

## **Factors Affecting the Financial Performance of Islamic Banks in Pakistan**

**Shoaib Khan**

University of Ha'il, Hail, Saudi Arabia

**Ali Polat**

Ankara Yildirim Beyazıt University, Ankara, Türkiye

**Usman Bashir**

University of Bahrain, Sakhir, Kingdom of Bahrain

This research aims to evaluate the internal factors influencing the performance of Islamic banks in Pakistan. There are currently five Islamic banks in operation, and data from all five have been used to analyze their performance from 2008 to 2021. The data was collected from the State Bank of Pakistan. To examine financial performance, this study used return on assets (ROA) and returns on equity (ROE) as proxies, and considered both internal attributes (such as liquidity, bank size, asset quality, capital adequacy ratio, operational efficiency, and assets management) and external factors (such as macroeconomic indicators like GDP growth and inflation rate). Ordinary least squares (OLS) estimation is employed to examine the relationship among variables. The estimation findings suggest that all of the internal factors have a strong association with banks' performance. Bank size and asset quality were found to have a positive and significant association with ROA, while asset quality and assets management were associated positively with ROE. Additionally, during the Covid-19 pandemic period, banks' size and liquidity were found to adversely affect ROA of Islamic banks, while operational efficiency had a positive impact.

**Keywords:** *Financial performance, Islamic banks, liquidity, Pakistan, Covid-19.*

**JEL Classification:** *D01, E50, G21, L25*

The series of crises have shed doubt on the conventional mode of financing and posed some serious questions on the effectiveness of the financial system particularly conventional banking. As a result, there is consensus among stakeholders that the US-led financial crisis of 2007-08 has resulted in an increase in inequality. In addition to finding the solution to the issues in conventional banking, policymakers, practitioners, and academics are supporting the alternative system. Hence, they advocate the effective role of *Shariah*-compliant Islamic banking as an effective alternative. *Shariah*-compliant finance refers to the financial system or products conforming the Islamic jurisprudence. According to Suzuki and Uddin (2016) in addition to profit-loss sharing and interest-free banking, Islamic banks cannot participate in risky, speculative, or gambling activities. Moreover, they can only invest in assets or businesses that are permissible

(*halal*) as per Islamic jurisprudence. Similarly, as per Beck *et al.*, (2013) Islamic banks are not permitted to charge interest (*riba*), take part in speculative or illicit financing activities and are permitted to carry a price on goods and services. Islamic finance emerged as a considerable alternative to conventional finance in the last few decades. According to World Bank (2015), in the past decades' Islamic finance business has flourished rapidly and is expanding at 10-12% annually. Currently, *Shariah*-compliant assets are expected at approximately US \$ 2 trillion, covering non-bank financial institutions, banks, insurance (Takaful), capital, and money markets. It further states that the progress of *Shariah*-compliant or Islamic banking is growing not just in Muslim-majority nations but also in non-Muslim nations like Luxembourg, Hong Kong, South Africa, and the UK.

Generally, banks play the role of financial intermediaries to channel the funds from households to the industrial sector, finance investment opportunities, and contribute to economic growth (See. Khan *et al.*, 2021). Besides other factors, the effective role of banks as suppliers of capital primarily depends on their financial soundness which is dependent on the financial performance of the banks. This performance is the outcome of the efficient allocation of funds to the different sectors within the economy. According to Almazari (2011), the effect of a firm's policies, plans, and operations can be measured with its financial performance, which can be reflected in ROE, ROA, and other value-adding measures.

The soundness of the financial system particularly, banks is the pre-requisite for economic growth, development, and equal distribution of wealth among households. As reported by the World Bank (2017) since the aftermath of the 2007-08 financial crisis income inequality has increased in the world. Despite the good policies and intentions, the desired results of equity have not been achieved. To promote equality in socio-economic development, Islamic Development Bank and World Bank revised their mission to provide the leading role to Islamic finance to achieve the objectives of economic development and income equality.

The financial prosperity or performance of the bank helps to analyze the safety of the banking industry and finally the robustness of the financial sector. The stability of the financial or banking structure depends on financial performance and that connection has been discussed extensively in the literature. Apart from financial performance, Mehtab *et al.*, (2015) explore the personality traits related to the knowledge and practice of the customer related to Islamic products in Pakistan. Basit *et al.*, (2021) examine the influence of religion on the purchasing of services or goods provided by Islamic banks, Hadi (2019) evaluated the role of government on the growth of *Musharakah* products in Pakistan.

Several empirical investigations have examined the performance or profitability of conventional commercial banks, like Al-Homaidi *et al.*, (2020), Almaqtari *et al.*, (2019), Al-Homaidi *et al.*, (2019) studied the Indian commercial banks' profitability, Antoun *et al.*, (2018) evaluated the performance of Central and Eastern Europe banks, Khan (2022) evaluated the operative effectiveness of Saudi banks. Additionally, Khan (2022) explored the influence of financing structure on the bank's profitability in the GCC (Gulf Cooperation Council). With the increase of Islamic banking particularly aftermath of the 2007-08 financial crisis numerous studies have evaluated the performance of Islamic banks in several countries like Ledhem and Mekidiche (2020) study on five Islamic countries, Berger *et al.*, (2019) study on twenty-four countries, Rusydiana and Sanrego (2018) on Islamic banks in Indonesia, Shahab *et al.*, (2016) by using the financial data from 2006-2014 conducted a comparison of conventional and Islamic banks performance, Majeed and Zainab (2021) comparative study uses the data from 2008-2019. However, the studies conducted on Pakistan mostly uses the data from 2006-2014 except for one

study that uses that data until 2019 (see. Majeed and Zainab, 2021). No doubt these studies have explicitly investigated the Islamic banks' financial efficiency/performance in the context of Pakistan and other global economies. But all of the studies use the post-2007-08 financial crisis data. But, limited studies have examined how well Islamic banks have performed in Pakistan during the Covid-19 pandemic. Moreover, as per Standard & Poor's (2022) Islamic finance outlook predicts the progress of Islamic finance at the rate of 10%-12%, especially in the post-Covid-19 period. Therefore, the study's goal is to investigate the answers to the subsequent questions.

1. What are the key aspects that affect Pakistani Islamic banks' performance.?
2. How do the Islamic banks in Pakistan perform throughout the Covid-19 pandemic?

The study is unique compared to the existing studies in such a way that it uses the data from 2008 to 2021 of five fully established Islamic banks functioning in Pakistan. It also includes the Covid-19 period in analysis to explore how the Islamic banks' performance has been affected during the pandemic. It is expected that the study's outcome will assist policymakers and practitioners to improve the supply side of Islamic banks by formulating growth-friendly strategies. Particularly, after the failure of the initial launch of Riba free or Profit Loss Sharing (PLS) banking in the country in 1980. However, it has been successful since its re-launching in 2001. While on the demand side, it will assist the investors and depositors to make effective decisions related to their investments and deposits or withdrawal of funds with Islamic banks in Pakistan.

To analyze the banks' performance, both macroeconomics and bank-specific parameters are used in the analysis. The following two responding variables as proxies of performance effectiveness i.e. ROA and ROE are used. Liquidity, bank size, asset management, assets quality, capital adequacy ratio, operational efficiency, growth, and inflation rates are applied as the independent variables. The rest of the manuscript is structured as follows. The Islamic banking overview in Pakistan and literature review is provided in the next section. It is then followed by an explanation of the data, variables, and the study's methodology. The subsequent part provides a discussion of empirical results, followed by the conclusion.

### **Overview of Islamic finance/banking in the country**

As reported by the State Bank of Pakistan (SBP), interest-free or elimination of *riba* (interest) from the Pakistani economy was started in the 1970s, in this regard significant and practical step was taken in 1980. However, this system fell apart due to its failure to address the issues like *Shariah* compliance, capacity building, etc. Afterward, the government took the initiative to reinstate Islamic banking in 2001. The Islamic banking sector shows moderate growth since 2002 and accounts for 7.8% of assets and 8.3% of deposits of the total banking industry by the end of 2011 (Financial stability review SBP, 2011, p.34). Moreover, a banking sector performance review by SBP stated that the assets of Islamic banks increase to 17% of overall banking assets (SBP, banking sector performance review, 2021).

The banking sector of Pakistan is comprised of 32 scheduled banks which include, 5 public sectors, 20 private sectors (including 5 Islamic banks), 4 specialized banks, and 4 foreign banks (SBP). This shows that Islamic banks comprise 15% of the total banking sector in Pakistan. As per SBP (2021), the total operating branches of conventional banks in Pakistan were 11,360 and Islamic banks have 3,884 branches. It shows that Islamic banks' branches are 25% of the total banks' branches. These facts show that the Islamic banking industry has growth potential, and is a lucrative business opportunity for conventional banks in Pakistan as well.

## Literature Review

The empirical studies such as Khan (2022), Majeed and Zainab (2021), Al-Homaidi *et al.*, (2020), Ledhem and Mekidiche (2020), Almaqtari *et al.*, (2019), Al-Homaidi *et al.*, (2019), Antoun *et al.*, (2018), Rusydiana and Sanrego (2018), and Delis and Papanikolaou (2009) examine the performance or factors disturbing the financial performance of the conventional banks. Majeed and Zainab (2021) reported that Islamic and conventional banks' performance is affected by profitability, liquidity, capital adequacy, and risk management. Al-Homaidi *et al.*, (2020) and Almaqtari *et al.*, (2019) stated liquidity, asset quality, asset management, and bank size as the internal determinants that improve the ROA of commercial banks. Likewise, Antoun *et al.*, (2018) also found the impact of earnings quality, liquidity, capital adequacy, and bank size on the performance of commercial banks. Delis and Papanikolaou (2009) described the bank's size, industry concentration, and investment environment as the factors that determine the bank's efficiency.

Almaqtari *et al.*, (2019) explored that operational efficiency, asset management, bank size, and leverage significantly affect the ROA. While bank size, liquidity, asset and management quality have a strong positive effect on ROE. Another study by Almazari (2011) concluded that the size of the banks adversely influences the performance of Jordanian commercial banks, while asset management positively influences the performance. Following a similar methodology, Shah and Jan (2014) use operational efficiency, bank size, and asset management to examine the performance of Pakistan's conventional banks. They reported that ROA and interest income has a positive association with asset management. However, performance and bank size are negatively associated. In the case of banks, loans or credit is considered as one of the income-producing assets of the banks. Hence, the continuous management and monitoring of these assets are required for constant revenue generation, which ultimately contributes to banks' performance.

In contrast, in the existing literature, the major research comparatively examines the conventional banks' performance with Islamic banks. These studies use the profitability ratios or financial ratios to associate the financial efficiency of these banks (see, Majeed and Zainab, 2021; Islam *et al.*, 2014; Ika and Abdullah, 2011; Widagdo and Ika, 2009; Samad, 2004; and Ahmed and Khababa, 1999). Majeed and Zainab (2021) stated that Pakistani Islamic banks are more liquid, highly capitalized, and less risky relative to their conventional counterparts. Islam *et al.*, (2014) using profitability ratios reported that Islamic banks are highly profitable relative to conventional banks in Bangladesh. Samad (2004) explores no specific dissimilarity between the Bahraini conventional and Islamic banks' profitability and liquidity risk. Also, Ika and Abdullah (2011) research on the comparison of Indonesian conventional and Islamic banks explore no significant variance between their performances. The only difference they explore is that Islamic banks are highly liquid compared to their conventional counterparts.

The following studies, Majeed and Zainab (2021), Al-Homaidi *et al.*, (2020), Almaqtari *et al.*, (2019), Tai (2014), and Hassan Al-Tamimi (2010) use regression techniques to examine the Islamic banks' performance in various countries. Most of them use ROA and ROE as dependent variables as performance measures in their empirical analysis. While the study by Hassan Al-Tamimi (2010) reported that cost and branch network (no. of branches) are the significant elements to affect the financial efficiency/performance of Islamic banks in UAE during the period 1996-2008. Tai (2014) examine the performance/efficiency of Islamic and conventional banks in Gulf Cooperation Council (GCC) countries between 2003 and 2011. This study found bank size, financial development, and operating cost as important variables affecting the ROA.

The empirical literature found a mixed result of bank size with the performance measures of the banks. In theory, it is anticipated that bigger banks are those with more assets which can help them to have access to more customers to meet their needs by receiving their deposits and providing them loans. Hence, it is expected that larger banks are extra efficient and profitable. Singh and Sharma (2016) established a negative association between ROA and bank size while Al-Homaidi *et al.*, (2019) stated a positive association. Almaqtari *et al.*, (2019) stated a positive association between bank size and ROA and ROE. Alzoubi (2018) and Alharbi (2017) studies on Islamic banks' also reported that profitability and bank size are positively related. In contrast, Djalilov and Piesse (2016) found no influence of the size of the bank on its profitability. In another study, Yao *et al.*, (2018) found an inverted U-shape association between size and profitability where the bank's size in term of assets contribute to profitability up to a certain extent after that it has an adverse effect on it. Salike and Ao (2017) study on Switzerland found small and large banks were highly profitable than the medium size banks.

Liquidity is an important factor in banking operations, the withdrawal of a large amount of money by depositors could trigger a liquidity issue for banks at any time. On the demand side availability of excessive cash also increases the bank's operational activity which could contribute to its performance. Al-Homaidi *et al.*, (2019) reported a positive association between liquidity and bank performance While a comparative study on Pakistani conventional and Islamic banks by Majeed and Zainab (2021) found that conventional banks have higher liquidity compared to Islamic banks. Almaqtari *et al.*, (2019) and Yao *et al.*, (2018) also reported a positive relationship between liquidity and profitability. Khan (2022) stated that for Saudi banks liquidity is a primary factor that contributed to operational effectiveness and performance.

Assets quality and management have an important impact on banks' performance. For banks, investments and loans comprises a major portion of their assets. Hence, the quality of the loans and investments directly contributes to the earnings of banks. Poor management of the loans results in poor quality of the loans that will reduce the banks' earnings from these assets on one side, and other side inflating the non-performing loans. Al-Homaidi *et al.*, (2020) and Almaqtari *et al.*, (2019) found a significant and positive connection between asset quality on ROA and ROE. Similarly, Salike and Ao (2017) reported that banks' poor asset quality could result in negative profitability.

To keep the banks' soundness to maintain financial stability, regulators rely on the capital adequacy ratio (CAR). It helps them to analyze the true picture of banks' position to meet any unexpected financial situation. Majeed and Zainab (2021), Ali (2020), Almaqtari *et al.*, (2019), and Al-Homaidi *et al.*, (2019) use the equity-to-assets ratio as a proxy of CAR. The rationale is to examine what proportion of assets are funded by equity or other sources of funds. A higher equity-to-asset ratio suggests that banks' assets are less likely to depend on external funds. Majeed and Zainab (2021) in a comparative study stated that Islamic banks have better risk management and have higher CAR compared to conventional banks. The findings by Almaqtari *et al.*, (2019), Al-Homaidi *et al.*, (2019), and Salike and Ao (2017) reported the part of CAR in banks' performance.

The level of operational efficiency suggests, how efficiently an organization performed. In banks, operational efficiency is related to the effectiveness of cost and reducing the no production cost. Al-Homaidi *et al.*, (2019), Almaqtari *et al.*, (2019), and Salike and Ao (2017) explored that the operating efficiency of the bank results in improved performance. Dietrich and Wanzenried (2011) stated that banks with higher operational efficiency shows reported higher profits than banks with lower operational efficiency. Yao *et al.*, (2018) study on Pakistani banks found a negative and strong association between profitability and operational efficiency.

Hence, by adopting the various factors from the existing literature that influence the banks' performance. This study investigates the factors of Islamic banks' financial performance. Additionally, based on the review of literature following literature gap is found. Firstly, very limited studies cover the Covid-19 pandemic period, along with using macroeconomic indicators such as economic growth and inflation to scrutinize the Islamic banks' financial performance, by using recent years' data. Therefore, the study covers the literature gap by adding to the body of knowledge by presenting empirical proof of the performance of all the Pakistani Islamic banks including the period of Covid-19, by introducing the rate of inflation and GDP growth as macroeconomic indicators.

## Method

### Data

To investigate the internal attributes that contribute to the financial performance, data of all Islamic banks working from 2008 to 2021 in Pakistan is used. The final sample comprises of unbalanced panel data of five banks for fourteen years. The data published by SBP is used. To check for the role of macroeconomic indicators growth and inflation rate data have been obtained from the World Bank.

### Variables

The variables used in the study are adopted from the present literature used to observe the performance of conventional or Islamic banks. For example, Majeed and Zainab (2021), Almaqtari *et al.*, (2019), Al-Homaidi *et al.*, (2019), Shah and Jan (2014), and Almazari (2011) used similar variables. These studies mostly used the ROA and ROE as the dependent variable as proxies of banks' performance. The variables adopted for this study with their description are presented in Table I. The assets quality proxy is computed as a proportion of non-performing loans to the total gross loans as suggested by IMF.

**Table 1**

*Variables summary*

<b>Variables</b>	<b>Descriptions</b>
<i>Dependent variables</i>	
<i>ROA</i> (Return on Assets)	Ratio of net income to total assets
<i>ROE</i> (Return on Equity)	Ratio of net income to total equity
<i>Explanatory variables</i>	
<i>LIQ</i> (Liquidity)	Ratio of cash and cash equivalents to total assets
<i>SZ</i> (Size)	Natural log of total assets
<i>AM</i> (Asset Management)	Ratio of operating income to total assets
<i>AQ</i> (Asset Quality)	Ratio of non-performing loans to total gross loans
<i>OE</i> (Operational Efficiency)	Ratio of administrative expenses to profit before taxes
<i>CA</i> (Capital Adequacy)	Ratio of total equity to total assets
<i>IR</i> (Inflation rate)	Annual inflation rate
<i>GDG</i> (GDP growth rate)	Annual growth rate of GDP

*Source: Authors based on Majeed and Zainab (2021), Almaqtari et al. (2019), Al-Homaidi et al. (2019), Shah and Jan (2014)*

### Research Model

Firstly, Breusch and Pagan Lagrange- multiplier (BPLM) test is performed for the choice of estimation model. The results of the BPLM test reject the existence of panel structure. Therefore, Ordinary Least Square (*OLS*), estimation was applied to estimate the results. Each

dependent variable was regressed against explanatory variables by using the mentioned estimation technique.

$$PERF_{it} = \beta_0 + \beta_1 LIQ_{it} + \beta_2 SZ_{it} + \beta_3 AQ_{it} + \beta_4 AM_{it} + \beta_5 OE_{it} + \beta_6 CA_{it} + \beta_7 IR + \beta_8 GDG + \varepsilon_{it}$$

Where  $Perf_{it}$  represents performance measures i.e.  $ROA$  and  $ROE$   $it$ h bank at time  $t$ ,  $\beta_0$  is the intercept,  $\varepsilon_{it}$  is the random error of  $it$ h firm at time  $t$ ,  $\beta_{0i}$  denotes intercept for the  $it$ h firm.

## Results and discussion

### Findings

The summary statistics are given in Table II. The mean of the  $ROA$  and  $ROE$  during the observed period was 0.4% and 16.2% respectively. The mean value of  $ROA$  and  $ROE$  of Islamic banks is less than the mean value of conventional banks operating in Pakistan as reported by Majeed and Zainab (2021). The availability of cash or cash equivalents which represents the liquidity was on average 34% of the total assets.

**Table 2**

*Descriptive summary*

<i>Variable</i>	<i>Obs</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
<i>ROA</i>	63	0.0049	0.0659	-0.2850	0.1690
<i>ROE</i>	63	0.1625	0.2963	-0.6420	0.9800
<i>LIQ</i>	63	0.3425	0.3258	0.0583	0.9820
<i>SZ</i>	63	18.7256	1.0587	16.6211	21.3667
<i>AM</i>	63	0.0326	0.0088	0.0089	0.0521
<i>AQ</i>	63	0.2639	0.2752	0.0000	0.9210
<i>OE</i>	63	14.1968	88.6418	-63.0502	688.8585
<i>CAR</i>	63	0.0957	0.0670	0.0418	0.3725
<i>INF</i>	63	8.8853	4.5320	2.5293	20.2861
<i>GDG</i>	63	3.5883	2.0511	-1.3295	6.1517

*Source: Authors' estimation.*

The outcomes of the Pearson correlation are given in table 3. The value of the correlation of all variables is less the 0.5 or 50% which suggests that multicollinearity is not the issue among variables. The results of VIF (variance inflation factor) of independent variables are also presented in table 3, as per the rule of thumb all the values of VIF are less than 10, and the maximum value of VIF is for size variable i.e. 3.56. The VIF values further indicate there is no issue of multicollinearity amongst variables.

**Table 3***Pairwise correlation matrix*

	ROA	ROE	LIQ	SZ	AM	AQ	OE	CAR	INF	GDG
ROA	1									
ROE	0.33***	1								
LIQ	0.20	0.24*	1							
SZ	0.44***	0.23*	-0.10	1						
AM	0.27**	0.33***	0.14	0.04	1					
AQ	0.23*	0.37***	0.30**	-0.26**	0.39***	1				
OE	0.00	-0.05	-0.06	0.00	0.05	0.00	1			
CAR	-0.32**	-0.36***	-0.07	-0.72***	-0.09	-0.06	-0.03	1		
INF	-0.20	-0.10	0.01	-0.38***	0.45***	0.25**	0.08	0.19	1	
GDG	0.10	0.07	0.04	0.13	-0.37***	-0.10	-0.10	-0.05	-0.06***	1
VIF*			1.14	3.16	1.69	1.59	1.02	2.48	2.09	1.57

*Source: Authors' estimation*

VIF\*: Variance Inflation Factor of independent variables

**Table 4***The effect of explanatory variables on ROA & ROE*

	ROA	ROE
LIQ	0.029 (0.023)	0.089 (0.106)
SZ	0.039*** (0.012)	0.011 (0.054)
AM	1.468 (1.014)	10.757** (4.743)
AQ	0.079** (0.032)	0.298** (0.148)
OE	0.000 (0.000)	-0.000 (0.000)
CAR	0.193 (0.162)	-1.065 (0.757)
INF	-0.002 (0.002)	-0.014 (0.010)
GDG	0.001 (0.004)	0.010 (0.020)
CONS	-0.801*** (0.233)	-0.312 (1.088)
Number of Observations	63	63
Prob. F (Stat)	0.0002	0.0012
R Square	0.411	0.363
Adj. R Square	0.323	0.268

*Source: Authors' estimation. \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.1$ .*

The OLS outcomes on the impact of explanatory variables on the performance measures i.e. ROA and ROE for the complete sample are given in table IV. The regression results suggest that the explanatory variables have an effect on the performance of Islamic banks functioning in Pakistan. However, bank size and asset quality show a significant positive association with the ROA. While assets management and quality have a positive significant relationship with ROE. Apart from these explanatory variables, other shows a positive relationship with ROA and ROE



but is insignificant. The macroeconomic indicator inflation only shows a negative relationship with ROA and ROE but the association is insignificant as well.

**Table 5**  
*The effect of explanatory variables on ROA & ROE during the Covid-19*

	ROA	ROE
LIQ	-0.007 (0.018)	0.483 (0.338)
SZ	0.009 (0.006)	0.136 (0.111)
AM	-0.128 (0.434)	0.194 (8.095)
AQ	0.026 (0.047)	-0.256 (0.876)
OE	0.000 (0.000)	-0.001 (0.006)
CAR	0.261 (0.225)	0.320 (4.196)
GDG	-0.000 (0.000)	-0.003 (0.009)
CONS	-0.190 (0.118)	-2.609 (2.208)
Obs.	10	10
F Sta.	73.974	121.18
R Sq.	0.996	1.00
Adj. R Sq.	0.983	0.99

*Source: Authors' estimation. \*\*\*  $p < 0.01$ ; \*\*  $p < 0.05$ ; \*  $p < 0.1$ .*

The analysis is performed to examine the performance of banks during Covid-19 i.e. during the years 2020 and 2021. The results are presented in table V. Even though no variable has a statistically significant effect on ROA and ROE. Liquidity and asset management negatively influence the ROA. While asset quality and operational efficiency negatively affected the ROE during the Covid-19 pandemic. But, all the relationships are insignificant. This might be due to the limited number of observations, but the results do infer that the pandemic may have adversely affected the liquidity, asset management, asset quality, and operational efficiency of Pakistani Islamic banks.

## Discussion

In Pakistan the Islamic bank's size contributes to the ROA, suggesting that larger banks have higher ROA or Islamic banks can achieve higher ROA through economies of scale. It further points out that the larger Islamic banks in Pakistan can finance more profitable investment opportunities to increase their revenue and ROA at last. Empirically, Singh and Sharma (2016) reported negative association between ROA and size the bank. While, the outcomes are consistent with the result of Khan (2022) and Almaqtari *et al.*, (2019) that also reported a positive association between the size of bank and ROA. Al-Homaidi *et al.*, (2019) and Alzoubi (2018) and Alharbi (2017) also reported a positive association. While Djalilov and Piesse (2016) found no effect of bank size on profitability, Salike and Ao (2017) found that the profitability of small and large banks was more compared to the medium size banks. Asset quality is another factor that has a positive and significant effect on ROA. The quality of the assets in banks refers to the quality of the loans given by banks. The quality of the loans indicates the credit risk evaluation of borrowers by the bank. This suggests that Islamic banks through efficient management of loans and by reducing non-performing loans can improve profitability. The positive relationship is congruent

with the results of Al-Homaidi *et al.*, (2020), Almaqtari *et al.*, (2019), and Al-Homaidi *et al.*, (2019). The study by Ali *et al.*, (2021) stated that Pakistani Islamic banks have superior asset management and quality compared to the country's conventional banks. Likewise, it also endorses the findings of Majeed and Zainab (2021) and Salik and Ao (2017), which states that banks with poor asset quality show lower profitability. The positive and significant relationship between asset quality and bank size with performance suggests that large banks can have better loan portfolios with low non-performing loans. This endorses the Berger *et al.*, (2009) conclusion that better asset quality is related to the bank's size and ultimately to its performance.

For the other performance variable, ROE, all the explanatory variables have a positive effect on performance except inflation. But the relationship of ROE is positive and significant with the proxies of assets management and assets quality. It means that for Islamic banks in Pakistan to improve their ROE need to enhance assets management and assets quality. As assets quality and management are interrelated to each other, therefore, poor asset management could result in poor quality assets, resulting in poor performance. These results are consistent with the findings of Almaqtari *et al.*, (2019) and Al-Homaidi *et al.*, (2019) who also reported a positive impact of asset management and quality on the ROE of banks in India. The positive influence of asset quality and management on probability supports the assumption of Salike and Ao (2017), which stated that the good quality of the assets is the outcome of better asset management that positively affects profitability or could be the opposite for poor asset quality.

The impact of descriptive variables on performance proxies is different during the pandemic showing the negative association of liquidity and bank size on ROA, suggesting that the uncertainty due to the pandemic has an adversarial consequence on Islamic banks' performance. The larger banks may have suffered more due to higher operating costs like branches and employees related expenses. While for liquidity especially cash, there were fewer deposits compared to more withdrawals by the customer due to the overall economic uncertainty. Moreover, for Islamic banks, the availability of short-term investment opportunities is limited because of the availability of *Shariah*-compliant products. Operational efficiency and asset quality showed a negative relationship with ROE, indicating that banks were not efficient with controlling their cost during the pandemic.

### **Conclusion**

In Pakistan, Islamic banking was relaunched in 2001 following its initial launch in 1980, which had been unsuccessful. Hence, the objective of this investigation is to evaluate the determinants of the financial performance of the Islamic banks operating in Pakistan after the relaunch of these banks. To accomplish the research objectives, the study uses five Pakistani Islamic banks' data for the period of 2008 to 2021. The ROA and ROE are used as dependent variables to estimate the performance of the banks. The banks' internal attributes like capital adequacy, liquidity, asset management, bank size, asset quality, operational efficiency, macroeconomic factors rate of inflation, and GDP growth are used as explanatory variables.

The result indicates that various factors of the banks do affect their financial performance. However, bank size and asset quality show a significant and positive relationship with ROA. It specifies that the larger Islamic banks have higher ROA compared to the smaller banks. Additionally, banks with better management of their assets could reduce non-performing loans can also enhance their performance. These results further suggest that Islamic banks need to invest in good quality assets that could result in better performance, failure to do so can adversely affect their performance. This could result in more financial risk for Islamic banks, as these banks cannot use conventional risk management tools. For ROE, asset management and quality have a significantly positive association. It may suggest that Islamic banks' obligations as per *Shariah*

compliance to invest in asset-backed investments could improve their profitability.

The findings also show that the internal factors that affect profitability are different than the factors of conventional banks. This variation could be due to the fundamental difference between Islamic and conventional banks. Islamic banks require an additional cushion to accept the unanticipated loss and the transaction costs connected with *Shariah*-compliance to sustain the franchise value (Suzuki and Uddin, 2014, pp.174). They further suggest that Islamic banks must earn additional income to manage the cost related to the *Shariah*-compliance. Moreover, it is observed that the economic uncertainty arising due to the Covid-19 pandemic also adversely affected the Islamic banks operating in Pakistan.

In a nutshell, it has been found that since its relaunch in Pakistan in 2001 Islamic banking has significantly contributed to the financial sector of the country, with support and consideration from the SBP. The market has the potential to grow and Islamic banks can increase their market share by using fintech or digital finance by accessing new customers and reducing their operational costs as well. In the future, a cross-country and industry comparative study by examining additional external and internal factors is suggested to observe the performance and growth of Islamic banks around the globe.

### References

- Ahmed, A. M., & Khababa, N. (1999). Performance of the banking sector in Saudi Arabia. *Journal of Financial Management & Analysis*, 12(2), 30.
- Ali, A., Bashir, M. F., & Afridi, M. A. Do Islamic Banks Perform Better than Conventional Banks? DOI: 10.26414/A082
- Ali, A. M. (2020). The impact of economic blockade on the performance of Qatari Islamic and conventional banks: a period-and-group-wise comparison. *ISRA International Journal of Islamic Finance*.
- Almazari, A. A. (2011). Financial performance evaluation of some selected Jordanian commercial banks. *International Research Journal of Finance and Economics*, 68(8), 50-63.
- Alzoubi, T. (2018). Determinants of bank profitability: Islamic versus conventional banks. *Banks & bank systems*, (13, Iss. 3), 106-113.
- Almaqtari, F. A., Al-Homaidi, E. A., Tabash, M. I., & Farhan, N. H. (2019). The determinants of profitability of Indian commercial banks: A panel data approach. *International Journal of Finance & Economics*, 24(1), 168-185.
- Alharbi, A. T. (2017). Determinants of Islamic banks' profitability: international evidence. *International Journal of Islamic and Middle Eastern Finance and Management Vol. 10 No. 3, 2017 pp. 331-350*, 10(3), 331-350.
- Al-Homaidi, E. A., Almaqtari, F. A., Yahya, A. T., & Khaled, A. S. (2020). Internal and external determinants of listed commercial banks' profitability in India: dynamic GMM approach. *International Journal of Monetary Economics and Finance*, 13(1), 34-67.
- Al-Homaidi, E. A., Tabash, M. I., Farhan, N. H., & Almaqtari, F. A. (2019). The determinants of liquidity of Indian listed commercial banks: A panel data approach. *Cogent Economics & Finance*, 7(1), 1616521.
- Basit, A., Maroof, L., & Mian, H. *FWU Journal of Social Sciences, Winter 2021, Vol. 15, No. 4, 132-148*.
- Antoun, R., Coskun, A., & Georgiezska, B. (2018). Determinants of financial performance of banks in Central and Eastern Europe. *Business and Economic Horizons (BEH)*, 14(1232-2019-853), 513-529.
- Beck, T., Demirgüç-Kunt, A., & Merrouche, O. (2013). Islamic vs. conventional banking: Business model, efficiency and stability. *Journal of Banking & Finance*, 37(2), 433-447.
- Berger, A., Klapper, L., & Turk-Ariss, R. (2009). Bank Competition and Financial Stability. *Journal of Financial Services Research*, 35(2).

- Berger, A. N., Boubakri, N., Guedhami, O., & Li, X. (2019). Liquidity creation performance and financial stability consequences of Islamic banking: Evidence from a multinational study. *Journal of Financial Stability*, 44, 100692.
- Delis, M. D., & Papanikolaou, N. I. (2009). Determinants of bank efficiency: evidence from a semi-parametric methodology. *Managerial Finance*, 35(3), 260-275.
- Dietrich, A., & Wanzenried, G. (2011). Determinants of bank profitability before and during the crisis: Evidence from Switzerland. *Journal of international financial markets, institutions and money*, 21(3), 307-327.
- Djalilov, K., & Piesse, J. (2016). Determinants of bank profitability in transition countries: What matters most? *Research in International Business and Finance*, 38, 69-82.
- Hadi, N. U. (2019). Effect of Government Policies on Internal Control Systems and Musharakah Growth: Perspective from KP, Pakistan. *FWU Journal of Social Sciences*, 13(1), 79-89.
- Hassan Al-Tamimi, H. A. (2010). Factors influencing performance of the UAE Islamic and conventional national banks. *Global Journal of Business Research*, 4(2), 1-9.
- Ika, S. R., & Abdullah, N. (2011). A comparative study of financial performance of Islamic banks and conventional banks in Indonesia. *International Journal of Business and Social Science*, 2(15), 199-207.
- Islam, K. A., Alam, I., & Hossain, S. A. (2014). Examination of Profitability between Islamic Banks and Conventional Banks in Bangladesh: A Comparative Study. *Research in Business and Management*, 1(1), pp-78.
- International Monetary Fund. Financial Soundness Indicators, Retrieved at <https://datahelp.imf.org/knowledgebase/articles/484369-in-financial-soundness-indicators-fsis-what-is>
- Johnes, J., Izzeldin, M., & Pappas, V. (2014). A comparison of performance of Islamic and conventional banks 2004–2009. *Journal of Economic Behavior & Organization*, 103, S93-S107.
- Khan, Shoib. "Determinants of Banks Profitability: An Evidence from GCC Countries" *Journal of Central Banking Theory and Practice*, vol.11, no.3, 2022, pp.99-116.
- Khan, S. (2022). The impact of capital structure on bank performance in emerging markets; empirical evidence from GCC countries. *Financial Internet Quarterly'e-Finanse'*, 18(1).
- Khan S. (2022) Determinants of operational efficiency: the case of Saudi Banks. *Financial Internet Quarterly* 18 (3), pp. 11-20.
- Khan, S., Bashir, U., & Islam, M. (2021). Determinants of capital structure of banks: evidence from the Kingdom of Saudi Arabia. *International Journal of Islamic and Middle Eastern Finance and Management*, 14(2), 268-285.
- Ledhem, M. A., & Mekidiche, M. (2020). Economic growth and financial performance of Islamic banks: a CAMELS approach. *Islamic Economic Studies*.
- Majeed, M. T., & Zainab, A. (2021). A comparative analysis of financial performance of Islamic banks vis-à-vis conventional banks: evidence from Pakistan. *ISRA International Journal of Islamic Finance*, 13(3), 331-346.
- Mehtab, H., Zaheer, Z., & Ali, S. (2015). Knowledge, attitudes and practices (KAP) survey: a case study on Islamic banking at Peshawar, Pakistan. *FWU Journal of Social Sciences*, 9(2), 1-13.
- Rusydia, A. S., & Sanrego, Y. D. (2018). Measuring the performance of Islamic banking in Indonesia: An application of Maslahah-efficiency quadrant (MEQ). *Journal of Islamic Monetary Economics and Finance*, 3, 79-98.
- Salike, N., & Ao, B. (2017). Determinants of bank's profitability: role of poor asset quality in Asia. *China Finance Review International*, 8(2), 216-231.
- Samad, A. (2004). Performance of Interest-free Islamic banks vis-à-vis Interest-based Conventional Banks of Bahrain. *International Journal of Economics, Management and Accounting*, 12(2).

- Shah, S. Q., & Jan, R. (2014). Analysis of financial performance of private banks in Pakistan. *Procedia-Social and Behavioral Sciences*, 109, 1021-1025.
- Shahab, A. Z. I. Z., Husin, M., & Hashmi, S. H. (2016). Performance of Islamic and conventional banks in Pakistan: A comparative study. *International Journal of Economics and Financial Issues*, 6(4), 1383-1391.
- Singh, A., & Sharma, A. K. (2016). An empirical analysis of macroeconomic and bank-specific factors affecting liquidity of Indian banks. *Future Business Journal*, 2(1), 40-53.
- State Bank of Pakistan, List of banks operating in the country, Retrieved at [https://www.sbp.org.pk/f\\_links/f-links.asp](https://www.sbp.org.pk/f_links/f-links.asp)
- State Bank of Pakistan, No. of Scheduled banks and branches (2021), Retrieved at [https://www.sbp.org.pk/publications/schedule\\_banks/Dec-2021/Appendices.pdf](https://www.sbp.org.pk/publications/schedule_banks/Dec-2021/Appendices.pdf).
- Standard and Poor's (S&P), (2022) Islamic Finance Outlook, Retrieved at, <https://www.spglobal.com/ratings/en/research/pdf-articles/islamic-finance-outlook-2022-edition-28102021>
- Suzuki, Y., & Sohrab Uddin, S. M. (2014). Islamic bank rent: A case study of Islamic banking in Bangladesh. *International Journal of Islamic and Middle Eastern Finance and Management*, 7(2), 170-181.
- Suzuki, Y., & Uddin, S. S. (2016). Recent trends in Islamic banks' lending modes in Bangladesh: an evaluation. *Journal of Islamic Accounting and Business Research*, 7(1), 28.
- Tai, L. (2014). Efficiency and performance of conventional and Islamic banks in GCC countries. *Middle East Journal of Business*, 9(2).
- Widagdo, A. K., & Ika, S. R. (2009). The interest prohibition and financial performance of Islamic banks: Indonesian evidence. *International business research*, 1(3), p98.
- “World Bank; Islamic Development Bank Group. 2017. *Global Report on Islamic Finance: Islamic Finance - A Catalyst for Shared Prosperity?* Washington, DC: World Bank. © Islamic Development Bank Group. <https://openknowledge.worldbank.org/handle/10986/25738> License: CC BY 3.0 IGO.”
- World Bank (2015), Islamic Finance, Retrieved from, <https://www.worldbank.org/en/topic/financialsector/brief/islamic-finance>
- Yao, H., Haris, M., & Tariq, G. (2018). Profitability determinants of financial institutions: evidence from banks in Pakistan. *International Journal of Financial Studies*, 6(2), 53.