International Journal of Economics, Management and Accounting 27, no. 1 (2019): 83-104

PERFORMANCE ANALYSIS OF ISLAMIC AND TRADITIONAL BANKS OF PAKISTAN

Muhammad Hussain Qureshi[a] and Kausar Abbas[b]

[a]*Department of Management Sciences, Virtual University of Pakistan, 54 Lawrence Road, Lahore, Pakistan. (Email: hussain.qureshi@vu.edu.pk)*

[b]*Department of Management Sciences, University of Lahore, Pakpattan Campus, Pakpattan, Pakistan (Email: kausarsial@yahoo. com).*

ABSTRACT

This paper investigates the consequence of some CAMEL ratios, bank size, type of bank and governance structure on the financial performance of Banks. It also performs a relative analysis of Islamic and traditional banks of Pakistan. The comparative performance analysis is based on descriptive statistics and regression analysis. Fifteen traditional and two pure Islamic banks are selected for the analysis. The study period is from 2010-2017. Operational efficiency, asset quality, liquidity, capital adequacy, size, and profitability ratios along with governance structure are applied to identify the operational and financial performance of Islamic and traditional banks of Pakistan. The paper provides strong evidence that all variables such as CAMEL ratios, bank type and bank size except governance structure are highly significant in assessing bank performance. The findings reveal significant implications for policymakers in assessing Islamic and traditional bank performance in Pakistan, and ascertaining the direction of a future banking system in Pakistan. Findings of the study also underpin the awareness and confidence in Islamic banks of Pakistan. Furthermore, to the best of our knowledge, no comprehensive research in Pakistan has examined the performance of Islamic and traditional banks with variables under study on the current data set.

JEL Classification: G2, G3

Key words: Performance, Islamic banks, Traditional banks, Pakistan

1. INTRODUCTION

Bank performance evaluation has always attracted researchers and corporations. Banking performance is defined as the capability of establishing sustainable profitability (Europian Central Bank, 2010). Profitability is necessary for banks to achieve good return on resources and to fund current activities. Banking transactions such as lending and borrowing accelerate wealth creation, distribution, exchange, and consumption. Better performance will encourage additional shareholder investment. In contrast, poor performance leads to failure and banking system crises (Ongore and Kusa, 2013).Therefore, good performance of banks is essential for economic development (Dincer et al., 2011).

Banking in Pakistan has progressed rapidly in the past few years. The State Bank of Pakistan (SBP) report[1] shows that the total assets were Rs 14.27 trillion in 2015, increasing to Rs 15.98 trillion in 2016 (12.02% growth). This growth is primarily associated with local banks that have contributed 11.32% to the balance sheet. The performance of all banks may not necessarily be the same, especially after the financial crisis of 2007.

The Pakistani banking industry can be segregated into two sectors, namely traditional and Islamic banking. According to the Islamic banking bulletin, Islamic Bank assets and deposits have captured 12.90% and 14.80% of market share respectively. Numbers of branches also increased from 2589 branches in March 2018 to 2685 branches in June 2018[2].

Among various performance indicators, a well-known framework for measuring bank performance is the CAMEL ratio developed by US federal regulators in the 1970s. It has five elements, namely Capital Adequacy, Asset Quality, Management Competency, Earning Quality and Liquidity. These ratios serve as an in-house tool for measuring risk and allocating resources. The financial, managerial and operational strengths and weaknesses that determine the overall banking conditions are also based on these measures.

Besides financial ratios, governance structure also affects bank performance (Agoraki, Delis and Staikouras , 2010; De Andres and Vallelado, 2008; Karami, Karimiyan and Ghaznavi, 2016). According to Ciancanelli and Reyes-Gonzalez (2000), governance related issues are more significant in banking than manufacturing firms, due to regulatory importance, involvedness of agent-principal problem and low capitalization rate. Furthermore, the presence of the

Shariah board differentiates the governing structure of Islamic banks from traditional banks (Wasiuzzaman and Gunasegavan, 2013).

Therefore, taking into consideration the distinction between Islamic and traditional banks, the objective of the study is to determine the consequence of some CAMEL ratios, bank size, type of bank and governance structure on bank financial performance. After the introduction, this paper will cover the literature review, methodology, rationale for hypothesis development, results and analysis and conclusion and policy recommendations.

2. LITERATURE REVIEW

The cost to income ratio is normally utilized for measuring management competency (Srairi, 2009). This ratio highlights the competency of management in managing operational expenses (Alkassim, 2005). A low ratio indicates less operational risk and hence ultimately increases bank performance (Wasiuzzaman and Gunasegavan, 2013). Hung et al. (2017) applied this ratio to estimate the impact of operational efficiency on bank performance. Other studies such as Ahmad and Hassan (2007) found that the net interest margin ratio of commercial banks is better than for Islamic banks due to their lower ratio.

Another important factor that estimates bank profitability is asset quality. Asset quality is negatively related to profitability when calculated by loan loss reserve to gross loan ratio because a low ratio depicts low credit risk and hence improved performance (Athanasoglou, Delis and Staikouras, 2006; Tanna, Kosmidou, and Pasiouras. 2005; Vong and Chan, 2009). In contrast Srairi (2009) employed the loan less loss reserve divided by total assets ratio and found that higher default risk is related to lower profitability. Therefore, a higher ratio would be associated with higher profitability. However, Heffernan and Fu (2008) argued that the coefficient of asset quality can be negative or positive.

Liquidity confirms the capability of banks to tackle their current commitments and to safeguard from insolvency. Srairi (2009) argued, for reducing liquidity associated risk, banks usually hold more liquid assets to meet sudden shocks. Therefore, less liquid banks are more profitable. According to Samad (2004) Islamic banks have more liquid assets. Most recently Muhmad and Hashim (2015) found an inverse relation between liquidity measured by liquid assets to total deposit ratio and return on assets. These studies indicate that

having low liquid assets increases the liquidity risk and therefore result in high profitability due to the tradeoff between risk and return (Eljelly, 2004). According to Kamaruddin and Mohd (2013):

> Modern Intermediate Financial Theory states that the creation of liquidity and transfer of risk are the main role of banks. This theory on the role of banks in liquidity creation and driving economic growth is a chain of theories first introduced by Smith in 1776. The modern form of this theory states that liquidity creation is the main role of financial institutions. On the basis of this theory, Bryant (1980) suggests that the process of creating liquidity depends on funding illiquid assets by relatively liquid liabilities. In this scenario, banks received funds from depositors and provide these funds to firms for getting profits and for offsetting the liquidity of assets and liabilities. For meeting a sudden demand for liquidity from depositors banks usually maintain a special pool for this internal liquidity (Diamond and Dybvig, 1983).

Adequate capital provides a buffer against the unexpected losses and involves bank owners in risk sharing; therefore, the requirement of regulatory capital is the focal attention for regulatory bodies (Berger and Bouwman, 2013). Kim and Rasiah (2010) claim that regulatory authority used capital adequacy requirements to tackle the distortion in banks performance and categorize the level of soundness of financial institutions. SBP has set the capital ratio of a minimum 10% for banks[3]. In different studies, Flamini, Schumacher and McDonald (2009), Vong and Chan (2009), Sufian and Habibullah (2009), Ahmad and Matemilola (2013), Olalekan and Adeyinka (2013) and Camilleri (2016) estimated a direct relation between the ratio of capital adequacy and performance. Vong and Chan (2009) argued that banks with sufficient capital may face lower financial stress and therefore may show higher performance. Olalekan and Adeyinka (2013) stated that the higher capital provides protection against losses and strengthens public and depositor confidence. However, a significant and inverse relation is due to the agency cost hypothesis (Athanasoglou et al., 2006; Pratomo and Ismail, 2006).

Regarding bank size, it is found that performance of bigger banks is better due to diversified investment options, efficient management and better technological access (Camilleri, 2005; Flamini, et al., 2009; Srairi, 2009; Yung, 2009). However, some studies show that bank size is not impacting profitability (Heffernan

and Fu, 2008; Wasiuzzaman and Tarmizi, 2010) and by eliminating this variable from the model results are improved. It is also found that because of diseconomies of scale bank size is negatively related to profitability (Pasiouras and Kosmidou, 2007; Sufian and Habibullah, 2009; Tanna et al., 2005). Furthermore, Yakubu (2016) claimed a direct relation between size and profitability; as banks invest more in assets their performance in terms of profitability increases.

According to De Andres and Vallelado (2008), larger boards are associated with the higher performance of banks. In contrast Belkhir (2009) argued that small size boards are more efficient, but hiring more directors does not weaken bank performance. Large boards are not only related to improving coordination, but also associated with communication and process problems (Agoraki et al., 2010). In Gulf Corporation Council (GCC) countries, it is found that board size has no relationship with bank performance (Arouri, Hossain and Muttakin, 2011). However, Wasiuzzaman and Gunasegavan (2013) found that larger boards are related to low bank performance and raise agency problems.

Earlier studies showed that presence of independent directors helps in protecting shareholder interest by resisting against unfriendly takeover or by providing greater returns to the target firm (Cotter, Shivdasani and Zenner, 1997). Bokpin (2013) found that board independence has an insignificant impact on profitability. Similarly Mollah and Zaman (2015) found that directors' independence is linked with low banking performance because they are hired to fulfill the regulatory requirements and market for better performing independent directors is limited. However, Karami et al. (2016) found a positive and significant coefficient of board size at the 5% level. Sarkar and Sarkar (2016) found that board size and independence are inversely and insignificantly related to profitability.

From literature, it is evident that most recent period study in the area of banks' performance was from 2005 to 2015 (Camilleri, 2016). It is also evident that most of the studies are concentrated in the region of Malaysia and the GCC (Ahmad and Matemilola, 2013; Alkassim, 2005; Muhmad and Hashim, 2015; Srairi, 2009; Pratomo and Ismail, 2006; Wasiuzzaman and Gunasegavan, 2013). Further, most of the studies focused on bank specific factors such as CAMEL ratios and macroeconomic factors and their impact on bank performance (such as Ahmad and Hassan, 2007; Alkassim, 2005; Muhmad and Hashim, 2015; Srairi, 2009; Tanna, et al., 2005). Very

few studies are dealing with Islamic and conventional banks (Mollah and Zaman, 2015; Pratomo and Ismail, 2006). Therefore, this study contributes to the literature on Islamic banking and finance in terms of sample, variables, study period and methodology. Table 1 presents the summary of previous researches in term of their study period, types of banks and variables.

TABLE 1
Summary of Literature

No.	Author(s)	Study period	Region	Variables
1	Alkassim (2005)	1991-2001	Gulf Corporation Council GCC	Return on assets (ROA), return on equity (ROE), net interest margin (NIM), total assets (TA), total equity to total assets (TETA), total loan to total assets (TLTA), deposit to total assets (DTA), total expenses to total assets (TETA) and non-interest expenses to total expenses (NIETE).
2	Tanna et al. (2005)	1995-2002	Commercial Banks, United Kingdom (UK)	ROA, NIM, cost to income, liquid assets to customer and shorter funding, loan loss reserve to gross loan, TETA, TA, gross domestic product, inflation and concentration.
3	Camilleri (2005)	2002-2002	Small and Large Size Bank (Malta)	CAMEL structure
4	Athanasoglou et al. (2006)	1998-2002	South Eastern Bank (Europe)	ROA, ROE, liquidity, credit risk, capital, operating expenses, foreign ownership, market share, banking system reforms, concentration, inflation and economic activity.

TABLE 1 (*continued)*

No.	Author(s)	Study period	Region	Variables
5	Pratomo and Ismail (2006)	1997-2004	Malaysia (Islamic and Conventional Banks)	ROE, capital to total assets, standard deviation of ROE, TA, total loan, total investment and market concentration.
6	Ahmad and Hassan (2007)	1994-2001	Bangladesh	CAMEL structure
7	Srairi (2009)	1999-2006	GCC	Banks characteristics, macroeconomic and financial structure
8	Vong and Chan (2009)	1993-2007	Macao	Bank specific variables, macroeconomic variables and financial variables and performance
9	Flamini et al. (2009)	1998-2006	Commercial Banks (South Africa)	Banks' profitability, credit risk, capital and bank size.
10	Wasiuzzaman and Nair Gunasegavan (2013)	2005-2009	Malaysia	Bank specific variables, macroeconomic variables, governance structure and type of bank.
11	Berger and Bouwman (2013)	1984-2010	United States	Capital structure and performance of banks
12	Ahmad and Matemilola (2013)	2003-2008	Malaysia Indonesia, Thailand and Korea	CAMEL ratios and inflation
13	Olalekan and Adeyinka (2013)	2006-2010	Nigeria	Capital adequacy and profitability of bank

TABLE 1 (*continued)*

No.	Author(s)	Study period	Region	Variables
14	Muhmad and Hashim (2015)	2008-2012	Domestic and Foreign Banks (Malaysia)	CAMEL ratios
15	Mollah and Zaman (2015)	2005-2011	Islamic and Conventional Banks (25 Countries)	Shariah supervisory board, board structure, CEO's power and banks' performance
16	Camilleri (2016)	2005-2015	Malta	Credit risk and profitability of banks
17	Yakubu (2016)	2010-2015	Commercial banks (Ghana)	Banks' specific, macroeconomic variables and profitability
18	Hung et al. (2017)	2007-2014	China	Banks performance and CEO's political connections

3. METHODOLOGY AND DATA

Annual reports and statements of corporate governance of sample banks are utilized to obtain the data for the period 2010-2017. Presently, Pakistan has four Islamic and twenty-one traditional banks. After dropping banks with incomplete data, the final sample comprises two Islamic banks and fifteen traditional banks. Furthermore, observations with extreme values are eliminated from the sample. Therefore, the final sample consists of 133 observations. Sample banks are listed in appendix.

3.1 VARIABLES OF THE STUDY AND HYPOTHESIS

ROA is employed as a dependent variable. ROA can be defined as return a firm gains on its assets (Berman et al., 1999). It is estimated by the ratio of net income over total assets (Tulung and Ramdani, 2018). According to Wasiuzzaman and Gunasegavan (2013), traditional banks have better asset quality.

3.1.1 OPERATIONAL EFFICIENCY

Operational efficiency is calculated by net interest margin ratio (NIM) and for Islamic bank through net spread over earning assets. This ratio is used by Simpson (2002) and Naceur (2003). According to Wasiuzzaman and Gunasegavan (2013) net interest margin ratio (net spread over earning assets) is higher for Islamic banks as compared to traditional banks. Doliente (2005), Wasiuzzaman and Tarmizi (2010) and Wasiuzzaman and Gunasegavan (2013) found that the net interest margin ratio has a direct and significant relationship with bank profitability.

H1: Operational efficiency has a positive and significant relation with bank profitability.

3.1.2 ASSET QUALITY

Asset quality is measured by taking a log of loan loss reserve to gross loan ratio (Chowdhury et al., 2016). According to Kabir and Dey (2012) asset quality is defined as the ability of banks to recover their outstanding loan and advances at due time. Alkassim (2005) claimed that the asset quality of traditional banks is superior to that of Islamic banks. According to Tanna et al. (2005), Athanasoglou et al. (2006) and Vong and Chan (2009) asset quality is negatively related to profitability.

H2: Asset quality has a negative and significant relation with bank profitability.

3.1.3 LIQUIDITY

Log of liquid assets to total deposit ratio is used as a measure of liquidity (Kamaruddin and Mohd, 2013). In most studies such as Srairi (2009), Eljelly (2004) and Muhmad and Hashim (2015) liquidity is inversely related with bank profitability.

H3: Liquidity is inversely and significantly related with bank profitability.

3.1.4 CAPITAL ADEQUACY

Capital adequacy is defined as the tendency of banks to protect depositors from sudden losses (Nimalathasan, 2008). In this study

log of equity over the net loan is used to measure capital adequacy (Hong and Razak, 2015). Akhter, Ali and Muhammad (2011) claimed that capital adequacy is significantly and directly linked with profitability. It was also observed that equity over net loan ratio of Islamic banks is higher.

H4: Capital adequacy is directly and significantly related with bank profitability.

3.1.5 SIZE

Log of total asset is applied as a measure of bank size and it is used as a control variable (Chowdhury et al., 2016). In most of the studies such as Camilleri (2005), Yung (2009), Flamini et al. (2009), Srairi (2009) and Yakubu (2016) size is positively related with profitability of banks.

H5: Size of banks is directly and significantly related with bank profitability.

3.16 BOARD STRUCTURE

Board size is calculated by the number of directors, and board independence is defined as number of independent directors in the board (Wasiuzzaman and Gunasegavan, 2013). De Andres and Vallelado (2008), Arouri et al. (2011), Bokpin (2013), Mollah and Zaman (2015), and Sarkar and Sarkar (2016) found that board independence and size have an insignificant impact on profitability with board size having positive coefficient and independence having negative coefficient.

H6: Board size has no significant relation with profitability of banks.

H7: Board independence has no significant relation with profitability of banks.

3.1.7 TYPE OF BANK

Distinction between Islamic and traditional banks is made by incorporating a dummy variable. A value of 0 and 1 is given to Islamic and traditional banks respectively.

FIGURE 1
Conceptual Framework

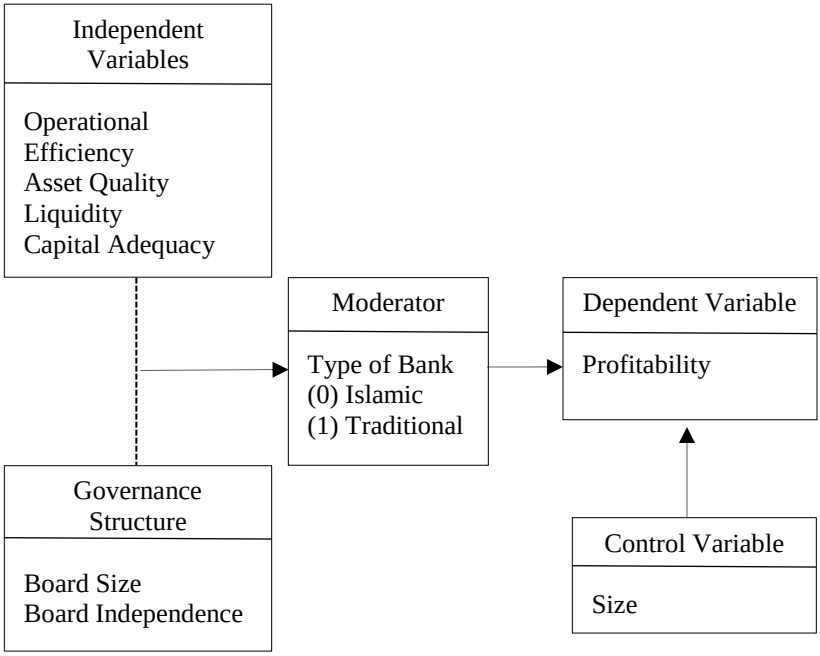

Figure 1 represents the conceptual framework. From literature, it is found that all variables are significantly impacting bank profitability (Camilleri, 2016; Muhmad and Hashim, 2015; Vong and Chan, 2009; Wasiuzzaman and Gunasegavan, 2013; Yakubu, 2016), except governance structure (Arouri et al., 2011; Sarkar and Sarkar, 2016).

3.2 MATHEMATICAL MODEL

The following model is used for testing the hypotheses of the study; the model is a modified version of the model developed by Wasiuzzaman and Gunasegavan (2013).

(1) $$ROA_{it} = \beta_0 + \beta_1 NIM_{it} + \beta_2 LLLRGL_{it} + \beta_3 LLATD_{it} + \beta_4 LENL_{it} + \beta_5 LBsize_{it} + \beta_6 Boardsize_{it} + \beta_7 Bindep_{it} + \beta_8 Type_{it} + \varepsilon_{it}$$

where

ROA	= Return on Assets
NIM	= Net Interest Margin
$LLLRGL$	= Log of Loan Loss Reserve Over Gross Loans
$LLATD$	= Log of Liquid Assets to Total Deposits
$LENL$	= Log Equity to Net Loans
$LBsize$	= Log of (Assets) Bank Size
$Boardsize$	= Board Members in Numbers
$Bindep$	= Ratio of Independent Directors
$Type$	= Type of Bank (0) for Islamic Banks (1) Traditional Banks
β_0	= Intercept
$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8$	= variables' coefficients
ε	= Error Term
Subscript i	= Bank
Subscript t	= Year

4. RESULT AND ANALYSIS

Table 2 presents the descriptive statistics. Section A depicts the descriptive statistics of all data. Section B and C depict the data of Islamic and traditional banks separately. It is observed that mean and median values are in between maximum and minimum values, with skewness near to 0 and kurtosis near to 3. Moreover, probability values of Jarque-Bera are insignificant. These indications confirm the normal distribution of sample data.

NIM, LLLRGL, LLATD and LENL ratios of Islamic banks are higher than for traditional banks. It can be inferred that operating performance; liquidity position and capital adequacy of Islamic banks are superior to that of traditional banks. Asset quality of Islamic banks seem to be lower than for traditional banks due to higher LLLRGL ratio. Islamic banks have a larger but less independent board than traditional banks. The ROA ratio of traditional banks is greater than that of Islamic banks. Furthermore, traditional banks and Islamic banks are equal in size; this will make the comparison more realistic.

TABLE 2
Descriptive Statistics (2010-2017)

Section-A (All Banks)

	ROA	NIM	LLLRGL	LLATD	LENL	LBSIZE	BOARDSIZE	BINDEP	TYPE
Mean	0.807	3.539	-2.010	2.635	2.884	19.550	8.609	27.201	0.878
Median	0.861	3.444	-1.615	2.545	2.797	19.614	8.000	28.571	1.000
Maximum	2.734	6.352	0.497	3.866	4.180	21.586	13.000	71.429	1.000
Minimum	-2.035	0.122	-6.318	1.889	1.707	17.234	4.000	0.000	0.000
Skewness	-0.812	0.038	-0.543	0.661	0.540	-0.256	0.426	-0.258	-2.334
Kurtosis	4.746	3.802	2.595	3.097	2.892	2.280	3.770	2.720	6.449
Jarque-Bera	31.496	3.599	7.443	9.729	6.513	4.326	7.315	1.909	186.723
Probability	0.000	0.165	0.024	0.008	0.038	0.115	0.026	0.385	0.000
Observations	133	133	133	133	133	133	133	133	133

Section-B (Islamic Banks)

	ROA	NIM	LLLRGL	LLATD	LENL	LBSIZE	BOARDSIZE	BINDEP	TYPE
Mean	0.725	3.796	-0.998	3.127	2.692	19.083	9.250	21.993	0.000
Median	0.765	3.722	-1.083	3.141	2.692	19.065	9.500	26.136	0.000
Maximum	1.691	5.416	0.470	3.866	3.186	20.477	12.000	40.000	0.000
Minimum	-0.113	2.617	-2.157	2.321	2.101	17.623	7.000	0.000	0.000
Skewness	0.066	0.474	0.180	-0.205	-0.391	-0.021	0.082	-0.562	NA
Kurtosis	2.344	2.251	1.538	2.385	2.498	2.011	1.558	1.828	NA
Jarque-Bera	0.298	0.974	1.512	0.364	0.575	0.653	1.404	1.757	NA
Probability	0.861	0.615	0.470	0.834	0.750	0.722	0.496	0.415	NA
Observations	16	16	16	16	16	16	16	16	16

Section-C (Traditional Banks)

	ROA	NIM	LLLRGL	LLATD	LENL	LBSIZE	BOARDSIZE	BINDEP	TYPE
Mean	0.819	3.504	-2.149	2.568	2.910	19.614	8.521	27.913	1.000
Median	0.868	3.432	-1.628	2.504	2.808	19.767	8.000	28.571	1.000
Maximum	2.734	6.352	0.497	3.609	4.180	21.586	13.000	71.429	1.000
Minimum	-2.035	0.122	-6.318	1.889	1.707	17.234	4.000	0.000	1.000
Skewness	-0.838	0.057	-0.457	0.522	0.472	-0.336	0.461	-0.250	NA
Kurtosis	4.542	3.782	2.432	2.964	2.693	2.346	4.287	2.766	NA
Jarque-Bera	25.292	3.041	5.643	5.321	4.814	4.286	12.215	1.486	NA
Probability	0.000	0.219	0.060	0.070	0.090	0.117	0.002	0.476	NA
Observations	117	117	117	117	117	117	117	117	117

TABLE 3
Correlation Matrix

	ROA	NIM	LLLRGL	LLATD	LENL	LBSIZE	BOARDSIZE	BINDEP	TYPE
ROA	1.000								
NIM	0.668	1.000							
LLLRGL	0.248	0.328	1.000						
LLATD	-0.129	0.072	0.067	1.000					
LENL	0.360	0.355	-0.131	0.154	1.000				
LBSIZE	0.541	0.220	0.401	-0.191	-0.27	1.000			
BOARDSIZE	0.339	0.268	0.330	-0.180	0.051	0.199	1.000		
BINDEP	-0.202	-0.264	-0.088	0.030	0.080	-0.117	-0.042	1.000	
TYPE	0.037	-0.088	-0.241	-0.471	0.146	0.168	-0.143	0.123	1.000

Correlations among independent variables were checked before performing the regressions. According to Gujarati and Porter (2009) a value greater than 0.80 between two independent variables can be a sign of serious multicollinearity. In this study the highest value is found between type of bank and log of liquid assets to total deposit ratio, which is $-0.471 < 0.80$ (Table 3).

Table 4 presents the results of regression analysis. The coefficient of NIM is positive and significant at the 1% level. Sensible investment decisions and loan negotiation may reduce the credit risk and increase NIM (Wasiuzzaman and Tarmizi, 2010). The result is in conformity with Doliente (2005) and Wasiuzzaman and Nair Gunasegavan (2013). According to descriptive statistics, NIM of Islamic banks is higher than for traditional banks, therefore, Islamic banks would be more profitable. The coefficient of LLLRGL is negative and significant at the 5% level. The result is in conformity with Athanasoglou et al. (2006), Vong and Chan (2009) and Wasiuzzaman and Nair Gunasegavan (2013). As per descriptive statistics, traditional banks have better LLLRGL, therefore, traditional banks would be more profitable.

The coefficient of LLATD is negative and significant at the 1% level. According to Srairi (2009) less liquid banks are more profitable. According to descriptive statistics, Islamic banks have a higher LLATD ratio. Therefore, having more liquid assets would result in lower profitability for Islamic banks. The result supports the findings of Muhmad and Hashim (2015). The coefficient of LENL is positive and significant at the 1% level. Findings are consistent with Camilleri (2016). A higher ratio indicates that banks can handle risk associated with loan losses. Since the descriptive statistics indicate

that Islamic banks have higher ratio of LENL, Islamic banks are expected to be more profitable.

TABLE 4
Regression Analysis (Dependent Variable-ROA) 2010-2017

Variables	Coefficients	*t*-Statistics (*p*-Value)	Hypothesis	Status
NIM	0.306	6.959(0.000)***	H-1	Accepted
LLLRGL	-0.069	-2.327(0.022)**	H-2	Accepted
LLATD	-0.366	-3.054(0.003)***	H-3	Accepted
LENL	0.704	7.277(0.000)***	H-4	Accepted
LBSIZE	0.480	10.635(0.000)***	H-5	Accepted
BOARDSIZE	0.039	1.506(0.134)	H-6	Accepted
BINDEP	-0.002	-0.852(0.396)	H-7	Accepted
TYPE	-0.467	-3.118(0.002)***		
C	-10.726	-10.419(0.000)***		
R^2	0.752			
Adjusted R^2	0.736			
F-stat	47.114			
Prob(F-stat)	0.000			
Durbin-Watson stat	1.491			
Observations	133			

Notes: *, **, *** indicate level of significance at 10%, 5% and 1%, respectively.

The coefficient of bank size is positive and significant at the 1% level. The result supports the findings of Flamini et al. (2009) and Yakubu (2016). As per descriptive statistics, both types of banks are equal in size. Therefore, both type of banks would be equally profitable.

Board size and independence are showing insignificant coefficients. This is also found by Arouri et al. (2011), Sarkar and Sarkar (2016), and Bokpin (2013). The coefficient of board size is positive. Descriptive statistics indicate that Islamic banks have a larger but less independent board. Therefore, Islamic banks would perform better. Further, the negative coefficient of board independence suggests that Islamic banks would be more profitable. However, the insignificant results do not support this.

The coefficient of the dummy variable is negative and significant. The result suggests that Islamic banks are more profitable than traditional banks. This result is interesting because it contradicts the descriptive statistics. According to descriptive statistics, traditional banks have better ROA. This indicates that with considered factors Islamic banks would reveal more profitability. However, if the comparison is based on ROA only, then tradition banks would be profitable. The results suggest that some other factors could be affecting the profitability of banks which are not taken into account such as the existence of earning management. The significant value of the constant (C) also indicates that ROA is not describing the actual performance of banks. However, contradicting result required nothing but a more in-depth study in the area.

5. CONCLUSION AND POLICY RECOMMENDATIONS

The aim of the study was to analyze the performance of Islamic and traditional banks of Pakistan. 15 traditional and two Islamic banks are selected for the period 2010-2017. According to descriptive statistics, net interest margin, log of loan loss reserve to gross loan, log of liquid assets to total deposits, log of equity over net loan and board size ratios of Islamic banks are higher, while return on assets and board independence ratios of traditional banks are higher. In terms of size, both types of banks are equal. Regression analysis shows that, except for governance structures, all variables are found highly significant in evaluating bank profitability.

The study may guide managers in choosing better operational efficiency, asset quality, liquidity and earning quality for their banks. It may enhance the confidence of foreign and local investors to invest in Islamic banking in Pakistan. There is an indirect contribution of the study in Pakistan from the perspective of development and economic activities. From the academic perspective, the study may provide evidence on the level of interbank ratios to enhance bank profitability. Based on the findings it is recommended that Islamic banks should manage their liquid assets more efficiently to benefit from the negative relation between liquidity and profitability. Further, it is recommended that Islamic banks need to maintain a low loan loss reserve to gross loan ratio to gain higher profitability. The findings of this study can only be generalized to the similar banks included in the study. Further

research can be done on a larger sample consisting of various banks across different countries.

ENDNOTES

1. http://www.sbp.org.pk/departments/stats/FSA-2012-16.pdf
2. http://www.sbp.org.pk/ibd/bulletin/2018/Jun.pdf
3. According to guideline on BASEL III implementation in Pakistan available at: http://www.sbp.org.pk/bsrvd/pdf/DCGuidelines/Draft%20Basel%203%20Guidelines%20(BPC).pdf (retrieve on 5 August 2017 11:34 pm).

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APPENDIX 1

List of Sample Banks

Sr.	Islamic Banks	Sr.	Traditional Banks
1	Bank Islami Limited	1	Askari Bank Limited
2	Meezan Bank Limited	2	Allied Bank Limited
		3	Bank of Khyber Limited
		4	Bank Al-Habib Limited
		5	Bank Alfalah Limited
		6	Faysal Bank Limited
		7	Habib Metropolitan Bank Limited
		8	JS Bank Limited
		9	Muslim Commercial Bank Limited
		10	National Bank of Pakistan Limited
		11	Soneri Bank Limited
		12	Summit Bank Limited
		13	Samba Bank Limited
		14	Silk Bank Limited
		15	United Bank Limited