This work is licensed under a Creative Commons Attribution 4.0 International License.

KASBIT Business Journal (KBJ) **Vol. 12, 138-160, December 2019**

Role of Remuneration and Board Characteristics for Bank Performance A Study Based on Conventional and Islamic Banking Comparison

Kashif Naseer Toor
MS Finance Scholar
Shaheed Zulfikar Ali Bhutto Institute of Science and Technology, Islamabad.

Zulqurnain Zeeshan Rafique
MS Finance Scholar
Shaheed Zulfikar Ali Bhutto Institute of Science and Technology, Islamabad.

Zahid Bashir
Lecturer
Department of Commerce, University of Gujrat, Pakistan.

Abstract

The standing study tried to analyze the role of board remuneration and board characteristics on the comparative performance of commercial and Islamic banking in Pakistan for the duration of 2006 to 2017. The data was collected in panel form for five leading conventional banks and five Islamic banks. Panel estimation techniques like fixed, random and pooled Ordinary least square were applied after conforming Hausman specification test and LM test. Using ROE and ROA, found that Director's Remuneration is positively and significantly affecting banking performance while Account holder's investment is positively and significantly affecting bank's performance for conventional banks only and Social contribution is significantly and positively affecting Islamic banking performance in Pakistan. Using Tobin's Q as a proxy of market performance indicates remuneration is negatively affecting conventional banking performance while Islamic banking market performance is negatively and significantly affected by board's composition and positively and significantly affected by social contribution. The policymakers should enhance the remuneration of their directors so as to boost their bank's performance. Moreover, the management of conventional banks should also consider the account holder's investment to enhance the accounting performance of their banks. The policymaker in Islamic banks can increase their performance (accounting as well as market) by enhancing the social contribution like Zakat. The discoveries of this comparative study are restricted to the banking sector of Pakistan.

Keywords: Board remuneration, board characteristics, bank performance, panel data modelling, islamic banks of Pakistan.

The material presented by the authors does not necessarily represent the viewpoint of editor(s) and the management of the Khadim Ali Shah Bukhari Institute of Technology (KASBIT) as well as authors' institute.

© KBJ is published by the Khadim Ali Shah Bukhari Institute of Technology (KASBIT) 84-B, S.M.C.H.S, Off.Sharah-e-Faisal, Karachi-74400, Pakistan.

Introduction

Study Background:

The banking sector of any nation can play a significant role in the development of an economy's financial system. (Narwal & Pathneja, 2016) stated that the existence of an efficient system of banking is crucial for technologically advanced as well as emerging nations. A solid segment of banking can excellently network financial goods and resources in a manner as to support the economic and financial system of any country (Sharma, Sharma, & Barua, 2013). In Pakistan, there are two types of banking services offered to customers; the one is based on interest system while the other is based on profit and loss sharing. Both banking system has its own pros and cons. Some of the Islamic banks are performing well in their domain while other are not. In the same way some of the conventional banks earning profit on continuous basis while other are irregular in their earnings. So, the profitability of banking system is based on many factors some are bank specific factors while other are industry specific. The current study is based on the board characteristics as well as board's remuneration effect on banking profitability as comparison of leading commercial banks and Islamic banks of Pakistan.

Problem Statement:

The board of directors being the agent of shareholders have great pressure to ensure bank performance for which effective remuneration and board characteristics are pre-requisite. If the board characteristics and remuneration system in a bank are not effective or attractive to the board members especially for the executive board members, it may happen to affect negatively the performance of a bank. So, to analyze the problem empirically, it requires the proper identification of factors from board characteristics and remuneration of board member whether it enhances profitability or not. So the statement of the problem is as follows:

"To explore the role of director's remuneration and director's characteristics for comparative performance of conventional and Islamic banks in Pakistan".

Study Objectives:

The drive of this investigation is the examination of board member's remuneration and board characteristics for exploring the performance of conventional and Islamic banking on comparative basis in Pakistan for the duration of 2006 to 2017. The researcher tried to explore the present study by setting the following five objectives;

- To investigate the relationship between the board's remuneration and the bank's performance as a comparison of Conventional and Islamic banks of Pakistan.
- To inspect the connection between the board's characteristics and the performance of conventional and Islamic banking on comparative basis.
- To compare the proposed findings with earlier studies (consistency).
- To find the difference of empirical findings for the proposed study on comparative basis for commercial as well as Islamic banks.
- To determine the recommendations based on concluded findings for the policymakers, managements and for professional bankers for enhancing performance of commercial besides Islamic banking in Pakistan.

Study Questions:

This comparative econometric study attempted to evaluate the impact of board remuneration and board characteristics for performance of conventional along with Islamic banking in Pakistan during 2006 to 2017 years. The researcher tried to explore the empirical answer of the following research questions;

Q.1: How do different features of board may affect the bank performance in Pakistan as a comparison of Commercial and Islamic banks?

Q.2: How does the remuneration of board members may affect the performance in Conventional along with Islamic banking of Pakistan?

Q.3: Does the concluded findings of this comparative empirical study is consistent with the previous research studies?

Q.4: What is the comparative difference between the findings of Conventional besides Islamic banking in Pakistan?

Q.5: What are the practical and policy implications of this comparative study for the policymakers, management and future researchers in conventional in addition to Islamic banking in Pakistan?

Significance of Research:

The present research is beneficial for the policymakers, decision-makers and internal management to enhance the performance of Islamic as well as commercial banks on a comparative basis in Pakistan on the basis of different features of the board as well as on the basis of board's remuneration. The policymakers and decision-maker after analyzing this study would be able to make the appropriate decision regarding the board structure and remuneration system in conventional besides Islamic banking in Pakistan.

Literature Review

The present study analyzes the effect of board member's remuneration as well as board characteristics on bank performance for Islamic as well as commercial banks in Pakistan for the period of study 2006 to 2017. The factor wise review of board member's remuneration and board's characteristics in the form of conceptual framework is given below under their respective headings as follows;

Remuneration and Bank performance:

According to the study directed by Lee and Isa (2015), it was observed that the relationship between board's remuneration and the performance is generally dependent on the theory of principal-agent. Some of the evidences suggested no connection between director's remuneration and the

performance (Fernandes, 2008 ; (Duffhues & Kabir, 2008; Omoregie & Kelikume, 2017). Furthermore, (Jaafar, Wahab, & James, 2012 ; Halaby 2014). discovered that performance of firms boosts by increasing director's remuneration. On the other hand, (Sarkar & Sarkar, 2018; Wooi & Ming, 2009) reported an inverse link between director's remuneration and the performance of firm.

Board Characteristics and Banking Performance:

The board's characteristics may include a lot of factors, but the study included a selected number of factors like size of the board, composition of the board, duality of the CEO, investment account holder and social contribution (Bukair & Rahman, 2015). The affiliates of board of director should perform their obligations and tasks by taking their decision on the basis of three essential principles like *ethics, shariah* and *Tawheed* to assist all the stakeholders in real terms. They should have the necessary knowledge and education in banking related to Islamic principles and shariah field. This is the only way for the efficient performance of tasks through the affiliates of the board of directors (Bukair & Rahman, 2015). There is a strong link between board characteristics and performance of banks as reported by (Muhammad, 2019). The detailed literature review on these factors are given under their respective headings.

Board's Size and Bank Performance:

The size of the board is well-thought-out as a core imperative instrument in structure of the board so the performance of a firm is influenced by it (Bukair & Rahman, 2015). In line with the theory of stakeholder, (Ghayad, 2008) stated that the degree for the representation of stakeholders can be improved by enhancing board of directors which will result in lessor denomination of decision by a small number of members of the board. Majority of the earlier evidences reported no effect of board size on the performance of firms (Rachdi & Ben Ameur, 2011 ; Al-Saidi & Al-Shammari, 2013 ; Belkhir, 2010 and Adusei, 2011).

Board's Composition and banking performance:

The earlier evidences regarding the connection between the composition of the board and the performance of the banks showed mixed results (Bukair & Rahman, 2015). A number of studies could not find the connection between composition of board and banking performance (Rachdi & Ben Ameur, 2011; Belkhir, 2010). On the other hand, Al-Saidi & Al-Shammari (2013) found that there is a negative relation between the composition of board and the performance of a bank. Furthermore, Hinson and Juras (2008) found a positive connection between the above said variables.

CEO Separation and Bank Performance:

Bukair & Rahman (2015) reported that CEO duality as role would originate a decline in the cost of agency that would enhance the performance of a firm. He further explained the reason for this response as duality of CEO keeps an authoritative person within a corporation as a sole person only. It enables the chief executive officer to effectively manage the board of directors for achieving the goals of that corporation. In contrast, some of the studies could not find any significant connection between Chief executive officer and the performance of a firm as (Al-Saidi & Al-Shammari, 2013). A study reported that bank performance is declined due to CEO separation (Sarkar & Sarkar, 2018).

Board Meeting and Bank Performance:

Ibrahim, Wirman, Alrazi, Nor, & Pramono (2011) stated that frequent meetings of board and frequent attendance of board member enhances the performance of a firm as well as board.

Accountholder's investment and bank's performance:

A lot of studies had analyzed the effect of the structure of ownership on the performance of Islamic banks like the studies conducted by (Abbas, Rahman, & Mahenthrian, 2009 ; Zouari & Taktak, 2014). Nevertheless, none of the studies had used an account holder's investment ratio as an instrument of the structure of ownership. Therefore this study used account holder's investment ratio as instrument to measure an alternative source of ownership structure in line with (Bukair & Rahman, 2015 ; Farook, Kabir Hassan, & Lanis, 2011).

Social Contribution and Banking Performance:

According to the study conducted by (Bukair & Rahman, 2015), the social contribution is an important element which distinguishes conventional banks from that of Islamic. Ibrahim et al., (2011) stated that the performance of Islamic banking should be assessed on the basis of periodical payments of zakat. The major input of zakat is the progress of life quality of people and eradicate poverty from the society.

Methodology

The accounting data for the present study was obtained from financial statements available on their respective websites as well as the market level data like share price will be obtained from the Pakistan stock exchange website. The data is collected and formed in a panel shape. The target population of the present study is the banking sector (Commercial and Islamic banks) of Pakistan while the final sample includes five leading commercial banks as well as five Islamic banks that provided the required data for the years under observations 2006 to 2017. In order to make the present study in a comparative mode, the required data was analyzed on the basis of 5 leading commercial banks and 5 leading Islamic banks working in Pakistan.

The present study uses two accounting measures as dependent variables like return on assets (ROA) and Return on equity (ROE) for bank performance indicator while one market measure of performance is also included like Tobin's Q. The return on asset is measured as the ratio between profit before tax to total assets while the return on equity is measured as the ratio between profit before tax to total equity. The Tobin's Q is measured as the ratio between the sum of debt book value along with share market value to total assets. The present study uses seven independent variables namely; director's remuneration, board size, board composition, CEO separation, board meetings, Accountholder's investment and social contribution ratio. The director's remuneration is measured by taking the natural log of total remunerations of directors. The board size was computed by the total number of directors in aboard. The board composition was computed by the ratio of total non-

executive directors in a board to total board members. The CEO-separation was indicated by 1 if the chairman and CEO are separate persons or 0 if both are same. Board meeting is indicated by 1 if the meeting held at least six times a year or 0 otherwise. Accountholder investment is indicated by the ratio between total investment account fund to total equity. The social contribution is indicated by the ratio of total zakat paid to total assets. Finally, the present study included three control variables namely bank's size, leverage ratio and capital adequacy ratio. The bank's size was computed by taking the natural log of total assets. Leverage ratio was indicated by total debt to total assets ratio. Finally, the capital adequacy ratio was computed by the bank's capital to risk-weighted assets.

Modelling of the Study:

The present study is based on economic and econometric relationship between bank performance as the dependent variable and director's remuneration as well as board characteristics as independent variables. The functional form of relationship between the dependent and independent variables including the controlled variables of the study can be stated as follows:

***Bank performance** = **f** (board remuneration, board characteristics, C.V)*

The present study is based on a study conducted by (Lee & Isa, 2015). By keeping in view their modelling technique, the following models were developed for the conventional banks in Pakistan for the analysis of the present study;

Model 1: remuneration and control variables

$$(PER)_{Conv} = \alpha_i + \ b_1\ Ln(Rem) + \sum_{k=1}^{n} \delta_{i,k}(CV)_{k,j,t} + \varepsilon_{i,j,t} \ldots\ldots\ldots\ldots\ldots\ldots (i)$$

Model 2: board features and control variables

$$(PER)_{Conv} = \alpha_i + \ b_1(BC) + \sum_{k=1}^{n} \delta_{i,k}(CV)_{k,j,t} + \varepsilon_{i,j,t} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (ii)$$

Model 3: Remuneration and board features with control variables

$$(PER)_{Conv} = \alpha_i + b_1 Ln(Rem) + \ b_2(BC) + \sum_{k=1}^{n} \delta_{i,k}(CV)_{k,j,t} + \varepsilon_{i,j,t} \ldots\ldots (iii)$$

The following models are developed for Islamic banks in Pakistan for the present study;

Model 1: remuneration and control variables:

$(PER)_{Islamic} = \alpha_i + \ b_1\ Ln(Rem) + \sum_{k=1}^{n} \delta_{i,k}(CV)_{k,j,t} + \varepsilon_{i,j,t} \ldots\ldots\ldots\ldots\ldots\ldots (i)$

Model 2: board features and control variables:

$(PER)_{Islamic} = \alpha_i + \ b_1(BC) + \sum_{k=1}^{n} \delta_{i,k}(CV)_{k,j,t} + \varepsilon_{i,j,t} \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (ii)$

Model 3: Remuneration and board features with control variables:

$(PER)_{Islamic} = \alpha_i + b_1 Ln(Rem) + \ b_2(BC) + \sum_{k=1}^{n} \delta_{i,k}(CV)_{k,j,t} + \varepsilon_{i,j,t} \ldots\ldots (iii)$

*Where **PER** = Profitability, **LN(Rem)** = log of remuneration, **BC** = board characteristics and **CV** = Control variables*

Study Hypothesis:

Based on the earlier studies conducted on the same domain, the following hypothesis was established;

H_1: *There should be a positive relationship between board member's remuneration and the bank's performance.*

H_2*: The board's size should have a positive effect on the bank's performance.*

H_3*: There should be a positive relationship between the composition of the board and the performance of a bank.*

H_4*: The Separation of chairman and CEO should have a positive effect on bank performance.*

H_5*: There should be a positive relationship between board's meeting and bank's performance.*

H_6*: There should be a positive relationship between account holder's investment ratio and performance of a bank.*

H_7*: There should be a positive relationship between social contribution and bank performance.*

Data Analysis:

For the detailed analysis of the present comparative study on five leading conventional as well as five Islamic banks in Pakistan, the researchers applied different analysis techniques like panel descriptive analysis for the proper summarization of the variable statistic, then Pearson correlation analysis for

the association of variables of the study, then for checking the stationarity of the data, the panel unit root is applied. Finally, panel regression analysis after conforming from unit root testing as well as Hausman specification test (1970) and LM test is applied. The present study is conducted on a comparative basis on conventional as well as Islamic banks for the period of study 2006 to 2017. The detailed descriptive statistics are given in the following table 4.1 (Appendix)

Discussion on Descriptive Statistic:

The table states that Return on asset contributes only .03 on average in the current study for five conventional banks included in the study which may deviate from its by .011 while in case of Islamic banks, the same contributes on average by .01 for selected five Islamic banks in Pakistan which may deviate from its mean by .01 in the current study. The table also states that Return on equity contributes .64 on average in the current study for conventional banks which can deviate from its mean by 2.607 while in case of Islamic banks the return on equity can contribute by .16 on average which can deviate from its mean by .139 for selected five Islamic banks in the current study. In addition, the Tobin's Q as measure of performance in the current study contributes on average by 135.28 which can deviate from its mean by 120.289 in case of selected conventional banks while in case of Islamic banks the average value of Tobin's Q is 93.48 in the current study which can deviate from its mean value by 82.428 for the selected Islamic banks in the current study.

Discussion for Correlation Matrix Conventional banks:

The table 4.2 (Appendix) shows the association between the variables of the study for the selected five conventional banks in Pakistan for the period of study 2006 to 2017. The table displays that there is a negative and insignificant association between return on equity and return on assets. The value for Tobin's Q indicates a positive as well as significant association with return on asset while the same has positive and insignificant association with return on equity. The remuneration has a negative but insignificant association with return on the asset while the same has negative as well as significant association with return on equity and Tobin's q. The board size has a positive and

significant association with return on the asset as well as with Tobin's q while the same has a negative and significant association with return on equity.

Discussion for Correlation Matrix Islamic banks:

The table 4.2.2 (Appendix) displays the association between the variables of the study for selected five Islamic banks in Pakistan for the period 2006 to 2017. The table displays a positive and significant association between return on assets and return on equity. There is a negative association between Tobin's q and return on assets as well with return on equity. The association between remuneration with return on assets along with return on equity is positively significant while the association between Tobin's q and remuneration is negatively insignificant.

Panel Unit Root Testing:

In order to check the stationarity of the data used in the current study, the following panel unit root testing of Fisher type is applied. The table indicates that all the variables were stationary at first difference (level) for both categories of bank; conventional banks and Islamic banks.

Regression estimations and discussions:

The researcher used return on equity as a dependent variable for estimating model 1 for the current study. The results were summarized in the table (Appendix) in a comparative model for conventional as well as for Islamic banks for the period 2006 to 2017. There is a positive and statistically significant relationship between director's remuneration and return on equity for conventional as well as Islamic banks in Pakistan. There is a positively insignificant relationship between the size of the board and return on equity both is found in the case of conventional banks as well as in the case of Islamic banks in Pakistan. The finding is consistent with the findings of (Belkhir, 2010) and (Adusei, 2011). A positively insignificant relationship between board composition and the return on equity is found in the case of conventional banks and negatively insignificant in the case of Islamic banks in Pakistan. The finding is consistent with (Hinson and Juras, 2008). There is a negatively insignificant relationship between CEO separation and the return on equity in the case of

conventional banks while there is a positively insignificant relationship between the same variables in the case of Islamic banks in Pakistan. This finding is consistent is with the findings of (Bukair & Rahman, 2015). A negatively insignificant relationship between board's meeting and the return on equity is found in case of conventional banks in Pakistan while a positively insignificant relationship was found in case of Islamic banks in Pakistan between board's meeting and the return on equity. The finding is consistent with (Ibrahim et al., 2011). A positively significant relationship between account holder's investment and the return on equity is found in the case of conventional banks while the same has a positively insignificant relationship in the case of Islamic banks in Pakistan. The finding is consistent with (Bukair & Rahman, 2015). A positively insignificant relationship between social contribution and the return on equity is found in the case of conventional banks in Pakistan while a positively significant relationship between the above said variables in the case of Islamic banks in Pakistan.

The researcher used return on assets as a dependent variable for estimating model 2 for the current study. The table (Appendix) displays that there is a positive and statistically significant relationship between director's remuneration and return on assets for conventional as well as Islamic banks in Pakistan. A positively insignificant relationship between the size of the board and return on assets is found in the case of conventional banks while a negatively insignificant relationship between the variables is found in the case of Islamic banks in Pakistan. A positively insignificant relationship between board composition and the return on assets is found in the case of conventional banks and negatively insignificant in the case of Islamic banks in Pakistan. A negatively insignificant relationship between CEO separation and the return on assets is found in the case of conventional banks while there is a positively insignificant relationship between the same variables in the case of Islamic banks in Pakistan. A negatively insignificant relationship between board's meeting and the return on assets is found in case of conventional banks in Pakistan while a positively insignificant relationship was found in case of Islamic banks in Pakistan between board's meeting and the return

on assets. A positively significant relationship between account holder's investment and the return on assets in case of conventional banks while the same has a negatively insignificant relationship in the case of Islamic banks in Pakistan. A positively insignificant relationship between social contribution and the return on assets is found in the case of conventional banks in Pakistan while a positively significant relationship between the above said variables in the case of Islamic banks in Pakistan.

Discussion on Model 3:

The researcher used Tobin's Q as a dependent variable for estimating model 3 for the current study. The results were summarized in the above table in a comparative model for conventional as well as for Islamic banks for the period 2006 to 2017. The table displays that there is a positive and statistically significant relationship between director's remuneration and Tobin's Q for conventional banks while a positively insignificant relationship for the above said variables in case of Islamic banks in Pakistan. There is a positive significant relationship between the size of the board and Tobin's Q in case of conventional banks as well as in the case of Islamic banks of Pakistan. A positively insignificant relationship between board composition and the Tobin's Q is found in the case of conventional banks and positively significant in the case of Islamic banks in Pakistan. There is a negatively insignificant relationship between CEO separation and Tobin's Q in the case of conventional banks while there is a positively insignificant relationship between the same variables in the case of Islamic banks in Pakistan. A positively insignificant relationship between the board's meeting and the Tobin's Q is found in case of conventional as well as for Islamic banks in Pakistan. A negatively insignificant relationship between account holder's investment and the Tobin's Q is found in case of both conventional as well as Islamic banks in Pakistan. A positively insignificant relationship between social contribution and the Tobin's Q is found in the case of conventional banks in Pakistan while a positively significant relationship between the above said variables in the case of Islamic banks in Pakistan.

Conclusion

Using ROE and ROA as accounting measure of performance for both conventional banking system and Islamic banking system in Pakistan found that Director's Remuneration is positively and significantly affecting banking performance while Account holder's investment is positively and significantly affecting bank's performance for conventional banks only and Social contribution is significantly and positively affecting Islamic banking performance in Pakistan. Using Tobin's Q as a market measure of performance indicates remuneration is negatively affecting conventional banking performance while Islamic banking market performance is negatively and significantly affected by board's composition and positively and significantly affected by social contribution. The policymakers should enhance the remuneration of their directors in order to enhance the performance of their banks as the directors work as management to enhance the performance of the firm and remuneration will increase their motivation regarding their performance. In addition, the management of conventional banks should also consider the account holder's investment to enhance the accounting performance of their banks. The policymaker in Islamic banks can increase their performance (accounting as well as market) by enhancing the social contribution like Zakat.

The findings of the current study are limited to the banking sector of Pakistan. Only five leading conventional and five Islamic banks were included in the current study. The findings of the study are not applicable to sectors other than banking sectors. The future research may include more banks in the dataset in order to increase the generalizability of the study. More market measures like book to market ratios, eps etc., can be included in the future research to more critically analyzed the study in this domain.

References

Abbas, S. Z. M., Rahman, R. A., & Mahenthrian, S. (2009). Ultimate Ownership and performance of Islamic financial institutions in Malaysia. *Asian Finance Association Conference*., 1-25.

Adusei, M. (2011). Board Structure and Bank Performance in Ghana. *Journal of Money, Investment*

and Banking, *19*(1), 72-84.

Al-Saidi, M., & Al-Shammari, B. (2013). Board composition and bank performance in Kuwait: an empirical study. *Managerial Auditing Journal, 28*(6), 472-494.

Belkhir, M. (2010). Board structure, ownership structure and firm performance: evidence from banking. *Applied Financial Economics, 19*(19), 1581-1593.

Bukair, A. A., & Rahman, A. A. (2015). Bank performance and board of directors attributes by Islamic banks. *International Journal of Islamic and Middle Eastern Finance and Management, 8*(3), 291-309.

Duffhues, P., & Kabir, R. (2008). Is the pay-performance relationship always positive? *Journal of Multinational Financial Management, 18*(1), 45-60.

Farook, S., Kabir Hassan, M., & Lanis, R. (2011). Determinants of corporate social responsibility disclosure: the case of Islamic banks. *Journal of Islamic Accounting and Business Research, 2*(2), 114-141.

Ghayad, R. (2008). Corporate governance and the global performance of Islamic banks. *Humanomics, 24*(3), 207-216.

Ibrahim, S. H. B. M., Wirman, A., Alrazi, B., Nor, M. N. B. M., & Pramono, S. (2004). Alternative disclosure & performance measures for Islamic banks in Malaysia. *Working paper*. , 19-21.

Jaafar, S. B., Wahab, E. A. A., & James, K. (2012). Director Remuneration and Performance in Malaysia Family Firms: An Expropriation Matter? *World Review of Business Research, 2*(4), 204-222.

Juras, P.E. and Hinson, Y.L. (2008), "Examining the effect of board characteristics on agency costs and selected performance measures in banks", *Academy of Banking Studies Journal*, Vol. 7 No. 2, pp. 87-107.

Lee, S. P., & Isa, M. (2015). Directors' remuneration, governance and performance: the case of

Malaysian banks. *Managerial Finance, 41*(1), 26-44.

Muhammad, M. B. (2019). *Corporate Governance and Bank Performance: Conventional vs Islamic Banks in Malaysia.* (Doctoral dissertation, UTAR), 1-93.

Narwal, K. P., & Pathneja, S. (2016). Effect of bank-specific and governance-specific variables on the productivity and profitability of banks. *International Journal of Productivity and Performance Management, 65*(8), 1057-1074.

Omoregie, O. K., & Kelikume, I. (2017). Executive compensation and banking sector performance: evidence from Nigeria. *The Journal of Developing Areas, 51*(2), 1-15.

Rachdi, H., & Ben Ameur, I. G. (2011). Board Characteristics, Performance and Risk-Taking Behaviour in Tunisian Banks. *International Journal of Business and Management, 6*(6), 88 97.

Sarkar, J., & Sarkar, S. (2018). Bank ownership, board characteristics and performance: Evidence from commercial banks in India. *International Journal of Financial Studies, 6*(1), 1-30.

Sharma, D., Sharma, A. K., & Barua, M. K. (2013). Efficiency and productivity of the banking sector: A critical analysis of literature and design of conceptual model. *Qualitative Research in Financial Markets, 5*(2), 195-224.

Wooi, H. C., & Ming, T. C. (2009). Directors' Pay-Performance: A Study on Malaysian Government Linked Companies. *Centre for policy research and international studies*, 1-19.

Zouari, S. B. S., & Taktak, N. B. (2014). Ownership structure and financial performance in Islamic banks: Does bank ownership matter? *International Journal of Islamic and Middle Eastern Finance and Management, 7*(2), 146-160.

Appendix

Table 4.1

Panel Descriptive Statistics:

Variables		Conventional Banks				Islamic Banks			
		Mean	**S.D**	**Min**	**Max**	**Mean**	**S.D**	**Min**	**Max**
ROA	Overall	.03	.011	.005	.054	.01	.010	-.027	.027
	Between		.010	.017	.043		.01	-.001	.018
	Within		.007	.007	.045		.01	-.024	.029
ROE	Overall	.64	2.61	.067	20.4	.16	.139	-.130	.552
	Between		.708	.267	1.90		.099	.019	.28
	Within		2.53	-1.09	19.2		.107	-.086	.597
TBQ	Overall	135.28	120	.98	613	93.48	82.43	9.74	434.91
	Between		107	1.07	301		30.39	59.14	125.63
	Within		70.8	7.34	447		77.74	-4.18	402.77
REM	Overall	9.47	1.39	4.76	10.9	9.20	1.50	6.62	11.74
	Between		.59	8.46	10		1.51	7.38	11.02
	Within		1.29	4.66	10.8		.620	7.24	10.56
BS	Overall	8.72	2.93	4	16	7.47	1.64	3	12
	Between		2.54	7.25	13.1		1.48	5.96	9.92
	Within		1.83	4.22	14.3		.96	4.52	9.56
BC	Overall	.64	.13	.33	.86	.72	.13	.44	1
	Between		.09	.57	.77		.09	.64	.86
	Within		.10	.39	.88		.11	.46	1.01
CEO	Overall	.80	.40	0	1	.42	.50	0	1
	Between		.30	.33	1		.33	.17	1
	Within		.30	.13	1.47		.40	.08	1.25
BM	Overall	.82	.39	0	1	.65	.48	0	1
	Between		.09	.75	.92		.30	.17	.92
	Within		.38	-.10	1.10		.40	-.27	1.48
AI	Overall	13.98	6.08	3.86	501	8.98	5.83	1.10	28.82
	Between		8.77	4.10	47.5		4.32	1.82	12.45
	Within		1.80	-28.54	468		4.34	1.60	25.34
SC	Overall	.0003	.000	9.26	.001	.004	.006	.001	.025
	Between		.000	.000	.000		.005	.001	.011
	Within		.000	-.000	.000		.004	-.001	.022
SZ	Overall	20.61	.55	19.35	21.7	18.29	1.46	15.21	20.71
	Between		.345	20.18	20.9		1.36	16.62	20.09
	Within		.456	19.77	21.4		.801	15.72	19.70
LEV	Overall	.87	.150	.086	1	.87	.124	.050	9.13
	Between		.056	.783	.932		.382	.283	1.35
	Within		.141	.177	1.03		.070	-.426	8.65
CAR	Overall	.08	.021	.001	.122	.11	.122	.037	.863
	Between		.018	.067	.114		.055	.048	.181
	Within		.014	.013	.104		.111	-.028	.791
N = 60, n = 5, T = 12									

Table 4.2.1

Correlation Matrix for Conventional Banks:

	ROA	**ROE**	**TQ**	**REM**	**BS**	**BC**	**CEO**	**BM**	**AI**	**SC**	**SZ**	**LEV**	**CAR**
ROA	1												
ROE	-0.02	1											
TQ	0.61*	0.12	1										
REM	-0.16	-0.46*	-0.34*	1									
BS	0.44*	-0.21*	0.53*	0.20	1								
BC	0.38*	0.12	0.25*	0.04	0.37*	1							
CEO	0.24*	0.06	0.02	0.11	0.04	0.37*	1						
BM	0.06	0.06	0.13	-0.12	0.06	0.23*	0.19	**1**					
AI	-0.06	0.99*	0.09	-0.45*	-0.22*	0.11	0.06	0.06	**1**				
SC	0.16	-0.03	-0.24*	-0.16	-0.25*	-0.06	0.28*	-0.19	-0.04	**1**			
SZ	-0.43*	-0.19	-0.46*	0.65*	-0.20	-0.12	0.11	-0.18	-0.17	-0.08	**1**		
LEV	0.03	0.04	-0.07	-0.05	0.08	0.04	0.32*	0.17	0.05	0.15	-0.06	**1**	
CAR	0.67*	-0.49*	0.35*	0.41*	0.55*	0.33*	0.37*	0.07	-0.51*	0.07	-0.06	0.04	**1**

Table 4.2.2

Correlation Matrix for Islamic Banks

	ROA	ROE	TQ	REM	BS	BC	CEO	BM	AI	SC	SZ	LEV	CAR
ROA	1												
ROE	0.76*	1											
TQ	-0.16	-0.23*	1										
REM	0.49*	0.67*	-0.11	1									
BS	0.26*	0.43*	0.11	0.60*	1								
BC	-0.17	-0.09	0.09	0.15	-0.12	1							
CEO	0.09	0.24*	0.13	0.23*	0.39*	-0.09	1						
BM	0.20	-0.05	-0.10	-0.11	0.01	-0.39*	0.12	1					
AI	-0.18	0.18	-0.07	0.23*	0.06	0.14	-0.01	-0.16	1				
SC	0.20	-0.25*	0.49*	-0.27*	-0.25*	-0.24*	-0.17	0.15	-0.36*	1			
SZ	0.13	0.54*	-0.47*	0.65*	0.40*	0.17	0.08	-0.30*	0.42*	-0.78*	1		
LEV	0.10	-0.15	0.08	0.06	0.13	-0.01	-0.07	0.06	0.18	0.25*	-0.05	1	
CAR	-0.11	-0.42*	0.51*	-0.31*	-0.16	-0.02	-0.15	0.02	0.03	0.65*	-0.59*	0.74*	1

Table 4.3

Fisher-type unit-root test

Based on augmented Dickey-Fuller tests (Statistics values)

H0: All Panels contain unit root

H1: At least one panel is stationary

	Conventional Banks				**Islamic Banks**			
Variables	**At Lag (0) difference**		**At Lag (1) difference**		**At Lag (0) difference**		**At Lag (1) difference**	
	Inv. chi-Sq (10) P	**Modified inv. chi-Sq Pm**	**Inv. chi-Sq (10) P**	**Modified inv. chi-Sq Pm**	**Inv. chi-Sq (10) P**	**Modified inv. chi-Sq Pm**	**Inv. chi-Sq (10) P**	**Modified inv. chi-Sq Pm**
ROA	11.37	0.31	12.58*	0.58*	9.23	-0.17	10.61*	0.14
ROE	91.96***	18.33***	16.15**	1.37*	12.16	0.48	11.65*	0.37
TBQ	30.44***	4.57***	145.22***	30.23***	24.76***	3.30***	90.66***	18.04***
REM	44.19***	7.65***	103.18***	20.84***	11.68	0.38	9.84*	-0.71
BS	19.45**	1.99**	20.06**	2.25**	20.08**	2.25**	22.60**	2.82**
BC	33.75***	5.31***	23.37**	2.99**	12.82	0.63	25.21**	3.40**
CEO	4.23	-1.29	9.72*	-1.40	25.23***	3.40***	12.38*	0.53
BM	22.99**	2.90***	8.32*	-0.38	5.77	-0.95	9.89*	-1.14
AI	114.85***	23.44***	34.21***	5.41***	13.71	0.83	23.15**	2.94**
SC	60.63***	11.32***	70.76***	13.59***	112.41***	22.90***	128.69***	26.54***
SZ	1.24	1.96	8.66*	-2.09	31.32***	4.77***	28.45***	4.13***
LEV	9.50	-0.12	8.16*	-1.31	44.74***	7.77***	32.18***	4.96***
CAR	43.41***	7.47***	11.30*	0.29	38.40***	6.35***	38.02***	6.27***

***** 1%, **5%, *10% ,** Number of Panels = 5**,** Number of Periods = 12**, Source: Researcher's self-analysis using STATA 13**

Table 4.4.1

Panel Regression Estimation

Model 1 (ROE)

Variables		Conventional Banks						Islamic Banks					
		F.E		R.E		P.OLS		F.E		R.E		P.OLS	
		Coef	P	Coef	P	Coef	P	Coef	P	Coef	P	Coef	P
Independent Variables	REM	-.012	0.35	-.03	0.02	.03	0.02	-.03	0.38	.04	0.02	.04	0.02
	BS	-.01	0.03	-.00	0.65	.00	0.65	.02	0.34	.00	0.84	.00	0.80
	BC	-.03	0.75	.07	0.55	.07	0.56	.21	0.22	-.15	0.25	-.15	0.21
	CEO	-.05	0.21	-.05	0.20	-.05	0.21	.01	0.73	.03	0.33	.03	0.42
	BM	-.01	0.64	-.01	0.73	-.01	0.73	-.01	0.87	.00	0.86	.00	0.87
	AI	.04	0.00	.04	0.00	.04	0.00	.00	0.07	.00	0.51	.00	0.48
	SC	15.9	0.09	5.2	0.92	5.2	0.92	5.2	0.39	7.7	0.15	7.7	0.08
	SZ	.02	0.71	-.00	0.90	-.00	0.90	.13	0.00	.04	0.23	.04	0.23
Control Variables	LEV	.05	0.55	-.07	0.41	-.07	0.42	-.03	0.33	-.01	0.56	-.02	0.48
	CAR	1.9	0.12	4.4	0.00	4.4	0.00	.35	0.38	-.17	0.64	-.17	0.48
	Cons	-.16	0.85	.20	0.76	.20	0.76	-2.4	0.00	-.85	0.13	-.85	0.09
R-square													
Within		= 0.9333		= 0.9199				= 0.4059		= 0.2786			
Between		= 0.7979		= 0.9399				= 0.1763		= 0.9709			
Overall		= 0.7999		= 0.9099		= 0.9099		= 0.2050		= 0.5640		= 0.5640	

Model						
F(10,45)	= 6844.00	= 50134.91	= 5013.4	= 3.07	= 63.38	= 15.86
Prob > F	= 0.0000	= 0.0000	= 0.0000	= 0.0047	= 0.0000	= 0.0000
H.Test	chi2(7) = 9.89, Prob > chi2 = 0.1951			chi2(10) = 11.78, Prob > chi2 = 0.3000		
LM Test	chibar2(01) = 0.00, Prob > chibar2 = 1.0000			chibar2(01) = 0.00, Prob > chibar2 = 1.0000		

Table 4.4.2

Panel Regression Estimation

Model 2 (ROA)

Variables		Conventional Banks						Islamic Banks					
		F.E		R.E		P.OLS		F.E		R.E		P. OLS	
		Coef	P	Coef	P	Coef	P	Coef	P	Coef	P	Coef	P
Independent Variables	REM	-.001	0.09	-.003	0.00	.003	0.08	-.007	0.76	.004	0.01	.004	0.00
	BS	-.001	0.02	.000	0.81	.000	0.80	.003	0.98	-.000	0.55	-.000	0.53
	BC	-.003	0.60	.009	0.25	.009	0.13	.025	0.07	-.006	0.57	-.006	0.47
	CEO	-.003	0.22	-.003	0.30	-.003	0.23	-.001	0.67	.00	0.88	.00	0.91
	BM	-.001	0.45	-.002	0.45	-.002	0.37	.008	0.79	.002	0.43	.002	0.46
	AI	.000	0.16	.00	0.02	.00	0.02	.001	0.86	-.00	0.29	-.000	0.26
	SC	9.87	0.04	3.05	0.40	3.05	0.44	.97	0.05	.97	0.02	.97	0.00
	SZ	-.001	0.62	-.002	0.53	-.001	0.57	.008	0.02	.000	0.95	.000	0.94
Control Variables	LEV	.005	0.30	-.00	0.90	-.00	0.82	.003	0.13	.004	0.09	.004	0.04
	CAR	.244	0.00	.47	0.00	.47	0.00	-.021	0.51	-.05	0.07	-.05	0.01
	Cons	.05	0.35	.042	0.36	.04	0.36	-.15	0.02	-.02	0.67	-.019	0.58
R-square													
Within		= 0.6002		= 0.4664				= 0.3369		= 0.1989			
Between		= 0.0649		= 0.9389				= 0.0009		= 0.9656			
Overall		= 0.2565		= 0.7306		= 0.7306		= 0.0535		= 0.5113		= 0.5113	
Model													
F(10,45)		= 6.76		= 132.90		= 18.57		= 2.29		= 51.26		= 10.59	
Prob > F		= 0.0000		= 0.0000		= 0.0000		= 0.0289		= 0.0000		= 0.0000	
H.Test		chi2(9) = 9.96, Prob>chi2 = 0.3538						chi2(10) = 12.23, Prob > chi2 = 0.2697					
LM Test		chibar2(01) = 0.00, Prob > chibar2 = 1.0000						chibar2(01) = 0.00, Prob > chibar2 = 1.0000					

Table 4.4.3

Panel Regression Estimation

Model 3 (Tobin's Q)

Variables		Conventional Banks						Islamic Banks					
		F.E		R.E		P.OLS		F.E		R.E		P.OLS	
		Coef	P	Coef	P	Coef	P	Coef	P	Coef	P	Coef	P
Independent Variables	REM	-39.9	0.00	-55.4	0.00	55.4	0.00	22.9	0.10	-6.3	0.49	6.3	0.49
	BS	-.64	0.91	14.9	0.00	14.9	0.00	4.3	0.58	21.6	0.00	21.6	0.00
	BC	-16.7	0.85	-55.5	0.56	55.5	0.48	-38.2	0.08	32.9	0.04	32.9	0.05
	CEO	-19.5	0.54	-.55	0.99	-.55	0.98	23.2	0.12	25.7	0.10	25.7	0.11
	BM	12.5	0.61	-10.3	0.72	-10.3	0.75	5.7	0.74	5.7	0.77	5.7	0.77
	AI	-.14	0.52	.34	0.11	.34	0.00	-1.4	0.31	.48	0.75	.48	0.75
	SC	64.4	0.27	-14.1	0.00	-14.1	0.00	67.5	0.02	41.7	0.09	46.7	0.10
	SZ	30.5	0.38	10.9	0.71	10.9	0.65	-40.5	0.04	18.4	0.25	18.4	0.26
Control Variables	LEV	-21.7	0.74	-81.5	0.27	-81.5	0.05	-60.7	0.00	-71.1	0.00	-71.1	0.00
	CAR	35.0	0.75	32.9	0.00	32.9	0.00	51.5	0.00	53.1	0.00	83.1	0.00
	Cons	-16.0	0.88	15.9	0.74	15.9	0.70	61.0	0.06	-51.1	0.07	-51.1	0.08
R-square													
Within		= 0.4000		= 0.2166				= 0.7696		= 0.6537			
Between		= 0.3146		= 0.9539				= 0.1892		= 0.8113			
Overall		= 0.0226		= 0.6551		= 0.6551		= 0.3485		= 0.6711		= 0.6711	
Model Fitness													
F(10,45)		= 3.00		= 93.05		= 39.37		= 15.03		= 99.96		= 10.00	
Prob > F		= 0.0055		= 0.0000		= 0.0000		= 0.0000		= 0.0000		= 0.0000	
Hausman Test		chi2(8) = 18.76, Prob>chi2 = 0.0162						chi2(10) = 33.98, Prob>chi2 = 0.0002					
LM Test		chibar2(01) = 0.00, Prob > chibar2 = 1.000						chibar2(01) = 0.00, Prob > chibar2 = 1.000					