Islamic Banking in Pakistan: Analysing Growth and Determinants of Profitability

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Abstract

In Islamic banks, deposits are the main source of funds which are converted to investment and assets to generate profit through Islamic Modes of financing and investment. There is limited research, especially in Pakistan, where the impact of deposits, investments, and total assets on performance is investigated for Islamic Banks along with the analysis of growth of Islamic Banking since its inception. The purpose of this paper is to fill this gap. Quarterly data of 10 years (2007 to 2016) published by the State Bank of Pakistan is applied for descriptive statistics, correlation and regression analysis. Assets while data from 2003-2016 is used for growth analysis. Assets, Investments, and deposits are used as independent variables while ROA and ROE are used as dependent variables. The results show that although there is a robust growth in deposits, investment, assets, and branch network of Islamic Banks during the study period, the profitability is not very impressive. This is evidenced from the negative relationship of assets with performance. However, the relationship of deposits and investment & financing is significantly positive with performance. Therefore, the Islamic Banks' management should pay attention towards improving the efficiency by managing assets more prudently and by reducing costs, particularly the operational cost.

Key Words: Islamic Banks, Assets, Deposits, Investment & Financing, Financial Performance

1. Introduction

Islamic banking and finance is now considered as a growing reality because of its expansion from the borders of traditional Muslim countries to the non-Muslim western countries since its inception in Egypt during 1970s. It flourished in countries like Pakistan, Malaysia, Bahrain, Iran, Sudan, Saudi Arabia, and Bangladesh along with non-Muslim countries mainly UK. Islamic Banking showed

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more resilience than its counterparts during the financial crises which helped in building more confidence of the world. According to Ayub (2017), Islamic finance industry spread over 110 countries with approximately 50 million customers with an estimated assets of US $ 2 trillion worldwide which is expected to cross US$ 3 trillion by 2020. Islamic banks have the major contribution towards this assets base.

Pakistan is one of the frontline countries playing an active and effective role for the development and growth of Islamic finance. Since 2000, the State Bank of Pakistan (SBP) is playing an important role in the development and promotion of Islamic finance and banking. SBP established a dedicated Islamic Banking Department and Sharia Board to approve and monitor the guidelines for Islamic banks. At present, Islamic banking industry in Pakistan consist of 21 Islamic Banking Institutions (IBIs). Out of these, 5 are full-fledged Islamic banks while there are 16 conventional banks with standalone Islamic banking branches (IBBs). The total branch network has 2,320 branches across the country as on June 30, 2017 (SBP, 2017).

Like other institutions, the performance of financial institutions, especially the banks, is influenced by a number of internal and external factors. These factors have a direct and indirect impact on their performance. The factors such as the management decisions regarding financial aspects, bank size, bank capital, risks and expenses management etc. are known as the internal factors directly affecting the performance of the banks. There are some other internal factors which are bank specific factors such as liquidity or credit. These factors are also related to the management of bank, specifically the risk mitigation management. Besides, there are two major causes of bank failure. These are related to the poor quality of assets and liquidity management. These factors represent the key sources of liquidity and credit risk. This issue has attracted great attention in research. On the other hand, economic conditions and institutional environment are considered as external factors which also affect the profitability of banks. These factors are: inflation, interest rates, market concentration, industry and ownership status etc. The challenge to the banks is to remain profitable and efficient for strengthening their financial health in a tough competition (Albertazzi & Gambacorta, 2009; Samad (1999).

There is abundance of literature on determinants of performance of banking sector, but these studies mostly related to conventional banks whereas very little research is done to investigate the impact of internal factors (such as assets,

deposits, and financing and investment) on the performance (ROA, ROE) of the Islamic Banks. This paper bridges this gap. In addition, the growth of Islamic Banking in Pakistan has also been analyzed.

The next section presents a literature review on the topic followed by a section that explains the research methodology. Results and discussion have been presented in section four followed by the conclusion in the last section.

2. Literature Review:

Islamic banking institutions provide Sharia complaint financial and investment services by employing Islamic criteria in allocating resources to achieve economic and social development (Ahmed, 2016). The Islamic Banking industry is spread over 110 countries with more than 50 million of customers. The growth in Islamic banking operations and services has been tremendous. For example, the assets based on Islamic banking have reached to US $ 2 trillion by 2016 from a meager amount of US $ 200 billion in 2003. It is expected that the figure will reach to US $ 3 trillion by 2020. Islamic banks are major contributors (more than 70%) for this growth (Ayub, 2017).

Islamic finance promotes a risk sharing culture. It creates a connection of real economy with financial sector and focuses on social welfare through financial inclusion. It provides a mechanism for redistribution of wealth to eradicate the imbalances that may be created by production of wealth and its distribution cycle (Ayub, 2017; Soliman, 2017). Islamic finance industry in Pakistan consists of Islamic Banks, Microfinance banks, Mudarabah companies, Takaful companies and Islamic Mutual funds. State Bank of Pakistan (SBP) regulates both Islamic banks and Microfinance banks while the Securities and Exchange Commission of Pakistan (SECP) regulates and monitors other Islamic Financial Institutions (IFIs). IFIs in Pakistan follow the Sharia standards of AAOIFI (Ayub, 2016).

Measurement of efficiency is one of the many aspects of a firm's performance. There are three ways to measure efficiency: maximisation of profits, maximizations of outputs and minimisation of cost. An efficient firm has the ability to maximize its outputs or generate maximum profit from the given inputs. In banking industry, in order to survive, tight competition forces banks to be efficient in operations to provide products and services where demand of the customers is high. Banks can make more profits only if they would do this efficiently and with the minimum cost (Hamim et al, 2008).

Like conventional banks, the main source of funds for Islamic banks is deposits of the customers. Similar to the conventional banks, Islamic banks also offer different kinds of accounts named as saving account, current account and the investment accounts. For investment deposit accounts, investors make agreement with banks to share a given portion of profit or loss. In general, the savings and current account holders are risk averse and receive a fairly good return while on the other hand, investment account holders face a greater risk because they do not only share profit but also contribute in the loss. According to Heggested (1977), banks rely heavily on time and savings deposits which earn lower returns than banks having higher dependence on demand deposits. Similarly, Smirlock (1985) found that demand deposits have a positive impact on profits and are a cheaper source of funds. Regarding efficiency of the banks, Kwast and Rose (1982) argued that operating efficiency has an insignificant effect on profitability. They found that in comparison to the low profit banks, there is no strong evidence that high profitability is linked with a higher level of efficiency.

There is enough literature on determinants of the performance of the banking sector, but these studies are mostly related to conventional banks (Javaid et al, 2011; Gul et al, 2011; Sudin, 2004) etc. Javaid, et.al. (2011) studied the internal factors as the determinants of banks' profitability in Pakistan over the period 2004-2008 and investigated the impact of assets, loans, equity and deposits on performance (ROA). They found that from among the internal factors, deposits, loans, and equity have a strong impact on the performance of the banks while the impact of assets is negative although insignificant. This means that rising total assets may not lead to higher profits all the time. The reason could be due to diseconomies of scales. In another study, Gul. et al. (2011) analysed the top 15 commercial banks in Pakistan and investigated the relationship between internal (bank-specific) and external (macro-economic) factors with bank performance. They investigated the impact of internal factors such as equity, deposits, loans, and assets and external factors such as inflation, economic growth, and market capitalization on key performance indicators: return on asset (ROA); net interest margin (NIM); return on equity (ROE); and return on capital employed (ROCE). Their results showed a strong relationship of both internal and external factors with the profitability of the banks.

Haron and Sudin, (2004) did a similar study to investigate the determinants of profitability in Islamic banks. They concluded that the internal factors (liquidity, funds invested in the securities, and the percentage of the profit sharing ratio between the bank and the borrower of the funds) have a high correlation with

the total revenue earned by the Islamic banks. The study is also responsible for having the similar effects when external factors are considered. Similarly determinants like total capital or the reserve, funds deposited in the current account, the percentage of profit sharing among bank and the depositors, and money supply (external factor) play a critical role in the performance of Islamic Banks. In an earlier study, Fraser et al (1974) took deposits, loan, and operating costs as internal factors. They found that the highest influence on the performance of the bank was the operating cost followed by a deposit and loan composition.

Hamim et al. (2008) found that in Malaysis, the efficiency of Islamic banking industry (overall) on average has increased over time. Within groups, Islamic banks (full-fledged) were efficient than the model of Islamic windows within conventional banks. But the level of efficiency in conventional banks was greater than the Islamic banks. Comparing the domestic with foreign banks, it was found that domestic banks were less efficient than foreign banks. Abdul Majid et al. (2011) investigated cost efficiency and productivity change of Islamic Banks in Malaysia. According to them, there is no consensus as to weather Islamic banks perform better or conventional banks. In many studies, Islamic banks outperformed conventional banks while in others conventional banks outperformed Islamic banks. For example, research shows that Islamic banks performed better than their counterpart in terms of overall productivity -an income to expenditure ratio (Hamid, 1999); in terms of profitability measured by ROE (Hamid, 1999; Hassoune, 2002; Iqbal, 2001). Similarly, Islamic banks showed higher growth in terms of total assets, deposits, equity, and investment (Iqbal, 2001); better capital adequacy ratio and higher asset quality (Hassan & Bashir, 2003); better credit management (Samad, 2004); lower risk because of excessive liquidity (Hamid, 1999; Metwally, 1997; Samad, 2004; Samad & Hassan, 1999); and higher investment ratios in government securities (Samad and Hassan, 1999). The reason for higher level of liquidity along with higher investment in government securities was the limited investment opportunities for Islamic banks relative to conventional banks because of the restrictions imposed by Shari'a (Hamid, 1999; Metwally, 1997; Samad, 2004; Samad and Hassan, 1999). In some other studies, Islamic banks were found relatively less cost effective (Iqbal, 2001). They also showed a higher labour costs (Hamid, 1999). Measuring the volatility in performance (ROE), Hassoune (2002) found that conventional banks, which were greatly influenced by interest rates fluctuations, were more volatile compared to Islamic banks.

From the above review, it seems that very little empirical research has been done to investigate the impact of internal factors such as assets, deposits, and financing and investment on the performance of the Islamic Banks. This research was done to fill this gap. In addition, the growth of Islamic Banking in Pakistan is also analyzed. Since, Islamic Banks are interest free, the generation of deposits and provision of financing facilities are based on special products developed for sharia compliance. For this purpose, products generally known as modes of financing are developed to cater to the needs of both savers and investors. Modes of financing in Islamic banks can be broadly classified into three types: participatory based modes of financing; trade based modes of financing, and Ijara (lease) based modes of financing. These modes of financing are briefly discussed below:

2.1 Participatory Modes of Financing:

Musharaka, Mudarabah and Diminishing Musharakah

Musharakah and Mudarabah are considered as the most ideal modes for Islamic Finance. Musharakah is a kind of participatory mode of financing where two or more partners give money and participate in work for investing it in a commercial enterprise. Basically the word Musharaka means sharing (Farooq & Mushtaq Ahmed, 2013). Musharaka is an "Equity participation contract" which provides profit and loss sharing facility in a joint business (Khan, 2010). Musharaka is a form of partnership between the client and an Islamic bank whereby both parties contribute towards the capital of the partnership. The sharing of the capital can be equal or in different proportion to establish a new project or create a share in an existing one. However, losses are shared according to the proportion of the investment in capital (Usmani, 1998; Ansari, 2007, Ayub, 2007). Mudarabah is also a participatory mode of financing where one partner manages the funds and uses it in a profitable business while the other party provides capital as investment in a commercial enterprise. Mudaraba, compared to Musharakah, is a passive partnership where the party who provides funds does not actively participate in the business while the other party actively participates by providing expertise and management skills. In Mudarabah, profits accrued are also shared on a pre-agreed basis while losses (in cash) are borne only by the investor –the capital provider (Ansari, 2007, Ayub, 2007; Khan, 2010; Usmani, 1998). Another mode of financing is known as Diminishing Musharakah where two or more parties join together to own a property or assets. The income of the asset is its rental income according to the ownership. The ownership is gradually transferred from one party (usually banker) to the client through the sale of the equity units of the asset.

2.2 Trade Based Modes of Financing:
Murabahah, Salam, and Istisna

Murabahah is a kind of sale of goods or physical assets where the cost of asset and the profit is separately disclosed and agreed upon. There are two types of Murabahah sales. For example, one way of doing Murabahah transaction can be that an Islamic bank directly purchases the required goods and make arrangements to sell to the purchaser without any prior promise from the customer to purchase. This would be an ideal transaction. The other way to apply Murabahah transaction is that an Islamic bank purchases the goods from a third party, based on the specifications provided by the customer, and then sells these goods to the same customer on the basis of prior promises by the customer. This is the prevailing mechanism in Islamic Banking and it requires stringent sharia compliance. Salam and Istisna are the other special kinds of trade based modes of financing. In Salam, the payment in full for a good (asset) is paid in advance whereas the delivery of that good or assets is made in future date agreed upon (Iqbal and Molyneux, 2005). This means that in Salam transaction, the purchase of a commodity is done, the delivery of which is deferred in exchange for immediate payment. The price in the Salam transaction, known as the Salam capital, has to be paid in advance at the time of contracting. The delivery of the subject matter of Salam (the commodity or an asset) is deferred. Salam is generally referred to as the agriculture based modes of financing. Another, mode of financing is Istisna. Here the payment can be made in advance in part or in installments but the commodity is to be manufactured according to the specifications of the customers and delivered in future (Ansari, 2007, Ayub, 2007; Khan, 2010; Usmani, 1998).

2.3 Ijarah (Lease) Based Modes:

Ijara is a lease based mode of financing. The meaning of Ijarah is to give something on rent in exchange of the right of using the usufructs of the asset (property, house, vehicle, shop, etc). Ijarah is a type of sale in which two parties are involved for the lease of an asset. The leaser (generally bank in Islamic banking) owns the asset or property. The party to whom the asset is leased out or rented out is known as lessee. In Ijara, the lessee has the choice either to keep the property at the time when the contract is matured or return the asset back to the lessor (bank). Generally, when the asset is kept by the lessee at higher price than the usual price after all payments are received (Iqbal and Molyneux, 2005; Khan, 2010; Usmani, 1998; Ansari, 2007, Ayub, 2007).

3. Research Methodology

3.1 Data

Quarterly time series data set covers 10-year period from 2007 to 2016 for regression analysis while for growth analysis, the data is used from 2003-2016. The data source is the Islamic Banking Bulletin published by SBP on quarterly basis. Descriptive statistics, correlation and regression techniques are used for analysis and estimation.

3.2 Dependent Variables (Performance)

The financial performance is generally measured by two popular measures of profitability: return on assets (ROA); and return on equity (ROE) (Al-Tamimi, 2010; Ramlan & Sharrizat, 2016). ROA is measured as the ratio of net income to total assets and is used to assess the ability or efficiency of the banks to generate profit by using its assets. Similarly, ROE is the ratio of net income to total equity (net worth) of the bank. ROE measures the ability of the banks to generate earning from the money invested by share holders (Hadriche, 2015).

3.3 Independent Variables (Assets, Deposits, Net Investment and Financing)

Total Assets (TA): In literature, the total assets of the banks are generally used as a proxy for measuring bank size. Because the dependent variables in the model (ROA and ROE) are in ratios, assets are deflated by taking natural logarithm to be consistent with other ratios.

3.4 Total Deposits (TD): Deposits are considered as the life blood of the banks and are the main source funds for banks. They have a considerable impact on the profitability of the banks. The ratio of Total deposits to total assets is used for estimation.

3.5 Net Investment and Financing (NIF): The total of investment under modes of financing is taken as one of the major determinant of profitability as the profit is generated through investment decisions. The ratio of NIF/TA is taken for estimation purpose.

3.6 Estimation Model: The following model is used for estimation:

$$Performance = \beta_0 + \beta_1 lnA + \beta_2 DR + \beta_3 NIF + \varepsilon_t$$

Where,

Performance =ROA and ROE

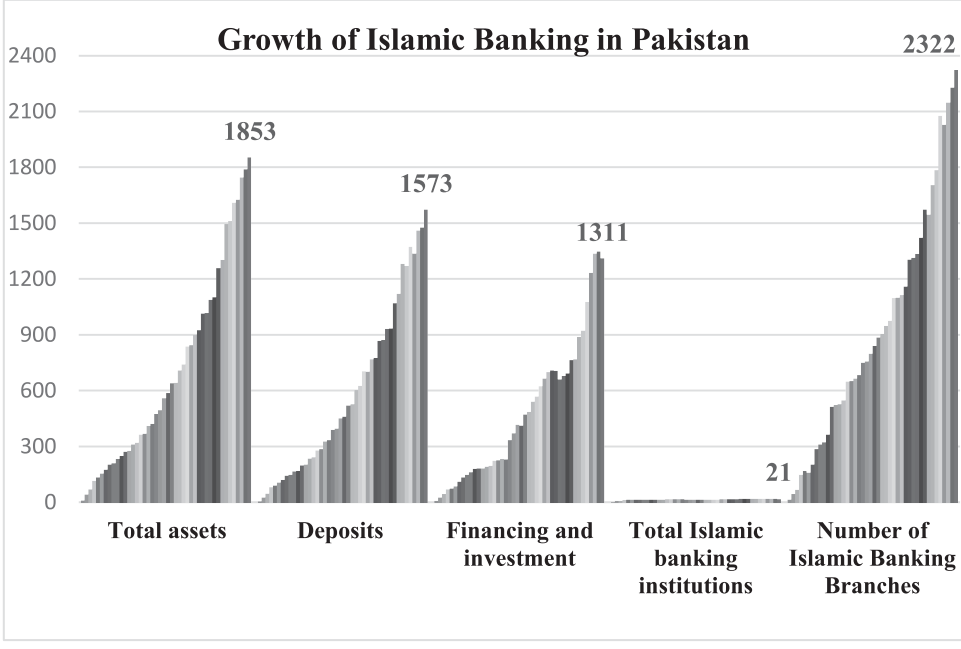
LnA = Log of assets

DR =Ratio of Total deposits to Total Assets
NIF= The ratio of Net investment and financing (NIF) to Total Assets
= Error term

4. Results and Analysis

Growth of Islamic Banking in Pakistan

Islamic banking growth in Pakistan is very encouraging since its inception. The graph shows an ever increasing trend in assets, deposits, financing and investment, and branch network.



Source: (SBP 2003 to 2016)

The graph shows that the total assets of Islamic banking tremendously increased to Rs. 1,853 billion in December 2016 as compared to Rs. 13 billion in December 2003. During the same time, the share of Islamic banking in the total banking industry reached to 11.7 percent. Similarly, the financing and investments made by the Islamic banks in Pakistan increased to Rs. 1,311 billion in December 2016 from Rs. 10 billion in December 2003. On the deposits side, the total deposits of the Islamic banks were only Rs. 8 billion in December 2003 but they increased to Rs. 1,573 billion in December 2016. Islamic banking Institutions increased to 21 in December 2016 with number of Islamic Banking branches increased to 2,322. The asset quality indicators –non-

performing finances to financing ratios (for both gross and net figures) of Islamic Banks are better than the industry. However, the liquidity ratios, capital adequacy ratios and profitability ratios are less than the industry averages which means that Islamic banks, despite their tremendous growth, need further concentration on operational efficiency.

4.1 Descriptive Statistics:

The descriptive statistics shows that the ROA has been below 1 (0.96%) with a small standard deviation. This means that ROA has remained consistently low. Similarly, average ROE is 10.67% which is lower than the industry average which is at 14.4% as on December 2016 (**Table 1**).

Table 1: Descriptive Statistics

Variable	Observation	Mean	Standard Deviation	Min	Max
ROA	40	0.96	0.35	0.40	1.70
ROE	40	10.67	4.77	2.80	18.70
Ln(TA)	40	6.40	0.76	4.91	7.52
TD/TA	40	0.80	0.06	0.68	0.86
NIF/TA	40	0.68	0.07	0.55	0.79

4.2 Correlation Results and Analysis:

Results for the Correlation Matrix of ROA and ROE and all the Independent variables are reported in **Table 2 and 3**.All the independent variables show a positive correlation with ROA and ROE. However, the strength of assets, deposits and financing is stronger for ROE than ROA. Relatively, there is higher correlation of ROA with investment and financing followed by deposits and assets. On the other hand, deposits have higher correlation with ROE followed by investment and financing and assets. Particularly, there is a strong relationship of ROE with assets and deposits. The results are similar to previous findings of Molyneux and Thornton (1992), Bikker and Hu (2012), Goddard et al. (2004) and Gul et al. (2011).

Table 2: Correlation Matrix of ROA and Independent variables

	ROA	LN(TA)	TD/TA	NIF/TA
ROA	1			
LN(TA)	0.1224	1		
TD/TA	0.2678	0.9142	1	
NIF/TA	0.3702	0.2875	0.2564	1

Table 3: Correlation Matrix of ROE and Independent variables

	ROE	ln(TA)	TD/TA	NIF/TA
ROE	1			
ln(TA)	0.6283	1		
TD/TA	0.6897	0.9142	1	
NIF/TA	0.3805	0.2875	0.2564	1

4.3 Regression Analysis:

To investigate the impact of assets, deposits, and investment and financing on performance, regression models are run. The results show that there is a positive and significant impact of deposits and investment & financing on ROA while the impact of assets is negative and significant. Similarly, there is a significant and positive impact of deposits and investment & financing on ROE. Again, the relationship of assets with ROE is negative but the impact is insignificant (**Table 4 & 5**). The findings imply that deposits and investments are contributing positively towards profit generation. However, Islamic banks are unable to convert their assets into profitability. One reason could be the rising maintenance cost of large and expanding branch network which is evidenced from the huge operating expenses shown in their income statements. The results of these investments can have positive effects towards profitability in future if operational expenses are curtailed. The negative relationship of assets with profitability is consistent with the results found by Alkassim, F. A. (2005), Bourke (1989) and Javaid et al. (2011).

Table 4: Model Fit and Parameter Estimates for **ROA**

Analysis of Variance							
Source	**DF**	**SS**	**MS**	**F Value**	**Pr > F**	**R^2**	**Adjusted R^2**
Model	3	1.36684	0.45561	4.90	0.0059***	0.29	0.23
Error	36	3.34655	0.09296				
Corrected Total	39	4.71340					

Parameter Estimates				
Variable	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	-2.38089	0.92787	-2.57	0.0146
LnA	-0.39649	0.16013	-2.48	0.0181*
DA	5.80484	2.08662	2.78	0.0085**
NIF	1.82482	0.71936	2.54	0.0157*

****, **,*=significant at 1, 5, and 10% respectively*

Table 5: Model Fit and Parameter Estimates for **ROE**

Analysis of Variance							
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F	R^2	Adjusted R^2
Model	3	462.67652	154.22551	13.07	<.0001***	0.52	0.48
Error	36	424.94527	11.80404				
Corrected Total	39	887.62180					

Parameter Estimates				
Variable	Parameter Estimate	Standard Error	t Value	Pr > |t|
Intercept	-43.02264	10.45569	-4.11	0.0002
LnA	-0.53964	1.80447	-0.30	0.7666
DA	58.73883	23.51315	2.50	0.0172**

Parameter Estimates				
Variable	Parameter Estimate	Standard Error	t Value	Pr > |t|
NIF	15.00438	8.10612	1.85	0.0724*

****, **,*=significant at 1, 5, and 10% respectively*

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5. Conclusion:

The purpose of the study was to analyse the growth of Islamic banking in Pakistan along with the investigation of the impact of assets, deposits, and financing & investment on the performance. The findings reveal that despite tremendous growth, the banks' profitability is not attractive as compared to the banking industry averages dominated by conventional banks. The reason for this as suggested by our findings is that Islamic banks are unable to manage the rapid expansion and are unable to convert their growth particularly in assets to profitability as there is a negative relationship of assets with performance. However, the relationship of deposits and financing and investment is significantly positive with performance. Therefore, the management of the Islamic Banks should pay more attention towards the efficiency in managing their financial assets and reducing cost, particularly the operational cost.

One reason for the low profitability is the poor liquidity management by Islamic Banks. Some of the issues related with liquidity management as highlighted by Ayub (2017) are: slow development in Islamic Finance instruments; absence of Islamic finance secondary market; absence of active Islamic inter-bank market; and absence of Lender of the Lost Resort (LOLR) facilities. Similarly, more focus is required for the application of participatory based modes particularly Musharakah and Mudarabah. More innovative and applicable products for agriculture and manufacturing sectors are needed under Salam and Istisna modes. SME sector is also least considered. Equity based products can be developed to cater to the needs of SMEs. If Islamic banks are to survive and remain in the competition, they have to improve their product development efficiency, reduce operating costs and work more on facilitating the customers. Since, the data set for this study is limited and only three internal factors are taken into account, the findings may not be generalized. Future research should take more variables with more in depth analysis for depicting the true picture.

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