BANK MONITORING AS AN ALTERNATIVE CORPORATE FORCE AND ITS IMPACT ON THE VALUE OF BORROWER FIRM

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ABSTRACT

We have analysed the effectiveness of monitoring by banks as a tool of corporate governance and the impact it has on the value of the borrowing firms. We used three indicators as proxies for strong bank monitoring on a company- a) substantial ratio of bank debt to overall debt, b) borrowings from private banks and c) sizeable banking relationships. A dataset comprising Indian non-financial companies from years 2003-2018 was used in our panel-data regression models. We considered a robust sample size of observations, consisting ~2269 firm years from public as well as private organizations. The result outcomes from our study show that all the three measures significantly impact the value of the borrower firm. However, while the share of bank borrowing as well as the type of banker are significant factors that have positive influence on the value, the number of different banking relations has an inverse impact on the same. Borrowing from multiple banks leads to drop infirm value, proving that a single bank relationship is stronger means of corporate governance as it mitigates any "free-rider" problems. This indicates that only the banks with high quality active monitoring play a key governance role, thus improving firm value.

Keywords: Corporate governance, bank monitoring, firm value

Introduction

Active monitoring of companies by a financial intermediary like a commercial bank can reduce the agency cost and asymmetric information, resulting in firm value

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improvement. Researches in the past (Lummer and McConnell, 1989 and James, 1987) provide empirical evidence on bank loan agreements announcements producing vast returns for borrowers. Bank debt can add value to borrowing firms when the banks monitor the firms. In such scenarios, any perceived or actual incremental change in monitoring by the lender will impact the returns during loan announcement periods. Additional evidence on this is provided by Slovin, Johnson, and Glascock (1992), Slovin, Sushka, and Hudson (1988) and James (1987). The literature on bank-monitoring highlights the value provided by external monitoring i.e. banks act as alternate monitors for various internal governance mechanisms (Byers et. al., 2008). Their findings are in-line with those of (Diamond, 1984) that consider the role of a bank as a delegate monitor. Sharpe (1990) and Diamond (1984) have backed this argument with the reason that banks, against other monitors, have higher informational advantage.

Corporate governance mechanisms, according to (Jensen and Mackling, 1976), should monitor both externally and internally to address agency issues. External auditors mostly do external monitoring, however lenders too can play a key part in doing so. Sources of debt funding can range from financial institutes to bonds in capital markets. Given the less developed bond market in Asia, many big firms in Asia including India continue to prefer traditional loans from banks (Nam and Nam, 2004). As firms do that, lending banks turn into their stakeholders with active interest in the firm's activities, making sure they reduce any potential credit risks (Ahn and Choi, 2009). Since creditors like to ensure that the firm uses the funds efficiently and appropriately, they pursue as a monitor akin to how audit committee and board composition function in corporate governance. Under such surveillance, managements usually act appropriately and that further leads to improvement in firm value. Thus, this piece of research examines the monitoring role of banks in corporate governance and tests if the value of companies that take bank debt increases.

Our study extends the literature on the significance of bank monitoring and corporate governance in general, by providing empirical evidence in India around the potential of external corporate governance performed by lending banks as key stakeholders to enhance firm value.

The results from our panel-data regression tests show that the share of bank borrowing as well as the type of banker are significant factors that have positive influence on the value. However, the number of different banking relations has an inverse impact on the firm value. Borrowing from multiple banks leads to drop infirm value, proving that a single bank relationship is stronger means of corporate governance as it mitigates any "free-rider" problems. This indicates that only the banks with high quality active monitoring play a key governance role, thus improving firm value.

LITERATURE REVIEW

Bank Monitoring as a Corporate Governance Mechanism

Primarily, in countries such as Germany and Japan, where bank debt as primary source of external financings, defines the financial system, corporate governance can be carried out by banks (Charkham, 1995). It is shown by Moerland (1995) that agency problem slower in such situations. Other works of literature in finance and economics try to explore banks managing this unique role and how these relations with their borrowers impact the latter's financials. However, as stated in Shleifer and Vishny(1997), only a handful empirical pieces of evidence depict the monitoring function of banks as corporate governance mechanism. Byers et al. (2008) have conveyed what degree it is to which a bank may substitute other such similar mechanisms. These findings establish the value of effective management monitoring in order to achieve satisfactory corporate governance.

The Effect of Bank Monitoring on the Value of the Borrower Firm

Majority of literature on bank monitoring linked with syndicated loans focussed mostly on information asymmetries among syndicated participants and the lead banks (Sufi, 2007; Champagne and Kryzanowski, 2007; Lee and Mullineaux, 2004; Dennis and Mullineaux, 2000). However, they didn't examine the monitoring role banks can play in corporate governance.

Hermawan (2009) carried out a test to check the impact of banks' role in monitoring on the informativeness of earnings captured by ERC (earnings response coefficient).

The result revealed that even though it doesn't have major impact on the ERC, the ERC's of firms with bigger loans and from banks with higher quality of monitoring were higher than that of firms with smaller loan sizes and from similar banks. Hence it implies that investors can have higher trust on the governance of firms that have taken loans from banks having high monitoring standards.

Byers et al. (2008) backs that bank monitoring can improve firm value through a dataset of 800+ commercial loan announcements from 1980 to 2003. It shows that loan announcements can have good impacts on the borrowers' firm value even if its internal corporate governance is weak.

Kang et al. (2000) showed that shareholder value can be improved when banks make policies around investments. Shepherd et al. (2008) too declared existence of this significant positive relation, particularly in firms bearing high agency cost. Van Overfelt et al. (2006) adds empirical support on the performance of bank-affiliated firms. They proved, using data from ~130 Belgium public firms, that bank affiliation positively influences the market-to-book ratio and that its degree of involvement may significantly decrease volatility of the ROA ratio.

HYPOTHESIS DEVELOPMENT

As part of the study, we developed three different hypotheses to test if bank monitoring impacts the firm value of the borrower. Particularly, we used three proxies of bank monitoring and assessed their relations with firm value. These proxies are: a) type of bank from where firms borrow money (i.e. public sector banks versus private sector banks), b) the number of banks with which the firm has taken a loan, and c) the proportion of bank debt to overall borrowing in the firms' financial statements.

State-owned and Private Sector Banks

It has been vastly documented (La Porta et al. 2002 , Shen and Lin 2012) that compared to their private sector counterparts, public banks make inefficient risk-choices. These choices may be made because of lack of incentives to innovate (Shleifer, 1998); they can be found in the elaborations presented in the political theory of firms by Shleifer

and Vishny(1997), the mis- governance theory of firms by Banerjee (1997) and the market discipline theory of firms under implicit guarantees by Flannery and Nikolova(2004). Basis the theory of Shleifer and Vishny (1997), state representative bureaucrats anticipate personal benefits by allocating bank credits towards riskier and/or politically significant yet inefficient endeavors. As per the mis-governance theory by Banerjee (1997), in situations where the government plans to address failures of market, agents may issued delays and get involved in corrupted actions because of their low incentives. Further, Flannery and Nikolova, (2004) point that the expected market disciplining is weakened by implicit guarantees on bank liabilities by supervisory systems. These implicit or explicit guarantees given by governments can also make moral hazards, as stated by Kornai (1979); Demirgiic-Kunt and Huizinga (2004); Boot and Greenbaum(1993); Dewatripont and Tirole(1993) and Freixas and Rochet(1997). Considering all of this, it is logical to conclude that a private sector bank isa way more stronger monitor than a state-owned one hence a firm value increase when the main bank is a private sector bank. Henceforth, we hypothesized the below:

H1:A firm's value is higher when a private bank is the main banker.

Number of Banking Relations

Recent studies (Carletti, Cerasi, and Daltung 2007, Ahn& Choi 2009) present that when there are more than one banking associations, even if the banks may have lower incentives to scrutinize, the overall monitoring may be actually higher and bank monitoring is stronger, therefore positively impacts the firm value. Moreover, since every bank monitors the financial statements and sets its debt covenants independently, the level of monitoring is most likely going to be high in case of multiple banks and it hence leads to strong bank monitoring therefore positively influencing the firm value. Studies also suggest the complete reverse of the above by stating that monitoring higher where there is instead just one banking relationship as it mitigates the "free-rider" problem (Ramakrishna and Thakor, 1984; Diamond, 1984). Therefore, how the number of banks a firm takes loans from impacts the firm value, as discussed earlier, is not clear. Therefore, we hypothesize the following:

H2a:*Firm's value decreases as the number of lending banks increases.*

H2b:*Firm's value increases as the number of lending banks increases.*

H2c:*There is no relation between firm's value and the number of lending banks.*

The proportion of Bank Debt

Intuitively, banks would have higher focus on borrowers who received bigger loans as there is a higher credit risk. Khalil and Parigi (1998) presented that bigger loans can indicate need for higher attention. Kang et al. (2000) also supported that the size of loans is positively linked with the banks' needs to carry out monitoring exercises. Further building on the concept, Lee and Mullineaux (2004) presented that for syndicated loans; the banks which have higher portions in the loan would carry stronger motives to scrutinize than other banks. In a nutshell most past literature depicts that banks monitor more when they provide bigger loans. This is crucial to ensure that the management takes honest actions that are beneficial for the firm. Therefore, we hypothesize the following:

H3:*Firm's Value increases when the proportion of bank debt increases.*

RESEARCH METHODOLOGY

Variables

Theory informs the choice of variables. In the current study, the strength of bank monitoring is measured by the government-owned banks versus privately owned banks. We include a binary variable equal to 1 if the main banker of the firm is a private bank, and 0 otherwise (Private Main Bank). For the number of banking relations, we include the number of banks with which the firm has banking relations. Also, for the proportion of bank debt, we use the ratio of bank debt to total debt of the firm (Bank Debt/Debt).

DEPENDENT VARIABLE

We have used ROA (return on assets) and Tobin's Q as proxies for measuring performance of sample firms which have been extensively used to capture the firm performance in the corporate governance studies. We have used both the measures to capture the relationship on the basis of both the accounting and market based ratios.

CONTROL VARIABLES

The regression between Bank monitoring and firm performance has been controlled for variables which could impact either strength of bank monitoring or firm performance or both. Based on earlier studies Ahn and Choi (2009) and Hermawan (2009), these variables are firm size measured by Log of Asset, Leverage (financial risk) measured by the debt-equity ratio, and Growth measured by growth of sales.

Table 1: Definition of Variables

VARIABLE	DESCRIPTION
	Dependent variables
Tobin's Q	(Market Value of Equity + Book Value of Debt)/ Total Assets
ROA	Net Income / Average total assets
	Research variables
Number of Banks	The number of banks with which the firm has a banking relation (Number of Bankers).
Bank Debt / Total Debt	Ratio of debt taken through banks divided by total debt
Main Banker	Dummy variable takes a value equal to 1 if the company's main bank is a private bank and takes a value 0 if it is a public bank.
Single Banker	If the firm has only one bank then 1 else 0
	Control variables
Debt/Equity	Ratio of total debt to total equity.
Ln (*Assets*)	Logarithm of total assets.
Growth of Sales	Percentage growth in sales over the previous year
Risk	Firm risk is measured by the beta of firm

Empirical Model

Firm's Performance = β0 + β1(Private Main Bank) it + β2 (Number of Banks) it + β3 (Bank Debt /Debt) it + + β4 Growth it + + β5 Size it + β6Leverage it + μit (1)

Sample Selection

Our sample set was obtained from CMIE Prowess Database and includes the observations for listed Indian firms (excluding financial firms) from 2003-2018. We used a large dataset as it captures the monitoring by banks in a more specific and effective manner. Additionally, we have also used the data of banking relations of firms in their order of significance. We have used this to examine the differential effect on the value of firm based on whether the lead bank is government owned or privately owned along with the number of banking relations.

Table 2. Final Sample Selection

PARTICULARS	FIRM YEARS
Total listed Firms (Non -financial) with Market Capitalisation data	18213
Less: Bankers not available	8634
Total	**9579**
Bank Debt or Long-term debt not available	6260
Total	**3319**
ROA and Control Variables Missing	1050
Final Firm Years	**2269**

RESULTS AND DISCUSSION

Descriptive Statistics

The descriptive statistics of the variables used are presented in Table 3. Data considered as outliers i.e. belonging to the lowermost and uppermost 5% of the series has been winsorized. The table below describes the financial performance as well as the measures of bank monitoring of the firms in the sample across the years 2003 – 2018.

These results revealed the presence of a large range of profitability and financial performances reported by the companies over the years in the sample. The standard deviation of ROA is higher as opposed to the Tobin's Q Ratio, signifying a higher consistency in the Tobin's Q.

We observed that majority of the companies over the years had the main bank as a government owned bank as we derive an arithmetic average of 0.2151 indicating that only 21.51% of the 2269 firm years had a private bank as the main bank.

The second metric to indicate bank monitoring is the number of bankers lending to the firm. Over the years, the firms registered an average of approximately 7 banks it borrowed from, ranging from a minimum of 1 bank to a maximum of 51 banks.

The third measure is the proportion of bank debt to total debt. The average is 64.69% with a negative skewness, a minimum of 0.28% to maximum of 100%.

Table 3 Summary Statistics

	Mean	Median	Maximum	Minimum	Std. Dev.
Tobin's Q	0.7683	0.4214	6.3741	0.0243	0.9705
ROA	4.9643	3.7500	29.0250	0.0900	4.5218
Main Banker	0.2151	0.0000	1.0000	0.0000	0.4110
Number of Bankers	6.9678	5.0000	51.0000	1.0000	5.8041
Bank Debt/Total Debt	0.6469	0.7354	1.0000	0.0028	0.3405
Debt Equity	1.1033	0.7947	14.9322	0.0004	1.3364
Growth in Sales	0.1451	0.1300	0.7200	-0.4700	0.2320
Log(Assets)	9.0386	8.9038	13.2022	5.6131	1.4003

Correlation Analysis

Initially, we checked the presence of multicollinearity among the independent variable by comparing the correlation values against the benchmark value of 0.7. The result of the correlation analysis is presented in Table 4. We can observe that all independent variables are weekly correlated, none of them being more than 0.7. Only the size of the firm has a strong correlation with coefficient 0.663 with the number of banks the companies have lent from. Hence, there is low likelihood of the existence of the problem of multicollinearity in the research output of the regression model.

Table 4: Pearson Correlation of Variables Used in the Main Model

	Tobin'sQ	Return on Assets	Main Banker	Number of Bankers	Bank Debt/Total Debt	Leverage	Growth in Sales	Log (Assets)	Single Banker
Tobin'sQ	1								
Return on Assets	.567**	1							
	(.000)								
Main Banker	.144**	.083**	1						
	(.000)	(.000)							
Number of Bankers	-.114**	-.127**	.030	1					
	(.000)	(.000)	(.157)						
Bank Debt/Total Debt	.088**	.086**	-.067**	-.130**	1				
	(.000)	(.000)	(.001)	(.000)					
Leverage	-.250**	-.244**	-.100**	.163**	.013	1			
	(.000)	(.000)	(.000)	(.000)	(.548)				
Growth in Sales	.069**	.199**	-.016	-.030	.041	.020	1		
	(.001)	(.000)	(.449)	(.156)	(.051)	(.351)			
Log (Assets)	-.022	-.044*	-.006	.663**	-.223**	.083**	-.026	1	
	(.289)	(.034)	(.789)	(.000)	(.000)	(.000)	(.213)		
Single Banker	.060**	.064**	-.004	-.303**	.077**	-.116**	.021	-.257**	1
	(.004)	(.002)	(.861)	(.000)	(.000)	(.000)	(.322)	(.000)	

Empirical results: Bank monitoring and Firm's Performance

TABLE 5. Main Regression Results: Bank Monitoring and Firm's Performance

Variable	DEPENDENT VARIABLE: TOBIN'S Q RATIO						DEPENDENT VARIABLE: RETURN ON ASSETS					
	Predicted Signs	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Predicted Signs	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)
Intercept		0.0864 (0.604)	0.8614 (0.000)	0.5414 (0.0004)	0.6309 (0.000)	-0.3025 (0.087)		2.5577 (0.001)	5.6868 (0.000)	4.152 (0.000)	4.6974 (0.000)	0.3638 (0.666)
Main Banker	+	0.31565*** (0.000)	0.28502*** (0.000)	-	-	0.2395*** (0.000)	+	0.8377*** (0.000)	0.7147*** (0.001)	-	-	0.8486*** (0.000)
Number of Bankers	?	-0.02402*** (0.000)	-	0.0217*** (0.000)	-	-0.0173*** (0.000)	?	-0.1017*** (0.000)	-	0.095*** (0.000)	-	0.0831*** (0.000)
Bank Debt to Total Debt	+	0.2977*** (0.000)	-	-	0.2680*** (0.000)	0.2623*** (0.000)	+	1.1262*** (0.000)	-	-	1.0381*** (0.000)	0.9768*** (0.000)
Growth in Sales	+	0.2904*** (0.001)	0.3134*** (0.000)	0.2985*** (0.000)	0.2911*** (0.000)	0.4641*** (0.000)	+	3.8807*** (0.000)	3.9710*** (0.000)	3.921*** (0.000)	3.8954*** (0.000)	4.0228*** (0.000)
Log (Assets)	?	0.0806*** (0.000)	-0.0007 (0.9599)	0.0582*** (0.0019)	0.0140 (0.3297)	0.0859*** (0.000)	?	0.2766*** (0.001)	-0.0607 (0.346)	0.197** (0.021)	-0.0031 (0.955)	0.3442*** (0.000)
Debt Equity Ratio	?	-0.1647*** (0.000)	-0.1747*** (0.000)	-0.1731*** (0.000)	-0.1855*** (0.000)	-0.1485*** (0.000)	?	-0.7736*** (0.000)	-0.8166*** (0.000)	-0.794*** (0.000)	-0.8467*** (0.000)	-0.8281*** (0.000)
Adjusted R-squared		0.1014	0.0811	0.0759	0.0751	0.1833		0.1196	0.1046	0.109	0.1062	0.1397
F-statistic		43.4839	50.8814	47.4268	46.8713	34.8000		52.1396	66.9951	69.813	68.1329	25.4461
Prob(F-statistic)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Firm Years		2269	2269	2269	2269	2269		2269	2269	2269	2269	2269
Industry Fixed Effect		No	No	No	No	Yes		No	No	No	No	Yes
Year Fixed Effect		No	No	No	No	Yes		No	No	No	No	Yes

(Note: This table reports the coefficients of the regression analysis results of the main model. The p-values based on robust standard error are reported in parentheses. The variables are defined in Table 1. All continuous variables are winsorized at 5%. (Significant at the level of α = 5% (2-tailed). ** Significant at the level of level α = 1% (2-tailed). Predicted signs are the hypothesised direction of significance before carrying out regression. Column 1 is pooled OLS regression model measuring significance of all hypothesised independent variables taken together on Tobin Q ratio of the firm. Column 2 is pooled OLS regression model measuring significance of Main Banker on Tobin Q ratio of the firm where 0 is government owned bank and 1 is private bank. Column 3 is pooled OLS regression model measuring significance of Number of bankers on Tobin Q ratio of the firm. Column 4 is pooled OLS regression model measuring significance of Bank debt to total debt on Tobin Q ratio of the firm. Column 5 is fixed effect regression model controlling for the effect of industry of the firm and the year of performance measured. The regression model is estimated with the White (1980) heteroskedasticity robust standard errors. Results of Eq. (1): *Firm's Performance = β0 + β1(Private Main Bank) it + β2 (Number of Banks) it + β3 (Bank Debt /Debt) it + + β4 Growth it + + β5 Size it + β6Leverage it + µit*

The empirical tests of the main hypotheses examine the association between the strength of bank monitoring and firm's performance. Table 5 reports the results from Eq. (1) which examines the association between the three measures of the strength of bank monitoring and Tobin Q and Return on assets. Consistent with H1 thata firm's Value is higher when the main banker is a private bank**.** The main banker variable remains statistically significant despite the presence of other proxies for control variables (Growth, Size and Leverage). These results also indicates that firm's performance is significantly lower for a firm with a greater number of bankers and borrowing firm's performance is increasing when bank debt proportion is higher.

The overall results indicate that the nature of main banker has a significant effect on determining the Tobin Q ratio and ROA (proxy for firm's performance). It supports the hypothesis that private banks have a positive impact on the firm value. It is consistent with the research of Dinc 2005; Khwaja and Mian 2005; Sapienza 2004 that government banks make poor choices and are negligent when compare to private banks. The study is also consistent with Micco and Panizza (2006) explanation for government banks being less

sensitive to the macroeconomic condition resulting in poor bank monitoring. The result holds true when the independent variable is accounted in the model separately and when the model is adjusted to control the effect of industry and time horizon of the data. Number of banking relations has a significant impact on the Tobin Q ratio and ROA of the firm indicating an increase in banking relations results in lower firm value. It also provides sufficient evidence to counter Ahn and Choi argument of having higher firm performance when number of banking relations increase. The results are consistent when the independent variable in accounted separately, and also controlled for time and industry effect, for measuring its significance. Based on the regression results above, proportion of bank debt to the total debt is significant in determining the firm's value. The results are consistent with study of Cai, Cheun, and Goyal (1999) making a proposition that bank debt to total debt can measure the intensity of bank monitoring having a positive relation between them. The results are consistent when the independent variable in accounted separately, and also controlled for time and industry effect, for measuring its significance. Therefore, our results show evidence that banks with high standards of monitoring prove to play a significant part in the governance of firms which eventually leads to increase in the value of the firm. However, bank monitoring is less effective if a company borrow from many banks (i.e. if company have large number of banking relations) and hence decreases the firm value.

ADDITIONAL TESTS

We conduct additional tests to examine whether the relationship between Bank Monitoring and Firm's Performance changes when Firms borrow from single banker. To test this idea, we construct a measure of Single Banker: a dummy variable with value 1 if the firm has only one bank else 0.

ADDITIONAL TESTS

TABLE 6. Regression Results: Bank Monitoring and Firm's Performance with Single Banker.

	Predicted Signs	Dependent Variable: Tobin's Q Ratio			Predicted Signs	Dependent Variable: Return on Assets		
		(1)	(2)	(3)		1	2	3
Intercept		0.46602 (0.001)	0.864516 (0.000)	-0.060954 (0.7143)		4.2239*** (0.000)	5.6327*** (0.000)	1.5245** (0.055)
Main Banker	+	0.300794*** (0.000)	-	0.227464*** (0.000)	+	0.7736*** (0.000)	-	0.7905*** (0.000)
Single Banker	?	**0.127547*** **(0.091)**	**0.128073*** **(0.0944)**	**0.076106** **(0.2916)**	?	**0.4257** **(0.221)**	**0.4383** **(0.210)**	**0.3622** **(0.2935)**
Bank Debt to Total Debt	+	0.288281*** (0.000)	-	0.240841*** (0.000)	+	1.0882*** (0.000)	-	0.9380*** (0.000)
Growth in Sales	+	0.295916*** (0.000)	0.303177*** (0.000)	0.473539*** (0.000)	+	3.9059*** (0.000)	3.9431*** (0.000)	4.0678*** (0.000)
Log (Assets)	?	0.021157 (0.151)	0.005563 (0.703)	0.044412** (0.003)	?	0.0191 (0.778)	-0.0394 (0.554)	0.1447** (0.045)
Debt Equity Ratio	?	0.17418*** (0.000)	0.1811*** (0.000)	0.155830*** (0.000)	?	0.8157*** (0.000)	0.8305*** (0.000)	0.8568*** (0.000)
Adjusted R-squared		0.091335	0.06794	0.178023		0.1109	0.1011	0.1340
F-statistic		38.82751	42.14753	33.60247		47.9452	64.5012	24.2982
Prob(F-statistic)		(0.000)	(0.000)	(0.000)		(0.000)	(0.000)	(0.000)
Firm Years		2269	2269	2269		2269	2269	2269
Industry Fixed Effect		No	No	Yes		No	No	Yes
Year Fixed Effect		No	No	Yes		No	No	Yes

(Note: This table reports the coefficients of the regression analysis results of the main model. The p-values based on robust standard error are reported in parentheses. The variables are defined in Table 1. All continuous variables are winsorized at 5%. (Significant at the level of α = 5% (2-tailed). ** Significant at the level of level α = 1% (2-tailed). Predicted signs are the hypothesised direction of significancebefore carrying out regression. Column 1 is pooled OLS regression model measuring significance of all hypothesised independent variables taken together on Tobin Q ratio of the firm. Column 2 is pooled OLS regression model measuring significance of Single banker on Tobin Q ratio of the firm where 0 is Number of bankers and 1 is the single banker. Column 3 is fixed effect regression model controlling for the effect of industry of the firm and the year of performance measured. The model used in this study is based on the models of Ahn and Choi (2009) and Hermawan (2009): *Firm's Performance = β0 + β1(Private Main Bank) it + β2 (Number of Banks) it + β3 (Bank Debt /Debt) it + + β4 Growth it + + β5 Size it + β6Leverage it + μit)*

The additional test to check whether the relationship between Bank monitoring and Firm's Performance changes, when firms borrow from a single bank to control for the 'free riders' problem if it exists and validate the results of H2 which implies a 'free riders' problem, supports the earlier results. The test results are still consistent with H1 thata firm's value is higher when the main banker is a private bank. Results are also consistent with H3, stating that a borrowing firm's performance increases as the ratio of Bank Debt to Total Debt rises. This indicates that the firm performance is higher for the firms with a single bank and supports the results of H2 which stated that the firm's performance is significantly lower for a firm with a greater number of bankers.The overall results indicate that firms having single banking relation have a higher firm value. This is in contradiction with argument of Ahn and Choi (2009) but consistent with the earlier results.

ROBUSTNESS: ADDITIONAL CONTROL

As robustness checks, we include some additional controls in the main regressions. The main results continue to be robust. The additional control used is the riskiness of the firm which is captured by beta of the firm. The use of these control variables is

motivated by research examining the role of bank monitoring on the borrowers' firm value (Hermawan, A.A. 2009).

Table 7: Regression Results: Bank Monitoring and Firm's Performance

Dependent Variable: Tobin's Q

Variable	1	2	3	4	5
Intercept	0.2103 (0.2434)	1.0026*** (0.000)	0.7164*** (0.000)	0.7065*** (0.000)	0.0946 (0.619)
Main Banker	0.2824*** (0.000)	0.2400*** (0.000)	-	-	0.2241*** (0.000)
Number of Bankers	-0.020*** (0.000)	-	-0.017*** (0.000)	-	-0.014*** (0.001)
Bank Debt to TotalDebt	0.3478*** (0.000)	-	-	0.3181*** (0.000)	0.2978*** (0.000)
Growth in Sales	0.2575*** (0.004)	0.2829*** (0.001)	0.2687*** (0.003)	0.2445*** (0.007)	0.4761*** (0.000)
Log (Assets)	0.1451*** (0.000)	0.0704*** (0.000)	0.1187*** (0.000)	0.0898*** (0.000)	0.1520*** (0.000)
Debt Equity	0.1875*** (0.000)	0.2006*** (0.000)	0.1971*** (0.000)	0.2112*** (0.000)	0.1689*** (0.000)
Beta	0.6635*** (0.000)	0.6753*** (0.000)	0.6609*** (0.000)	0.6918*** (0.000)	0.7543*** (0.000)
A Adjusted R-squared	0.1662	0.1452	0.1411	0.1470	0.2580
F-statistic	55.6238	66.1410	64.0301	67.1065	42.6737
Prob(F-statistic)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Firm Years	1919	1919	1919	1919	1919
Industry Fixed Effect	No	No	No	No	Yes
Time Fixed Effect	No	No	No	No	Yes

(Note: This table reports the coefficients of the regression analysis results of the main model. The p-values based on robust standard error are reported in parentheses. The variables are defined in Table 1. All continuous variables are winsorized at 5%. Significant at the level of $\alpha = 5\%$ (2-tailed). ** Significant at the level of level $\alpha = 1\%$ (2-tailed). Predicted signs are the hypothesised direction of significance before carrying out regression. Column 1 is pooled OLS regression model measuring significance of all hypothesised independent variables taken together on Return on Assets of the firm. Column 2 is pooled OLS regression model measuring significance of Main Banker on Return on Assets ratio of the firm where 0 is government bank and 1 is private bank. Column 3 is pooled OLS regression model measuring significance

of Number of bankers on Return on Assets ratio of the firm. Column 4 is pooled OLS regression model measuring significance of Bank debt to total debt on Return on Assets ratio of the firm. Column 5 is fixed effect regression model controlling for the effect of industry of the firm and the year of performance measured. The model used in this study is based on the models of Ahn and Choi (2009) and Hermawan (2009): Firm's Performance = $\beta 0 + \beta 1$ (Private Main Bank) it + $\beta 2$ (Number of Banks) it + $\beta 3$ (Bank Debt /Debt) it + + $\beta 4$ Growth it + + $\beta 5$ Size it + $\beta 6$Leverage it + μit)

The results of the robustness tests are reported in Table 7. Results are consistent with H1 thatA firm's Value is higher when the main banker is a private bank**.** The main banker variable remains statistically significant despite the presence of other proxies for control variables (Growth, Size and Leverage). As expected in H2, the coefficient on Number of Banker is negative and statistically significant. This indicates that firm's performance is significantly lower for a firm with a greater number of bankers. Consistent with H3 that a borrowing firm's performance is increasing when the Bank Debt to Total Debt increases. Our results show evidence that banks with high standards of monitoring prove to play a significant part in the governance of firms which eventually leads to increase in the value of the firm.

CONCLUSION

We have investigated the presence of a significant relation between monitoring by banks and the value of firm with bank monitoring acting as a substitute for other corporate governance measures. Research in the past has proved that banks are placed in a superior position to monitor their borrowing firms. However, there is very little evidence of the same in the Indian context which make it a crucial question as banks play a significant role in business financing in developing countries due to the absence of well developed and efficient equity market. Thus our study fills the gap by answering the question with empirical evidence from listed Indian companies. The results from this study leads to important contributions. Firstly, it is observed that in case of firms that are dependent on banks for business financing, banks act as an effective agent for ensuring sound governance of these firms. This helps us to understand and appreciate the presence of corporate governance forces beyond those

proposed by law. Secondly, we find that the presence of large number of banking relations leads to free rider problem and thus results in decrease in value of the borrower firm. Finally, our study gives an indication to the banks that their monitoring plays a significant role in improving the performance of borrower firm.

Despite the robustness checks, our study has certain limitations. Firstly, The proxies used to capture the effectiveness of monitoring by banks are indirect measures and can be questioned with regard to their representation of monitoring because banks do not disclose all the processes followed by them in monitoring the functions of firms. Monitoring is a function of several unobserved individual bank specific variables.

Secondly, there is a possibility that certain variables which impact firm performance might have been omitted, Thus leading to false results in our study. This argument is valid for any regression analysis and therefore our efforts were to include a comprehensive set of variables influencing firm performance. Answering these questions is difficult because of the difficulty in obtaining the data and is beyond the scope of this study. We leave it to future research to examine these questions.

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