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ABSTRACT

Contrary to other forms of outside financing, the announcement of a bank loan agreement prompts a positive and significant market return. Throughout the literature, bank loans are deemed special and unique due to multiple benefits accruing to bank borrowers. The short-term positive market reaction is however inconsistent with the long-term underperformance of borrowing firms (Billet et al., 2006). We find that unlike shareholders, CEOs gain from the bank loan relation over the long-term. Specifically, we find that bank loan agreement elicits a significant increase in total compensation through an increase in non-performance based compensation components such as salary, bonus and other compensation. We also report a smaller proportion of performance based compensation following the bank agreement. Generally, the results suggest that subsequent to a major bank loan, CEOs seem to gain enough influence to shield their compensation from the firm's underperformance. In particular, this evidence supports the "uniqueness" of bank loan relations.

Keywords: *Bank loan, CEO compensation, corporate governance.*

INTRODUCTION

An extensive body of literature establishes the commercial banks' certification role pertaining to information advantage, special monitory abilities, and securities underwriting (e.g. Leland & Pyle, 1977; Diamond, 1984, 1991; Fama, 1985). Specifically, these studies argue that commercial banks possess the technical skills and capacities to monitor their corporate clients over extended periods of time and ensure more reliable disclosure. The capital market regards banks as firm insiders and therefore reacts positively to the announcement of a bank loan relation (e.g. James, 1987; Mikkelson & Partch, 1986; Billett, Flannery & Garfinkel, 1995). One may expect that this certification role affects corporate control mechanisms as well. In due course, commercial bank monitoring should be able to help mitigate corporate agency costs seeing that lending banks generally restrict managers from engaging in risky behavior and require more transparency and disclosure (Preece & Mullineaux, 1984).

An additional consequence of increased monitoring can equally be a valuable argument for a manager to negotiate higher compensation. In fact, when a CEO believes that there are no major risky investments to undertake in the near future, he would turn to a bank loan to finance the relatively safe investments (see Holthausen & Leftwich, 1986; Hand, Holthausen, & Leftwich, 1992). Bank loans provide less expensive capital and bank monitoring prevents the firm from engaging in risky investments, which is in line with the CEOs short-term strategy. Knowing that the firm is undertaking safer investments, the CEO does not expect to have outstanding return on investment and therefore higher compensation in the near future. Consequently, one would expect the CEO to aggressively demand higher compensation following the grant of a major bank loan and use this event to secure an above average increase in compensation. The increased monitoring from highly reputable banks is proved to send a positive signal to the capital markets.

The CEO may typically advocate the positive stock market reaction following the announcement of the loan agreement along with the increased transparency and scrutiny provided by the bank relation. While major bank loans may benefit shareholders by improving profitability and providing leverage, it has uncertain economic merit and may increase the firms' total risk. A recent study by Billett, Flannery and Garfinkel (2006) examines the post-announcement performance of bank borrowers and finds that firms announcing bank loans suffer significant negative abnormal returns over the subsequent three years. This fact seems to contradict the market expectations from a bank loan agreement. CEO compensation is then affected by two opposing forces: the first is the favorable market reaction attributable to the bank relation and the second is the documented future underperformance. It is therefore interesting to study the behavior of CEO compensation following bank loan agreement.

The purpose of this paper is to examine the behavior of CEO compensation following the grant of a major bank loan. Using an extensive sample of 743 bank loan agreements from 1992 to 2007, we find that, despite the lower long-term returns for shareholders, CEOs benefit from the bank relation through an increase in total compensation and a reduction in pay-at-risk compensation components. Particularly, we conclude that borrowing CEOs gain a greater bargaining power that allows them to negotiate a higher compensation scheme unrelated to firm performance. Overall, the results have several implications on optimal compensation policy, CEOs incentive alignment, and corporate governance theory.

We make two major contributions to the literature. First, we document a substantial increase in CEO compensation following private loan agreement despite the firms' long-term underperformance. Second, our study analyzes the relation between managerial incentives and corporate financing decision.

LITERATURE REVIEW

Theories of financial intermediation emphasize the informational advantage of banks. Leland and Pyle (1977) and Diamond (1984) develop models in which banks are shown to have an information advantage and special monitoring ability over public lenders. There are several theories explaining the source of this information advantage. Some assert that banks can access additional information about their borrowers since they provide other intermediary and transaction services. However, the most common argument is the ability of banks to build long-term lending and personal relationships with their borrowers. The uniqueness of bank loans has since been extensively addressed in the literature. For instance, Fama (1985) concludes that there must be something special about bank loans in view of his findings that the reserve tax requirement is borne by banks' borrowers and depositors.

Diamond (1991) argues that firms tend to reduce adverse selection and build a reputation by taking monitored bank loans. After achieving a favorable track record, firms then turn to utilizing publicly traded debt. Accordingly, bank monitoring is an effective way for firms to eliminate the moral hazard problem and to obtain access to cheaper public financing. From a bank's perspective, yet using the same logic, Chemmanur and Fulghieri (1994) demonstrate that banks treatment of borrowing firms in financial distress is different from that of bondholders. In fact, banks tend to build a reputation for financial flexibility by promising borrowers that they will credibly devote more resources to evaluate renegotiation alternatives and hence avoid inefficient liquidation. Consequently, managers holding private information about the future prospects of the firm choose bank loans over bond financing. In both Diamond (1991) and Chemmanur and Fulghieri (1994), firms seem to benefits from bank loans through access to

public debts and the flexibility of bank loan re-negotiability. Among other things, these studies suggest that banks are better suited than public creditors to reduce information asymmetries and screen and monitor the future prospects of their borrowers. Thus, the announcement of a bank loan agreement should evidently convey positive information.

Several studies have documented the stock market response to bank loans. Mikkelson and Partch (1986) are the first to report a positive market reaction to the announcement of new bank credit agreements. This study provides a limited analysis of bank loans since it primarily focuses on the negative market reaction to the announcement of common stock and convertible debt offerings. James (1987) extends the bank loan analysis and finds a similar positive market response. Further, he finds that the announcement of private placements and straight debt issues has an adverse market reaction, especially for issues used to repay bank loans. Another study by Lummer and McConnell (1989) distinguishes between new bank loans and renewals. While they find no significant excess returns following the announcement of new credit agreements, they report significantly positive announcement returns for favourable loan revisions, and significantly negative returns for unfavourable revised credit agreements. Accordingly, lending banks have no informational advantage at the initiation of a loan agreement. Nonetheless, banks achieve an information advantage as they develop a continuous credit relationship.

An extensive body of empirical studies also investigates the market response to other forms of external financing: seasoned equity offerings, initial public offerings, straight public debt, convertible debt, convertible preferred stock and private placements. These studies have systematically reported a negative stock price reaction to many of the above forms of financing (See Smith (1986) for a review of this literature).

A part from the positive market response to the announcement of bank loans, several studies also establish the uniqueness of bank loans. Dahiya, Puri and Saunders (2003) provide evidence of negative market reaction for a borrowing firm following the announcement of its loan sale in the secondary market by the lending bank. This negative certification effect is subsequently confirmed after the loan sale by the firm's poor performance and the increased proportion of borrowers filing for bankruptcy. Hence, the information content of credit relationship termination through a loan sale seems to carry the opposite effect of a loan initiation and provide further support to the special role of banks. Within the same context, the recent dramatic expansion in the secondary market for bank loans may serve as an alternative source of information and therefore reduces a bank's incentive to monitor. Gande and Saunders (2006) provide evidence to the contrary. They find that the initiation of bank loans trading in the secondary market triggers a positive market reaction for the borrowing firm. Most importantly, they find that the presence of the secondary market does not adversely affect distressed borrowers, known to benefit the most from a bank relationship. The study concludes that banks continue to be special despite the presence of a well-developed secondary market for bank loans. As such, banks and a secondary market for bank loans are complementary sources of information and monitoring.

Preece and Mullineaux (1994) extend the literature on the certification role to non-bank firms. They argue that non-bank firms are able to enter the commercial lending market largely due to technological advances and acquire some of the bank information advantages. Consequently, they find that the announcement of credit agreements with non-bank firms elicits positive stock returns for borrowing firms.

One strand of the literature focuses on the contractual characteristics of bank loans to explain the potential sources of gain to borrowers. For instance, the work of Preece and

Mullineaux (1996) suggests that, in addition to the benefits of monitoring, contractual flexibility offered by private debt contracts could be a source of value to borrowing firms. They use the number of lenders as a proxy for contractual flexibility and ability to restructure the loan in the event of financial distress. The evidence suggests that the market reaction to a loan announcement is a decreasing function of the number of lending banks in a syndicate. Therefore, the increased capacity to renegotiate a loan among fewer lenders constitutes another source of value to borrowing firms. In addition, Billett, mark and Flannery (1995) find that the market reaction to a bank loan is also a function of the identity of the lending institution. Specifically, the market reacts more favorably to borrowers contracting with high credit rating lenders. They also find no difference between the market's reaction to loans issued by bank and non-bank institutions. However, as explained in Carey, Post and Sharpe (1998), non-bank institutions differ in their lending practices since they serve riskier and more leveraged borrowers. Similarly, Berger and Udell (1995) point out that some of the benefits inherent in a banking relationship are stronger for small borrowing firms, where asymmetric information is a more acute problem. Consistent with banks' information role, small borrowing firms with longer banking relationships enjoy lower interest rates and need to provide less collateral on their loans.

Slovin, Sushka and Polonchek (1993) provide further support to the uniqueness of bank relationship. Their study reports a significant correlation between a client firm value and the future prospects of the corresponding lending bank. Using a unique database of failed banks, the study documents that an increase in the probability of bank dissolution reduces the market values of its client firms, and the subsequent FDIC bank rescue enhances client firm value. This implies that borrowing firms are stakeholders in the banks from which they borrow. Reciprocally, Dahiya, Saunders and Srinivasan (2003) examine the effect of financially distressed borrowers on lending banks and find that the announcement of a major corporate borrower default or bankruptcy significantly reduces the lead lending bank value. This negative effect is even larger for banks having past lending relationships with the distressed borrowers.

From another perspective, recent technological progress has spurred a debate about whether banks can maintain their information advantages with the advent of low-cost and publicly available information sources (For example, Peterson & Rajan, 2002; Boyd & Gertler, 1994). These studies report substantial developments in the financial sector and a potential demise of the benefits drawn from bank lending relationships. This hypothesis is supported by the recent decline in the market valuation effect of bank loans as stated in Fields, Fraser, Berry and Byers (2006). Accordingly, they report a decline in abnormal returns following the announcement of a bank loan agreement. They also find that in recent years, bank loan abnormal returns have disappeared. This recent development in the market reaction to bank loan agreements is consistent with the notion that informational technology advances and the shift toward a market-based financial system have eroded the value of bank credit relationships (James & Smith, 2000).

Despite the extensive theoretical evidence of bank certification effect discussed above, recent work of Billett, Flannery and Garfinkel (2006) on the long-term performance of bank loan borrowers raises serious questions about the reliance on market short-run valuation effects. They particularly provide evidence of bank borrowers' underperformance during the three years following the loan agreement. In addition, the analysis of the market reaction around the quarterly earnings announcement reveals significantly negative abnormal returns. This is also supported by the relatively worse operating performance of bank borrowers in the post-loan period and even in the year preceding the loan agreement. Such evidence contradicts the significantly positive

abnormal return surrounding the announcement of the bank loan. According to the former study, there is no difference between bank loans and equity or public debt offerings since both are followed by significantly worse stock performance. In contradiction with the early literature (Slovin, Sushka & Polonchek, 1993; Dahiya, Saunders & Srinivasan, 2003), they report a negative relation between lender protection and borrower performance, suggesting that lenders effectively protect themselves from poor performance.

This long-run negative performance of bank borrowers motivates our study. Specifically, we examine the relation between managerial compensation and corporate financing decisions. This relation has been addressed by very few recent papers. For example, Harford and Li (2007) find that "following a merger, a CEO's pay and overall wealth become insensitive to negative stock performance, but a CEO wealth rises in step with positive stock performance". Another study by Jiang and Zhang (2008) reports the CEOs use of adjustments (Board compensation grant and portfolio adjustments) to offset the negative valuation effect of Seasoned Equity Offerings (SEOs). To our knowledge, we are the first paper to address the change in CEO compensation from the perceptive of bank loan financing. We fill in the gap in the literature and provide several contributions.

HYPOTHESES DEVELOPMENT

The positive valuation effect of bank loans is widely established in the literature. However, private knowledge of poor future performance may induce CEOs to take actions to protect their wealth. First, they may sell some of their holdings to cash in on the abnormal stock price run up following the bank loan announcement. Second, they can affect the timing of compensation grants, so that they are awarded before the bank loan announcement.

From another perspective, contracting a major new loan increases the firm size and may change the scope of its operations. The loan financing decision hence provides an opportunity for the CEO to renegotiate his/her compensation. By securing a bank loan, the CEO sends a positive signal to the market, reduces information asymmetry, and facilitates future public financing (Diamond 1991). These facts are compelling arguments while negotiating a higher pay. In addition, the CEO's private knowledge of the firm's murky future performance (Billett et al. 2006) may lead to argue for less sensitivity to performance for the first few years. The CEO may also justify this downside protection arguing the restrictions on risk taking behavior and other covenants imposed by the loan agreement. This conjecture is however in contradiction with Almazan and Suarez (2003) who theoretically model for the borrowing firm's compensation. Their model predicts that firms with the proper compensation scheme will induce managers with the highest unobservable profitability prospects to be more inclined to submit to bank monitoring. Bank financing is then a signal of higher profitability. This is in turn consistent with the event study analysis of Dahiya, Saunders and Srinivasan (2003). Bank monitoring also reduces the manager's private benefits and hence complements the use of incentive compensation. A key prediction of this model is that borrowing firms tend to offer compensation contracts with higher pay for performance sensitivity to induce managers to accept bank scrutiny. Managers should be generously rewarded in cases of subsequent high-performance, except for those with low-profitability firms within the separating regime. If the bank loan is associated with managerial accountability and high profitability prospects, we should expect CEO compensation to become more sensitive to firm performance. In the event of negative abnormal returns during the post-announcement period, it is intrinsic to hypothesize that the post loan announcement CEO compensation should be negatively affected.

Based on the mentioned literature and the above discussion, the following null hypotheses can be tested:

H1 *The announcement of a bank loan should have a long-run negative effect on CEO compensation components.*

H2 *Borrowing firm CEOs should have high-performance based compensation following a bank loan.*

Data

Identifying Bank Loans

Our sample consists of loan agreements involving U.S. borrowers collected from Loan Pricing Dealscan (Table "Package") data. The executive compensation data is from Standard and Poor's ExecuComp, and the firm-level financial data is from Compustat. We first merge the ExecuComp list of companies (for active and inactive companies) with the Loan Pricing Corporation Dealscan (Table "Package") data. Due to the lack of common company identifiers between the two databases, we simultaneously match by company name, zip code and SIC code. This procedure yields a total of 2,165 matched firms.

Next, we delete utilities (4900-4999 SIC codes) and financial service (SIC code 6000-6999) firms resulting in a loss of 145 and 176 observations respectively. After merging with Compustat database, we lose an additional 10 observations. Therefore, we end up with a final listof 1,834 observations.

Subsequently, we identify all bank loan agreements in Dealscan for each firm in our sample of 1,834 observations. We are technically limited to focusing on the period from 1993 to 2007 because Execucomp data is available beginning in 1992. Retrieving all the bank loan agreements relating to our sample's firms over this time period yields a total of 12,350 observations. Next, we delete 228 observations due to duplication and an additional 1,190 observations due to missing market capitalization data in Compustat. Among the remaining 10,932 observations, we select firms that do not have loan agreements in the preceding and following year. There are 3,894 observations that satisfy this condition. We subsequently delete 1,389 observations due to duplications in Dealscan. These duplications are due to multiple observations which reflect consequent amendments related to the same loan agreement. Among the 2,505 observations remaining, there are 613 cases where the firm had more than one bank loan during the year under consideration. These cases are rather relevant to our study and thus we compute the total value of these multiple loans, and add them to the analysis.

To increase the likelihood of capturing the effect of bank loan agreements on compensation and to minimize the influence of outliers, we further require that the loan value represent at least 10% of the borrowing firm market capitalization in the year preceding the bank loan agreement. We believe that this restriction is essential in our analysis. The data sources in earlier studies were primarily news media. For instance, Billett, Flannery, and Garfinkel (1995) use the Dow Jones News Retrieval Service and Best and Zhang (1993) use the Wall Street Journal for bank loan announcements. These studies have no restriction on loan size as anyone would expect the mainstream media to be mostly interested in major and newsworthy loan agreements. Whereas, LPC Dealscan systematically compiles loans filed with the Security and Exchange Commission and from other reliable public sources. By applying the 10% restriction, we further delete 695 observations.

Using the sample of firms with bank loan(s) higher than 10% of the company's market capitalization (sample size 1,810), we identify 941 ExecuComp firms for which the same CEO is in office during the year before the loan, the year of the loan and the year after.

Control Sample

We next match each of the 941 observations with a control firm. The same requirements of data availability in ExecuComp and the same CEO over the three years period also apply to the control sample. The matching procedure is as follows:

We first match firms by total assets within 80% and 120% of the borrowing firm and with the same four digits SIC codes. These restrictions resulted in 230 matching firms.

Then, we relax the matching criteria to total assets within 80% and 120% of the firm and with the same three digits SIC codes, resulting in an additional 124 matching firms.

Then, we relax the matching procedure to two digits SIC codes, and obtain 259 additional matching firms.

For the remaining observations, we relax the matching criteria to two digits SIC codes with total sales between 80% and 120% of the original firm. These constraints added another 130 matching firms.

Overall, we manage to match 743 of the 941 firms with a control firm. Therefore, our final sample contains 743 borrowing firms each with a corresponding matching firm. We also classify the borrowing firms by year and systematically check that none of the borrowing firms in that specific year is used as a matching firm.

Data distribution and Characteristics

Table 1 reports the distribution of bank loans by industry and year. We categorize the sample firms based on the 48 Fama and French (1997) industry classifications, among which 42 industries are represented in our sample. The distribution of firms among the various industries seems uniform except for a relatively high concentration for industries such as Business Services, Retail, Machinery and Wholesale. Similarly, the firms' distribution across time is uniform. On average, there are fifty bank loan agreements satisfying our selection criteria every year. In general, Table 1 indicates that our sample firms are evenly distributed across industry and time dimensions. We therefore feel confident that our bank loan sample does not suffer from clustering.

In panel A of Table 2, we report some of the bank loans' characteristics. The average bank loan amount in our sample is around 350 million (USD) and a median value of 205 million (USD). These figures are relatively larger than the reported 116.9 and 45 respectively for mean and median in Billett, Flannery and Garfinkel (1995). Likewise, the borrowing firms in our sample are relatively larger with regard to both total assets and sales, and a lower beta by comparison with the above mentioned study.

The predominance of larger loan amounts and larger firms in our sample can be best explained by the restriction on the firm data availability in ExecuComp database, which covers fairly larger firms. A less compelling reason could be attributed to the sample period in Billett, Flannery and Garfinkel (1995) covering the period from 1980 to 1989; while our sample starts in 1993, and both samples are not inflation adjusted. From the other side, the lack of adjustment for inflation has no bearing on our results since our analysis compares the sub-sample of borrowing firms to that of matching firms and both are affected equally by inflation.

Compensation Variables

Compensation variables are constructed from ExcuComp. The variables' definitions are taken from ExecuComp Data Definitions table. The Salary variable represents the dollar value of the base salary earned by the CEO. The Bonus variable is the dollar value of the bonus paid to the CEO. The Restricted Stocks variable is the sum of the restricted stock and the stock awarded under plan-based awards. Similarly, the Stock Options variable is the sum of the aggregate value of stock options granted to the executive during the year and the fair value of all options awarded during the year as detailed in the Plan Based Awards. The Other Compensation variable sums up all other compensation received by the executive including perquisites and other personal benefits, termination or change-in-control payments, contributions to defined contribution plans (e.g. 401K plans), life insurance premiums, gross-ups and other tax reimbursements, discounted share purchases, the change in pension value and nonqualified deferred compensation earnings, and the amount paid out to the executive under the company's long-term incentive plan.

Table 1
DISTRIBUTION OF BANK LOANS BY INDUSTRY AND BY YEAR

Panel A: Distribution of bank loans by Fama and French Industry

Industry	Number of firms	Industry	Number of firms
Agriculture	2	Miscellaneous	3
Food Products	15	Automobiles and Trucks	17
Candy and Soda	4	Aircraft	8
Alcoholic Beverages	1	Shipbuilding, Railroad Eq.	5
Recreational Products	2	Defense	2
Entertainment	5	Precious Metals	1
Printing and Publishing	15	Nonmetallic Mining	2
Consumer Goods	22	Coal	1
Apparel	21	Petroleum and Natural Gas	30
Healthcare	18	Telecommunications	11
Medical Equipment	27	Personal Services	4
Pharmaceutical Products	10	Business Services	71
Chemicals	27	Computers	17
Rubber and Plastic Products	3	Electronic Equipment	28
Textiles	8	Measuring and Control Equip	27
Construction Materials	26	Business Supplies	24
Construction	21	Shipping Containers	4
Steel Works, Etc.	38	Transportation	19
Fabricated Products	5	Wholesale	45
Machinery	56	Retail	63
Electrical Equipment	13	Restaurants, Hotel, Motel	22

Panel B: Distribution of bank loans by year.

Year	Bank Loans	Year	Bank Loans	Year	Bank Loans
1993	11	1998	52	2003	58
1994	30	1999	47	2004	63

1995	47	2000	42	2005	66
1996	57	2001	56	2006	69
1997	71	2002	62	2007	12

The data sample includes 743 bank loan observations. The data reported in Panel A represents the distribution of bank loans by industry using the 48 Fama and French (1997) industry dummies. The analysis excludes firms in utilities and financial services sectors. Panel B reports the distribution of bank loans by year.

Table 2
SAMPLE SUMMARY STATISTICS

Panel A: Bank loans' characteristics				
	Mean	Median	Minimum	Maximum
Deal Amount ($ millions)	354.8	205	10	7000
Spread (%) (obs. = 570)	2.03	2	1	5
Panel B: Borrowers' characteristics				
	Mean	Median	Minimum	Maximum
Borrowers' Total assets ($ millions)	1877.1	919.8	35.58	28472.4
Sales ($ millions)	1030.5	918.1	35.58	28472
Beta	1.09	0.81	-0.23	9.9
P/E	34.06	18.25	2.13(*)	2835
ROA (%)	4.26	4.82	-56.36	25.01

This Table presents the bank loans' characteristics for loan granted to U.S. firm from 1993 to 2007 and retrieved from LPC Dealscan database. The sample contains 743 bank loans that represents at least 10% of the borrowing firm market capitalization at the year of the loan and conform to other restrictions pertaining to CEO tenure surrounding the year of the loan agreement. The Deal Amount is the total value of the loan grant. The spread represents the percentage spread over default base and it is reported for only 570 observations. The borrowers' total assets, sales, beta, price per earning (P/E), and return on assets (ROA) are all measured at the beginning of the year of the bank loan agreement.
(*) Due to missing values in Compustat, the P/E ratio minimum value is positive despite a negative minimum value for the RO ratio.

We present the compensation components' descriptive statistics in Table 3 for both the borrowing firms and the matching firms. We report the mean and median for: Salary, Bonus, Restricted Stock, Stock Option, Other Compensation, and their sum in Total Compensation. In this Table and henceforth, we refer to the year preceding the bank loan agreement as "Year -1", the year of the loan as: "Year 0", and the year following the bank loan as: "Year +1"

Methodology

To measure the change in compensation, we use two different approaches. In the first approach, we measure the percentage change in compensation by dividing the value of the change in each compensation component, in a given year, by the value of that same component in the preceding year. we apply this approach to "Total Compensation", "Salary", and "Other Compensation" since these variables display non-zero values throughout the entire sample (except for 2 observations), which makes computing the percentage change from one year to another feasible. However, the remaining compensation components ("Bonus", "Restricted Stocks", and "Stock Options") present zero values throughout the years since they are generally not granted every year. To avoid losing observations and any distortion in the analysis, we use a second approach in computing the change in these compensation components using portfolio deciles constructed as follows. We first compute the average of each compensation variable for each firm and its corresponding control firm over the three year span. In other terms, this is the

average of each firm and its corresponding control firm over the three year period surrounding the bank loan.

Table 3
COMPENSATION VARIABLES DESCRIPTIVE STATISTICS

	Borrowing Firms		Matching firms	
	Mean	Median	Mean	Median
Total Compensation:				
Year -1	2,850.3	1,764.7	3,309.8	1,914.8
Year 0	3,404.1	1,945.9	3,342.0	2,019.6
Year +1	3,444.3	2,129.6	3,639.9	2,087.6
Salary:				
Year -1	560.98	524.19	556.30	521.00
Year 0	608.60	573.81	596.46	565.58
Year +1	641.39	610.00	619.86	590.82
Bonus:				
Year -1	606.39	318.78	632.08	369.00
Year 0	597.35	305.00	570.21	329.33
Year +1	585.21	269.44	546.10	256.96
Restricted Stock:				
Year -1	372.73	0.00	267.32	0.00
Year 0	392.89	0.00	424.56	0.00
Year +1	514.17	0.00	478.22	0.00
Stock Options:				
Year -1	1,096.8	416.57	1,546.3	511.46
Year 0	1,344.9	396.57	1,346.6	486.54
Year +1	1,168.2	379.98	1,402.1	422.75
Other compensation:				
Year -1	213.43	35.63	307.75	33.37
Year 0	460.39	58.51	404.19	45.20
Year +1	535.29	83.95	593.64	70.06

This Table presents the descriptive statistics for borrowing firms and matching firms' compensation variables which include: total compensation, salary, bonus, restricted stocks, stock options and other compensation. The compensation variables are reported for the year of the bank loan (year 0), the year before the bank loan (year -1) and the year after the bank loan (year +1).

Second, we construct ten portfolios (deciles) by ranking these averages from the lowest to the highest and assign each firm and its corresponding control firm to the same portfolio decile. Then, we compute the average value of each portfolio decile. Finally, we measure the percentage change separately for borrowing firms and control firms as a percentage of the corresponding portfolio decile average. The significance of the differences in the percentage change in the value of compensation components is measured by the paired t-test and the Wilcoxon test.

Changes in the Structure of CEO Compensation

For changes in compensation structure, we measure the percentage change in the proportions of each compensation component. Specifically, we divide the percentage change in the proportion (with regard to total compensation) of each compensation component by the proportion of that same component in the preceding year. We run into the zero values for the variables: "Bonus", "Restricted Stocks", and "Stock Options" as well. Therefore, we construct ten portfolio deciles following the same approach described above, and measure the percentage change in compensation components' proportions with regard to the corresponding portfolio deciles.

RESULTS

Market reaction to the announcement of a bank loan agreement

Since Former studies relate bank loan relationship benefits to the positive announcement period abnormal returns, we start our empirical analysis with an event study analysis to measure the market reaction surrounding the announcement of private loan agreements in our sample. For the announcement date, we use the "dealActivedate" variable defined in Dealscan as the date the deal was issued. In cases of multiple facilities within the deal, the date will be determined as the earliest facility date. Since the announcement period abnormal return is beyond the scope of our study, we rely on the deal active date variable provided by Dealscan as a proxy for the deal's public announcement date. Later, we show that there is no abnormal return on this deal active date. Accordingly, we speculate that the public announcement is subsequent to the deal active date since we find significant market reaction for the event windows following the deal active date. This also justifies our inclusion of various announcement period event windows in an attempt to capture the market abnormal returns.

We measure the mean daily abnormal returns (ARs) and the mean cumulative abnormal returns (CARs) for multiple event windows. Panel A of Table 4 provides the ARs and CARs for the full sample of borrowing firms. We notice an insignificant market reaction for the deal issuance date. However, we report a positive and significant abnormal return for the event window (0, +5) with a 1% significance level. There are also further evidence of positive CARs for the four days window (0, +3) and the 21 days window (-10, +10) surrounding the event day (10% significant level). In panel B of Table 4, we split the full sample into a subsample of bank loans issued before the year 2000 and bank loans after 2000. Testing the two subsamples announcement returns reveals a slight difference in market reaction. In the second half of our sample period, the positive abnormal returns are less significant. The disappearance of announcement returns in recent years is consistent with the findings of Fields et al. (2006). Next, we examine the effect of loan size on market reaction. Hence, we rank our sample loans by the total value of the loan proportional to the firm's market value of equity. We consider the lower half of our total sample as the small loan subsample containing loans with value between 10 to 27% of the firm's market value of equity. The upper half of our sample represents large loans with loan values higher than 27% of the firm's market value of equity. Then, we test for the announcement returns separately on both subsamples (Panel C of Table 4). We report statistically insignificant announcement returns for large loans. However, for the subsample of small bank loans, we find highly significant abnormal returns specifically for the (0, +5) event window. Consequently, we draw the conclusion that capital markets are less optimistic to the announcement of large loans due to higher leverage and insolvability risk.

Table 4
TEST OF MARKET REACTION TO THE ANNOUNCEMENT OF A BANK LOAN AGREEMENT USING THE FULL SAMPLE OF BORROWING FIRMS

Panel A: Mean daily abnormal returns and cumulative abnormal returns for the full sample of borrowing firms.

Intervals of trading days[(a)]	Full Sample (N = 716)		
	Mean (%)	Z-statistic	%Positive
AR_{-1}	0.16	0.237	48.74
AR_{0}	0.06	0.885	46.65
AR_{+1}	0.03	0.312	48.88
$CAR_{-10,-1}$	0.08	0.985	50.14
$CAR_{-1,0}$	0.21	0.013	48.32
$CAR_{-1,+1}$	0.25	1.209	50.56
$CAR_{0,+3}$	0.06	1.957†	51.56†
$CAR_{0,+5}$	0.28	2.630**	53.21**
$CAR_{-10,+10}$	0.30	1.733†	51.54†

Panel B: Mean daily abnormal returns and cumulative abnormal returns for the full sample of borrowing firms before year 2000 and after year 2000.

Intervals of trading days[(a)]	Before 2000 (N = 302)			After 2000 (N = 414)		
	Mean (%)	Z-statistic	%Positive	Mean (%)	Z-statistic	%Positive
AR_{-1}	0.16	0.274	48.68	0.16	0.078	48.79
AR_{0}	0.18	-0.417	46.69	-0.03	-0.808	46.62
AR_{+1}	-0.14	-0.071	47.68	0.16	0.471	49.76
$CAR_{-10,-1}$	0.16	1.887†	53.31†	0.02	-0.316	47.83
$CAR_{-1,0}$	0.33	0.274	48.68	0.13	-0.218	48.07
$CAR_{-1,+1}$	0.19	1.081	50.99	0.29	0.668	50.24
$CAR_{0,+3}$	-0.06	0.965	50.66	0.14	1.749†	52.90†
$CAR_{0,+5}$	0.25	2.348*	54.64	0.31	1.454	52.17
$CAR_{-10,+10}$	0.36	1.196	51.13	0.25	1.258	51.69

Panel C: Mean daily abnormal returns and cumulative abnormal returns for the sub-sample of Large Loans and the sub-sample of Small Loans.

Intervals of trading days[(a)]	Large Loans (N = 358)			Small Loans (N = 358)		
	Mean (%)	Z-statistic	%Positive	Mean (%)	Z-statistic	%Positive
AR_{-1}	0.25	-0.908	45.81	0.07	1.243	51.68
AR_{0}	0.10	-0.061	48.04	0.01	-1.190	45.25
AR_{+1}	-0.03	-0.908	45.81	0.10	1.348	51.95
$CAR_{-10,-1}$	0.30	1.314	51.68	-0.14	0.079	48.60
$CAR_{-1,0}$	0.35	0.044	48.32	0.08	-0.027	48.32
$CAR_{-1,+1}$	0.32	0.362	49.16	0.18	1.348	51.95
$CAR_{0,+3}$	-0.11	0.679	50.00	0.23	2.089*	53.91
$CAR_{0,+5}$	-0.24	0.785	50.28	0.81	2.935**	56.14
$CAR_{-10,+10}$	0.52	0.362	49.16	0.07	2.089*	53.91

This Table reports the standard event-study announcement period mean abnormal returns (ARs), cumulative average abnormal returns (CARs), Z-statistics for the nonparametric generalized sign test, the percent of sample with positive returns at the announcement of private loan agreement. Abnormal returns are calculated using the market model estimates from 110 day to 11 days prior to the event day. The Z-statistics are based on the standardized cross-sectional method (Boehmer et al. 1991).
2-tailed significance test, with: †, *, ** Significance level at the 10%, 5%, and 1% respectively.

Bank Borrowers' Long-Term Performance

The recent evidence of bank borrowers' long-term underperformance documented in Billett, Flannery and Garfinkell (2006) contradicts the announcement period returns and the notion of bank certification as a whole. To the extent that performance is a key determinant of

compensation, it is essential to apply some form of long-term performance measurement to our sample. While it is evidently beyond the scope of our study, we should note that measuring long-term performance has been a contentious subject. Without addressing the complete array of measurement techniques, we apply the buy-and-hold abnormal returns (BHARs) performance measure, which is one of the methods of long-term performance used in Billett, Flannery and Garfinkell (2006). As explained in Ritter (1991) and Barber and Lyon (1997), we first compute the holding period returns (HPR) for each firm in our sample and its corresponding matching firm over the three year period following the bank loan announcement.

We then estimate the mean and median holding period return differences between the sample firms and the matching firms. We generally conclude that the borrowing firms underperform their peers over the three year period following the bank loan agreement. Specifically, the estimate for the mean difference over the three year period is equal to -4.76%. This mean difference is significant at the 0.1% level. For the median difference, we find an estimate of -3.11% with a 5% significance level. The presence of significant long-term underperformance in our sample firms enhances the importance of our compensation results as discussed below.

Table 5
BUY-AND-HOLD ABNORMAL RETURNS FOR THE THREE YEARS FOLLOWING LOAN ANNOUNCEMENTS

	Mean Difference	Median Difference	Number of Observations
Three years combined	-4.76% (-3.43***)	-3.11% (-2.24*)	669

This Table presents the Holding-period returns (HPRs) for the three years following the year of the bank loan. We report the mean difference and median difference between the sample borrowing firms and their corresponding matching firms. The significance t-test is provided between brackets.
2-tailed significance test, with: *, ** Significance level at the 5%, and 1% respectively.

Change in Value of Compensation Components

We expect the CEO to use the bank loan relationship as a bargaining tool to request an abnormal increase in compensation or to reduce the performance based compensation. In Table 6, we report a comparison of the percentage change in compensation between the borrowing firms and the matching firms. The results indicate a positive and significant increase in the percentage change in compensation in the year of the loan (significant at the 5% level). Similarly, there is a significant (1% level) increase in the year following the bank loan compared to the year preceding the loan. For Salary, there is a positive increase in percentage change both in the year of the loan and the subsequent year.

To a lesser extent, this evidence is also supported when comparing the percentage changes using portfolio deciles. Nevertheless, there is a much more compelling and consistent evidence of a positive increase in the Other Compensation component during the year of the loan (significant at the 1% level). In panel B of Table 6, the results indicate a reduction in bonus awards to CEOs over the sample period. This reduction is more pronounced for non-borrowing firms when compared to borrowing firms. However, this difference is positive and significant at the 0.1% level. Within the portfolio deciles analysis, we also notice negative percentage changes in the values of stock options. Whereas, the percentage changes in restricted stock is positive and overall higher than that of borrowing firms. The differences for both restricted stock and stock options are

not significant.

So far, the evidence suggests that borrowing CEOs benefit from the certification role of bank loan agreement through significant increase in compensation. It is however noteworthy to find that the increase involves only the compensation components that are least likely to be affected by poor performance. Additionally, this result suggests that borrowing CEOs gain a greater bargaining power that allows them to negotiate a higher compensation scheme unrelated to firm performance. Consequently, the significant increase in compensation justifies, to a certain extent, the reason why CEOs tend to tolerate the bank scrutiny, disclosures and covenants.

The results are consistent with the hypothesis suggesting that borrowing CEOs choose to submit themselves to bank scrutiny knowing that they will benefit from the bank relationship. As such, CEOs are rewarded by the board through an abnormal increase in salary, bonus, other compensation and hence total compensation. The bank certification effect benefits the shareholders through the short-term positive market reaction; however, to the CEO this positive effect is even more lasting despite the borrowing firm dire long-term performance.

Changes in the Proportion of Compensation Components

Subsequently, we examine the change in the proportion of compensation components as a percentage of total compensation. Table 7 reports the results using the two approaches: percentage change in dollar value (panel A), and percentage change proportional to portfolio deciles (panel B). We find that the proportion of salary within the total compensation significantly drops using both approaches. For the Other Compensation, the results are mixed. The percentage changes are positive in the year of the loan and then negative in the year after. However, there is strong evidence of an increase in the proportion of bonus award. Specifically, there is a reduction in the proportion of bonus for matching firms that is more pronounced than that of the borrowing firms. For the year following the bank loan this change is significant at the 0.1% level using both the paired sample t-test and the Wilcoxon test.

Table 6
PERCENTAGE CHANGE IN VALUE OF COMPENSATION COMPONENTS
Bank loan representing 10% or more of the firm value, sample size = 743.

Panel A: Percentage change in value

	Borrowing firms			**Matching firms**			**Paired t-test**	**Wilcoxon test**
	Mean	Median	Std. dev.	Mean	Median	Std. dev.	t-value	Z-value
Total Compensation								
$Y_0 - Y_{-1}$	0.5387	0.1014	1.9353	0.3828	0.0539	1.9643	1.53	2.03*
$Y_{+1} - Y_0$	0.3767	0.0978	1.4260	0.3422	0.0672	1.3870	0.48	0.89
$Y_{+1} - Y_{-1}$	0.6775	0.2068	2.0954	0.4504	0.1143	1.5917	2.40*	2.77**
Salary								
$Y_0 - Y_{-1}$	0.1592	0.0526	0.9050	0.0877	0.0588	0.1617	2.12*	0.25
$Y_{+1} - Y_0$	0.0583	0.0460	0.1631	0.0450	0.0452	0.1821	1.48	-0.24
$Y_{+1} - Y_{-1}$	0.2271	0.1129	0.9675	0.1435	0.1138	0.2971	2.22*	0.69
Other Compensation								
$Y_0 - Y_{-1}$	10.553	0.0886	67.497	2.7593	0.0561	11.617	3.05**	2.33*
$Y_{+1} - Y_0$	15.770	0.0552	210.57	2.6369	0.0439	15.187	1.66†	0.17
$Y_{+1} - Y_{-1}$	30.054	0.2790	291.29	25.653	0.2093	430.99	0.22	1.57

Panel B: Percentage change in value using portfolio deciles analysis								
	Borrowing firms			Matching firms			Paired t-test	Wilcoxon test
	Mean	Median	Std. dev.	Mean	Median	Std. dev.	t-value	Z-value
Total Compensation Decile								
$Y_0 - Y_{-1}$	0.0979	0.0618	0.8493	0.0258	0.0269	0.08805	1.60	1.36
$Y_{+1} - Y_0$	0.0625	0.0635	0.8193	0.0647	0.0502	0.8452	-0.05	0.22
$Y_{+1} - Y_{-1}$	0.1604	0.1277	0.8131	0.0905	0.0830	0.9826	1.52	1.92†
Salary Decile								
$Y_0 - Y_{-1}$	0.0826	0.0502	0.1592	0.0688	0.0527	0.1176	1.98*	-0.04
$Y_{+1} - Y_0$	0.0517	0.0462	0.1522	0.0389	0.0472	0.2015	1.37	0.41
$Y_{+1} - Y_{-1}$	0.1343	0.1093	0.2208	0.1077	0.1072	0.2449	2.21*	1.04
Other Compensation Decile								
$Y_0 - Y_{-1}$	0.3363	0.0306	1.3315	0.1482	0.0099	1.0806	3.04**	2.43*
$Y_{+1} - Y_0$	0.2374	0.0149	1.6829	0.3731	0.0129	1.5588	1.65†	-0.68
$Y_{+1} - Y_{-1}$	0.5737	0.1370	1.6264	0.5213	0.0668	1.6852	0.61	1.43
Bonus Decile								
$Y_0 - Y_{-1}$	-0.0882	0.0411	1.4889	-0.3158	0.0000	1.3118	3.44***	4.69***
$Y_{+1} - Y_0$	-0.0615	0.0000	1.2553	-0.1040	0.0000	0.9915	0.75	1.95†
$Y_{+1} - Y_{-1}$	-0.1497	0.0000	1.5853	-0.4198	-0.0484	1.4383	3.95***	4.44***
Restricted Stock Decile								
$Y_0 - Y_{-1}$	0.0565	0.0000	2.4256	0.0250	0.0000	1.9987	0.27	1.29
$Y_{+1} - Y_0$	0.0685	0.0000	2.6352	0.2233	0.0000	2.1394	-1.25	-1.43
$Y_{+1} - Y_{-1}$	0.1250	0.0000	2.6095	0.2483	0.0000	2.1952	-1.00	-0.83
Stock Options Decile								
$Y_0 - Y_{-1}$	0.1267	0.0000	1.8965	-0.0345	0.0000	1.9257	0.48	-0.26
$Y_{+1} - Y_0$	-0.0659	0.0000	1.7333	-0.0454	0.0000	1.6217	-0.24	-0.25
$Y_{+1} - Y_{-1}$	-0.0532	0.0000	1.7411	-0.0799	0.0000	2.0264	0.28	-0.07

This Table presents the annual percentage change in the value of each of the compensation components. We use ($Y_0 - Y_{-1}$) to indicate the difference between the year of the loan and the preceding year, ($Y_{+1} - Y_0$) to indicate the difference between the year following the loan and the year of the loan, and ($Y_{+1} - Y_{-1}$) to indicate the difference between the year following the loan and the year preceding the loan. There are two different methods used in computing the percentage change. In Panel A, the percentage change is computed by dividing the value of the change in each component, in a given year, by the value of that same component in the preceding year. The compensation components: total compensation, salary, and other compensation have non-zero values throughout the entire sample (except for less than 2 observations), which makes computing the percentage change from one year to another feasible. In Panel B, we however use a different method in computing the percentage change since the data for the compensation components (bonus, restricted stock, and stock options) presented zero values. The later forms of compensation are generally not granted every year. To avoid losing observations and any distortion in the analysis due to dramatic changes in percentages (increase from a zero, decrease to a zero), we compute the change in these compensation components using portfolio deciles constructed as follows. These deciles are computed separately for bonus, restricted stock and stock options. We first compute the average value of each component for each firm and its corresponding control firm over the three year spam. In other terms, this is the average of each firm and its control firm over the three year period surrounding the bank loan. Second, we construct ten portfolios (deciles) by ranking these averages from lowest to highest. We assign each firm and its corresponding control firm to the same portfolio decile. Then, we compute the average value for each decile. Finally, we measure the percentage changes separately for borrowing firms and control firms as a percentage of the corresponding decile average. Essentially, the percentage changes in each compensation component are computed proportional to the corresponding deciles. For the sake of consistency and comparability, Panel B portfolio deciles analysis also includes the compensation components used in Panel A. The difference in the percentage change in the value of compensation components are measured by the paired t-test and the Wilcoxon test. The Wilcoxon test is a two-sample test with a normal approximation and two-sided test (Z-value). The paired t-test assumes that the differences between pairs are normally distributed. If this assumption is violated, the Wilcoxon signed-rank test would be a better alternative.

2-tailed significance test, with: *, **, *** Significance level at the 10%, 5%, 1%, and 0.1% respectively.

In addition, we notice a significant decrease in the proportion of restricted Stock for the year of the loan and the year after (significant at the 5% level for both years). This is an evidence of a shift toward a smaller proportion of pay-at-risk. Unlike restricted stock, we find that the difference between the borrowing and matching firm changes in stock options are consistently insignificant. So far, the evidence indicates that the shift in the proportion of total compensation is mainly dominated by an increase in the proportion of bonus award. In addition, there is a less compelling evidence for a reduction in the proportion of pay-at-risk compensation.

Table 7
CHANGE IN THE COMPENSATION COMPONENTS AS A PERCENTAGE OF TOTAL COMPENSATION
Bank loan representing 10% or more of the firm value, sample size = 743.

Panel A: Change in percentage of total compensation

	Borrowing firms			**Matching firms**			**Paired t-test**	**Wilcoxon test**
	Mean	Median	Std. dev.	Mean	Median	Std. dev.	t-value	Z-value
Salary								
$Y_0 - Y_{-1}$	0.3858	-0.0287	1.9632	0.4460	0.0050	2.2923	-0.54	-1.84†
$Y_{+1} - Y_0$	0.2802	-0.0131	1.6514	0.4058	-0.0176	2.1705	-1.33	0.54
$Y_{+1} - Y_{-1}$	0.3540	-0.0571	2.0192	0.7319	0.0000	5.6638	-1.72†	-2.47*
Other Compensation								
$Y_0 - Y_{-1}$	10.419	0.0949	73.819	6.7536	0.0476	64.749	1.01	1.65†
$Y_{+1} - Y_0$	12.974	0.0248	188.98	8.3539	0.0127	56.163	0.61	-0.85
$Y_{+1} - Y_{-1}$	26.092	0.1842	247.71	14.949	0.1899	167.58	1.00	0.39

Panel B: Change in percentage to total compensation using portfolio deciles analysis

	Borrowing firms			**Matching firms**			**Paired t-test**	**Wilcoxon test**
	Mean	Median	Std. dev.	Mean	Median	Std. dev.	t-value	Z-value
Salary Decile								
$Y_0 - Y_{-1}$	-0.0271	-0.0241	0.7169	0.0288	0.0068	0.5845	-1.64†	-1.95†
$Y_{+1} - Y_0$	-0.0531	-0.0119	0.6456	0.0081	-0.0144	0.6698	-1.81†	-0.84
$Y_{+1} - Y_{-1}$	-0.0802	-0.0509	0.7414	0.0369	0.0000	0.7039	-3.19**	-2.62**
Other Compensation Decile								
$Y_0 - Y_{-1}$	0.2476	0.0335	1.3012	0.1191	0.0108	1.0290	2.13*	2.03*
$Y_{+1} - Y_0$	0.1770	0.0195	1.5486	0.3197	0.0029	1.4733	-1.84*	-0.90
$Y_{+1} - Y_{-1}$	0.4246	0.0709	1.5816	0.4387	0.0611	1.5571	-0.18	0.17
Bonus Decile								
$Y_0 - Y_{-1}$	-0.1711	0.0000	1.5608	-0.3544	-0.0495	1.3023	2.59**	3.27**
$Y_{+1} - Y_0$	-0.1355	0.0000	1.2225	-0.1956	-0.0108	1.0383	1.05	2.34**
$Y_{+1} - Y_{-1}$	-0.3067	-0.0066	1.5531	-0.5500	-0.2361	1.3605	3.54***	4.29***
Restricted Stock Decile								
$Y_0 - Y_{-1}$	-0.0194	0.0000	2.6420	0.0193	0.0000	1.5673	-0.34	-0.26
$Y_{+1} - Y_0$	0.0133	0.0000	2.4877	0.3033	0.0000	2.3831	-2.29*	-0.95
$Y_{+1} - Y_{-1}$	-0.0061	0.0000	2.6074	0.3226	0.0000	2.5038	-2.49*	-1.13
Stock Options Decile								
$Y_0 - Y_{-1}$	-0.0865	0.0000	1.6997	-0.0760	0.0000	1.4379	-0.13	-0.99
$Y_{+1} - Y_0$	-0.0907	0.0000	1.3505	-0.0986	0.0000	1.2795	0.12	0.46
$Y_{+1} - Y_{-1}$	-0.1773	0.0000	1.5945	-0.1747	0.0000	1.5116	-0.03	-0.17

This Table presents the annual percentage change of the compensation components as a percentage of total compensation. We use $(Y_0 - Y_{-1})$ to indicate the difference between the year of the loan and the preceding year, $(Y_{+1} - Y_0)$ to indicate the difference between the year following the loan and the year of the loan, and $(Y_{+1} - Y_{-1})$ to indicate the difference between the year following the loan and the year preceding the loan. There are two different method used in computing the percentage changes. In panel A:

the percentage change is computed by dividing the percentage change in the proportion (with regard to total compensation) of each component, in a given year, by the proportion of that same component in the preceding year. The compensation components: salary, and other compensation have non-zero values throughout the entire sample (except for less than 2 observations), which makes computing the percentage change from one year to another feasible. In Panel B, we however use a different method in computing the percentage change since the data for the compensation components (bonus, restricted stock, and stock options) presents zero values. The later forms of compensation are generally not granted every year. To avoid losing observations and any distortion in the analysis due to dramatic changes in percentages (increase from a zero, decrease to a zero), we compute the change in these compensation components using portfolio deciles constructed as follows. These deciles are computed separately for bonus, restricted stock and stock options. We first compute the average percentage of each component for each firm and its corresponding control firm over the three year spam. In other terms, this is the average of each firm and its control firm over the three year period surrounding the bank loan. Second, we construct ten portfolios (deciles) by ranking these averages from lowest to highest. We assign each firm and its corresponding control firm to the same portfolio decile. Then, we compute the average percentage for each decile. Finally, we measure the percentage changes separately for borrowing firms and control firms as a percentage of the corresponding decile average. Essentially, the percentage changes in the compensation components proportions are computed proportional to the corresponding deciles. For the sake of consistency and comparability, panel B portfolio deciles analysis also includes the compensation components used in panel A.

The differences in the percentage change in the value of compensation components are measured by the paired t-test and the Wilcoxon test. The Wilcoxon test is a two-sample test with a normal approximation and two-sided test (Z-value). The paired t-test assumes that the differences between pairs are normally distributed. If this assumption is violated, the Wilcoxon signed-rank test would be a better alternative.

2-tails significance test, with: †, *, **, *** Significance level at the 10%, 5%, 1%, and 0.1% respectively.

CONCLUSIONS

Prior literature extensively establishes the "uniqueness" and the "special" nature of bank loans. This study extends this evidence to include a positive effect of bank loan agreement on CEO compensation. However, this positive effect seems to be at odds with the long-term firm underperformance following bank financing.

Using an extensive sample of 743 major bank loan agreements from 1993-2007, we find a positive and significant increase in the CEO total compensation, salary, bonus and other compensation over the two years following the bank loan. However, we do not find evidence of a significant increase in performance based compensation such as restricted stock and stock options.

This implies that borrowing CEOs benefit from the certification role of the bank loan relationship through a significant increase in compensation. It is however noteworthy to mention that the increase involves only the compensation components that are least likely to be affected by poor performance. Overall, we conclude that borrowing CEOs gain a greater bargaining power allowing them to negotiate a higher compensation scheme unrelated to firm performance. As such, the significant increase in compensation justifies, to a certain extent, the reason why CEOs tend to accept the added scrutiny and disclosure embedded in bank loan provisions. Overall, our results provide a better understanding of the managerial incentive alignment and suggest several valuable implications to both shareholders and regulators.

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