

**Impact of Macroeconomic Indicators on Financing in
Islamic Banking Industry:
An Empirical Analysis in Pakistan**

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Abstract

This study aims to investigate the impact of macroeconomic and bank-specific variables on the financing of Islamic banking. The collected data are taken from the fullfledged Islamic banks in Pakistan between the year of 2006 to 2018. Islamic banks' financing is taken as a dependent variable. The predictors include the macroeconomic variables such as inflation, gross domestic product (GDP), exchange rate and interest rate. They also cover bank-specific variables like deposit, size of bank, net interest margin, bank spread, investment, credit risk and lagged of dependent variable (which is from the previous year financing). The results suggest that the interest rate has a significant and negative effect on Islamic bank's financing. Investment has an inverse and significant effect on the financing. Size has a positive and significant effect on the financing. The findings also suggest that the financing is positively and significantly affected by its lags. Furthermore, net interest margin significantly affects the financing. This study is beneficial to the regulators, policymakers and bankers, especially to understand the key factors that affecting Islamic bank's financing. This is crucial so that they can develop the policies that will create an effective and strong financial system which may contribute to the development of the economy in Pakistan.

Keyword: Financing, Investments, Islamic Banking, Credit Risk, Deposits, GDP, Interest Rate, Pakistan

1.0 Introduction

Islamic banking is not only flourishing in Muslim countries per se, it is also accepted by non-Muslim countries due to its unique features such as asset-based and risk-sharing characteristics. Islamic banking is growing at the rate of 10% to 15% annually (International Monetary Funds). In Pakistan, Islamic banking contributes significantly to the economy. The overall deposits of Islamic banking are 16%, whereas their assets are amounting to 13.8% of the total banking industry (Islamic Banking Bulletin of SBP, September 2019). The recorded value of deposits in Islamic banks is Rs 2,407 billion in total (Islamic Banking Bulletin of SBP, September 2019). While, their assets are recorded to reach up to Rs 2,995 billion in total as at September 2019 (Islamic Banking Bulletin of SBP, September 2019). This remarkable achievement is obtained in a very short period since the introduction of Islamic banking in Pakistan in 2002. Meezan Bank stands as the first Islamic bank that operates in Pakistan.

Islamic banking provides financing to their customers according to the principles of Shariah. They facilitate their customers by providing funds to acquire assets. Their financing products are in a variety. These financing products are Murabahah, Diminishing Musharakah, Ijarah, Salam, Istisna', Musawamah and Mudharabah. Majority of these financing transactions are featured with the principles of risk-sharing and asset-based. When comes to a loan, if the customer fails to repay the loan on time, the loan is considered as a bad loan. It will be treated as a non-performing loan. If there are a lot of non-performing loans (NPL), it will become a major concern for all banks. The survival of the banks depends on their financing portfolios. In the financial crisis of 2008, there are many banks that became insolvent due to NPL and liquidity issues (World Bank report). Thus, it is necessary to know the important factors that give impacts to the Islamic banking financing.

2.0 Literature Review

There are quite a few empirical studies that have been done on the impacts of Islamic bank's financing. Majority of the previous works were done relating to commercial banks. However, there are important studies done in relation to macroeconomic and bank-specific variables, and their impacts on bank's financing.

Abuka et al. (2019), observed the linkage of monetary policies on bank's financing decisions in Uganda. They obtained the data from 2013

to 2014 on a quarterly basis and they applied a regression model. Their research reveals that a decrease in the money supply due to the monetary tightening may decrease the bank's financing, which ultimately affecting the economy as well.¹

In a research done by Adzis et al. (2018), they examined the bank-specific and macroeconomic variables on the bank's financing in Malaysia. They also considered macro-prudential policies of 2010 and their impacts on the financing portfolio performance. The data was collected from 2005 to 2014 from 27 selected banks in Malaysia.

Just like Abuka et al. (2019), they also selected and applied the regression model. They found that bank size and deposit have a positive and key influence on the bank's lending, whereas liquidity has an inverse impact on the bank's financing. They also concluded that the implementation of the macro-prudential policy of 2010 did not have any impact on the bank's lending in Malaysia.²

Marshal (2017), studied the macroeconomic and bank-specific variables on the bank's lending decision. His data dated from 1976 to 2016 which were obtained from the commercial banks in Nigeria and he applied the ordinary least square. He found out that money supply and capital adequacy are the key variables and their impacts have a positive value on the bank's financing decision.³

Looking into the situation in Ethiopia, Malede (2014) studied the variables that created impacts on the bank financing. He also considered macroeconomic and bank-specific variables for the analysis. He obtained the data from eight commercial banks in Ethiopia from the period of 2005 to 2011. It was revealed from his research that credit risk, bank size,

¹Abuka, Charles, Ronnie K. Alinda, CameliaMinoiu, José-Luis Peydró, and Andrea F. Presbitero. "Monetary policy and bank lending in developing countries: Loan applications, rates, and real effects." *Journal of Development Economics* 139 (2019): 185-202.

²Abdul Adzis, Azira, Lee Eng Sheng, and Juhaida Abu Bakar. "Bank lending determinants: evidence from Malaysia commercial banks." *Journal of Banking and Finance Management* 1, no. 3 (2018): 36-48.

³Marshal, Iwedi. "Bank Failure in Nigeria: Evidence of Prudential Regulator Laxity." (2017).

liquidity ratio and gross domestic product (GDP) have a positive and significant impact on the bank's financing.⁴

In another work, Churchill (2014) studied the effect of the instability of macroeconomic indicators such as inflation, exchange rate, GDP, money supply and employment level and their impact on the bank's financing decisions. He concluded that those are the key macroeconomic variables that have significant impacts on the bank's lending.⁵

Tomak (2013) investigated the impacts of bank-specific and market-based variables on the financing of banks in Turkey. He selected eighteen banks in which fifteen banks are private commercial banks, whereas the remaining consisted of state-owned banks. From his study, it is found out that private banks were in a better position than state-owned banks because the outreach of private banks was greater as the result of high deposits and financing that they had in comparison to state-owned banks. He further revealed that bank size, NPL, inflation, and deposit have significant impacts on the financing of banks in Turkey.⁶

Imran and Nishat (2012), investigated the key bank-specific and macroeconomic variables that may have impacts on the financing of commercial banks in Pakistan. They selected the data from 1971 to 2010 and applied the regression model. They found out that exchange rate, GDP, and deposit are the variables that affected significantly the financing of commercial banks.⁷

Djiogap and Ngomsi (2012) studied the impacts of bank-specific and macroeconomic variables on financing portfolio of banks from countries of the Central Africa. They selected the data from 2001 to 2010. They analysed the financing activities of the banks and determine the

⁴Malede, Mitku. "Determinants of Commercial Banks Lending: Evidence from Ethiopian Commercial Banks." *European Journal of Business and Management* 6, no. 20 (2014): 109-117.

⁵Churchill, RansfordQuarmyne. "Macroeconomic instability and banks lending behavior in Ghana." *European Scientific Journal* 10, no. 10 (2014).

⁶Tomak, Serpil. "Determinants of commercial banks' lending behavior: Evidence from Turkey." *Asian Journal of Empirical Research* 3, no. 8 (2013): 933-943

⁷Imran, Kashif, and Mohammed Nishat. "Determinants of bank credit in Pakistan: A supply side approach." *Economic Modelling* 35 (2013): 384-390.

factors that affects significantly the financing behaviour of the banks. They revealed that bank size, capitalization, and GDP are the key factors that influenced significantly on banks' lending behaviour in the countries of from the Central Africa. By depending on the bank's specific and macroeconomic variables.⁸

Adebola et al. (2011), examined the factors that impacted the financing of Islamic banks in Malaysia. They used and applied ADRL approach. In their result, they identified that the interest rate has an inverse and significant impact on the bank's financing.⁹

3.0 Research Methodology

Depending on the quantitative research design, the researchers provide a brief explanation relating to the research aims and objectives, the relevant research question, the studied variables, the studied financing model, the population frame, the sample size, and the selection of the samples. They are as the followings.

3.1 Research Objectives and Research Questions

The main objective of this research is to find the factors that may give impacts on the financing of Islamic banks in Pakistan. This research is conducted by the researchers to investigate the impacts of macroeconomic and bank-specific variables on Islamic bank's financing. Here, the relevant research question is how macroeconomic and bank specific variable will impact the financing of Islamic banks in Pakistan?

⁸Constant, FouopiDjiogap, and AugustinNgomsi."Determinants of bank long-term lending behavior in the Central African Economic and Monetary Community (CEMAC)." *Review of Economics & Finance* 2 (2012): 107-114.

⁹Adebola, SolarinSakiru, Wan Sulaiman B. Wan Yusoff, and JauhariDahalan. "An ARDL approach to the determinants of nonperforming loans in Islamic banking system in Malaysia." *Kuwait Chapter of Arabian Journal of Business and Management Review* 33, no. 830 (2011): 1-11.

Table 1

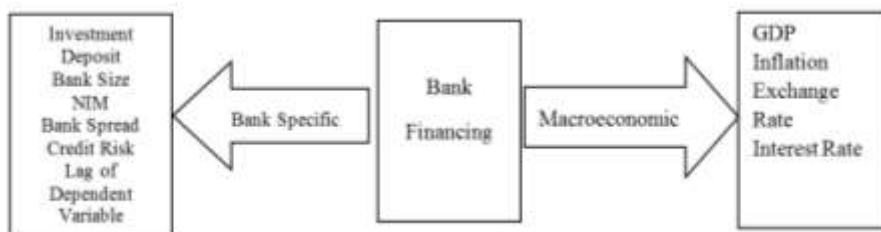
Symbol	Variable	OperationalDefinition/ Measurement	Expected Sign
GDP	Gross Domestic Product	Current year Real GDP minus Previous Year Real GDP/ Previous year Real GDP.	Positive
IR	Interest Rate	Weighted Average lending Kibor Rate	Positive/ Negative
ER	Exchange Rate	PKR Exchange Rate to USD	Positive
Inf	Inflation	Consumer Price Index(CPI)	Positive
CR	Credit Risk	A ratio of nonperforming loan to total advances	Negative
Log(TI)	Total Investment	Bank total investment divided by Total Asset	Negative
Bank Size	Bank Size	Natural Logarithm of Total Asset	Positive
NIM	Net Interest Margin	Net Interest/ Total Asset	Positive
BS	Bank Spread	Net Interest/ Total Interest	Positive/ Negative
Deposit	Deposit	Total Deposit / Total Asset	Positive
TL(-1)	Total Loan (-1)	Total loan of Previous year	Positive

Source: Authors' own

3.3 Studied Financing Model

The studied financing model shows the predictors and the dependent variables. The analysis is done by using the panel least square regression. This model is developed based on the analysis done by the researchers from the literature review (see Figure 1.0).

Figure 1.0: The Studied Financing Model



Source: Authors' own.

3.4 Population Frame, Sample Size and Selection of Sample

The population frame covers five full-fledged Islamic banks in Pakistan. They are as provided in Table 2.0 below.

Table 2.0: Population Frame

1	Meezan Bank Ltd
2	AlBaraka Bank Pakistan Ltd
3	BankIslami Pakistan Ltd
4	Dubai Islamic Bank Pakistan Ltd
5	MCB Islamic Bank Ltd

Source: Authors' own.

In this research, there are four full-fledged Islamic banks in Pakistan that were selected as samples. These Islamic banks namely are: (i) Meezan Bank Ltd; (ii) Dubai Islamic Bank Pakistan Ltd; (iii) AlBaraka Bank Pakistan Ltd; and (iv) BankIslami Pakistan Ltd, where the data are collected from 2006 to 2018. These banks have market capitalizations of more than 70%. Thus, they are sufficient figures for the understanding and characteristics of the data. According to Yasir & Hijazi (2006), it is an adequate number for the analysis of the population. MCB Islamic bank Ltd is excluded since this Islamic bank was recently established in 2015. The researchers collected the data from the websites of the said banks and also from the State Bank of Pakistan.¹⁰

4.0 Variables Trend Analysis

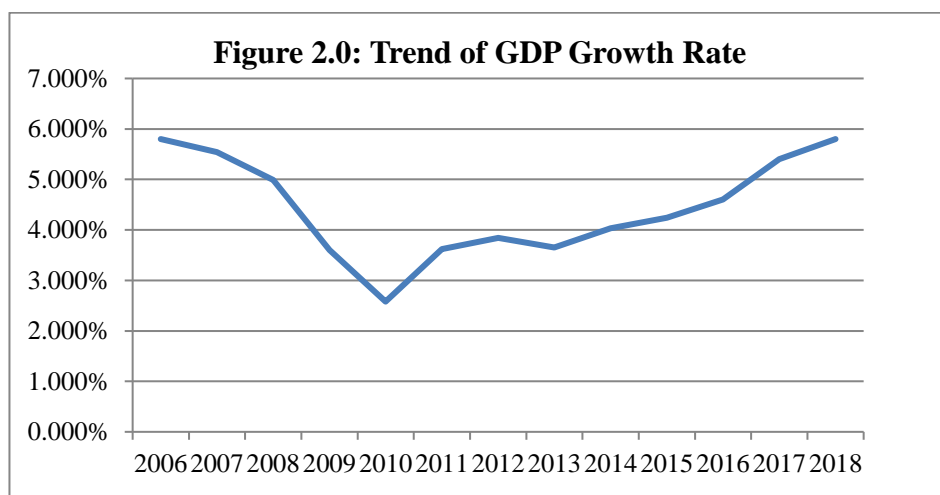
This section provides the discussion on the variables trend analysis. The relevant variables and their trends are GDP growth rate,

¹⁰Hijazi, Syed Tahir, and Dr Tariq, Yasir "Determinants of capital structure: A case for Pakistani cement industry." *Lahore Journal of Economics* 11, no. 1 (2006): 63-80.

exchange rate, interest rate, inflation rate, non-performing loan (NPL), deposits, bank assets, financing, investment, bank spread ratio, and net interest margin (NIM)

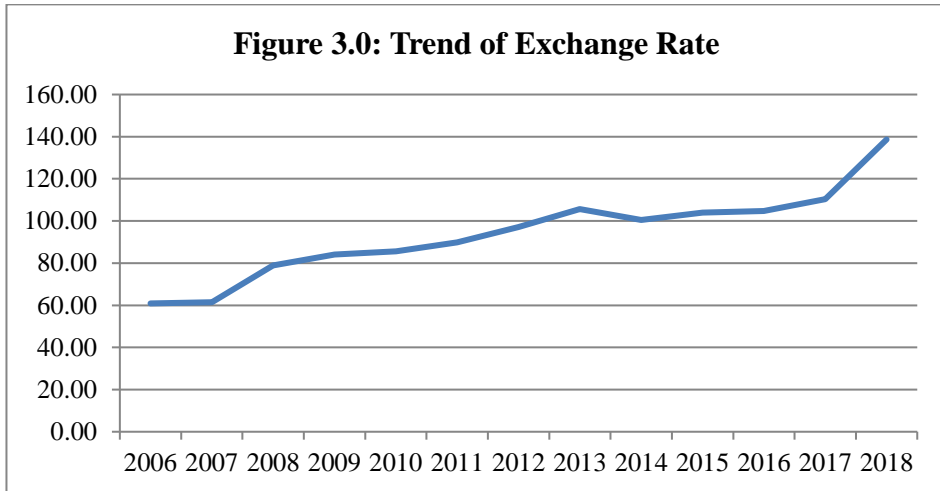
4.1 Trend of GDP Growth Rate

Gross Domestic Product (GDP) was found at 5.81% in 2018. In 2009 the lowest GDP was observed at 0.36%. The average GDP was noted as 4.1%. The graph shows the trend of GDP growth from 2006 to 2018 (see Figure 2.0).



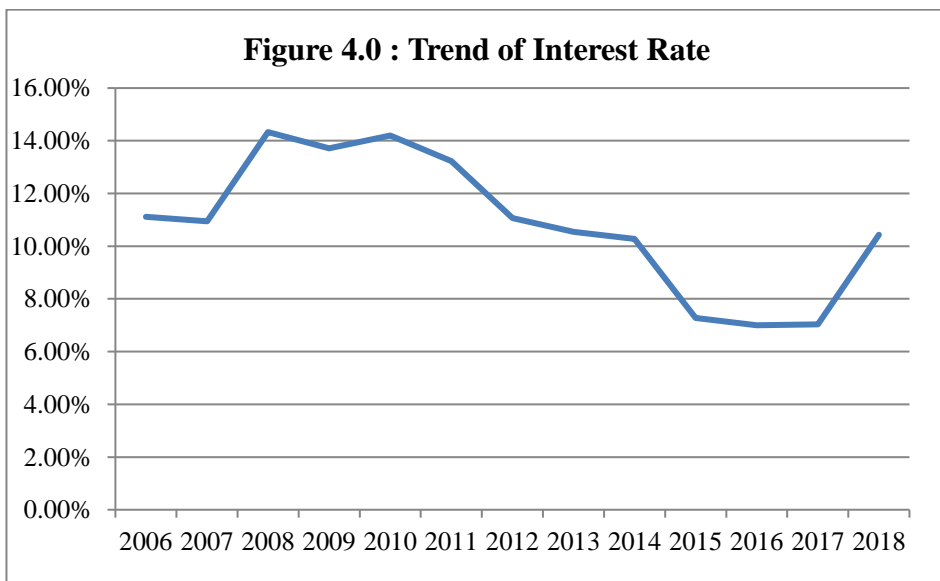
4.2 Trend of Exchange Rate

In the last decade, the continuous stress on the exchange rate of Pakistan can be witnessed. In 2018, the exchange rate was at the rate of Rs 138.6. The average exchange rate was observed at Rs 93.98. The trend of the exchange rate from 2006 to 2018 is shown in Figure 3.0



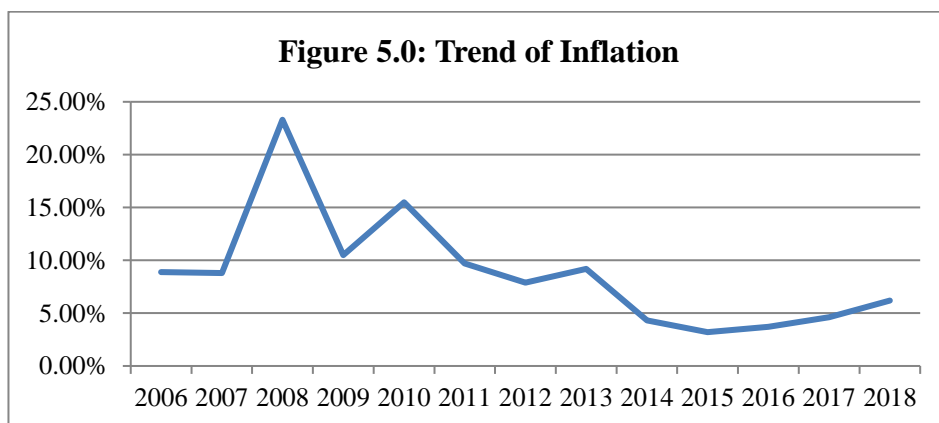
4.3 Trend of Interest Rate

Interest rate's trend was very volatile in Pakistan from 2006 to 2018. The lowest interest rate was recorded in 2016 which was at 6.01%. In 2009, interest rate was at their highest level of 15.61%. The average interest rate was noted at 10.08%. See Figure 4.0 for the trend of interest rate from 2006 to 2018



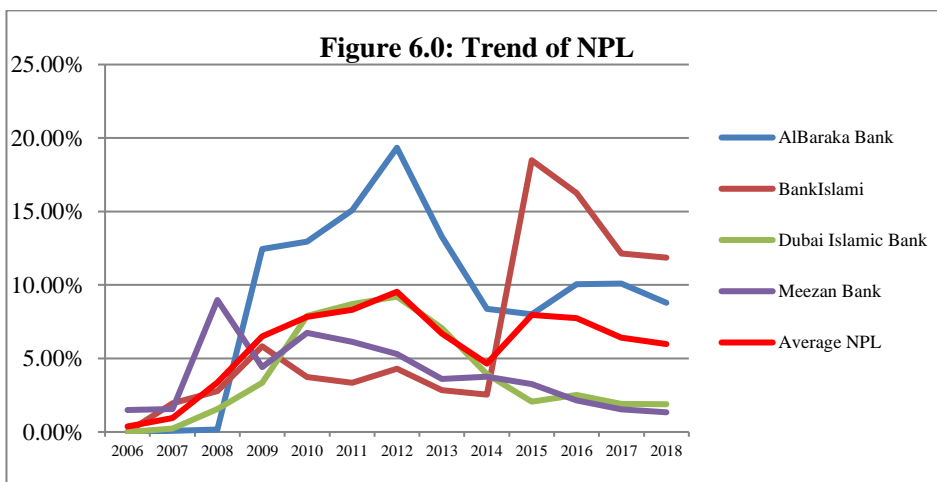
4.4 Trend of Inflation Rate

Inflation refers to an increase in the price of goods over time. Consumer Price Index (CPI) is taken as the proxy to measure inflation. In 2015, the lowest inflation was found at 3.2%. The economy witnessed the highest inflation in 2008 which was at 23.3%. In Pakistan, the average inflation was observed at 8.91%. Trend of inflation in Pakistan from 2006 to 2018 is provided in Figure 5.0.



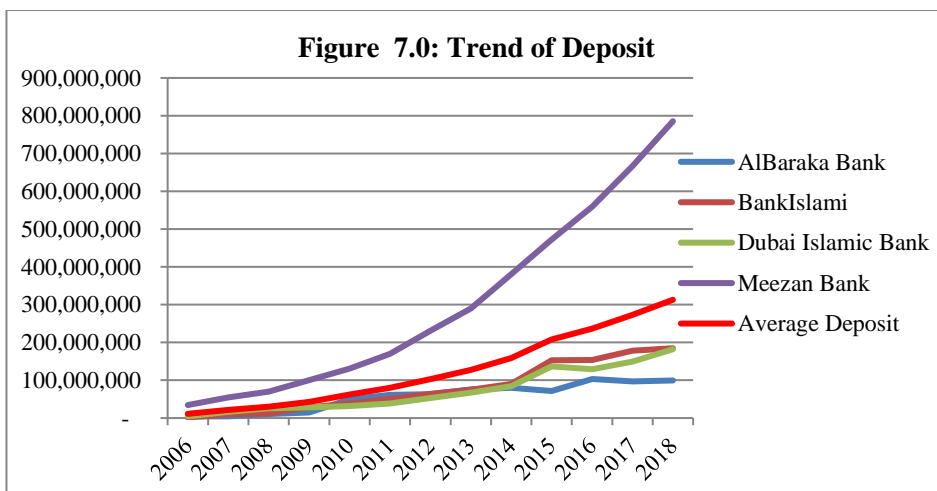
4.5 Trend of Non-Performing Loan (NPL)

NPL refers to non-performing loans. Here, the calculation is made based on the ratio of NPL to gross financing. NPL is taken as a proxy to measure the credit risk. The average NPL was found at 5.87%. It is pertinent to mention that the NPL of Islamic banking is reducing over time. Figure 6.0 shows the trend of NPL in the Islamic banking industry.



4.6 Trend of Deposit

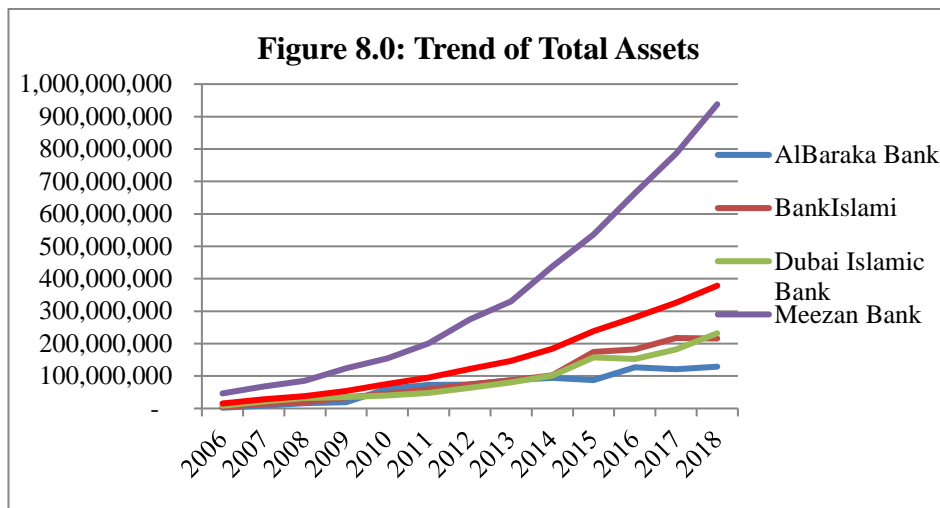
Deposits are the lifeblood for the banks. Banks do finance and investment from the deposits that they obtained from the depositors. Banks with large deposits have a better position in financing more of their clients. It can be traced positively that the overall deposits of Islamic banking are increasing over time. The trend of deposits of Islamic banking from 2006 to 2018 can be seen in Figure 7.0.



4.7 Trend of Bank Assets

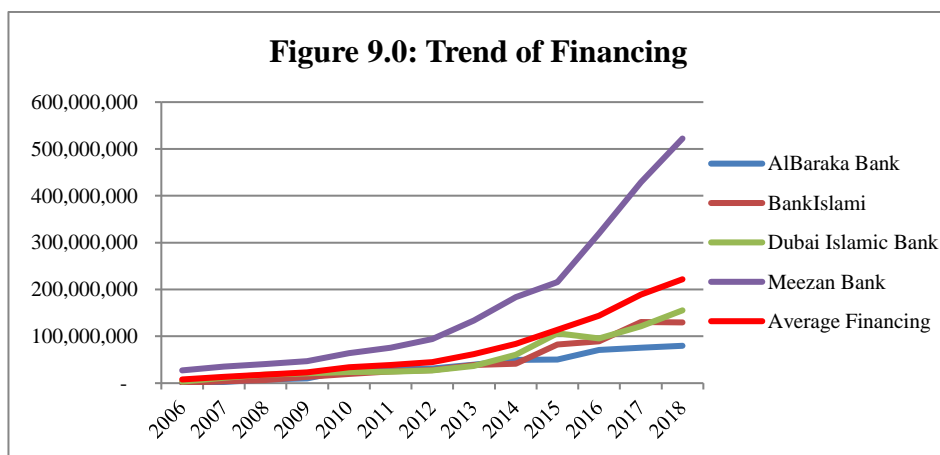
The bank's financing and investments are considered as the assets of the bank. It is very significant that the overall assets of Islamic banks

are increasing over the period. It shows the confidence and willingness of the customers to obtain their financing from Islamic banks. The trend of total assets of Islamic banks in Pakistan from 2006 to 2018 is shown in Figure 8.0



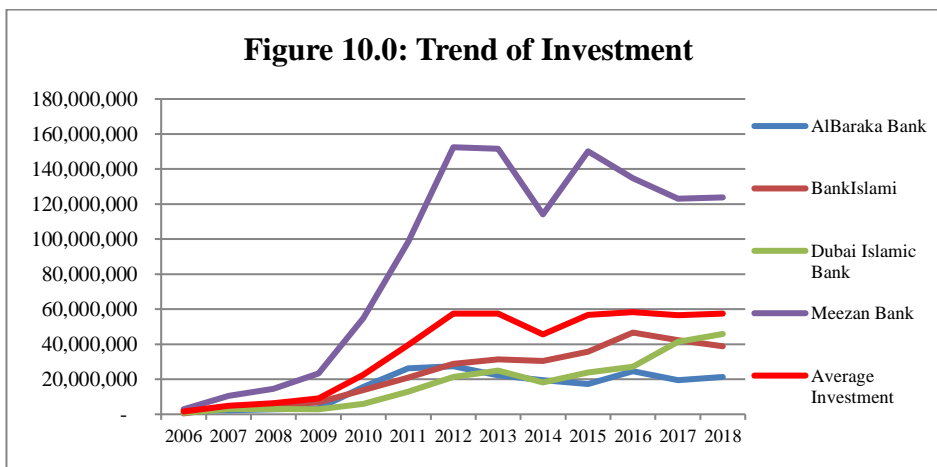
4.8 Trend of Financing

The major income of the bank is generated from financing. It is considered as the most important function of the bank. The financing of Islamic banks is increasing significantly. The following Figure 9.0 shows the trend of financing from 2006 to 2018.



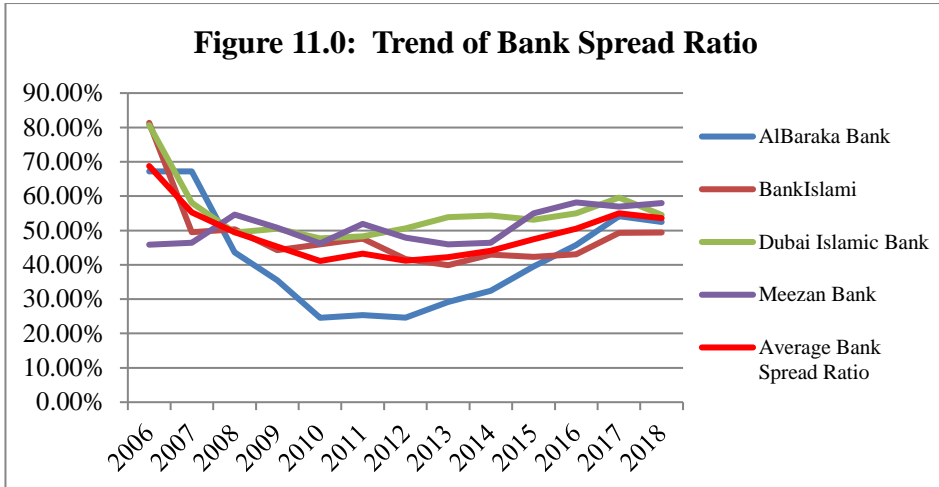
4.9 Trend of Investment

It is found that the banks are not placing all of their depositors' deposits into the financing. Banks have diversified their portfolio by investing in the government securities and in the capital market. Investment was found stable over the time. The following graph shows the trend of investment from 2006 to 2018 (see Figure 10.0).



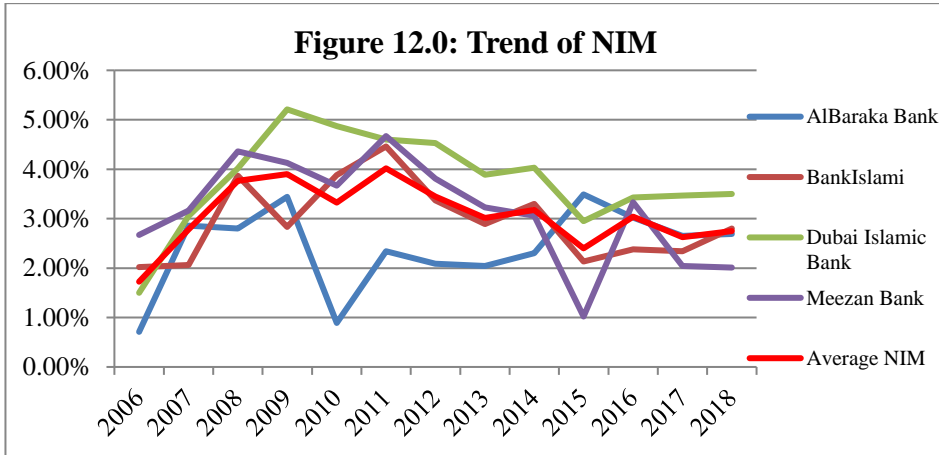
4.10 Trend of Bank Spread Ratio

The bank spread is calculated as the net income (the mark-up earned minus the mark-up expenses) divided by the total income. The spread of the banks over time is stable and the average bank spread was noted as 49%. The following graph shows the trend of the banks spread from 2006 to 2018 (see Figure 11.0).



4.11 Trend of Net Interest Margin (NIM)

Net interest margin or NIM is calculated as the net income divides by the total assets. It is used to measure the efficiency of the banks. The average NIM was observed at 3.07%. The graph in Figure 12.0 above shows the NIM from 2006 to 2018.



5.0 Descriptive Statistics

Descriptive statistics plays the vital role in the analysis of quantitative data. The mean of GDP growth rate was found at 4.18%. The standard deviation was noted at 1.46%. Mean of the Exchange rate was Rs. 93.98 and the standard deviation was observed at Rs. 20.23. Interest

rate mean was 8.93% and 2.50% was noted at standard deviation. Inflation mean was found at 8.93% whereas the standard deviation was 5.3%. The mean of financing was 47% which shows that 47% of assets are in the form of financing. Therefore Islamic Banks plays the key role in the development of economy by providing loan to industries, retailer, farmer and household. Here, the standard deviation was found at 12.4% of the mean value. The researchers found that the banks were having different financing portfolios as per their assets' size, higher standard deviation was witnessed in financing. The net interest margin mean was 3.1% and with 1% as the value for the standard deviation. Bank spread mean was found at 49.65% and the standard deviation was 13.05%. NPL mean was 5.8% and the standard deviation was noted at 5% from their mean value.

Table 3 Descriptive Statistics

	A	IM	S	R	In	Inv	Deposit	GDP	IR	INF	ER
Mean	1.520008	.03074	.49651	.05874	.47562	.232088	0.786500	0.044377	0.108600	0.089062	93.9830
Median	686672	.03055	.49362	.03850	.47263	.201466	0.830150	0.042400	0.109500	0.088000	97.1100
Maximum	.380008	.05210	.00000	.19340	.67873	.555538	0.885700	0.058000	0.143300	0.233000	138.650
Minimum	2448298.	0.00710	.24570	0.00000	0.01344	0.000000	0.000000	0.025800	0.070000	0.032000	60.8800
Std. Dev.	.940008	.01013	0.13058	.05053	0.12422	.108542	0.145403	0.009777	0.025047	0.053261	20.2370
Skewness	2.487072	0.17172	.17654	.92838	0.918703	.737609	3.636973	-0.0731	0.2213	.440460	0.21110
urtosis	.068282	.75451	.84543	.02561	.05365	.721630	8.32760	.986985	.963428	.716805	3.08572
um Sq. Dev.	.920018	.00524	.86972	.13025	.78700	.600846	.078247	.004875	.031995	.144676	20886.4

6.0 Multicollinearity Test

Depending on the selected data as obtained by the researchers, the multicollinearity test is considered suitable as a quantitative tool in doing the analysis. The following Table 4.0 is provided to show the results from the multicollinearity test. Based on the multicollinearity test's results,

they θ seem not enough to present the data because all values of the variables are found less than 0.8. Thus, according to Kennedy (2008) the results of the multicollinearity test is substantial when the correlation value is 0.8. By following Kennedy (2008), the values of the data's correlation are less than 0.8, therefore, the multicollinearity test is not shown in the analysed data. ¹¹

Table 4 Multicollinearity Test
Covariance Analysis: Ordinary
Sample: 2006 2018

Correlation	DP	IR	INF	ER	INV	FIN	TA	NIM	BS	CR	DEPOSIT
GDP	.000000										
IR	0.453865	1.000000									
INF	0.170053	0.616511	1.000000								
ER	0.086072	0.456347	-0.450638	.000000							
INVESTMENT	0.062402	0.348958	-0.336444	0.452830	.000000						
FINANCING	0.248691	0.463974	-0.388057	0.590149	.650945	.000000					
TA	0.192505	0.437050	-0.377626	0.546325	.642148	0.683203	.000000				
NIM	-0.389103	.367721	0.286363	0.006689	0.094006	-0.205009	0.202412	.000000			
BS	0.437267	0.150396	-0.073833	-0.250095	0.004372	0.102524	.079534	-0.121441	.000000		
CR	-0.257680	0.074339	-0.121063	0.317553	0.072916	-0.129248	0.124108	-0.100413	0.612253	.000000	
DEPOSIT	-0.304737	-0.160053	-0.184389	0.536496	0.351885	0.289714	.309419	0.350987	-0.631906	0.369613	1.000000

7.0 Regression Model

In achieving the research objective, the regression model is applied to the macroeconomic and bank-specific variables. This is important to measure their impacts on the financing of Islamic banks in Pakistan. The formula that the researchers applied is as the following

$$TL_{it} = \alpha + \beta_1 GDP_{it} + \beta_2 Interest_{it} + \beta_3 Inflation_{it} + \beta_4 Exchange\ Rate_{it} + \beta_5 LR_{it} + \beta_6 NIM + \beta_7 Credit\ Risk_{it} + \beta_8 Deposit_{it} + \beta_9 Bank\ Size_{it} + \beta_{10} Investment_{it}$$

Kennedy, Peter. "A guide to econometrics. 2008." Malden, MA: Blackwell.¹¹

Where:

TL: Total financing of the bank 'i' at a year, whereas 't' is scaled by total assets.

GDP: Annual growth rate of gross domestic product of Pakistan at a year 't'.

Interest: Weighted average KIBOR lending rate at a year 't'.

Inflation: Consumer price index at a year 't'.

Exchange Rate: PKR exchange rate to USD at a year 't'.

Deposit: Total deposit of the bank 'i' at a year 't' divided by total assets.

LR: Liquidity ratio of the bank 'i' at a year 't' calculated by dividing liquid assets to total assets.

NIM: Net interest margin of bank 'i' at a year 't'.

Credit risk: It is ratio of NPL to gross financing of the bank 'i' at a year 't'.

Log(TA): Logarithm of total asset of bank 'i' at a year 't'. It is used as proxy of bank size.

Log(TI): Logarithm of total investment of the bank 'i' at a year 't'.

The dependent variable is financing. The panel least square is chosen to be the method for the analysis. The results found by the researchers are presented in Table 5.0 as follows:

Table 5.0: Panel Least Square (PLS) Output

		Model 1
Dependent Variable ->		Financing
C	Coefficient	0.836938
	t-Statistic	2.411783
	Prob.	0.0211
GDP	Coefficient	0.26865
	t-Statistic	0.226877
	Prob.	0.8218
IR	Coefficient	-2.40998
	t-Statistic	-2.31421
	Prob.	0.0265
INF	Coefficient	0.368494
	t-Statistic	0.89209
	Prob.	0.3783
ER	Coefficient	0.001214
	t-Statistic	1.261692
	Prob.	0.2152
LOG(INVESTMENT)	Coefficient	-0.13171
	t-Statistic	-3.18235
	Prob.	0.003
LOG(TA)	Coefficient	0.138561
	t-Statistic	2.790181
	Prob.	0.0084
DEPOSIT	Coefficient	0.686
	t-Statistic	2.002163
	Prob.	0.0528
NIM	Coefficient	4.119369
	t-Statistic	2.258144
	Prob.	0.0301
BS	Coefficient	-0.39872
	t-Statistic	-1.59017
	Prob.	0.1205
CR	Coefficient	-0.3541
	t-Statistic	-1.13723
	Prob.	0.263
ADV_DEP(-1)	Coefficient	0.29234
	t-Statistic	2.618067
	Prob.	0.0129
R-squared		0.709007
Adjusted R-squared		0.620092
F-statistic		7.974013
Prob(F-statistic)		0.000001
Durbin-Watson stat		1.411954

8.0 Regression Analysis

The result of adjusted R-square is at 62% which means that 62% variation of the dependent variable is determined by the predictors. The finding of F-statistics is 7.97 and the P-value is zero. Thus, it is statistically significant and authenticates the model and it is fit for testing. In this model, the serial correlation does not exist since the value of the Durbin Watson test is at 1.41 and near to 2. Hence, the correlation is not present in the data.

The regression analysis also shows that the macroeconomic indicator such as interest rate has a negative and significant impact on the financing of Islamic banks. Net interest margin, bank size, deposit and the lag of dependent variable from the previous year financing have significant and positive impacts on the financing of Islamic banks. Whereas, investment is found to have a negative and significant impact on the financing of Islamic banks. As mentioned previously, deposits are the lifeline for the banks. Banks with higher deposits are in a better position to finance because there is consistency in their liquidity.

From the test, the deposit has a significant and positive impact on the financing of Islamic banks. This finding is similar to the previous studies such as done by Imran and Nishat (2013) and Swamy (2012). They also found that the deposit is the key factor that positively influences the financing of the banks.¹²

Furthermore, due to the increase in the financing, the net interest margin also increases. Banks are inclined to provide more financing if the interest margin is higher. The aim of the bank management is to generate higher profits on its financing portfolio. The results are in line with Ekpu and Paloni (2016), and Osayameh (1996). They revealed that the bank management is focused to generate higher profits from their operations.¹³

^{12A}Imran, Kashif, and Mohammed Nishat. "Determinants of bank credit in Pakistan: A supply side approach." *Economic Modelling* 35 (2013): 384-390.

^{12B}Swamy, Vighneswara. "Financial Instability, Uncertainty and Banks' Lending Behaviour." *Uncertainty and Banks' Lending Behaviour (August 8, 2012)* (2012).

^{13A}Ekpu, Victor, and Alberto Paloni. "Business lending and bank profitability in the UK." *Studies in Economics and Finance* (2016).

Furthermore, the Size of the bank plays a crucial role in the financing of the banks. Large banks have a higher financing portfolio as they have many borrowers such as corporate, commercial, small and medium enterprises, household and retailers. The size of the bank has a positive and significant impact on the financing of the Islamic banks. These results are in line with the findings of Amidu (2014), Malede (2014), Alfaro et al. (2003), they all revealed that bank size has a positive and significant impact on bank financing.¹⁴

Additionally, the size of the bank plays a crucial role in providing the financing. Large banks have a higher financing portfolio since they have many borrowers such as corporate, commercial, small and medium enterprises, household and retailers. It is found that the size of the bank has a positive and significant impact on the financing of the Islamic banks. These results are in line with the findings of Amidu (2014), Malede (2014), and Alfaro et al. (2003), they all revealed that the bank size has a positive and significant impact on the bank's financing. It is identified that the previous year's finance has a significant and positive impact on Islamic banks' financing. The bank's financing is comprised of short-term financing which is mainly for working capital needs, whereas the medium- and long-term financing are for the acquisition of assets or project financing. The financing is annually reviewed and the past lending relationship is very crucial. The bank renews the limit when the customer pays their instalments on time.

Once a good credit history is maintained, then the relationship between the bank and their customers remains intact for a longer period. In such scenario, banks are confident to renew their previous year limit. This result is in line with the research done by Ladime (2013) that revealed

^{13B} Osayameh, R. "Practice of banking: Lending and finance." *Lagos: FA Publishers* (1996).

^{14A} Amidu, Mohammed. "What Influences Banks Lending in Sub-Saharan Africa?." *Journal of Emerging Market Finance* 13, no. 1 (2014): 1-42.

^{14B} Malede, Mitku. "Determinants of Commercial Banks Lending: Evidence from Ethiopian Commercial Banks." *European Journal of Business and Management* 6, no. 20 (2014): 109-117.

^{14C} Alfaro, Rodrigo, Helmut Franken, Carlos García, and Alejandro Jara. *Bank lending channel and the monetary transmission mechanism: the case of Chile*. Vol. 223. Banco Central de Chile, 2003

the previous year financing has a positive and significant impact on the bank's financing.¹⁵

Moreover, if banks do larger investments, they will have fewer funds available for financing. Bank's investment portfolio comprises of government securities and investment in the capital market. Government securities are considered as a risk-free investment, while the capital market investment is a highly risky venture. Usually banks try to maintain the balance between financing and investment. Here, investments have a negative and significant impact on the financing of Islamic banks. Olusanya et al. (2012) also found the same, where investments have a negative impact on bank's financing.¹⁶

A macroeconomic indicator such as interest rate has a negative and significant impact on the financing of Islamic banks. With increase in the interest rate, customers are less inclined toward borrowing since the cost of the loan is increased. Karim et al. (2011) found that interest rate has a negative and significant impact on the financing of Islamic banks.¹⁷

9.0 Conclusion

By using the regression model, the descriptive statistics, and multi-collinearity test, the analysis is done.

This research identifies for Islamic bankers and regulators several key variables of macroeconomic and related bank-specific. Such findings on key variables are able to structure policies which may contribute in creating positive and significant impacts on their financing portfolio. This is essential to ensure the stability and soundness of the Islamic banks. Thus, it is important to continue the increases which will benefit the

¹⁵Ladime, Jonas, E. Sarpong-Kumankoma, and K. A. Osei. "Determinants of bank lending behavior in Ghana." *Journal of Economics and Sustainable Development* 4, no. 17 (2013): 42-47.

¹⁶Olusanya, Samuel Olumuyiwa, A. O. Oyebo, and E. C. Ohadebere. "Determinants of lending behaviour of commercial banks: Evidence from Nigeria, a co-integration analysis (1975-2010)." *Journal of Humanities and Social science* 5, no. 5 (2012): 71-80

¹⁷Abdul Karim, Zulkefly, W. N. W. Azman-Saini, and Bakri Abdul Karim. "Bank lending channel of monetary policy: Dynamic panel data study of Malaysia." *Journal of Asia-Pacific Business* 12, no. 3 (2011): 225-243.

economy as well. This study will reduce the gap in the existing literature of the Islamic banking industry in Pakistan. So far, there is an absence of research of this kind especially relating to the financing of Islamic banks in Pakistan.

The result of the financing model reveals that there is a significant impact of macroeconomic indicators and bank-specific variables. Interest rate and investment have a significant and negative impact on the financing of Islamic banks. Deposit, size, net interest margin, and the previous year financing are found to have a positive and significant impacts on the financing of Islamic banks in Pakistan.