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WHY DOES CORPORATE GOVERNANCE MATTER? EVIDENCE FROM SEASONED BOND OFFERINGS

FANG WANG

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN FINANCE

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Abstract

To examine the importance of corporate governance, I look at how management and investors behave in the event of seasoned bond offerings, controlling for the corporate governance structure of issuing firms. I find that companies with the weakest governance structure aggressively manipulate their earnings upwards during the two years prior to the debt issuances. And when the bond offerings are announced to the market, these same firms experienced positive abnormal returns over a three day event period, indicating that investors of poorly governed firms value a debt financing for the alleged decrease in agency cost.

Keywords: corporate governance, earnings management, seasoned bond offering

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Acknowledgement

With 20 months' effort I've finally reached this page, on which I get to write down a note of thanks to those that have generously granted me guidance, help and encouragement. I cannot think of a better way to draw an ending to my master degree thesis and the master program as well.

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Chapter 1

Introduction

Along with the recent financial crisis, discussion over corporate governance has once again come onto the center stage. Its importance has long been recognized since the collapse of Enron and WorldCom and previous literatures have documented evidence suggesting a positive relationship between a firm's value and its corporate governance structure[1]. However, little has been done to study the direct impact corporate governance has on managers' behavior and investors' decision making process. Will managers conduct business more properly in companies with good governance than those in poorly governed firms? Will investors take a company's corporate governance into consideration when making stock buy and sell decisions? Using seasoned bond offerings as a triggering event, I look at these questions in this paper and provide new evidence for the importance of corporate governance.

The first part of the study looks at the earnings management effort of bond issuing firms before and after the offering year, conditioned on the corporate governance structure of issuing firms. Entrenchment index developed in Bebchuk,

[1] See for example Gompers et al (2003).

Cohen and Ferrell (2009) and governance index by Gompers et al are employed as proxy for corporate governance quality. Following Teol et al (1998), I estimate the earnings management efforts of issuing firms by calculating their discretional current accruals using a modified Jones model. While there is no detectable manipulation in earnings for the full sample, a clear pattern emerges after further grouping the full sample. Firms with the weakest governance structure display significantly positive earnings management in the two years prior to the bond issuing, whereas firms that are soundly governed show no such attempts. This result is quite intuitive as managers in a poorly governed firm are more likely to be over-entrenched, subject to fewer restraints and generally have more freedom to conduct the business in whichever way they like, properly or not. This study contributes by providing empirical evidence supporting this argument.

The other main interest of this study is to find out how investors react to the bond issuing announcement and whether their reactions differ among firms with different corporate governance structure. The study of market reaction to the issuance of various securities is no new topic. Literature in this area is rather abundant. However, the existing results of the stock valuation effect of seasoned bond offering are quite confounding. The earliest literature has documented a positive stock price change while later studies argue that the market reactions are only non-positive.[2] No factors have been singled out as having a significant influence on the stock valuation effect of corporate bond offering. I look at the same question by introducing corporate governance as one of the explanatory variables. The results show that the market reaction to the announcement of seasoned bond offering is not significantly different from zero for the full sample,

[2] See for example Masulis (1983) and Eckbo (1986).

which is consistent with existing literatures. But after divided into different groups according to the issuing firms' corporate governance, I document a positive cumulative abnormal return for firms that are poorly governed. One possible explanation for the result is what Jensen and Meckling argued in their 1976 paper. They posit that the cost of agency problems decreases as firms' leverage increases. The creation of debt will provide more incentives for the managers to perform as failures to make debt repayment will lead to bankruptcy in which the manager will lose its job. These agency problem related benefits are only significant to firms that are poorly governed, as for these firms negligence and mismanagement of entrenched executives are more likely to be investors' major concern. This result not only serves as a new evidence verifying the importance of corporate governance since it actually goes into the decision making process when an investor makes stock buy-and-sell judgments, it also provides a new insight when examining stock valuation effect of bond offering.

The rest of the paper is structured as follows. Chapter 2 reviews previous literatures on corporate governance, earnings management and seasoned bond offering. Chapter 3 presents the 4 hypotheses. Data and sample selection are described in chapter 4. Chapter 5 explains the methodology employed in this paper. Chapter 6 provides results and analysis. Chapter 7 concludes.

Chapter 2

Literature Review

2.1 Corporate governance

Corporate governance is a manifestation of the agency problem resulted from the separation of ownership and control in modern corporations. A company raises capital from numerous investors to operate and expand a business, and investors need the managers' specialized talents and experience to generate returns for the capital they invest in the firm. However, because the persons who actually use the funds (the managers, i.e., the agents) are not the owners of the money (the investors, i.e., the principal), managers would have incentives to misuse the money to benefit themselves, such as to undertake over-risky investments, to show a lack of due diligence, to distribute an excessive amount of bonus to themselves or to conduct outright expropriation. Although previous literatures have dealt with how the agency problems can be solved under certain assumptions (see, e.g., E.F. Fama (1980), and Jensen and Fama (1983)), it's still an established fact that in reality, the agency problems are widely present and have a significant impact on the development of modern corporations.

In Shleifer et al. (2000), corporate governance is defined as "a set of mechanisms through which outside investors protect themselves against expropriation by the insiders". Such mechanisms include the introduction of board of directors and independent directors, the establishment of various committees within the board such as audit committee, remuneration committee etc, and shareholders' rights to vote with regard to significant company decisions. There is a wide range of literatures documenting positive relationships between a company's good corporate governance and its shareholders' value. Core, Holthausen, Larcker (1999) found that firms with weaker governance structures have greater agency problems, that CEOs with greater agency problems receive bigger compensation and that firms with greater agency problems perform worse. In Gompers, Ishii and Metrick (2003), it's observed that the corporate governance quality of a company has a significant impact on the firm's value. Bebchuk, Cohen and Ferrell (2009) built up an entrenchment index as a measure of a firm's corporate governance quality and found that increases in the index level, which is a decrease in firm's corporate governance quality, are monotonically associated with economically significant reductions in firm valuation as well as large negative abnormal returns during the 1990-2003 period.

Because corporate governance is a mechanism utilized to deal with the agency problem resulted from external financing, a company with good corporate governance is believed to have lower financing cost. Bhojraj and Sengupta (2003) found that firms facing stronger external monitoring through effective mechanisms are rewarded with lower yields and superior bond ratings. On the other hand, firms with poor corporate governance may have a hard time raising external funds at all. According to Barca (1995) and Pagano, Panetta, and Zingales (1995), Italian

corporate governance mechanisms are so underdeveloped as to substantially undermine a firm’s ability to raise external capital.

Previous literatures mostly focused on the relationship between corporate governance and a firm's value and used it as a reflection of the importance of corporate governance. Little has been done to study the direct impact corporate governance has on managers' behavior and investors' decision making process. Will managers conduct business more properly in companies with good governance than those in poorly governed firms? Will investors take a company's corporate governance into consideration when making stock buy and sell decisions? Sonda et al. (2001) studied the relationship between a firm's corporate governance and the magnitude of its earnings management effort and found that managers in better governed firms are more restrained from manipulating the income numbers and misleading outside investors. Chen, Elder and Hsieh found a similar result in Taiwan stock market. Acknowledging earnings management effort as a good measure of how properly managers conduct daily business in companies with different corporate governance structure, I, too, look at the relationship between earnings management and corporate governance of a company. Different from their studies, I study this relationship in the context of seasoned bond offering, taking it as a triggering event for the earnings management activity. Meanwhile, by looking at how shareholders react differently to the bond offering announcement conditioned on the corporate governance practice of issuing firms, I examine whether investors take a firm's corporate governance into account when making share purchase and sale decisions.

To carry out the study, a proxy for the corporate governance quality of a firm is needed. In Core, Holthausen, Larcker (1999), the quality of corporate

governance is assessed by the board structure and ownership structure of a firm. The structure of board of directors is evaluated in several dimensions including the percentage of the board composed of inside directors, board size, the percentage of the board who are outside directors appointed by the CEO, the percentage of the board who are grey outside directors, the percentage of outside directors who are over age 69, the percentage of outside directors who serve on three or more other boards (six or more other boards if retired), and whether the CEO is also a chair. The ownership structure is simply the CEO's stake in the company. Their corporate governance measurement is able to capture the specific features of governance structure of different firms. However it's not very easy to make overall comparisons among firms using this approach.

Gompers, Isshii and Metrick (2003) developed a Governance Index (G-index) covering about 1,500 companies in the U.S market since 1990. The G-index is built on 24 corporate governance provisions, most of which are directly related to management's options to resist a hostile takeover such as "poison pills", "golden parachutes", "antigreemail" etc.[3] The G-index is constructed in the following way: for every firm, one point is added for every provision that reduces shareholder rights. Therefore, the higher the index, the fewer rights are granted to shareholders, which can be considered as a reflection of poor corporate governance. In Bebchuk, Cohen and Ferrell (2009), this G-index is further studied and six provisions[4] are singled out from the original 24 provisions included in G-index as having the strongest correlation with reduction in firm valuation and negative abnormal return between 1990 and 2003. The other 18 provisions are

[3] A detailed list and description of the 24 provisions from Gompers et al (2003) is included in Appendix 1

[4] The six provisions include staggered boards, limits to shareholder bylaw amendments, poison pills, golden parachutes, supermajority requirements for mergers, and charter amendments.

found to have little impact. A new governance index, named as entrenchment index or E-index, is constructed based on the six provisions. Each company in their database is given a score, from zero to six, that equals to the number of provisions adopted by the company in a given month or year. In this article, E-index is used as a primary proxy for a firm's corporate governance quality whereas similar tests are also carried out using G-index as robustness check.

2.2 Earnings management

Before reviewing literatures discussing earnings management, it's better to have a clear understanding about what is earnings management. In Healy and Wahlen (1998), a definition is given as follows: "earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company, or to influence contractual outcomes that depend on reported accounting numbers". It's quoted here because the author thinks it managed to cover the two most important factors in defining earnings management. Firstly, it is a result of manager's discretion. Listed companies in the U.S follow Generally Accepted Accounting Principles (GAAP) when preparing financial statements. As all principles, GAAP is not a set of hard solid rules that leave no room for adjustment. In fact, a general need for discretion is widely recognized. Managers can achieve a better disclosure of the firm performance if they apply their discretion properly. As stated in the Statement of Financial Accounting Concepts No.1, paragraph 44: “Information about enterprise earnings and its components measured by accrual accounting generally provides a better indication of enterprise performance than does information about current cash

receipts and payments." However, it can also be exploited as a way to manipulate earnings for unjustified purposes. This is the second defining factor for earnings management - the motivation has to be a distortion of the real income and attempts for unjustified benefits either for the company or for the management itself.

Earnings management literatures can be roughly divided into to two groups. The first group studies the incentives for earnings management, i.e., what motivates managers to manipulate earnings. The other group studies the methods to calculate earnings management, aimed at designing an accurate proxy for a firm's earnings management effort.

2.2.1 Motivations for earnings management

One motivation documented as a major reason for earnings management arises from the capital market. Teoh, Welch and Wong (1998b) recorded aggressive positive earnings management for firms making seasoned public offerings as an attempt to achieve better pricing in the stock market. And they also relate this earnings management effort to the poor stock performance in the subsequent three years. Shivakumar (2000) found a similar result for firms making seasoned public offerings. He showed that firms overstate earnings around equity offerings and pre-offering abnormal accruals predict subsequent declines in net income. In addition, he also looked at whether investors recognize and undo the effects of such earnings management at the offering announcements. The result shows that investors seem to correct the price impact of earlier earnings management, as evidenced by a negative relation between pre-announcement abnormal accruals and the stock price reaction to the offering announcements.

For initial public offerings, the results are quite mixed. Teoh Welch and Wong (1998a) recorded aggressive earnings management for firms that are undertaking IPOs, whereas Ball and Shivakumar (2008) argue that the magnitude of earnings management effort of initial public offering (IPO) firms is far less significant than documented by previous literatures. They argue that when a firm goes public, it's demanded by public investors of higher quality financial reporting since public investors experience higher information asymmetry than private investors. And a set of mechanisms is in place to enforce the actual delivery of such high quality financial reporting, such as reputation effects, cost of capital effects, and monitoring by internal and external auditors, boards, analysts, rating agencies, the press, litigators and the other parties. The reported discrepancy between their results and those of Teoh Welch and Wong (1998a) and other similar studies is indicated as a result of a biased approach employed.

Earnings management is not only in one direction. There are various circumstances in which managers might actually want to decrease their earnings. For example, Gong, Louis, and Sun (2008) found that firms aggressively manage their earnings downwards before making an open market repurchase so that the cost of the repurchase can be lowered. One interesting finding of their study is that the negative pre-repurchase abnormal accruals increase with the percentage of the stock that the managers repurchase and CEO ownership, which reflects the notion that managers have greater incentives to deflate earnings when the potential benefits from downward earnings management are greater. Furthermore, they document a significant negative correlation between the pre-repurchase abnormal accruals and the both the future operating performance and future stock

performance and conclude that the post-repurchase performance improvement is at least partly driven by the pre-repurchase earnings management.

Another type of motivation for earnings management is contracting motivations. For instance, the compensation of an executive may be closely related to a firm's earnings increase; various provisions in bond covenants may be tied up to a firm's financial performance. In Watts and Zimmerman (1978), it's suggested that managers have incentive to manipulate earnings as it's too costly for remuneration committees or creditors to detect such activities. Caton, Chiyachantana, Chua and Goh (2008) found significant earnings management efforts by issuers in the year of the seasoned bond offering although in their study, there is no evidence showing that rating agencies are actually misled by this window dressing effort. Healy (1985) states that bonus schemes create incentives for managers to select accounting procedures and accruals to maximize the value of their bonus awards. They found that managers are more likely to choose income decreasing accruals when the upper or lower bounds of their bonus plan are binding. Guidry, Leone and Rock (1999) further supported this finding by looking at whether the divisional head in U.S. conglomerate manage earnings so as to maximize their bonus and found strong evidence suggesting so. Holthausen, Larcker and Sloan (1995) extended Healy (1985) by showing no significant downward earnings management when the lower bound of managers' bonus plan is binding.

The third type of earnings management motivation comes from regulatory concerns. Guenther (1994) investigated whether accounting earnings of U.S. firms are managed in response to the upcoming changes in statutory corporate income tax rate brought about by the Tax Reform Act of 1986. The results of empirical

test reported significantly negative current accruals for large firms for year prior to the tax reform. Similarly, Jones (1991) found that managers decrease earnings through earnings accruals manipulation during import relief investigations (e.g. tariff increases and quota reductions). Managers in this special context are argued to have more incentive and freedom to manipulate earnings because in this case, the losing end of the wealth transfer caused by the dishonest disclosure is a group of consumers whose stakes are highly diffused.

2.2.2 Measurements of earnings management

One of the major debates in earnings management researches is over its measurement. Broadly divided, there are two types of measurement approaches that have received wide attention. The first is based on decomposing total accruals into one discretionary component and a non discretionary one, and then use non discretionary accruals as a proxy for a firm's earnings management activity. DeAngelo (1986), Healy (1985), and McNichols and Wilson (1988) laid out a foundation for using discretional accruals as a proxy for earnings management. Jones (1991) modified their models and relaxed the assumptions that non discretionary accruals are constant over time. When estimating non-discretionary accruals, she first introduced a cross sectional regression to capture an average amount of earnings adjustment justified by the market. Dechow and Sloan (1991) further modified Jones model and developed an industry model, which assumes that variation in the determinants of non-discretionary accruals are common across firms in the same industry. Thereby, the cross sectional regression used in their model is industry specific. Dechow, Sloan and Seeney (1995) examined the Healy model (1985), DeAngelo model (1986), Jones model (1991) and the Industry

model and found that the Industry model (1991) exhibits the most power in detecting earnings management. In Teoh et al. (1998), the modified Jones model is employed only that in their study, discretionary current accruals, instead of discretionary total accruals, are used as earnings management estimates. In these models, accruals are calculated using items from balance sheet and the legitimacy of using a balance sheet approach has become increasingly controversial. Hribar and Collins (2002) compared the results of earnings management calculation using a balance sheet approach with those calculated directly from cash flow statements. They argued that the earnings management estimates obtained using balance sheet method is contaminated and biased upwards. Kothari, Leone, and Wasley (2005) suggested to match discretionary accruals with firms performance and showed that performance-matched discretionary accruals are more reliable in inferring a firm's earnings management.

A more recently developed approach is the so-called "Test of Distribution of Reported Earnings and Accruals" approach. These studies examine the distribution of reported earnings to assess whether there is any evidence of earnings management.[5] These studies found that there is a higher than expected frequency of firms with slightly positive earnings and a lower than expected frequency of firms with slightly negative earnings. One advantage of this approach is the avoidance of calculate accruals, and therefore sidestep the problem with whether a balance sheet approach or cash flow approach should be used. But at the same time it also becomes one the main shortcomings as this approach doesn't provide a clear understanding of the steps that companies take to increase reported earnings.

[5] See, e.g., Burgstahler and Dichev (1997) and Degeorge, Patel and Zeckhauser (1999).

2.3 Seasoned bond offerings and market reaction

Existing literatures on the stock price changes in response to public debt offerings provide confounding results. As a primary financing method, public debt offering alters a company's capital structure, or to put more specifically, it increases a company's leverage. The earliest literatures found positive relationship between the increase in a firm's leverage level and stock price reactions to the announcement of such capital structure altering issuance. For example, Masulis (1983) discovered that a firm's stock price changes in the same direction as the changes in its debt to equity ratio. And he argues that "this evidence was shown to be consistent with tax based models of optimal capital structure and leverage induced wealth transfers across security classes as well as with information effects concerning firm value which are positively related to changes in firm debt level."

However, later studies found contradictory results that do not support these theories. Smith (1986) showed that there is a negative 0.26 percent average stock price reaction in response to straight debt offerings. Although the negative abnormal return is not statistically significant, it already differs from the positive reaction to such issuance recorded in previous literatures. Eckbo (1986) looked at the valuation effect of corporate debt offerings and also found that straight debt offerings have non-positive price effects. What is counter-intuitive in the findings of their study is that the abnormal stock returns are more negative for those firms that have indicated the usage of the raised funds as to finance capital expenditure program than those that haven't made any specific indication. Another main result of their study is that convertible debt offerings have a negative impact on the issuing firm's common stock price. This finding is consistently supported by later researches on the same topic with different sample. These two results are mostly

descriptive or can be taken as empirical evidence for or against certain theories. The result that has more indicative significance is probably the last one. They showed that there is no detectable statistical relation between the valuation effect of debt offerings and 1) the size of the offering, 2) the increase in the firm's debt-related tax shield, 3) the rating of the bonds, 4) the abnormal change in the issuing firm's earnings in the period immediately following the offering or 5) the offering method. This makes it more justifiable to not worry about controlling different characteristics of debt when studying valuation effect of bond offerings in the future.

Lakshmi (1991) again looked at the valuation effect of bond issuing. What makes their study interesting is that they divided debt into two groups by their underlying level of risks and then examined the stock market reaction to the issuance of these two different types of corporate debts. Firstly they showed that announcements of straight debt offerings are not associated with a significant stock price reaction. And in order to examine stock reaction to bond issuance with different risk profiles, they used bond rating as a proxy for the risk levels of underlying bond. Their study showed that there is no significant difference between the stock valuation effects of safe and risky debt issuances. Similar to Eckbo (1986), they also found that abnormal returns at the announcement of straight debt issues are not significantly related to firm size.

The literatures discussed above didn't distinguish initial public debt offerings from seasoned bond offering. Argued by Datta et al (2000), initial public debt offerings have some unique features as it represents a major shift in a firm's financing policy by both extending debt maturity and altering the public-private mix. They documented a significantly negative stock price response to debt IPO

announcements. In their robustness check they showed that the negative stock price response is invariant to the default risk of the issue, the effect of the debt IPO on leverage, the industry in which the issuing firm operates (industrial and financial), and the purpose of the offer. The price reaction at the announcement of the second and third public bond offerings is not significantly different from zero. And in addition, they also found that firms with less information asymmetry and firms with higher growth opportunities experience a less adverse stock price response.

Recognizing this difference between initial debt offering and seasoned bond offering, in this study, seasoned bond offering is selected as the event to examine the importance of corporate governance due to a larger amount of SBOs as opposed to IBOs.

Chapter 3

Hypothesis Development

As reviewed in the previous chapter, firms have various incentives to manipulate earnings. Teoh, Welch and Wong (1998b) recorded aggressive positive earnings management for firms making seasoned public offerings as an attempt to achieve better pricing in the stock market. They also find similar results for inital public offerings (Teoh, Welch and Wong (1998a)). Gong, Louis, and Sun (2008) found that firms aggressively manage their earnings downwards before making an open market repurchase so that the cost of the repurchase can be lowered. Security offerings and purchases are essentially market transactions and as one party in the transaction, it's only natural to find firms trying to obtain better pricing by dressing up (or down as in stock repurchasing) the "products", in this case, the firm itself.

One such transaction is seasoned bond offerings. Ever since the early 1900s, industrial corporate bonds have been given quality ratings. Pervious literatures have shown that the bond yield is negatively related to such ratings. For example, Caouette, Altman, and Narayanan (1998) report that the average B-

rated firm pays about 150 basis points more than does the average double-B rated firm. And this gives a high incentive to firms to obtain a better bond rating. One important factor in rating debt security is the firm's ability to generate future cash flows, which in turn would be examined based on the firm's profitability in the past. In Ashbaugh-Skaife, Collins, and LaFond (2006), credit ratings are proved empirically to be positively related to the return on asset ratio and interest coverage ratio, which are both a function of a company's net income. This coincides with the results of previous literatures in the same field.[6] Therefore, when debt-issuing firms try to dress up as a good company, one of the gimmicks under their disposal is to manipulate accounting incomes upwards. As documented in Caton, Chiyachantan, Chua and Goh (1998), bond issuing firms display a significant earnings management in the year of the offering. Using a different sample period and sample firms, this study would also look at the earnings management effort surrounding seasoned bond offerings and in null form, Hypothesis 1 is as follows:

Hypothesis 1: Earnings management activities are insignificant surrounding seasoned bond offerings.

The quality of financial reporting has been gaining more attention since the collapse of Enron and WorldCom. What investors demand from public companies is a fair disclosure of its operating and financial conditions. And one of the reasons that corporate governance is requested to be in place and well implemented is to ensure the achievement of such goals, because, as argued

[6] For example, see Ziebart and Reiter (1992).

earlier, management would always have incentives to distort the accounting figures and mislead the market for the benefit of their own.

It's fairly intuitive to assume that in companies with good corporate governance, the management are subject to more constraints and are more likely to be prevented from applying their discretions in a way that could be detrimental to the outside investors. On contrary, in poorly governed firms where supervision and oversight are rarely in place and where managers are so entrenched that they're practically free to conduct the business in whichever way they feel like, malpractice can be quite common. Elder and Hsieh (2007) studied Taiwan stock market and found that lower likelihood of earnings management is associated with good corporate governance, indicated by the independence of supervisors, financial expertise of independent directors, and voluntary formation of independent directorship (supervisor-ship). Xie and Davidson (2001) showed that board and audit committee members with corporate or financial backgrounds are associated with firms that have smaller discretionary current accruals. Similarly, in this study, I posit that in the event of corporate bond offering, firms with relatively poor corporate governance practice will display a higher earnings management effort. Hypothesis 2, therefore, is as given in the following null form:

Hypothesis 2: Earnings management activities surrounding seasoned bond offerings are insignificantly different among firms with different corporate governance qualities.

After examining how managers' behaviors differ among firms with different corporate governance, I turn to the difference corporate governance

make on the investment decision-making process of shareholders. When a firm announces the bond offering to the market, how would investors react? What is the overall stock price change? What affects their reactions? Is corporate governance one of the factors that investors take into account when responding to the bond offering announcement? There is a voluminous amount of literatures examining the stock valuation effect of straight debt offerings but only providing confounding results. No consensus has been achieved on how market reacts to such an event. This study contributes to this field by introducing corporate governance as one of the factors in determining market reaction in response to SBOs. In null form, hypothesis 3 and 4 are as follows:

Hypothesis 3: Stock market reaction immediately following the announcement of seasoned bond offering is insignificant.

Hypothesis 4: Stock market reaction following the announcement of seasoned bond offering is insignificantly different among firms with different corporate governance practice.

In Jensen and Mecklings (1976), it's argued that the agency cost of a firm decreases as it increases its leverage. In other words, it means that a debt financing and equity financing have completely different implications for investors of firms with different corporate governance structure. When a firm issues debt, it commits itself to a series of future cash flows and the failure to meet any of these cash flows would directly lead to the firm's bankruptcy, in which case, the manager will lose its job. And as a firm's leverage goes up, debt holders would have more claims over the residual assets of a firm when bankrupt

and whatever is left for its shareholders, including the manager, becomes smaller. Thus, a debt offering decreases the agency cost by better aligning the interest of the managers and outsider shareholders. As stated in Jensen (1989), "over-leveraging creates the atmosphere managers require to slash unsound investment programs, shrink overhead, and dispose of assets that are more valuable outside the company." This effect is expected to be bigger for firms with weak corporate governance structure. With this reasoning, it's expected to see a positive market reaction to the seasoned bond offerings for firms with poor corporate governance.

Another argument for poorly governed firms to have a positive market reaction in response to its seasoned bond offering is a signaling effect. This goes back to the question why managers that are "happily" entrenched would want to choose debt financing over equity financing in the first place? After all, they are subjecting themselves to more supervision and pressure from potential bankruptcies. By issuing debt, managers can stay as entrenched as they feel like while obtaining the capital they need at the same time. One thing that could compete with the supervision brought in by a debt issuing is a direct deduction in managers' wealth. And here goes one possible explanation for the selection of debt financing over equity financing: the company's stocks are currently under-priced. And if the firm issues equity instead of debt in this case, there is a wealth transfer from its existing shareholders (including the manager) to the new ones. Therefore, when firms that have a weak corporate governance practice announce a debt issuing, the market may interpret it as a signal, indicating that shares of these firms are currently undervalued.

Chapter 4

Data and Sample Selection

The bond offering data are obtained from Securities Data Corporation (SDC). 3630 companies are identified as having had a bond offering between January 1st, 1990 and December 31st, 2006. Data provided by the Investor Responsibility Research Centre (IRRC) in their *Corporate Takeover Defences* (Rosenbaum (1990), (1993), (1995), (1998), (2000), (2002), (2004)) are used to determine the number of protective provisions employed by a given firm and then decide their Entrenchment Index using the aforementioned method. 2413 companies are covered in the IRRC during the same period. Since *Corporate Takeover Defences* is not published annually and the number of provisions employed by individual companies can change, I limit the analysis to company issuance included in IRRC as of the date of the issuance. This results in a sample of 1707 company issues in this period.

Three criteria are applied in further selecting the data. Firstly, because of the high frequency of bond issuing and their unique characteristic, companies in the finance industry are excluded. Those in the utility industry are also left out due

to its heavy regulation. Secondly, the first bond issuance of each company is deleted from the dataset to make sure that there are no initial bond offerings involved. Lastly, if a company has more than one bond issuance within 3 years, only the first one is retained. Among all the companies that are left, only 188 have stock return data on the Centre for Research in Security Prices (CRSP) and accounting data on Standard & Poor's Compustat. This gives a 371 company issues in the final sample.

Table 1 gives the distribution of company bond issuance during the sample period. As can be seen from the table, the bond issuances spread quite evenly across the years. No particular year has a large concentration of bond offerings.

[Insert Table 1 Here]

Table 2 provides descriptive statistics for the sample of seasoned bond offering firms. In Panel A, note that sample companies are fairly large in terms of total assets, which has a mean (median) of $13.5 billion ($5.01 billion); capital expenditure averages at 6.6%; sample companies have an average leverage ratio of 29%; given the large value of assets, the average ROA is only 6%. Panel B shows the industry distribution of sample firms as classified by the 2-digit SIC code obtained from Compustat. Firms are clustered in the broadly defined manufacturing industry while there are only 2 firms in the agricultural industry.

[Insert Table 2 Here]

Following Bebchek et al. (2004), each company is assigned an entrenchment index according to the number of protective provisions it adopted. Companies whose entrenchment index equals to zero or one are grouped together as E-index portfolio 1, which has the strongest corporate governance practice according to this measurement. Companies with entrenchment index equaling to two are three, are divided into separate groups as E-index portfolio 2 and 3, which have average governance practice. Firms whose entrenchment index equals to 4 or 5 are grouped together due to the small number of companies with a high entrenchment index and they are placed in E-index portfolio 4. Panel A in table 3 shows the frequency distribution of E-index in the sample. About 11% of the companies have an E index of zero; companies with an E index equal to 1 to 4 takes up around 20% of the sample each; only 2% of the company has an E index of 5; there are no companies in the sample that has an entrenchment index that equals to 6.

Following Gompers et al. (2003), each company is assigned a Governance Index according to the numbers of protective provisions employed. Companies whose G-index falls into the range of 3 to 8 are grouped into G-index portfolio 1; companies with G-index equal to 9 or then are grouped into G-index portfolio 2; eleven and twelve into G-index portfolio 3; 13 and above into G-index portfolio 4. There are no companies in the sample that has a G-index that equals to one or two or seventeen. Panel B in table 3 gives the frequency distribution of G-index in the sample.

E-index will be used as the primary proxy for corporate governance quality of sample firms while results of similar tests using G-index as corporate governance proxy will also be provided.

[Insert Table 3 Here]

Table 4 gives the distribution of company bond issuance among different corporate governance portfolio. As can be seen from the table, the number of bond issuance of different portfolios does not differ greatly from each other and the average bond issuances per company of different portfolios are quite comparable. No particular corporate governance portfolio displays an extremely large or small amount of total bond issuance.

[Insert Table 4 Here]

Chapter 5

Methodology

5.1 Earnings management

In the U.S., listed firms follow the Generally Accepted Accounting Principles (GAAP) to prepare their financial statements. As all principles, GAAP is not a set of hard solid rules that leave no room for discretion. In fact, a general need for discretion is widely recognized and that's where the "accrual" system walks in. In order to make a company's financial statements more accurately reflect its real operation performance, managers are allowed to record revenues and expenses in the books even if the actual cash hasn't been changed hands. The most often cited examples would be accounts receivables, which reflects the revenue from goods sold or service rendered but the cash payment hasn't been made yet; accounts payable follows the same circle with an opposite direction. Another commonly cited example would be the selection of depreciation methods. A switch from straight line method to accelerating method would normally result in a decrease in the company earnings of current year and vise visa. Used properly, accruals can indeed enhance the precision of a firm's financial statements in

displaying its operating and financial performance. However, this is only one side of the coin. The flipside would be the freedom granted to the management to manipulate earnings reported to the public, serving all kinds of intentions. And therefore, a reasonable proxy for earnings management would be the abnormal accruals, which is the part that cannot be justified by the ordinary activities of a firm within a certain industry.

Looked at by the underlying motivation of accruals recorded, it can be classified into discretional and non-discretional accruals. Non-discretional accrual is the part that's supposed to happen according to GAAP so that the financial conditions of a company within a specified period can be best reflected. Discretional accruals, on the other hand, are only generated when the managers want and need them to. To put more blatantly, a manager may have an incentive to defer the recognition of revenues earned so that the earnings can be put off to future periods if a general tax deduction is known to be put in place soon (Guenther, 1994), or if the company is going to have a seasoned equity offering, the manager may want to defer the recognition of expenses incurred as an effort to increase current earnings so that the shares can be sold with a better price. (Teoh et al., 1998a) Discretional accruals, therefore, can be considered as a proxy for the magnitude of a firm's earnings management practice.

Looked at by time horizon, total accruals can be divided into two categories – long-term accruals and short-term accruals, or current accruals. Long term accruals are accruals involved in long term assets. The aforementioned depreciation is an example of long term accruals. Short-term accruals are revenue or expense recognitions happened in the current fiscal year. Apparently, managers have more control over current accruals as opposed to long term accruals.

Especially in an event as seasoned bond offering, which is considered as a commonly-employed financing approach, managers are expected to adjust current accruals to achieve their earnings management purpose rather than long term accruals. It's hard to believe that managers would switch to another depreciation method every time it issues corporate bond. Besides, manipulation in current accruals is more difficult to detect whereas a change in depreciation method is a rather bald movement and the managers may have a hard time justifying it. Thus, in the study, I will use discretionary current accruals as the proxy for earnings management of issuing firms.

Net income in a company's income statements equals to the sum of cash flow from operations and total accruals.

$$Net\ Income = Cash\ Flow\ from\ Operations + Total\ Accruals$$

And therefore, total accruals (TAC) equals to net income minus cash flow from operations. As reasoned above, total accruals can be divided into long term accruals (LA) and current accruals (CA).

$$TAC = Net\ Income - Cash\ Flow\ from\ Operations$$
$$= CA + LA$$

The part I'll be looking at in the study, current accruals, is reflected as the sum of changes in a firm's current assets and current liabilities:

$$CA = \Delta ACT - \Delta CHE - \Delta LCT + \Delta DD1$$

where $\Delta ACT =$ the change in current assets during period t (Compustat item 4); $\Delta CHE =$ the change in cash and cash equivalents during period t (Compustat item 1); $\Delta LCT =$ the change in current liabilities during period t (Compustat item 5); $\Delta DD1 =$ the change in current maturity of long term debt (Compustat item 44).

Following Teoh, Welch and Wong (1998a), I use a modified Jones (1991) model to estimate discretionary current accruals, i.e., the earnings management of a given firm. It argues that a company's current accruals should be linked to the changes in its sales revenue, as given by the following equation:

$$\frac{CA_{jt}}{TA_{j,t-1}} = a_0\left(\frac{1}{TA_{j,t-1}}\right) + a_1\left(\frac{\Delta SALES_{jt}}{TA_{j,t-1}}\right) + \varepsilon_{jt}$$

where j firms belong to the same two-digit SIC group but excluding the issuing company; $\Delta SALES_{jt}$ (Compustat item 12) is the change in sales of firm j in year t, CA_{jt} is the current accruals of firm j in year t; $TA_{j,t-1}$ is the total assets of firm j in year t-1 (Compustat item 6). The equation is scaled by the total assets as of the end of previous year to control for the size effect. To estimate the coefficients a_0 and a_1, cross sectional regressions are carried out within each industry and in each year from year -2 to year 0, where year zero is the year in which the issuing company made the bond offering. Then non discretionary current accruals (NDCA), the part that can be justified by the sales changes in the firms according to its peers in the same industry, are estimated using the following equation:

$$NDCA_{it} = \widehat{a_0}\left(\frac{1}{TA_{i,t-1}}\right) + \widehat{a_1}\left(\frac{\Delta SALES_{it} - RECCH_{it}}{TA_{i,t-1}}\right)$$

where $NDCA_{it}$ is the estimated non discretional current accruals for issuing firm i in year t; $RECCH_{it}$ is the change in accounts receivables (Compustat item 302); $\widehat{a_0}$ and $\widehat{a_1}$ are the coefficients estimations. The changes in accounts receivables are subtracted from changes in sales to allow for credit sales manipulation by the issuing company, which might introduce in a loose policy on credit sales to gear up the earnings preceding the offering year. The discretionary accruals, or earnings management (EM) is the balance of actual accruals after subtracting the non discretionary portion:

$$EM_{it} = \frac{CA_{it}}{TA_{i,t-1}} - NDCA_{it}$$

where EM_{it} is the earnings management of firm i in year t.

To summarize, the discretionary current accrual is selected as the proxy for the earnings management of a firm making a bond offering. To calculate a firm's discretionary current accruals, its non-discretionary accruals are estimated first. Non-discretionary accruals are considered to be determined by the changes in sales and cross-sectional regressions are carried out within each industry to estimate the coefficients for a firm in this particular industry. And then the discretionary current accruals, i.e., earnings management of a firm is calculated by subtracting its estimated non discretionary accruals from total current accruals.

5.2 Market reactions

The second part of this paper studies the market reaction to the bond offering announcement of companies with different corporate governance practice.

Here, I employ the standard event study approach and use stock return data from CRSP to calculate the stock abnormal returns over the seven days surrounding the seasoned bond offering announcement and the cumulative abnormal returns over a three day event window (-1, 1). The event day, i.e. day 0 is defined as the filing date data downloaded from SDC[7].

The following equation is used to calculate the abnormal returns of each company,

$$AR_i = R_i - E(R_i)$$

where AR_i is the abnormal return of company i, R_i is the realized return and $E(R_i)$ is the expected return. The expected return is calculated using the simple market return model given below,

$$E(R_i) = \widehat{\alpha_i} + \widehat{\beta_i}(R_m)$$

where $\widehat{\alpha_i}$ and $\widehat{\beta_i}$ are the estimated coefficients for the simple stock return model of firm i, and R_m is the value weighted market stock return. Therefore an estimation period that is least affected by the event under study needs to be selected to properly estimate the model coefficients by running the following time series regression,

$$R_i = \alpha_i + \beta_i(R_m) + \varepsilon_i$$

[7] To ensure that the filing date is the first announcement of the debt offering, I use Factiva to check whether there is a separate announcement of the debt offering before the filing date. In the sample, there are only 14 companies out of 371 that announced the issuance before the press release of the filing. I delete these companies due to the uncertainty of event date.

In this paper, I estimate market model parameters using daily stock returns from day -245 to day -51. Within each E-index portfolio, I average abnormal returns by day and cumulate them over the three-day event window (-1, 1).

Chapter 6

Results and Analysis

6. 1 Earnings management

I posit that before the bond issuing, companies would have incentives to manipulate the earnings upwards in order to lower the financing cost. And companies with a high entrenchment index will display a higher magnitude of earnings management because the corporate governance in these companies is more to the advantage of managers and they therefore enjoy more discretion. Hence, I look at the abnormal current accruals of issuing firms in different E-index portfolios in year -2, -1, 0, 1, and 2, where year 0 is the bond offering year. Note that there is normally one year lag between a company's fiscal year and the calendar year. Therefore if a company issues debt in 2000, the earnings figure for that year would only appear in year 2001, which won't contribute much to a company's bond rating even if manipulated. Combined with the fact that most companies do not plan their bond offerings 2 years in advance, earnings management efforts are expected to appear more likely in year -2 and -1.

The results are given in table 5. Portfolios of sample firms are arranged across the columns of the table with the first two columns containing results for the full sample and subsequent columns containing results for each entrenchment portfolio from the most entrenched firms (E index=4, 5, or 6) to the least entrenched ones (E index=0 or 1).

[Insert Table 5 Here]

As is shown, for the full sample the earnings management activities in the 3 years leading up to the issuing year and the 2 years after are not significantly different from zero. However, after divided into different corporate governance portfolios, companies that have an E-index equal to 4, 5 and 6 display significantly positive discretionary current accruals in year -2 and -1. Two years before the actual bond offering, companies that fall into the highest E-index portfolio have an average earnings management of 0.74%, which is larger than the average earnings management for any other portfolios by at least a factor of 2 and is the only statistically significant portfolio EM. This difference is much larger in year -1. While companies in other governance portfolios have almost zero EM in year -1, those in the highest E-index portfolio present a 0.88% earnings management, which is statistically significant below a 5% level. During year 0, no portfolio display an EM that is significantly different from zero, which is reasonable, since there is normally a lag between a company's fiscal year and the calendar year and thus it's considered a bit too late to manipulate earnings in the year when the bond is being offered.

Results in table 5 show that firms with the weakest corporate governance structure aggressively manage their earnings upwards in the 2 years prior to the bond offering; other firms with relatively better governance practice do not display this pattern. To further examine whether the earnings management effort among firms with different governance quality differ significantly from each other, I carry out a one way non-parametric test to see whether the average earnings management of E-index portfolio 4 is significantly larger than other 3 groups.

Table 6 compares the earnings management effort of E-Index portfolio 1, 2 and 3 with that of E-Index portfolio 4 in the five years surrounding the bond offering year. With rare exceptions (year 0, with E-index portfolio 1 and E-index portfolio 3, neither is statistically significant), in almost every case, the earnings management effort of the most poorly governed firms is larger than those of the better governed firms. And in year -1, in which we expect to see the strongest earnings management effort in the most entrenched firms, the difference is significantly larger than zero when compared with the other three groups. The difference is especially stronger between the best governed firms and the worst ones.

[Insert Table 6 Here]

The result coincides with the hypothesis that managers in the highest E-index portfolio are more entrenched and has more discretion and when these companies are offering debt, they have more freedom to manipulate the earnings so as to increase the bond rating and therefore lower the cost of financing. As

predicted, this earnings management behavior is observed in the two years leading up to the actual issuing year.

To test more directly on the relationship between a firm's earnings management effort and its pre-issuing corporate governance structure, I carry out a regression analysis with earnings management being dependent variable and E-index as explanatory variable, while controlling for other potentially important independent variables. The regression equation is given below:

$$EM_{i,j} = \alpha_{i,j} + \beta_{i,j}(Edum_i) + \sum_{k=1}^{K} \gamma_{k,i,j} C_{k,i,j-1} + \varepsilon_{i,j}$$

where $EM_{i,j}$ is the earnings management effort of firm i in year j; $Edum_i$ indicates membership in a specific E-index portfolio; $C_{k,i,j-1}$ denotes each of K different control variables of firm i in year j-1.

My main interest in estimating the above equation is to find out whether the strong earnings management effort displayed by firms in the lowest corporate governance layer is indeed associated with their poor corporate governance quality. Therefore, $Edum_i$ equals to 1 if the firm's entrenchment index equals to 4, 5 or 6, otherwise $Edum_i$ would be assigned a value of zero.

When selecting control variables, I include a firm's leverage ratio and capital expenditure deflated by total assets. As argued by Jensen and Meckling (1976), a firm can decrease its agency cost by increasing the use of debt and therefore, by introducing in leverage ratio we control for already existing constraints on agency costs. Capital expenditure is included to reflect how strongly a company is in need for new capital at a low cost, which may in turn increase its

incentive to manage earnings. The value of control variables are measured at the end of the fiscal year prior to the relative year of the underlying earnings management. As discussed previously, the earnings management effort of issuing firms are expected to be most strongly in the 2 years prior to the bond offering. Therefore we regress the estimated earnings management in year -1 and -2 on the above listed variables with their value measured at year -2 and -3 respectively.

$$EM_{i,-1} = \alpha_i + \beta_i(Edum_i) + \gamma_{1,i}\left(LEV_{i,-2}\right) + \gamma_{2,i}\left(CAPX_{i,-2}\right)$$

$$EM_{i,-2} = \alpha_i + \beta_i(Edum_i) + \gamma_{1,i}\left(LEV_{i,-3}\right) + \gamma_{2,i}\left(CAPX_{i,-3}\right)$$

where $EM_{i,-1}$ is the earnings management of firm i in year -1; $Edum_i$ indicates membership in a specific E-index portfolio; $LEV_{i,-2}$ is the leverage ratio of firm i in year -2; $CAPX_{i,-2}$ is the capital expenditure of firm i in year -2. The notions are similar for the other equation.

The regression results are shown in table 7. Earnings management estimates in year -1 and -2 are both positively related to the Edum, the dummy variable that equals to 1 if the firm's entrenchment index is larger than 4, and are both statistically significant. This gives direct evidence supporting the hypothesis that the earnings management activities of bond issuing firms are negatively associated with their corporate governance quality. The worse a firm's corporate governance is, the more earnings management activities it engages in during the two years prior to the bond offering. Note that, this relationship is statistically stronger for earnings management estimates in year -2, implying that not only do firms with poor corporate governance manage their earnings more aggressively,

they also start the earnings management activity earlier than firms with relatively sound corporate governance.

[Insert Table 7 Here]

Similar tests are carried out using G-index as a proxy for a firm's corporate governance practice. Results are given in table 8, table 9 and table 10. As can be seen from the tables, the results using G-index as corporate governance proxy are qualitatively similar to those using E-index as governance proxy, although some of the results are not as significant.

[Insert Table 8 Here]

[Insert Table 9 Here]

[Insert Table 10 Here]

In summary, I examined earnings management activity of firms making seasoned bond offerings and found that managers in poorly governed firms manipulate the earnings of their companies more aggressively and more ahead of time. In the two years prior to the bond offering year, firms in the highest entrenchment index group managed their earnings upwards by 0.74% and 0.78% respectively, as opposed to the non-significant earnings management of firms with better governance structure. This provides direct evidence supporting the importance of corporate governance and its implications on how firms conduct

their day-to-day business. To put more clearly, firms with a relatively sound corporate governance structure are less likely to engage in inappropriate activities such as earnings management as an attempt to mislead the market and its investors.

6.2 Stock market reactions

Table 11 presents the results of analysis on stock market reactions. Using the methodology discussed previously, I calculated the stock abnormal returns of issuing firms during the seven days surrounding the announcement day and cumulated them over a three day event window of (-1, 1). Portfolios of sample firms are arranged across the columns of the table with the first two columns containing results for the full sample and subsequent columns containing results for each entrenchment portfolio from the most entrenched firms (E index=4, 5, or 6) to the least entrenched ones (E index=0 or 1). Single day abnormal returns are in the main body of the table.

[Insert Table 11 Here]

Over the three day event window, the cumulative abnormal return of the full sample is not significantly different from zero, which is consistent with previous literature. Among the four governance portfolios, only the one with the highest E index showed a positive 0.63% cumulative abnormal return, which is larger than that of any other government portfolio and is three times greater than the second largest. And it is also the only abnormal return that is statistically significant at a level below 5%. As discussed in the previous section, issuing debt

can reduce the agency problem of corporations on two levels. Firstly, as argued in Jensen and Mecklings (1976), one way to decrease the cost of agency problem is to increase the firm leverages. By creating a crisis atmosphere attached to over-leveraged firms, managers would have incentives to create value for the firm and thereby their interest and shareholders' interest are better aligned. And even when firms are not over-leveraged, the commitment to pay a series of future cash flows would also serve as a pressure for the managers to perform so that their firms won't go bankrupt. And thus shareholders of these firms would favor a seasoned bond offering and react positively. For companies whose corporate governance is already very sound, and therefore have a relatively low cost of agency problem, the introduction of additional debt will not have as much impact as on those badly governed firms. In fact, for shareholders of these firms with good corporate governance, agency problem is no longer a major concern. And the market reactions to the announcement of seasoned bond offering of these firms are expected to be mixed, as supported by the results shown in the table.

Looking more closely at the abnormal returns of each portfolio in each day, for the two portfolios with a lower E index, nearly all the abnormal returns are not significantly different from zero; for companies with an E index equal to 3, the results are quite mixed: in day 0, there is a negative abnormal return of -0.39% and in day 1 there is a positive one of 0.28%; only for firms with the highest E index, there is a relatively consistent positive abnormal returns from day -1 onwards, where the abnormal return in day 0 is 0.38%, which is the highest positive abnormal return among all the companies during the entire period.

To test more directly on the hypothesis that investors of firms with weak corporate governance structure react positively to the announcement of seasoned

bond offering as they see a potential decrease in these firms' agency problems, I carry out a regression analysis using the following equation:

$$CAR_i = \alpha_i + \beta_i(Edum_i) + \sum_{k=1}^{K} \gamma_{k,i} C_{k,i} + \varepsilon_{i,j}$$

where CAR_i is the 3-day cumulative abnormal return; $Edum_i$ indicates membership in a specific E-index portfolio; $C_{k,i,j-1}$ denotes each of K different control variables; and i denotes different firms. In an effort to more fully specify the regression model, I include several control variables in the analysis. First, I assign a dummy variable CONTAM, which equals one for firms that had a confounding news announcement (such as merger and acquisition, earnings or dividend announcement etc) during the 7 days surrounding the earnings management. In the sample, there are 137 companies have had such a news announcement. Secondly, I include the average earnings management effort during the two years prior to the bond offering year to control any potential effect this abnormal activity might have on the market reaction. As discussed the section of hypothesis development, I posit that market reaction to seasoned bond offerings of firms with poor corporate governance structure may be negatively related to the firms' pre-existing leverage ratio because if a poorly governed firm is already highly-leveraged, the additional debt is expected to not have much effect in reducing the underlying agency problem. Therefore, a firms' leverage ratio is also included as a control variable for the full sample regression. According to Jensen's free cash flow theory, when firms offering security to the market, the stock price change will depend on the net effect of the offering on the company's free cash

flows. If a company issues debt to buy back stocks, the market reaction is expected to be positive. Meanwhile, if a firm is believed to have sound investment projects the issuance of securities would also be positively received because the newly raised funds will be put into good use. Therefore I include a firm's capital expenditure, return on assets and as control variables to reflect the investment activity and profitability of the issuing firms in the year prior to the bond offering. The firm's leverage ratio and capital expenditure is measured at the end of the fiscal year prior to the offering. Return on assets ratio and sales are measured as the 3 year average leading up to the bond offering. Capital expenditure and sales are deflated by a firm's total assets. The regression equation is given in specific terms below:

$$CAR_i = \alpha_i + \beta_i(Edum_i) + \gamma_{1,i}(CONTAM_i) + \gamma_{2,i}(EM_i) + \gamma_{3,i}(LEV_i) + \gamma_{4,i}(CAPX_i) + \gamma_{5,i}(ROA_i) + \gamma_{6,i}(SALE_i) + \varepsilon_i$$

where CAR_i is the 3-day cumulative abnormal return; $Edum_i$ indicates membership in a specific E-index portfolio; $CONTAM_i$ equals one when a firm has a confounding news announcement in the 7 days surrounding the offering; EM_i is the average earnings management estimates prior to the offering year; LEV_i is the issuing firm's leverage ratio measured at the end of the fiscal year prior to the issuing; $CAPX_i$ is the capital expenditure deflated by total assets measured at the end of the fiscal year prior to the offering; ROA_i is the average return on assets ratio over the 3 years prior to the offering; $SALE_i$ is the average sales over the same period deflated by total assets.

Results of the regression are shown in table 12. For the 5 models incorporating different control variables, Edum is the one and only explanatory variable with a positive estimated coefficient that are statistically significant below a 5% level. There is no detectable relationship between the valuation effects of a bond offering in the stock market with any other controlling variables. Model 1 is a univariate regression of Edum on the three-day announcement period CAR and indicates that, on average, firms with the weakest governance structure have abnormal returns 0.73% points higher than firms in the other 3 better governed firm portfolios. This is the primary finding in this section. The results support the hypothesis that the market reacts differently and positively to the seasoned bond offering announcements when the issuing firms' managers have been overly entrenched. Model 2 shows that the pre-issuing earnings management efforts have little impact on the market reaction. Model 3 indicates that there is little influence of the confounding news released in the 7 days surrounding the announcement. Model 4 finds no significant connection between the market reactions to the issuing firms' pre-existing leverage level for the full sample. Model 5 incorporates all the control variables and still only Edum has presented a positive association with the cumulative abnormal returns.

[Insert Table 12 Here]

Similar tests are carried out using G-index as the proxy for firms' corporate governance practice. Results are given in table 13 and 14. As can be seen from the tables, the results using G-index as corporate governance proxy

are qualitatively similar to those using E-index as governance proxy, although some of the results are not as significant.

[Insert Table 13 Here]

[Insert Table 14 Here]

In summary, I looked at the stock market reaction to firms making seasoned bond offerings, controlling for the corporate governance structure, among other firm-specific variables. I found that for the full sample, there are no significant reactions from the stock market. However, after divided into different groups according to firms' corporate governance structure, a significant positive reaction is observed for firms with the weakest governance quality, which is consistent with the argument of Jensen and Meckling (1976) that the cost of agency problem decreases with the increase in firms' leverage ratio. This effect is expected to be amplified for firms with notorious governance practice as this may be the investors' biggest concern.[8] The three-day cumulative abnormal return of firms in E-index portfolio 4 is 0.63%, which is the only significantly positive abnormal return documented of all firm portfolios and is 3 times larger than the second largest portfolio CAR. The result of regression analysis also gives a positive relationship between a firm's CAR and the entrenchment index dummy, which equals to one for firms with an entrenchment index bigger than 4. This provides more direct evidence indicating that when investors make buy and sell decisions following the announcement of seasoned bond offering, corporate

[8] See Jensen, M.C, 1989.

governance is one factor that would make an impact on this decision making process.

Tests on the earnings management activity prior to seasoned bond offering and stock market reaction to the announcement of seasoned bond offering provide evidence verifying the importance of corporate governance by showing its influence on management behavior of firm executives and investment decision of investors. Firms that are poorly governed leave much room for their managers to cast discretion over operational decisions properly and inappropriately

Chapter 7

Summary and Conclusion

Corporate governance – does it matter? Why does it matter? How does it matter? We say something is of importance by pointing out its influence over other important things. And that's how this article tries to answer the above questions. By examining the impact corporate governance has on the two most important participants in the market – firms and shareholders, I document evidence that is in favor of the main argument of this paper: the corporate governance structure of a firm is directly related to the way its managers conduct day-to-day business and it is also a factor that would affect investors' decision making process, at least in the event of seasoned bond offering, which is used as a triggering event to carry out the underlying study.

Previous literatures have documented positive earnings management for firms making seasoned bond offering. This article makes contribution by further examining the difference of earnings management activities of firms with different corporate governance structure and found that firms that have a weak corporate governance practice display greater earnings management effort in the 2 years prior to the bond offering. This makes quite intuitive economic sense as

managers in poorly governed firms are more entrenched, face less restraints and basically free to conduct business any way they like, properly or inappropriately. When offering debt, a firm can lower the financial cost by obtaining a better bond rating. And one way that has been proved to be employed most commonly is earnings management. As shown in the regression analysis, there is a significantly negative relationship between an issuing firm's earnings management magnitude and its corporate governance quality. Weakly governed firms manipulate their earnings more aggressively and more ahead of time.

The second part of the study looks at how market interprets the seasoned bond offering of firms with different corporate governance structure. Existing literature has documented confounding results. By adding in the corporate governance quality of issuing firms, I found some interesting results. While market reactions to the bond issuing announcements of soundly governed firms are still quite mixed, the cumulative abnormal return for firms with the worst governance practice is significantly positive. This is consistent with the argument of Jensen and Meckling (1976), which posits that the increase in a firm's leverage ratio would reduce the cost of its agency problem, which obviously is most severe in poorly governed firms.

At first sight, it may seem counter-intuitive for the market to react positively to poorly governed firms but if we go back to the origin of corporate governance, it turns out to be not so surprising after all. External financing results in the separation of ownership and control, which in turn creates the agency problem. And to mitigate the problem, a set of corporate managing mechanisms are set up and promoted, which is what we now call corporate governance. It's established to protect the value and rights of shareholders,

especially outside shareholders who normally stay un-informed about the usage of their own money. As the shareholder of a poorly governed firm, one may be constantly worried over the potential misusage of their funds and therefore when the company announces a debt issuance, which may in turn improve its governance structure, investors would feel better protected and thereby react positively as it mitigates their biggest concern. However for firms which already have a sound governance structure, shareholders will not be much troubled by the agency problem, and thus the potential governance-related benefits attached to a bond issuing are unlikely to make an impact on these investors. Hence no positive reactions are observed for these companies.

As an interesting extension, I also mention another alternative explanation for the positive market reaction to the bond offering of poorly governed firms, which is a signaling effect. Since bringing in debt will make managers subject to more constraints, the fact that a happily-entrenched manager chooses debt financing over equity financing may serve as a signal that the stocks of the firm are under-priced. Hence, a positive stock market reaction. However, this hypothesis is yet to be tested. Regression analysis also gives negative correlation between the 3-day cumulative abnormal return and a firm's corporate governance structure. Compared with previous studies in this field, this paper contributes by providing a new stand to examine the problem and some new observations.

To summarize, this study provided evidence for the importance of corporate governance and showed that it has a significant impact on management behavior in their daily business conduct and also serves as an important factor when investors make stock buy-and-sell decisions.

References

Abhyankar, A, Dunning, A, 1999. Wealth effects of convertible bond and convertible preference share issues: an empirical analysis of the UK market. *Journal of Banking & Finance* 23, 1043-1065.

Ashbaugh-Skaife, H, Collins, D.W, LaFond, R, 2006. The effects of corporate governance on firms' credit ratings. *Journal of Accounting and Economics* 42, 203-243.

Ball, R, Shivakumar, L, 2005. Earnings quality in UK private firms: comparative loss recognition timeliness. *Journal of Accounting and Economics* 39, 83-128.

Ball, R, Shivakumar, L, 2008. Earnings quality at initial public offerings. *Journal of Accounting and Economics* 45, 324-349.

Barca, Fabrizio, 1995. On corporate governance in Italy: Issues, facts, and agency, manuscript, Bank of Italy, Rome.

Bebchuk, L.A, Cohen, A, 2005. The cost of entrenched boards. *Journal of Financial Economics* 78, 409-433.

Bebchuk, L.A, Cohen, A, Ferrell, A, 2009. What matters in corporate governance?. The *Review of Financial Studies* 22(2), 783-827.

Bhojraj, S, Sengupta, P, 2003. Effect of corporate governance on bond ratings and yields: the role of institutional investors and outside directors. *Journal of Business* 76(3), 455-475.

Burgstahler, D, Dichev, I, 1997. Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics* 24, 99-126.

Caouette, J.B, Altman, E.I, Narayanan, P (1998). *Managing credit risk: the next great financial challenge.* New York, NY: John Wiley & Sons, Inc.

Caton, G.L, Chiyachantana, C.N, Chua, C.T, Goh, J, 2009. Earnings management and seasoned bond offerings: do managers mislead the bond market? *Journal of Financial and Quantitative Analysis*, forthcoming.

Caton, G.L, Goh, J, 2008. Corporate governance, shareholder rights, and shareholder rights plans: poison, placebo, or prescription?. *Journal of Financial and Quantitative Analysis* 43(2), 381-400.

Chen, K.Y, Elder, R.J, Hsieh, Y.M, 2007. Corporate governance and earnings management: the implications of Corporate Governance Best-Practice Principles for Taiwanese Listed Companies. Unpublished working paper, retrieved from http://ssrn.com/abstract=981926.

Core, J.E, Holthausen, R.W, Larcker, D.F, 1999. Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics* 51, 371-406.

Dann, L.Y, Mikkelson, W.H, 1983. Convertible debt issuance, capital structure change and finance related information – some new evidence. *Journal of Financial Economics* 13, 157-186.

Datta, S, Iskandar-Datta, M, Patel, A, 2000. Some evidence on the uniqueness of initial public debt offerings. *The Journal of Finance* 55, 715-743.

Datta, S, Iskandar-Datta, M, Patel, A, 1999. Banking monitoring and the pricing of corporate public debt. *Journal of Financial Economics* 51, 435-449.

DeAngelo, L.E, 1986. Accounting numbers as market valuation substitutes: a study of management buyouts of public stockholders. *The Accounting Review* 61(3), 400-420.

Dechow, P.M, 1994. Accounting earnings and cash flows as measures of firm performance – the role of accounting accruals. *Journal of Accounting and Economics* 18, 3-42.

Dechow, P.M, Sloan, R.G, Sweeney A.P, 1995. Detecting earnings management. *The Accounting Review* 70(2), 193-225.

Degeorge, F, Patel, J, Zeckhauser, R, 1999. Earnings management to exceed thresholds. *Journal of Business* 72(1), 1-33.

Diamond, D.W, 1991. Monitoring and reputation: the choice between bank loans and directly placed debt. *Journal of Political Economy* 99(4), 689-721.

Eckbo, B.E, 1985. Valuation effects of corporate debt offerings. *Journal of Financial Economics* 15, 119-151.

Eckbo, B.E, Masulis, R.W, Norli, Q, 2000. Seasoned public offerings: resolution of 'new issues puzzle'. *Journal of Financial Economics* 56, 251-291.

Fama, E.F, 1980. Agency problems and the theory of the firm. *Journal of Political Economy* 88(2), 288-307.

Fama, E.F, Jensen, M.C, 1983. Agency problems and residual claims. Journal *of Law and Economics* 26(2), 327-349.

Gillan, S.L, Starks, L.T, 2000. Corporate governance proposals and shareholder activism: the role of institutional investors. *Journal of Financial Economics* 57, 275-305.

Gompers, P.A, Ishii, J.L, Metrick, A, 2003. Corporate governance and equity prices. *Quarterly Journal of Economic*s 118, 107-155.

Gong, G.J, Louis, H, Sun, A.X, 2008. Earnings management and firm performance following open-market repurchases. *The Journal of Finance* 58(2), 947-986.

Guenther, D.A, 1994. Earnings management in response to corporate tax rate changes: evidence from the 1986 tax reform act. *The Accounting Review* 69(1), 230-243.

Guidry, F, Leone, A.J, Rock, S, 1999. Earnings-based bonus plans and earnings management by business-unit managers. *Journal of Accounting and Economics* 26, 113-142.

Healy, P.M, 1985. The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics* 7, 85-107.

Healy, P.M, Wahlen, J.M, 1999. A review of the earnings management literature and its implications for standard setting. Accounting Horizons 13, 365-383.

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

Hribar, P, Collins, D.W, 2002. Errors in estimating accruals: implications for empirical research. *Journal of Accounting Research* 40(1), 105-134.

Jensen, M.C, 1986. Agency costs of free cash flow, corporate finance and takeovers. *American Economic Review* 76(2), 323-329.

Jensen, M.C, 1989. Eclipse of public corporation. *Harvard Business Review* 67(5), 61-74.

Jensen, M.C, 1993. The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance* 48(3), 831-880.

Jensen, M.C, Meckling, W.H, 1976. Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics* 3, 305-360.

Jones, J.J, 1991. Earnings management during import relief investigations. *Journal of Accounting Research*, 29(2), 193-228.

Kothari, S.P, Leone, A.J, Wasley, C.E, 2005. Performance matched discretionary accrual measures. *Journal of Accounting and Economics* 39, 163-197.

Louis, H, 2004. Earnings management and the market performance of acquiring firms. *Journal of Financial Economics* 74, 121-148.

Louis, H, White, H, 2007. Do managers intentionally use repurchase tender offers to signal private information? Evidence from firm financial reporting behavior. *Journal of Financial Economics* 85, 205-233.

Louis, H, Robinson, D, Sbaraglia, A, 2008. An integrated analysis of the association between accrual disclosure and the abnormal accrual anomaly. *Review of Accounting Studies* 13(1), 23-54.

Masulis R.W, 1983. The impact of capital structure change on firm value: some estimates. *Journal of Finance* 38(1), 107-126.

McNichols, M, Wilson, G.P, 1988. Evidence of earnings management from the provision for bad debts. *Journal of Accounting Research* 26, 1-31.

Mikkelson, W.H, Partch, M.M, 1986. Valuation effects of security offerings and the issuance process. *Journal of Financial Economics* 15, 31-60.

Pagano, Marco, F. Panetta, and Luigi Zingales, 1998. Why do companies go public? An empirical analysis. *The Journal of Finance* 53(1), 27-64.

Porta, R.L, Lopez-de-Silanes, F, Shleifer, A, Vishny, R, 2000. Investor protection and corporate governance. *Journal of Financial Economics* 58, 3-27.

Ronald, W.M, 1980. The effect of capital structure change on security prices – a study of exchange offers. *Journal of Financial Economics* 8, 139-178.

Shivakumar, L, 2000. Do firms mislead investors by overstating earnings before seasoned equity offering?. *Journal of Accounting and Economics* 29, 339-371.

Shleifer, A, Vishny, R.W, 1997. A survey of corporate governance. *The Journal of Finance* 52(2), 737-783.

Shyam-Sunder, L., 1991. The stock price effect of risk versus safe debt. *Journal of Financial and Quantitative Analysis* 26(4), 549-558.

Smith, C.W, 1986. Investment banking and the capital acquisition process. *Journal of Financial Economics* 15, 3-29.

Sonda, M.C, Jean, B, Lucie, C, 2001. Corporate governance and earnings management. Unpublished working paper, retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=275053.

Spiess, D.K, Affleck-Graves, J, 1995. Underperformance in long-run stock returns following seasoned equity offerings. *Journal of Financial Economics* 38, 243-267.

Teoh, S.H, Welch, I, Wong, T.J, 1998. Earnings management and the long-run market performance of initial public offerings. *The Journal of Finance* 53(6), 1935-1974.

Teoh, S.H, Welch, I, Wong, T.J, 1998. Earnings management and the underperformance of seasoned equity offerings. *Journal of Financial Economics* 50, 63-99.

Watts, R.L, Zimmerman, J.L, 1978. Towards a positive theory of the determination of accounting standards. *The Accounting Review* 53(1), 112-134.

Xie, B, Davidson, W.N, Dadalt, P.J, 2001. Earnings management and corporate governance: the roles of the board and the audit committee. Working paper, Southern Illinois University (2001).

Ziebart, D.A, Reiter, S.A, 1992. Bond ratings, bond yields and financial information. *Contemporary Accounting Research* 9(1), 252-282.

Appendix

Corporate Governance Provisions

This appendix describes the provisions used as components of the Governance Index, where the underlined provisions are employed in constructing the entrenchment index.

1 Antigreenmail – Greenmail refers to the agreement between a large shareholder and a company in which the shareholder agrees to sell his stock back to the company, usually at a premium, in exchange for the promise not to seek control of the company for a specified period of time. Antigreenmail provisions prevent such arrangements unless the same repurchase offer is made to all shareholders or the transaction is approved by shareholders through a vote. They are thought to discourage accumulation of large blocks of stock because one source of exit for the stake is closed, but the net effect on shareholder wealth is unclear (Shleifer and Vishny (1986a)). Five states have specific antigreenmail laws, and two other states have "recapture of profits" laws, which enable firms to recapture raiders' profits earned in the secondary market. We consider recapture of profits laws to be a version of antigreenmail laws (albeit a stronger one). The

antigreenmail category includes both firms with the provision and those incorporated in states with either antigreenmail or recapture of profits laws.

2 Blank check preferred stock – This is preferred stock over which the board of directors has broad authority to determine voting, dividend, conversion, and other rights. While it can be used to enable a company to meet changing financial needs, it can also be used to implement poison pills or to prevent takeover by placement of this stock with friendly investors. Companies who have this type of preferred stock but who have required shareholder approval before it can be used as a takeover defense are not coded as having this provision in our data.

3 Business Combination laws – These laws impose a moratorium on certain kinds of transactions (e.g., asset sales, mergers) between a large shareholder and the firm for a period usually ranging between three and five years after the shareholder's stake passes a pre-specified (minority) threshold.

4 & 5 Bylaw and Charter amendment limitations – These provisions limit shareholders' ability to amend the governing documents of the corporation. This might take the form of a supermajority vote requirement for charter or bylaw amendments, total elimination of the ability of shareholders to amend the bylaws, or the ability of directors beyond the provisions of state law to amend the bylaws without shareholder approval.

6 Classified board – A classified board is one in which the directors are placed into different classes and serve overlapping terms. Since only part of the board can be replaced each year, an outsider who gains control of a corporation may have to wait a few years before being able to gain control of the board. This

provision may also deter proxy contests, since fewer seats on the board are open each year.

7 Compensation plans with changes in control provisions – These plans allow participants in incentive bonus plans to cash out options or accelerate the payout of bonuses should there be a change in control. The details may be a written part of the compensation agreement, or discretion may be given to the compensation committee.

8 Director indemnification contracts – These are contracts between the company and particular officers and directors indemnifying them from certain legal expenses and judgments resulting from lawsuits pertaining to their conduct. Some firms have both "indemnification" in their bylaw/charter and these additional indemnification "contracts".

9 Control-share cash-out laws enable shareholders to sell their stakes to a "controlling" shareholder at a price based on the highest price of recently acquired shares. This works something like fair-price provisions (see below) extended to non-takeover situations.

10 Cumulative voting – Cumulative voting allows a shareholder to allocate his total votes in any manner desired, where the total number of votes is the product of the number of shares owned and the number of directors to be elected. By enabling them to concentrate their votes, this practice helps enable minority shareholders to elect favored directors. Cumulative voting and secret ballot (see below), are the only two provisions whose presence is coded as an increase in shareholder rights, with an additional point to G if the provision is absent.

11 Directors' duties allow directors to consider constituencies other than shareholders when considering a merger. These constituencies may include, for example, employees, host communities, or suppliers. This provision provides boards of directors with a legal basis for rejecting a takeover that would have been beneficial to shareholders. 31 states also have laws with language allowing an expansion of directors' duties, but in only two of these states (Indiana and Pennsylvania) are the laws explicit that the claims of shareholders should not be held above those of other stakeholders [Pinnell (2000)]. We treat firms in these two states as though they had an expanded directors' duty provision unless the firm has explicitly opted out of coverage under the law.

12 Fair-Price requirements – These provisions limit the range of prices a bidder can pay in two-tier offers. They typically require a bidder to pay to all shareholders the highest price paid to any during a specified period of time before the commencement of a tender offer and do not apply if the deal is approved by the board of directors or a supermajority of the target's shareholders. The goal of this provision is to prevent pressure on the target's shareholders to tender their shares in the front end of a two-tiered tender offer, and they have the result of making such an acquisition more expensive. This category includes both the firms with this provision and the firms incorporated in states with a fair price law.

13 Golden parachutes – These are severance agreements which provide cash and non-cash compensation to senior executives upon a triggering event such as termination, demotion, or resignation following a change in control. They do not require shareholder approval.

14 Director indemnification – This provision uses the bylaws and/or charter to indemnify officers and directors from certain legal expenses and

judgments resulting from lawsuits pertaining to their conduct. Some firms have both this “indemnification” in their bylaws/charter and additional indemnification “contracts”. The cost of such protection can be used as a market measure of the quality of corporate governance [Core (2000)].

15 Limitations on director liability – These charter amendments limit directors’ personal liability to the extent allowed by state law. They often eliminate personal liability for breaches of the duty of care, but not for breaches of the duty of loyalty or for acts of intentional misconduct or knowing violation of the law.

16 Pension parachute – This provision prevents an acquirer from using surplus cash in the pension fund of the target in order to finance an acquisition. Surplus funds are required to remain the property of the pension fund and to be used for plan participants’ benefits.

17 Poison pills – These securities provide their holders with special rights in the case of a triggering event such as a hostile takeover bid. If a deal is approved by the board of directors, the poison pill can be revoked, but if the deal is not approved and the bidder proceeds, the pill is triggered. In this case, typical poison pills give the holders of the target’s stock other than the bidder the right to purchase stock in the target or the bidder’s company at a steep discount, making the target unattractive or diluting the acquirer’s voting power. The early adopters of poison pills also called them “shareholder rights” plans, ostensibly since they give current shareholders the “rights” to buy additional shares, but more likely as an attempt to influence public perceptions. A raider-shareholder might disagree with this nomenclature.

18 Secret ballot – Under secret ballot (also called confidential voting), either an independent third party or employees sworn to secrecy are used to count proxy votes, and the management usually agrees not to look at individual proxy cards. This can help eliminate potential conflicts of interest for fiduciaries voting shares on behalf of others, or can reduce pressure by management on shareholder-employees or shareholder-partners. Cumulative voting (see above) and secret ballot, are the only two provisions whose presence is coded as an increase in shareholder rights, with an additional point to G if the provision is absent.

19 Executive severance agreements – These agreements assure high-level executives of their positions or some compensation and are not contingent upon a change in control (unlike Golden or Silver parachutes).

20 Silver parachutes – These are similar to golden parachutes in that they provide severance payments upon a change in corporate control, but unlike golden parachutes, a large number of a firm's employees are eligible for these benefits.

21 Special meeting requirements – These provisions either increase the level of shareholder support required to call a special meeting beyond that specified by state law or eliminate the ability to call one entirely.

22 Supermajority requirements for approval of mergers – These charter provisions establish voting requirements for mergers or other business combinations that are higher than the threshold requirements of state law. They are typically 66.7, 75, or 85 percent, and often exceed attendance at the annual meeting. This category includes both the firms with this provision and the firms incorporated in states with a "control-share acquisition" law. These laws require a majority of disinterested shareholders to vote on whether a newly qualifying large

shareholder has voting rights. In practice, such laws work much like supermajority requirements.

23 Unequal voting rights – These provisions limit the voting rights of some shareholders and expand those of others. Under time-phased voting, shareholders who have held the stock for a given period of time are given more votes per share than recent purchasers. Another variety is the substantial-shareholder provision, which limits the voting power of shareholders who have exceeded a certain threshold of ownership.

24 Limitations on action by written consent – These limitations can take the form of the establishment of majority thresholds beyond the level of state law, the requirement of unanimous consent, or the elimination of the right to take action by written consent.

Table 1

Distribution of Company Bond Issuance during the Sample Period

Table 1 shows the distribution of firms having had a bond offering from January 1991 to December 2006. The original sample contains all the companies in the Securities Data Corporation database that announced a bond offering during this period. After several rounds of screening, the final sample contains 371 company issues and 188 companies. To be included in the final sample reported below, issuing firms must have data available on IRRC, CRSP and Compustat.

Year	Frequency	Percent	Cumulative Frequency	Cumulative percent
1991	37	9.97	37	9.97
1992	26	7.01	63	16.98
1993	22	5.93	85	22.91
1994	23	6.20	108	29.11
1995	27	7.28	135	36.39
1996	22	5.93	157	42.32
1997	21	5.66	178	47.98
1998	34	9.16	212	57.14
1999	27	7.28	239	64.42
2000	19	5.12	258	69.54
2001	24	6.47	282	76.01
2002	21	5.66	303	81.67
2003	22	5.93	325	87.60
2004	14	3.77	339	91.37
2005	12	3.23	351	94.61
2006	20	5.39	371	100.00

Table 2

Sample Statistics

Table 2 shows descriptive company and industry statistics of sample firmss. Financial variables in Panel A and SIC codes in Panel B were obtained from Compustat. All figures are in millions of dollars. Capital expenditure and sales are deflated by company total assets. All variables are measured at fiscal year-end prior to bond offering announcement.

Panel A Firm Characteristics

	Mean	Median	Std Dev
Total Assets	$13,499.70	$5,014.15	$32,863.34
Capital Expenditure	0.066	0.054	0.05
Sales	1.24	1.09	0.74
Leverage	0.29	0.28	0.14
ROA	0.06	0.06	0.05

Panel B Industry Distribution

	2-Digit SIC	Frequency	%	Cum. Freq	%
Agriculture, Forestry and Fishing	01-09	2	0.54	2	0.54
Mining	10-14	14	3.77	16	4.31
Construction	15-17	14	3.77	30	8.09
Manufacturing	20-39	247	66.58	277	74.66
Transportation, Communication	40-49	8	2.16	285	76.82
Wholesale trade	50-51	8	2.16	293	78.98
Retail trade	52-59	46	12.4	339	91.37
Services	70-89	29	7.82	368	99.19
Others	99	3	0.81	371	100.00

Table 3

Distribution of Corporate Governance Proxy

Table 3 shows the frequency distribution of the two corporate governance proxies adopted in this paper – E-index and G-index. Panel A gives the frequency distribution of E-index, which is developed by Bebchuk, Cohen and Ferrell (2004) and is the tally of the protective provisions employed by a company, with a range from 0 to 6. The original data is published by the Investor Responsibility Research Center in Corporate Takeover Defences. Sample firms are assigned to an E-index portfolio according to the value of their E-index and the relative number of firms with each index value. Panel B shows the frequency distribution of G index, which is developed by Gompers, Ishii and Metrick (2003) with a similar rationale to the E index. It is also defined as the number of protective provisions employed by each company only that in their approach, the universe of protective provisions is enlarged and contains 24 provisions in total. The original data source is again the IRRC in Corporate Takeover Defences. Sample firms are assigned to 4 different G-index portfolios according to the value of their G-index and the relative number of firms with each index value.

Panel A – Frequency Distribution of E index

E-index	Frequency	Percent	Cumulative Frequency	Cumulative Percent	E-index Portfolio
0	39	10.51	39	10.51	1
1	68	18.33	107	28.84	1
2	91	24.53	198	53.37	2
3	86	23.18	284	76.55	3
4	76	20.49	360	97.04	4
5	11	2.96	371	100.00	4
6	0	0.00	0	0.00	4

Panel B – Frequency Distribution of G index

G-index	Frequency	Percent	Cumulative Frequency	Cumulative Percent	G-index Portfolio
3	2	0.54	2	0.54	1
4	9	2.43	11	2.96	1
5	17	4.58	28	7.55	1
6	28	7.55	56	15.09	1
7	22	5.93	78	21.02	1
8	37	9.97	115	31.00	1
9	48	12.94	163	43.94	2
10	46	12.40	209	56.33	2
11	47	12.67	256	69.00	3
12	50	13.48	306	82.48	3
13	35	9.43	341	91.91	4
14	20	5.39	361	97.30	4
15	6	1.62	367	98.92	4
16	4	1.08	371	100.00	4

Table 4

Distribution of bond issue by corporate governance portfolio

Table 4 gives the distribution of company bond issuance among different corporate governance portfolio. E-index portfolio is constructed according to the different entrenchment index of each issuing firms. Firms whose E-index equal to 0 or 1 are grouped into E-index portfolio 1; 2 into portfolio 2; 3 into portfolio 3 and 4 or 5 into portfolio 4. G-index portfolio is constructed according to the different governance index of each issuing firm. Firms with G-index that falls into a band of 3 to 8 are assigned to G-index portfolio 1; 9 and 10 to portfolio 2; 11 and 12 to portfolio 3 and 13 and above to portfolio 4.

Panel A: Bond issuance distribution by E-index portfolio

			Per Firm Statistic		
E-index Portfolio	Frequency	Cumulative Frequency	Mean	Max	Min
1	107	107	1.65	5	1
2	91	198	1.54	4	1
3	86	284	1.65	4	1
4	87	371	1.77	4	1

Panel B: Bond issuance distribution by G-index portfolio

			Per Firm Statistic		
G-index Portfolio	Frequency	Cumulative Frequency	Mean	Max	Min
1	115	115	1.69	5	1
2	94	209	1.62	4	1
3	97	306	1.59	4	1
4	65	371	1.71	3	1

Table 5

Average Earnings Management Surrounding Seasoned Bond Offering (E-index)

The sample consists of 371 seasoned bond issues during January 1991 to December 2006. A seasoned bond issue is defined as one offered by a company that has already issued debt to the public. Relative year 0 is the year in which the company made the offering. E is the entrenchment index defined as the number of protective provisions adopted by a company. It's a proxy for a firm's corporate governance. Firms with high E-index is considered more manager-friendly whereas companies with low E-index are more shareholder-friendly. Companies are grouped into different portfolios according to their E-index to compare the different magnitude of earnings management activity with different corporate governance strength.

To estimate the earnings management efforts of a company, I follow the approach employed in Teoh, et al (1998). Discretionary current accruals (DCA) are used as a measurement for the earnings management activity of a company. Positive and significant DCA indicates significant efforts to manage a company's earning upwards. DCA is estimated by 1) running cross sectional regressions in each industry with current accruals as dependent variable and changes in sales as independent variable; 2) using the estimated coefficients to compute the expected change in current accruals for issuing firms; and 3) subtracting the expected accruals from the actual current accruals of sample firms. The balance is the calculated DCA of an issuing firm, i.e., its earnings management.

	Full Sample		Portfolio							
			E-Index=4,5,6		E-Index=3		E-Index=2		E-Index=1,0	
Year	EM	t-stat.	EM	t-stat.	EM	t-stat.	EM	t-stat.	EM	t-stat.
-2	0.34%	1.60	**0.74%**	**1.71***	0.13%	0.28	0.36%	0.88	0.16%	0.40
-1	0.17%	0.78	**0.88%**	**2.03****	0.09%	0.19	-0.01%	-0.03	-0.18%	-0.43
0	0.26%	1.12	0.42%	0.92	0.48%	0.97	-0.43%	-0.97	0.54%	1.21
+1	0.11%	0.52	0.52%	1.18	-0.02%	-0.05	-0.22%	-0.48	0.18%	0.42
+2	0.23%	1.05	0.43%	1.13	0.27%	0.64	-0.03%	-0.06	-0.20%	-0.46

*, **, and *** denote statistical significance at the 10%, 5% and 1% level respectively, using a two-tailed test.

Table 6

Difference in Earnings Management

(Compared with the most poorly governed firms measured by E-index)

This table gives differences in the earnings management effort between the most entrenched firm portfolio and those less entrenched ones. E-index is used here as the proxy for corporate governance. The earnings management figures are obtained following the same method. A one way non-parametric test is employed to compare the means of different groups. In almost every case, the earnings management of the most poorly governed firm is larger than firms with a better governance structure. And in year -1, the earnings management difference is significantly larger than zero especially when compared with the best governed firms.

	E-Index=3		E-Index=2		E-Index=1,0	
Year	DEM	z-stat.	DEM	z-stat.	DEM	z-stat.
-2	0.61%	1.01	0.38%	0.43	0.58%	0.91
-1	**0.79%**	**1.42***	**0.89%**	**1.47***	**1.06%**	**1.95****
0	-0.06%	-0.10	0.85%	**1.27***	-0.12%	-0.03
1	0.54%	1.05	0.74%	**1.47***	0.34%	0.62
2	0.16%	0.37	0.46%	0.43	0.63%	1.04

*, **, and *** denote statistical significance at the 10%, 5% and 1% level respectively, using a two-tailed test.

Table 7

Cross-Sectional Regression Results for Earnings Management (E-index)

This table shows OLS regression of corporate governance and other firm-specific variables on the earnings management in year -1 and year -2 prior to seasoned bond offerings. The dependent variable is the issuing firms' earnings management in year -1 and year -2 prior to the bond offering respectively. Independent variables included: Edum, a dummy variable that equals one when the entrenchment index is above 4; LEV equals the firm's total debt to total assets ration; CAPX equals the firm's capital expenditure deflated by its total assets. LEV and CAPX are measured at the fiscal year end prior to the underlying earnings management estimates.

	Model			
	EM in year -1		EM in year -2	
	1	2	3	4
Intercept	-0.0001	0.0004	0.0018	0.0050
	(-0.03)	(0.09)	(0.83)	(1.04)
Edum	**0.0078***	**0.0081***	**0.0090****	**0.0097****
	(1.76)	(1.80)	(2.00)	(2.14)
LEV		-0.0018		-0.0070
		(-0.14)		(-0.60)
CAPX		-0.0033		-0.0159
		(-0.09)		(-0.52)
F-value	3.11*	1.09	3.99**	1.68

*, **, and *** denote statistical significance at the 10%, 5% and 1% level respectively, using a two-tailed test.

Table 8

Average Earnings Management Surrounding Seasoned Bond Offering (G-index)

The sample consists of 371 seasoned bond issues during January 1991 to December 2006. A seasoned bond issue is defined as one offered by a company that has already issued debt to the public. Relative year 0 is the year in which the company made the offering. G is the governance index defined as the number of protective provisions adopted by a company. It's a proxy for a firm's corporate governance. Firms with high G-index is considered more manager-friendly whereas companies with low G-index are more shareholder-friendly. Companies are grouped into different portfolios according to their G-index to compare the different magnitude of earnings management activity with different corporate governance strength.

To estimate the earnings management efforts of a company, I follow the approach employed in Teoh, et al (1998). Discretionary current accruals (DCA) are used as a measurement for the earnings management activity of a company. Positive and significant DCA indicates significant efforts to manage a company's earning upwards. DCA is estimated by 1) running cross sectional regressions in each industry with current accruals as dependent variable and changes in sales as independent variable; 2) using the estimated coefficients to compute the expected change in current accruals for issuing firms; and 3) subtracting the expected accruals from the actual current accruals of sample firms. The balance is the calculated DCA of an issuing firm, i.e., its earnings management.

	Full Sample		Portfolio							
			G-Index=13-16		G-Index=11,12		G-Index=9,10		G-Index=3-8	
Year	EM	t-stat.	EM	t-stat.	EM	t-stat.	EM	t-stat.	EM	t-stat.
-2	0.34%	1.60	0.87%	**1.80***	-0.01%	-0.05	0.48%	1.25	0.13%	0.39
-1	0.17%	0.78	0.88%	**1.72***	0.07%	0.18	0.43%	1.2	-0.51%	-1.45
0	0.26%	1.12	0.69%	1.37	-0.04%	-0.11	0.10%	0.26	0.05%	0.14
+1	0.11%	0.52	0.43%	0.96	0.42%	1.21	0.23%	0.55	-0.31%	-0.87
+2	0.23%	1.05	0.37%	0.79	0.87%	2.72***	-0.14%	-0.37	-0.05%	-0.14

*, **, and *** denote statistical significance at the 10%, 5% and 1% level respectively, using a two-tailed test.

Table 9

Difference in Earnings Management

(Compared with the most poorly governed group of issuing firms measured by G-index)

This table gives differences in the earnings management effort between the most entrenched firm portfolio and those less entrenched ones. G-index is used here as the proxy for corporate governance. The earnings management figures are obtained following the same method. A non-parametric test is employed to compare the means of different groups. In almost every case, the earnings management of the most poorly governed firm is larger than firms with a better governance structure. And in year -1, the earnings management difference is significantly larger than zero especially when compared with the best governed firms.

	G-Index=11,12		G-Index=9,10		G-Index=3-8	
Year	DEM	z-stat.	DEM	z-stat.	DEM	z-stat.
-2	0.88%	**1.85****	0.39%	0.73	0.74%	**1.26***
-1	0.81%	**1.66****	0.45%	0.74	1.39%	**2.36*****
0	0.73%	**1.53***	0.59%	1.12	0.64%	1.07
1	0.01%	0.03	0.20%	0.32	0.74%	**1.31***
2	-0.50%	-0.15	0.51%	0.86	0.42%	0.71

*, **, and *** denote statistical significance at the 10%, 5% and 1% level respectively, using a two-tailed test.

Table 10

Cross-Sectional Regression Results for Earnings Management (G-index)

This table shows OLS regression of corporate governance and other firm-specific variables on the earnings management in year -1 and year -2 prior to seasoned bond offerings. The dependent variable is the issuing firms' earnings management in year -1 and year -2 prior to the bond offering respectively. Independent variables included: Gdum, a dummy variable that equals one when the governance index is above 13; LEV equals the firm's total debt to total assets ration; CAPX equals the firm's capital expenditure deflated by its total assets. LEV and CAPX are measured at the fiscal year end prior to the underlying earnings management estimates.

	Model			
	EM in year -1		EM in year -2	
	1	2	3	4
Intercept	0.0000	0.0048	0.0002	0.0022
	(0.01)	(0.93)	(0.09)	(0.43)
Gdum	0.0065	0.0075	**0.0088***	**0.0092***
	(1.19)	(1.48)	(1.69)	(1.74)
LEV		0.0001		-0.0083
		(0.00)		(-0.67)
CAPX		0.0147		0.0064
		(0.38)		(0.20)
F-value	1.42	0.76	2.84*	1.21

*, **, and *** denote statistical significance at the 10%, 5% and 1% level respectively, using a two-tailed test.

Table 11

Average Abnormal Returns

Surrounding the Seasoned Bond Offering Announcements (E-index)

Table 5 gives the results of average abnormal returns estimated based on a simple market model over the seven days surrounding the seasoned bond offering announcement. The market model is estimated over a 195-day period. The sample includes 188 companies that have had seasoned bond offering during 1991 to 2006 and 371 company issues in total. Sample firms are categorized into four different governance portfolios according to their entrenchment index developed by Bebchuk, Cohen, and Farrell (2004). E-index is a measure of a company's corporate governance practice. Firms in the highest E portfolio have an E index equal to 4, 5, or 6. Managers in these companies are more entrenched and have more discretion over the company resource. Firms in the lowest E portfolio have an E index equal to 1 and 0. These companies are considered as having relatively better corporate governance practice.

	Full Sample		Portfolio							
			E-Index=4,5,6		E-Index=3		E-Index=2		E-Index=1,0	
Day	AR	t-stat	AR	t-stat	AR	t-stat	AR	t-stat	AR	t-stat
-3	0.03%	0.5	0.01%	0.05	0.17%	1.14	0.07%	0.53	-0.08%	-0.65
-2	-0.19%	***-2.96	-0.32%	**-2.39	-0.28%	**-2.12	0.01%	0.09	-0.18%	-1.58
-1	-0.05%	-0.7	-0.01%	-0.05	-0.24%	-1.63	-0.07%	-0.49	-0.08%	0.57
0	-0.01%	-0.08	**0.38%**	**2.52	-0.39%	***-3.1	0.08%	0.56	-0.07%	-0.54
1	0.20%	***2.68	0.26%	1.61	0.28%	*1.92	0.08%	0.55	0.18%	1.33
2	0.11%	1.39	0.25%	1.49	-0.11%	-0.70	0.09%	0.62	0.18%	1.23
3	0.10%	1.41	0.28%	*1.89	0.01%	0.05	0.08%	0.61	-0.09%	-0.75
Window										
(-1,1)	0.14%	1.05	**0.63%**	**2.14	-0.35%	-1.17	0.09%	0.38	0.03%	0.12

*, **, and *** denote statistical significance at the 10%, 5% and 1% level respectively, using a two-tailed test.

Table 12

Cross-Sectional Regression Results for Cumulative Abnormal Returns (E-index)

This table shows OLS regression of corporate governance and other firm-specific variables on the average cumulative abnormal stock return surrounding seasoned bond offerings. The dependent variable is the issuing firms' three-day CAR over the window (-1, 1). Independent variables included: Edum, a dummy variable that equals to one when the entrenchment index is above 4; EM is the average earnings management during the 2 years prior to the bond offering; CONTAM is a dummy variable that equals one when coincident comfounding news appears in the seven days surrounding the bond offering announcements; LEV equals the firm's total debt to total assets ratio; CAPX equals the firm's capital expenditure deflated by its total assets; ROA is the firm's average return on asset ratio during the 3 years leading up to the bond offering year; SALES is the firm's average revenue deflated by total assets during the 3 years prior the bond offering year. LEV and CAPX are measured as of the fiscal year-end immediately preceding the bond offering.

	Model				
	1	2	3	4	5
Intercept	-0.0001	0.0001	-0.0002	0.0007	0.0024
	(-0.05)	(0.05)	(-0.10)	(0.22)	(0.47)
Edum	**0.0073****	**0.0077****	**0.0073****	**0.0074****	**0.0083****
	(2.37)	(2.49)	(2.36)	(2.40)	(2.58)
EM		-0.064			-0.0612
		(-1.35)			(-1.27)
CONTAM			0.0003		0.0002
			(0.11)		(0.06)
LEV				-0.0030	-0.0025
				(-0.32)	(-0.26)
CAPX					-0.0097
					(-0.31)
ROA					0.0139
					(0.46)
SALES					-0.0017
					(-0.93)
F-value	5.62**	3.73**	2.81*	2.92*	1.20

*, **, and *** denote statistical significance at the 10%, 5% and 1% level respectively, using a two-tailed test.

Table 13

Average Abnormal Returns

surrounding the Seasoned Bond Offering Announcements (G-index)

Table 5 gives the results of average abnormal returns estimated based on a simple market model over the seven days surrounding the seasoned bond offering announcement. The market model is estimated over a 195-day period. The sample includes 188 companies that have had seasoned bond offering during 1991 to 2006 and 371 company issues in total. Sample firms are categorized into four different governance portfolios according to their government index developed by Gompers et al (2003). G-index is a measure of a company's corporate governance practice. Firms in the highest G portfolio have a G index equal to 13, 14, 15, or 16. Managers in these companies are more entrenched and have more discretion over the company resource. Firms in the lowest E portfolio have a G-index ranging from 3 to 8. These companies are considered as having relatively better corporate governance practice.

	Full Sample		Portfolio							
			G-Index=13-16		G-Index=11,12		G-Index=9,10		G-Index=3-8	
Day	AR	t-stat	AR	t-stat	AR	t-stat	AR	t-stat	AR	t-stat
-3	0.03%	0.37	-0.27%	-1.54	0.21%	1.58	-0.05%	-0.37	0.12%	0.87
-2	-0.09%	-1.41	-0.32%	**-2.19	-0.01%	-0.12	0.05%	0.36	-0.14%	-1.04
-1	-0.01%	-0.16	0.03%	0.19	-0.07%	-0.54	-0.16%	-1.08	0.13%	1.04
0	-0.01%	-0.12	0.30%	***1.90**	-0.22%	*-1.67	0.10%	0.79	-0.11%	-0.87
1	0.12%	*1.68	0.19%	1.3	0.17%	1.02	0.11%	0.76	0.05%	0.41
2	0.05%	0.72	0.10%	0.56	0.07%	0.45	-0.01%	-0.09	0.07%	0.53
3	0.08%	1.18	0.28%	1.53	0.19%	1.29	-0.03%	1.58	-0.02%	-0.14
Window										
(-1,1)	0.10%	0.73	0.52%	***1.67**	-0.12%	-0.41	0.05%	0.18	0.07%	0.37

*, **, and *** denote statistical significance at the 10%, 5% and 1% level respectively, using a two-tailed test.

Table 14

Cross-Sectional Regression Results for Cumulative Abnormal Returns (G-index)

This table shows OLS regression of corporate governance and other firm-specific variables on the average cumulative abnormal stock return surrounding seasoned bond offerings. The dependent variable is the issuing firms' three-day CAR over the window (-1, 1). Independent variables in clued: G_DUM is a dummy variable that equals one when the governance index is above 13; EM is the average earnings management during the 2 years prior to the bond offering; CONTAM is a dummy variable that equals one when coincident compounding news appears in the seven days surrounding the bond offering announcements; LEV equals the firm's total debt to total assets ration; CAPEX equals the firm's capital expenditure deflated by its total assets; ROA is the firm's average return on asset ratio during the 3 years leading up to the bond offering year; SALES is the firm's average revenue deflated by total assets during the 3 years prior the bond offering year. LEV and CAPEX are measured as of the fiscal year-end immediately preceding the bond offering.

	Model				
	1	2	3	4	5
Intercept	0.0004	0.0006	0.0002	0.0025	0.0020
	(0.30)	(0.41)	(0.10)	(0.86)	(0.42)
Gdum	**0.0059***	**0.0062***	**0.0059***	**0.0057***	**0.0060***
	(1.84)	(1.94)	(1.83)	(1.78)	(1.81)
EM		-0.0615			-0.0580
		(-1.35)			(-1.25)
CONTAM			0.0007		0.0013
			(0.27)		(0.47)
LEV				-0.0075	-0.0082
				(-0.85)	(-0.86)
CAPEX					0.0058
					(0.19)
ROA					0.0006
					(0.02)
SALES					-0.0001
					(-0.01)
F-value	3.39*	2.61*	1.72	2.10	0.84

*, **, and *** denote statistical significance at the 10%, 5% and 1% level respectively, using a two-tailed test.