

Factors Influencing the Profitability of Islamic Banks of Pakistan

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Abstract

In this study we attempt at investigating the impact of how the bank-specific factors of profitability affects the performance of Islamic banks. This study uses sample that is composed of Islamic banks of Pakistan from period 2006 to 2009. It is evident from both statistical multivariate regression models that the relationship of gearing ratio and capital adequacy ratio found to have a positive relation and are statistically significant at the 5% significance level, whereas the asset management is statistically significant in model I and insignificant in model II with positive relation in both models. Size of the bank reported negative and insignificant relation in both models, which can be explained with the fact that most of the Islamic banks are facing losses in recent years. Moreover capital adequacy found to have significant relation in both models, as prudential regulations tighten by the State bank of Pakistan. This research offers researchers and practitioners both with insights to enhance the financial and economic literature as regards the profitability of Islamic banks.

Keywords: Profitability Determinants; Profitability Indicators; Commercial banks; Islamic Banks; Pakistan

JEL Classification Codes: E44; F36; G21; G32; E62

1. Introduction

In recent years, financial institutions have faced a vibrant, competitive, and fast-paced situation at national and international level. One of the most mounting dimensions is the new prototype of Islamic Banking, which has amazingly attracted the attention of both Islamic and conventional economists. Today Islamic banks are operating in all areas of the globe, and are appeared as a practical and feasible alternative system, which has numerous things to present. Though it was originally developed to

accomplish the requirements of Muslims, at present Islamic banking has currently achieved worldwide acceptance. Islamic banking is documented as one of the greatest rising areas in finance and banking. Despite the fact that the majority of Islamic Banks were established within the promising and/or Middle East states, many banks in developed countries have started to value the enormous demand for financial products of Islamic Banks (Sufian, 2007).

In most parts of the country, Islamic banking industry has continued growth thrust in the face of shaky economic conditions established in the country which were worsen due to the latest floods. Assets for Islamic banking, deposits persistent show evidence of strong growth throughout the quarter with total assets escalating to Rs. 424 billion from Rs. 411 billion as at the opening of the quarter. Moreover 31% Year on Year (YoY) growth was observed. In the same way at the end of the quarter, deposits and financing & investments developed by 38.2% and 17.7% respectively and boosted to Rs. 338 billion and Rs.233 billion. The comparatively lesser escalation in financing & investments is symptomatic of the problems being faced by Islamic banking institutions in discovering new financing & investment opportunities to organize the upward deposits. The overall share of Islamic banking industry in the country's banking system also enhanced to 6.4% at the end of quarter from 6.1% as at the start of the quarter¹.

Despite the fact that there have been widespread literatures investigating the efficiency characteristics of the conventional banking sector, on the USA, European and Asian banking markets; the study on Islamic banking is still in its formative years. Characteristically, studies on efficiency of Islamic bank have dedicated on theoretical aspects and the pragmatic work has focused primarily on the examination of descriptive statistics rather than meticulous statistical inferences. In particular, the leading role engaged by banks in the stipulation of financial services in transition economies, owing to the underdevelopment of capital markets, constructs the banking system performance vital for financial development. In a challenge to enhance the literature of the efficiency of Islamic banks, this study aspires to empirically examine the factors of profitability of the Islamic banks of Pakistan.

The objective of this study aims to unfold a challenging gap in the literature by offering the up-to-the-minute empirical support on the factors of profitability of the Islamic banks, to review the profitability of the Islamic banking, to scrutinize and observe the factors that possibly will manipulate the profitability of Islamic Banks, to offer proposals for advancing relying on the knowledge of the author and evidence presented by this study and to endorse Islamic banking values towards their personnel's, patrons and the all stakeholders.

To empirically approximate the determinants of profitability for Islamic banks, this study will use parametric linear analysis. This system has the advantage of developing a data-driven analysis that necessitates no specification of any scrupulous functional shape or error structure. This study fills a vacuum in the literature by leaving from the traditional examination of profitability.

2. Previous Research

Bashir (2003) identified the determinants of profitability in Islamic Banks. They study focused on cross-country analysis and collected income statements of 14 Islamic banks in 8 countries for the period of 1993 to 1998. Using return on asset (ROA) and return on equity (ROE) as dependent variables the regression reported that profitability indicators positively react to boost in loan ratios and capital. Al-Tamimi (2005) studied the determinants of UAE commercial banks through a contrast between National and Foreign banks for the period 1987-2002. Using results of two regression models the study suggested that the bank portfolio combination and bank size were found to have highly significant relation with return on assets and return on equity for the National banks performance.

Despite the fact that the majority of Islamic Banks were established within the promising and/or Middle East states, many banks in developed countries have started to value the enormous demand for

¹ Source: Islamic Banking Bulletin, September 2010, 5 (3) - State bank of Pakistan (data for which is based on Unaudited Quarterly Accounts *number includes sub-branches)

financial products of Islamic Banks (Sufian, 2007). Mokhtar, Abdullah and Alhabshi (2008) while studying Malaysia banks for the period 1997 to 2003 discovered that, even though the fully functional Islamic banks were more efficient and well-organized in contrast to the Islamic windows, still they were less efficient than the conventional banks. Siddiqui (2008) analyzed behavior of Islamic styles of finance and scrutinize their risk characteristics. Comparing two fully Islamic licensed banks of Pakistan (Meezan Bank and Al-Baraqa Bank) study contrasted a range of earning, liquidity, profitability and capital adequacy ratios and contrasted with scheduled banks ratios. The study found reported Islamic banks in Pakistan were more inclined in the direction of employing projects with long term financing and found to had enhanced profitability than conventional banks. Sadaqat, Akhtar and Ali (2011) reported the superior performance of conventional banks than Islamic banks in boosting their profitability and risk management practices.

Sufian and Parman (2009) studied the profitability of non-commercial banks financial institutes (NCBFIs) of Malaysia with the macroeconomic and bank-specific factors that influenced their profitability for the period of 2000-2004. Using ordinary least square model, the study found NCBFI with high credit risk and loan intensity tend to show lesser profitability level and NCBFI with high operational expenses and level of capitalization tend to show higher profitability level. Sufian and Noor (2009) found that the Islamic banks have been administratively incompetent in taking advantage of their resources to the optimum extent. Sufian (2007); Choi, Stefanou, and Stokes (2007); Koutsomanoli-Filippaki, Margaritis, & Staikouras (2009) observed significant variation and diverse prototypes in inefficiency levels across banking systems. Additionally he found small and home private banks emerge to be the utmost efficient. Hassan, Mohamad and Bader (2009) stated that on average, banks are more competent in utilizing their resources in contrast to their capability to produce profits and revenues while studying on a cross-country level in 11 Organization of Islamic Conference (OIC) nations for the period 1990-2005.

Sufian and Habibullah (2010) empirically studied the efficiency of the banking sector of Thailand for period 1999-2008. Using DEA model and multivariate regression analysis finds that superior efficiency levels are revealed by banks with superior capitalization and higher loans intensity. Conversely, empirical findings propose topical global financial crunch to be negative exercising on the efficiency for banks of Thailand.

Akhtar, Ali and Sadaqat (2011) reported the significance of size and networking capital while studying the risk management practices of Islamic banks. Ali, Akhtar and Ahmed (2011) studied the bank-specific and macroeconomic determinants of profitability for commercial banks of Pakistan. Using four years data the study found significant affect of capital adequacy ratio, credit risk, asset management, GDP and consumer price index with profitability when measure with return on assets (ROA) and significant relation of operating efficiency, asset management and GDP with profitability when measured with return on equity (ROE).

Ali, Akhtar and Sadaqat (2011) scrutinized the financial and non-financial risk dimension for the commercial banks of Pakistan. Using a sample of 28 commercial banks (Out of 6 were full-fledge Islamic banks) of Pakistan, the study applied linear regression models. Credit risk was used as financial and Operational risk as non-financial risk dimensions. For model (A), where financial risk is scrutinized the study found significant affect of size, gearing ratio and liquid assets. However in model (B), where non-financial risk is scrutinized the study reported significant relation of size, non-performing loans ratio and operating efficiency.

To fill the knowledge gaps for on the profitability of Islamic banks, this study looks to provide new empirical support on the resources and factors of the Islamic Banks of Pakistan.

3. Research Methodology

The ordinary least square method is adopted for this study. The use of this research methodology is reasonable and acceptable based on the availability of a number of preceding studies that taken as a whole investigated the profitability of banking sector. Moreover for interpretation and understanding of

the results, secondary sources including; books, Journal papers and official publications will be used right the way through this study.

3.1. Research Models

To complete the aim and objectives of this study, the following models were proposed.

Model (I): Return on Asset (ROA)

$$ROA = \alpha + X_1\beta_1 + X_2\beta_2 + X_3\beta_3 + X_4\beta_4 + X_5\beta_5 + \epsilon$$

Model (II): Return on Equity (ROE)

$$ROE = \alpha + X_1\beta_1 + X_2\beta_2 + X_3\beta_3 + X_4\beta_4 + X_5\beta_5 + \epsilon$$

3.2. Sample & Data Collection

The sample chosen in this study consists of Islamic banks of Pakistan to analyze the factors of profitability of the financial data for the period of 2006-2009. The sample was collected from the annual reports of the respective banks and from the website of Lahore stock exchange and State Bank of Pakistan. The financial data of the banks was used to estimate the capacity and dimensions for control variables.

3.3. Variable Measurement

Profitability is important to the shareholders of the banks on one side and on the other dish up as spine adjacent to unfavorable conditions which includes: losses on loans, or losses that originated due to unforeseen and sudden changes in economic conditions.

Return on assets (ROA) and return on equity (ROE) are the largely pertained ratios used to measure financial performance (Berger, 1995; Naceur & Goaid, 2001; Williams, 2003; Kosmidou, 2008; Siddiqui, 2008; Sufian & Habibullah, 2009). The annual financial statements of the Islamic banking institutions were studied by using the profitability from two dimensions (Return on Assets, Return on Equity), and explanatory variables such as Bank's Size, Gearing Ratio, Asset management, NPLs Ratio, Capital Adequacy, and Operating Efficiency measures for four years period. The details of these variables along with their symbols, and proxies are reported as under in Table 3.1

Table 3.1: Variable, their Proxies and Symbols

Symbols	Variables	Proxies
Y ₁	ROA (Return on Asset)	Net-Operating Income/Total Assets
Y ₂	ROE (Return on Equity)	EACS /Common Stock Equity
Explanatory Variables		
X ₁	Bank's Size	Logarithm of Total Assets
X ₂	Gearing Ratio	Total Debts/Equity
X ₃	NPLs Ratio	Non-Performing Loans/Total Loans
X ₄	Asset management	Operating Income/Total Assets
X ₅	Operating Efficiency	Total Operating Expenses/Total Assets
X ₆	Capital Adequacy	Tier 1 Capital + Tier 2 Capital / Risk Weighted Assets

4. Empirical Results

The profitability of Islamic banks has a long-term relationship with size of the bank, debt equity ratio, asset management, NPLs Ratio, capital adequacy ratio and operating efficiency because all these variables affected the profitability. If any one of these variables will have a destructive impact of profitability, due to mismanagement of the assets and liabilities, this will disturb the overall performance of the banks. These variables are bank specific and the banks can control them with their effective strategies and efficient resource utilization.

4.1. Descriptive and Pearson Correlation Statistics

The Table 4.1 exhibits the descriptive statistics of the all exploratory and explanatory variables. The values of mean; discrete random variable reports the arithmetical average of all the variables which are included in this study for given set of data, and standard deviation which shows the variability or diversity in the data set for each variable. A small standard deviation point towards that the data points are inclined to be extremely close to the mean; while high values of standard deviation points that the data set is broaden out over a hefty range of values.

Table 4.1: Descriptive Statistics

Descriptive Statistics		
	Mean	Std. Deviation
Return on Assets (ROA)	-0.00234	0.021069
Return on Equity (ROE)	0.014484	0.154248
Size of the Bank	6.699244	2.098607
Debt Equity Ratio	4.981711	4.120784
Asset Management	0.000893	0.014358
NPLs Ratio	0.019161	0.024063
Capital Adequacy Ratio	0.242438	0.178561
Operating Efficiency	0.034825	0.020859

*Correlation is significant at 0.001 level (Significance value<0.001)

**Correlation is significant at 0.10 level (Significance value<0.10)

The results of Pearson-Correlation test specify the absence of multicollinearity problem among the variables. Thus it can be said that all of the explanatory variables are free from the interdependency of explanatory variables. The Pearson Correlation Coefficients is reported in Table 4.2.

Table 4.2: Pearson Correlation Coefficients

Pearson Correlation Coefficients						
	Bank's Size	Gearing Ratio	Asset Management	NPLs Ratio	Capital Adequacy	Operating Efficiency
Bank's Size	1	0.515**	0.110	0.289**	0.322	0.518
Gearing Ratio		1	0.589	0.309	-0.425	-0.042
Asset management			1	-0.114**	-0.388**	-0.566
NPLs Ratio				1	0.046**	0.331
Capital Adequacy					1	0.538*
Operating Efficiency						1

4.2. Regression Results

The least-square regression results of model I is stated in Table 4.3. The value of Durbin-Watson test indicates the absence of autocorrelation and the F-statistic shows the overall significance of both models at 0% level of significance. The resulted value of R-square in Model I specifies that if the 1% change will occur in all explanatory variables then return on assets (ROA) will change by 85% approximately.

The relationship between Islamic banks profit and debt equity ratio is positive and the coefficient is statistically significant at the 5% level of all specifications. The operating efficiency (Alexiou & Sofoklis, 2009; Sufian & Habibullah, 2009; Ramlall, 2009) and NPLs ratio (Sacket & Shaffer, 2006) established the negative relationship with return on assets (ROA) and the coefficient is statistically significantly at the 0% and 5% level of all specifications respectively. The size of the bank found to have a negative (Spathis et al., 2002; Kosmidou, 2008; Ali, Akhtar & Ahmed, 2011) and asset management exhibited positive (Chirwa, 2003; Miller & Noulas, 1997) relationship with profitability of Islamic banks and statistically the coefficients are insignificantly affected by the return on asset

(ROA). A positive relationship is found between the profitability and capital adequacy ratio (Ramlall, 2009; Ali, Akhtar & Ahmed, 2011), with coefficient of capital adequacy ratio being statistically significant at 5% level of significance.

Table 4.3: Regression Statistics for Model I

Dependent Variable: Return on Assets					
Method: Least Squares					
Sample: 2006M01 2009M12					
No. of Observations: 24					
Durbin-Watson Test: Standard Errors & Covariance					
Coefficients-Model I					
	Un-standardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	0.0000	.007		-.012	.991
Bank's Size	0.0000	.002	-.002	-.010	.992
Gearing Ratio	0.0030	.001	.501	2.421	.027
Asset management	0.3050	.255	.208	1.196	.248
NPLs Ratio	-0.2260	.096	-.258	-2.354	.031
Capital Adequacy	0.0650	.018	.552	3.547	.002
Operating Efficiency	-0.7650	.175	-.758	-4.364	.000
R-squared	0.849		Mean dependent var	-0.002339	
Adjusted R-squared	0.796		S.D. dependent var	0.19415	
Sum squared resid	0.002		F-statistic	15.953	
Durbin-Watson stat	1.961		Prob (F-statistic)	0.0000	

The Table 4.4 reports the regression results of Model II where return on equity (ROE) is used as dependent variable. The resulted value of R-square shows that if the 1% change will occur in all dependent variables then return on equity (ROE) will change by 79% approximately.

The relationship of debt equity ratio and Islamic banks profitability is positive and the coefficient is statistically significant at 5% level of significance. The coefficients of size of the bank, asset management and NPLs ratio are statistically insignificant affected by the profitability.

Table 4.4: Regression Statistics for Model II

Dependent Variable: Return on Equity					
Method: Least Squares					
Sample: 2006M01 2009M12					
No. of Observations: 24					
Durbin-Watson Test: Standard Errors & Covariance					
Coefficients-Model II					
	Un-standardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	.000	.058		-.002	.998
Bank's Size	-.004	.015	-.053	-.270	.791
Gearing Ratio	.023	.009	.626	2.571	.020
Asset management	2.704	2.197	.252	1.231	.235
NPLs Ratio	-1.272	.826	-.198	-1.540	.142
Capital Adequacy	.380	.158	.440	2.401	.028
Operating Efficiency	-4.196	1.511	-.567	-2.776	.013
R-squared	0.791		Mean dependent var	0.0000	
Adjusted R-squared	0.717		S.D. dependent var	0.013719	
Sum squared resid	0.114		F-statistic	10.729	
Durbin-Watson stat	1.652		Prob (F-statistic)	0.0000	

The negative relation of size with the profitability when measured with return on equity (ROE) is in accordance with the finding of the literature (Spathis et al., 2002; Kosmidou, 2008; Ali, Akhtar & Ahmed, 2011). The operating efficiency recognized the negative relationship (Alexiou & Sofoklis,

2009; Sufian & Habibullah, 2009; Ramlall, 2009; Ali, Akhtar & Ahmed, 2011) with return on equity (ROE). The coefficient of operating efficiency is statistically significant at the 5% level of all specifications. The capital adequacy ratio found to be a positive relationship with profitability and the statistical coefficient is significant at the 5% level of significance (Ramlall, 2009; Ali, Akhtar & Ahmed, 2011).

5. Summary and Concluding Remarks

The study established the consequences of bank-specific determinant of profitability in Islamic banks of Pakistan. The data analysis based on the data over the period of 2006-2009 that shows the long run relationship all explanatory variables with profitability.

It is evident from both statistical multivariate regression models that the relationship of gearing ratio and capital adequacy ratio found to have a positive relation and are statistically significant at the 5% significance level, whereas the asset management is statistically significant in model I and insignificant in model II with positive relation in both models. Size of the bank reported negative and insignificant relation in both models, which can be explained with the fact that most of the Islamic banks are facing losses in recent years. Moreover capital adequacy found to have significant relation in both models, as prudential regulations tighten by the State bank of Pakistan. The NPLs ratio is found to have negative relationship with both profitability measures (return on asset & return on equity), Whereas statistical effect of NPLs ratio is significant in model I and insignificant in model II.

This research offers researchers and practitioners both with insights to enhance the financial and economic literature as regards the profitability of Islamic banks.

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Appendix

Sr.	ISLAMIC BANKS
1	BankIslami Pakistan Limited
2	Dawood Islamic Bank Limited
3	Dubai Islamic Bank Pakistan Limited
4	Al-Baraka Bank (Pakistan) Limited
5	Meezan Bank Limited
6	Emirates Islamic Bank