Bank Relationship and Corporate Decisions of Non-Financial Firms: Empirical Evidence from Pakistan

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The aim of this study is to examine the important role of banks in the governance of non-financial companies listed in the Pakistan Stock Exchange (PSX) as well as to investigate the influence of bank presence within a firm, both as shareholder and creditor, on corporate decisions (liquidity level, investment and firm performance). It has been examined that bank as a shareholder of the firm helps Pakistan's non-financial firms in getting easy access to bank loans. Empirical analysis has been conducted on secondary data set taken from 35 non-financial firms of PSX from 2010-2015. The results taken using Two-Stage Least Squares Method show that bank as the firm's creditor negatively affects a firm's performance and the firm's liquidity level. Besides this, the results clarify that the bank as a firm's shareholder positively influences firm performance and the firm's liquidity. Moreover, bank relationship with firms as a fund provider and owner positively influence a firm's investment decisions. Furthermore, the results show that the bank as a shareholder of the firm assists firms in acquiring bank loans. The findings of this study recommend that the firms in Pakistan should establish their relationship with banks, offering lenient control over investment ventures and also aiding in maintaining positive liquidity level.

Keywords: Bank, Creditor, Liquidity level, Pakistan Stock Exchange, Shareholder, Two-stage Least Squares
JEL classification: C33; C36; G21; G23

INTRODUCTION

In the last few decades, research in finance has been carried out in the corporate governance area and with the passage of time, research on corporate governance got modified. Besides examining the relationship between shareholder and manager, corporate governance research started highlighting the affairs that focused on inspection of the relationship between a company and its multiple stakeholders. The company's relationship with its loan provider (the creditor) and different equity participants have extended the research scope of corporate governance. It has been recognized with the passage of time that banks apart from playing their conventional role of accepting deposits and sanctioning loans took an active interest in the administration of firms. The banks as an intermediary not merely provide funds to corporations but also play a major role in shaping corporate governance. Banks as an external benefactor of funds help different firms, particularly this financial intermediary is regarded as an important source of funds for small and medium-sized corporations. The bank role in firms financing and governance helps in the growth of the economy. Moreover, providing finance to firms, banks also act as firms' shareholders and board members. Hence, the firms' performance relation with banks got considerable attention in various studies (Baert and Vennet, 2009; Chirinko and Elston, 2006). The bank and firm relation not solely minimize the bank's controlling cost but also helps in mitigating principal and agent conflicts (Diamond, 1984). Firms having relations

with banks get various benefits as bank helps in mitigating information asymmetry problems and increases the availability of capital. Bank's role has gained importance, particularly in emerging markets, as bank finances new and existing businesses more as opposed to any other financial or nonfinancial sector.

Banks do not participate in the governance of firms as creditors only, in many firms banks also act as an equity holder. Banks' influence on firm performance is found contradictory in some studies, a few studies reported positive relation (Fama, 1985; Yosha, 1995) while some reported negative association (Chirinko and Elston, 2006; Weinstein and Yafeh, 1998). In a growing economy like Pakistan, how banks' presence as a creditor and as an equity holder shapes non-financial firms' investment, performance, and liquidity level needs to be studied, as such study will provide insight that in a developing economy context what kind of relation (positive or negative) appears between bank and corporate attributes (performance, Liquidity, and investment decisions). The bank as an equity holder helps in achieving easy access to bank loans. Lin, Zhang, and Zhu (2009) reported that the bank as the firm's equity holder positively affects firm's borrowings from banks, but in the recent study conducted by Zemzem, Guesmi, and Ftouhi (2017), the insignificant negative relation between bank equity holdings and firm access to bank loans was found. The different results (positive and negative) call for further research, as a study on this subject, will clear that whether in a developing

economy like Pakistan banks' shareholding provides ease to companies in acquiring bank loans or not.

This paper reports how in a growing economy firms' different attributes (i.e. performance, investment decisions, liquidity level and access to bank loans) get influenced by bank presence. The bank's influence as a firm creditor and equity holder is inspected on corporate performance and liquidity level. It has also been examined whether bank presence as firm shareholder provides ease to Pakistan's firms in accessing bank loans. Besides this, the bank and firm investment decision relationship have also been examined in this study. Non-financial firms from Pakistan Stock Exchange (PSE) are selected for examining the aforementioned relationships. The sample of the study comprised of 35 firms for 6 years ranging from 2010-2015.

The main objectives of this study are to answer the following questions.

How bank presence as a creditor in Pakistan's non-financial firm's influences corporate performance, investment, and liquidity level?

How the bank as an equity holder affects non-financial firm's performance, investment, and liquidity level in Pakistan?

Does bank as a shareholder of non- financial firm's aids firms in getting easier access to bank loans?

The results of the study show that bank as a creditor of firm negatively affects both firm liquidity level and firm performance and bank as a shareholder of the firm positively affects firm liquidity and firm performance. The results also reveal that the bank as both firm shareholder and creditor positively affects firm investment decisions. Furthermore, the results show that the bank as a shareholder of the firm assists firms in acquiring bank loans. So, it is recommended that a firm in Pakistan should establish its relationship with banks, offering lenient control over investment ventures and also aiding in maintaining positive liquidity level.

Literature review and hypothesis are part of the next section. We then present a study's methodology, sampling procedures, and data collection methods. Finally, the results of the study are discussed and conclusions and future work directions are presented.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Banks play a major role in the smooth functioning of the economy. Literature has explained many benefits for firms of having an association with banks, as a relation with banks helps firms in getting monitoring advantage and increases the availability of capital. Fama (1985) argued that banks are able to provide efficient debt related external monitoring for the corporate governance of firms because of having a cost advantage in accessing superior inside information. Many theories have suggested that bank debts have a positive impact on firm performance. Bank loans mitigate high information
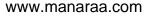
costs incurred in public debt offerings (Fama, 1985). Banks monitor firms after providing loans, the higher the loan the higher will be the monitoring degree (Yosha, 1995). Some studies found a positive bank and firm relation while some authors reported a negative association between the bank and firm relation. Chirinko and Elston (2006), performed an analysis of German companies and found a negative relationship between bank control and the company's performance. Sharpe (1990), Rajan (1992) found that if the bank has private information about their borrowers, they may use this information for the extraction of profits in the future. Borrowings of firms by banks sometimes inflate the cost of capital (Diamond, 1996).

In many countries, bank interferes and influences firms not only by debt financing but also through shareholding. The effect of equity holdings on firm value is considered an important issue in corporate governance. Concentrated ownership is assumed to have a positive effect on the firm's value maximization (Berle and Means, 1932). The firm and bank close relation not only minimize monitoring costs but also helps in minimizing the principal and agent problem. Equity holding by banks can enhance corporate governance of firms as bank equity holding in firm's aids in minimizing the false transfer of wealth from lenders to shareholders (Prowse, 1990; Limpaphayom and Polwitoon, 2004). The presence of banks as shareholder improves the performance of non-financial firms (Groton and Schmid, 2000; Mulbert, 1997; McConnell and Servaes, 1990). Bank equity holdings in a firm increase by the proportion of financing it offers to the firm. The equity holding by a bank in a firm is greater if the firm faces many growth opportunities (Kim, 1991). Direct ownership by banks in firm shares proves beneficial for borrowing companies in developed markets (Lin, Zhang, and Zhu, 2009). In many countries, bank equity holding encourages bank borrowing and level of indebtedness but direct ownership sometimes hurts company performance due to inefficient borrowing and investment (Lin, Zhang and Zhu, 2009).

Direct ownership by banks in firms provide firms with better capital access and better monitoring (Diamond, 1984; Barth, 2008). Bank ownership benefits the listed companies by providing better access to debt financing. In a study conducted in China, firms access to advanced bank loans have not resulted in efficient corporate performance (Lin, Zhang and Zhu, 2009). Kang and Shivdasani (1995) are of the view that bank ownership promotes firms access to bank loans. Some theories propose that bank equity holdings may lead to a conflict of interest (Diamond, 1984) most studies support that banks can effectively discipline borrowers and can lead to an improvement in firm performance (Kang, 2000; Gorton and Schmid, 2000).

Firm's performance gets influenced by a firm's investment decisions, as better investment decisions result in improved

firm performance. Profit from investment decisions leads to positive firm health (Fama and French, 1998; Chen, 2009). Bank lending affects firm performance and firm investment policy (Pan and Tian, 2015). Bank holding equity in non-financial firms in developed countries help in mitigation of interest difference between equity holder and creditor that creates motivation for firms to deviate from optimal investment (Kroszner and Strahan, 2001). Studies conducted in China showed that loans granted to politically connected firms were less affected by those firm's profitability and tangibility, and political connections appeared as a violation factor in debt markets, firms with political ties invest less efficiently than firms having no political ties when they can access abnormal debt (Zheng and Zhu, 2013).

Many theories have proposed a positive relationship between bank loans and firm performance. Private debt minimizes the information revelation risk to rival firms and helps in reduction of disclosure costs (Yosha, 1995), bank loans obviate information cost that appears to incur in public debt offerings (Fama, 1985). Better firm performance is achieved by a reduction in these costs. Bank loans also aid in acquiring monitoring purpose. Indeed, the more credit offered by a bank, the greater the degree of monitoring of the borrower. Firm value can be increased by bank monitoring as monitoring by banks help in mitigation of asset substitution and underinvestment issues. Bank and firm relationship create value for companies and the economy, the bank also gets facilitated by having associations with firms. Some other authors revealed a negative relationship between firm and banks. A study conducted on European listed firms for a period ranging from 1997–2006 reported the negative relation between bank ownership and the market value of firms (Baert and Vennet, 2009). Similarly, Chirinko and Elston (2006) found a negative association between the bank and the German firm's profitability. Chirinko and Elston (1997), Seger and Perlitz (1994) conducted a study on German listed firms, they classified the sampled firms according to different criteria with an objective to determine whether companies get influenced or not by bank presence, they also compared the profitability of firms with the bank and no bank control.

Liquid asset holdings a share of total non-financial assets is also defined as cash ratio. Firm's liquid asset holdings get affected by inflation. Falato, Kadyrzhanova, and Sim (2013) revealed that increase in company's intangible assets, rather than tangible capital that can be conveniently used for pledging, is regarded as the substantial reason that increases corporate cash holding growth since 1970. Weinstein and Yafeh (1988) conducted a study on Japan while Petersen and Rajan (1994) performed a study on the United States and the results demonstrated that companies having a relation with banks face fewer liquidity problems.

Banks as both creditor and equity holder influence the performance of non-financial firms. But studies do not provide a bright picture that how firms borrowing from banks or bank's stakeholders in firms affect non-financial firm's investment decisions (Zemzem, Guesmi, and Ftouhi, (2017). In previous studies, it was conjectured that the bank being a shareholder of the firm provides easy access to bank loans, the shareholder and loan provider (creditor) conflicts and information asymmetry problem could be reduced if the bank holds equity in firms, and the reduction of the conflict could direct firm in acquiring bank loans (Pan and Tian, 2015). Bank lending and bank stakeholding relation with non-financial firms' access to bank loans has been measured in the European context ((Zemzem, Guesmi, and Ftouhi, 2017) but how the bank's stakeholder and lending affect non-financial firm's performance, investment decision and liquidity in a developing economy (i.e. Pakistan) has not been studied copiously. Bank stakeholders in Pakistan's non-financial firm's relationship with companies' access to bank loans have not been explored, so to fill such gaps the current study is carried out.

The main hypothesis of the presented study is

Hypothesis 1 (a): The presence of a bank as a creditor is significantly related to firm performance.

Hypothesis 1 (b): The presence of a bank as a shareholder is significantly related to firm performance.

Hypothesis 2: The presence of a bank as a shareholder facilitates firm access to bank loans.

Hypothesis 3 (a): The presence of a bank as a creditor is positively related to firm investment and firm liquidity level.

Hypothesis 3 (b): The presence of a bank as a shareholder is positively related to firm investment and firm liquidity level.
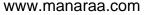
DATA AND METHODOLOGY

The data set used in this study has been taken from 35 non-financial companies of Pakistan Stock Exchange (PSE). Companies Sectors include Beverages and miscellaneous, cement, chemicals, electronic and electrical goods, food and personal care products, oil and gas exploration, paper and board Engineering, pharmaceutical, power generation, and distribution, sugar and allied, synthetic and rayon, technology and communication and woolen textiles. Those companies are selected from above-mentioned sectors which have banks as shareholder and creditor. The data is of panel nature of duration 2010-2015 and a total of 210 observations were used for the final analysis of the proposed hypothesis.

Table 1: Study Variables and their Measurement

Variable Name	Variable Type	Calculation Formula
Firms investment (FINV)	Dependent	Capital expenditures/ Total Assets
Firms performance (ROA)	Dependent	Net income / Total assets
Firms Liquidity (FLIQ)	Dependent	Current Ratio = Current Assets / Current Liabilities
Firm's Access to Loans (FAL)	Dependent	$BDEBT_{it}$ $= \beta_0 + \beta_1 BSHARE_{it} + \beta_2 ROA_{it} + \beta_3 AGE_{it} + \beta_4 INT_{it} + \beta_5 GUAR_{it} + e_{it}$

Bank as Creditor (BDEBT)	Independent	Bank debt / total assets	
Bank as Shareholder (BSHARE)	Independent	Percentage of total shares owned by banks	
Firm Age (AGE)	Control	Number of years since the firm commenced its operations	
Guarantees (GUAR)	Control	Tangible assets / Total assets	
Profit (PROFIT)	Control	Return on sales= (EBIT/ total sales)	
Intangibility (INT)	Control	Intangible assets / total assets	
Operating Income growth (ORG)	Control	Operating income in the current year-operating year in the previous year/Operating income in the previous year	

"BSHARE" coefficient β_1 estimates firm access to bank loans

Model Specification

Every cross-section of data set is taken for analysis. The data multi co-linearity is checked as in panel data multi co-linearity problem may exist that can lead to spurious results. The descriptive statistics (mean, median, maximum, minimum value and standard deviation) of the variables are analyzed. Correlation analysis has been done to check the relationship between study variables. The regression analysis has also been performed to check the impact of bank credit and equity holding on liquidity, the firm's performance and investment. The impact of equity holdings on a firm's access to loans has also been checked using regression analysis. Purpose of regression analysis is to check the impact of independent variables on dependent variables.

The regression models are run in Stata, where techniques like the method of instrumental variables (two-stage least squares method) and multiple linear regression are operationalized. OLS estimators are used to explaining the impact of multiple explanatory variables on the study's different dependent variables.

The first regression equation allows measuring the impact of bank credit holding and shareholding impact on non-financial firm performance. The first regression model employed for testing Hypothesis 1 (a) and 1 (b) cited below.

$ROA_{it} = \beta_0 + \beta_1 BDEBT_{it} + \beta_2 SHARE_{it} + \beta_3 PROFIT_{it} + \beta_4 ORG_{it} + \beta_5 INT_{it} + e_{it}$ **(1)**

The second model is designed to estimate the relation between bank shareholding and firm access to bank loans. In order to evaluate whether bank shareholding in non-financial firms aids a firm's access to bank loans, the below-mentioned equation is used.

$BDE_{it} = \beta_0 + \beta_1 BSHARE_{it} + \beta_2 ROA_{it} + \beta_3 AGE_{it} + \beta_4 INT_{it} + \beta_5 GUAR_{it} + e_{it}$ **(2)**

The third and fourth regression equations are used for analyzing how non-financial firms' investment decisions and liquidity level get influenced by bank participation as a credit holder and equity holder. The below-cited model results will help in the acceptance or rejection of hypothesis 3(a) and 3(b).

$FINV_{it} = \beta_0 + \beta_1 BDEBT_{it} + \beta_2 SHARE_{it} + \beta_3 PROFIT_{it} + \beta_4 ORG_{it} + \beta_5 INT_{it} + e_{it}$ **(3)**

$FLIQ_{it} = \beta_0 + \beta_1 BDEBT_{it} + \beta_2 SHARE_{it} + \beta_3 PROFIT_{it} + \beta_4 ORG_{it} + \beta_5 INT_{it} + e_{it}$ **(4)**

Where β_0 shows constant of the equation while β (1, 2, 3, 4, 5) represents the coefficient of the variable X_{it} and e indicates the error.

RESULTS AND DISCUSSION

In table 2 descriptive statistics of the variables are presented. ROA has a mean and standard deviation value of 4% and 7.6%. The standard deviation value (7.6%) indicates the sample firm performance is little dispersed. FINV has a 3.6% average value and 3.7% standard deviation, which tells the sample has close levels of investment. BDEBT has 8.9% mean value ranging from a minimum of 0 to 63, and the standard deviation value is 11.4%. The BDEBT descriptive statistics reveal companies included in the sample has a different level of bank debt. The average value for BSHARE is 6.2% indicating a range of minimum to a maximum value of 0 to 33, the standard deviation of 7.3% shows the companies taken as study sample have a different level of equity ownership. The mean value of FLIQ is 150% with a minimum of 5.6 and a maximum value of 91.14 with a highly dispersed standard deviation of 133%. The exogenous variable AGE represents the mean and standard deviation value of 40.52% and 15.52%. GUAR another exogenous variable shows a mean value of 46.5% with a standard deviation of 24%, which depicts that companies have varying level of tangible assets. The ORG has a mean value of 1% and the maximum value of 6.62 and a minimum value of -7.08. On average companies included in the sample have shown a 7.4% annual profit for the sample period ranging from 2010-2015.

Table 2: Descriptive Analysis

Variables	Mean	Std	Min	Max
FINV	0.036	0.037	0.000	0.190
ROA	0.038	0.076	-0.170	0.230
FLIQ	1.502	1.328	0.056	9.114
BDEBT	0.089	0.114	0.000	0.630
BSHARE	0.062	0.073	0.000	0.330
AGE	40.529	15.519	3.000	67.000
GUAR	0.465	0.240	0.000	0.940
PROFIT	0.074	0.175	-0.610	0.630
ORG	0.007	1.459	-7.080	6.620
INT	0.001	0.003	0.000	0.018

Diagnostic Testing

Before applying regression techniques data normality has been checked with an objective to estimate whether outliers are present in the dataset. The variables outlying values have been removed by substituting variable mean values. In order to examine whether data is stationary or not, unit root test has been applied on variables data, the results presented in table 3 revealed that the variables are stationary in nature.

Table 3: Results of Unit root test

Variables	Series Results	p-value
ROA	Level	0.00
FLIQ	Level	0.00
FINV	Level	0.00
BDEBT	Level	0.00
BSHARE	Level	0.00
AGE	Level	0.00
GUAR	Level	0.00
ORG	Level	0.00
INT	Level	0.00
PROFIT	Level	0.00

As data is of panel nature, therefore for panel data analysis Hausman test is opted for making choice between fixed and random effect model. Hausman Test aids in estimating endogeneity between variables. The decision criteria of the test are, if the Hausman test probability value comes less than 5% the alternative hypothesis gets accepted. The alternative hypothesis suggests that the fixed effect model should be applied for panel data analysis whereas the null hypothesis states that the random effect model is appropriate for panel data. The fixed effect model confirms endogeneity among variables while random effect model suggests that study variables are free from the endogeneity problem. The results of the Hausman test of the study are presented in table 4.

It is clear from table 4 that the fixed effect model is appropriate for both model 1 (ROA) and 4 (FLIQ) as the probability value against these two models is less than 5%. Whereas a random effect model is suggested by the test for model 2 and 3. In accordance with Hausman test results reported in table 4, ROA and FLIQ are found endogenous with explanatory variables BDEBT and BSHARE.

In order to deal with endogeneity problem, two-stage least squares method (2SLS) opts. 2SLS technique is also known as the method of instrumental variables. In 2SLS regression technique for elimination of endogeneity, instruments are introduced. Those variables are taken as instrumental variables that have a strong correlation with endogenous variables. In this study, AGE and GUAR are taken as an instrument of BDEBT and BSHARE. Multiple linear regression is operated for measuring the relation of FINV and FAL with BDEBT and BSHARE. The multiple linear regression is chosen on the basis of the random effect model as explanatory variables BDEBT and BSHARE are not found endogenous with FINV and FAL.

Table 4: Results of Hausman Test

Test Summary	Chi-square Statistics	Probability
Cross-section (Model 1)	11.220	0.047
Cross-section (Model 2)	5.776	0.328
Cross-section (Model 3)	8.520	0.129
Cross-section (Model 4)	65.294	0.000

In order to examine the multicollinearity between explanatory variables, the variance inflation factor (VIF) is computed. The test calculates the extent by which each explanatory variable of the study can be explained by other independent variables. So, if the VIF value comes more than 10, multi-collinearity is regarded as an issue (Chatterjee and Hadi, 2006). The test results are provided in table 5. With the aid of VIF results, the analysis results can be confidently interpreted as multicollinearity is not an issue in available variables data.

Table 5: Results of multicollinearity test

Variables	p-value
BDEBT	1.16
BSHARE	1.20
AGE	1.31
GUAR	1.41
ORG	1.09
INT	1.07
PROFIT	1.25

Correlation Analysis

In table 6 the correlation between all variables used in this study is presented. FINV has a positive correlation of 0.123 with BDEBT and 0.008 with BSHARE, ROA has a positive correlation of 0.064 with BDEBT and negative correlation of 0.057 with BSHARE. FLIQ has a positive correlation of .155 with BSHARE and negative correlation of .147 with BDEBT. AGE has a negative correlation with BDEBT and BSHARE. GUAR, PROFIT, and ORG have a positive correlation of .040, .082, and 0.24 with BDEBT respectively. With BSHARE, the same exogenous variables (GUAR PROFIT and ORG) are negatively correlated. INT is positively correlated at 0.124 with BSHARE.
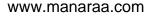
Table 6: Correlation Matrix (to check the relationship between all variables)

	FINV	ROA	FLIQ	BDEBT	BSHARE	AGE	GUAR	PROF	ORG	INT
FINV	1.00									
ROA	.37	1.00								
FLIQ	.17	.43	1.00							
BDEBT	.12	.06	-.14	1.000						
BSHARE	.00	-.05	.155	.118	1.000					
AGE	.15	.19	.177	-.326	-.104	1.00				
GUAR	-.17	-.35	-.36	.040	-.300	-.26	1.00			
PROF	.300	.60	.331	.082	-.026	.12	-.346	1.00		
ORG	.030	.23	.087	.024	-.126	-.05	.004	.230	1.00	
INT	-.05	.16	.530	-.022	.124	-.16	-.087	.036	.07	1.00

Regression Analysis

In order to study the impact of bank debt and bank ownership on corporate decisions of Pakistan's non-financial firms, two-stage least squares (2SLS) method and multiple linear regression (MLR) has been applied and results are presented in table 7. Two-stage least squares method is used for dealing with endogenous variables while multiple linear regression is used for measuring the non-endogenous independent variables effect on dependent variables.

BDEBT and BSHARE are found endogenous in model 1 and model 4, so for measuring bank lending and shareholding effect on non-financial firm's performance and liquidity level, method of instrumental variables (2 SLS) is used. While for measuring BDEBT and BSHARE effect on non-financial firms' investment decisions multiple linear regression is used as BDEBT and BSHARE are not found endogenous with dependent variables FINV. For estimating the impact of bank shareholding on non-financial firm's

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access to bank loans multiple linear regression is opted. Bank shareholding in non-financial firms is not found endogenous with firm access to bank loans.

Table 7: Regression Results

Dependent Variables	2 SLS		MLR	
	ROA	FLIQ	FAL	FINV
BDEBT	-.364*** (.012)	-7.516*** (.001)	-	.051*** (.027)
BSHARE	.393* (.073)	9.234*** (.006)	.176* (.109)	.005 (.864)
PROFIT	.271*** (.000)	-	-	.058*** (.000)
ORG	.007* (.073)	.035 (0.585)	-	-.001 (.721)
INT	1.944 (.337)	171.65*** (.000)	-4.739* (.074)	-
ROA	-	7.530*** (.000)	.258*** (.018)	-
AGE	-	-	-.002*** (.000)	.0004*** (.016)
GUAR	-	-	.013 (.719)	-
Constant	.024* (.142)	1.156*** (.000)	.174*** (.000)	.009 (.249)
Prob(F-statistics)	.000	.000	.000	.000
Adjusted R2	.281	.118	.125	.105

Note: Variables are significant ***, **,* at 1%, 5% and 10% level respectively. The amount in parentheses reports significance level.

The bank presence as a firm creditor reported negative influence on ROA. A coefficient of (-0.364) with a significance value of (.012) indicates that firm performance is negatively influenced by BDEBT. The bank presence as a firm shareholder indicates a positive impact on non-financial firm's performance, a positive coefficient of (0.393) is found at a significant level of 10%. Agency problems can be mitigated by bank participation in the firm's equity holdings. Hold up issues between banks and companies can be alleviated by bank equity participation. So, it can be interpreted on the basis of analysis results that bank presence in the firm's both as a credit holder and equity holder significantly influence ROA. So, hypothesis 1(a) and 1(b) is confirmed. The hypothesis results are in line with some past studies (Chirinko and Elston, 2006; Gorton and Schmid, 2000). The exogenous variable PROFIT has shown a positive coefficient of 0.2708 with firm performance significant at 1% level. The results indicate that the profit of the firm positively influences the performance of non-financial companies. ORG has also reported the positive coefficient of 0.007 significant at the 10% level, the findings reveal that the increase in operating income would lead to an increase in firm performance. The correlation between INT and ROA is found positive and insignificant in this study.

The second equation allows for measuring the effect of bank shareholding on FAL. The analysis reveals that bank equity holdings in firms positively influence FAL. A significant and positive correlation coefficient of 0.176 with

a p-value of (0.10) is observed between BSHARE and BDEBT. So, it is concluded that the firms get easier access to loans by bank equity participation. The results of BSHARE with FAL are found in line with the results of (Lin et al., 2009), who reported the same positive correlation between bank ownership and bank borrowing. Hence hypothesis 2 is verified. A significant and positive relation seems between bank shareholding in firms and firm performance. A significant correlation coefficient of 0.258 at 1% level is found between bank equity holding and firm performance. A negative and significant correlation with a coefficient of (-4.739) at 10% level is observed between INT and BSHARE, and a positive and insignificant relation with a coefficient of 0.013 is observed between GUAR and BSHARE, which suggests that bank ownership in firms is not motivated by guarantee level of firms. The results are consistent with (Zemzem, Guesmi, and Ftouhi, (2017).

Through the estimation of the third model, the relationship between firm investment decisions and bank loan and equity holding is determined. A significant and positive correlation is revealed between FINV and BDEBT. The coefficient correlation is 0.051 and is highly significant at 1% level, which suggests bank debt influences the investment level of non-financial firms in the context of this study sample. The results are in line with the study hypothesis. Positive and insignificant relation with a correlation coefficient of 0.005 is observed between BSHARE and FINV. The analysis allowed to comment that bank shareholding in Pakistan's non-financial firm does not significantly influence a firm's investment decisions. A positive and significant relation between FINV and PROFIT is observed. The correlation coefficient 0.058 significant at 1% level suggests Pakistan's non-financial firm's investment level is significantly influenced by profit level. A significant and positive correlation at a 1% level between AGE and FINV with a coefficient of 0.001 is observed. So, it can be concluded that a firm investment level is influenced by age. A non-significant and negative correlation between ORG and FINV is obtained (p-value = 0.72). Thus in accordance with results, it can be said that a firm investment level does not get affected by OGR.

The estimation of the fourth regression equation indicates a positive correlation between BSHARE and FLIQ. The coefficient of correlation is 9.234 and is significant at 1% level, the results recommend that non-financial firm's liquidity gets influenced by bank ownership in firms. Bank ownership leads to an increase in a firm's liquidity level. The relation between firm liquidity and bank shareholding is in line with the proposed relation so, hypothesis 3(b) is confirmed. A significant negative relation between BDEBT

and FLIQ is observed. The correlation coefficient is -7.516 and is highly significant at 1% level, which suggests that firms borrowing from banks negatively influence firms' liquidity level, the results are against the proposed relation between FLIQ and BDEBT, hypothesis 3(a) gets rejected in case of firm liquidity proposed relation with BDEBT, the probable reason for this negative significant relation is high-interest payment charged by banks. The increase in interest payment (current liability) decreases FLIQ. A positive correlation coefficient of 7.530 at 1% level is observed between ROA and FLIQ. The analysis reported an insignificant positive correlation between ORG and FLIQ, while INT shows significant positive correlation at a 1% level with FLIQ.

R-square explains the overall fitness of the statistical model and it increases by the inclusion of any new variable in the model, while adjusted R- the square is a modified form of R square it increases only when the model gets improved by the inclusion of new varieties. The value of adjusted R-square for model 1 is 28%, 12% for model 2, 13% for model 3 and 11% for model 4. A probability value of F-stats reports the overall significance of whole model variables. The p-value of F-statistics is less than 5%, indicating the significant relation of explanatory variables with the dependent variables of the study.

CONCLUSION

The research has been conducted to examine the importance of the role of banks in the governance of non-financial companies. The banks not only as a provider of funds but also as the firm's owner affect corporate decisions and activities. Non-financial firm's investment decisions, performance and liquidity level get influenced by the bank's loans and shareholdings. Primarily, this research has analyzed the impact of the bank-firm relationship on corporate performance, firm investment and liquidity level. Besides examining bank relation with these corporate elements, it has also been tested whether the bank presence as shareholder facilitates the company's access to bank loans or not. Empirical analysis has been conducted on data set taken from 35 non-financial firms of Pakistan Stock Exchange (PSE) of duration from 2010-2015 using 2SLS and multiple linear regression method.

The results of the study identified that there exists a significant negative relation between ROA and BDEBT. The results can be interpreted by the fact that banks act as more risk-averse than shareholders. A negative and significant relationship is evidenced between FLIQ and BDEBT. The possible reason for this outcome is the heavy amount charged by creditor banks in the shape of interest to firms for using bank loans. Moreover, the presence of a bank

as the firm's shareholder reported a significant positive impact on ROA and FLIQ. Furthermore, the research also revealed that the presence of a bank as a non-financial firm's shareholder has a positive significant relationship with bank loans. Therefore, it is concluded that bank presence in firms as shareholders' aids firms in accessing bank loans. Finally, the results indicated that bank role as creditor and shareholder positively influences the firm's investment decision.

The limitations and future directions of the study are: Firstly, the research sample is small, the large sample could represent the population in a more significant and better way. Secondly, the study has examined separately bank role as creditor and shareholder on corporate performance, investment and liquidity level, the same bank dual holdings effect as firm creditor and shareholder could provide better insight on the firm-bank relationship. Below mentioned opinions can lead to future studies in the firm-bank relationship area.

The basic motivations of banks for holding shares in non-financial firms can be explored as the study of this relation will help to find out why banks hold equity in firms.

The bank effect on other corporate variables i.e. the firm's asset growth and profitability level can also be examined.

The same study can be conducted in any other growing economy to check whether the same result appears or not.

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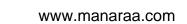
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