Corporate Governance and Bank Diversification

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Abstract

This study intends to investigate the corporate governance structures between specialized and diversified U.S. banks (financial conglomerates) and whether their governance structures are significantly different. If the intensified agency problems are the results of financial conglomerates, we would expect to see a relationship between characteristics of weak corporate governance and diversified decision. Our major findings are as follows: First, univariate analyses show that diversified banks tend to have lower insider ownership and institutional holdings. These ownership differences provide evidence of managerial entrenchment and support the agency argument for diversification but more outside directors are employed by diversified banks to enhance the monitoring role played by the boards. Second, bank diversification is associated with governance mechanisms in some perspectives: higher board independence, higher outside director's holdings and higher percentage of CEO equity-based pay. Finally, we investigate the relationship between excess value, bank diversification, and their governance structure and provide the evidence that CEO equity-based pay has a significant impact on bank value discount.

JEL classification: G21

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I. Introduction

The agency problem resulting from the separate ownership and management not only exists in the industry firms but also in banks and financial institutions. However, the corporate governance of banks and financial institutions received relative less focus due to the opaqueness of financial institutions and the characteristics of regulated industry(Adams and Mehran, 2003; Mehran, 2003; Handley-Schachler, Juleff, and Paton, 2007; Mortlock. 2003). We know that the financial stability is critical for the whole economy and to understand the corporate governance in banking is important for the policy makers since a more stable economic and financial environment is also essential for the growth of industry firms (Vafeas and Waegelein, 2003). Besides, after the thrift and banking problem of the 1980s and early 1990s in the U.S. and the Asian financial crisis in 1998, policy makers realized the importance of maintaining good corporate governance and management in banking in stabilizing the financial system (Mehran, 2003; Vafeas and Waegelein, 2003).

Most empirical studies examine the impact of corporate governance mechanisms on firm performance by excluding regulated firms, especially banking firms and financial institutions due to the opaqueness of bank and bank regulations. It is reasonable to focus on the effect of regulation on corporate governance in similar industries in order to provide more reliable empirical results by using a more homogeneous and clearer setting. However, the corporate governance of banks, a special attention is needed since financial services are critical for any economy and of course banks are the most important component within financial services. Thus, the question arises to whether the proposals and reforms in unregulated firms can be effective at enhancing the governance of banks. If not, then the questions would be what in practice the structure of corporate governance is in banking firms and how it

work to avoid the agency problem and thus enhance bank performance and stability (Adams and Mehran, 2003).

The critical corporate governance mechanisms in literature: board characteristics, ownership structure, CEO compensation, the role of audit committee, and external governance. However, the function of above corporate governance mechanisms might not enhance firm performance well or might have a different impact in regulated industries, especially the banking industry. In practice, the corporate governance area has been primarily concerned with the single agency relationship between company directors and shareholders; however, the multiple principal-agency relationships are features of financial services companies and a more complicated organization structure and theoretical discussion are needed than that that in unregulated firms.

Bank regulation limits the impact of bank governance mechanisms on alleviating the agency problems; however, it might also be viewed as a special corporate governance mechanism for banking firms. Deposit insurance protection (the safety net) resulting from avoiding the depositor panic of bank run might also create the moral hazard problem, where the safety net provide shareholders and managers incentives to increase excess risk-taking activities and which is subsidized by the taxpayers. Even though there are minimum capital requirements and prompt correction actions, the moral hazard problem is still there. Macey and O'Hara (2003) suggest that depositors with funds at risk might induce them to monitor bank activities actively. Basel Committee also stresses the important role of supervisors on ensuring a stable financial environment and Barth et al. (2004) propose that supervisors at risk might enhance the effective monitoring in banks.

Theory and empirical studies provide conflicting predictions on the impact of diversification. Laeven and Levine (2007) state that even though there is no evidence

that non-financial corporate diversification intensifies agency problem and thus destroys value, it might not be the case here for financial intermediaries. Some research states that financial conglomerates are not easier to monitor than the industrial conglomerates due to opaqueness of financial intermediaries and intensified agency problem. For example, Morgan (2002) finds that bond analysts have greater variations in bank's bond ratings.

Diamond (1984) assigns the role of delegated monitors for financial intermediaries and demonstrates the diversification benefits from the economy of scale by operating bank offices across state line. Later, researchers find that diversification (making the loans and underwriting the securities of the same firms) can provide cost savings to their clients by charging lower fee (e.g. Kroszner and Rajan, 1994; Puri, 1996; Gande et al., 1997; Schenone, 2004; Ber et al., 2001, and Benzoni and Schenone, 2005). The procedure of relaxing restrictions on banking activities begin with removing restrictions on operating bank offices across state line (Riegle-Neal Interstate Banking and Branching Act, 1994) and then on bank affiliation with other financial firms (Gramm-Leach-Bliley Act, 1999).

Deregulations on bank activities have raised a number of concerns. These concerns are mainly related to the stability of financial system, which are the risk of bank failure and micro effect on the pricing of securities (Hebb and Fraser, 2002). Allowing inter-state banking and branches (geographic diversification) makes commercial banks enjoy the benefits of economic scale on cost of deposits and making loans. Regarding to the economy of scope, bank engages a variety of activities could benefit from information advantages and thus boost performance and market valuation; however, conglomerates may make it more difficult to design effective incentive contract for managers and to align the incentive of outsiders and insiders (Laeven and Levine, 2007). Insiders may be eager to expand the range of

financial activities if diversification enhances their private benefits, especially the banks under deposit insurance protections. Therefore, financial conglomerates may intensify the agency problem and thus offset the benefits of economic of scope.

Therefore, in this study the authors would like to investigate the corporate governance structures between specialized and diversified U.S. banks (financial conglomerates) and whether their governance structures are significantly different. Furthermore, theses differences are consistent with the intensified agency problems for diversification. Laeven and Levine (2007) have emphasized that the potential benefits of functional diversification might not be large than the costs, due to the intensified agency problem resulting from financial conglomerates. Therefore, it is interesting to compare the corporate governance structure between the banks with and without financial conglomerates. If the intensified agency problems are the results of financial conglomerates, we would expect to see a relationship between characteristics of weak corporate governance and diversified decision. Besides, by only focusing on the U.S. banks, we would expect to see a clear comparison between specialized and diversified banks since the corporate governance not only differs with industry characteristics but also with national boundaries (Macey and O'Hara, 2003).

Our major findings are as follows. Since the intensified agency problem might be caused by bank diversification (financial conglomerates), diversified banks in the U.S. decrease the usages of corporate governance characteristics in insider ownership, institutional ownership but increase the level of outside director ownership based on the univariate analysis in Table 2. Empirical results from the OLS regression, we also show the positive relationships between diversity and some corporate governance characteristics: board independence, outside director ownership, and CEO equity pay. Next, we investigate the relationship between these corporate governance characteristics and excess value of bank; however, we could not find any significant

results to link these corporate governance characteristics with bank excess value after controlling the decision to diversify. Our contribution to the literature is that even though diversified banks have realized the opaqueness and the intensified agency problems after financial conglomerates and increase the usages of some corporate governance mechanisms, the agency problems still there since these mechanisms could not enhance bank valuation. We also provide the evidence that CEO equity pay might increase risk taking incentives and thus hurt bank performance.

The reminder of the paper is organized as follows. Section II reviews previous literature on diversification and the corporate governance in banking. Section III provides a description of the sample and data. Section IV contains our univariate analysis for specialized and diversified banks. Section V reports the multivariate OLS regression analysis for the relationship between excess value and corporate governance characteristics. Finally, the last section presents the conclusion.

II. Literature review:

The advantages of functionally diversified banks are as follows (Baele et al., 2007). First, the consolidated revenues would be enhanced by improving the income-generating capacity and the operating costs of financial conglomerates would be lower by enjoying operating synergies. Second, information advantages from lending relations might facilitates the efficiency of other financial services. Third, bank governance might be improved by cross-activity mergers (takeover market). In addition, the cross-product merge deals undertaken in financial institutions have a higher degree of similarity than in most other industries. Cybo-Ottone and Murgia (2000) provide evidence that the abnormal return of cross-product deals is higher than horizontal bank merge. On the other hand, the disadvantage of financial conglomerates would be mainly the conflict of interest

and the complexity of the conglomerates organization for monitoring.

Hebb and Fraser (2002) examine two hypotheses of financial conglomerates (combining lending and underwriting). First, the conflict of interest hypothesis states that a join bank/underwriter might underwrite security issuance of a firm in which it has a borrowing relationship with the bank. Second, the information advantages hypothesis states that the additional information obtained by a joint underwriter/bank might convey a signaling effect to investors as less risky (Puri, 1996). They show that there is no evidence to support the hypothesis of conflict of interest by using Canadian banks.

Laeven and Levine (2007) state that there is no evidence that diversification intensifies agency problem and destroys value in non-financial corporate diversification literature. However, the opaqueness and complexity of financial intermediaries might intensify the agency problems in financial conglomerates since it might not easier for stakeholders to monitor banks. Even though diversification (making the loans and underwriting the securities of the same firms) can provide cost savings to their clients by charging lower fee (e.g. Kroszner and Rajan, 1994; Puri, 1996; Gande et al., 1997; Schenone, 2004; Ber et al., 2001, and Benzoni and Schenone, 2005), conglomerates may make it more difficult to design effective incentive contract for managers and to align the incentives of outsiders and insiders (Aron, 1988; Stulz, 1990; Rotemberg and Saloner, 1994) and thus offset the benefits of economic scope. Laeven and Levine (2007) find a diversification discount and state that it would be better to break the financial conglomerates into separated financial intermediaries that specialized in individual activities.

Macey and O'Hara (2003) state that there are two corporate governance models: the Anglo-American and Franco-German models. They differ in treatments in the interest of protecting: the Anglo-American model views that to maximize

shareholder value is the only focus of corporate governance. However, to the extent that shareholder wealth maximization might conflict with the interests of other groups, called "stakeholders" or "nonshareholder constituencies". Therefore, the Franco-German model takes the interests of nonshareholders into account and considers corporations to be the one with a long-term relationship with these stakeholders, particular banks and employee groups. Therefore, the corporate governance not only differs with industry characteristics but also with national boundaries. Besides, Macey and O'Hara (2003) state that due to the characteristics of multiple principal-agency relationships, banks should be governed according to the Franco-German Model (Handly-Schachler, Juleff, and Paton, 2007).

Adam and Mehran (2003) provide statistical and non-econometric analysis by comparing corporate governance variables for a sample of bank holding companies (BHCs) with a sample of manufacturing firms. They found that some key variables are different in BHCs: board size and composition, board activity, CEO compensation, CEO ownership, block share ownership. Therefore, the policy implication from their study is that banks did require distinctive, different, and complicated corporate governance arrangements than manufacturing firms, unregulated one.

Mortlock (2003) states that reliance on debt financing and the complex risks are two special features of banks and a more intensive focus is needed here than some other industries. He proposes that appropriate banking supervisory and more frequent financial disclosures (bank credit in market value, directors' and managers' conflict of interest, and the board's rules) and external auditing arrangements are important for enhancing good bank governance. Mortlock (2003) stresses the importance of effective market disciplines in promoting financial stability and sound corporate governance practices and it is also aligned with the concept of the third Pillar under Basel II.

Houston and James (1995) state that banks use relatively fewer stock options and stockholding as the evidence that CEO equity pay contract in banks could intensify the risk taking incentive and hinder bank stability. John and Qian (2003) find that the pay-performance sensitivity for bank CEO is lower than for manufacturing firms due to the capital structure difference.

III. Sample and Data description

A. sample:

This study adopts Laeven and Levine's (2007) selection criteria of sample banks in the U.S.. Sample banks included in this study are excluded small banks (less than US$100 million in total asset) and banks engaged in neither investment banking nor deposit-taking and loan-making. This study also eliminate Islamic banks because of accounting information does not match with the rest of sample and banks with missing data on basic accounting variables, including assets, loan, deposits, equity, interest income , and non-interest income.

We use the OSIRIS database to obtain the financial statements of banks from 2003-2007. OSIRIS is maintained by Bureau Van Dijk, which provides the Bankscope dataset. Bankscope contains considerably more data on financial firms than alternative data source (Laeven and Levine, 2007). The only difference between Bankscope and OSIRIS is that only listed banks are provided in OSIRIS. We believe that since this study has the selection criterion of excluding small banks (less than US$100 million in total asset) from sample of banks, most of banks included in this study should be large banks and listed banks with high possibility. Financial data refers to the end of year.

B. Data on governance variables:

This study investigates bank governance in five categories: board characteristics, ownership structures, CEO compensation, the roles of the audit committee, and market for corporate control. The authors collect the corporate governance data from the Compact D/SEC database, SEC proxy statement, Risk Metrics (formerly Investors Responsibility Research Center, IRRC), Governance and Directors datasets, Thomson Reuters, Executive Compensation, and Corporate Library database to match the sample of banks with the governance data.

The authors employ four variables to proxy for board characteristics, such as board size, board independence, leadership structure, and busyness of board. We clarify the board characteristics from the Risk Metrics Directors and Corporate Library database. We investigate bank ownership structure in four different perspectives, such as insider ownership, blockholder ownership, institutional ownership, and outside director ownership. The authors collect the data on ownership structure from the Compact D/SEC database, Thomson Reuters, Corporate Library, and proxy statements depending on the data availability. CEO equity-based pay and CEO ownership data is collected from the COMPUSTAT Executive Compensation. The study utilizes two measures as the proxy for audit quality: outside directors on audit committee and number of audit committee meetings. The authors collect the data from the proxy statements.

The measures of Gompers, Ishii, and Metrick (2003) corporate governance index and Bebchuk, Cohen, and Ferrell (2009) governance entrenchment index are used to proxy for external governance. The Gompers, Ishii, and Metrick (2003) index measures the numbers of antitakeover provisions in a firm's charter and in the legal code of the state in which the firm is incorporated. The data of the index is assembled and reported every two or three years (1990, 1993, 1995, 1998, 2000, 2002, 2004, and 2006) by the IRRC and it varies between zero and twenty-four. Bebchuk, Cohen,

and Ferrell (2009) develop the entrenchment index which extends the Gompers, Ishii, and Metrick (2003) index by only focusing on the 6 provisions. This index varies from zero to six. Following the concepts of Gompers, Ishii, and Metrick (2003) and Bebchuk, Cohen, and Ferrell (2009), higher scores on the "governance index" are referred to as having the "higher management power" or the "weaker shareholder rights". Therefore, a firm is usually thought to be a better externally-governed firm when it has lower score on the "governance index". The available data from the previous year are used for years for which there is no governance index (Cremers and Nair, 2005). Because this study's governance data draws from several sources, the authors do not require complete data availability for all variables to maximize the sample size.

C. Variables:

C.1 Governance measures

(1) Board characteristics

This study incorporates four board characteristics measures developed by (Jensen, 1993; Fama, 1980; Fama and Jensen, 1983; Ferris, Jagannathan, and Pritchard, 2003). For the first measure, board size (*BOARD SIZE*) is measured by the number of directors on the board. Our second board characteristic measures the board independence (*BOARD INDEPENDENCE*). The *BOARD INDEPENDENCE* is calculated as the percentage of outside directors of the board. We define outside directors as directors who not have an executive position in the firm, not had such a position in the past, or not are related to an executive. Third, *LEADERSHIP STRUCTURE* is a dummy variable equal to one for the chairman of the board of sample bank serving as chief executive officer and zero otherwise. Finally, we calculate the percentage of the busy board (*BUSY BOARD*) in which a director is

defined as “busy” when he or she holds three or more directorships.

(2) Ownership structure

The authors employ four proxies for ownership structure, including insider ownership, blockholder ownership, institutional ownership, and outside director ownership. We define the percentage of common stock shares of the bank held by the officer and directors as the ratio of *INSIDER OWNERSHIP* of the sample bank. The *BLOCKHOLDER OWNERSHIP* is defined as the ratio of total more than 5% shareholdings to total common shares outstanding of the sample bank. The percentage of equity ownership held by 18 largest public pension funds is used as the proxy for the *INSTITUTIONAL OWNERSHIP*. We define the *OUTSIDE DIRECTOR OWNERSHIP* as the percentage of common equity held by the outside directors.

(3) CEO compensation

CEO equity-based pay and CEO ownership are used to proxy for CEO compensation. *CEO EQUITY-BASED PAY* is the percentage of equity-based compensation in CEO’s total compensation, with equity-based pay defined as the value of stock option and restricted stock grants. *CEO OWNERSHIP* is measured by the percentage of equity ownership held by chief executive officer.

(4) The role of audit committee

We measure the outside directors on audit commit and the number of audit committee meetings to proxy for the quality of audit committee. *OUTSIDE DIRECTORS ON AUDIT COMMITTEE* is a dummy variable equal to one if the audit committee composes entirely of outside directors and zero otherwise. *NUMBER OF AUDIT COMMITTEE MEETINGS* is defined as the times of audit committee

meetings in that fiscal year.

(5) External governance level

As described earlier, the measures of Gompers, Ishii, and Metrick (2003) corporate governance index (*GIM INDEX*) and Bebchuk, Cohen, and Ferrell (2009) governance entrenchment index (*BCF INDEX*) are used to proxy for external governance.

C.2 Bank-level measures of activities and diversity

Laeven and Levine (2007) define pure commercial banks as converting deposits into loans and specialized investing banks as underwriting securities but not making loans. Laeven and Levine (2007) measure the degree to which banks specialized in lending and non-lending services (bank activities) or whether banks perform a range of activities (bank diversity). Bank activities and diversities are two kinds of measures of diversification but bank diversities focus on diversification per se. Laeven and Levine (2007) only focus on the impact diversification per se on bank valuations. Then they construct asset- and income-based measures for both the measures of bank activities and diversity and report both in their study. But they also raise the issue that the income-based measure suffers from more measurement problems that the asset-based measure since the income-based measure could overestimate the level of lending institutions engaging in non-lending activities.

Following the definition for specialized and diversified banks (Laven and Levine, 2007), a bank is classified as diversified one if the ratio of interest income to total operating income (NIM/TOINCOME) or if loans to total earning assets (LOAN/TEASSET) is between 0.1 and 0.9. In this study, due to the measurement problems, here we only adopt the asset-based measure, LOAN/TEASSET, as a way

to break the sample banks into two segments: specialized versus diversified banks.

(1) Bank activities

For the measures of bank activities, very high values in the percentage of loans relative to total earning assets (the income-based measure: *NIM/TOINCOME*) or in the ratios of net interest income to total operating income (the asset-based measure: *LOAN/TEASSET*) signal that the bank specialized in loan making. Total earning assets include loans, securities, and investments. Total operating income includes net interest income, net fee income, net trading income, and net commission income.

(2) Measures of diversification (diversification per se)

For the measures of diversification, lower values of diversity indexes (asset diversity and income diversity) infer to more specialization, while higher values imply that the banks engages in both lending and non-lending services. Asset diversity and income diversity take values between zero and one and are calculated as follows.

$$ASSET\ DIVERSITY = 1 - \left| \frac{(NetLoans - OtherEarningAsset)}{TotalEarningAsset} \right|$$

$$INCOME\ DIVERSITY = 1 - \left| \frac{(NetInterestIncome - OtherOperatingIncome)}{TotalOperatingIncome} \right|$$

where other earning assets include securities and investments and other operating income includes fee income, net commission income, and net trading income.

Note that all four measures *(NIM/TOINCOME, LOAN/TEASSET, ASSET DIVERSITY, and INCOME DIVERSITY*) take values between zero and one and there might be a link between the measures of bank activities (*NIM/TOINCOME and LOAN/TEASSET*) and diversity (*ASSET DIVERSITY and INCOME DIVERSITY*). If a

bank only makes loans, it will be classified as having one in *LOAN/TEASSET* and having zero income diversity. However, the two measures still capture different traits. Laeven and Levine (2007) state that the diversity indexes measure diversification per se, while the bank activities measure where each bank falls along the range from a pure lending bank to a pure fee-generating bank.

C.2 Measures of Bank Excess Value

Based on Laeven and Levine (2007), excess value is the difference between a bank's actual TOBIN-Q and the activity-adjusted TOBIN-Q. Laeven and Levine (2007) use TOBIN-Q as one measure of bank valuation and Andres and Vallelado (2008) use TOBIN-Q as the measure of bank performance. Here the *TOBIN-Q* is calculated as the book value of total asset minus the book value of common equity plus the market value of common equity divided by the book value of total assets (Andres and Vallelado, 2008). So we calculate the excess value for bank j is as follows and there are two measures of excess value, one is by the asset composition of the bank and the other (*LOAN/TEASSET*) is by the income composition of the bank (*NIM/TOINCOME*). Laeven and Levine (2007) emphasize that this method can control for the possibility of unequal market value for different financial activities. Here we follow the same assumption of Laeven and Levine (2007) that only two banking activities (lending versus non-lending) are considered in this study.

$$EXCESSVALUE_j = q - \left(\partial_{j1} q^1 + \partial_{j2} q^2\right) = q - \left(\partial_{j1} q^1 + \left(1 - \partial_{j1}\right) q^2\right)$$

where q^1 and q^2 are constructed from banks that specialize in one activity. q^1 is the valuation of a bank focused on commercial banking and q^2 is the valuation of a bank focused on investment banking. For the asset-based measures, banks where *LOAN/TEASSET* is larger than 0.90 are classified as specialized, where 90% of the

assets are associated with one activity. Then q^1 is the average q of bank with *LOAN/TEASSET* is larger than 0.90 and q^2 is the average q of bank with *LOAN/TEASSET* is less than 0.10. Here ∂_{ij} is the share of the *i*th activity in the total activity of bank *j*. Similarly, the income-based measures is banks where NIM/TOINCOME is larger than 0.90 are classified as specialized. q^1 is the average q of bank with NIM/TOINCOME is larger than 0.90 and q^2 is the average q of bank with NIM/TOINCOME is less than 0.10.

C.4 Control variables

We investigate the robustness of the diversification and governance mechanisms in financial conglomerates by controlling for bank level characteristics. Bank size is usually used to influence diversification decision and bank valuation through economies of scale. As in Lang and Stulz (1994) and Laeven and Levine (2007), we use the logarithm of total assets, LOG(TA), as the control variable. The ratio of profit before taxes to total asset (PBT/ASSET) is also included to capture the impact of accounting return on bank valuation and decision to diversity.

D. Summary Statistics

Table 1 presents descriptive statistics for our sample of banks. The mean and median size of the board are 12.139 and 12 directors, respectively, which is close to the average size for non-financial firms (Yermack, 1996; Klein, 1998; Anderson, Bates, Bizjak, and Lemmon, 2000), but lower than the ones reported in Adams and Mehran (2003) for US bank holding companies from 1986 to 1999 and Andres and Vallelado (2008) for large commercial banks from 6 OECD countries. On average, outside directors account for 78% of board of directors, similar to Andres and

Vallelado's (2008) data, but lower than the ratio reported by Adams and Mehran (2003). The median value of leadership structure is 1, indicating that relatively higher ratio of banks in the United States whose chairman also serves as CEO of the bank. Interestingly, the mean (median) ratio of busy board is 4.18% (0%) which is relatively lower that the ones reported for non-financial firms (Ferris, Jagannathan, and Pritchard, 2003).

[Table 1 is inserted about here]

Outside blockholders hold 11.62% (8.5%) of ownership on average. Institutional ownership takes 1.06% (0.7%) shares in mean (median) of sample banks, largely lower than the average level of manufacturing firms (Adams and Mehran, 2003). Mean (median) insider ownership is 8.21% (5.37%). Specifically, mean (median) CEO ownership is 2.2% (0.52%), quite consistent with the findings in John and Qian (2003) and Adams and Mehran (2003) in which they document that the level of CEO ownership in banking industry is significantly lower than that of manufacturing firms. We also find that equity-based pay constitutes 37.76% (41.45%) of CEO total compensation of the sample banks, which is significantly lower that the ratio in manufacturing industries (Anderson et al., 2000). As John and Qian (2003) indicate, CEO incentives equipped by pay-performance sensitivity in banking industry is designed to be less than one in manufacturing industries due to managerial higher incentives toward riskier project investment for this high leveraged and asymmetric institutions.

We observe that high percentage of outside directors on audit committee. This may be due to the SOX regulation after 2002 Mean (median) number of audit committee meetings is 8.66 (8) times within a year, which is significantly larger than

the number reported by Vafeas and Waegelein (2007) for Fortune 500 firms in 2001. The mean (median) GIM index and BCF index is 9.49 (10) and 3.06 (3), respectively.

The average Tobin-Q is higher than one. Mean (median) ratio of *LOAN/TEASSET* is 0.746 (0.778), close to the mean (median) level of *NIM/TOINCOME*. Consistent with Laeven and Levine (2007), we find that income-based activity measures have more measurement problems than asset-based measures. Although it is not reported, we find that distribution of *NIM/TOINCOME* is quite diverse but the distribution of *LOAN/TEASSET* is between 0 and 1. In order to include the results from income-based activities measure for robustness, we require that there is a positive correlation between the extent to which banks engage in a particular activity and the net income generated from that activity. Therefore, our four measures regarding bank excess value and diversity activities take value between zero and one (Laeven and Levine, 2007) in the empirical analysis. We do the empirical tests on both two measures of banking activities and get the similar results. For our analysis below we report our results using the asset based measure.

IV. The Characteristics of Specialized and Diversified Banks

According to Laeven and Levine (2007), a bank is defined as diversified if its ratio of diversity activities either measured by assets or incomes is between 0.1 and 0.9. Under this definition, we can divide our sample into two subgroups: specialized and diversified bank and compare the difference between these two types of banks. Table 2 and 3 present univariate comparisons of financial and governance characteristics between specialized and diversified Banks. Table 2 shows a comparison of financial characteristics between specialized and diversified Banks. Diversified banks are relatively larger and tend to have lower growth opportunities

(Tobin Q), consistent with findings of Laeven and Levine (2007). The finding that banks have lower growth opportunities (*Tobin-Q*) once they diversified is also consistent with the evidence documented in non-banking industries (Lang and Stulz, 1994; Servaes, 1996; Hyland and Diltz, 2002; Ahn and Denis, 2004). Although we find the magnitude of diversified banks' average net income ratio is larger than that of specialized banks, we do not observe consistent pattern in terms of profits (*PBT/ASSET*) for these two types of banks.

[Table 2 is inserted about here]

In Table 3, we report univariate comparisons of governance characteristics between specialized and diversified banks. We do not find there is significant difference on board size between specialized and diversified banks. However, we find that diversified banks have significantly larger board independence as compared to specialized banks. The average insider ownership of diversified banks is significantly less than the average holdings in specialized firms. This finding is consistent with the evidence for non-banking industries that insider ownership is significantly lower in diversified firms (Servaes, 1996; Denis, Denis, and Sarin, 1997; Anderson, Bates, Bizjak, and Lemmon, 2000). The table also shows that the average holdings of 18 biggest pension funds (*INSTITUTIONAL OWNERSHIP*) is at least 1% lower in diversified banks. However, the average level of outside directors' ownership of diversified banks is significantly higher than one of specialized banks. We observe the percentage of CEO compensation made up by equity or stock options of diversified banks is larger than one of specialized banks, but the difference is not significant. The mean (median) number of *BCF INDEX* of diversified banks is significantly higher compared with specialized banks. This indicates that managers in

diversified banks tend to more entrenched then those in specialized banks in some sense.

[Table 3 is inserted about here]

The univariate analysis indicates there are some differences from the governance perspective that exist between specialized banks and diversified banks. Lower insider ownership and institutional ownership of diversified banks highlight the ownership structure between these two groups of banks are different. Especially, these ownership differences provide evidence of managerial entrenchment. However, differences in the level of board independence and outside director's ownership convey that diversified banks may strength their board functions for low ownership. As Adams and Mehran (2003) argued that different governance mechanisms may plays as substitutes for one another, but the industry attributes characterize the systematic differences between the governance of banking and manufacturing firms. Compared to traditional saving and loan activities, banks involving in non-lending financial activities start expose themselves more business risk and investment risk (Laevine and Levine, 2007). This industrial or business characteristics form the needs for their governances. Banks intensely involve in multiple banking activities tend to expose themselves with high operation and investment risks for since their managers have such low stakes in the bank, hence call for bank directors to expand their fiduciary duties to implement their monitoring functions to protest stakeholders (Macey and O'Hara, 2003).

V. Multivariate Analysis on Governance Characteristics in Specialized and Diversified Banks

We further investigate the relationship between bank diversification and governance mechanisms in a multivariate framework. To capture the effects of diversification on bank governance, we include *ASSET DIVERSITY* variable in each model specification. We also include bank size (*LOG(TA)*), loan to total asset(*LOAN/TEASSET*), profit before taxes to total asset (*PBT/ASSET*) as independent control variables. Because our data is cross-sectional and time-series data, simple OLS pooled regressions are likely to overstate the statistical significance of empirical test results due to serial and cross correlation in the error terms (Anderson, et al. 2000). To address the issue, we follow Laeven and Levine (2007) by controlling the year effect in the regression model.

[Table 4 is inserted about here]

Model 1 to 4 illustrates the relation between diversification and board structure of sample banks. Model 1 documents the relation between diversification and the board size of sample banks. We find no significant difference on board size as the diversity activities increase, similar to previous univariate results. Model 2 reports the relation between diversification and board independence of sample banks. As banks become diversified, their board independence is statistically and significantly higher than specialized banks. This result corresponds to the univariate result that diverisified banks have higher board independence even we control those factors which may also influence bank diversification decision. We do not find significant differences on leadership structure between these two types of banks in the multivariate framework. The multivariate analysis on busy board (Model 4) do not provide supporting evidence that board members in diversified banks tend to more busy compared to specialized banks.

The table also documents the relation between diversification and the ownership structure of sample banks. The negative coefficients of bank diversity in models 5 and 7 imply officers and directors and outside institutional investors tend to decrease their holdings as banks diversify, but this effect is not significant. Therefore, our empirical results indicate that the effect of bank diversification to insider shareholdings or institutional holdings is at the margin. On the contrary, outside directors of diversified banks on average hold 3.0% more shares compared to their counterparts. The results from model 2 and 8 suggest that diversified banks, in some sense, put more emphasis on their board functions. The boards of diversified banks are equipped with higher board independence and higher outsider directors' ownership. Inconsistent with the univariate analysis in the previous section, we find that the percentage of CEO compensation based on stock performance significantly increases at 10% level as banks become diversified. Through these governance mechanisms, diversified banks not only strengthen their monitoring functions to avoid the possible managerial entrenchment problems but also better align managerial interest with shareholders'. The results from models 13 and 14 provide supporting evidence that managerial entrenchment level in diversified banks is significantly lower compared to specialized banks. Finally, we do not find there are significant differences in CEO ownership and outsider directors on audit committee between diversified banks and specialized banks.

VI. Excess Value, Bank Diversification, and Governance Characteristics

Our analyses highlight that different governance mechanisms exist between diversified banks and specialized banks in some perspectives, especially in board effectiveness and shareholder's protections. The results in previous sections also provide some evidence that diversified banks may use alternative governance

mechanisms, namely outside directors and market monitoring functions, to increase board monitoring function and also enhance shareholder's protections. We further wonder whether these differences in governance mechanisms associate with value discount of diversified banks. To provide further evidence on the role that alternative governance characteristics might play their roles in diversified banks, we investigate the relationship among excess value of diversified banks, bank diversification, and their governance structures. Table 5 presents our empirical results. In each model specification, we use excess value of the sample bank to regress on its diversity level and governance variables. In each regression, we add different governance variable to investigate its impact on bank excess values. As the results indicate, board independence level and outside director ownership have no significant effect on bank excess values. The increase of percentage of CEO equity based on their performance shows a significantly negative impact on bank excess value at 5% significance level (model 3). Although we find CEO equity-based pay of diversified banks are significantly higher than specialized banks, banks with higher ratio of CEO equity based pay have significantly lower values than those with lower ratio of CEO equity-based pay (model 3). Our result tend to support the argument of John and Qian (2003) that high equity-based compensation tend to induce managerial risk-taking behaviors and these highly-risk projects investments are harmful to shareholders especially in banking industry with characteristics of high leveraged and information asymmetry. Besides, we support Houston and James (1995) that banks should use relatively fewer stock options and stockholding as CEO pay since it might induce bank CEO risk taking incentives and bank run. Our conjecture is also supported by the result of model 5 in Table 5 that managerial entrenchment behavior plays a crucial role in determining the bank value. As managers become more entrenched, their interests are not aligned with shareholders' interests, therefore the

bank value won't be maximized. We also find that bank diversification has negative impact on excess value of banks, consistent with the findings of Laeven and Levine (2007) and the profitability level has significantly impact on excess values of banks from the empirical evidence.

[Table 5 is inserted about here]

VII. Summary and Conclusion

This study compares the structure of corporate governance across specialized and diversified banks in the US, examine the link between agency problems and bank diversification, and relate those differences in governance to the value discount of diversified banks. We find that some differences exist between specialized banks and diversified banks from corporate governance perspective. Univariate analyses show that diversified banks tend to have lower insider ownership and institutional holdings. These ownership differences provide evidence of managerial entrenchment and support the agency argument for diversification. However, diversified banks employ more outside directors, show higher board independence, and endow outside directors with more share holdings.

Multivariate analyses about the governance structure and bank diversification indicate that bank diversification is associated with governance mechanisms in some perspectives. Bank diversification usually leads to higher board independence, higher outside director's holdings and higher percentage of CEO equity-based pay. Through these governance mechanisms, diversified banks not only strengthen their monitoring functions to avoid the possible managerial entrenchment problems but also better align managerial interest with shareholders'.

Our empirical investigation among excess value of diversified banks, bank

diversification, and their governance structures shows that governance mechanisms have significant impact on bank value discount, especially on CEO equity-based pay and managerial entrenched level. Our study, although show significant differences in governance perspective between diversified banks and specialized banks, suggests that governance differences cannot completely explain the significant valuation discounts for diversified banks.

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Table 1. Summary Statistics for the Variables of Governance and Financial Characteristics

This table presents the summary statistics for various measures of corporate governance and financial characteristics for the studied samples. *BOARD SIZE* is the number of the directors serving on the board. *BOARD INDEPENDENCE* is the fraction of outside directors in the board, where outside directors are directors who do not have an executive position in the firm, have not had such a position in the past, or are not related to an executive. *LEADERSHIP STRUCTURE* is a dummy variable that equals one when the chairman of the board serves as CEO, and zero otherwise. *BUSY BOARD* is the fraction of directors who serve on the boards of three or more firms. *Insider ownership* is the fraction of outstanding shares held by officers and directors. *BLOCKHOLDER OWNERSHIP* is the fraction of outstanding shares owned by blockholders, where blockholders is defined as shareholders who hold more than 5% of outstanding shares. *INSTITUTIONAL OWNERSHIP* is the fraction of outstanding shares held by the 18 largest public pension funds (as in Cremers and Nair (2005)). *OUTSIDE DIRECTORS OWNERSHIP* is the fraction of outstanding shares held by outside directors. *CEO EQUITY-BASED PAY* is the percentage of equity-based compensation (stock option and restricted stock grants) in CEO's total compensation. *CEO OWNERSHIP* is the fraction of outstanding shares held by CEO. *OUTSIDE DIRECTORS ON AUDIT COMMITTEE* is a dummy variable that equals one if the audit committee is composed entirely of outside directors, and zero otherwise. *NUMBER OF AUDIT COMMITTEE MEETINGS* is the number of times the audit committee meets during the fiscal year. Two measures of external governance indices are used: *GIM INDEX* (Gompers et al., 2003) and *BCF INDEX* (Bebchuk et al., 2009). *TOBIN Q* is calculated as the book value of total asset minus the book value of common equity plus the market value of common equity divided by the book value of total assets. *LOAN/TEASSET* is the ration of loan to total earning asset. *NIM/TOINCOME* is the ratio of net interest income to total operating income. *NIM/ASSET* is the ratio of net interest income divided by total asset. *OPI/ASSET* is the ratio of operating income dived by total asset. *PBT/ASSET* is the ratio of profits before taxes divided by total asset. *EXCESS_ASSET* is the difference between a bank's actual *TOBIN Q* and the activity-adjusted *TOBIN Q* based on asset-based measures. *EXCESS_INCOME* is the difference between a bank's actual *TOBIN Q* and the activity-adjusted *TOBIN Q* based on income-based measures. *ASSET DIVERSITY* is calculated as 1-|(net loans-other earning assets)/total earning asset| and takes value between 0 and 1. *INCOME DIVERSITY* is calculated as 1-|(net interest income-total operating income)/total operating income| and takes value between 0 and 1.

Panel A. Governance Characteristics

Variable	*N*	Mean	Median	Maximum	Minimum
BOARD_SIZE	915	12.140	12	31	5
BOARD INDEPENDENCE	914	0.782	0.800	0.957	0.273
LEADERSHIP STRUCTURE	915	0.577	1	1	0
BUSY BOARD	831	0.042	0.000	0.714	0
INSIDER OWNERSHIP	170	0.082	0.054	0.586	0
BLOCKHOLDER OWNERSHIP	821	0.116	0.085	0.906	0
INSTITUTIONAL OWNERSHIP	1969	0.011	0.007	0.062	0
OUTSIDE DIRECTORS OWNERSHIP	906	0.051	0.024	0.757	0
CEO EQUITY-BASED PAY	214	0.378	0.414	1.000	0
CEO OWNERSHIP	696	0.022	0.006	0.509	0
OUTSIDE DIRECTORS ON AUDIT COMMITTEE	908	0.819	1	1	0
NUMBER OF AUDIT COMMITTEE MEETINGS	179	8.659	8	21	0
GIM INDEX	534	9.498	10	15	3
BCF INDEX	536	3.065	3	6	0

Panel B. Financial Characteristics

Variable	*N*	Mean	Median	Maximum	Minimum
TOBIN_Q	3126	1.096	1.082	5.889	0.811
LOAN/TEASSET	3499	0.747	0.778	1.000	0.000
NIM/TOINCOME	3499	0.780	0.798	1.000	0.006
NIM/ASSET	3503	0.033	0.032	0.210	0.000
OPI/ASSET	3503	0.012	0.008	0.683	-0.023
PBT/ASSET	3503	0.010	0.012	0.268	-0.157
EXCESS_ASSET	3127	-0.090	-0.114	5.065	-1.498
EXCESS_INCOME	3126	-0.321	-0.306	4.299	-2.334
ASSET DIVERSITY	3499	0.470	0.440	0.999	0.000
INCOME DIVERSITY	3499	0.413	0.401	0.999	0.000

Table 2. Univariate Comparisons of Firm Characteristics for Single-Segment and Two-Segment Firms

Sample bank for segment data is defined by Laeven and Levine (2007). Banks with the ratio of *LOAN/TEASSET* between 0.1 and 0.9 are defined as diversified banks; otherwise they are specialized banks. The number in parentheses below the mean is the t-statistics from an ANOVA test, and the number in parentheses below the median is the z-statistics from a Wilcoxon sign-rank test. The sample period is during the year 2003-2008.

	Mean		Median	
	Single-Segment	Two-Segment	Single-Segment	Two-Segment
TOBIN Q	1.383	1.093***	1.103	1.082*
		(-9.593)		(1.897)
LOAN/TEASSET	0.514	0.747***	0.900	0.778
		(-9.370)		(0.190)
NIM/TOINCOME	0.644	0.782***	0.815	0.798
		(6.200)		(0.364)
NIM/ASSET	0.026	0.033***	0.022	0.032***
		(4.457)		(2.927)
OPI/ASSET	0.070	0.011***	0.008	0.008
		(-14.956)		(0.159)
PBT/ASSET	0.030	0.010***	0.017	0.012***
		(-7.915)		(3.565)

Table 3. Univariate Comparisons of Governance Characteristics for Specialized and Diversified Banks

Sample bank for segment data is defined by Laeven and Levine (2007). Banks with the ratio of *LOAN/TEASSET* between 0.1 and 0.9 are defined as diversified banks; otherwise they are specialized banks. The number in parentheses below the mean is the t-statistics from an ANOVA test, and the number in parentheses below the median is the z-statistics from a Wilcoxon sign-rank test. The sample period is during the year 2003-2008.

	Mean		Median	
	Specialized ent	Diversified ent	Specialized ent	Diversified
BOARD SIZE	12.063	12.011	13.000	12.000
		(-0.061)		(0.47)
BOARD INDEPENDENCE	0.696	0.784***	0.75	0.813*
		(2.921)		(1.854)
LEADERSHIP STRUCTURE	0.688	0.571	1.000	1.000
		(-0.93)		(0.796)
BUSY BOARD	0.066	0.041	0.063	0.000*
		(-1.009)		(1.744)
INSIDER OWNERSHIP	0.287	0.075***	0.351	0.051*
		(-5.26)		(1.648)
BLOCKHOLDER OWNERSHIP	0.092	0.116	0.065	0.085
		(0.703)		(0.645)
INSTITUTIONAL OWNERSHIP	0.022	0.010***	0.025	0.007***
		(-4.782)		(4.05)
OUTSIDE DIRECTORS OWNERSHIP	0.008	0.051**	0.003	0.025***
		(2.057)		(4.363)
CEO EQUITY-BASED PAY	0.496	0.357	0.495	0.349
		(-1.36)		(1.512)
*CEO OWNERSHIP_*	0.135	0.023	0.003	0.006
		(-0.269)		(1.301)
OUTSIDE DIRECTORS ON AUDIT COMMITTEE	0.875	0.814	1.000	1.000
		(-0.625)		(0.42)
NUMBER OF AUDIT COMMITTEE MEETINGS	8.750	8.913	9.500	8.000
		(0.112)		(0.072)
GIM INDEX	8.417	9.519	9.000	10.000
		(1.299)		(1.085)
BCF INDEX	1.6667	3.067***	2.000	3.000***
		(3.447)		(3.039)

Table 4. OLS Regressions Comparing Corporate Governance Characteristics in Specialized Banks and Banks become Diversified

This table presents OLS regression results that the dependent variables are the list of corporate governance characteristics. The corporate governance characteristics are as follows: *BOARD SIZE* is the number of the directors serving on the board. *BOARD INDEPENDENCE* is the fraction of outside directors in the board, where outside directors are directors who do not have an executive position in the firm, have not had such a position in the past, or are not related to an executive. *LEADERSHIP STRUCTURE* is a dummy variable that equals one when the chairman of the board serves as CEO, and zero otherwise. *BUSY BOARD* is the fraction of directors who serve on the boards of three or more firms. *Insider ownership* is the fraction of outstanding shares held by officers and directors. *BLOCKHOLDER OWNERSHIP* is the fraction of outstanding shares owned by blockholders, where blockholders is defined as shareholders who hold more than 5% of outstanding shares. *INSTITUTIONAL OWNERSHIP* is the fraction of outstanding shares held by the 18 largest public pension funds (as in Cremers and Nair (2005)). *OUTSIDE DIRECTORS OWNERSHIP* is the fraction of outstanding shares held by outside directors. *CEO EQUITY-BASED PAY* is the percentage of equity-based compensation (stock option and restricted stock grants) in CEO's total compensation. *CEO OWNERSHIP* is the fraction of outstanding shares held by CEO. *OUTSIDE DIRECTORS ON AUDIT COMMITTEE* is a dummy variable that equals one if the audit committee is composed entirely of outside directors, and zero otherwise. *NUMBER OF AUDIT COMMITTEE MEETINGS* is the number of times the audit committee meets during the fiscal year. Two measures of external governance indices are used: *GIM INDEX* (Gompers et al., 2003) and *BCF INDEX* (Bebchuk et al., 2009). *ASSET DIVERSITY* is included as the independent variable to investigate the relationship between bank diversification and governance mechanisms. *LOG(TA), LOAN/TEASSET*, and *PBT/ASSET* are included to control for the bank-level characteristics and also year effect. *LOG(TA)* is the logarithm of total asset. *LOAN/TEASSET* is the ration of loan to total earning asset. *PBT/ASSET* is the ratio of profits before taxes divided by total asset.

	model 1	model 2	model 3	model 4	model 5	model 6	model 7	model 8	Model9	model 10	model 11	model 12	model 13	model 14
	BOARD SIZE	*BOARD INDEPENDENCE*	*LEADERSHIP STRUCTURE*	*BUSY BOARD*	*INSIDER OWNERSHIP*	*BLOCK OWNERSHIP*	*INSTITUTION OWNERSHIP*	*OUTSIDE DIR OWNERSHIP*	*EQUITY-BASED PAY*	*CEO OWNERSHIP*	*OUTSIDE DIRS ON AUDIT COM*	*NO AUDIT COM MEETINGS*	*GIM INDEX*	*BCF INDEX*
Intercept	80.438	-21.271	23.148	16.119	0.059	-9.557	1.150	-8.667	21.746	-1.012	-1.727	-3151.68	236.436	-80.654
	(0.509)	(-3.649)***	(0.972)	(3.505)***	(0.003)	(-1.166)	(5.579)***	(-2.171)**	(0.513)	(-0.304)	(-0.087)	(-4.388)***	(1.398)	(-1.050)
ASSET DIVERSITY	0.021	0.039	-0.096	0.025	-0.058	0.012	-0.001	0.030	0.171	-0.015	-0.016	-0.098	-1.438	-0.643
	(0.033)	(1.655)*	(-1.005)	(1.446)	(-1.315)	(0.442)	(-0.242)	(1.891)*	(1.876)*	(-1.162)	(-0.200)	(-0.067)	(-2.060)**	(-2.043)**
LOG(TA)	0.801	-0.012	0.091	0.022	-0.025	-0.007	0.004	-0.012	0.067	-0.006	-0.025	0.798	-0.148	-0.138
	(10.990)***	(-4.311)***	(8.263)***	(10.981)***	(-5.061)***	(-2.124)**	(43.260)***	(-6.702)***	(6.178)***	(-3.812)***	(-2.774)***	(4.383)***	(-1.676)*	(-3.430)***
LOAN/TEASSET	2.337	-0.019	-0.010	-0.006	-0.037	-0.059	0.004	0.005	0.132	-0.014	-0.331	1.063	1.758	0.960
	(2.494)**	(-0.573)	(-0.705)	(-0.249)	(-0.644)	(-1.393)	(2.502)**	(0.225)	(1.192)	(-0.696)	(-2.852)***	(0.616)	(1.873)*	(2.245)**
PBT/ASSET	8.991	-0.558	-0.742	0.307	1.375	-0.693	0.030	-0.021	2.371	0.027	-0.979	11.794	-8.734	-12.390
	(1.592)	(-2.677)***	(-0.872)	(2.038)**	(2.626)***	(-2.897)***	(2.763)***	(-0.150)	(2.424)**	(0.249)	(-1.281)	(0.640)	(-1.362)	(-4.238)***
Control year effect	Yes	Yes	Yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	Yes
Adjusted	0.131	0.065	0.092	0.214	0.232	0.020	0.52	0.07	0.17	0.02	0.01	0.17	0.04	0.13
F-statistic	27.26***	13.07***	18.59***	44.96***	9.86***	4.09***	407.93***	14.23***	8.69***	3.68***	3.31**	7.46***	5.20***	15.74***
N	870	870	870	806	148	796	1893	863	187	661	864	157	499	501

Table 5. OLS Regressions of Excess Value on Measures of Corporate Governance in Specialized Banks and Banks become Diversified

This table presents OLS regression results that the dependent variable is EXCESS_ASSET_. We further examine the role played by these statistically significant corporate governance characteristics in Table 4 with the decision to diversify. EXCESS_ASSET_ is the difference between a bank's actual TOBIN_Q and the activity-adjusted TOBIN_Q based on asset-based measures. The corporate governance characteristics are as follows: *BOARD INDEPENDENCE* is the fraction of outside directors in the board, where outside directors are directors who do not have an executive position in the firm, have not had such a position in the past, or are not related to an executive. *OUTSIDE DIRECTORS OWNERSHIP* is the fraction of outstanding shares held by outside directors. *CEO EQUITY-BASED PAY* is the percentage of equity-based compensation (stock option and restricted stock grants) in CEO's total compensation. Two measures of external governance indices are used: *GIM INDEX* (Gompers et al., 2003) and *BCF INDEX* (Bebchuk et al., 2009). ASSET DIVERSITY is included as the independent variable to control for the decision to diversify. *LOG(TA)*, *LOAN/TEASSET*, and *PBT/ASSET* are included to control for the bank-level characteristics and also year effect. LOG(TA) is the logarithm of total asset. *LOAN/TEASSET* is the ration of loan to total earning asset. *PBT/ASSET* is the ratio of profits before taxes divided by total asset.

	model 1	model 2	model 3	model 4	model 5	model 6	model 7	model 8
Intercept	43.797	44.582	210	31.936	18.892	217.342	215.554	215.922
	(2.801)***	(2.835)***	(11.162)***	(1.658)*	(0.976)	(10.95)***	(9.791)***	(9.624)***
ASSET DIVERSITY	-0.223	-0.219	-0.059	-0.18	-0.134	-0.043	-0.044	-0.04
	(-3.585)***	(-3.516)***	(-1.438)	(-2.278)*	(-1.671)*	(-1.011)	(-0.946)	(-0.837)
LOG(TA)	-0.022	-0.023	-0.011	-0.014	-0.012	-0.015	-0.014	-0.017
	(-3.086)***	(-3.085)***	(-2.03)**	(-1.403)	(-1.152)	(-2.285)**	(-1.859)*	(-2.085)**
LOAN/TEASSET	-0.003	-0.005	0.062	0.218	0.157	0.043	0.043	0.043
	(-0.037)	(-0.052)	(1.261)	(2.037)**	(1.459)	(0.858)	(0.819)	(0.808)
PBT/ASSET	6.31	6.281	13.604	8.297	8.749	13.545	13.585	13.477
	(11.364)***	(11.327)***	(31.354)***	(11.238)***	(12.007)***	(30.845)***	(28.728)***	(26.795)***
BOARD INDEPENDENCE	0.051						-0.009	-0.018
	(0.56)						(-0.124)	(-0.241)
OUTSIDE DIRECTORS OWNERSHIP		0.044				0.584	0.717	0.596
		(0.329)				(1.318)	(1.444)	(1.164)
CEO QUUITY-BASED PAY			-0.073			-0.058	-0.063	-0.059
			(-2.189)**			(-1.641)	(-1.621)	(-1.454)
GIM INDEX				-0.002			0.002	
				(-0.463)			(0.662)	
BCF INDEX					-0.026			-0.002
					(-2.281)**			(-0.26)
Adjusted R-squared	0.198	0.198	0.892	0.291	0.286	0.903	0.904	0.903

F-statistic	36.59	36.36	246.65	34.78	33.80	211.70	152.54	148.29
N	865	859	180	494	492	159	145	142