4-1-2012

Ex Ante Severance Agreements and Timely Disclosures of Bad News

Qianhua Ling
Marquette University, qianhua.ling@marquette.edu

Accepted version. *Journal of Accounting, Auditing & Finance*, Vol. 27, No. 2 (April, 2012): 177-207. DOI.

Ex-Ante Severance Agreements and Timely Disclosure of Bad News

Qianhua (Q.) Ling

Accounting Department, Marquette University

Milwaukee, WI

Abstract

This study explores the puzzle of CEO severance agreements by examining the association between the existence of ex ante severance agreements and the timeliness of bad news disclosure. The results suggest that the single-trigger severance agreement alone plays a role (which may not be causal) in eliciting timely disclosure of bad news. The association between this severance agreement and timely disclosure of bad news is stronger among the CEOs with a highly variable pay structure than among the CEOs with a low variable pay structure. In the last year of the CEO's tenure where the performance is poor, the association between this severance agreement and timely disclosure of bad news remains positive. The results are consistent with the theory of information disclosure by Inderst and Mueller (2005) and Laux (2008).

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

1. Introduction

This study explores the puzzle of chief executive officer (CEO) severance agreements by investigating the association between the existence of ex ante severance agreements and the timeliness of bad news disclosures. CEO severance agreements present a puzzle because in addition to annual compensation they guarantee a significant amount of money if the CEO's employment is terminated. This is true even if the termination is based on poor or improper performance. This promise of payment reduces the menace of employment termination that intends to mitigate the moral hazard arising from the separation of ownership and management. The large payment also directly reduces funds available for business operation and sends a negative signal to the incoming executives by rewarding failure (Bebchuk and Fried 2004). Why do boards sign severance agreements with the CEOs?

Accounting literature has examined this issue from different perspectives. In theory, ex ante severance agreements have a positive effect on shareholder wealth. Analytical models suggest that severance agreements align CEOs' risk preference with that of the firm (Van Wesep 2008), induce CEOs to exert greater effort (Berkovitch et al. 2000, Almazan and Suarez 2003), or encourage CEOs to disclose private information (Inderst and Mueller 2005, Laux 2008). Empirical studies have focused on the determinants of granting the severance agreements (Rusticus 2006) and the magnitude of the severance agreement (Rau and Xu 2008). CEOs in companies with unstable performance and strong corporate governance are more likely to have severance agreements. Studies have also examined theories explaining the value related to severance. Rau and Xu (2008) report that the value specified in the ex-ante contract is consistent with the hypothesis of human capital risk and inconsistent with the hypothesis of wealth transfer by management. Yermack (2006) examines the actual size of the ex post severance pay (i.e., separation pay) for departing CEOs. He finds evidence consistent with the following theories: separation pay is the result of poor governance; separation pay serves to reduce management human capital risk; and separation pay is used to prevent possible damage by the departing CEO to the company. Except for the study by Rusticus (2006), which examines

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

the relation between ex ante severance agreements and CEO turnover, empirical studies have not investigated the actual business outcomes of having severance agreements in place.[1] Taking a step in this direction, this study tests the association between ex ante severance agreements and the timeliness of bad news disclosures.

Following prior literature, severance agreements are studied by type, the single-trigger severance agreement (*ST*) and the double-trigger severance agreement also called the golden parachute (*DT*). In addition, severance agreements are studied by the way boards grant them. Boards may grant a single-trigger severance agreement only (*STONLY*), or a double-trigger severance agreement only (*DTONLY*), or both (*STDT*) to their CEOs. Though both types of severance agreements are triggered by the termination of employment, for the double-trigger agreement the termination must be within a specified period following a defined change in control of the firm. This additional trigger of change-in-control may signal the expectation of takeover bids (Lambert and Larker 1985). Thus it provides the CEO with a disclosure incentive different from the one provided by a single-trigger severance agreement.

Theory predicts that the existence of ex ante severance agreements and the timeliness of bad news disclosures are positively associated. The separation of ownership and management creates an information advantage for CEOs over boards. CEOs will be indifferent to disclosure or non-disclosure of their private information if boards do not act on the information. It is easy for boards to refrain from reacting to good news. However, it is difficult for boards to ignore bad news. Given bad news, boards may reallocate resources or even replace the CEO. Intervention from boards makes CEOs unwilling to reveal their private information, especially bad news. An incentive is warranted to induce timely disclosure of bad news (Levitt and Snyder 1997). Severance agreements promise a compensation to offset CEO personal losses from doing so. Severance agreements provide an incentive for CEOs to disclose bad news early.

Using the full sample, a positive association is found between the timeliness of bad news disclosures and the single-trigger severance agreement alone (*STONLY*) but not the double-trigger

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

severance agreement alone (*DTONLY*) or the combined severance agreements (*STDT*). An effect by type, *ST* or *DT*, is not found. The results are robust after controlling for the possible effect of firm size, historical accounting practice, the demand by debt holders, and the legal environment of the industry. These findings suggest that the single-trigger severance agreement alone plays a role (which may not be causal, but is important) in producing timely disclosure of bad news. The association is also tested in the context of the CEO's last year of tenure, where performance is poorer than in normal years. It is in poor performance years that timely disclosure of bad news is especially valuable to boards. The positive association between the single-trigger severance agreement (alone) and the timeliness of bad news disclosures still exists.

Theory also predicts that before reaching the disclosure decision, CEOs may compare their severance pay with the compensation pay. If the severance pay is higher than the compensation pay, CEOs are likely to disclose the bad news. If the severance pay is lower, CEOs may hide the bad news and keep collecting rent. A significant amount of compensation based on performance, namely, performance-based pay, enhances the chance of the severance pay being greater than the annual compensation in the poor performance scenario (Inderst and Mueller 2005, Van Wesep 2008). Therefore, a highly variable pay structure is expected to be accompanied by a stronger association between ex ante severance agreements and timely disclosure of bad news.

This study uses different approaches to determine the CEO's pay structure: the level of the CEO's performance-based pay, the change in the CEO's performance-based pay over a three-year time period, and the volatility of the performance-based pay over the CEO's tenure. A high level of performance-based pay or a wide fluctuation in performance-based pay reflects the significant influence of performance and indicates a highly variable pay structure for the CEO. In the subsamples, the positive association between the single-trigger severance agreement and the timeliness of bad news disclosures is stronger among a group of CEOs with a highly variable pay structure than among a group of CEOs with a low variable pay structure. These findings are consistent with the theoretical predictions.

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

This study makes two contributions to the literature. First, it complements other work on severance agreements by examining the business outcome of severance agreements. The results suggest that single-trigger severance agreements play a role in timely disclosure of bad news. These findings are consistent with the theory of information disclosure by Inderst and Mueller (2005) and Laux (2008). Together with other studies, they suggest that the impact of one-time rewards on management incentives should not be ignored (Fee and Hadlock 2003, Grinstein and Hribar 2004, Hartzell et al. 2004, Yermack 2006). Second, this study provides insight into corporate governance. The results suggest that boards can use the severance agreement as a mechanism to elicit early disclosure of bad news. This study also provides evidence that pairing the severance agreement with a highly variable pay structure may enhance the power of this mechanism.

The paper proceeds as follows: Section 2 introduces severance agreements and payments. Section 3 discusses the hypotheses and the empirical model. Section 4 explains the sample. Section 5 presents the results, followed by the sensitivity tests in Section 6. Section 7 concludes the paper.

2. Severance Agreements and Payments

Severance agreements promise CEOs pay and benefits if they lose their position. Severance agreements are roughly classified as single-trigger severance agreements and double-trigger severance agreements. The difference between the two types is that under the double-trigger severance agreement, the employment termination must be within a specified period of time following a defined change in control over the firm. Both types of severance agreements qualify the CEO for the pay and benefits if his employment is terminated without cause or he resigns for a good reason. What is considered "cause" varies across firms? The most commonly specified causes are "willful misconduct", "moral turpitude" and "failure to perform duties" (Schwab and Thomas 2004). The CEO resigns for a "good reason" if the firm changes his duty, fails to compensate him as promised, or relocates him (Schwab and Thomas 2004). Leaving for a position at another firm is not a good reason for resigning from the present

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

employment. Termination for cause or resignation without a good reason does not trigger the severance pay under any type of severance agreements.

An ex-ante severance agreement typically provides two times of the CEO's annual salary and bonus, allows the CEO to accelerate the vesting of his stock options and restricted stocks, and offers the CEO a supplemental executive retirement plan, insurance, and other perquisites (Schwab and Thomas 2006, Rau & Xu 2008, Rusticus 2006, Yermack 2006). A termination without cause or a resignation with a good reason awards the departing CEO a similar amount (Schwab and Thomas 2004). However, the amount specified in a double-trigger severance agreement is usually larger, partly because it is the acquiring firm not the current hiring firm that will make the payment later (Schwab and Thomas 2004). In ex post settlements, CEOs receive more generous pay than what is specified in the severance agreement; CEOs removed from office usually receive a higher separation pay than CEOs who voluntarily retire (Bebchuk and Fried 2003, 2004; Yermack 2006).

3. Hypothesis Development and Empirical Model

Hypothesis Development

The separation of ownership and management creates a situation in which CEOs have an information advantage over boards because they manage the business on a daily basis. A CEO knows his own talents and he learns faster than the board whether his human capital fits the firm, whether the current corporate strategy could succeed, and whether the investment projects will make a profit. The separation of ownership and management also means that CEOs want to maximize their private benefits, which may not be aligned with shareholders' objectives. When things go wrong, the CEO worries about his private benefits and may be unwilling to reveal negative information. Releasing bad news has an adverse impact on the CEO's private benefits from different perspectives. Stock markets react negatively to bad news (e.g., Skinner 1994). The CEO's wealth will shrink as the result of a falling stock price and of a smaller award of

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

stock options or restricted stocks. The CEO may also face a termination of employment, loss of directorship, and difficulty in finding another job. With these concerns, some managers admit that they delay the disclosure of bad news, hoping that good news will come out in the subsequent period and then investors will not notice the changes (Graham et al. 2005). Managers intentionally delay bad news and gradually leak good news, leading to asymmetric market reactions to bad news and good news (Kothari et al. 2009).

Lack of private information from managers prevents boards from taking necessary actions to minimize shareholder loss. For example, managers engage in "empire building", keeping negative present value projects going. Without information on projects, boards are unable to identify the loss creating projects and terminate those projects (Watts 2003). Regardless of their productivity, mangers keep resources to themselves. Without information on individual productivity, boards cannot re-assign resources for their best use (Eisfeldt and Rampini 2008). Managers undertake projects with excessive risks that the company cannot afford if managers believe that they cannot meet the board's expectations even given their best effort (Van Wesep 2008). Not knowing management's ability, boards may have unrealistic expectations, thus creating pressure for excessive risk taking. Overall, access to management's private information is important for boards to maximize shareholder value.

An incentive is needed to achieve early disclosure of bad news from the CEO. Levitt and Snyder (1997) model information flow from the agent to the principal. Theoretically, the principal can obtain private information from the agent without cost. If the principal promises not to intervene in the business operation following the information disclosure, the disclosure will not affect the agent's benefits. Therefore, the agent is indifferent to revealing or hiding the private information. However, if the principal decides to take actions such as reassigning resources or terminating projects based on the revealed information, then the agent will be unwilling to reveal the information. Therefore, the principal has to reward early disclosure of private information if he wishes to avoid non-disclosure or a delay in disclosure. Applying this line of reasoning to the CEO (the agent) and the board (the principal), if the board does not take actions on the

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

CEO's private information, then the board does not need to provide incentive for the CEO to disclose the information. However, if the board wants to take actions given the information, then the board has to reward the early revelation of the private information. In practice, it is easy for boards not to take actions given good news, but difficult not to do so given bad news. An extreme example is that 24 percent of CEOs in Yermack's (2006) sample were forced to leave by their board.

An ex-ante severance agreement provides an incentive for the CEO to disclose bad news early. Inderst and Mueller (2005) argue that the CEO evaluates the cost and benefit of revealing bad news. If the disclosure costs his job and there is nothing in return, then the CEO will try to hide the information. If he receives a severance pay while losing his job, then the CEO is better motivated to disclose the bad news. Similarly, Van Wsep (2008) argues that severance pay helps the board distinguish high quality from low quality CEOs, because severance pay induces the low quality CEO to disclose the bad news and then leave. The value of the bad news increases in proportion to the eagerness that the board has for the information. The bad news appears more valuable if the board has an aggressive policy of replacing incumbent CEOs (Laux 2008). These theoretical studies suggest that severance pay offsets some costs that the CEO will incur if the disclosure leads to the termination of his employment, and that the expectation of severance pay encourages the CEO to disclose the bad news early. This leads to the first hypothesis stated in the alternate form:

H1: The existence of ex ante severance agreements and the timeliness of bad news disclosures are positively associated.

A properly designed compensation package improves the chance of a successful transfer of information from the CEO to the board of directors (Inderst and Mueller 2005, Van Wesep 2008). To make the information transfer work effectively, the CEO's compensation must include stock options or other forms of performance-based pay. This part of compensation varies with performance. Before coming to the decision to share the news, the CEO will compare the severance pay with the expected performance-based pay if he stays. Without a severance agreement, the low pay based on poor performance is preferred to receiving nothing resulting from being fired. The CEO is

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

financially better off hiding the bad news. With a severance agreement, the pay from severance may be greater than the compensation pay based on poor performance. The CEO is better off disclosing the bad news. A highly variable pay structure lowers the CEO's expected annual pay in the case of poor performance, which in turn enhances the relative value of the severance pay, thus providing a strong incentive for the CEO to communicate the bad news.

H2: The association between the existence of ex ante severance agreements and the timeliness of bad news disclosures is stronger among CEOs with a highly variable pay structure than among CEOs with a low variable pay structure.

Empirical Model

This study examines disclosures that take the form of recognizing bad news in accounting earnings. Basu's (1997) model separates good news and bad news and captures the timeliness of the disclosures. Good news is indicated by positive stock returns and bad news by negative stock returns. The relationship between the stock returns and accounting earnings shows the timeliness of news disclosure. The Basu model is specified as:

$$EARN = \beta 0 + \beta 1\ NEG + \beta 2\ RET + \beta 3\ NEG * RET + \varepsilon \qquad (1)$$

Where *EARN* is earnings before extraordinary items, *RET* is the buy-and-hold return, and *NEG* is a dummy variable that equals 1 for a negative *RET*, and 0 otherwise. The coefficients on the variable *RET* and the interaction term *NEG*RET* captures the timeliness of good news disclosure and bad news disclosure, respectively.

The Basu (1997) measures may be contaminated by accounting treatment of economic events in the past. To address this concern, the market-to-book ratio (MTB) is included as a control variable in this study's empirical model because the composition of equity value at the beginning of the year reflects the cumulative effect from accounting practice (Roychowdhury and Watts 2007). This study also controls for other variables that have a potential impact on timely disclosure of

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

bad news. These variables are firm size, leverage and litigation risk. They are discussed below.

The empirical model testing the association between ex ante severance agreements and timely disclosure of bad news is as follows:

$$\begin{aligned} EARNt = {} & \beta 0 + \beta 1\ NEGt + \beta 2\ RETt + \beta 3\ NEG\ t*RET\ t + \beta 4\ SIZE\ t\text{-}1 \\ & + \beta 5 NEGt * SIZE\ t\text{-}1 + \beta 6 RET\ t*SIZE\ t\text{-}1 + \beta 7\ NEG\ t*RET\ t*SIZE\ t\text{-}1 \\ & + \beta 8\ MTB\ t\text{-}1 + \beta 9 NEGt\ *MTB\ t\text{-}1 + \beta 10 RET\ t*MTB\ t\text{-}1 \\ & + \beta 11\ NEG\ t*RET\ t*MTB\ t\text{-}1 + \beta 12\ LEVERAGE\ t\text{-}1 \\ & + \beta 13\ NEGt*LEVERAGE\ t\text{-}1 + \beta 14 RET\ t*LEVERAGE\ t\text{-}1 \\ & + \beta 15\ NEG\ t*RET\ t*LEVERAGE\ t\text{-}1 + \beta 16\ LIT\ t\text{-}1 + \beta 17 NEGt\ *LIT\ t\text{-}1 \\ & + \beta 18\ RET\ t*LIT\ t\text{-}1 + \beta 19\ NEG\ t*RET\ t*LIT\ t\text{-}1 + \beta 20\ SA\ t\text{-}1 \\ & + \beta 21\ NEGt\ *SA\ t\text{-}1 + \beta 22 RET\ t*SA\ t\text{-}1 + \beta 23 NEG\ t*RET\ t*SA\ t\text{-}1 + \varepsilon t \quad (2) \end{aligned}$$

where *NEG*RET*SA* is the variable of interest, whose coefficient indicates whether the existence of ex ante severance agreements and the timeliness of bad news disclosures are positively associated. *SA* captures the existence of the ex-ante severance agreement by type, a single-trigger severance agreement (*ST*) or a double-trigger severance agreement (*DT*), or by the way boards grant them, a single-trigger severance agreement alone (*STONLY*), a double-trigger severance agreement alone (*DTONLY*), or both types of severance agreements granted to the same CEO (*STDT*). The coefficient on *NEG*RET*SA* is expected to be positive*. RET* is the buy-and-hold stock return over the same fiscal year as *EARN* covers. *EARN* is earnings before extraordinary items scaled by the market value of equity at the beginning of the year, and *NEG* is a dummy variable equal to 1 if *RET* is negative and 0 otherwise.

Following LaFond and Roychowdhury (2007), variables *SIZE*, *MTB*, and *LEVERAGE* take the scaled decile rank values of their respective underlying measures. Each of these variables is the yearly decile rank of its underlying measure from 0 to 9 and then scaled by 9. This step makes the values of these variables fall

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

between 0 and 1. The underlying measure of *SIZE* is the market value of equity (*MV*), that of *MTB* is the ratio of market value of equity to book value of equity (*MV/BV*), and that of *LEVERAGE* is the ratio of total debt to total assets (*DEBT/ASSETS*). The predicted sign of the coefficient on *NEG*RET*SIZE* is negative, as large firms are less likely to report bad news in a timely manner (Givoly, Hayn, and Natarajan 2007, LaFond and Watts 2006). The coefficient on *NEG*RET*MTB* is also predicted to be negative, because a high level of unrecorded good news, captured by a high value of *MTB*, lowers the need to record bad news in the subsequent period (Roychowdhury and Watts 2007). The expected sign of the coefficient on *NEG*RET*LEVERAGE* is positive because debt holders exhibit a strong demand for timely disclosure of bad news (Zhang 2004, Wittenberg-Moerman 2008, Ball, Robin and Sadka 2008, Frankel and Roychowdhury 2007, and Beatty, Weber, and Yu 2007). Firms in high litigation risk industries tend to disclose bad news early, so the coefficient on *NEG*RET*LIT* is predicted to be positive (Basu 1997, Watts 2003). The dummy variable *LIT* equals 1 if the standard industry classification (SIC) code of the firm falls in one of these ranges, 2833–2836, 3570– 3577, 3600–3674, 5200–5961 and 7370-7374 (Francis, Philbrick, and Schipper 1994).

4. Sample Selection and Descriptive Statistics

RiskMetrics (formerly, Investor Responsibility Research Center - IRRC) provides the severance agreement information. The main sample starts with the RiskMetrics governance biannual data from 1993 to 2006, with 12,531 observations. New governance data became available in July 1993, July 1995, February 1998, February 2000, February 2002, January 2004 and January 2006. As governance was less likely to change immediately after the information update, this data is most applicable to the fiscal year ending after the cut-off point. Taking the relative relationship between the cut-off month of the RiskMetrics data and the firm fiscal year-end month into consideration, the RiskMetrics 1993 data are matched with Standard & Poor's Compustat financial data for 1993 and 1994, the RiskMetrics 1995 data with Compustat data for 1995 and 1996, the RiskMetrics 1998

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

data with Compustat data for 1997 and 1998, the RiskMetrics 2000 data with Compustat data for 1999 and 2000, the RiskMetrics 2002 data with Compustat data for 2001 and 2002, the RiskMetrics 2004 data with Compustat data for 2003 and 2004, and the RiskMetrics 2006 data with Compustat data for 2005 and 2006. There are 11,303 firm year observations resulting from this step. Out of the 11,303 observations, 10,904 observations have corresponding stock return information from the Center for Research in Security Prices (CRSP). This study retrieved CEO compensation information from Standard & Poor's ExecuComp dataset, which begins with fiscal year 1992. To test hypothesis 2, this study requires that ExecuComp has more than three observations each year in each two-digit SIC industry. This requirement reduces the sample size to 8,803 observations. Another 34 observations are lost because they have no SIC information. Firms in the utility and financial industries (SIC codes 4900-4999 and 6000-6900) are excluded because such firms are subject to different legal constraints. After deleting these firms, the full sample includes 6,986 observations.

Table 1 presents descriptive statistics on the sample. In Panel A, the statistics show that the mean of *ST* is 7.7% and that of *DT* is 63.5%. Approximately 6.8% of CEOs have the single-trigger severance agreement alone (*STONLY*), 62.6% of CEOs have the double-trigger severance agreement alone (*DTONLY*), and 0.9% of CEOs have both severance agreements (*STDT*). This is consistent with other studies of severance agreements that more double-trigger severance agreements are granted than are single-trigger severance agreements that are not contingent on change in firm control (Rusticus 2006; Rau and Xu 2008). On average, the sample has a positive income before extraordinary items scaled by the beginning market value of equity (*EARN*). The sample also shows an average of 13.6% of one year buy-and-hold return (*RET*), but 40.3% of the firms experience a negative return (*NEG*). The market value of equity (*MV*) at the beginning of the year varies dramatically across sample firms with an average value of 6.6 billion. The average market-to-book ratio (*MV/BV*) is 4.1. Twenty-two percent of corporate capital comes from debt (*DEBT/ASSETS*). Approximately 32.4% of the sample firms are in industries with high litigation risk (*LIT*).

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

Panel B presents the severance agreements granted by year. The grant of single-trigger severance agreements declines from a peak of 11.6% to 4.0%. That of the double-trigger severance agreements increases over time from a low 50% to 76.5%. The number of double-trigger severance agreements is much higher than that of single-trigger severance agreements.

Panel C reports the correlations between the variables. The Pearson product-moment correlations are reported above the diagonal and the Spearman rank-order correlations below the diagonal. The correlation between *ST* and *DT* is significantly negative, with a correlation coefficient of -0.307. *ST* exhibits a positive correlation with *LIT*. *DT* shows a positive correlation with *DEBT/ASSETS*. The correlation between *EARN* and *RET* is significantly positive and the correlation between *EARN* and *NEG* is significantly negative, suggesting that firms' accounting systems and the stock market capture similar economic events.

TABLE 1 Descriptive Statistics and Correlations

Panel A: Descriptive Statistics

Variable	N	Mean	Std Dev	10th Pctl	Lower Quartile	Median	Upper Quartile	90th Pctl
ST	6986	0.077	0.267	0.000	0.000	0.000	0.000	0.000
DT	6986	0.635	0.481	0.000	0.000	1.000	1.000	1.000
STONLY	6986	0.068	0.251	0.000	0.000	0.000	0.000	0.000
DTONLY	6986	0.626	0.484	0.000	0.000	1.000	1.000	1.000
STDT	6986	0.009	0.097	0.000	0.000	0.000	0.000	0.000
EARN	6986	0.025	0.194	-0.044	0.022	0.049	0.072	0.101
RET	6986	0.136	0.557	-0.390	-0.159	0.085	0.329	0.659
NEG	6986	0.403	0.490	0.000	0.000	0.000	1.000	1.000
MV	6986	6561	23002	251	537	1286	3892	11862
MV/BV	6986	4.051	67.925	1.085	1.606	2.410	3.893	6.291
DEBT/ASSSETS	6986	0.220	0.178	0.000	0.068	0.212	0.329	0.439
LIT	6986	0.324	0.468	0.000	0.000	0.000	1.000	1.000

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

Panel B: Severance Agreements by Year

Year	1993	1995	1998	2000	2002	2004	2006
N	660	801	1108	1030	1139	1157	1091
	Mean	Mean	Mean	Mean	Mean	Mean	Mean
	(Std Dev)	(Std Dev)	(Std Dev)	(Std Dev)	(Std Dev)	(Std Dev)	(Std Dev)
ST	0.042	0.099	0.116	0.102	0.068	0.066	0.040
	(0.202)	(0.298)	(0.321)	(0.303)	(0.251)	(0.248)	(0.197)
DT	0.535	0.532	0.526	0.607	0.681	0.724	0.765
	(0.499)	(0.499)	(0.500)	(0.489)	(0.466)	(0.447)	(0.424)

Panel C: Pearson and Spearman Correlations

Variable	*ST*	*DT*	*EARN*	*RET*	*NEG*	*MV*	*MV/BV*	*DEBT /ASSSETS*	*LIT*
ST		**-0.307**	0.015	0.022	-0.002	0.020	0.000	-0.007	**0.053**
DT	**-0.307**		-0.020	**-0.025**	-0.005	**-0.106**	-0.005	**0.083**	**-0.060**
EARN	-0.003	-0.003		**0.181**	**-0.177**	0.023	0.007	**-0.038**	**0.067**
RET	-0.008	-0.011	**0.429**		**-0.596**	**-0.026**	-0.012	-0.016	**0.026**
NEG	0.002	0.005	**-0.374**	**-0.849**		-0.011	-0.016	0.000	**0.059**
MV	-0.008	-0.022	-0.021	-0.005	**-0.039**		-0.010	-0.014	**0.075**
MV/BV	0.021	**-0.078**	**-0.085**	**-0.051**	**-0.035**	**0.491**		**0.027**	-0.002
DEBT/ASSSETS	**-0.026**	**-0.103**	**-0.084**	-0.010	-0.010	**0.042**	**-0.189**		**-0.237**
LIT	**0.053**	**-0.060**	**-0.174**	**-0.031**	**0.059**	**0.050**	**0.145**	**-0.269**	

Note:

Variable definitions: *ST*	=	1 if the CEO has a single-trigger severance agreement, and 0 otherwise
DT	=	1 if the CEO has a double-trigger severance agreement, and 0 otherwise
STONLY	=	1 if the CEO has only a single-trigger agreement, and 0 otherwise
DTONLY	=	1 if the CEO has only a double-trigger severance agreement, and 0 otherwise
STDT	=	1 if the CEO has both a single-trigger severance agreement and a double-trigger severance agreement, and 0 otherwise
EARN	=	earnings before extraordinary items scaled by the market value of equity at the beginning of the year
RET	=	the buy-and-hold stock return over the fiscal year
NEG	=	1 if RET is negative, and 0 otherwise
MV	=	the market value of equity at the beginning of the year
MV/BV	=	the ratio of the market value of equity to the book value of equity at the beginning of the year
DEBT/ASSSETS	=	the ratio of total debt to total assets
LIT	=	1 if the standard industry classification (SIC) code of the firm falls in one of these ranges, 2833–2836, 3570– 3577, 3600–3674, 5200–5961, and 7370-7374, and 0 otherwise

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

In Panel C: The Pearson product-moment correlations are reported above the diagonal and the Spearman rank-order correlations below the diagonal. Bold text indicates significant at the 0.01 and 0.05 level using a two-tailed t-test.

5. Results

In this section, hypothesis 1 will be tested using the full sample. Then hypothesis 1 will be tested in the context of the CEO's last year in office (a smaller sample). Since CEO turnover relates to performance to some extent, it is expected that performance in the CEO's last year of tenure is worse than in other years, thus more bad news will be in this year than in other years. This context provides an opportunity to test the association between the ex-ante severance agreements and the timeliness of bad news disclosures, where having private information from the CEO is more valuable to the board than usual. Following that, the full sample will be partitioned based on the proxies for the pay structure. Model (2) is run within each subsample, i.e., the highly variable pay structure group and the low variable pay structure group, to test hypothesis 2.

Testing H1:

Full Sample

Table 2 reports the test results for the association between the existence of ex ante severance agreements and the timeliness of bad news disclosures. The association is first examined by type of severance agreements and then by the way boards grant them to the CEO. Column I presents the result for the single-trigger severance agreement. The coefficient on *NEG*RET*ST* is not significant. This does not support an effect by the single-trigger severance agreement that bad news is disclosed in a timelier manner by CEOs with the single-trigger severance agreement than by CEOs without such a severance agreement. The coefficients on the control variables are all consistent with the literature. The coefficient on *NEG*RET*SIZE* is negative, supporting the inverse relationship between firm size and timely disclosure of bad news (-0.214). The coefficient on *NEG*RET*MTB* is also negative (-0.308). The positive coefficient on *NEG*RET* LEVERAGE* (0.117) indicates that firms with a high level of debt disclose bad news early. The coefficient on *NEG*RET*LIT* (0.065)

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

suggests that timely disclosure of bad news is more common in industries with high litigation risk.

Column II reports the results for the double-trigger severance agreements. In general, CEOs with the double-trigger severance agreement do not disclose bad news in a timelier manner than CEOs without such an agreement, as the coefficient on *NEG*RET*DT* is not significant. The results on the control variables are similar to those in Column I, thus they are not repeated here.

Column III separates the CEOs with one severance agreement from the CEOs with two severance agreements. The coefficient on *NEG*RET*STONLY* is significantly positive (0.085), and the coefficients on *NEG*RET*DT* and *NEG*RET*STDT* are not significant. The result suggests that bad news is disclosed earlier by CEOs with a single-trigger severance agreement alone than by CEOs without a severance agreement. This is not observed among CEOs with a double-trigger severance agreement alone or CEOs with both types of severance agreements. Using the full sample, hypothesis 1 is supported for the single-trigger severance agreement when it is granted alone to the CEO.

TABLE 2 Tests on the association between severance agreements and timely disclosure of bad news (Full Sample)

		(I)			(II)			(III)		
Parameter		Est	t		Est	t		Est	t	
Intercept		0.057	4.62	***	0.053	4.71	***	0.053	4.45	***
NEG		-0.004	-0.25		0.009	0.54		0.006	0.35	
RET		-0.003	-0.10		0.012	0.42		0.009	0.32	
NEG*RET	+	0.407	7.00	***	0.409	6.94	***	0.397	6.67	***
SIZE		0.002	0.21		0.001	0.12		0.001	0.18	
NEG*SIZE		-0.007	-0.37		-0.006	-0.34		-0.008	-0.42	
RET*SIZE		0.058	2.98	***	0.059	2.96	***	0.058	2.94	***
NEG*RET*SIZE	-	-0.214	-3.02	***	-0.217	-3.04	***	-0.219	-3.07	***
MTB		0.010	1.24		0.012	1.64		0.012	1.51	
NEG*MTB		-0.013	-0.72		-0.016	-0.88		-0.015	-0.85	

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

RET*MTB		-0.041	-2.24	**	-0.048	-2.88	***	-0.046	-2.62	***
NEG*RET*MTB	-	-0.308	-4.33	***	-0.300	-4.24	***	-0.301	-4.26	***
LEVERAGE		-0.016	-1.62		-0.015	-1.55		-0.016	-1.57	
NEG*LEVERAGE		0.041	2.55	***	0.041	2.61	***	0.041	2.57	***
RET*LEVERAGE		0.022	0.86		0.020	0.80		0.022	0.83	
NEG*RET*LEVERAGE	+	0.117	2.06	**	0.121	2.14	**	0.113	2.00	**
LIT		-0.023	-4.34	***	-0.021	-4.19	***	-0.021	-4.24	***
NEG*LIT		0.018	1.91	*	0.016	1.72	*	0.017	1.80	*
RET*LIT		0.002	0.11		-0.003	-0.25		-0.003	-0.24	
NEG*RET*LIT	+	0.065	1.82	**	0.069	1.96	**	0.073	2.05	**
ST		0.000	0.01							
NEG*ST		0.024	1.95	**						
RET*ST		0.008	0.57							
NEG*RET*ST	+	0.048	0.97							
DT					0.004	1.04				
NEG*DT					-0.016	-2.14	**			
RET*DT					-0.015	-2.01	**			
NEG*RET*DT	+				-0.005	-0.18				
STONLY								0.001	0.14	
NEG*STONLY								0.020	1.54	
RET*STONLY								0.008	0.61	
NEG*RET*STONLY	+							0.085	1.60	**
DTONLY								0.004	1.07	
NEG*DTONLY								-0.013	-1.59	
RET*DTONLY						-0.013	-1.71			
NEG*RET*DTONLY	+							0.013	0.43	
STDT								-0.001	-0.04	
NEG*STDT								0.005	0.14	
RET*STDT								-0.019	-0.38	
NEG*RET*STDT	+							-0.068	-0.77	
N		6986			6986			6986		
R^2		26.52%			26.58%			26.73%		

Note:

Variable definitions: *ST* = 1 if the CEO has a single-trigger severance agreement, and 0 otherwise
DT = 1 if the CEO has a double-trigger severance agreement, and 0 otherwise
STONLY = 1 if the CEO has only a single-trigger severance agreement, and 0 otherwise
DTONLY = 1 if the CEO has only a double-trigger severance agreement, and 0 otherwise

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

STDT	=	1 if the CEO has both a single-trigger severance agreement and a double-trigger severance agreement, and 0 otherwise
EARN	=	earnings before extraordinary items scaled by the market value of equity at the beginning of the year
RET	=	the buy-and-hold stock return over the fiscal year
NEG	=	1 if RET is negative, and 0 otherwise
SIZE	=	the yearly decile rank value of the market value of equity at the beginning of the year, scaled by 9
MTB	=	the yearly decile rank value of the ratio of the market value of equity to the book value of equity at the beginning of the year, scaled by 9
LEVERAGE	=	the yearly decile rank value of the ratio of total debt to total assets, scaled by 9
LIT	=	1 if the standard industry classification (SIC) code of the firm falls in one of these ranges, 2833–2836, 3570– 3577, 3600–3674, 5200–5961, and 7370-7374, and 0 otherwise

t-values are based on the firm-clustered standard errors. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively. *p*-values are one-tailed for coefficients with a predicted sign, and two-tailed otherwise.

Departing CEOs

This section examines the timeliness of bad news disclosures in the CEO's last year in office. The departing CEO sample begins with ExecuComp 1992-2008, with a specific date of departure for the CEO (ExecuComp item: LEFTOFC). CEOs in the financial and utility industries or departing due to death are deleted. The number of observations declines from 2,820 to 2,289 because of these restrictions. Next, interim CEOs are dropped from the sample because over their short CEO time, an interim CEO is unlikely to have much influence on the company's information disclosure policy. An interim CEO is defined as being in office for less than one year. This requires comparing the date of becoming the CEO and the date of departing as the CEO. If the information of the starting date (ExecuComp item: BECAMECEO) is missing from ExecuComp, the data is then collected by hand from the company's proxy statement or 8-K or news release. Some of the dates retrieved from ExecuComp appear to be mistakes because the year of BECAMECEO is later than the fiscal year they are shown as the CEO. For example, ExecuComp records Bernard Gordon as the CEO of Analogic Corp in 1999 and 2003 while his dates of BECAMECEO are all listed as November 8th, 2006. After checking the public records, it became clear that Bernard Gordon was the CEO of the Company from 1973 to 2000, from 2002 to 2003, and then became the CEO again in 2006. ExecuComp updates all the historical

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

dates of becoming the CEO and the departure as the CEO for returned CEOs like Bernard Gordon. For cases like this, this study only keeps the CEO's last departure from the company as a regular CEO. After deleting the interim CEOs, the departing CEO sample has 2,117 observations.

This study intends to examine the disclosure practice in the departing CEO's last year of significant influence. [2] A fiscal year is defined to be under the CEO's significant influence if the CEO is in office for more than nine months of the fiscal year. This is determined by comparing the CEO's departure date with the firm's fiscal year-end date. Specifically, if the CEO was in office for more than nine months in the fiscal year of his departure, then the year of his departure is the last fiscal year under his significant influence. Otherwise, the last fiscal year under his significant influence would be the fiscal year before the year of his departure. The cut-off point of nine months is a subjective but reasonable choice. It ensures that the disclosure practice is primarily under the departing CEO's not the incoming CEO's influence.

The departing CEO sample is matched with the RiskMetrics severance data (1990-2006) and Compustat financial data and CRSP stock price information. Some observations are lost during this matching process because of missing data in one or more of the three datasets. The final sample includes 1,568 observations. The descriptive statistics for this sample are reported in Table 3. The statistics support the conjecture that the performance in the CEO's last year of tenure is worse than in other years. Earnings in Table 3 are lower (*EARN* = -0.010), compared to those reported in Table 1 (*EARN* = 0.025). Stock returns are lower as well (*RET* =4.9%, *NEG* =48.7% vs. *RET* =13.6%, *NEG* =40.3% in Table 1).

The severance agreement statistics for these departing CEOs are similar to those for the CEOs in the full sample: on average, 7.5% of the CEOs have the single-trigger severance agreement; 6.3% of them only have this agreement, while 1.3% of them have this agreement in addition to a double-trigger severance agreement. Approximately 65.9% of the CEOs have the double-trigger severance agreement; 64.7% of them have this agreement alone, while the other

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

1.3% of the CEOs have both a single-trigger severance agreement and a double-trigger severance agreement.

TABLE 3 Descriptive Statistics (Departing CEOs)

Variable	N	Mean	Std Dev	10th Pctl	Lower Quartile	Median	Upper Quartile	90th Pctl
ST	1568	0.075	0.264	0.000	0.000	0.000	0.000	0.000
DT	1568	0.659	0.474	0.000	0.000	1.000	1.000	1.000
STONLY	1568	0.063	0.242	0.000	0.000	0.000	0.000	0.000
DTONLY	1568	0.647	0.478	0.000	0.000	1.000	1.000	1.000
STDT	1568	0.013	0.112	0.000	0.000	0.000	0.000	0.000
EARN	1568	-0.010	0.261	-0.121	0.008	0.044	0.067	0.090
RET	1568	0.049	0.501	-0.473	-0.238	0.012	0.241	0.561
NEG	1568	0.487	0.500	0.000	0.000	0.000	1.000	1.000
MV	1568	7891	25233	238	559	1533	4798	15833
MV/BV	1568	3.593	20.008	1.061	1.574	2.342	3.870	6.541
DEBT/ASSSETS	1568	0.220	0.174	0.000	0.084	0.210	0.322	0.436
LIT	1568	0.333	0.471	0.000	0.000	0.000	1.000	1.000

Variable definitions: *ST* = 1 if the CEO has a single-trigger severance agreement, and 0 otherwise
DT = 1 if the CEO has a double-trigger severance agreement, and 0 otherwise
STONLY = 1 if the CEO has only a single-trigger severance agreement, and 0 otherwise
DTONLY = 1 if the CEO has only a double-trigger severance agreement, and 0 otherwise
STDT = 1 if the CEO has both a single-trigger severance agreement and a double-trigger severance agreement, and 0 otherwise
EARN = earnings before extraordinary items scaled by the market value of equity at the beginning of the year
RET = the buy-and-hold stock return over the fiscal year
NEG = 1 if RET is negative, and 0 otherwise
MV = the market value of equity at the beginning of the year
MV/BV = the ratio of the market value of equity to the book value of equity at the beginning of the year
DEBT/ASSSETS = the ratio of total debt to total assets
LIT = 1 if the standard industry classification (SIC) code of the firm falls in one of these ranges, 2833–2836, 3570– 3577, 3600–3674, 5200–5961, and 7370-7374, and 0 otherwise

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

The analyses in Table 4 are similar to those in Table 2. Column I presents the results of the association between the existence of a single-trigger severance agreement and the timely disclosure of bad news. Column II reports the association between the existence of a double-trigger severance agreement and the timely disclosure of bad news. Column III separates the CEOs with one severance agreement from the CEOs with both severance agreements. The coefficient on *NEG*RET*ST* is significantly positive (0.395). It suggests that in the CEO's last year of strong influence, bad news is revealed earlier by CEOs with a single-trigger severance agreement than by CEOs without such an agreement. Column II shows that this phenomenon is not observed among CEOs with the double-trigger severance agreement, as evidenced by the non-significant coefficient on *NEG*RET*DT*. Consistent with the result in Table 2, the coefficient on *NEG*RET*STONLY* is significantly positive (0.416), indicating the strong role played by the single-trigger severance agreement in eliciting timely disclosure of bad news. Neither the coefficient on *NEG*RET*DTONLY* nor the one on *NEG*RET*STDT* is significant. The results in this table provide additional evidence that the existence of ex ante single-trigger severance agreements and timeliness of bad news disclosure are positively related. The single-trigger severance agreement plays an important role in eliciting early disclosure of bad news. The coefficients on the control variables are all in the predicted direction. The coefficients are significantly negative on *NEG*RET*SIZE* and *NEG*RET*MTB*. The coefficients on *NEG*RET*LEVERAGE* and *NEG*RET* LIT* lose their significance but are still positive.

TABLE 4 Tests on the association between severance agreements and timely disclosure of bad news (Departing CEOs)

	(I)			(II)			(III)		
Parameter	Est	t		Est	t		Est	t	
Intercept	0.022	1.13		0.026	1.37		0.028	1.43	
NEG	0.064	1.49		0.083	1.79	*	0.069	1.54	
RET	-0.061	-1.01		-0.046	-0.81		-0.038	-0.69	
NEG*RET	+ 0.862	5.25	***	0.944	5.23	***	0.886	4.83	***
SIZE	0.016	0.90		0.017	0.98		0.017	0.97	
NEG*SIZE	-0.041	-0.79		-0.038	-0.73		-0.044	-0.84	

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

RET*SIZE		0.038	0.77		0.027	0.56		0.027	0.54	
NEG*RET*SIZE	-	-0.376	-2.20	**	-0.362	-2.10	**	-0.372	-2.14	**
MTB		0.053	2.37	**	0.048	2.18	**	0.048	2.15	**
NEG*MTB		-0.080	-1.40		-0.081	-1.43		-0.073	-1.28	
RET*MTB		-0.010	-0.14		0.002	0.02		0.003	0.04	
NEG*RET*MTB	-	-0.669	-3.33	***	-0.692	-3.47	***	-0.675	-3.31	***
LEVERAGE		-0.024	-1.24		-0.021	-1.05		-0.021	-1.05	
NEG*LEVERAGE		-0.011	-0.22		-0.014	-0.28		-0.013	-0.28	
RET*LEVERAGE		0.105	1.87	*	0.098	1.72	*	0.101	1.77	*
NEG*RET*LEVERAGE	+	-0.190	-1.20		-0.173	-1.08		-0.185	-1.18	
LIT		-0.036	-3.50	***	-0.033	-3.26	***	-0.033	-3.20	***
NEG*LIT		0.059	2.29	**	0.054	2.20	**	0.053	2.13	**
RET*LIT		0.038	1.24		0.028	0.98		0.025	0.90	
NEG*RET*LIT	+	0.106	1.07		0.102	1.08		0.110	1.15	
ST		0.018	0.79							
NEG*ST		0.075	1.11							
RET*ST		-0.067	-0.97							
NEG*RET*ST	+	0.395	1.67	*						
DT					-0.006	-0.65				
NEG*DT					-0.019	-0.82				
RET*DT					-0.020	-0.83				
NEG*RET*DT	+				-0.091	-0.96				
STONLY								0.008	0.32	
NEG*STONLY								0.079	1.03	
RET*STONLY								-0.099	-1.18	
NEG*RET*STONLY	+							0.416	1.52	*
DTONLY								-0.008	-0.91	
NEG*DTONLY						-0.006	-0.26			
RET*DTONLY								-0.028	-1.22	
NEG*RET*DTONLY	+							-0.036	-0.39	
STDT								0.030	1.87	**
NEG*STDT								0.031	0.45	
RET*STDT								-0.042	-0.83	
NEG*RET*STDT	+							0.165	0.82	
N		1568			1568			1568		
R^2		30.09%			29.91%			30.36%		

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

Note:

Variable definitions: *ST*	=	1 if the CEO has a single-trigger severance agreement, and 0 otherwise
DT	=	1 if the CEO has a double-trigger severance agreement, and 0 otherwise
STONLY	=	1 if the CEO has only a single-trigger severance agreement, and 0 otherwise
DTONLY	=	1 if the CEO has only a double-trigger severance agreement, and 0 otherwise
STDT	=	1 if the CEO has both a single-trigger severance agreement and a double-trigger severance agreement, and 0 otherwise
EARN	=	earnings before extraordinary items scaled by the market value of equity at the beginning of the year
RET	=	the buy-and-hold stock return over the fiscal year
NEG	=	1 if RET is negative, and 0 otherwise
SIZE	=	the yearly decile rank value of the market value of equity at the beginning of the year, scaled by 9
MTB	=	the yearly decile rank value of the ratio of the market value of equity to the book value of equity at the beginning of the year, scaled by 9
LEVERAGE	=	the yearly decile rank value of the ratio of total debt to total assets, scaled by 9
LIT	=	1 if the standard industry classification (SIC) code of the firm falls in one of these ranges, 2833–2836, 3570– 3577, 3600–3674, 5200–5961, and 7370-7374, and 0 otherwise

t-values are based on the firm-clustered standard errors. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively. *p*-values are one-tailed for coefficients with a predicted sign, and two-tailed otherwise.

Testing H2:
Compensation Structure Determined by the Level of Performance-Based Pay

Hypothesis 2 predicts that the relationship between the existence of severance agreements and timely disclosure of bad news will be stronger among CEOs with a highly variable pay structure. How to determine a highly variable pay structure versus a low variable pay structure is not clear in the literature and it is a difficult issue. A highly variable pay structure means that the CEO has a large component of his compensation based on performance. This compensation design leads to a high amount of performance-based pay for a year of good performance, while a low amount for a year of poor performance. By contrast, a low variable pay structure is less affected by performance. It produces a low amount of performance-based pay. An extreme example is that regardless of performance a CEO's performance-based pay is always zero if he only works on salary. A highly variable pay *structure* does not always mean a high *amount* of performance-based pay in annual compensation. However, a high *amount* of performance-based pay is a signal of a highly variable pay *structure* for the CEO. Based on this property, the full sample is partitioned into a highly

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

variable pay structure group and a low variable pay structure group. Models are run within each subsample.

CEOs' performance-based pay information is obtained from ExecuComp. The proxy for performance-based pay, *PBP*, treats salary as the only fixed component paid to the CEO. The performance-based pay is calculated as the total annual compensation minus salary, where the total annual compensation (ExecuComp item: TDC1) includes salary, bonus, other annual compensation, total value of restricted stock granted, total value of stock options granted (using Black-Scholes), long-term incentive payouts, and all other compensations.

CEO's performance-based pay may be affected by the overall economy of the year and industry-specific differences in the design of compensation package. Therefore, CEO performance-based pays are sorted by year and industry (defined by the 2-digit SIC code), using *all* the observations available in ExecuComp. These observations are then assigned to four groups of equal size, with the lowest performance-based pay in group 1 and the highest performance-based pay in group 4.[3] Group 4 is the highly variable pay structure group. The remaining observations of the full sample constitute the low variable pay structure group.

Table 5 reports the results, with Panel A for the highly variable pay structure group and Panel B for the low variable pay structure group. Panel A Column I presents the results for the single-trigger severance agreement. The coefficient on *NEG*RET*ST* is significantly positive (0.072), indicating that among CEOs with a highly variable pay structure, bad news is disclosed earlier by CEOs with a single-trigger severance agreement than by CEOs without such an agreement. The coefficient is still negative on *NEG*RET*MTB* and positive on *NEG*RET*LIT*. The coefficients on *NEG*RET*SIZE* and *NEG*RET*LEVERAGE* become not significant but are in the predicted direction. Column II tests for the double-trigger severance agreement. The coefficient on *NEG*RET*DT* is not significant. This indicates that CEOs with this severance agreement do not disclose bad news in a timelier manner. In Column III, the results suggest again that CEOs with the single-trigger severance agreement alone demonstrate the

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

tendency to disclose bad news earlier. CEOs with the double-trigger severance agreement alone or with both types of severance agreements do not show this tendency. The coefficient on *NEG*RET*STONLY* is 0.074 in this subsample.

Panel B presents the analysis for the association between ex ante severance agreements and timely disclosure of bad news within the low variable pay structure subsample. The coefficients on the variables of interest, *NEG*RET*ST*, *NEG*RET*DT*, *NEG*RET*STONLY*, *NEG*RET*DTONLY* and *NEG*RET*STDT*, are not significant. The results indicate that among CEOs with a low variable pay structure, bad news is not revealed earlier by CEOs with a severance agreement than by CEOs without a severance agreement. Among these CEOs, severance agreements do not play a role in eliciting timely disclosure of bad news. Turning to the control variables, the signs of the coefficients on *NEG*RET*SIZE*, *NEG*RET*MTB*, and *NEG*RET*LEVERAGE* are consistent with the literature. The coefficient on *NEG*RET*LIT* loses its significance. Combining the results in Panel A and Panel B, H2 is supported.

TABLE 5 Tests on the association between severance agreements and timely disclosure of bad news (Sample Partitioned by Performance-Based Pay Level)

Panel A: Highly Variable Pay Structure

		(I)			(II)			(III)		
Parameter		Est	t		Est	t		Est	t	
Intercept		0.064	8.05	***	0.061	6.30	***	0.065	7.02	***
NEG		0.003	0.16		0.017	0.75		0.011	0.48	
RET		0.021	1.45		0.021	1.16		0.016	0.90	
NEG*RET	+	0.280	4.02	***	0.308	3.67	***	0.298	3.36	***
SIZE		0.002	0.30		0.004	0.50		0.004	0.42	
NEG*SIZE		0.040	1.78	*	0.037	1.68	*	0.037	1.62	
RET*SIZE		0.014	1.02		0.012	0.87		0.011	0.75	
NEG*RET*SIZE	-	0.110	1.12		0.112	1.15		0.106	1.06	
MTB		-0.016	-1.68	*	-0.016	-1.56		-0.016	-1.57	
NEG*MTB		-0.067	-2.78	***	-0.068	-2.79	***	-0.066	-2.68	***
RET*MTB		-0.028	-1.57		-0.028	-1.38		-0.027	-1.37	
NEG*RET*MTB	-	-0.492	-4.34	***	-0.495	-4.33	***	-0.486	-4.09	***
LEVERAGE		0.000	0.03		0.001	0.13		-0.001	-0.10	
NEG*LEVERAGE		0.009	0.41		0.008	0.39		0.011	0.50	

RET*LEVERAGE		0.015	0.98		0.013	0.81		0.019	1.22	
NEG*RET*LEVERAGE	+	0.045	0.55		0.050	0.61		0.047	0.57	
LIT		-0.019	-3.70	***	-0.019	-3.74	***	-0.020	-4.11	***
NEG*LIT		0.046	3.59	***	0.044	3.41	***	0.046	3.53	***
RET*LIT		-0.001	-0.07		-0.001	-0.10		0.003	0.34	
NEG*RET*LIT	+	0.149	2.69	***	0.145	2.58	***	0.141	2.50	***
ST		-0.001	-0.09							
NEG*ST		0.016	1.00							
RET*ST		-0.015	-1.11							
NEG*RET*ST	+	0.072	1.38	*						
DT					0.003	0.49				
NEG*DT					-0.015	-1.24				
RET*DT					0.001	0.15				
NEG*RET*DT	+				-0.034	-0.78				
STONLY								-0.005	-0.44	
NEG*STONLY								0.015	0.91	
RET*STONLY								-0.004	-0.32	
NEG*RET*STONLY	+							0.074	1.25	*
DTONLY								0.000	0.02	
NEG*DTONLY								-0.010	-0.81	
RET*DTONLY								0.003	0.37	
NEG*RET*DTONLY	+							-0.022	-0.46	
STDT								0.021	0.81	
NEG*STDT								-0.045	-0.89	
RET*STDT								-0.068	-4.01	***
NEG*RET*STDT	+							-0.044	-0.39	
N		1806			1806			1806		
R^2		28.03%			27.97%			28.27%		

Panel B: Low Variable Pay Structure

	(I)			(II)			(III)		
Parameter	Est	t		Est	t		Est	t	
Intercept	0.057	3.88	***	0.052	3.89	***	0.053	3.64	***
NEG	-0.011	-0.57		0.002	0.13		-0.002	-0.09	

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

RET		-0.013	-0.34		0.013	0.39		0.005	0.14	
NEG*RET	+	0.433	6.26	***	0.421	6.03	***	0.416	5.83	***
SIZE		-0.009	-0.94		-0.009	-0.88		-0.008	-0.85	
NEG*SIZE		-0.024	-1.13		-0.024	-1.13		-0.025	-1.20	
RET*SIZE		0.095	3.94	***	0.091	3.72	***	0.091	3.81	***
NEG*RET*SIZE	-	-0.391	-5.20	***	-0.388	-5.16	***	-0.389	-5.19	***
MTB		0.026	2.58	***	0.029	2.85	***	0.028	2.73	***
NEG*MTB		0.003	0.15		0.000	0.01		0.002	0.07	
RET*MTB		-0.065	-2.61	***	-0.073	-3.03	***	-0.069	-2.84	***
NEG*RET*MTB	-	-0.180	-2.20	**	-0.171	-2.09	**	-0.176	-2.14	**
LEVERAGE		-0.023	-1.93	**	-0.020	-1.75	*	-0.022	-1.82	*
NEG*LEVERAGE		0.061	3.18	***	0.060	3.16	***	0.061	3.15	***
RET*LEVERAGE		0.024	0.72		0.017	0.56		0.022	0.66	
NEG*RET*LEVERAGE	+	0.165	2.41	**	0.174	2.56	***	0.163	2.35	**
LIT		-0.023	-3.79	***	-0.021	-3.47	***	-0.021	-3.52	***
NEG*LIT		0.008	0.71		0.006	0.56		0.006	0.56	
RET*LIT		0.002	0.10		-0.005	-0.29		-0.005	-0.34	
NEG*RET*LIT	+	0.039	0.95		0.047	1.14		0.051	1.23	
ST		0.000	0.01							
NEG*ST		0.027	1.93	**						
RET*ST		0.024	1.21							
NEG*RET*ST	+	0.030	0.56							
DT					0.004	0.79				
NEG*DT					-0.015	-1.67	*			
RET*DT					-0.023	-2.06	**			
NEG*RET*DT	+				0.006	0.18				
STONLY								0.003	0.31	
NEG*STONLY								0.020	1.34	
RET*STONLY								0.021	1.16	
NEG*RET*STONLY	+							0.063	1.06	
DTONLY								0.004	0.83	
NEG*DTONLY								-0.012	-1.25	
RET*DTONLY								-0.019	-1.59	
NEG*RET*DTONLY	+							0.020	0.54	
STDT								-0.017	-0.48	
NEG*STDT								0.045	0.96	

RET*STDT			0.000	0.01
NEG*RET*STDT	+		-0.035	-0.34
N	5180	5180	5180	
R^2	27.13%	27.15%	27.34%	

Note: Using all data available in ExecuComp, CEO performance-based pays (PBP) are sorted by 2-digit SIC industry classification and year. The observations are assigned to four groups of equal size, with the lowest performance-based pay in group 1 and the highest performance-based pay in group 4. CEOs who have a performance-based pay in group 4 are classified as highly-variable-pay-structure CEOs (Panel A). CEOs with a performance-based pay in other groups are low-variable-pay-structure CEOs (Panel B). This information is then matched with the full sample described in Table 1.

Variable definitions: *PBP*	=	the total annual compensation subtracts salary
ST	=	1 if the CEO has a single-trigger severance agreement, and 0 otherwise
DT	=	1 if the CEO has a double-trigger severance agreement, and 0 otherwise
STONLY	=	1 if the CEO has only a single-trigger severance agreement, and 0 otherwise
DTONLY	=	1 if the CEO has only a double-trigger severance agreement, and 0 otherwise
STDT	=	1 if the CEO has both a single-trigger severance agreement and a double-trigger severance agreement, and 0 otherwise
EARN	=	earnings before extraordinary items scaled by the market value of equity at the beginning of the year
RET	=	the buy-and-hold stock return over the fiscal year
NEG	=	1 if RET is negative, and 0 otherwise
SIZE	=	the yearly decile rank value of the market value of equity at the beginning of the year, scaled by 9
MTB	=	the yearly decile rank value of the ratio of the market value of equity to the book value of equity at the beginning of the year, scaled by 9
LEVERAGE	=	the yearly decile rank value of the ratio of total debt to total assets, scaled by 9
LIT	=	1 if the standard industry classification (SIC) code of the firm falls in one of these ranges, 2833–2836, 3570– 3577, 3600–3674, 5200–5961, and 7370-7374, and 0 otherwise

t-values are based on the firm-clustered standard errors. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively. p-values are one-tailed for coefficients with a predicted sign, and two-tailed otherwise.

Compensation Structure Determined by Change in Performance-Based Pay

The classifications of the compensation structure based on the level of performance-based pay runs the risk of misclassifying some CEOs with a highly variable pay structure as CEOs with a low variable pay structure, if the CEO has a year of poor performance. In this section, the change in the performance-based pay level is the factor that defines the pay structure. As in the previous section, CEOs'

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

performance-based pays are first sorted and then assigned to one of the four groups specifically for the year and industry. For purposes of this section, if the CEO's performance-based pay moves up or down across more than two groups in any of the following two years, then the CEO has a compensation package with a highly variable pay structure.[4]

This change in the performance-based pay sample with the necessary severance, financial and stock returns data includes 5,767 observations. Among them, 897 observations experienced large changes in three years and thus they are in the highly variable pay structure group. The remaining 4,870 observations are in the low variable pay structure group. Panel A of Table 6 reports the analysis using the highly variable pay structure group, and Panel B reports the analysis using the low variable pay structure group.

The coefficient on *NEG*RET*ST*, *NEG*RET*DT* or *NEG*RET*DTONLY* is not significant in either Panel. The coefficient on *NEG*RET*STDT* is significantly negative in Panel A. This suggests that CEOs with both severance agreements are less likely to disclose bad news early. By contrast, the coefficient on *NEG*RET*STONLY* is significant in both Panel A (0.159) and Panel B (0.090), supporting a positive association between the single-trigger severance agreement alone and the early disclosure of bad news. Further tests show that the coefficient on *NEG*RET*STONLY* in Panel A is significantly larger than the coefficient in Panel B (t=25.53, p=0.00). This provides evidence that the positive association between the single-trigger severance agreement alone and the timeliness of bad news disclosure is stronger among CEOs with a highly variable pay structure than among CEOs with a low variable pay structure. Therefore, H2 is supported.

TABLE 6 Tests on the association between severance agreements and timely disclosure of bad news (Sample Partitioned by Change in Performance-Based Pay Level)

Panel A: Highly Variable Pay Structure

	(I)			(II)			(III)		
Parameter	Est	t		Est	t		Est	t	
Intercept	0.020	1.02		0.013	0.63		0.006	0.29	
NEG	0.038	1.19		0.044	1.23		0.052	1.42	
RET	0.055	1.92	*	0.068	2.30	**	0.081	2.60	***

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

NEG*RET	+	0.273	2.42	**	0.269	2.21	**	0.252	2.10	**
SIZE		-0.005	-0.27		-0.005	-0.26		0.000	-0.01	
NEG*SIZE		0.017	0.46		0.018	0.49		0.011	0.29	
RET*SIZE		0.052	1.44		0.051	1.52		0.039	1.11	
NEG*RET*SIZE	-	-0.046	-0.34		-0.045	-0.33		-0.036	-0.27	
MTB		0.035	1.44		0.037	1.52		0.036	1.51	
NEG*MTB		-0.091	-2.03	**	-0.092	-2.06	**	-0.093	-2.09	**
RET*MTB		-0.077	-1.87	*	-0.082	-2.04	**	-0.083	-2.07	**
NEG*RET*MTB	-	-0.440	-3.20	***	-0.427	-3.12	***	-0.436	-3.20	***
LEVERAGE		0.008	0.42		0.006	0.35		0.009	0.47	
NEG*LEVERAGE		0.036	1.20		0.040	1.33		0.032	1.07	
RET*LEVERAGE		-0.003	-0.08		-0.003	-0.08		-0.012	-0.35	
NEG*RET*LEVERAGE	+	0.191	1.99	**	0.200	2.09	**	0.189	2.01	**
LIT		0.180	2.51	***	0.177	2.50	***	-0.015	-1.41	
NEG*LIT		-0.015	-1.43		-0.013	-1.27		0.015	0.72	
RET*LIT		0.016	0.74		0.014	0.65		-0.016	-0.83	
NEG*RET*LIT	+	-0.016	-0.82		-0.019	-0.96		0.178	2.50	***
ST		0.006	0.41							
NEG*ST		0.001	0.03							
RET*ST		-0.002	-0.09							
NEG*RET*ST	+	0.070	0.98							
DT					0.015	1.45				
NEG*DT					-0.015	-0.82				
RET*DT					-0.024	-1.78	*			
NEG*RET*DT	+				0.008	0.14				
STONLY								0.018	1.08	
NEG*STONLY								0.000	-0.01	
RET*STONLY								-0.024	-1.07	
NEG*RET*STONLY	+							0.159	2.04	**
DTONLY								0.019	1.67	
NEG*DTONLY						-0.016	-0.80			
RET*DTONLY								-0.031	-2.22	**
NEG*RET*DTONLY	+							0.039	0.60	
STDT								-0.005	-0.19	
NEG*STDT								-0.034	-0.67	
RET*STDT								0.040	0.87	
NEG*RET*STDT	+							-0.173	-1.71	**

N		897			897			897		
R^2		33.37%			33.45%			33.83%		

Panel B: Low Variable Pay Structure

		(I)			(II)			(III)		
Parameter		Est	t		Est	t		Est	t	
Intercept		0.065	4.95	***	0.065	5.33	***	0.065	5.24	***
NEG		-0.009	-0.53		-0.003	-0.16		-0.006	-0.35	
RET		-0.008	-0.25		0.000	-0.01		-0.003	-0.08	
NEG*RET	+	0.375	6.34	***	0.364	6.27	***	0.348	6.00	***
SIZE		-0.003	-0.29		-0.005	-0.46		-0.005	-0.51	
NEG*SIZE		0.001	0.07		0.003	0.16		0.003	0.16	
RET*SIZE		0.079	3.20	***	0.085	3.29	***	0.085	3.31	***
NEG*RET*SIZE	-	-0.187	-2.55	***	-0.195	-2.65	***	-0.198	-2.7	***
MTB		0.003	0.36		0.005	0.74		0.004	0.57	
NEG*MTB		0.001	0.04		-0.002	-0.11		-0.001	-0.04	
RET*MTB		-0.045	-2.43	**	-0.053	-3.22	***	-0.049	-2.73	***
NEG*RET*MTB	-	-0.234	-3.38	***	-0.221	-3.26	***	-0.223	-3.33	***
LEVERAGE		-0.014	-1.45		-0.013	-1.33		-0.013	-1.3	
NEG*LEVERAGE		0.028	1.85	*	0.027	1.81	*	0.027	1.82	*
RET*LEVERAGE		0.015	0.56		0.014	0.51		0.012	0.47	
NEG*RET*LEVERAGE	+	0.046	0.85		0.045	0.84		0.044	0.82	
LIT		-0.022	-3.93	***	-0.022	-3.92	***	-0.022	-3.98	***
NEG*LIT		0.013	1.47		0.014	1.53		0.013	1.5	
RET*LIT		-0.001	-0.06		-0.002	-0.12		-0.003	-0.19	
NEG*RET*LIT	+	0.039	1.13		0.042	1.22		0.045	1.29	
ST		-0.001	-0.11							
NEG*ST		0.023	1.92	*						
RET*ST		0.020	1.63	*						
NEG*RET*ST	+	0.037	0.80							
DT					-0.002	-0.59				
NEG*DT					-0.007	-1.01				
RET*DT					-0.006	-0.71				
NEG*RET*DT	+				0.015	0.51				
STONLY								0.003	0.43	

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

NEG*STONLY			0.015	1.23	
RET*STONLY			0.005	0.38	
NEG*RET*STONLY	+		0.090	1.71	**
DTONLY			-0.001	-0.3	
NEG*DTONLY			-0.005	-0.72	
RET*DTONLY			-0.007	-0.77	
NEG*RET*DTONLY	+		0.037	1.17	
STDT			-0.023	-0.92	
NEG*STDT			0.050	1.26	
RET*STDT			0.058	2.19	**
NEG*RET*STDT	+		-0.038	-0.43	
N		4870	4870	4870	
R^2		23.62%	23.64%	23.97%	

Note: Using all data available in ExecuComp, CEO performance-based pays (PBP) are sorted by 2-digit SIC industry classification and year. The observations are assigned to four groups of equal size, with the lowest performance-based pay in group 1 and the highest performance-based pay in group 4. CEOs who move across more than one groups in the next two years are classified as highly-variable-pay-structure CEOs (Panel A). Other CEOs are low-variable-pay-structure CEOs (Panel B). This information is then matched with the full sample described in Table 1.

Variable definitions: *PBP*	=	the total annual compensation subtracts salary
ST	=	1 if the CEO has a single-trigger severance agreement, and 0 otherwise
DT	=	1 if the CEO has a double-trigger severance agreement, and 0 otherwise
STONLY	=	1 if the CEO has only a single-trigger severance agreement, and 0 otherwise
DTONLY	=	1 if the CEO has only a double-trigger severance agreement, and 0 otherwise
STDT	=	1 if the CEO has both a single-trigger severance agreement and a double-trigger severance agreement, and 0 otherwise
EARN	=	earnings before extraordinary items scaled by the market value of equity at the beginning of the year
RET	=	the buy-and-hold stock return over the fiscal year
NEG	=	1 if RET is negative, and 0 otherwise
SIZE	=	the yearly decile rank value of the market value of equity at the beginning of the year, scaled by 9
MTB	=	the yearly decile rank value of the ratio of the market value of equity to the book value of equity at the beginning of the year, scaled by 9
LEVERAGE	=	the yearly decile rank value of the ratio of total debt to total assets, scaled by 9
LIT	=	1 if the standard industry classification (SIC) code of the firm falls in one of these ranges, 2833–2836, 3570– 3577, 3600–3674, 5200–5961, and 7370-7374, and 0 otherwise

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

t-values are based on the firm-clustered standard errors. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively. *p*-values are one-tailed for coefficients with a predicted sign, and two-tailed otherwise.

6. Sensitivity Analyses

The robustness analyses in this section check the possibility of endogeneity with the severance agreement variables. Models are re-run applying an alternative rule to determine the CEO's significant influence in the company. And then, models are re-run employing an alternative proxy to determine the pay structures. The inferences are qualitatively the same.

Endogeneity Tests

To check the robustness of the results, this study conducts endogeneity tests on the severance agreement variables. Prior literature suggests that firms with unstable performance and a strong board are likely to grant severance agreements to CEOs. The proxies for these factors are the volatility of stock returns in the previous year, the return on assets of the previous year, the size of the board and the independence of the board (Rusticus 2006, Rau & Xu 2008). The volatility of stock returns is measured as the standard deviation of the monthly stock return. The return on assets is calculated as the earnings before extraordinary items divided by total assets at the beginning of the year. The size of the board is the total number of directors on the board, and the independence of the board is the percentage of independent directors. This study obtains information from CRSP and Compustat to calculate the first two measures, and uses information from RiskMetrics' director dataset to calculate the last two measures. This additional requirement for data reduces the size of the full sample from 6,986 to 5,062 observations.

Using the measures above as distinct instrumental variables, the Hausman specification tests do not support the hypothesis of endogeneity (Hausman and Taylor 1985). Thus, they suggest no preference for the two-stage least-squares model (2SLS) over the ordinary least-squares model (OLS). The chi-square statistic is 0.97 for the model of the single-trigger severance agreement and 2.26 for the

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

model of the double-trigger severance agreement. The p-values are equal to 1 in both cases. The endogeneity test for the model of granting the severance agreements separately or combined is not conducted due to the requirement of eight additional distinct instrumental variables (Wooldrige 2002). There are insufficient data to satisfy this requirement. Further, using incorrect instruments can lead to estimates from the 2SLS more biased than simple OLS estimates (Larcker et al. 2008).

As a further check, this study adds one more instrumental variable to the endogeneity tests. Rau and Xu (2008) report that institutional ownership is positively related to the value of severance pays. The blockholder data provided by Dlugosz etc. (2004) through Wharton Research Data Service (WRDS) are from 1996 to 2001. They are matched with the full sample based on firm ticker symbol. Only 1,859 observations have all the required information. Again, the Hausman specification tests do not support the 2SLS models. The chi-square statistics are 11.02 and 1.10, respectively. The p-value is close to 1 or equal to 1. In summary, the 2SLS models are not preferable to the OLS models in testing the hypotheses of this study.

Alternative Definition of Significant Influence for Departing CEOs

The tests here are to explore the effect of the definition of "significant influence" on the findings from analyzing the departing CEO sample. In the main results, a CEO is considered to have a significant influence if he is in office for more than nine months during a fiscal year. To test the sensitivity of the results to this definition, the "nine months" constraint is relaxed to also consider CEOs who were in office for more than six months but less than nine months as the significantly influential CEO of the year. This change in variable specification does not affect the inference on the single-trigger severance agreement, as the coefficient on NEG*RET*ST is still significantly positive at the conventional level. The coefficient on *NEG*RET*STONLY* is only significant at the 10.9% level, suggesting that a heightened association is among CEOs in office for a longer period of time in their last year of tenure.

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

Alternative Proxy to Determine the Pay Structure

Thus far this study has used the level and the change in the level of performance-based pay to classify the CEO's pay structure. An alternative approach is to use the volatility of the pay to distinguish between highly variable pay structure and low variable pay structure CEOs. Volatility is captured by the standard deviation of the CEO's performance-based pay over his tenure. This measure is calculated for *all* CEOs in ExecuComp and the observations are separated into two groups by comparing the values with their industry median. Observations with above industry median values are in the highly variable pay structure group and those with below industry median values are in the low variable pay structure group. This information is then added to the full sample. The sample loses 230 observations because no standard deviation is calculated for the CEOs with only one year of compensation data.

Table 7 reports the results using this new approach. None of the coefficients on *NEG*RET*DT*, *NEG*RET*DTONLY* or *NEG*RET*STDT* are significant. The coefficients on *NEG*RET*ST* and *NEG*RET*STONLY* are not significant in Panel B, but they are significantly positive in Panel A. The results provide evidence that the association between severance agreements specifically the single-trigger severance agreement and timely disclosure of bad news is stronger among CEOs with a highly variable pay structure than among CEOs with a low variable pay structure. The findings support H2.

TABLE 7
Tests on the association between severance agreements and timely disclosure of bad news (Sample Partitioned by Volatility of Performance-Based Pay Level)

Panel A: Highly Variable Pay Structure

	(I)			(II)			(III)		
Parameter	Est	t		Est	t		Est	t	
Intercept	0.046	7.25	***	0.045	6.91	***	0.044	6.38	***
NEG	0.012	0.8		0.025	1.54		0.024	1.45	
RET	0.054	4.4	***	0.053	4.43	***	0.057	4.18	***
NEG*RET +	0.276	4.58	***	0.312	4.90	***	0.281	4.35	***

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

SIZE		0.003	0.4		0.003	0.44		0.003	0.41	
NEG*SIZE		0.026	1.41		0.024	1.26		0.024	1.28	
RET*SIZE		0.029	1.85	*	0.029	1.83	*	0.027	1.71	*
NEG*RET*SIZE	-	0.017	0.21		0.010	0.13		0.014	0.18	
MTB		0.007	0.89		0.005	0.73		0.007	0.94	
NEG*MTB		-0.035	-1.63	*	-0.035	-1.62		-0.035	-1.64	*
RET*MTB		-0.051	-3.64	***	-0.047	-3.93	***	-0.052	-3.71	***
NEG*RET*MTB	-	-0.337	-3.87	***	-0.345	-3.94	***	-0.331	-3.79	***
LEVERAGE		0.006	0.71		0.004	0.53		0.005	0.58	
NEG*LEVERAGE		-0.010	-0.54		-0.007	-0.42		-0.009	-0.52	
RET*LEVERAGE		-0.034	-1.65	*	-0.030	-1.49		-0.031	-1.51	
NEG*RET*LEVERAGE	+	0.055	0.89		0.051	0.83		0.047	0.78	
LIT		-0.018	-4.23	***	-0.016	-4.00	***	-0.017	-4.05	***
NEG*LIT		0.016	1.52		0.013	1.30		0.014	1.36	
RET*LIT		-0.013	-1.43		-0.017	-1.83	*	-0.014	-1.46	
NEG*RET*LIT	+	0.092	2.25	**	0.091	2.22	**	0.089	2.17	**
ST		0.001	0.18							
NEG*ST		0.014	1.01							
RET*ST		-0.017	-1.31							
NEG*RET*ST	+	0.095	1.74	**						
DT					0.003	0.83				
NEG*DT					-0.017	-1.91	*			
RET*DT					-0.005	-0.75				
NEG*RET*DT	+				-0.026	-0.72				
STONLY								0.005	0.6	
NEG*STONLY								0.005	0.32	
RET*STONLY								-0.014	-1.32	
NEG*RET*STONLY	+							0.114	2.08	**
DTONLY								0.003	0.88	
NEG*DTONLY								-0.014	-1.53	
RET*DTONLY								-0.006	-0.76	
NEG*RET*DTONLY	+							0.002	0.05	
STDT								-0.016	-0.39	
NEG*STDT								-0.017	-0.35	
RET*STDT								-0.044	-0.6	
NEG*RET*STDT	+							-0.119	-1.22	
N		3552			3552			3552		

R^2		26.28%			26.16%			26.63%		

Panel B: Low Variable Pay Structure

		(I)			(II)			(III)		
Parameter		Est	t		Est	t		Est	t	
Intercept		0.061	3.39	***	0.060	3.42	***	0.060	3.43	***
NEG		-0.012	-0.47		-0.004	-0.17		-0.008	-0.35	
RET		-0.031	-0.70		-0.015	-0.34		-0.022	-0.49	
NEG*RET	+	0.490	5.48	***	0.474	5.36	***	0.471	5.34	***
SIZE		-0.006	-0.42		-0.006	-0.42		-0.005	-0.36	
NEG*SIZE		-0.008	-0.34		-0.009	-0.36		-0.010	-0.43	
RET*SIZE		0.102	2.61	***	0.101	2.49	***	0.098	2.43	**
NEG*RET*SIZE	-	-0.371	-4.22	***	-0.373	-4.19	***	-0.372	-4.17	***
MTB		0.029	1.98	**	0.032	2.14	**	0.031	2.08	**
NEG*MTB		-0.009	-0.4		-0.012	-0.52		-0.010	-0.43	
RET*MTB		-0.087	-2.22	**	-0.095	-2.39	**	-0.091	-2.29	**
NEG*RET*MTB	-	-0.158	-1.73	**	-0.148	-1.63	*	-0.152	-1.67	*
LEVERAGE		-0.033	-2.20	**	-0.031	-2.03	**	-0.032	-2.15	**
NEG*LEVERAGE		0.058	2.60	***	0.056	2.54	***	0.059	2.64	***
RET*LEVERAGE		0.059	1.44		0.058	1.41		0.059	1.44	
NEG*RET*LEVERAGE	+	0.052	0.65		0.053	0.66		0.052	0.63	
LIT		-0.022	-2.83	***	-0.019	-2.66	***	-0.020	-2.79	***
NEG*LIT		0.005	0.38		0.003	0.28		0.004	0.36	
RET*LIT		0.004	0.20		-0.002	-0.09		0.000	0.02	
NEG*RET*LIT	+	0.001	0.02		0.009	0.19		0.011	0.21	
ST		0.001	0.14							
NEG*ST		0.027	1.64	*						
RET*ST		0.043	2.35	**						
NEG*RET*ST	+	-0.003	-0.06							
DT					-0.002	-0.37				
NEG*DT					-0.007	-0.62				
RET*DT					-0.014	-1.04				
NEG*RET*DT	+				0.013	0.30				
STONLY								-0.007	-0.70	
NEG*STONLY								0.033	1.63	*
RET*STONLY								0.057	2.36	**
NEG*RET*STONLY	+							0.019	0.23	

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

DTONLY			-0.001	-0.23
NEG*DTONLY			-0.005	-0.40
RET*DTONLY			-0.010	-0.65
NEG*RET*DTONLY	+		0.020	0.44
STDT			0.013	0.67
NEG*STDT			0.033	0.77
RET*STDT			0.009	0.39
NEG*RET*STDT	+		0.015	0.16
N	3202	3202	3202	
R^2	25.70%	25.56%	25.85%	

Note: Using all data available in ExecuComp, the volatility (standard deviation) of CEOs' performance-based pays (PBP) are sorted by 2-digit SIC industry classification. The observations are assigned to the highly variable pay group (volatility above the industry median) or the low variable pay group (volatility below the industry median). This information is then matched with the full sample described in Table 1.

Variable definitions: *PBP*	=	the total annual compensation subtracts salary
ST	=	1 if the CEO has a single-trigger severance agreement, and 0 otherwise
DT	=	1 if the CEO has a double-trigger severance agreement, and 0 otherwise
STONLY	=	1 if the CEO has only a single-trigger severance agreement, and 0 otherwise
DTONLY	=	1 if the CEO has only a double-trigger severance agreement, and 0 otherwise
STDT	=	1 if the CEO has both a single-trigger severance agreement and a double-trigger severance agreement, and 0 otherwise
EARN	=	earnings before extraordinary items scaled by the market value of equity at the beginning of the year
RET	=	the buy-and-hold stock return over the fiscal year
NEG	=	1 if RET is negative, and 0 otherwise
SIZE	=	the yearly decile rank value of the market value of equity at the beginning of the year, scaled by 9
MTB	=	the yearly decile rank value of the ratio of the market value of equity to the book value of equity at the beginning of the year, scaled by 9
LEVERAGE	=	the yearly decile rank value of the ratio of total debt to total assets, scaled by 9
LIT	=	1 if the standard industry classification (SIC) code of the firm falls in one of these ranges, 2833–2836, 3570– 3577, 3600–3674, 5200–5961, and 7370-7374, and 0 otherwise

t-values are based on the firm-clustered standard errors. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively. *p*-values are one-tailed for coefficients with a predicted sign, and two-tailed otherwise.

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

7. Conclusion

CEO severance agreements present a puzzle because they seem not to align with the idea of "pay for performance." However, they are still popular with boards of directors. This study explores one business outcome after boards grant severance agreements to the CEOs. This study hypothesizes that the existence of ex ante severance agreements is positively associated with the timeliness of the disclosure of bad news. The prediction is built upon prior literature that CEOs care for their own benefit and need incentives to reveal bad news (e.g., Levitt and Snyder 1997). Severance agreements provide the incentives for CEOs to do so. The tests show that the single-trigger severance agreement plays a role in eliciting timely disclosure of bad news. The association between this ex ante severance agreement and timely disclosure of bad news is positive for CEOs in general (the full sample). The association remains valid in the last year of the CEO's tenure where performance is relatively poor and where being aware of bad news early is more valuable to the boards than usual (the departing CEO sample). Moreover, the association between severance agreements and timely disclosure of bad news is stronger among CEOs with a highly variable pay structure than among CEOs with a low variable pay structure. The results are consistent with the theory of information disclosure by Inderst and Mueller (2005) and Laux (2008). These results are robust to the control for the possible effects of other factors, endogeneity tests and alternative variable specifications.

This study complements other research on severance agreements by providing evidence that the single-trigger severance agreement plays a role in obtaining bad news early from the CEOs. It also suggests that a highly variable pay structure facilitate the severance agreement in playing this role. As the data are pre-selected by RiskMetrics, Standard & Poor's and the CRSP, the inferences are most likely to apply to firms with characteristics similar to those examined in this study. When more data becomes available, future studies could examine the role of severance agreements in a broader sample.

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

REFERENCES

Almazan A. and J. Suarez. 2003. Entrenchment and severance pay in optimal governance structures. *The Journal of Finance* 58(2): 519-547.

Ball, R., A. Robin, and G. Sadka. 2008. Is accounting conservatism due to debt or equity markets? An international study of timeliness and conservatism. Review of Accounting Studies 13(2-3): 168-205.

Basu, S. 1997. The conservatism principle and the asymmetric timeliness of earnings. Journal of Accounting and Economics 24: 3-37.

Beatty, A., J. Weber, and J. Yu. 2007. Conservatism and debt. Working paper, Ohio State University.

Bebchuk, L.A. and J.M. Fried. 2003. Executive compensation as an agency problem. Journal of Economic Perspectives 17(3):71-92.

Bebchuk, Lucian, and Jesse Fried. 2004. Pay without performance: The unfulfilled promise of executive compensation. Cambridge, Massachusetts: Harvard University Press.

Berkovitch E., R. Isreal, and Y. Spiegel. 2000. Managerial compensation and capital structure. Journal of Economics and Management Strategy 9(4): 549-584.

Dlugosz, J., R. Fahlenbrach, P. Gompers, and A. Metrick. 2004. Large Blocks of Stock: Prevalence, Size, and Measurement. http://wrds.wharton.upenn.edu/ds/block/manuals /block.pdf

Eisfeldt, A. L. and A.A. Rampini. 2008. Managerial incentives, capital allocation, and the business cycle. Journal of Financial Economic 87: 177-199.

Fee, C.E. and C.J., Hadlock, 2003. Raids, rewards, and reputations in the market for managerial talent. Review of Financial Studies 16 (4): 1315-1357.

Francis, J., D. Philbrick, and K. Schipper. 1994. Shareholder litigation and corporate disclosures. Journal of Accounting Research 32: 137-164.

Frankel, R.M. and S. Roychowdhury. 2007. Predicted asymmetric timeliness and persistence of special items. Working paper, Massachusetts Institute of Technology.

Gillan, S.L., J.C. Hartzell, and R. Parrino. 2007. Explicit vs. implicit contracts: Evidence from CEO employment agreements. Working paper, Texas Tech University.

Givoly, D., C. Hayn, and A. Natarajan. 2007. Measuring reporting conservatism. The Accounting Review 82 (1): 65-106.

Graham, J., C. Harvey, and S. Rajgopal. 2005. The economic implications of corporate financial reporting. Journal of Accounting and Economics 40:3-73.

Grinstein, Y. and P. Hribar. 2004. CEO compensation and incentives: Evidence from M&A bonuses. Journal of Financial Economics 73: 119-143.

Hartzell, J.C., E. Ofek, and D. Yermack. 2004. What's in it for me? CEOs whose firms are acquired. Review of Financial Studies 17 (1):37-61.

Hausman, J.A. and W.E. Taylor. 1982. A generalized specification test. Economics Letters 8: 239-245.

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

Holthausen, R., D. Larcker, and R. Sloan. 1995. Annual bonus schemes and the manipulation of earnings. Journal of Accounting and Economics 19: 29-74.

Inderst R. and H.M. Mueller. 2005. Incentives for CEOs to exit. Working paper, INSEAD, London School of Economics.

Indjejikian, R.J. and D.J. Nanda. 2002. Executive target bonuses and what they imply about performance standards. The Accounting Review 77 (4): 793-879.

Ju, N., H. Leland, and L.W. Snbet. 2003. Options, option repricing and severance packages in managerial compensation: Their effects on corporate investment risk. Working paper, University of Maryland.

Kothari, S.P., S. Shu, and P.D. Wysocki. 2009. Do managers withhold bad news? Journal of Accounting Research 47(1): 241-276.

LaFond, R. and S. Roychowdhury. 2008. Managerial ownership and accounting conservatism. Accounting Research 46(1): 101-135.

LaFond, Ryan, and R. Watts. 2008. The information role of conservative financial statements. The Accounting Review 83 (2): 447-478.

Lambert, R.A., and D.F. Larcker. 1985. Golden parachutes, executive decision-making and shareholder wealth. Journal of Accounting and Economics 7: 179-203.

Larcker, D.F. and T.O. Rusticus. 2008. On the use of instrumental variables in accounting research. Working paper, Stanford University.

Laux, V. 2008. Board independence and CEO turnover. Journal of Accounting Research 46(1): 137-171.

Levitt S.D. and C.M. Snyder. 1997. Is no news bad news? Information transmission and the role of "early warning" in the principal-agent model. The Rand Journal of Economics 28(4):641-661.

Rau, R.R. and J. Xu. 2008. Getting rich by getting fired? An analysis of severance contracts. Working paper, Barclays Global Investors and Purdue University.

Roychowdhury, S. and R. Watts. 2007. Asymmetric timeliness of earnings, market-to-book and conservatism in financial reporting. Journal of Accounting and Economics 44: 2-31.

Rusticus, T.O. 2006. Executive severance agreements. Working paper, University of Pennsylvania.

Schwab, S.J. and R.S. Thomas. 2006. An empirical analysis of CEO employment contracts: What do top executives bargain for? Washington and Lee Law Review 63(1): 231-270.

Skinner, D. 1994. Why firms voluntarily disclose bad news? Journal of Accounting Research 32:38-61.

Van Wesep, E.D. 2008. Severance pay, empire building and the prevention of managerial shenanigans. Working paper, University of North Carolina.

Watts, R. 2003. Conservatism in Accounting Part I: Explanations and implications. Accounting Horizons 17:207-221.

Wittenberg-Moerman, R. 2008. The role of information asymmetry and financial reporting quality in debt trading: Evidence from the secondary loan market. Journal of Accounting and Economics 46 (2-3): 240-260.

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.

Wooldridge, J.M. 2002. Econometric analysis of cross section and panel data. MIT Press, Cambridge.

Yermack, D. 2006. Golden handshakes: Separation pay for retired and dismissed CEOs. *Journal of Accounting and Economics* 41: 237-256.

Zhang, J. 2005. Efficiency gains from accounting conservatism: Benefits to lenders and borrowers. Working paper, Massachusetts Institute of Technology.

Note

[1] A significant amount of research has been done on "golden parachute" agreements, e.g., Lambert and Larker (1985) study the influence of golden parachutes on the CEO's reaction to the firm takeover bids. "Golden parachute" is a name for a special type of severance agreements. It is triggered by a change in control of the company and the termination of employment. The severance agreement is a broader concept.

[2] "The CEO's last year of tenure" is used interchangeably with "the departing CEO's last year of significant influence" in this study for the sake of simplicity.

[3] This explains the data requirement of more than three observations for each year and two-digit SIC combination.

[4] Approximately 48.5% of the CEOs in the ExecuComp sample have no more than three years of compensation information: 17.4% has only one year of data, 16.9% has two years of data, and 14.1% of the sample has three years of data. Going beyond three years gives more weight to CEOs with a longer tenure.

About the Authors

Qianhua Ling is an Assistant Professor in the department of accounting, Marquette University, Milwaukee, Wisconsin 53201-1881, USA (Phone: 414 288-8069, e-mail: Qianhua.ling@marquette.edu).

Journal of Accounting, Auditing & Finance, Vol. 27, No. 2 (2012): pg. 177-207. DOI.