

## **AFTER SARBANES-OXLEY: MARKET REACTION TO THE APPOINTMENT OF OUTSIDE DIRECTORS**

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### **Abstract**

This paper examines the stock market reaction to the appointment of outside directors to the board both before and after the passage of the Sarbanes Oxley Act in 2002. We also examine whether the abnormal returns following outside director appointments are related to audit committee appointments, and whether the outsider has financial expertise. Results show that the market response to the announcement of an appointment of an outsider to the board of directors is mixed, and abnormal returns are not significantly different after the passage of the Sarbanes-Oxley Act compared to those announcements before the Act. Also, we find that the market reaction pre- Sarbanes Oxley is higher when the outsider is expanding the board, lower in cases of CEO/chairman duality, and lower if the outsider is appointed to the audit committee. Post- Sarbanes Oxley CEO/chairman duality has a positive impact on the abnormal returns.

**Keywords:** outside directors, abnormal return, CEO/chairman duality

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### **1. Introduction**

The recent fraud scandals at Enron, WorldCom, Sunbeam, Tyco, and others have led to more attention being directed toward corporate governance reforms that aim to improve the quality of monitoring and protection of shareholders. After these fraud cases were reported, investor confidence diminished, and as fraud at large brokerage houses such as Merrill Lynch and Solomon Smith Barney became apparent in the second quarter of 2002, action from regulatory agencies became essential. A particularly important regulatory response to these events was the passage of the Sarbanes-Oxley Act on July 30, 2002, which is widely regarded as “the most sweeping federal law concerning corporate governance since the adoption of the initial federal securities laws in 1933 and 1934,” (Ribstein, 2002). Another important response to the securities fraud cases came from both the New York Stock Exchange and NASDAQ requiring various corporate governance provisions for companies whose stock is traded on the NYSE or listed on the NASDAQ. Both the Sarbanes-Oxley Act (SOX) and the NYSE and NASDAQ proposals impose several governance provisions on publicly traded firms in the United States. However, a significant stipulation of SOX is the

call for improved oversight and monitoring capabilities of a firm’s independent directors.

The primary purpose of the Sarbanes-Oxley Act is to correct systematic weaknesses in corporate governance structures. Specifically, it tightens up rules on disclosure and establishes guidelines for boards of directors in publicly-traded firms. One of the goals of SOX is to increase the degree of the board independence, most notably on the audit committee. A common measure for board independence is the proportion of outside directors on the board, and SOX has mandated changes to corporate governance requirements. These requirements include increasing the ratio of outsiders on the board of directors and increasing the ratio of outsiders on the board’s audit committee. In addition to audit committee independence, SOX provision (SEC.407) requires public companies to appoint and disclose financial experts to the audit committee. The idea behind this requirement is to encourage boards to appoint independent directors with financial expertise to the audit committee. Theoretically, this will lead to an increase in the quality of financial reporting and monitoring as these directors should use their expertise to protect investors. Thus, the primary occupation of the outside directors and appointment to the audit committee are also important factors to protect

shareholders. Since this Act was passed, empirical study on outside director appointment announcements has yet to be examined in the financial literature. The purpose of this paper is twofold. First, we examine the stock market reaction to the appointment of outside directors both before and after the passage of the Sarbanes-Oxley Act. Previous studies, such as Rosenstein and Wyatt (1990) and Brickley, Coles, and Terry (1994), document a positive market reaction to the announcement of independent director appointments using announcements from the 1980s. However, more recent studies, including DeFond, Hann, and Hu (2005) report mixed results based on director characteristics. Second, we examine the determinants of the abnormal returns following outside director appointment announcements in both sample periods to determine whether they are related to a director's primary occupation, audit committee assignment, and structure of the board at the time of the appointment. In order to test the market reaction to outside director appointments following the Sarbanes-Oxley Act of 2002, we use *Lexis Nexis* to collect announcements of firms appointing an outside director to the board both before and after the SOX passage. Using standard event study methodology, we analyze shareholder response to outside directors' appointments. The results show that for four different event windows the difference between market reactions to independent director appointments is not statistically significantly different between pre-SOX and post-SOX announcements. Results from multiple regression analysis show that the market reaction pre-SOX is higher when the outsider is expanding the board, but is lower in cases of CEO/chairman duality and if the outsider is appointed to the audit committee. However, post-SOX CEO/chairman duality has a positive impact on the abnormal returns. This difference in the influence of CEO/chairman duality is significantly different between samples.

The rest of the paper is organized as follows. Section 2 discusses the corporate governance literature. Section 3 describes the data and methodology. Section 4 presents the results and section 5 concludes.

## 2. Literature Review

The structure and effectiveness of corporate governance systems has an important place in the empirical and theoretical finance literature where the board of directors is viewed as an important internal corporate governance mechanism. The standard view in empirical finance is that the degree of board independence is closely related to its monitoring effectiveness. Stronger governance structures and monitoring effectiveness should

therefore lead to maximization of shareholder wealth. Fama (1980) and Fama and Jensen (1983) suggest that the composition of individuals who serve on the board of directors is an important factor in creating a board that is an effective monitor of managerial actions. While noting the importance of having both inside (i.e., management) and outside (i.e., non-management) members on the board of directors, they argue that the board's effectiveness in monitoring on behalf of the shareholders is a function of the mix of insiders and outsiders who serve on the board. Specifically, the board should be composed primarily of outside directors so as to increase independence. Rosenstein and Wyatt (1990) examine shareholder wealth effects surrounding the appointment of outside directors. They find that even though most boards are numerically dominated by outsiders prior to the announcement, the addition of an additional outsider tends to increase firm value. In a different vein of research, Brickley, Coles, and Terry (1994) find that the average stock market reaction to announcements of poison pills is positive when the board is comprised of a majority of outside directors and negative when it is not. This implies that managerial entrenchment associated with anti-takeover amendments such as poison pills may be counterbalanced by independent boards of directors. Weisbach (1988) finds that CEO turnover is more likely following poor firm performance when boards are dominated by outside directors. Both these findings are consistent with the premise that outside directors are more inclined to represent shareholder interests than insiders may be.

Prior to the passage of Sarbanes-Oxley, appointing outside directors with financial expertise was encouraged, but not required. Lee, Rosenstein, and Wyatt (1999) study the market reaction to outside director appointments when the director's primary occupation is in the financial industry. They find that the largest abnormal returns following outside director appointments are to small firm shareholders, since these firms may derive higher marginal benefits from the expertise of investment bankers, commercial bankers, and insurance executives on their boards than may large firms. Rosenstein and Wyatt (1990) also find that outside directors with financial expertise are valuable additions to the board. The board of directors has the responsibility of recruiting and appointing members to the audit committee, whose duty it is to oversee the financial reporting process of the firm. Since much of the fraudulent corporate activity that lead to the development and passage of Sarbanes-Oxley was linked to inadequacies of audit committees, these governance bodies have become important in both the popular and

academic press. In their study on audit committee appointment announcements prior to Sarbanes-Oxley, DeFond, Hann, and Hu (2005) find that 3-day cumulative abnormal returns are positive when the newly appointed outside directors have accounting financial expertise as opposed to non-accounting financial expertise. They also find that this only holds in firms that have relatively strong corporate governance prior to appointing new directors. Beasley and Salterio (2004) find that Canadian firms with audit committees comprised of members with financial expertise tend to have larger, more independent boards and are less likely to be chaired by the CEO. Also, Uzun, Szewczyk, and Varma (2004) examine whether board composition and the structure of board oversight committees are correlated with the incidence of corporate fraud. They find that as the number of independent outside directors increased on a board and in the board's audit committee, the likelihood of corporate wrongdoing decreased. In general, the literature on the relationship between board and audit committee composition and firm performance suggests that outside directors and their primary occupation do matter and that they are necessary for effective monitoring. Here, we attempt to determine whether or not passage of Sarbanes-Oxley has influenced market response to outside (independent) director appointments to the board. We propose that given the current situation whereby boards are of greater interest to both shareholders and analysts, the market response to outsider appointments should be positive. However, since an increase in the proportion of outside directors is outlined in Sarbanes-Oxley, which impose substantial cost on public companies, this reaction may not be as strong since investors may infer appointments of outsiders as simply firms attempting to satisfy requirements of the Act rather than as enhancement of board effectiveness. Further, we test whether the abnormal returns following outside director appointments are related to appointment to the audit committee, the director's occupation, and the structure of the board prior to the announcement (board size, CEO/chairman duality, and whether or not the director will expand the board size). Controlling for firm size and performance, we expect there to be differences between effects on abnormal returns following outside director appointments before and after SOX.

### 3. Data and methodology

#### 3.1. Sample

In order to test market reaction to outside director appointments following the Sarbanes-Oxley Act of 2002, we use *Lexis Nexis* to collect announcements of firms appointing and outside

director to the board. We use Rosenstein and Wyatt's (1990) procedure for determining outside directors. An outside director is one who is not affiliated with the firm in any way except in terms of his or her directorial duties. Past and present employees of the firm are not considered outside directors. Directors who have close family relationships with an employee of the firm, past or present, are also not considered outsiders. Also, directors who receive fees from the firm for any other service (e.g., consulting, lawyer fees, and accounting) besides their directorship are not outsiders.

We collect outside director appointment announcements from 1999 to 2003. The key words used in the *Lexis Nexis* search are the following: director, outside, and appointed. Firms must have returns available on CRSP to be included in the final sample. We also collect information on the number of outsiders elected to the board, the number of directors currently on the board, the proportion of outsiders on the board prior to the announcement, whether or not the CEO is also the chairman of the board, and whether or not the new outside director will expand the board or is a replacement of a former director. We eliminate any observation if the date is contaminated by other firm news.

Using COMPUSTAT, we collect firm characteristics for each observation in our sample. Our initial sample was 137 announcements; however 59 companies do not have the returns available on CRSP, so our final sample consists of 78 firms. While this number is smaller than earlier studies' sample sizes, it should be noted that Defond, Hann, and Hu (2004) find that the number of board appointments has been declining over time.

#### 3.2. Sample characteristics

Frequency distributions for the sample are presented in Table 1 by year and month (panels A and B, respectively). As in Lee, Rosenstein and Wyatt (1999), we analyze the frequency of announcement by month to determine uniformity of dates throughout the year. Consistent with their result, we find that there is wide distribution of announcement dates throughout the year, indicating that the news media, rather than the proxy statement, makes the first announcement of an outside director appointment.<sup>1</sup>

We present the descriptive statistics of the sample in Table 2. First, we divide the sample between those announcements before the passage of the Sarbanes-Oxley Act on July 30, 2002 (pre-SOX), and those observations after July 30, 2002

<sup>1</sup> Since the proxy season is generally occurs in just April and May.

(post-SOX). We find that there are no statistically significant differences between the majority of characteristics of firms that announce the appointment of an outside director pre- and post-SOX. Specifically, we test differences in total assets, total debt, sales, net income, and return on assets, and find that, although the post-SOX sample has slightly larger dollar amounts for most characteristics, the differences between the two samples are not statistically significant. However, we find that return on equity, the proportion of outsiders on the board prior to announcement (POUTSIDE), and 5-year average returns are all smaller post-SOX compared to the pre-SOX sample. These differences are statistically significant between samples. Evidence from ROA and ROE indicate that firms both pre- and post-SOX were not performing well during the sample period. This may influence market reaction to appointment announcements and we later include ROA in multiple regressions to account for this potential performance bias.

In addition, there is some evidence that firms are less likely to expand their board of directors after Sarbanes Oxley than they were prior to the Act's passage. Also, appointments to the audit committee have increased slightly post-SOX (from 31% of announcements pre-SOX to 34%). However, these differences are not statistically significant between samples.

### 3.3. Statistical methodology

A standard event study is employed using the methodology as described in Brown and Warner (1985). The event date is the date that the announcement appears in the *Lexis Nexis* news database. The market model is estimated by ordinary least squares, using data from a 255 trading-day estimation period ending 46 trading days before the event date. The event period is defined as 30 days before through 30 days after the event date. We focus on the 3-day announcement period (-1, 0, +1) surrounding the event date.

We also calculate cross-sectional OLS regressions of two windows of abnormal returns on several explanatory variables. Following Rosenstein and Wyatt (1990), we include firm size (log of sales = SALES), ROA (measure of performance), board size (BOARDSIZE), proportion of outsiders on the board prior to the announcement (POUTSIDE), and DUALITY, which is a dummy variable set equal to "1" if the CEO is also the board chair. These variables are included to control for governance strength prior to the announcement of an outsider appointment to the board. We also include the primary occupation of the outside director using OCCFIN, which is a dummy variable set equal to "1" if the outside

director is from a finance profession, and OCCCORP, which is a dummy variable, set equal "1" if the outside director has general corporate experience. We include a dummy variable, EXPAND, that is set equal to "1" if the new director expands the board size or "0" if the director is a replacement. AUDIT is dummy variable set equal to "1" if the outside director sits on the audit committee. Further definitions of the variables are summarized in Appendix A.

## 4. Empirical Results

In Table 3, we report the four windows of cumulative abnormal returns (CARs) for both pre- and post-SOX samples around announcements of outside director appointments. We also calculate the differences between the two samples' CARs. Since the announcement date in *Lexis Nexis* may not be the precise date that the market is aware of the news of an outside director appointment, using cumulative returns in event windows, as per Rosenstein and Wyatt (1990), around the event may provide more meaningful results.

As described in Table 3, cumulative abnormal returns in the four event windows for the pre-SOX sample are not statistically significant using both a t-test for difference in means and a non-parametric Wilcoxon Z-test. After Sarbanes Oxley, cumulative abnormal returns are negative and statistically significant at the 10% level on the event date (0, 0). The differences between the two samples, however, for each window are not statistically significant. Since abnormal returns surrounding the announcement date are not significantly different between the two samples, we further analyze the determinants of the abnormal returns found in each sample.

We present results from OLS regressions in Tables 4 and 5. In Table 4, the dependent variable is the cumulative abnormal returns in the three-day event window (-1, 0, +1). Three models are analyzed. In the first column, we calculate coefficients for the full sample of excess returns. In the second and third column, we present results from regressions using pre-SOX events and post-SOX events, respectively. In the fourth column, the differences in coefficients between pre- and post-SOX samples are computed.

In Table 4, we find that the coefficient for AUDIT is negative for the pre-SOX sample (-0.093). This is significantly different (at the 10% level) from the post-SOX coefficient, which is positive (0.002) but is not significant. This implies that there is a prior to Sarbanes Oxley, appointments of new outsiders to the audit committee were met with negative market responses, but post-SOX this negative connotation has disappeared. Perhaps because more importance is placed on finding qualified

individuals to serve on the audit committee, the costs associated with a new member to the committee are no longer significant.

Further, in Table 4, the coefficient on the dummy variable EXPAND is positive and statistically significant at 5% level for the pre-SOX sample. Prior to Sarbanes Oxley, the market responds favorably to expanding the board with a new outside director (as opposed to replacing a current director). This is no longer the case after Sarbanes Oxley. The market seems to not react positively in cases where the outsider being appointed to the board is expanding the size of the board of directors. This is consistent with the view of Sarbanes Oxley and early governance studies showing that to be effective, board size should be limited. There is no statistically significant difference, however, in EXPAND variables between the two periods (pre- and post-SOX).

The dummy variable DUALITY's coefficient is negative and statistically significant at the 10% level for the pre-SOX sample; however the coefficient is positive and significant at the 5% level for post-SOX sample. This difference is positive and significant. Prior to Sarbanes Oxley, having the same person serve as CEO and chairman of the board drove down the market response to outside director appointments, but after SOX, the effect of CEO/chair duality had a positive influence on the response. In situations of CEO/chair duality, the market may respond favorably now to new outsiders on the board since this increases that board's independence more so than it would if the chairman and CEO were two different individuals. The marginal benefit of the outside director is higher now in cases of dual CEO/chair roles than it was prior to Sarbanes Oxley.

We also find a positive and significant difference in proportion of outside directors (POUTSIDE) between the two periods. This indicates that there is a positive relationship between the percentage of outside directors and market reaction to the outsider appointment after Sarbanes Oxley. Further, results in Table 4 show that there is no significant influence of the director's occupation before or after Sarbanes Oxley. However, p-values for the post-SOX sample are smaller than that from the pre-SOX sample, indicating that the influence is somewhat stronger after Sarbanes Oxley.

We also present OLS regression results where the dependent variable is the abnormal returns for the event window (0, +1) in Table 5. Consistent with Table 4, the coefficient for AUDIT using the pre-SOX sample (column two) is negative while the coefficient is positive using post-Sarbanes Oxley events (column three). Although difference between two periods for the coefficient on OCCFIN is not statistically significant, the

coefficient is positive and significant at the 5% level for the post-SOX sample. This suggests that there is a positive relation between the observed market reaction and the appointment of outside directors with a finance background variable to a greater extent after Sarbanes Oxley. This result is consistent with the less-significant results in Table 4. The coefficient of DUALITY variable is again positive and significant for the post-SOX sample, however, differences in the variable for two periods (pre-and Post Sarbanes Oxley) is not statistically significant as it was in Table 4. Overall, results using the two event windows of abnormal returns yield similar conclusions regarding the market response to outside director appointments. While the response itself is not significant, it seems that prior to the passage of Sarbanes Oxley, CEO/chair duality led to negative market responses to outsider appointments as compared to post-SOX. In addition, appointing the new outsider to the audit committee was met with a negative market response prior to SOX. After the passage, AUDIT is positive.

## 5. Conclusion

Our primarily results show that the market response to the announcement of an appointment of an outsider to the board of directors is negative but not significant both before and after the passage of the Sarbanes-Oxley Act. These differences are not significant between samples. It appears that the Sarbanes Oxley Act did not influence shareholders' response to outside director appointments; although it may have impacted determinants of those responses.

Determinants that have increased their influence on market response to outside director appointments include CEO/chairman duality and if the director is being appointed to the audit committee. In addition, there is evidence that the market is less willing to reward firms for expanding their board of directors, even if the new appointee is an outsider. Director occupation, in particular if the director has a background in finance, also influences the market response upwards at the announcement of his or her appointment to the board more so after Sarbanes Oxley than before.

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## Appendices

**Table 1.** Frequency distribution

The frequency distribution for the number of announcements of outside director appointments used in the sample (with usable returns from CRSP) is shown in years (panel A) and months (panel B). A total announcement in the sample is 78.

A. Frequency distribution of announcements by year

	1999	2000	2001	2002	2003
Frequency	23	13	6	12	24

B. Frequency distribution of announcements by month

	Jan.	Feb.	Mar.	Apr.
	3	7	10	5
	May	Jun.	Jul.	Aug.
	6	7	8	10
	Sep.	Oct.	Nov.	Dec.
	6	3	7	6

**Table 2. Descriptive Statistics**

The descriptive statistics for the two samples are shown along with the sample size (in parentheses). ROA and ROE represent annual return on assets and return on equity, respectively. TOTASSETS, TOTALDEBT, SALES, and NETINCOME data is in millions of U.S. dollars in the year of the announcement. MKTBOOK represents the average market-to-book ratio for the firm in the year of the announcement. 1YRET and 5YRET are the 1 and 5 year past average returns for the sample firm starting with the year of the announcement. BOARDSIZE represents the number of members on the board of directors prior to the announcement. EXPAND is a binary variable that equals "1" if the new outside director increases the size of the board of directors, and equals "0" if he/she replaces a board member. DUALITY is a binary variable equaling "1" if the chairman of the board is also the firm's CEO, "0" if not. POUTSIDE is proportion of outsiders on the board prior to the announcement. \*, \*\*, \*\*\* indicates significance at the .10, .05, .01 levels, respectively.

	Pre-SOX	Post-SOX	Difference in means (Post-Pre)	t-statistic (Z-statistic)
	Mean (n)	Mean (n)		
ROA	-0.92 (38)	-3.61 (31)	-2.70	-0.60 (-1.09)
ROE	-11.65 (36)	-655.30 (30)	-643.65	-1.10 (-1.42)*
TOTALASSETS	4759.30 (38)	19795.00 (31)	15035.70	1.02 (1.08)
TOTALDEBT	813.75 (38)	10560.00 (31)	9746.25	1.11 (0.69)
MKTBOOK	2.14 (38)	0.23 (31)	-1.91	-0.72 (-0.38)
SALES	2897.10 (38)	9387.20 (31)	6490.10	1.08 (0.52)
NETINCOME	174.51 (38)	-181.60 (31)	-356.11	-1.02 (-0.67)
1YRET	34.63 (37)	32.91 (31)	-1.72	-0.08 (-0.39)
5YRET	4.79 (31)	-3.60 (30)	-8.39	-1.64 (-1.74)**
BOARDSIZE	8.18 (45)	8.83 (30)	0.65	1.03 (1.16)
POUTSIDE	0.14 (45)	0.11 (30)	-0.03	-2.10** (-1.61)*
EXPAND	0.64 (45)	0.53 (30)	-0.11	-0.95 (-0.95)
DUALITY	0.84 (44)	0.77 (31)	-0.07	-0.71 (-0.72)

**Table 3. Cumulative Abnormal Returns around Event Date by Sample**

Average and median cumulative abnormal returns (CAR) around the date of outside director appointment announcement (Day 0). The p-value is for the difference between the mean CARs for the two samples. Day (-1, +1) includes the day prior to the announcement, the announcement date itself, and the day after the announcement. Day (0, 0) includes the announcement date. Day (0, +1) includes the announcement date plus the day after the announcement, and Day (-1, 0) includes the day prior to the announcement plus the announcement date. Z-test p-value is the p-value for the Wilcoxon two-sided Z-test.

Event Window	Sample		Difference in means (T-test p-value) (Z-test p-value)
	Pre-SOX	Post-SOX	
	Average CAR Median CAR (p-value)	Average CAR Median CAR (p-value)	
(-1, +1)	-0.007	0.012	0.019
	-0.018	-0.004	(0.436)
	(0.706)	(0.354)	(0.182)
(0, 0)	-0.030	-0.013	0.000
	-0.007	-0.005	(0.976)
	(0.113)	(0.058)	(0.864)
(0, +1)	-0.013	0.002	0.014
	-0.010	-0.013	(0.413)
	(0.353)	(0.833)	(0.467)
(-1, 0)	-0.008	-0.003	0.005
	-0.010	-0.006	(0.774)
	(0.579)	(0.612)	(0.467)
N	45	33	78

**Table 4. Determinants of Abnormal Returns surrounding Outside Director Announcements**

This table shows the coefficients from the results of ordinary least squares regressions using (-1, +1) CARs surrounding the announcement of an outside director appointment. *SALES* is the log of sales in millions of US\$. *ROA* is the return on assets for the firm prior to the announcement. *BOARD SIZE* is the number of directors on the board prior to the appointment of the outside director. *POUTSIDE* is the proportion of outsiders on the board prior to the appointment of the outside director. *OCCFIN* is a dummy variable equal to "1" if the outside director is from the finance profession. *OCCCORP* is a dummy variable equal to "1" if the outside director has general corporate experience. *EXPAND* is a dummy variable equal to "1" if the new director expands the size of the board or equal to "0" if the new director replaces a former director on the board. *DUALITY* is a dummy variable equal to "1" if the CEO is also the board chair. *AUDIT* is a dummy variable equal to "1" if the outside director sits on the audit committee. P-values are reported in parentheses under the coefficients.

Panel B	Dependent variable = (-1, 1)			
	Full sample	Pre-SOX	Post-SOX	Difference (Post - Pre)
INTERCEPT	-0.018 (0.9420)	0.369 (0.549)	0.113 (0.529)	
SALES	0.012 (0.125)	0.025 (0.044)	0.007 (0.263)	-0.018 (0.223)
ROA	-0.001 (0.048)	-0.002 (0.058)	-0.000 (0.182)	0.001 (0.305)
BOARD SIZE	-0.018 (0.839)	-0.143 (0.502)	-0.093 (0.158)	-0.035 (0.573)
PROP OUTSIDE	-0.319 (0.583)	-1.310 (0.360)	0.005 (0.988)	0.765 (0.093)
OCC FINANCE	0.078 (0.212)	0.119 (0.251)	0.102 (0.123)	-0.028 (0.833)
OCC CORP	-0.004 (0.924)	0.011 (0.869)	-0.057 (0.222)	-0.0753 (0.431)
EXPAND	0.038 (0.192)	0.088 (0.050)	0.013 (0.635)	-0.069 (0.239)
DUALITY	-0.003 (0.925)	-0.121 (0.062)	0.075 (0.026)	0.195 (0.010)
AUDIT	-0.038 (0.195)	-0.093 (0.039)	0.002 (0.930)	0.098 (0.077)
n	61	35	26	61

**Table 5.** Determinants of Abnormal Returns surrounding Outside Director Announcements

This table shows the coefficients from the results of ordinary least squares regressions using (0, +1) CARs surrounding the announcement of an outside director appointment. *SALES* is the log of sales in millions of US\$. *ROA* is the return on assets for the firm prior to the announcement. *BOARD SIZE* is the number of directors on the board prior to the appointment of the outside director. *POUTSIDE* is the proportion of outsiders on the board prior to the appointment of the outside director. *OCCFIN* is a dummy variable equal to "1" if the outside director is from the finance profession. *OCCCORP* is a dummy variable equal to "1" if the outside director has general corporate experience. *EXPAND* is a dummy variable equal to "1" if the new director expands the size of the board or equal to "0" if the new director replaces a former director on the board. *DUALITY* is a dummy variable equal to "1" if the CEO is also the board chair. *AUDIT* is a dummy variable equal to "1" if the outside director sits on the audit committee. P-values are reported in parentheses under the coefficients.

Panel C	Dependent variable = (0, 1)			Difference
	Full sample	Pre-SOX	Post-SOX	
INTERCEPT	-0.023 (0.904)	-0.183 (0.717)	0.175 (0.220)	
SALES	0.010 (0.071)	0.022 (0.031)	-0.002 (0.569)	-0.018 (0.125)
ROA	-0.001 (0.021)	-0.002 (0.073)	-0.000 (0.228)	0.001 (0.320)
BOARDSIZE	-0.028 (0.683)	0.023 (0.893)	-0.101 (0.057)	-0.005 (0.916)
POUTSIDE	-0.258 (0.554)	0.080 (0.945)	-0.293 (0.347)	0.398 (0.864)
OCCFIN	0.080 (0.092)	0.067 (0.425)	0.110 (0.038)	0.058 (0.592)
OCCCORP	-0.001 (0.971)	-0.018 (0.750)	-0.013 (0.709)	0.013 (0.858)
EXPAND	0.016 (0.438)	0.028 (0.433)	0.003 (0.870)	-0.031 (0.519)
DUALITY	0.026 (0.334)	-0.019 (0.704)	0.050 (0.054)	0.071 (0.240)
AUDIT	-0.015 (0.495)	-0.060 (0.100)	0.023 (0.238)	0.081 (0.080)
n	61	35	26	61

## Appendix B: Definition of Variables

*Outside Directors*: one who is not affiliated with the firm in any way except in terms of his/her directorial duties. Definition of variable is taken from Rosenstein and Wyatt (1990) paper.

*BOARDSIZE*: the number of members on the board of directors prior to the announcement

*PROP OUTSIDE*: proportion of outsider on the board prior to the announcement of outside directors' appointment to the board.

*DUALITY*: a dummy variable set equal to "1" if the CEO is also the board chair, otherwise is zero.

*OCC FINANCE*: a dummy variable set equal to "1" if outside director is from a finance profession otherwise it is zero. We follow the definition of finance profession from Rosenstein & Wyatt (1990) paper.

*OCC CORP*: a dummy variable set equal to "1" if outside director has general corporate experience. We also follow Rosenstein & Wyatt (1990) paper.

*EXPAND*: a dummy variable set equal to 1 if the new director expands the board size, zero if director is a replacement.

*AUDIT*: a dummy variable set equal to "1" if outside director sits on the audit committee otherwise it is zero.

*ROA*: return on assets

*ROE*: return on equity

*TOTASSETS*: total assets in millions of U.S. dollars in the year of the announcement.

*TOTALDEBT*: total debt in millions of U.S. dollars in the year of the announcement.

*SALES*: sales in millions of U.S. dollars in the year of the announcement.

*NETINCOME*: net income in millions of U.S. dollars in the year of the announcement.

*MKTBOOK*: the average market-to-book ratio for the firm in the year of the announcement

*1YRET and 5YRET*: are the 1 and 5 year past average returns for the sample firm starting with the year of the announcement