investigates whether the type of auditor is likely to influence the reporting of income-decreasing special items. Numerous studies assume that Big Six audit firms perform audits that are higher quality than those performed by non-Big Six firms (e.g., Becker, DeFond, Jiambalvo and Subramanyam 1998). Model 1 was re-run after including a dichotomous variable to include if the auditor was a Big Six auditor or not (AUDITOR). The results, shown in Column 3 of Table IV, indicate that the type of auditor is not significantly associated with the firm reporting these charges.

V. CONCLUSIONS

The purpose of this study was to examine if the reporting of non-recurring charges is related to the level of institutional ownership. The results indicate that the likelihood of the firm reporting such charges is positively and significantly related to the level of institutional ownership after controlling for economic conditions and management incentives. These results imply that close monitoring by influential stakeholders prompts management to take corrective actions. Consistent with prior research, the results indicate that firms that report non-recurring charges are larger in size and have higher level debt in their corporate structure. Firms that report these charges also exhibit poorer economic performance. The results also provide evidence consistent with management reporting these charges to take earnings baths and to smooth earnings. Future studies might want to further explore if the presence of certain types of institutional

investors (e.g., momentum shareholders) is likely to affect the likelihood of the reporting of these charges.

REFERENCES

1. Becker, C. L.; M. L. DeFond; J. Jiambalvo, and K.R. Subramanyam. 1998. The effect of audit quality on earnings management. *Contemporary Accounting Research* (Spring): 1-24.
2. Black, B.S. 1990. Shareholder Passivity Reexamined. *Michigan Law Review* 89: 520-608.
3. Brous, P.A. and O. Kini. 1994. The Valuation Effects of Equity Issues and the Level of Institutional Ownership: Evidence from Analysts' Earnings Forecasts. *Financial Management* (Spring): 33-46.
4. Bushee, B. J. 1998. The Influence of Institutional Investors on Myopic R&D Investment Behavior. *The Accounting Review* 73: 305-334.
5. Craswell, A.T., J.R. Francis, and S.L Taylor. 1995. Auditor brand name reputations and industry specializations. *Journal of Accounting and Economics* 20: 297-322.
7. DeFond, M.L. 1992. The association between changes in client firm agency costs and auditor switching. *Auditing: A Journal of Practice and Theory* 11(1): 16-31.
8. Eakins, S. 1995. An Empirical Investigation of Monitoring by Institutional Investors. *American Business Review* (January): 67-74.
9. Elliott, J. A. & J.D. Hanna 1996. Repeated accounting write-offs and the information content of earnings. *Journal of Accounting Research*, 34 (Supplement): 135-155.
10. Elliott, J.A. and W.H.Shaw. 1988. Write-offs as Accounting Procedures to Manage Perceptions. *Journal of Accounting Research*, 26 (Supplement): 91-119.
11. Francis, J., J. Hanna, and L. Vincent. 1996. Causes and effects of discretionary asset write-offs. *Journal of Accounting Research* 34 (Supplement): 117-134.
12. Kane, G. and F. Richardson. 2002. The Relationship between Changes in Fixed Plant Investment and the Likelihood of Emergence from Corporate Financial Distress, *Review of Quantitative Finance and Accounting* : 259-272.
13. Kinney, M. and R. Trezevant. 1997. The Use of Special Items to Manage Earnings and Perceptions, *The Journal of Financial Statement Analysis*, 2,3 (Fall): 45-53.
14. McConnell, J.J. and H. Servaes. 1990. Additional Evidence on Equity Ownership and Corporate Value. *Journal of Financial Economics* 27: 595-612.
15. Rees, L., S. Gill and R. Gore. 1996. An Investigation of Asset Write-Downs and Concurrent Abnormal Accruals, *Journal of Accounting Research*, 34 (Supplement): 157-469.
16. Shleifer, A. and R. W. Vishny. 1986. Large Shareholders and Corporate Control. *Journal of Political Economy* 94 (31): 461-488.
17. Smith, M.P. 1996. Shareholder Activism by Institutional Investors: Evidence from CALpers. *The Journal of Finance* LI (1): 227-252.
18. *The Wall Street Journal*. February 3, 1995a. *Nine Concerns Named by Big Pension Fund as Underperformers*.
19. *The Wall Street Journal*. April 14, 1995b. *CALpers to Vote against Board of Phillip Morris*.

20. *The Wall Street Journal*. September 12, 1996a. Law—Legal Beat: CALpers Wins A Lead Role in Suit over Grace’s Severance Packages.
21. *The Wall Street Journal*. April 16, 1996b. Economy: Some Big AT&T Holders To Withhold Support for Board to Support CEO’s Pay.
22. *The Wall Street Journal*. February 11, 1997. CALpers Targets Apple, Reebok, others in its latest list of worst performers.
23. *The Wall Street Journal*. July 13, 2001. Spate of Write-offs Calls into Question Lofty 1990 Profits.
24. *The Wall Street Journal*. May 15, 2002. S&P Introduces New Definition For Term “Operating Earnings”.
25. Useem, M. *Investor Capitalism: How Money Managers Are Changing the Face of Corporate America*. BasicBooks, 1996.

TABLE I
Definitions of Variables Used

GROUP = 1 if the firm *i* reports income-decreasing special items in year *t*; 0 otherwise;

PIH = Number of shares held by institutional investors divided by total number of outstanding shares;

CHSALES = (Sales in year *t* minus Sales in year *t*-1) / sales in year *t*-1;

D_CHSALE = 1 if percentage change in sales from prior year is less than zero; 0 otherwise;

EARN = income from continuing operations before special items (net of tax);

D_EARN = 1 if income from continuing operations before special items is less than zero; 0 otherwise;

CHEARN = 1 if income from continuing operations before special items (net of tax) is less than prior year’s income from continuing operations; 0 otherwise;

D_CHEARN = 1 if income from continuing operations before special items (net of tax) is less than prior year’s income from continuing operations; 0 otherwise;

DISTRESS = Altman Z Score;

LTD = Long Term Debt / total assets;

SIZE = measured as log of market value of equity;

MAXDECR = 1 if the firm was in the extreme negative earnings deviation; 0 otherwise;

MAXINCR = 1 if the firm was in extreme positive earnings deviation; 0 otherwise.

TABLE II
Means and significance tests for firms reporting
Negative special items and firms not reporting negative special items

Variable	Firms reporting Negative special items (N = 1907)	Firms not reporting negative special items (N = 4392)	Difference in Means
PIH	34.331	29.549	4.782***
LTD	0.161	0.130	0.031***
CHSALES	0.266	0.453	-0.187
Z SCORE	4.941	7.576	-2.635***
EARN (in ml. \$)	47.481	47.116	0.366
CHEARN (in ml \$)	-9.550	8.063	-17.613***
SIZE	5.131	4.838	0.293***

TABLE III
 Correlations of predictor variables
 Pearson correlation coefficients on the top (Prob > |r| under H₀: ρ = 0)
 Spearman correlation coefficients on the bottom (Prob > |r| under H₀: ρ = 0)
 (significance levels in parentheses)

	<i>PIH</i>	<i>DEBT</i>	<i>SIZE</i>	<i>EARN</i>	<i>CHEARN</i>	<i>ZSCORE</i>	<i>CHSALES</i>	<i>MAXDEC</i> <i>R</i>	<i>MAXINCR</i>
<i>PIH</i>	1.00	0.0512 (0.0001)	0.6337 (0.0001)	0.1683 (0.0001)	0.0565 (0.0001)	-0.0470 (0.0002)	0.0024 (0.8486)	0.1275 (0.0001)	0.2699 (0.0001)
<i>DEBT</i>	0.1135 (0.0001)	1.00	0.0395 (0.0017)	0.0001 (0.9933)	-0.0135 (0.2841)	-0.2441 (0.0001)	-0.0286 (0.0232)	0.0919 (0.0001)	0.0579 (0.0001)
<i>SIZE</i>	0.6515 (0.0001)	0.7079 (0.0001)	1.00	0.3970 (0.0001)	0.1214 (0.0001)	0.0934 (0.0001)	0.0074 (0.5580)	0.1692 (0.0001)	0.4582 (0.0001)
<i>EARN</i>	0.5065 (0.0001)	0.2249 (0.0001)	0.7079 (0.0001)	1.00	0.3661 (0.0001)	-0.0143 (0.2567)	-0.0094 (0.4575)	-0.0212 (0.0919)	0.3808 (0.0001)
<i>CHEARN</i>	0.2326 (0.0001)	0.0179 (0.1549)	0.3653 (0.0001)	0.5550 (0.0001)	1.00	0.0121 (0.3391)	0.0024 (0.8486)	-0.334 (0.0001)	0.3127 (0.0001)
<i>ZSCORE</i>	0.0672 (0.0001)	-0.5936 (0.0001)	0.2466 (0.0001)	0.0248 (0.0001)	0.1514 (0.0001)	1.00	0.0753 (0.0001)	-0.0756 (0.0001)	-0.0322 (0.0105)
<i>CHSALES</i>	0.0063 (0.6192)	-0.0542 (0.0001)	0.1864 (0.0001)	0.1773 (0.0001)	0.2675 (0.0001)	0.1514 (0.0001)	1.00	-0.0092 (0.4659)	-0.0036 (0.7779)
<i>MAXDECR</i>	0.1216 (0.0001)	0.1056 (0.0001)	0.1660 (0.0001)	-0.1161 (0.0001)	-0.4953 (0.0001)	-0.1385 (0.0001)	-0.1396 (0.0001)	1.00	-0.1035 (0.0001)
<i>MAXINCR</i>	0.2576 (0.0001)	0.0945 (0.0001)	0.4074 (0.0001)	0.3924 (0.0001)	0.5149 (0.0001)	-0.0084 (0.5068)	0.0447 (0.0004)	-0.1035 (0.0001)	1.00

TABLE IV
 Estimated logistic regression models
 and goodness of fit statistics of the basic model

	1907/4392	1907/4392
Sample Size for firms reporting negative special items/ not reporting negative special items		
<u>Predictor Variables</u>		
<i>PIH</i>	-2.5734***	-2.6580***
<i>D_CHEARN</i>	0.0081***	0.0080***
<i>D_EARN</i>	0.8452***	0.8469***
<i>ZSCORE</i>	1.2965***	1.2919***
<i>D_CHSALE</i>	-0.0292***	-0.0291***
<i>DEBT</i>	0.0239	0.0241
<i>SIZE</i>	0.3635**	0.3638**
<i>MAXDECR</i>	0.1533***	0.1471***
<i>MAXINCR</i>	0.7182***	0.7207***
<i>AUDITOR</i>	0.1782	0.1859
		0.1352
<u>Model</u>		
<u>Goodness of Fit</u>		
<u>Statistics</u>		
C	0.742	0.743
-2logL	6637.327	6636.080
χ ² for covariates	1086.914	1088.679

*** = Significant at the .01 level
 ** = Significant at the .05 level
 * = Significant at the .10 level