MANHATTAN COLLEGE

School of Business

Faculty Research Working Paper Series

Characteristics of Firms Subject to Fraud Litigation

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Working Paper FRWP #3
Fall 2013

Characteristics of Firms Subject to Fraud Litigation

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2013

Abstract

Fraud is a fundamental issue that has been problematic for decades in the U.S. business sphere. The academic literature addresses fraud in terms of deviance, but fails to raise the question of whether corporate governance is tied to fraud in any way. In this paper, I attempt to disentangle the question, does corporate governance help firms subject to fraud litigation? Using the Governance Index and a unique set of class action law suit data, I use survival analysis to determine the correlation between fraud and corporate governance. Results indicate that bad governance is associated with cases of fraud. These findings have far reaching implications on both the establishment of governance standards as well as the study of fraudulent business activities.

JEL Classification: M14, M19, M21, M38,

Keywords: corporate governance, fraud, deviance, class action law suits

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Introduction

Fraud has plagued the corporate world since the early part of the 20th century and has recently become a fundamental problem in the operations of firms, particularly within the United States. One definition is that fraud refers to the "deliberate actions taken by management at any level to deceive, con, swindle, or cheat investors or other key stakeholders." (Zahra et al 2005). In contrast with occupational fraud, which entails individual benefits, corporate fraud means that the beneficiary of the fraud is the corporation itself. Due to the nature of this crime as more adverse in terms of volume, the focus will be on this type of fraud. Litigation for fraud can occur by shareholders of a firm when management abridges fiduciary duties, which include statutory, contractual or common law duties owned to such shareholders (Choper et al 2008). If this misconduct, often caused by self-interest or neglect, causes injury in the form of diminution of shares it is a shareholder's right to perform a class-action against the management. If the corporate situation is such that shareholders do not own a controlling share in the company, there is a large gap between ownership and control. Therefore, minority shareholders can resort to a derivative law suit in order to rectify and prevent management abuses. The abilities of shareholders to exercise this right are governed by the regulations surrounding fraud in the jurisdiction where the corporation is incorporated or where it operates.

Although the original anti-fraud disclosure laws originated in Great Britain, individual states within the United States brought into legislation several laws as early as 1911 called the "blue sky" laws colloquially. The provisions of these regulations included protecting investors from fraudulent sellers who promised "a piece of the blue sky itself" to potential shareholders. These laws proved to be not strong enough in reach. Instigated by this fact and the stock market crash of 1929, Federal laws were established in a pair of two laws: the Securities Act of 1933 and the Securities Act of 1934 (Choper et al 2008). The purpose of these statutes was to maintain public confidence in the marketplace. The acts followed in rapid succession because certain points had to be more detailed in the second act. For example, public firms were henceforth required to file 10-K forms, or annual audited financial statements, every year; 10-Q forms, or quarterly financial statements, four times a year; and 8-K forms, or proxy statements, whenever there was a material development or event that may affect earnings. These two laws continue as the mainstay of United States disclosure laws until today. The primary rule that is used to litigate on behalf of potential victims of fraud is rule 10b-5 of the Securities Act of 1934. This rule requires that five elements are demonstrated as necessary components of a case showing fraud. These are: that a material omission was commited; that “scienter,” or wrongful state of mind was in effect during the action; that a purchase or sale of security was involved; that a loss was caused by the action; and, that damages were significant. These requirements are substantial yet applied to a great deal of potential cases.

While the purpose of the legislation was to protect shareholders from potential insider trading or any manipulative or deceptive devices utilized to undermine the ability of owners to properly value and recognize shares, it became apparent that litigation often ensued in a frivolous manner. Law suits were charged routinely when triggered by fluctuations in stock prices and costs to defendants often became egregious. Thus, the Private Securities Litigation Reform Act 1995 (PSLRA) was issued and implemented substantial changes to the fraud litigation process, particularly with respect to pleading, expenses and class representation. The Act essentially requires plaintiffs to be in possession of incriminating evidence prior to filing and officially submitting a law suit against defendants.

Further legislation was not written until it was precipitated by a series of frauds whose initiator was Enron. In a series of cases such as U.S. v. Kenneth Lay, et al, and U.S. v. Jeffrey Skilling, Richard Causey, the Enron scandal was brought to light in 2001. The company operated as a dealer in energy futures. The scandal which it performed involved accounting gimmicks, financial legerdemain as well as “off balance sheet” partnerships. In order to combat the panic the followed this scandal and other such as those involving Adelphia, Tyco and WorldCom, Congress drafted the Sarbanes-Oxley Act (or the Public Company Accounting Reform and Investor Protection Act of 2002). This included forming a Public Company Accounting Oversight Board, establishing auditor independence, many rules about corporate governance, improved financial disclosures and SEC authority over attorneys (Choper et al 2008). In the wake of this new legislation, frauds still occur and the patterns that surround these incidents are of great interest to scholars.

Literature Review

Corporate fraud exists within the definitional category of organizational deviance (Vaughan 1999). As such, litigation for fraud acts as the closest proxy to what corporate fraud actually is, because of the difficulty of ascertaining that fraud was actually committed. The literature surrounding “the dark side of organizations” points to misconduct as an important determinant of organizational performance. As such, it is important to understand why certain firms are more prone for being implicated in conducting such behavior and why others are not affected.

The link between firm characteristics and litigation has seldom been studied. Although a considerable literature that describes law and business exists, it tends to focus on the effect of legal regimes and legislation of firm attributes or performance (La Porta et al 2002, Wugler 2000, Kumar et al 1999). In the case of disclosure practices, firms that adhere to such legislation tend to fare better (Bailey et al 2005). Particularly salient today, and relevant because of its reliance on firm disclosure about size and operations, is litigation surrounding fraud. Some evidence exists that detection of fraud is in fact beneficial for firm performance (Schnatterly 2003). Moreover, estimates of the costs of fraud to U.S. firms range up to $600 million per year. The evidence emphasizing the positive effects of legislation isn't uncontroversial: some claim that regulations have become so complicated that they promote fraud themselves (Berenson 2003).

In order to understand the nature of fraud litigation, it is important to note the rationale used in creating the legislation regarding disclosure in the United States. The Securities Acts of 1933 and 1934, particularly rule 10b-5, and the subsequent Acts of 1995 and 2002 (the Sarbanes-Oxley Act) are grounded in the belief that the marginal benefits of disclosure will exceed the marginal costs. The exceedingly substantial costs noted above are outweighed by the increased ability of the firm to market information about itself to potential investors (Benston 1973). The data about companies that is published may also, however, somehow distinguish between those firms that are sued and the others.

Studies preceding the large accounting scandals of the early 21st century emphasized methods by which governments and enforcement agencies can secure incentives for managers to avoid scandals (Instefjord 1998). Such methods included ex ante and ex post penalties, the latter of which, when imposed on culprits and their regulators, are found to be more effective. These earlier studies also underlined that all firms, not just those in the financial industry, are susceptible to fraud. Still, it was never determined what the ordering of susceptibility among industries may be.

Still, independent auditing may not be enough. Particularly, litigation against auditors has been studied to determine what type of fraud is likely to induce such law suits (Bonner et al 1998). Often suits are determined through attribution theory, which explains that juries are more likely to understand a defendants actions if they can be attributed to those of an average person. The aspects of litigation described therein shed light upon the methods through which cases are brought to court. Antecedents of fraud also help to explain why certain firms may be sued. These are divided into societal, industry and organizational (Zahra et al 2005). Also, the environment in which a firm operates may differentiate fraudulent firms from those that are not litigated (Saksena 2001).

Certain inadequacies of the system exist as well. Laws do not consist of appropriate levels of what one study refers to as gatekeeper liability to produce high law compliance (Coffee 2001). Although it is possible to rely on class action litigation for the enforcement of disclosure and anti-fraud settlements, it is more advised to revise the auditing profession. The Sarbanes-Oxley Act made a single attempt at that. This attempt is yet to be tested, and a view of what firms are more susceptible to fraud may bring light upon how successful it has been.

One characteristic of firms that has been explored in relation to the commitment of fraud is board composition. Findings indicate that firms with a larger number of outside directors are less likely to commit fraud (Beasley 1996). Additional characteristics include investment opportunities, concentration of ownership and needs for external financing and all three are found to be positively associated with governance albeit with no explicit link to fraud (Durnev and Kim 2005). Further, literature has explored the effect that fraud allegations have on reputations of elites and the stigmas that are created (Wiesenfeld et al 2008). These works emphasize the role of arbiters and the sensemaking surrounding the process of recognition and stigmatization of managers and executives. Limited findings include studies on relatively small samples (n=62) that find positive relationships between fraud and disciplining of corporate directors in addition to identifying some industry differences among fraud-committing firms. Litigation as such is not examined (Gerety and Lenn 1997).

Most recent work surrounding frauds has engaged the issue of whistle-blowing. An important concept, whistle-blowing points to the individual or group that has brought the fraud to light (Dyck et al 2009). It is important to conduct studies on this topic because one can thereby predict how companies react and which individuals should be targeted most effectively with encouragement for speaking out. However, a more interesting question still is what kinds of companies are in fact more at risk of committing fraud. Characteristics that differentiate firms may include size, industry, performance, ownership of intangibles among others.

Data

Data for this study was collected from three sources: information about firm characteristics was collected from OSIRIS, information regarding class action law suits for securities fraud was collected from the Stanford Securities Class Action Clearinghouse, and information about corporate governance was collected from RiskMetrics' Investor Responsibility Research Center, Inc. Governance database. Details about the data collection from these three sources follow.

Firm-level data

The overall data set for this study is derived from Bureau van Dijk's OSIRIS database. A search conducted in March 2009 retrieved 2,682 companies operating in the United States with assets exceeding $750 million. This limitation was placed in order to focus on companies that have significant impact on their industries. Because reductions in size of the firm may be caused by fraud, we look at the assets of firm before they were litigated if litigation occurred. Large corporations that are listed on national exchanges will have shareholders in many States and shares that are traded frequently. The information available from OSIRIS that was extracted included identification information for each firms, such as name, web site address, ticker, status and main exchange. Status described the firm as active, inactive, dissolved, in liquidation or bankrupt. If a company was inactive, information about the time when it obtained this status was downloaded. The date of incorporation was also listed. Moreover, data about the last available accounts was available, which indicated whether a firm had delisted or had been dissolved during the period under review. This was significant when accounting for observations censored from the analysis. In addition, various income statement information for the last year of available accounts and several previous years were downloaded, including market capitalization, net revenue and operating income. Size metrics, such as assets and number of employees were also in the dataset. Asset levels were made available going as far as 9 years before the latest available accounts.

Next, the dataset contained industry classification, including two-, three- and four-level SIC classifications along with their text descriptions. Industry classifications can be relevant to group companies into categories to analyze. Although contagion may not be a significant factor in determining fraud, industry classification serves as an important indicator of many characteristics of a firm. Finally, information about the board of directors for each firm was available, and listed the full names of all members.

Securities Class-Action Law Suits

Of the larger set, we wanted to determine the proportion of firms that were litigated for fraud during the period following the adoption of the PSLRA. The period following the Sarbanes-Oxley Act of 2002 would have been more interesting, as this legislation is a great deal more restrictive and addresses more current demands of law; however a study for such a short period may not generate sufficient results. Therefore, the Stanford Securities Class Action Clearinghouse (SSCAC) was selected as the source for the law suits to be matched with companies found in Osiris.

The database is a source of data regarding class action cases, including the process of their prosecution and defense and typically subsequent settlement. The database is limited to federal cases, which provides for a sample of firms that have a significant bearing on the economy. The SSCAC regularly updates an Index of Filings that contains nearly 3,000 law suits since the PSLRA. The database is complete with full information about each law suit, including backing documents. These can be, for example, filings, complaints or briefs. For consistency with the OSIRIS dataset, we restrict filings to those where the defendant is a firm with assets exceeding $750 million. This generated a sample of 244 cases. Therefore for each firm, information about whether or not a litigation took place during the period under review, the starting date of the alleged fraud and its end date, and the result of the litigation was coded. The vast majority of these cases were settled out of court. This settlement does not however indicate that fraud was committed: it is often that both parties seek to avoid incredibly high fees of court-level litigation and thus choose this route. Some defendants were acquitted and there were also a very limited number of convictions. Also, several cases were ongoing during the time period that the SSCAC studied.

I find the use of Securities Class Actions filed against large companies as the source for likelihood of litigation more convincing that the use of the General Accounting Office's restatement statistics because it is a closer proxy to litigation. It in fact relies directly on law suits, while restatement could occur for a variety of reasons, not only reasons related to fraudulent behavior. Previous studies have relied on this type of data, combined with information from databases similar to OSIRIS (Kedia and Phillipon 2006).

Corporate Governance

The method resented by Gompers et al (2003) was used to measure corporate governance for this study. The study employs 24 governance rules in order to create a "Governance Index" that can act as a measure of how much control shareholders have over the management and operations of a firm. Generally, high levels of governance are associated with positive outcomes. The Investment Responsibility Research Center, a Washington, DC –based think-tank recently acquired by RiskMetrics, Inc., tracked the operations of corporations and several indicators of the extent to which shareholders' rights were limited by directors and management. The ultimate source for this data was a publication called "Corporate Takeover Defenses" that used sources such as Form 10-K (annual filings required for all publicly held corporation by the Securities and Exchange Commission), 10-Q (such quarterly statements), or proxy statements for close to 2,000 companies.

The Index is constructed as follows: it adds one point for every provision that reduces shareholders rights or places restrictions on the shareholders. Therefore, firms with a lower value for the index have higher levels of corporate governance. Provisions are divided into six subcategories. These are: delay provisions such as classified board and advance notice requirements; protection provisions such as combined severance and golden parachutes; voting provisions such as limited liability with respect to amending the charter; other provisions such as poison pills; state laws such as Director's Duties Law and Fair Price Law; and, Opt-In/Opt-outs. In addition to the value of the index, the occurrence of each of the individual 24 provisions per firm was available from the dataset. This allows analysis of each of the particular provisions in turn.

After Gompers et al (2003) original assertions about corporate governance, several studies were conducted in different contexts to test these claims. Particularly, the original study found that a lower Governance Index was associated with higher profits, sales growth and even firm value itself. Moreover, firms with better governance had lower capital expenditures. In terms of diversification, they were found to conduct fewer acquisitions. The diversification hypothesis has found support, where firms suffer a greater diversification discount when corporate governance is low (Jiraporn et al 2005). Further, findings have been observed of an association between high market value and good governance. This has been particularly salient in Russia (Black et al 2006) and has also found support in Korea (Kim et al 2006). On the other hand, no effect of corporate governance on firm performance has been found in Canada (Klein et al 2005). However, the link between litigation for fraud and governance has not yet been studied.

Hypothesis

It is important to look at the problem of litigation for fraud because, particularly in light of ubiquitous corporate scandals, determining the types of firms more prone to litigation can not only help managers manipulate the characteristics of their firms to lower the probability of litigation but can also bring to light the types of firms that ought to be litigated. One aspect that is particularly salient when looking at fraud detection is corporate governance. Specifically, there are certain qualities of this topic that may be accessed. First, one must identify the population at risk. In this case, firms incorporated within the United States during the late 20th century with what will be deemed as significant asset levels are the population. These firms are differentiated by size, industry, levels of innovative investment, board composition, levels of intangibles, administrative expenses and profits. All of these factors may predict who is most at risk.

The reason that high corporate governance leads to lower incidence of fraud litigation may be twofold. Firstly, managers may be less likely to engage in fraudulent activities because they are aware that they are being closely monitored by shareholders. Because they are very likely to be discovered, they may eschew from manipulative or deceptive conduct in the first place. Secondly, because governance structures are in place, fraud may be detected early within the firm and culprits may be brought to justice before litigation takes place. Fraud may be "nipped at the bud" so to speak before a class action is required and brought forth. There are also additional implications of corporate governance that affect fraud litigation. One of these is signaling. When litigators recognize a firm as one with high corporate governance, they tend to assess it in a way different from firms with perceived lower levels. For some, good governance is equated with transparency. Disclosure becomes trustworthy and assurances are made that it is complete.

> **Hypothesis 1.** Firms with higher levels of corporate governance (a lower Governance Index) will be less at risk of litigation for securities fraud.

This hypothesis can be explored through the survival analysis detailed below. Once a correlation between corporate governance levels and fraud litigation is established, a more detailed study may follow which will lead to revealing what aspects of corporate governance are most effective in preventing litigation. Although it is not in the scope of this paper to explore the latter, it may be that these aspects include any of the provisions from the six categories provided in the Governance Index calculation.

Analysis

The purpose of this analysis at the most fundamental level is to assess the probability of a firm being litigated given its levels of corporate governance. In order to empirically test the hypothesis of this study, I will utilize the Cox Proportional Hazards model (Cox, 1972). The equational form for this model is as follows:

$$h(t) = h_0(t)e^{\beta^t Z}$$

where,

$h(t) = hazard\ of\ being\ litigated$
$h_0(t) = an\ arbitrary\ baseline\ hazard\ rate$
$\beta = parametric\ vector$
$Z = risk\ vector$

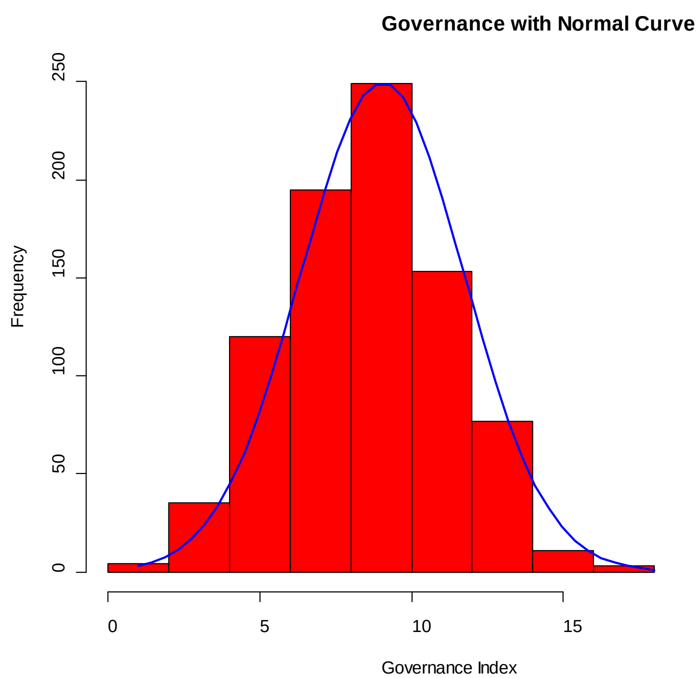
This model is especially useful because it is semi-parametric, which means that a parametric form is assumed only for the covariate effect and the baseline hazard rate is treated nonparametrically (Kalbfleisch and Prentice, 1980). The dependent variable will be the time until an alleged fraud was litigated. This will demonstrate how quickly litigation occurs and whether higher levels governance affect the patterns of litigation occurrence. The model is therefore run using the Governance Index as the covariate. The total number of firms is reduced to 846 when the set is integrated, duplicates are removed and irregular observations are not considered. The results of the analysis are presented in Table 1.

Table 1: Cox Proportional Hazard Model for Fraud and Corporate Governance	
N = 846	Dependent variable: time to alleged fraud
Governance Index	1.10**
Two-Digit SIC	1.00
Dummy for NYSE	0.51**
Log likelihood	12.8

**significant at the 5% level

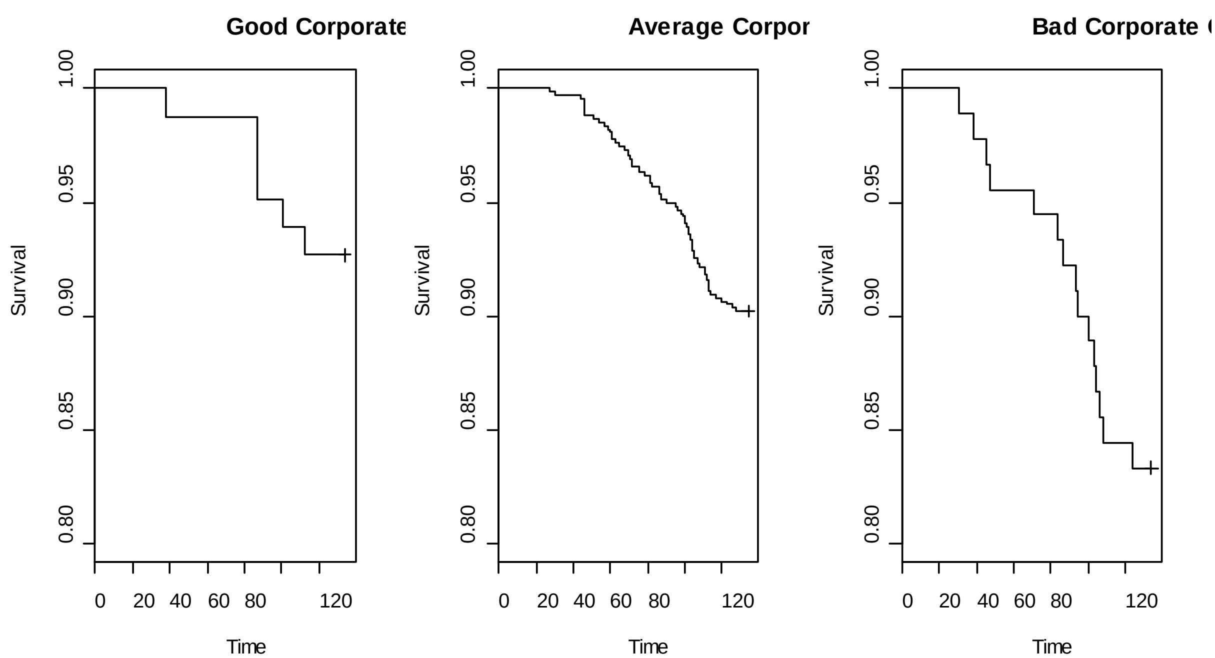
These are results indicate that for an increase of one point in the governance index, a firm is ten percent more likely to be litigated for committing fraud. This positive relationship indicates that firms with worse corporate governance are more likely to be litigated for fraud. In order to ascertain that these results are robust, we take a closer look at the Governance Index variable. The distribution of the Governance Index variable in this model approximates a normal distribution, therefore when studying the effects of this variable it is reasonable to look at distances from the mean in terms of standard deviations. The mean value of this distribution is 9 and the standard deviation is 2.7.

Figure 1: Distribution of Governance Index Variable



Once the formal empirical test is conducted, it is instructive to view the patterns of survival for the overall group as well as for firms with particularly high and low levels of corporate governance. Because we would expect firms with lower levels of corporate governance to be litigated more often, Kaplan-Meier curves for three groups are constructed: one for firms with governance levels of a score below 6, one for firms whose governance index level lies within one standard deviation of the mean, and one for firms with governance levels above 12. These cut-off points come from the mean of the Governance Index variable, which is 9, and one standard deviation above and one standard deviation below the mean. Figure 2 illustrates these curves.

Figure 2: Kaplan-Meier Curves for Three Classes of Governance



Visually, Figure 2 demonstrates that firms with bad governance tend to be a great deal more at risk of litigation than not only those firms with good governance but also the remainder of the population. In order to provide more rigor, we ran a logrank test comparing the companies demonstrating good and average corporate governance to those with reported bad corporate governance. The logrank test results are presented in Table 2.

Table 2: LogRank Tests for Three Classes of Governance

	P-value	Result
Hypothesis: Bad Governance Firms have the Same Hazard Pattern as Others	0.0308	Reject
Hypothesis: Good Governance Firms have the Same Hazard Pattern as Others	0.356	Accept

The interpretation of these results is that not only is bad governance more likely to result in litigation for fraud, but firms with extremely bad governance are at an extremely increased risk of being sued. This can serve as an indicator that bad governance has further negative implications than what has been found in literature thus far.

There are some limitations to this analysis. One is that several time series components, such as how assets of firms change before and after litigation, have not been incorporated. This issue is difficult to overcome with a Cox Proportional Hazard Model and thus a different specification may also be used. This may include a panel logistic regression with time-varying covariates.

More importantly, the Governance Index is composed of 24 provisions and it is interesting to see if any particular provision is more responsible than others for driving the probability of a firm being litigated. In order to do this, a hazard model can be run where in the place of the Governance Index, one applies individual provisions in turn or in groups according to their organization. Prior to doing this, however, it is important to establish theoretically what the mechanism for an individual provision driving the likelihood may be.

Discussion and Conclusions

The question of whether corporate governance has a positive effect on firm performance is important because an analysis-based answer may affect not only scholarly research but also practitioners. It is therefore crucial to determine if corporate governance can also alleviate the threat of litigation, an occurrence that can be extremely costly for firms and that can carry with it huge negative consequences for future performance and current shareholder value. Corporate governance can serve as a deterrent for litigation directly by allowing shareholders to control potentially deviant managers. It can also influence managerial behavior in a way that encourages these agents to act in honest ways in favor of the general welfare of the corporation and its shareholders.

Through the application of a survival analysis on a dataset composed of large U.S. firms, we determined that there is a correlation between high levels of corporate governance and occurrence of litigation. Moreover, we determined that while firms with good corporate governance and average levels thereof fare about the same, firms with negative levels of corporate governance are much more likely to be litigated. This suggests that managers ought to achieve at least average levels of corporate governance to prevent litigation. These findings also point to regulators, that firms exhibiting very high level of corporate governance have been identified as potentially being responsible for a preponderance of fraudulent activities.

Future Work

Firms have a very large number of characteristics that may influence their propensity to be litigated for fraud. Corporate Governance levels are just one subset. I would like to explore a number of these characteristics, which range from firm stock volatility, to industry classifications and length of status as a public entity. I also hope to explore board composition, including gender and characteristics of persons being sued. This includes whether they are managers, underwriters or auditors of the firm in question. It may also be interesting to look at the opposite effect, namely whether litigation leads to better governance. This endogeneous effect may be studied using a VAR with a hazard model.

The issue of the effect of individuals on fraud as well as fraud on individuals is interesting and has already been taken up by scholarly research to some extent. The fate of managers who were successfully litigated for fraud has been followed and demonstrates that perpetrators are duly punished for their actions (Karpoff et al 2008). It is also interesting to look at specific characteristics of actors within firms before fraud is litigated or committed. Board composition, including gender effects or proportion of outside directors may be followed to determine whether these changes are significant. Other aspects of board composition may include whether or not they are auditors and their expertise such as finance.

On the issue of firm characteristics, another group of firms, namely those that have recently become public and underwent Initial Public Offerings, may be more at risk of litigation. This may be due to newly established firms' vulnerability in the face of regulators, who may trust these firms less and set low expectations for their survival. Thus, another variable that could be analyzed with respect to its effect on hazard of fraud litigation may be length of status as a public entity. Further, a natural experiment could be performed where one looks at a situation where a law has changed and whether that leads to greater levels of litigation. This precipitates an identification issue between laws and states. A great deal more may be studied in the field of management regarding the patterns surrounding the commitment of fraud. Studies ought to be conducted for the purpose of informing both academic and practicing audiences that bridge the field of law and management.

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