Optimal Ownership Structure toward Islamic Bank Performance: A Panel Data Approach

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Abstract

The objective of this study is to explore the impact of ownership structure on the performance of Islamic Banks of Pakistan for the period 2008 to 2015. The performance of the banks measure in term of profitability (return on assets (ROA) and return on equity (ROE)) and the efficiency (Non- performing loan (NPL)). The ownership structure generally accepted the important component of corporate governance (Shleifer & Vishny, 1986) and measured through institutional ownership, ownership concentration, managerial ownership, foreign ownership, government ownership, and family ownership. This study employed fixed/random effect and GMM estimations and found that the ownership structure influence on the return on asset and return on equity is very meager. It reflects that owners are not making policies regarding efficient use of assets to get more return out of it. Whereas, managerial ownership and ownership concentration have a negative impact on ROE. More precisely, the results are inclined toward the agency theory. The efficiency of the banks to recover their loans amount from their clients seems miserable because all ownership structure (institutional ownership, government ownership, foreign ownership, and ownership concentration expect managerial ownership) have a positive significant impact on NPL. It means management of the banks is not able to collect their funds back from the borrowers. This reflects the inefficiencies of the Islamic banks. The management of the bank is not properly utilizing their funds collected from the different sources of ownership. As per the results of research findings presented above, this paper ensuring few policy recommendations to make the banks performance up to the mark.

Keywords: Profitability, Efficiency, Managerial ownership, Institutional ownership, Government ownership, foreign ownership, Family ownership, Ownership concentration.

Introduction

Corporate governance is an influential term as it plays an imperative role in financial performance in the banking sector. It empowers the banking sector to be efficient and make them strong enough to draw up the negative shocks in the economy. The ownership structure as a measure of corporate governance may affect both internally and externally in the banking sector of underdeveloped countries. We all know that the banking system is the backbone of the economy as it relates to the distribution of resources inside the system. Every system

is based on their own country principles and regulations. In the context of Pakistan, State Bank of Pakistan (SBP) and the Securities and Exchange Commission of Pakistan (SECP) are authorities to make the regulations for the financial institutions and they bound to act with them. However, the Islamic banking system is also framed with the regulatory bodies as Pakistan is the Islamic Republic. So the research on corporate governance in the context of Islamic banking depends upon various multifaceted topics that may of accountability of rules and regulations, ownership structure, transparency of authorities, the board of directors and performance.

The ownership structure segregated in to managerial, institutional, government, family, ownership concentration and foreign. Managerial ownership in which its capital the proportion of equity owned by insiders and ownership concentration s, where insiders are clear as the officers and directors of a firm. Institutional ownership refers to the ownership probability in a company that is held by large financial organizations, pension funds. Institutions generally purchase large blocks of a company's outstanding shares and can apply significant influence upon its management. State ownership (also called public ownership and government ownership) refers to property interests that are vested in the state or a body on behalf of a community as different to an individual or private party. State ownership may refer to ownership and organize of any asset, industry, or enterprise at any level (national, regional, local or municipal) or to non-governmental community ownership. The procedure of bringing an asset into state ownership is called nationalization or municipalization.

A family business is a commercial organization in which decision-making is influenced by many generations of a family related by blood or marriage who are closely recognized with the firm through management or ownership. A ownership concentration is the owner of a large number of a company's shares and bonds, or block. In terms of shares, these owners are frequently able to pressure the company with the selection rights awarded with their holding. Foreign ownership explained as the full fledge controls of a business is managed by a majority of those individuals who are non-citizens for that particular country, or any institution who is not controlled by the same country. Practically, foreign ownership refers when multinationals organizations, which are those organizations that perform economic events in more than one country, insert long-term investments in a foreign country, usually in terms of foreign direct investment or acquisition.

Islamic banking system relates to interest (Riba) free system which provides profit-sharing terms and conditions between bank and depositors. Basically, this is mandatory for all the Islamic banks to follow the Shariah Laws and exclude forbidden activities (Riba-interest &Gharar-extreme uncertainty) related to the system. The segment of Islamic banking has been growing rapidly as investors are enormously investing in it around the globe. Though it is a universal truth that the client is restricted on Muslim countries but it's distributing over Fareast, USA, and EU nowadays. Investors of Muslim countries are more inclined towards a value-oriented ethos of Islamic banking systems rather only making profits by accepting immoral systems.

Pakistan ideology of creation is based on Islamic values. Considering this that our political leaders, religious groups and economists have been always striving for the implementation of Islamic banking in Pakistan and to reduce the Interest (Riba) fully from the Banking industry & financial institutions of Pakistan. The basic objective for the creation of Pakistan clearly states to base an economic system free of Riba based transactions. It is irony of the matter that the demand of interest-free economy was very strong from the religious scholar during the era of 1947-1960 but due to no solid steps and concrete policies we are far away to achieve this basic objective for which Pakistan came into being.

If we take up the Islamic Banking in Pakistan which clearly states that Islamic banking system under the Banking company's ordinance 1962, Mudarabah Companies Act 1984 and under the policies integrated for Islamic Banking in 2001 and 2009 came into existence. With this perspective the supreme authority in the capacity of main regulatory power in Pakistan formed a Shariah Board to ensure Shariah governance in 2003.This system of Shariah governance bounds Islamic Banking institutions to work under the supervision of Shariah advisor. To this end, there are crystal clear criteria provided for Shariah advisors of Islamic banks.

However, the State Bank of Pakistan issued the guidelines and instructions for Shariah compliance in Islamic banking institutions cooperated in 2008. These instructions and guidelines provide all the integral elements and the mechanism for Islamic banking. Further elaborating in this context, there has been a complete strategy paper (2014-2018) which enables the Shariah Advisors to review the standards made by the State Bank of Pakistan. Besides that, to ensure the smooth system of Islamic banking it is already unvague the system of AAOIFI (Accounting and Auditing Organization for Islamic Financial Institutions). The feedback thus, obtained through these standards and guidelines empowers the SBP and Shariah Board Committee to further coin out policies and measures to

upgrade the standards subject to the circumstances with the due approval of SBP and Shariah Board.

Presently, the Islamic Banking System of Pakistan is operating through four Islamic banks whose working is having a healthy and positive impact on the economy of Pakistan. Marking their working statistically, that at the moment the rate of the deposit of Islamic banking ranges from 12.5% (627-706 billion rupees). Whereas, comparatively, this growth rate previously was just 4.2%. It clearly indicates that the Islamic banking sector is in progression.

It is vital to mention here that Iran Siddiqui, President,and CEO of Meezan, Islamic banking has a share of 8% in the banking industry. With this perspective of his share, the rate of growth in the Islamic banking sector must ascend to over 15% by 2016.There are four Islamic banks which are opting complete Shariah rules whereas six conventional banks are offering just Islamic financing. It must be taken into consideration that Islamic financing toes the procedure which is laid down by religious rules and regulations designed by Shariah. These outlines extend directions to various business communities, industry and to the nationwide economies.

Considering Islamic values, we ground the concept of governance in terms of ownership structure (Young, Peng, Ahlstrom, Bruton, & Jiang, 2008) as we all know that, there is no existence of any institution without owners and all the institutional rights they have with them. Basically, in prior researches, the concept of ownership is the main point of any conflict among various ownership structures and managers who are executing the rules and regulations of any business (Jensen & Meckling, 1976). It has been analyzed by various scholars that how ownership structure creates an effect on the performance (measured through return on equity, return on asset and non-performing loans) of the organization (Demsetz & Villalonga, 2001) and explored the strategies to cover such loans investment in corporate social responsibilities activities and product diversification(Cruz, Larraza-Kintana, Garcés-Galdeano, &Berrone, 2014; Crespi´&Marti´n-Oliver,2015).

Evidently, the basic outcome of this paper is to define in a crystal-clear manner the impact of ownership structure on the firm performance in the context of Islamic banking. This way the paper would be providing considerable food for thought with the objective to evaluate the significance, determining the efficiency and ownership structure at a governance level. This will further enable to decide and regulate the incentives for managers, factors related to descending ratio of the non-performing loan in Islamic banking industry. Moreover, the crux of this research paper to highlights the ownership structures are of major importance in corporate governance as they as resulting in efficient firm performance due to their decision-making strategies and supremacy powers. With this element in mind, the ownership structure could be well explained in the terms "distribution of equity regarding votes and capital but also by the identity of the equity owners".

Objectives of the Study

The objectives of the study are:

1.To investigate the impact of ownership structure (OS) on the performance of Islamic Banks.

2.To explore the impact of managerial ownership (MO) on the performance of Islamic Banks.

3.To determine the impact of institutional ownership (IO) on the performance of Islamic Banks.

4.To ascertain the impact of government ownership (GO) on the performance of Islamic Banks.

5.To reveal the impact of foreign ownership (FO) on the performance of Islamic Banks.

6.To determine the impact of family ownership (FAMO) on the performance of Islamic Banks.

7.To examine the impact of ownership concentration (OC) on the performance of Islamic Bank

Literature Review

Ownership structure and Performance of Islamic Banks

Ironically stating that fewer efforts have been done to promote the Islamic banks even their recognition in promoting economic growth and financial markets. Whereas, the researchers started their study in 2009 the repercussions of some governance aspects on Islamic bank performance. The objective of this study is limelight the impact of ownership structure on the performance of the Islamic banking system.

Sarkar & Sarkar (2000) explore that foreign equity not only have a positive effect on corporate governance of companies of developing country but it also enhances their valuation. Gürsoy & Aydoğan (2002) found family ownership lowering the risk but also the performance and productivity. In comparison with family and concentration ownership, firms owned by Government havehigher market efficiency and productivity but the level of risk involved is lower. Demsetz & Villalonga(2001) explore that there is an existence of a relationship between ownership structure and the firm performance but statistically there is no particularly significant relation

between ownership structure and firm performance.

Singh & Davidson (2003) explore that managerial ownership has significant positive and outside block ownership have no impact on total asset turnover. Anderson & Reeb (2003) investigate that the firms with more family ownership have family significantly depends on the performance of the firm as compared to non-family ownership. It also revealed that the performance of the firm increases when a family member serves as a CEO rather than outside CEO. Another researcher (Zeitun & Tian, 2007)investigate that individual shareholders have no influence on the efficiency of the organization but ownership concentration not only increase the firm's performance but it also decreases the chances of default. On the contrary, government ownership is negatively related to the probability of default, and the firm's performance.

Abbas, Zuha, Abdul Rahman, & Mahenthrian (2009) found ownership structure hasa significant positive influence on ROE but on Non-Performing Loans. Even the high ownership concentration optimistically creating an impact on the performance of Islamic banking.Chun, Nagano, & Lee (2011) explored that managerial ownership are negative significant for both the Korean and the Japanese banking industries.

In prior research by (Najid & Rahman, 2011) explained that there are few Malaysian companies under the ownership of Khazanah Holdings has a governance structure directly linked with Malaysian Government has creating positively significant effect on the various parameters of good corporate governance thus, evaluating the firm value on such particular measures such as age, size, leverage value, composition of board members, duality in decision making of firms. It is a matter of the fact that involvement of the Government and also the third-party monitoring system creates the positive impact on the efficiency and effectiveness of the organizations in Malaysia as they are closely monitored by Malaysian Governmental Regulatory authorities.

Kim, Rasiah, & Tasnim (2012) investigates that the Private domestically owned banks are not performing better as compared to foreign-owned banks though they can create good governance. To implement the policies and procedures for good governance it is clearly defined in the role of Bank managers. Alkhawaldeh (2012) examines that outcome of ownership structure on credit rating of firm performance. Insider, family and foreign ownership have significant positive relations with credit ratings. Leverage, institution and government ownership have a significant negative relationship with credit rating.

Li, Armstrong , & Clarke (2014) explore that with the increase of independent directors, family and governments' shareholding, follow the Shariah rules, with no the CEO duality, the proper conduct of internal and external auditing, and fewer directors and institutional shareholding enhances the financial performance of Islamic banking. By considering the research of (Li & Sun, 2014) explained the basic effect of managerial ownership, it differs with the levels and hierarchy of the managerial positions one can hold in the firm. Performance of any firm is directly linked with the managerial ownership and empowerment. It's more the high level of managerial position you have in any firm the more the productivity and vice versa.

Naushad & Malik (2015) found that ownership concentration s' ownership structure inclines positively on the performance of the Islamic banking sector. In another way, good corporate governance in the financial and accounting performance of the GCC banking sector poses a significant influence. As per another author of (Shahid, Hassan, & Rizwan, 2015) it is defined that the impact on the profitability of Islamic banks positively correlated to capital adequacy. It is a calculated fact that the profitabilityof Islamic banks moves at par with Macroeconomic (GDP growth rate, foreign exchange rate, and inflation rate).

In prior literature, profitability in Islamic banking is naturally articulated through external and internal factors. In this paper, we are criticizing the current literature related to the antecedents of performance in the Islamic banking sector. Basically, researchers tagged internal factors as micro or institution-specific antecedents of profitability and external factors labeled as macro antecedents of profitability. To cover the gap of various previous researches explored the association between the ownership structure and firm profitability in Islamic banking context.

The hypothesis of the study

The following are the hypothesis encompass

§H1: There is a significant relationship between managerial ownership and the performance of Islamic Banks.

§H2: There is a significant relationship between institutional ownership and the performance of Islamic Banks.

§H3: There is a significant relationship between government ownership and the performance of Islamic Banks.

§H4: There is a significant relationship between foreign ownership and the performance of Islamic Banks.

§H5: There is a significant relationship between family ownership and the performance of Islamic Banks.

§H6: There is a significant relationship between ownership concentration and the performance of Islamic Banks.

Research Methodology

Research Design

The study has employed the panel data estimation techniques. As the data used in the study comprises of Islamic banks (cross-section) for the period of 2008-2015 (longitudinal series) (Gujarati & Porter, 2009).

Sample Selection

The study has selected all the Islamic banks which are listed in Pakistan Stock Exchange (PSE) as a sample for the period of 2008 to 2015. In Pakistan, 4 banks are pure Islamic and 10 conventional banks which are operating their Islamic branches. The study has omitted the pure conventional banks.

Data Collection

The source of data was the annual reports of the sampled banks through which ownership structure was measured. The study also took data from the "Financial Statement Analysis Reports [1] 2009-2015 to measure the performance indicators.

Data Analysis

The longitudinal analysis is suitable for panel data as it combines both the cross-section and time series effect (Baltagi, 2013). The descriptive statistics used to measure the central tendency of data. The study further measures the measure the cross-sectional heterogeneity across time and banks. After the observation of cross-section heterogeneity, the selection of fixed and random model through Hausman test was performed. The Hausman (1978) test has been applied for the selection of the technique whether the fixed effect is the appropriate or random effect (Hausman, 1978). The assumptions of linear regression were checked through multicollinearity, heteroscedasticity, and autocorrelation. After performing the diagnostics test data revealed the issue of endogeneity and heteroskedasticity, so the generalized method of moment (GMM) was applied.

Variables Construction

The table given shows the variables employed in the study with their operational definition and the authors used them in their studies.

Table 1 Operational Measurement of the Study Variables

Variables	Denote	Operational Definition	Authors
Dependent			
Return on Assets	ROA	"Ratio of profit after tax to total assets"	Al-Saidi & Al-Shammari, 2013
Return on equity	ROE	"Ratio of profit after tax to shareholder's equity"	Tomar& Bino, 2012
Non-performing loans	NPL	"Ratio of non -performing loans to gross advances"	Abbas, S. Z. B. M., R. A. Rahman, et al. ,2009
Independent			
Managerial ownership	MO	"Ratio of shares owned by the directors to total outstanding common stocks"	Tomar and Bino (2012)
Institutional ownership	IO	"Ratio of shares owned by the financial institutions to total outstanding common stocks"	Tomar and Bino,2012
Government ownership	GO	"Ratio of shares owned by the state to the total outstanding common stocks"	La Porta et al. ,2002
Foreign ownership	FO	"Ratio of shares owned by the foreign investors to the total outstanding stocks"	Bilyk (2009)
Family ownership	Famo	"Ratio of share owned the spouse/siblings to the total outstanding stocks"	Choi, Zahra, Yoshikawa, & Han (2015)
Ownership concentration	OC	"Percentage of shares held by largest shareholder of the bank"	Aymen, 2014
Control Varaibles			
Leverage	D/E	"Ratio of total debts to total equity"	Sheikh and Karim(2015)
Size of the bank	Lnsize	"Log of Total assets of the banks"	Sheikh and Karim (2015)

Models for Estimation

The objective of the study estimated by the three-panel regression models with the various variables which have been identified as important in the literature (Singh & Davidson (2003); Li, Armstrong, & Clarke (2014); Villalonga& Amit (2004); Zourari&Takak (2014). This basic relationship may be written as follow:

$$ROA = \alpha + \beta_1 MO + \beta_2 IO + \beta_3 GO + \beta_4 OC + \beta_5 FO + \beta_6 Famo + \beta_7 Lnsize + \beta_8 D/E + \epsilon \ldots\ldots\ldots (i)$$

$$ROE = \alpha + \beta_1 MO + \beta_2 IO + \beta_3 GO + \beta_4 OC + \beta_5 FO + \beta_6 Famo + \beta_7 Lnsize + \beta_8 D/E + \epsilon \ldots\ldots\ldots (ii)$$

$$NPL = \alpha + \beta_1 MO + \beta_2 IO + \beta_3 GO + \beta_4 OC + \beta_5 FO + \beta_6 Famo + \beta_7 Lnsize + \beta_8 D/E + \epsilon \ldots\ldots\ldots (iii)$$

The study has applied different short panel data estimation techniques i.e. Pooled OLS, Fixed Effect (FE) and Random Effect (RE) and. But this conventional method does not handle the issue of endogeneity. The presence of endogeneity can produce bias estimates; the best option is to move towards the Two-Stage Least Square (2SLS) technique. The issue related to 2SLS technique that it can't control the heteroscedasticity and provide inefficient estimates. Furthermore, to correct the problem of autocorrelation we can't include the lag of the dependent variable as a repressor in 2SLS. An econometric technique which handles the all mentioned above problems i.e. endogeneity, heteroscedasticity and autocorrelation is the Generalized Method of Moment (GMM). GMM is the extension of an Instrumental Variable (IV) technique(Lin & Lee, 2005).

Research Findings

Descriptive Statistics

Table 2 shows the descriptive statistics in terms of mean, maximum, minimum, standard deviation and skewness values of dependent and independent variables.

Table 2 Summary of Descriptive Measures

Variables	Mean	Std. Dev	Min.	Maxi.	Skewness
ROE	.078	.131	-.23	.29	.115
ROA	.003	.018	-.07	.03	.000
NPL	.106	.057	-.01	.35	.000
MO	.133	.646	0	7	.000
IO	.639	.312	.02	1	.009
GO	.075	.170	-.12	.79	.000
FO	.080	.160	-.01	.79	.000
FAMO	8.27	15.52	0	67.41	0.01
OC	.547	.297	-.1	.99	.000
D/E	18.93	78.67	.27	782.46	.000
Lnsize	18.75	1.44	15.87	21.52	0.99
GDP	106906	26416	65223	145524	0.65
INF	11.12	5.85	4.31	20.66	0.01

Source: Author's own calculation

The standard deviation value of Family ownership shows the high variation in terms of their ownership in Islamic banking. This is seen by the wide range between the maximum values (67.41) to minimum values (0). Similarly leverage of the banks showing high variability (78.67) by the difference in the maximum (782.46) and minimum (.27) values. It indicates that banks prefer more debt as compared to the equity. The banks earn more on their equity rather on their assets. The range of Non-performing loan is increasing; it indicates the inefficiencies of banks that they are not able to recover their loans.

Panel Data Diagnostic Test

To measure the fitness of the panel data for regression analysis, need to carry out a various diagnostic test on the collected data. The diagnostic test includes the unit root test, test for multicollinearity, panel-level heteroscedasticity test and serial correlation test(Greene, 2003).

Panel Unit Root Test

The unit root test applied on the short panel to check whether the data is stationarity or not(Hall & Mairesse, 2002). Table 3 gives the p-value of each variable of the study. If the $p<0.05$, it rejects the null hypothesis (Panel contain unit roots) and accepts the alternative hypothesis (panel does not contain unit roots). There are many tests of unit root but this study employed the Augmented Dickey-Fuller (ADF) test through Levin-Lin-Chu unit-root.

Table 3 Augmented Dickey-Fuller (ADF) unit root test

Variables	Statistics	P-value
Roe	-4.51223	0.00
Roa	-9.87837	0.00
NPL	-6.96071	0.00
Mo	-2.88472	0.00
Io	-17.47	0.00
Go	-7.61	0.00
OC	-6.4457	0.00
FAMO	-53.701	0.00
FO	-1.80	0.00
D/E	-28.573	0.00
Lnsize	-3.029	0.00
Gdp	-3.17	0.00
INF	-1.74	0.00

Ho: Panels contain unit roots at 5 % significance level

The results showed that for all the variables reject null hypothesis at 5% significance level. It indicates the data is stationary of all the variables used in this study at levelnot at 1st difference.

Heteroscedasticity Test

The test of Heteroscedasticity was performed through Breusch-Pagan / Cook-Weisberg test (Juhl & Sosa-Escudero, 2014). Table 4 shows the results. The first linear

regression run for all panel models and then test was performed. The models 2 and 3 reject the null hypothesis (Ho: Constant Variance (homoscedastic). It indicates that the panel data having issues of heteroscedasticity. But in model1 there is no issue of heteroscedasticity because it accepts the null hypothesis.

Table 4 Results of Breusch-Pagan Test for Heteroscedasticity

Breusch-Pagan / Cook - Weisberg test	Model 1 ROE	Model 2 ROA	Model 3 NPL
Ho: Constant variance	chi2(1) = 2.20	chi2(1) = 25.62	chi2(1) = 18.31
	Prob > chi2 =0.138	Prob > chi2 = 0.00	Prob > chi2 = 0.00

Serial Auto correlation test

The serial autocorrelation was performed from Wooldridge test for panel data (Drukker, 2003). The results of Wooldridge test reported in table 5. The test performed for all three models and the null hypothesis (H0: no first order autocorrelation) for all rejected at 5% significance level. It shows that the data suffer from 1st order serial correlation problem in model 2 and 3. But the model 1 accepts the null hypothesis which shows that there is no issue of first order autocorrelation.

Table 5 Wooldridge test for Autocorrelation

Wooldridge test	Model 1 ROE	Model 2 ROA	Model 3 NPL
H0: no first order autocorrelation	F(1,14) =2.23	F(1,14) =27.121	F(1,14) = 138.8
	Prob > F =0.157	Prob > F = 0.0001	Prob > F= 0.00

Test for Multicollinearity

Multicollinearity means "one predictor variable in a multiple regression model can be linearly predicted from the others with a substantial degree of accuracy". To measure the issue of multicollinearity the Variance inflation factor (VIF) has been used. The value of VIF greater than 10 shows the issues of multicollinearity exists among the variable. Table 6 reported that the VIF value for all variables of the study under 10 which means no issue of multicollinearity.

Table 6 Variance inflation factor (VIF) Test for Multicollinearity

Variables	VIF	1/VIF
MO	1.08	0.928357
IO	5.22	0.191709
GO	3.22	0.310619
FO	2.72	0.367199
FAMO	1.97	0.507454
OC	1.32	0.755591

Panel Model Regression Results

The study estimates the three models with panel data estimation techniques. The pooled OLS, fixed effect and random effect panel regression measured in three of the models. The Hausman test was performed to select between the fixed and random effect model. Further, Generalized Method of Moment (GMM) was applied to capture the issue of endogeneity and heteroskedasticity.

The model 1 measure the impact of ownership structure along with control variables on the return on equity. Table 7 shows the result of model1 and it select the random effect through Hausman test. In GMM the appropriateness and adequacy of model is tested by using Arellano-Bond AR test and Hansen test of over identifying restrictions. The null hypothesis of Arellano-Bond AR (2) test states that instruments are valid, i.e Instruments are not correlated with error term. The probability value of Arellano-Bond AR (2) is 0.319 which is enough high to accept null hypothesis that instruments are valid. While, the null hypothesis of Hansen test states that instruments as a group are exogenous, i.e they are the true representors of the endogenous [2]variables. The probability value of Hansen test is 0.974 indicating that instruments as a group are exogenous; i.e truly represents the nature of endogenous variable.

Table 7 Impact of Ownership Structure on Performance: Dependent Variable is Return on Equity

	(1)	(2)	(3)
VARIABLES	**OLS**	**Random robust**	**GMM**
Mo	-0.00656	-0.0178***	-0.106
	(0.0114)	(0.00236)	(0.175)
Io	0.0602	-0.0144	0.148**
	(0.0522)	(0.0677)	(0.0710)
Go	0.158**	0.0500	0.00738
	(0.0748)	(0.123)	(0.128)
Fo	0.0955	0.0197	0.156**
	(0.0734)	(0.0734)	(0.0614)
Oc	0.00648	-0.00651	-0.110*
	(0.0275)	(0.0326)	(0.0575)
Famo	0.00154**	0.000216	0.00216
	(0.000645)	(0.000528)	(0.00236)
De	-0.000297***	-0.000207***	-0.000255***
	(9.22e-05)	(1.39e-05)	(3.69e-05)
Lnta	0.0705***	0.0635***	0.0688***
	(0.00692)	(0.0135)	(0.0109)
Constant	-1.311***	-1.100***	-1.257***
	(0.153)	(0.276)	(0.238)
Observations	120	120	120
R-squared	0.669		
Hausman test		8.12 (0.32)	
Prob>chi2			
Number of no		15	15
Arellano-Bond test for AR(2)			0.319
Hansen test of overid			0.974

****, ** and * represent 1%, 5% and 10% significance level respectively.*

The result shows that the managerial ownership having negative insignificant in all estimation techniques. But the coefficient value of managerial ownership enhances through GMM technique. It shows that insider ownership damages the profitability of the bank by their risk-taking attitude(Ahmed & Hadi, 2017). The coefficient associated with institutional ownership become positive and significant in GMM. We perceive that a 1% increase in institutional ownership enhance the performance of the bank by almost 14% with 5% level of significance. This implies that investment behavior of Pakistan's bank largely sensitive to the externally generated fund (Fazlzadeh,

Hendi, & Mahboubi, 2011). The role of government ownership is positive but insignificant because the 1% increase in coefficient value of government ownership enhance the performance of the bank only by 7% (Ab Razak, Ahmad, & Aliahmed, 2008). The governance level enhances with the involvement of foreign ownership. It is observed that a 1% increase in foreign ownership enhance the performance of the bank by almost 15.6% at 5% significance level(Peck-Ling, Nai-Chiek, & Chee-Seong, 2016). The effect on ownership concentration lower the profitability of the bank with a coefficient value of 11% at 5% significance level (Thompson & Prottas, 2006). It reflects that conflicts of interest among ownership concentration s investor and the management of the banks. In Pakistan, most of the banks are family owned but our study confirms that the existence of family ownership having no significant impact for enhancing the profitability of the bank (Miller & Le Breton-Miller (2006) ;Villalonga & Amit (2004) It was found that family ownership creates value of the firm but if family owners serve as CEO of the bank. It is observed that most of non-family CEO served in management so the role of family owners is limited.

The model 2 measure the impact of ownership structure along with control variables on the return on asset. Table 8 shows the result of model 2 and it selects the fixed effect through Hausman test. In GMM technique the appropriateness and adequacy of the modelare tested by using Arellano-Bond AR test and Hansen test of over identifying restrictions. The null hypothesis of Arellano-Bond AR (2) test states that instruments are valid, i.e Instruments are not correlated with the error term. The probability value of Arellano-Bond AR (2) is 0.202 which is enough high to accept the null hypothesis that instruments are valid. While the null hypothesis of Hansen test states that instruments as a group are exogenous, i.e they are the true representors of the endogenous [3]variables. The probability value of Hansen test is 1.00 indicating that instruments as a group are exogenous; i.e truly represents the nature of the endogenous variable.

Table 8 Impact of Ownership Structure on Performance: Dependent Variable is Return on Asset

VARIABLES	(1) OLS	(2) Fixed Robust	(3) GMM
Mo	0.000276	0.00118**	0.0183
	(0.00168)	(0.000424)	(0.0118)
Io	0.00473	0.00466	0.00524
	(0.00768)	(0.00326)	(0.00787)
Go	0.00338	0.00342	-0.0163
	(0.0110)	(0.00804)	(0.0197)
Fo	0.00655	0.00792	0.00388
	(0.0108)	(0.00489)	(0.00958)
Oc	-0.00305	-0.00383	-0.00617
	(0.00404)	(0.00390)	(0.00405)
Famo	-2.78e-05	-3.85e-05	-0.000203**
	(9.49e-05)	(9.51e-05)	(0.000101)
De	-8.96e-05***	-8.05e-05***	-8.69e-05***
	(1.36e-05)	(3.82e-06)	(4.35e-06)
Lnta	0.00879***	0.00842***	0.00993***
	(0.00102)	(0.00131)	(0.00173)
Constant	-0.161***	-0.154***	-0.181***
	(0.0225)	(0.0224)	(0.0304)
Observations	120	120	120
Number of year		9	9
R-squared	0.627	0.612	
Hausman test		65.65***	
		(0.00)	
Arellano-Bond test for AR(2)			0.202
Hansen test of overid			1.00

****, ** and * represent 1%, 5% and 10% significance level respectively.*

The finding shows that managerial ownership having positive insignificant in all estimation techniques. It became significant in fixed robust but the coefficient value (0.018) of managerial ownership in GMM technique is too low (Ruan, Tian, & Ma, 2011). It shows that banks are not generating profit through internal funds. The coefficient associated with institutional ownership become positive and insignificant. It revealed that a 1% increase in institutional ownership enhances the performance of the bank only 0.5% with 5% level of significance. This implies that institutional investment may also get effected with unstable political conditions as well (AL-Najjar, 2015). The role of government ownership depicts that 1% increase in GO decreases the performance in terms of ROA by 0.7% (Yu, 2013). The reason behind that in Pakistan mostly banks are private-owned and less investment of government reduce its strategic involvement in the profitability.

The performance of the bank in terms of ROA enhances the involvement of foreign ownership. It is observed that a 1% increase in foreign ownership enhances the performance of the bank by almost 15.6% at 5% significance level (Bilyk, 2009). It means foreign investor put some pressure to the management of the bank to get more profits. The coefficient associated with ownership concentration appears with negative significant. Our finding confirms that 1% increase in ownership concentration significantly decreases return on an asset by 0.6% (Alimehmeti & Paletta, 2012). The reason behind is the statement given by the (Fama & Jensen, 1983) which state that the investment of minority shareholders exploit by the proportion of ownership concentration. The coefficient related to family ownership appear negative significant. The negative sign indicates that family owner is not taking an active part in decision-making matters especially related to profit making decisions (Shyu, 2011).

Model 3 measure the impact of ownership structure along with control variables on the non-performing loan. Table 9 shows the result of model 3 and it selects the fixed effect through Hausman test. In GMM the appropriateness and adequacy of the modelare tested by using Arellano-Bond AR test and Hansen test of over identifying restrictions. The null hypothesis of Arellano-Bond AR (2) test states that instruments are valid, i.e. Instruments are not correlated with the error term. The probability value of Arellano-Bond AR (2) is 0.123 which is enough high to accept the null hypothesis that instruments are valid. While the null hypothesis of Hansen test states that instruments as a group are exogenous, i.e. they are the true representors of the endogenous [4]variables. The probability value of Hansen test is 1.00 indicating that instruments as a group are exogenous, i.e truly represents the nature of the endogenous variable.

Table 9 Impact of Ownership Structure on Performance: Dependent Variable is Non-performing loans

VARIABLES	(1) OLS	(2) Fixed Robust	(3) GMM
Mo	-0.0107	-0.00892***	-0.0974
	(0.00727)	(0.00207)	(0.0847)
Io	0.0287	0.0415	0.0432
	(0.0332)	(0.0241)	(0.0466)
Go	0.0618	0.0838**	0.182**
	(0.0476)	(0.0305)	(0.0756)
Fo	0.0671	0.0855***	0.117**
	(0.0467)	(0.0222)	(0.0429)
Oc	0.0487***	0.0525***	0.0698***
	(0.0175)	(0.0135)	(0.00870)
Famo	0.000327	0.000461	0.00139***
	(0.000411)	(0.000251)	(0.000370)
De	0.000320***	0.000328***	0.000339***
	(5.86e-05)	(2.86e-05)	(3.92e-05)
Lnta	-0.00457	-0.00291	-0.0111**
	(0.00440)	(0.00437)	(0.00468)

Constant	0.129	0.0834	0.220
	(0.0973)	(0.0899)	(0.120)
Observations	120	120	120
R-squared	0.300	0.324	
Hausman test		33.41***	
		(0.00)	
Number of year		9	9
Arellano-Bond test for AR(2)			0.123
Hansen test of overid			1.00

****, ** and * represent 1%, 5% and 10% significance level respectively.*

The efficiency of the bank measure through non-performing Loan (NPL). NPL have a positive significant relationship with all dimensions of ownership structure except the managerial and institutional ownership. The negative coefficients of managerial ownership reveal that 1% change in MO decreases the possibilities of NPL by 9%. It reflects that management is working for the enhancement of the efficiency of the bank. The positive coefficient of institutional ownership reflects that the ratio of NPL increases with the increase of institutional investors. Similarly, ownership concentration and family ownership produce positive and low coefficients. It reflects the role of both ownership to recover the NPL is quite low. The government ownership and foreign ownership showing a positive significant relationship with high coefficients. With the increase of government and foreign ownership ,the efficiency of the banks becomes lower. As they are not able to recover their loans from their customers.

Conclusion & Recommendations

The purpose of the study is to measure the impact of ownership structure on the performance of Islamic Banks for the period 2008 to 2015. Total banks 15 are selected out of which 4 banks are pure Islamic and 11 conventional banks which are operating their Islamic branches. The paper measure performance not only in term of profitability but also the efficiency of the bank. The ownership structure generally accepted the important component of corporate governance (Shleifer & Vishny, 1986). In Pakistan, most of the ownership of the banks is in the hands of their families. Afterward, the institutional ownership and ownership concentration having the highest proportion of ownership. It is believed that these ownership variables should contribute more to the profitability and efficiency of the bank.

The results are contrary to the investment ratio of the owners. After the fixed/random effect and GMM estimations the research findings show that the impact of ownership structure on the return on asset is meager. It reflects that owners are not making policies regarding efficient use of assets to get more return out of it. The role of institutional ownership and foreign ownership to uplift the return on their equities is quite significant. It means external investors put more pressure on the management for the better return. Whereas, managerial ownership and ownership concentration have a negative impact on ROE. The results are in line to the agency theory. The managers are not happy with their incentives and salaries and not putting efforts to enhance the profitability of the banks.

The efficiency of the banks to recover their loans amount from their clients seems meager because all ownership structure (institutional ownership, government ownership, foreign ownership,and ownership concentration expect managerial ownership) have a positivesignificant impact. It means management of the banks is not able to collect their funds back from the borrowers. This reflects the inefficiencies of the Islamic banks. The management of the bank is not properly utilizing the funds collected from the different sources of ownership. The efficient use of the resource makes them able to generate a high volume of profit. They also generate the credit creation process by lending their customers.

On the basis of research findings presented above, the paper would suggest the following policy recommendations. First, there is a need to develop the policies regarding the investment pattern in the bank through which governance should enhance. Second, from the result it revealed that banks are not properly collected their loan amount from their customers and even the owners do not take care of. The bank should screen their clients before advancing loan to them. Need to make more strict policies to meet the criteria for the lending process. Further, there is a need to have more trained staff for the recovery of the loan. With these efforts, the bank recovers loan amount and the ratio of profitability can ultimately enhance.

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Endnotes:

1 http://www.sbp.org.pk/departments/stats/FSA-2011-15.pdf

2 When robust standard error is used then p-value of Hansen test should be taken into consideration instead of Sargan test.

3 When robust standard error is used then p-value of Hansen test should be taken into consideration instead of Sargan test.

4 When robust standard error is used then p-value of Hansen test should be taken into consideration instead of Sargan test.