STOCK MARKET REACTIONS TO EXECUTIVE OATHS: 
THE SIGNALING ROLE OF CEO BACKGROUNDS

YAN ZHANG
Jesse H. Jones Graduate School of Management
Rice University
Houston TX 77005

ABSTRACT

Responding to the recent accounting scandals, the Securities and Exchange Commission (SEC) required chief executive officers (CEOs) and chief financial officers (CFOs) of large publicly traded companies to swear by their financial statements. Focusing on executive oaths that were filed by the first deadline of August 14, 2002, this study finds that stock markets, on average, reacted positively to executive oaths. Further, this study finds that CEO backgrounds, such as shareholding, external directorships, and association with the firm’s prior financial restatements are significantly related to the abnormal stock returns.

INTRODUCTION

Responding to the recent accounting scandals of Enron, WorldCom and the like, on July 27, 2002, the SEC (File No. 4-460) required CEOs and CFOs of large publicly traded companies to swear that their latest annual and quarterly financial reports neither contain an “untrue statement” nor omit any “material fact” (The Economist, 2002a). August 14, 2002 was the deadline for the first wave of executive oaths and has drawn significant public attention (The Economist, 2002b). In this study, I use an event study method to examine stock markets’ reactions to executive oaths that were filed by this deadline. According to institutional theory (DiMaggio & Powell, 1983), in filing executive oaths, companies can reassure stock markets’ confidence in their financial disclosures by conforming to the institutional requirement of the SEC. Hence, stock markets tend to react positively to executive oaths. In addition, based upon signaling theory (Spence, 1973), I argue that executive oaths are characterized by informational asymmetry in which executives who file the oaths have superior information relative to shareholders on the extent to which the financial statements certified are true and complete. I argue that CEO backgrounds can signal the credibility of executive oaths, and thus affecting stock markets’ reactions to the oaths.

THEORY AND HYPOTHESES

Executive Oaths and Conformity to Institutional Requirement

The scandals of Enron, WorldCom, and the like have diminished these companies’
legitimacy, which refers to a normative evaluation of the organization and its activities (Parsons, 1960; Scott, 1995; Suchman, 1995). First, companies involved in these scandals failed to deliver desirable and proper consequences to their stakeholders (for example, the bankruptcies of Enron and WorldCom). Second, these companies misrepresented their financial reports, meaning that they did not follow socially accepted procedures (e.g., generally accepted accounting principles). Thus they also violate the procedural legitimacy. Although the scandals occurred only in some (but very large and visible) companies, the reputation crisis can be “spilled over” or diffused from these companies to others (Yu, Lester, & Sengul, 2002). The public began to suspect that other companies’ desirable outputs and efficacious strategies, procedures, and structures might also be tricks and that more scandals might be found out later.

In filing executive oaths, companies show allegiance to this new institutional order (Suchman, 1995). In oaths, executives take personal responsibilities for their companies’ financial statements. Hence, oaths can narrow the legal loophole between a company’s disclosures and its executives’ personal responsibilities (The Economist, 2002b). In addition, as executives are required by the SEC to file the oaths, they tend to require their middle managers to sign documents verifying the accuracy of the information they send up (The Economist, 2002b). In doing so, executive oaths can help create a system of accountability within a company, which can reduce the chance of future false disclosures. In summary, executive oaths enable companies to repair their legitimacy and status (Suchman, 1995). Stock price of the company will increase to reflect this expectation.

**Hypothesis 1:** Executive oaths will, on average, lead to positive abnormal stock returns.

The Signaling Role of CEO Backgrounds

Executive oaths are characterized by informational asymmetry between executives who file the oaths and shareholders. The executives have superior information relative to shareholders on the extent to which the financial statements certified are true and complete. Shareholders tend to react favorably to oaths that are perceived to be credible and genuine and disregard or discredit those they deem suspicious. In this section I will draw upon the signaling theory (Spence, 1973) to investigate how CEO backgrounds can serve as signals of the credibility of a company’s executive oaths.

**CEO Shareholding.** Jensen and Meckling (1976) suggested that managers’ incentives to expropriate firm resources depend on the costs those managers might bear from misbehaving relative to the benefits they accrue from consuming firm resources. Their models showed that managerial ownership can limit their opportunistic behavior (Jensen & Meckling, 1976). Based upon this reasoning, studies that use signaling theory examine the signaling role of managerial equity. For example, Leland and Pyle (1977) modeled that entrepreneurs’ equity can serve as a signal of their projects’ quality. Empirically, Han and Suk (1998) found that the abnormal stock returns of the announcement of stock splits are positively related to the level of inside ownership. In this study I propose that a CEO’s shareholding can serve as a signal of the credibility of a
company’s executive oaths. Because the CEO is a shareholder, the costs of certifying false financial statements will be borne, at least partially, by the CEO. Ex-ante, when the level of CEO shareholding is higher, so is the CEO’s portion of the costs of certifying false statements. Since shareholders’ perception of the credibility of executive oaths may be proportional to the executives’ costs of certifying false statements, it will increase as the level of CEO shareholding increases. Therefore, the markets will react more positively to a company’s executive oaths as its CEO’s shareholding is higher.

_Hypothesis 2: CEO shareholding will be positively related to abnormal stock returns of executive oaths._

**CEO External Directorships.** In the IPO context, Certo (2003) conceptualized that board members’ external directorships can serve as a signal of an IPO firm’s legitimacy and thus improve the firm’s market performance. Similarly, I argue that a CEO’s external directorships can serve as a signal of the credibility of a company’s executive oaths. Holding multiple board memberships can be indicative of a CEO’s reputation or prestige in the managerial labor market (D’Aveni, 1990; Davis & Mizruchi, 1999). According to Fama (1980), reputation in the managerial labor market can limit executives’ misbehavior because they can suffer damage to their reputation as a cost of misbehaving. Furthermore, CEOs with higher levels of social capital, prestige, and reputation tend to be viewed as competent, credible, and trustworthy (D’Aveni, 1990). Constituents may also have positive affective response to these CEOs and rationalize their innocence in a crisis. As a result, these CEOs’ oaths tend to be perceived as credible and thus are more favorably received by stock markets. Therefore,

_Hypothesis 3: CEO external directorships will be positively related to abnormal stock returns of executive oaths._

**CEO tenure.** In this study I argue that CEO tenure can serve as a signal of the credibility of a company’s executive oaths. As CEO tenure increases, a CEO’s human capital becomes more firm-specific and less generic (Harris & Helfat, 1997). As the specificity of a CEO’s human capital increases, its value will be higher within the firm than in the external market (Williamson, 1985). In other words, as CEO tenure increases, the CEO’s human capital becomes increasingly undiversified in the firm. To the extent that a CEO’s human capital is undiversified in the firm, the costs of certifying false financial statements will be more likely to be shifted to the CEO. In addition, as CEO tenure increases, the reputation and image of the CEO thus becomes increasingly intertwined with those of the firm. Hence, as CEO tenure increases, the CEO’s reputation and image are more at stake if he or she certifies false financial statements. Therefore, as CEO tenure increases, CEOs may be less likely to certify false statements because they bear higher costs of doing so that accrue from the damage to their reputation. Therefore,

_Hypothesis 4: CEO tenure will be positively related to abnormal stock returns of executive oaths._
**Prior Filing of Financial Restatements with the CEO in Office.** Financial restatements acknowledge that a company’s prior financial statements were not in accordance with generally accepted accounting principles (Palmrose & Scholz, 2004). Previous studies suggest that restatements can damage the reputations of the restated firms’ strategic leaders (Arthaud-Day et al., in press; Srinivasan, 2005). In this study I argue that prior filing of financial restatements with the CEO in office can reduce the credibility of a company’s executive oaths. Shareholders can use the restatements to infer that the CEOs failed to build an internal monitoring system or were even directly involved in the fraud. Further, since these CEOs’ reputations have already been damaged, their costs of certifying false financial statements tend to be lower. Because shareholders’ perception of the credibility of executive oaths may be proportional to the executives’ costs of certifying false statements, it tends to be lower if the CEO has been associated with the firm’s prior financial restatements. Therefore, I propose that,

*Hypothesis 5: Prior filing of financial restatements with the CEO in office will be negatively related to abnormal stock returns of executive oaths.*

**METHODS**

**Event Study**

According to the SEC’s website, a total of 785 companies filed executive oaths by August 14, 2002 ([http://www.sec.gov/rules/other/4-460list.htm](http://www.sec.gov/rules/other/4-460list.htm)). In event study, it is critical to identify event dates and control for confounding events (McWilliams & Siegel, 1997). I used the list for CEO oath statements and checked for the confounding events. I checked the confounding events such as declarations of dividends, mergers and acquisitions, unexpected earnings or losses, top executive appointments or departures, major contract awards and new product announcements, and significant liability suits during a 21-day window (from day -10 to day +10) around the filing date of the CEO oath statement. 419 companies had no confounding events during that window, which consisted of the sample for this study. I compared the dates of these CEO oaths and the dates of the corresponding CFO oaths and found that in all but two companies CEO and CFO oaths were filed on the same day. In the other two companies, CEO oaths were filed prior to CFO oaths. Hence I used the dates of CEO oaths as the event dates. Excluding these two companies from the sample did not change the results.

I followed the procedures outlined by McWilliams and Siegel (1997) to calculate the abnormal stock returns. The abnormal returns ($AR_t$) represent returns earned by the firm after the markets have adjusted for the “normal” return process. I used various lengths of window in the event study, ranging from 2 through 4 days since filing the oaths: (days 0, +1), (days 0, +2), and (days 0, +3). I conducted two significance tests for the average cumulative abnormal return. The first was a standard parametric significance test. The test statistic is for the null hypothesis that the average cumulative abnormal return is equal to zero. The second reported significance
test was the generalized sign test. The null hypothesis for this test is that the fraction of positive (or negative) returns is the same as in the estimation period. This test relatively is more robust to outliers than parametric tests (Cowan, 1992). According to McWilliams and Siegel (1997), both test statistics should be significant to indicate a relationship.

**Measurements**

*CEO shareholding* was measured by the proportion of a firm’s outstanding shares owned by the CEO (Zajac & Westphal, 1996). *CEO external directorships* referred to the number of external board directorships (other than the focal firm’s board) that a CEO is serving (Certo et al., 2001; D’Aveni, 1990). *CEO tenure* was measured by counting the years a CEO had been in office (Hambrick & Fukutomi, 1991). These data were collected from company proxy statements prior to filing executive oaths. I used LexisNexis to identify whether a company restated its financial statements in the three years prior to filing executive oaths, periods of restated and restated causes. Restatements that were technical in nature and not misstatements were not included (Palmrose, Richardson, & Scholz, 2004). *Prior financial restatement with the CEO in office* was coded 1 if a company restated their financial statements at least once in the three years prior to filing executive oaths and the periods of restated fell within the incumbent CEO’s tenure, and 0 otherwise. To rule out alternative explanations, I control for the following variables: the time when a company filed executive oaths (i.e., the number of days prior to the deadline), firm size, firm prior accounting performance, presence of a formally designated CFO, the CEO’s founder status, CEO age, CEO duality, proportion of outside directors, outside director shareholding, the presence of an independent audit committee on the board, and industry dummies at the 2-digit level.

**RESULTS**

Hypothesis 1 states that executive oaths will, on the average, lead to positive abnormal stock returns. The results of this study suggest that stock returns increased 0.65% over the two-day window (days 0, +1), 0.81% over the three-day window (days 0, +2), and 1.18% over the four-day window (days 0, +3), which are all significant at the level of p < 0.001, as assessed by both of the significance tests. Thus, Hypothesis 1 is supported. I used regression analyses to test Hypotheses 2 to 5. Cumulative abnormal return over the two-day window (days 0, +1) was used as the dependent variable. The results suggest that CEO shareholding (b = 0.036, p < 0.05) and CEO external directorships (b = 3.53E-3, p < 0.05) are positively related to the abnormal stock returns. However, prior filing of financial restatements with the CEO in office (b = -0.02, p < 0.05) is negatively related to the abnormal stock returns.

**DISCUSSION AND CONCLUSION**

This study can make several important contributions. First, in the changing institutional
environment following the scandals of Enron and WorldCom and the like, executive oaths represent an important component of the new governance standards. This study examines stock markets’ reactions to the first wave of executive oaths and represents one of the few empirical studies focusing on the impact of the new governance standards. The findings of this study can contribute significantly to our knowledge of how the new governance standards matter, and encourage more research in this emerging and important area. Practically, the findings also provide encouraging evidence in support of the current governance reform. Second, most previous studies have focused on the role of strategic leaders in the occurrence of organizational crises and the impact of organizational crises on leadership changes. Few studies have examined how organization valuation is restored after a crisis (Wiesenfeld et al., in press). This study addresses this relatively ignored question by examining stock market reactions to executive oaths after recent scandals. It shows that executive oaths, particularly those perceived to be credible, can restore company valuations after the crisis. Third, previous studies on CEO backgrounds have focused on how they can influence a CEO’s activities, which in turn can influence organizational outcomes. In this study I propose that CEO backgrounds can affect a company’s valuation by influencing shareholders’ perceptions of the credibility of the company’s executive oaths. This study can contribute to the emerging research stream that focuses on the signaling role of strategic leaders in organizations (e.g., Certo, 2003; Cohen & Dean, 2005), in addition to their substantial impact on organizations.

Further research can extend this study to address some related and important issues. First, this study focuses on the first wave of executive oaths that were filed by August 14, 2002. It would be interesting to compare stock market reactions to these oaths and those that were filed after that date. It is also interesting to compare stock market reactions to these oaths and to these companies’ later repeated oaths. It is possible that over time executive oaths may draw weaker market reactions as the public has recovered from the shock of these scandals and executive oaths have become “routine.” Second, this study focuses only on how CEO backgrounds may influence abnormal stock returns of executive oaths. Future research is needed to investigate other factors. In conclusion, this study examines stock market reactions to the first wave of executive oaths. The findings can contribute to our knowledge on how strategic leaders matter in restoring their companies’ valuations after a crisis and how the new governance standards matter.

REFERENCES AVAILABLE FROM THE AUTHOR.