# The Effect of Corporate Governance on the Cost of Bank Loans

By

Danah Baqais (A00367026)

A research project submitted in partial fulfillment of the requirements for the degree of Master of Finance.

Saint Mary's University

Copyright Danah Baqais 2013

Written for MFIN 6692 under the direction of

Dr. Colin Dodds

Approved: <u>Dr. Colin Dodds</u>

Faculty Advisor

Approved: <u>Dr. Francis Boabang</u>

MFIN Director

Date: September 23, 2013

#### Acknowledgments

I wish to express my sincere gratitude to Dr. Colin Dodds and Dr. Francis Boabang for their guidance and support. I take this opportunity to thank Dr. Mohammed Rahaman for his time, effort, and encouragement in carrying out this project work.

Apart from the efforts of myself, the success of this project would not have been possible without the support, patience, and a lot of prayers of my mother Hanan Alqahtani, my father Hasan Baqais, and my beloved sisters and friends. Last but not least, a special thanks to my brother Mohammed and my brother in-law Hussain for their assistance throughout my studies.

#### **Abstract**

# The Effect of Corporate Governance on the Cost of Bank Loans By Danah Baqais

In this paper we try to investigate the effect of corporate governance on the cost of external debt financing. Using a sample of North American companies from 1990 to 2006, we find that high corporate governance levels raises a company's credit rating by the agencies leading to an increase in external financing capacity by lowering the cost debt. We also put a spotlight on specified corporate governance areas and their effect on the cost of bank loans. Our results suggest that banks take into account the risk of poor corporate governance when pricing and designing debt contracts.

# **Table of Contents**

Acknowledgment	2
Abstract	3
Table of Contents	4
Chapter1: Introduction	5
Chapter2: literature Review	8
2.2 The board of directors and management quality	8
2.3 Information disclosure	9
2.4 Auditing quality	10
Chapter3: Corporate governance characteristics	11
3.2 Ownership structure	11
3.3 Financial transparency	12
3.4 Board structure	13
3.4.1 Board independence	13
3.4.2 Board expertise	13
3.4.3 Board size	14
Chapter4: Methodology	14
4.1 Variables and data	14
4.1.1 Data	15
4.1.2 Variables.	18
4.2 The Model	22
Chapter5: The Empirical Results	22
Chapter6: Conclusion	27
Chantar7. References	28

# **Chapter 1:**

#### 1.1 Introduction

Corporate governance refers to the set of systems, principles and processes by which a company is governed. It is well-known that the main goal for a company's corporate governance is to maximize shareholder wealth and to provide protection to all stakeholders by the compliance of the best practice principles and regulations. Evaluation of corporate governance performance differs based on each company's specific condition but there are some basic guidelines to eliminate potential risks to occur. The importance of corporate governance arises from its effects on many different aspects in any institution such as firm performance, risk management, and economic growth to name but a few. However, what concerns us in this paper is the effect of the quality of corporate governance on the cost of bank loans and to what extent.

Bankers are concentrating on how to assess the creditworthiness of a borrower by two methods, which are quantitative and qualitative measures. The objective is to be able to evaluate the default risk on a future loan and determine the answer of what is the accurate number to price a loan for an institutional borrower, as well as non-price terms such as covenants and collateral. Therefore, many studies have already detected the relationship between the default risk and the cost of debt and came up with results that the higher the default risk, the higher the cost of bank loans.

In this paper we will put a spotlight on the qualitative area, more specifically on how the quality of corporate governance affects the cost of loans issued by banks from 1990 to 2006 using two sets of data. The first one is considered as a way to measure corporate governance and it is called the G-Index. The second one covers bank loans at the level of individual US firms.

The Governance Index is a measure of the quality of corporate governance by adding up one point for each provision regarding the absence or existence of each company's specific provision. It is divided into five areas: Delay (Blank check, Classified Board, Special Meeting, and Written Consent), Protection (Compensation Plans, Contracts, Golden Parachutes, Indemnification, Liability, and Severance), Voting (Bylaws, Charter, Cumulative Voting, Secret Ballot, Supermajority, and Unequal Voting), Other (Antigreenmail, Director's Duties, Fair Price, Pension Parachutes, Poison Pill, and Silver Parachutes), and State (Antigreenmail Law, Business Combination Law, Cash-Out Law, Director's Duties Law, Fair Price Law, and Control Share Acquisition Law). The total number of provisions is 28, and the index is higher for low corporate governance quality and low for high corporate governance quality. The data were collected for around 1500 large firms during 14 years between1990 to 2004. However, in our model we will estimate that the result related to 2004 up to 2006.

The second set of data come from the Loan Pricing Corporation's (LPC) DealScan data, which is one of the most reliable, extensive, and historical data sets from 1990 up to 2006 the year before the noticeable jump on loan prices during the 2007/2008 financial crises.

To test the relationship between the corporate governance and the debt cost we will use panel data analysis that will capture the correlation between corporate governance and cost of debt, and whether it is strong or weak correlation. Therefore, the higher the correlation the stronger the effect of corporate governance quality on the cost of bank loan would be. Creditors to ensure that they will be paid back and in the case of risk they in turn raise the cost of debt, which will benefit the banking system and harm the borrower potential growth.

# **Chapter 2:**

#### 2.1 Literature review

Recently, many research papers have been published regarding the factors that affect the cost of debt the most. Strong and effective corporate governance could benefit the company by cutting the cost of bank loans down with the governance being the core. Examples of good governance include the board of directors and management quality, auditing, and information disclosure (Biao et al 2013).

# 2.2 The Board of directors and management quality

Fields et al (2012) shows that the higher the board's quality, independence, and experience, the lower the interest rate on bank loan, and less regulation in the non-price terms. The same adverse relationship between management quality and the cost of debt is shown clearly with no evidence saying that the lower cost of loan because of high management quality will lead to more regulation and restriction on non-price terms (Mohammad, and Zaman 2013).

#### 2.3 Information disclosure

Many papers have provided evidence regarding the effect of corporate timely and detailed information disclosure on eliminating the possibility of borrower's default risk as well as the potential of agency conflicts between shareholder and creditors which in turn

will reduce the bank cost of loans and raise the credit rating (Partha, 1998). However, information disclosure is a very wide research area, so they did just not stop at the influence of the required information disclosure on the cost of bank loan. Rather they have given results about the role of voluntary information disclosure on the cost of debt this is an insignificant and negative relationship.

# 2.4 Auditing quality

An audit quality and its effect on cost of debt the research found that the Big 4 audits, who are the four largest auditing and accounting firms for large publicly traded firms in the U.S., are associated with a lower cost of debt. Moving from Big 4 to non-Big 4 will cause an increase in cost of debt reducing the ability to acquire a bank loan (Biao et al 2013). Additionally, according to Karjalainen (2011) the firms that made changes on their outcomes and opinion about their report, which would lead to lower reporting quality, will have a higher interest rate.

In this research paper we are focusing on the cost of debt as the interest rate on a bank loan. The cost of a loan is not limited to the just interest rate. As mentioned in Chapter 1, it covers other factors including covenant, maturity, and syndication (non-price terms) as well as the agency costs that arise from the potential conflict of interest between shareholders and creditors. Agency costs are a rich research area, and it has been reported that the improvement in corporate governance with higher external financing will lead to a decrease in agency costs when the shareholder in a levered firm takes actions that cause an unjust wealth transfer from creditors to shareholder (Chae, et al 2009).

More generally, the research papers that indicate the relationship between corporate governance and cost of bank loan mostly find their results based on one or two factors of corporate governance, but not corporate governance as a whole which we will deal with in this research paper using G-index which contains the five categories including 28 provisions as discussed above.

# **Chapter 3**

# 3.1 Corporate governance characteristics

As noted in Chapter 2 on the literature review, corporate governance has a strong influence on the cost of a bank loan. Prior studies have tended to focus on one component of corporate governance and its effect on the cost of debt. However, this paper will examine the relationship between corporate governance and the cost of bank loan. Before doing so, we would like to show how the cost of debt is affected by each one of the main three attributes of corporate governance namely ownership structure, financial disclosure, and board structure (Ashbaugh-Skaife, et al 2006).

# 3.2 Ownership structure

Shareholders, who have an ownership of publicly traded firms, usually have strong concerns about their residual claims protection. Governance that monitors management practices and limits any profiteering actions protects the rights for all stakeholders including creditors and shareholders. However, that is not an easy task to be done by management. Shareholders with the power of voting in theory can force management to take risky projects where in the case of success will get the entire benefit leaving zero extra benefit to bondholders, and in the case of failure, bondholders will bear the loss. As a result the ownership structure is very a important component of corporate governance,

and is the main cause of wealth transfer from bondholders to shareholders.

Under the wealth transfer situation, as the percentage of ownership by institutional investors increases, the possibility of these investors to use their power increases as well, which leads to high likelihood of interest conflicts between stakeholder and in turn a negative impact on credit rating.

The company's credit rating specially by the Big Three credit rating agencies: Moody's Investors Services, Standard & Poor's, and Fitch Ratings, affects the debt cost and the studies have proven that the market strongly reacts to downgrades of ratings more than to upgrades in pricing for both bonds and stocks. For example, the European Central Bank noted that the price reaction to downgrading is not symmetric to upgrading on stock returns (Pett, 2013).

# 3.3 Financial transparency

Several finance papers argue that managers deprive wealth from creditors, and they add that timely and detailed financial reports have a noticeable effect on reducing debt contact costs. Specially, non-price terms such as covenants that restrict dividends payment or engage in more debt contracts. Creditors prevent corporations from shifting the wealth from them to shareholders and risk from shareholders to bondholders by exercising their power and putting some restrictions on capital expenditures, asset sales, or dividends payment, and these restrictions are based on financial information (Ashbaugh-Skaife, et al 2006).

#### 3.4 Board structure

The board structure plays an important role providing an independent oversight of firm performance or actions related to each committee; auditing, compensation, nominating, and investment. These committees are segments of the board that their members meet separately to deal with some specific functions.

# 3.4.1 Board independence

The independence of the board of directors is a very useful tool in monitoring and control of the enterprise actions. Creditors value the independence of board of directors because of their strong control on management activities. Therefore protect them from any conflict of interest as well as the default risk for the company as a whole. It has been proved (see Chapter 2) that board independence is positively related to credit rating, and as we noted earlier in this paper that firm credit rating is inversely related to the cost of a bank loan. Therefore, board independence should be negatively related to the cost of debt.

### 3.4.2 Board expertise

It is logical that board members with long experience and superior knowledge will help to predict a better future to the company and eliminate the chance of default. Credit rating agencies account for board members expertise and look for the percentage of the board members who were on the board of other companies and the reputation for each individual on the board.

Credit rating agencies give positive points for the board expertise and that will lead to lower cost of debt.

#### 3.4.3 Board size

Research has shown that the large size board of directors has an effect on raising the ability to monitor management team and control their actions because of the large number of expertise and knowledgeable board members (Adams and Mehran, 2005; Chaganti et al., 1985; Klein, 2002). However, John and Senbet (1998) argue that a large number of directors on the board will be costly by the poor communication between members and the time wasted to come up with decisions.

# **Chapter4: Methodology**

#### 4.1 Variables and data

#### 4.1.1 Data

This paper will capture the effect of company's corporate governance level on the cost of bank loan. We will consider North American companies in our analysis using three sets of data; G-index, (LPC) Loan Price Corporation, and Compustat during the period of 16 years from 1990 up to 2006. We will use the data for this period because the G-index data is available from 1990, but we do not want to include the period of the financial crises 2007\2008 when the cost of bank loans jumped significantly. However, the G-index data is up to 2004 and in this paper we will assume that the corporate governance level in 2006 will be the same as 2004 corporate governance level.

First, the G-index is a proxy to measure the level of shareholders rights for 1500 large firms by adding points for each provision. Every provision gives management the power to restrict shareholders rights, such as suing the directors, bylaws, calling private meetings, or changing all of them. Table 4.1 shows the percentage of firms with each one of corporate governance provisions for eight years from 1990 to 1998 with two years gap between every a two results. Table 4.2 presents the corporate governance statistics for the same period of time from 1990 to 1998.

**Table 4.1 Governance Provisions** 

	Percentage of firms with governance provisions in			
	1990	1993	1995	1998
Delay				
Blank Check	76.4	80.0	85.7	87.9
Classified Board	59.0	60.4	61.7	59.4
Special Meeting	24.5	29.9	31.9	34.5
Written Consent	24.4	29.2	32.0	33.1
Protection				
Compensation Plans	44.7	65.8	72.5	62.4
Contracts	16.4	15.2	12.7	11.7
Golden Parachutes	53.1	55.5	55.1	56.6
Indemnification	40.9	39.6	38.7	24.4
Liability	72.3	69.1	65.6	46.8
Severance	13.4	5.5	10.3	11.7
Voting				
Bylaws	14.4	16.1	16.0	18.1
Charter	3.2	3.4	3.1	3.0
Cumulative Voting	18.5	16.5	14.9	12.2
Secret Ballot	2.9	9.5	12.2	9.4
Supermajority	38.8	39.6	38.5	34.1
Unequal Voting	2.4	2.0	1.9	1.9
Other				
Antigreenmail	6.1	6.9	6.4	5.6
Directors' Duties	6.5	7.4	7.2	6.7
Fair Price	33.5	35.2	33.6	27.8
Pension Parachutes	3.9	5.2	3.9	2.2
Poison Pill	53.9	57.4	56.6	55.3
Silver Parachutes	4.1	4.8	3.5	2.3
State				
Antigreenmail Law	17.2	17.6	17.0	14.1
Business Combination Law	84.3	88.5	88.9	89.9
Cash-Out Law	4.2	3.9	3.9	3.5
Directors' Duties Law	5.2	5.0	5.0	4.4
Fair Price Law	35.7	36.9	35.9	31.6
Control Share Acquisition Law	29.6	29.9	29.4	26.4
Number of Firms	1357	1343	1373	1708

Source: Corporate Governance and Equity Prices by Gompers et al (2003)

Note: This table presents the percentage of firms with each provision between 1990 and 1998.

Table 4.2 The Governance Index.

	1990	1993	1995	1998
Governance Index				
Minimum	2	2	2	2
Mean	9.0	9.3	9.4	8.9
Median	9	9	9	9
Mode	10	9	9	10
Maximum	17	17	17	18
Standard Deviation	2.9	2.8	2.8	2.8
Number of Firms				
G≤5 (Democracy Portfolio)	158	139	120	215
G=6	119	88	108	169
G=7	158	140	127	186
G=8	165	139	152	201
G=9	160	183	183	197
G=10	175	170	178	221
G=11	149	168	166	194
G=12	104	123	142	136
G=13	84	100	110	106
G≥14 (Dictatorship Portfolio)	85	93	87	83
Total	1357	1343	1373	1708
Subindex Means				
Delay	1.8	2.0	2.1	2.1
Protection	2.4	2.5	2.5	2.1
Voting	2.2	2.1	2.1	2.2
Other	1.1	1.2	1.1	1.0
State	1.8	1.8	1.8	1.7

Source: Corporate Governance and Equity Prices by Gompers et al (2003)

Note: This table provides summary statistics on the distribution of G, the Governance Index, and the sub-indices (Delay, Protection, Other, Voting, and State) over time.

Second, in this paper we collect our cost of bank loan data from DealScan database of (LPC) Loan Pricing Corporation, which gives detailed data for all US and foreign commercial loan. The LCP DealScan database is compiled from the Security and Exchange Commission (SEC) corporate financial fillings for both loans and multiple loans.

Third, in order to get the companies' size we will use the log of total asset from the Compustat. Compustat is a database that is published by (S&P) Standard and Poor's, and it gives informative financial data for more than 40 years.

#### 4.1.2 Variables

In this paper we are dealing with five variables, four of them are independent; G-index, amount, maturity, and size and one is dependent variable; cost of bank loan. The main variables of interest are cost of a bank loan, and the G-index.

#### 4.1.2.1 Cost of bank loan

Our dependent variable is the cost of a bank loan, which is the important outcome of our analysis. Usually, the cost of a bank loan is calculated as the loan spread over LIBOR (London Interbank Offered Rate) at the inception of the loan as a way to measure loan cost from a bank. The cost of a bank loan is given through DealScan database as "All-in-Drawn" which is the amount paid by borrowers in basis points over LIBOR. As well as the loan spread with any extra annual fee that is paid by the borrower of the loan to the bank. We will transform "All-in-drawn" to the logarithm in our analysis, and then windsorize it to wlogspreed.

#### 4.1.2.2 **G-index**

We have briefly mentioned the 24 G-index provisions in the introductory part. However, in this section we will discuss G-index provisions in more detail.

- -Antigreenmail: is a provision that prevents the large shareholders to agree to sell their stocks back at premium and promise not to exercise their control on the company.
- -Blank Check preferred stock is used as a way of anti-takeover by placing them with friendly investors.
- **-Business Combination Laws**: enforce a legal authorized delay of sum kinds of transactions; (asset sales, mergers) between the firm and large shareholders.
- **-Bylaw** and **charter** prevent shareholders from amend the corporate governance documents.
- **-Cash-out Laws** prevent small shareholders to sell their stocks to large controlling shareholders at a high price.
- **-Classified Board** when the directors serve different overlapping terms.
- -Compensation Plans determine the amount paid from each agent's own sales such as cash out options or accelerate bonuses.
- **-Contract** is a way to indemnify the company from specified legal expense and judgments from lawsuits.

- -Control-share Acquisition laws and supermajority are requirements for agreement of mergers or other business activities that are above the threshold limit of state law
- **-Cumulative Voting** gives the shareholders the right to votes that will give minority shareholders to vote.
- -**Directors' Duties** open directors' eyes to consider constituencies other than shareholder for merger decisions.
- **-Fair-Price** asks a bidder to pay the highest price to all shareholders during specified period of time.
- **-Golden Parachutes** are agreements that show compensation to senior executives whether it is cash or non- cash.
- **-Indemnification** is used to indemnify directors from some legal expenses by bylaws, charter, or both.
- **-Liability** is a provision that limits directors' liability to the limit allowed by state law.
- **-Pension Parachutes** is a provision to protect financing for target acquisition from an acquirer who desires to use pension fund surplus cash.
- -**Poison Pills**: in the case of a hostile takeover, poison pills give their holders special rights.
- -Secret Ballot is a special independent third party that used to count proxy votes.
- -Executive Severance

- **-Silver Parachutes** they give severance payments for a change in corporate governance control.
- **-Special meeting** to limit any special meetings beyond the limit set by state law.
- **-Unequal Voting** limits the ability of some shareholders to vote while expand the rights for others.
- **-Written Consent** to limit actions that can be an establishment of thresholds above the limit of stated law.
- **4.1.2.3 Wlogamt:** is the winsorized logarithm loan amount using DealScan database.
- **4.1.2.4 Wlogmat**: is the windsorized logarithm loan maturity using DealScan database.
- **4.1.2.5 Wlogsize:** is the winsorized logarithm of company's total asset using Compustat database.
- **4.1.2.6 wlognet\_profit:** is the windsorized logarithm of company's net income calculated by simply deducting expenses from revenue using compustat database.
- **4.1.2.7 wlogleverage:** is the windsorized logarithm of company's leverage level using compusts database .
- **4.1.2.8 wlogQ:** is the windsorized logarithm of company's total market value divided by the total asset value (Tobin's Q) using compustat database.

#### 4.2 The Model

In this paper we will be using the Panel Data Model because the data that we are using are both cross sectional and time series. And it is both long and short Panel data due to the large number of accompanies as well as time periods. This test we will distinguish which type of Panel data to use.

Hausman test is used to decide whether a fixed effect should be used or a Random effect estimator. If the Hausman test estimator is insignificant we will use the Random effects, but if it is significant, this mean that if we use Random effect estimators on the Fixed Effect Model, we will get inconsistent results.

The fixed effect model is used in this paper, which will allow the individual-specific effects to be correlated with the regressors

Wlogspreed= α+ β1wlogamt + β2 wlogmat+ β3 wlogsize + β4 G-index+ β5
wlognet\_profit + β6 wlogleverage + β7wlogQ
4.1

# Chapter 5

# **5.1** Empirical results

We are using the panel data analysis to study the relationship between the cost of bank loans and the corporate governance level by chosen factors described above. First we will start with the regression results of the Hausman test. Table 4.3 shows that the p-value of Chi Square is very significant indicating that the fixed and random coefficients are different therefore we should use the Fixed Effect Model.

. hausman fixed random

Table 4.3

	Coeffi	cients ——		
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fixed	random	Difference	S.E.
wlogsize	.0606636	0819728	.1426364	.0098699
wlogmat	.0391276	.0648405	0257129	.0011377
wlogamt	1522888	1499149	0023739	.0015062
gindex2	.0638798	.0043466	.0595332	.0053528
wlognet_pr~t	0707068	0695673	0011395	.0043463
wlogleverage	.0595166	.0893203	0298037	.0054546
wlogQ	4067991	4117204	.0049213	.0199588

 $\mbox{$b$ = consistent under Ho and Ha; obtained from xtreg} \mbox{$B$ = inconsistent under Ha, efficient under Ho; obtained from xtreg}$ 

Test: Ho: difference in coefficients not systematic

$$chi2(7) = (b-B)'[(V_b-V_B)^{-1}](b-B)$$
  
= 888.18  
Prob>chi2 = 0.0000

Second, looking at Table 4.4, it is obvious from the p-values (almost zero) that our results are statistically significant, which means that it is most likely that our results are not based on random sampling. Additionally, our independent variables have an effect on the cost of a bank loan. For example, the coefficient of wlogsize is -0.4233, which means that there is a negative relationship between the wlogspreed and wlogsize, the same logic for all other variables.

 $Table \ 4.4$  . pwcorr wlogspread wlogsize wlogmat wlogamt gindex2 wlognet\_profit wlogleverage wlogQ, s > iq

	wlogsp~d	wlogsize	wlogmat	wlogamt	gindex2	wlogne~t	wlogle~e
wlogspread	1.0000						
wlogsize	-0.4233 0.0000	1.0000					
wlogmat	0.1933 0.0000	-0.1398 0.0000	1.0000				
wlogamt	-0.4113 0.0000	0.4196 0.0000	-0.0334 0.0000	1.0000			
gindex2	-0.1458 0.0000	0.0500 0.0000	-0.0624 0.0000	0.1069 0.0000	1.0000		
wlognet_pr~t	-0.2056 0.0000	0.2360 0.0000	-0.0586 0.0000	0.0613 0.0000	-0.0360 0.0000	1.0000	
wlogleverage	0.1802 0.0000	-0.0517 0.0000	0.1397 0.0000	0.1000 0.0000	-0.0232 0.0013	-0.0892 0.0000	1.0000
wlogQ	-0.2144 0.0000	-0.1431 0.0000	0.0140 0.0647	0.0680 0.0000	-0.0056 0.4363	0.2370 0.0000	-0.1096 0.0000
	wlogQ						
wlogQ	1.0000						

Finally, after testing which type of Panel data analysis to use, we will now focus on our main test to prove all the theoretical research above. Running the Fixed Effect test ( see Table 4.5 ). We can observe the coefficients of each variable; wlogsize, wlogmat, wlogamt, gindex2, wlognet\_profit, wlogleverage, and wlogQ.

First, for the effect of company's size, loan maturity length, and company's leverage on the cost of bank loans, we got positive coefficients. But both of them are less than .1 indicating a weak realtionship between the company size, and loan maturity on debt cost. Second, the loan amount variable is influencing the loan spread negatively (-.1522), which means as the amount of loan become larger, the cost of borrowing will be lower. Additionally, the cost of bank loans is influnced negatively by the net profit, but the effect is weak while the Tobin's q ratio has a strong negative effect on the cost of debt. In other words, because the Tobin's q is less than one, which means when the company's shares are undervalued, that will make borrowing more expensive. Most importantly, the G-index variable and its effect on the cost of debt, from the G-index coeffecent of .064 we understand that when a company has a lower corporate governance level it will get higher points in the G-index which in turn will cause a higher cost of a bank loan.

Finally, we should look at two important points the P-value, and Rho. All p-values are statistically significant showing that our results are not based on random sampling. Rho at the end of the table, which is the percent of the variation that is explained by individual specific effects, in our test is relatively high indicating that it is not an idiosyncratic effect.

Table 4.5

. xtreg wlogspread wlogsize wlogmat wlogamt gindex2 wlognet\_profit wlogleverage wlogQ, fe

Fixed-effects (within) regression Group variable: gvkey	Number of obs = Number of groups =	11142 1945
R-sq: within = 0.1094 between = 0.0324 overall = 0.0592	Obs per group: min = avg = max =	1 5.7 51
corr(u_i, Xb) = -0.1257	F(7,9190) = Prob > F =	161.19 0.0000

wlogspread	Coef.	Std. Err.	t	P>ItI	[95% Conf.	Interval]
wlogsize wlogmat wlogamt gindex2 wlognet_pr~t wlogleverage wlogQ _cons	.0606636 .0391276 1522888 .0638798 0707068 .0595166 4067991 6.122572	.0124968 .007484 .0060588 .0066384 .0089125 .0093013 .0341399 .1387395	4.85 5.23 -25.14 9.62 -7.93 6.40 -11.92 44.13	0.000 0.000 0.000 0.000 0.000 0.000 0.000	.0361672 .0244573 1641654 .0508671 0881774 .0412839 4737209 5.850612	.0851601 .0537978 1404122 .0768924 0532363 .0777493 3398773 6.394533
sigma_u sigma_e rho	.72173846 .49278805 .682041	(fraction	of varia	nce due	to u_i)	

F test that all u\_i=0:

F(1944, 9190) =

6.76

Prob > F = 0.0000

# Chapter 6

#### 6.1. Conclusion

The purpose of our study is to investigate the effect of a company's corporate governance on the cost of bank loans using a sample of North American companies for the period from 1990 to 2006. This paper also focuses on how the individual variables within specified areas of corporate governance influence the cost of external debt financing including the effect of board of directors structure, ownership structure, and information disclosure/transparency. To be specific, will those individually or collectively increase the firm rating by the credit rating agencies knowing that they respond to downgrading activities more than any improvements.

Our results suggest that creditors do pay attention to a company's credit rating and more importantly that an increase in corporate governance level will lead to a lower G-index, which in turn will reduce the cost of bank loans. However, pricing a debt contract in our test does not depend only on the governance level, but also a company's other variables including leverage, net profitability, Tobin's Q, and size as well as some variables related to the debt its size, and maturity.

It is hoped that this paper is a step forward towards understanding the importance of corporate governance on pricing external debt financing and how the evaluation of the governance level will affect a company's financial conditions.

#### References

- Adams, R. B. and H. Mehran: 2005, Corporate Performance, Board Structure and Its Determinants in the Banking Industry. Working Paper, University of Queensland, http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=302593.
- Ashbaugh-Skaife, H., Collins, D. W., & LaFond, R. (2006). The Effects Of Corporate Governance On Firms' Credit Ratings. Journal of Accounting and Economics, 42(1-2), 203-243.
- Averkamp, H. (2013). What is Big 4 Accounting? | AccountingCoach.com Q&A.

  Accounting Questions and Answers | Accounting Blog.

  http://blog.accountingcoach.com/big-4-accounting/
- Biao, Y., Tao-ying, P., & Xin, L. (2013). The Influence of Corporate Governance and Independent Audit on the Cost of Debt - Springer. Home - Springer. Retrieved September 9, 2013, from http://link.springer.com/content/pdf/10.1007%2F978-3-642-38442-4\_30.pdf#
- Chae, J., Kim, S., & Lee, E. J. (2009). How Corporate Governance Affects Payout Policy Under Agency Problems And External Financing Constraints. Journal of Banking & Finance, 33(11), 2093-2101.
- Chaganti, R. S., V. Mahajan and S. Sharma: 1985, 'Corporate Board Size, Composition and Corporate Failures in the Retailing Industry', The Journal of Management Studies 22(4), 400–418.
- Compustat Definition | Investopedia. (2013). Investopedia Educating the world about finance. Retrieved September 9, 2013, from <a href="http://www.investopedia.com/terms/c/compustat.asp">http://www.investopedia.com/terms/c/compustat.asp</a>

- Fields, L. Paige, Donald R Fraser, and Avanidhar Subrahmanyam. "Board quality and the cost of debt capital: The case of bank loans." Journal of Banking & Finance 36.5 (2012): 1536–1547. Print.
- Five Cs Of Credit Definition | Investopedia. (2013). Investopedia Educating the world about finance. Retrieved September 9, 2013, from http://www.investopedia.com/terms/f/five-c-credit.asp#commentsControlPosition
- Gompers, P., Ishii, J., & Metrick, A. (2003). Corporate Governance And Equity Prices\*. Quarterly Journal of Economics, 118(1), 107-155.
- John, K. and L. W. Senbet: 1998, 'Corporate Governance and Board Effectiveness', Journal of Banking and Finance 22, 371–403.
- Karjalainen, J. (2011). Audit Quality and Cost of Debt Capital for Private Firms: Evidence from Finland. International Journal of Auditing, 15. Retrieved September 9, 2013, from http://dx.doi.org/10.1111/j.1099-1123.2010.00424.x
- Klein, A.: 2002, 'Economic determinants of audit committee independence', The Accounting Review 77(2), 435–452.
- Lorca, C., Sánchez-Ballesta, J., & García-Meca, E. (2011). Board Effectiveness and Cost of Debt. Journal of Business Ethics, 100, 613-631.
- Mohammad, R., & Zaman, A. A. (2013). Management quality and the cost of debt: Does management matter to lenders? . ScienceDirect.com | Search through over 11 million science, health, medical journal full text articles and books.. Retrieved September 9, 2013, from http://www.sciencedirect.com/science/article/pii/S0378426612003226
- Partha, S. (1998). Corporate Disclosure Quality and the Cost of Debt. The Accounting Review. Retrieved September 9, 2013, from http://www.jstor.org/stable/248186

- Pett, D. (2013). How credit ratings affect the markets | Financial Post. Financial Post | Canadian Business News, Investing and Commentary. Retrieved September 9, 2013, from http://business.financialpost.com/2013/03/13/how-credit-ratings-affect-the-markets/
- Thomson, I. (2009, January 18). What is corporate governance? Economic Times. Featured Articles From The Economic Times. Retrieved September 9, 2013, from http://articles.economictimes.indiatimes.com/2009-01-18/news/28462497\_1\_corporate-governance-satyam-books-fraud-by-satyam-founder