Role of the Kibor Rate in Conventional and Islamic Banks of Pakistan

Lala Rukh
Assistant professor at Center for Management and Commerce University of Swat at-
lalarukh@uswat.edu.pk
Dr. Muhammad Sohail
lecturer at Center for management and commerce University of Swat at-sohail.uoswat.edu.pk
Mr. Khursheed Ahmad
lecturer at Center for management and commerce University of Swat
at- khursheed@uswat.edu.pk
Mr. Sangeen Khan
Deputy treasurer University of Swat at- sangeenkhan@uswat.edu.pk

Abstract
The present study is aimed to study the interest rate impact in the overall banking system of Pakistan, including both the Islamic and conventional banks. In this article both the short and long term impact of interest rate (KIBOR) on total deposits and profitability of the conventional and Islamic banks is studied. The study also focuses on studying the long and short run impact of the interest rate on total deposits as well as the profitability of both banking systems under study. The data is being analysed using the Panel Autoregressive Distributive lag test, and it spans the years December 2010 through December 2019. The study's conclusions demonstrate that, over time, KIBOR has a favourable and considerable impact on conventional banks' total deposits. Whereas, in the short run the impact of interest rate is also positive but is insignificant. From the statistical analysis of the collected data it is evident that KIBOR affects the return on assets (ROA) significantly and positively in long term maturity of conventional banks while the effect in the short term is positive but the results are not significant. While the interest rate shows a negative effect on the total deposits of the Islamic banks both in short and long term. However, the effect of interest rate on the return on assets (ROA) of Islamic banks has a positive relation of the Islamic banks in the long run and vice versa in the short term.
Keywords: KIBOR (interest rate), ROA profitability, Islamic banks, conventional bank, T Deposits.

Introduction
Financial institutions are crucial to the expansion of every nation's economy. One type of financial organization that serves as a financial intermediary is a bank. It brings together surplus and deficit units and offers its customers securities as a means of saving and investing (Moin, 2008). The economic stability of the country depends on the stability of the financial institutions. Between final borrowers and lenders, banks serve as a middleman. It carries out several tasks, including credit facilities, insurance, cash management, brokerage, and payment (Siraj & Pillai, 2012). In a Pakistani rural location, the first experimental local Islamic bank was established in the late 1950s. Nonetheless, Pakistan today has two financial systems in place: an Islamic banking system and a regular banking system. Conventional banks operate their activities based on interest. While Islamic banks operate activities according to the Islamic law (sharia), that is interest free banking. Customers in Pakistan can choose from a variety of products and services provided by

conventional and Islamic banks. Conventional banks provide their goods and services with an interest-behind, but Islamic banking functions on an interest-free system. As Islamic banking sectors expand, they are competing with traditional banking systems in terms of interest rates and client profit-sharing programs. The customer's motivation and investment decision are subsequently impacted. In Pakistan, 53 banks are active at the moment. Furthermore, Husain (2005) notes that during the worst political downturn, Pakistan's financial system was also influenced politically when choosing lenders and making director plans. There are now five fully functional Islamic banks functioning in Pakistan. The following banks are listed according to the year of establishment. The basic aim of Islamic banks is the avoidance of riba (interest) in order to stick to the teachings of Islam in practical. In contrast to the conventional banking system the money is considered only as a medium of exchange rather than as an asset of the bank for earning interest over it. Simply it is concluded that Islamic banks are working hard for promoting equity rather than relying on interest base approach (Siraj & Pillai, 2012). Few years back the struggle for making an interest free banking system in Pakistan started in 1977-1978, although the results appeared in January 2002 when the SBP worked on the transformation of financial systems through a commission (CTFS) to work on defining the sharia mode of financing.(SBP,2021). On 15 of September 2002 a department of Islamic banking was established in SBP, which is playing a vital role in the shape of Islamic banks operating all over the country following the procedures and regulations of Islamic Sharia'ah in operations (Moin, 2008).

Because consumer deposits are held in profit-sharing investment accounts, Islamic banks do not concentrate on their deposit accounts (PSIA). When a PSIA is offered without fees, the investment account holder's deposits are placed in the bank's pooled assets, which are made up of both the current account holders and the bank's shareholders' funds. Therefore, in this instance, the bank funds put in the pool asset are regarded as equivalent to holders of unconstrained PSIA for profit and loss sharing drives; nevertheless, the shareholders to receive a portion of the profit as compensation for the bank's role as asset manager. This payment, which is regarded as management fees, demonstrates an important source of revenue and profit. Islamic banks are expanding worldwide, not just in terms of their quantity but also in terms of the financial services they provide and the nations in which they operate (Bhala, 2013). The Department of Islamic Banking at SBP is putting a lot of effort into getting clients to choose Islamic banks first. Islamic banks are gradually drawing more and more customers. It draws clients not only from Muslim nations but also from developed non-Muslim economies such as China, Japan, America, and France (Ahmad and Khan, 2018).

Across 70 nations worldwide, there are approximately 300 financial institutions offering Islamic banking services. (Safiullah, 2010). The Islamic financial market is expected to grow at a rate of between 15% and 20% annually. In Pakistan, the Islamic banking system operates more than 200 branches. Hassan et al. (2012); Khan & Ahmad (2018). Islamic banks in Pakistan have demonstrated exceptional performance. The performance of the two types of banks has been compared by numerous researchers and writers worldwide. According to their findings, Islamic

banks outperform commercial banks in terms of asset quality and maintaining adequate capital (Jaffar & Manarvi, 2011). Over 160 Islamic financial institutions are active worldwide, according to Dar (2003). According to Yudistra (2003), Islamic financial goods are in high demand in Middle Eastern, developing, and established nations alike. Additionally, it has been demonstrated that Islamic banks are more dependable and efficient than traditional banks. Conventional and Islamic banks are similar in many aspects with some slight differences making Islamic banking more desirable option for the customers as the risk in comparing the Islamic financial system to the regular banking system it is more varied (Omar, Md. Noor, & MydinMeera 2010; UlHaqu & Mirakhor 1999; Mirakhor 1996). Islamic banks provide financial incentives as well, though they are not set in stone. Depositors in Islamic banks do not receive a set rate of return on their money, claim Samad & Chowdhury (2017). The primary characteristic of Islamic banking is its interest-free nature. (How, Verhoeven, & Karim, 2005). Another Study somehow similar to the existing research is also carried out by different researchers in different countries like Malaysia by Zainol (2010) and kedar (2009) and Temuz (2017) in Turkey while the focus of the existing study is on the total deposits and profitability of both the conventional and Islamic banking system taking into consideration the short- and long-term time period

Literature Reviews

Interest rate fluctuation (KIBOR) is a serious issue that has to be addressed. According to Aysan, Disli, Duygun, and Ozturk (2017), interest rate fluctuations have an impact on clients of both conventional and Islamic banks. Radiah & Yap Kok (2008) looked at how interest rate changes affected the demand for Islamic financing in Malaysia's dual financial system. Bai Bithamin Ajil (2009) also used the financial data from 1999 to 2007 of Malaysian banks, to examine the Islamic residential property financing reaction to the conventional residential property loan shocks. The authors find out a positive relation between both. They stated that it would suggest a substitution impact and went on to say that Islamic bank private property financing appears to respond to a shock in the base lending rate (BLR) more swiftly than conventional bank private property credits since it is differentiated from them. This would again shift toward the BBA financing offered by the Islamic bank at a fixed rate. When the base lending rate fluctuates, this will impact the client's decision to complete Islamic bank asset financing. They came to the conclusion that there is a risk of interest rate movement on Islamic banks in a dual financial system due to the fixed BBA instrument auxiliary flaw. The effect of innovation in the funds to be paid by the credit channel on the level of debt was examined by Bernanke and Blinder (1992). The authors emphasized that through the credit channel the reserves in the financial system increase steadily when the central bank raises interest rates in recognition of a legitimate strategy. Malaysian banks were examined by Sukmana & Kassim (2010), who discovered that deposits held by Islamic banks react negatively to an increase in financing costs. Low business risk for Islamic banks is suggested by this relationship. Investors in Islamic banks have the option to withdraw their funds in the event that the interest rate changes. According to Sukmana & Kassim (2010), Malaysia's cash-related transmission system is mostly dependent on Islamic banks.

According to Aysan, Disli, Duygun, and Ozturk (2017), as compared to traditional banks, the outcomes of deposits made into the Islamic banking system are astounding, as is the response from investors. In 2015, Charap conducted an evaluation of the bank divisions in Malaysia and Turkey and came to the conclusion that PLS returns and deposit rates of conventional financial institutions demonstrate long-term co integration; the costs of back pedalling on retail Islamic venture capital owed and conventional financial establishment loan fees are shared by all parties. The results also demonstrate a significant and quantitative relationship between the typical cash-related establishment deposit rate and the time-varying insecurity of PLS returns. Similarly, multivariate causality and paired tests demonstrate that variations in the traditional banking system's deposit rates determine changes in PLS returns. Charap (2010) used the data from January 1997 through August 2010 on a monthly basis. The analysis indicates that traditional financial institution deposits charges and PLS returns have historically shown integration, and that there is a significant correlation between the time differences between the conventional bank store expenses and PLS returns. Granger's typical budgetary foundation deposits are the cause of returns on PLS bills, as demonstrated by the multivariate causality and paired tests. Ito (2013) looked into the Malaysian banking sector and showed that in the country's deposit market, the Islamic rate of return and the conventional interest rate co-flow. He investigates the effects of a fierce competition between the Islamic and conventional deposit markets. Inquisitively, the author has found that the Islamic rate return has a more profound impact on short-term interest costs than the usual interest rate. In accordance with the venture work out, KIBOR rates are utilized as a benchmark by both Islamic and conventional banks to assess currency market instruments. If the cost of KIBOR is used to value Islamic commodities with short time horizons, then it is evident that conventional interest rates are strongly correlated with KIBOR and hence the Islamic rate of return.

This elucidates the reason behind the co-flow of traditional interest rates and Islamic rate of return. The dispersion over KLIBOR expenses, which are reliant on the credit value of the financial institutions, may be the cause of the more grounded relationships in some areas of the commercial center or the opposite. According to Ergeç and Arslan (2013), who concentrated on the Turkish banking system, the costs of conventional and Islamic banks contribute to the findings of the monitoring technique. Understanding how interest rates affect Islamic banks is essential to understanding these establishments' dedication to financial stability, designing money-related regulations, and developing appropriate risk management strategies that are pertinent to these businesses. The investigation focuses on the impact of interest rate shocks on deposits and credits held in conventional and Islamic banks, primarily pertaining to the period between December 2005 and July 2009. The focus is on the Vector Error Correction (VEC) process. Charap (2015) observed similar results after taking into account the banking frameworks of Malaysia and Turkey. Based on a brief overview of Islamic funds, it can be inferred that Islamic banks share many characteristics with conventional banks, such as executive boards, internal and

external review errors, minority share risk, unscrupulous advances, and risk management. Lee, Auzairy, Isa, and Choong (2017) concluded from their research study on Malaysian banking systems that there is no clear association between conventional and Islamic banking as the interest rate offered by the Islamic banks are always higher than that of the conventional banking system.

The researchers employed the Johansen cointegration, change breakdown comparative old system. Drive response efforts and acknowledge causality. Based on home base loan advance rates, the results indicate that there may no longer be a relationship between Islamic and conventional (traditional banking) commitment rates. A study by Samad and Chowdhury (2017) on Bangladeshi banks revealed a causal relationship between the the rate of return for contributors in Islamic banks and the annual deposit rate of conventional banks. The final result of the VEC demonstrates that the interest rate of the regular banks was significantly influenced by the Islamic banks' rate of return to investors (ISBKDR). Tekin, Atasoy, and Ertugrul (2017) report that they used the ARDL and DCC-GARCH models to study the relationship between regular deposit rates and profit-sharing rate of interest for the Turkish banking quarter. It was found that there is a unidirectional causal relationship between traditional and Islamic banking, with traditional banking driving Islamic banking. The researchers used customized models that included FMOLS, DOLS, and ARDL. The outcome of the ARDL adaption shows that there is a positive correlation between the profit share rates of Islamic banks and the costs of conventional deposits. The authors came to the conclusion that it is typical for conventional banks' exchange deposit rates to have an impact on Islamic banks' profit margins. Cevik & Charap(2017) conducted a research study keeping in view the deposits of both the islamic and conventional banks of turkey and Malaysia using monthly data from a time period of 1997 to 2010. The researcher came to know that the interest of both type of banking system moves together. Their analysis demonstrates the co-integration of the bank deposit rate and the typical profit and loss rate. The relationship between conventional and Islamic banking in Turkey was investigated by Yuksel (2017). The author came to the conclusion that there is no meaningful correlation between the interest rates of Turkey's twin banking systems. The conventional banks choose the interest charged on the advances without considering the rate of return offered by the Islamic banks.

Hakan Ergec & Gülümser Kaytanci (2014) conducted a study to find out the relationship of the interest rate of Islamic and conventional banks. The authors tried to find if the interest rate of Islamic banks in the region that is, Turkey affects the interest rate of conventional banks or either the Islamic banks have to develop additional instruments to mitigate the interest rate risk. The researchers looked at the association between the interest rate on time deposits in the area from 2002 to 2010 and the rate of return of Islamic banks using monthly data and the Granger Causality technique. Tekin (2017) claims that during the past 20 years, Islamic banking has achieved unquestionable excellence, Similarly, regular deposit rates have a direct impact on profit share rates, and when enterprises are running under optimal conditions, the dynamic connection between ordinary deposit rates and profit share rates is normally constant at 0.9. Etem Hakan & Bengül Gülümser (2011) studied the how interest rate affects interest rate on Islamic banks in their study the researchers investigated the effect of interest rate shocks on the deposits and credit lent by both the Islamic and conventional banks during December 2005 and July 2009using

Vector Error Connection method. The results of the study concluded that any variation in the financing cost not only affects the deposits and loans of conventional banks but also it does affect the same for Islamic banks. Bacha (2004) states that the basic idea behind the introduction of Islamic banking in Malaysia was to restructure the services and products provided by conventional banks. The successful implementation of this strategy has indicated that Malaysia currently has a genuinely dual banking system. Zainol and Kassim, (2010) conducted a research study in order to examine the effect of interest rate variation on the interest rate offered by both the conventional and Islamic banks on their deposits, their findings have extremely important implications for the Malaysian Islamic bank's risk management procedures. They said that conventional banks and Islamic banks coexist and coexist. In an effort to reduce the DCR, Van Greuning and Iqbal (2008) coordinated the enhancement of two standards within the banking industry: venture risk hold (IRR) and profit equalization save (per). Ismail and Shahimi (2006) found that when examining conduct PER behaviour, provision decisions must be based on the entire future profit or expected loss and that the results would no longer be unbiased regarding how financing is priced.

In order to investigate the relationship between the mudharabah and the deposit rates of traditional Malaysian banks, Latiff & Halid (2012) carried out research studies between the months of January 1996 and September 2004, as well as between October 2004 and June 2011. which refers to the application of a framework for determining the Islamic bank deposit rate and the profit adjustment reserve (PER). The importance of this discovery, which was obtained using the autoregressive distributed lagged (ARDL) approach, is that Islamic banks do not deviate from the benchmark of conventional rates in the subsequent time period when they employ a controlled PER as a relocation risk reducing procedure. They will most likely make money for potential financial execution. According to Khairul, Shamsher, and Shah (2014), Islamic Banking and Finance (IBF) follow Sharīfah guidelines. As a result, Islamic and conventional deposit rates shouldn't be comparable. According to the disclosures, the profit margins of Islamic banks are essentially correlated with the deposit rates of conventional banks. According to the study, improvements in interest rates for ordinary banks and bank associations have an independent impact on the profit rates of Islamic banks and fund organizations, rather than the other way around. A contemporary example is the inquiry on Islamic ideas that Erol and El-Bdour (1989) coordinated and submitted to the Style Business Office. Islamic requests are fully constructed taking into account the budgetary situation inside the financial state of the sharp programming program, whereas ultimately connected requests are developed entirely regarding the item within good great boundaries (the full created detail out of Islam gadget). The potential for Islamic accounting records and general open doors generally constitute a leading edge in the open door strategy for establishing those new financial assets and hacking linkages. There is a recently emergent, vibrant, and forward-thinking Islamic component throughout the United States and Islamic reserve money.

According to Abdul-Majid et al. (2010), Islamic banking is growing quickly everywhere, but primarily in Pakistan. At the same time, traditional banking is surprisingly declining in nations that support individual entrepreneurs and interest-based creators of entirely financial

systems. These developed countries currently attempt to incorporate financial emergencies by managing finance costs and bringing them down to zero, but there are certain challenges in achieving the intended outcomes. Abdul-Majid et al. (2010) conducted research to investigate the relationship between Pakistan's Islamic and conventional banks' levels of efficiency. In Pakistan, the history of conventional banks is noticeably more prosperous than that of Islamic banks. The findings indicate that regular banks have a higher TE than Islamic banks, however there is a significant rivalry between the two groups in CE and AE. The information reveals that, with the exception of 2008, there is no fundamental difference between the suggested efficacy rankings of conventional and Islamic banks. The aforementioned literature mostly addressed how interest rates affected the dual banking system. However, I believe that in the context of Pakistan, it is necessary to investigate how the KIBOR rate affected both the Islamic and conventional banking systems. To do this, a panel autoregressive distributive lag test along with a variety of variables that have not been previously studied will be used. The purpose of this study is to determine how interest rates (KIBOR) relate to the total deposits held by Islamic and conventional banks as well as the profitability of Islamic and conventional banks.

Hypothesis

After extensive study of the literature the following hypothesis are developed.

H 1: The interest rate and the total amount of deposits made by Islamic banks are significantly correlated.

H 2: The interest rate and the profitability of Islamic banks are significantly correlated.

H 3: Interest rates and the total deposits held by conventional banks are significantly correlated.

H 4: The profitability of traditional banks is closely linked to interest rates.

Methodology

The secondary data, quantitative in nature is used for conducting the current research study. The data is retrieved from the official websites of different banks including the website of state bank of Pakistan.

Sample of the Study

There are currently 30 conventional banks and 6 fully operational Islamic banks in Pakistan, according to the State Bank of Pakistan. Using Yuksel's (2017) random sampling technique, five Islamic banks and thirty conventional banks are chosen at random from the public to represent the sample in this study. The secondary data is obtained from annual financial statements of the selected banks from their official sites and from the website of State Bank of Pakistan for the time period of 2010 to 2019

Variables

This study uses five variables to analyze the effect of interest rates on total deposits held by conventional banks, total deposits held by Islamic banks, profitability of conventional banks, and profitability of Islamic banks.

The interest rate serves as an independent variable, whereas the other four are reliant on it.

Interest Rate (KIBOR)

It is the cost rate applied to a loan of money by a bank or other lender. It is essentially a rate that the bank charges its customers for holding money in an account. A rate calculated over a year is called an annual interest rate (Chong & Liu, 2009). Interest is an independent variable in this study that is used to determine how the other four variables are affected by it.

Total deposits of Islamic bank

The entire number of deposits is shown on the liabilities side of an Islamic bank's balance sheet. Depositors at Islamic banks have access to a variety of account options. for instance, a profit and loss account, a current account, a savings account, and accounts for fixed deposits. The sum of all the accounts' deposits is the total deposits (State Bank of Pakistan, 2019). This variable is a dependent variable in the current research study, and the data came from the annual reports of the chosen Islamic banks.

Total deposits of Conventional bank

The balance sheet of a traditional bank expresses the total deposits made by the bank. Traditional banks offer a variety of accounts to their clients and take in many forms of payment. The term "total deposits of a conventional bank" refers to the accumulation of all account deposits. The total of all conventional bank accounts, including savings, current, and fixed deposit accounts, is known as total deposits (State Bank of Pakistan, 2019). The dependent variable in the study was an existing variable, the data for which came from the yearly financial reports of the chosen conventional banks.

Profitability

ROA is the metric used in this study to quantify profitability. A financial ratio known as return on assets indicates the portion of profit a bank makes relative to its total resources. It is generally expressed as the division of total assets by net income. The sources of the total income and assets are, respectively, the income statement and balance sheet of the annual reports of the selected Islamic and conventional banks. According to Rukh, L., and ur Rehman, S. (2019), ROA is calculated as net income divided by total assets.

Model Specification

Keeping all else equal, an increase in interest rates is matched by an increase in deposits at Islamic banks. Zainol and Kassim, 2010). The total deposits of conventional and Islamic banks are examined in this study together with the short- and long-term effects of interest rates (KIBOR). "as well as the profitability of both types of banks using the panel autoregressive distributive lag model (ARDL). As a result, this study looks at five important variables: the interest rate (KIBOR), total deposits made by conventional and Islamic banks (TDCB and TDIB), profitability of Islamic banks (ROAIB), and profitability of conventional banks (ROACB). This is an illustration of the panel ADRL model study conducted by Karim et al.

Model:

$$\triangle y_{it} = \emptyset_t \left(y_{1,t-1} - \beta_i x_{1,t-1} \right) + \sum_{j=1}^{p-1} \lambda_{ij} \, y_{1,t-j} + \sum_{j=0}^{q-1} y_{ij} \, x_{1,t-j} + \mu_i + u_{it}$$

Analysis of Data and Interpretation

Using the ARDL approach, this section of the study offers detailed information regarding the relationships between the variables. The annual reports of the study's chosen banks provided the data that was picked for the current investigation. The results of the study are displayed in this section using the pooled mean group ARDL model, the Hausman test table, and their interpretation.

Analytical Findings on Panel Data Approximation

The Panel ARDL approach, which uses Mean group models in addition to Pooled mean group models, was used in this study. Because the panel data is brief, we must estimate the correlation between the study's chosen variable over both the short and long terms. The following is the estimation model's detail.

Table 1 Results of Total Deposits of Conventional Banks) (PMG) ARDL

	KIBOR	ECT	KIBOR
	(Long Run)	Short Run	
Coefficient	0.000025	-.0822545	279725
Standard error	0.00000126	.0292798	2979734
p-value	0.012	0.005	0.925
Hausman test 0.3968			

The current study examines the impact of the KIBOR rate on the total deposits of conventional banks using three distinct methods: the Mean Group (MG), Pooled Mean Group (PMG), and Dynamic Fixed Effect (DFE) estimate tools. The results of the Hausman Test, which is employed in the current study to choose between the mean group estimators and the pooled mean group, show the presence of an insignificant p-vale of 0.3968, indicating that the pooled mean group model is preferable to the mean group model. The pool mean group model should be used because the Hausman value is higher than the conventional significant value of 0.05. Overall, the results suggest that the pooled mean group is a more dependable and efficient estimator than the mean group and dynamic fixed effect models. By using a pooled mean group model, the study's results, which are displayed in the top table, reflect data from both long- and short-term estimation. Based on the Akaike information criterion (AIC), the model's ideal lag order is selected. The results of the above table show that, at the five per cent significance level, the rate of KIBOR has a significant

468

and favourable impact on the total deposit of conventional banks. The aforementioned data thus indicates that, over time, the KIBOR rate has a favourable effect on the total deposit of conventional banks. Additionally, the coefficient of coverage and the error correction term statistics demonstrate that the rate of adjustment is negative and considerable, that is approximately -.0822545. This indicates that there is no bias from omitted variables and further supports the existence of a long-term association. On the other hand, the study's findings also show that, when looking at conventional banks' total deposit in the short term, the KIBOR rate has a favourable but insignificant impact.

Table 2 Return on Asset of Conventional Banks (PMG) ARDL

	KIBOR	ECT	KIBOR
	(Long Run)	Short Run	
Coefficient	0.0008939	-0.8918311	-0.0010224
Standard error	0.000254	0.1215308	0.0002772
p-value	0.000	0.000	0.000
Hausman test 0.8021			

The study's findings, which are displayed in Table 2 above, represent data from both long- and short-term estimation using a pooled mean group model. AIC (Akaike information criteria) is used to determine the model's ideal lag order. The above table's results show that, at the five per cent significance level, the rate of KIBOR significantly and favourably affects conventional banks' return on assets. Thus, the aforementioned evidence indicates that the rate of KIBOR has a long-term favourable effect on conventional banks' return on assets. Additionally, the coefficient of coverage, which is approximately -0.8918311, indicates a substantial speed of adjustment as calculated by the error correction term figures, further supporting the existence of a long-term connection. On the other hand, the study's findings also show that, when looking at traditional banks' Return on Asset over the short term, the KIBOR rate has a favorable and significant impact.

Table 3 Total Deposit of Islamic Banks ARDL (PMG)

	KIBOR	ECT	KIBOR	
	(Long Run)	Short Run		
Coefficient	-7589733	0.1272775		-1393793
Standard error	4996534	0.055303		2344079
p-value	0.129	0.021		0.552
Hausman test 0.1044				

The results of the Hausman Test, which is used in the current study to choose between the pooled mean group and mean group estimators, are also revealed in this section of the study. The presence of an insignificant p-vale of 0.1044 indicates that the pooled mean group model is preferable to the mean group model. The pool mean group model should be used because the Hausman value

is higher than the conventional significant value of 0.05. Overall, the results suggest that the pooled mean group is a more dependable and efficient estimator than the mean group and dynamic fixed effect models. The study's findings, which are displayed in Table 3 above, represent data from both long- and short-term estimation using a pooled mean group model. AIC (Akaike information criteria) is used to determine the model's ideal lag order. The above table's results show that the rate of KIBOR has a little but unfavorable impact on Islamic banks' total deposit. Thus, the data above indicates that, over time, the KIBOR rate has a negative and negligible effect on the total deposits of Islamic banks. Similarly, the outcomes of the study also reveal that rate of KIBOR which has a negative and insignificant influence on Total deposit of Islamic banks in the analysis of the selected Islamic banks in short run.

Table 4 Results for ROAIB (Return on Asset of Islamic Banks) (PMG) ARDL

	KIBOR	ECT	KIBOR
	(Long Run)	Short Run	
Coefficient	8939	-0.9688764	-0.0003062
Standard error	0.000254	0.2067301	0.0003733
p-value	0.000	0.000	0.412
Hausman test 0.3601			

Assessment of Panel ARDL model results for ROAIB (Return on Asset of Islamic Banks)
The study's findings, which are shown in table 4.4 above, are based on data from both long- and short-term estimations using a pooled mean group model. AIC (Akaike information criteria) is used to determine the model's ideal lag order. The above table's results show that, at the five per cent significance level, the rate of KIBOR significantly and favourably influences the return on assets of Islamic banks. The above data depicts that interest rate that is KIBOR rate in the long run shows a direct relationship with ROA of Islamic banks. Moreover, the coefficient of coverage is approximately -0.9688, the value is negative and significant that support the idea that there is long term association as the absence of omitted variables is biased. From the analysis it is concluded that KIBOR rate has no significant impact on ROA of the Islamic banks.

Conclusion

The purpose of the current study is to look into how the rate of interest (KIBOR) affects the total deposits held by conventional and Islamic banks as well as their profitability. For this investigation, data covering a ten-year period, from 2010 to 2019, was collected. In the current study, ten banks were included in the sample, five of which were Islamic banks and five of which were conventional banks. Previous theoretical research that suggest there may be positive and negative, significant or not, associations between the study's chosen variables over the long and short terms. As a result, the research given by Akhtar et al. (2017), Haron and Ahmad (2000), Ali et al. (2012), and Minny and Görmüş (2017) served as inspiration for the current research. The

results of the current studies are likewise trustworthy when compared to the conclusions made by other writers in the literature. The present study utilized the Panel ARDL estimate technique, which also included a pooled mean group model, to investigate the research findings. As a result, the final study's findings demonstrate that KIBOR has a long-term, substantial, and favourable impact on traditional banks' overall deposit volume. On the other hand, in the near term, it has a slight but favourable impact. Additionally, the research that is currently available shows that the KIBOR rate influences conventional banks' return on assets both short- and long-term in a positive and significant way. On the other hand, in the short term, it has a slight but favourable impact. Additionally, the research that is currently available shows that the KIBOR rate influences conventional banks' return on assets in a positive and significant both in short- and long-term. The analysis also shows that, both over the long term and in the short term, the KIBOR rate has a negative and negligible impact on the total deposit of Islamic banks. The current research, however, indicates that while there is a short-term negative and minor correlation between KIBOR and Return on Assets for Islamic banks, there is a long-term positive and significant influence of KIBOR rate with Return on Asset of Islamic banks.

References

Archer, S., & Karim, R. A. A. (2006). On capital structure, risk sharing and capital adequacy in Islamic banks. *International Journal of Theoretical and Applied Finance*, 9(03), 269-280.

Aysan, A. F., Disli, M., Duygun, M., & Ozturk, H. (2017). Religiosity versus rationality: Depositor behaviour in Islamic and conventional banks. *Journal of Comparative Economics*.

Bacha, O. I. (2004). Dual banking systems and interest rate risk for Islamic banks. Cevik, S., & Charap, J. (2017). The behaviour of conventional and Islamic bank deposit returns in Malaysia and Turkey.

Chong, B. S., & Liu, M.-H. (2009). Islamic banking: interest-free or interest-based? *Pacific-Basin Finance Journal*, 17(1), 125-144.

Etem Hakan, E., & Bengül Gülümser, A. (2011). Impact of Interest Rates on Islamic and Conventional Banks: The Case of Turkey.

Granger, C. W. (1969). Investigating causal relations by econometric models and crossspectral methods. *Econometrica: Journal of the Econometric Society*, 424-438.

Hakan Ergec, E., & Gülümser Kaytanci, B. (2014). The causality between returns of interest-based banks and Islamic banks: the case of Turkey. *International Journal of Islamic and Middle Eastern Finance and Management*, 7(4), 443-456.

Haron, S., & Ahmad, N. (2000). The effects of conventional interest rates and rate of profit on funds deposited with Islamic banking system in Malaysia. *International Journal of Islamic Financial Services*, 1(4), 1-7.

Haron, S., & Shanmugam, B. (1995). The Effect of rates of profit on Islamic bank's deposit: a note. *Journal of Islamic Banking and Finance*, 12(2), 18-28.

Ismail, A. G., & Shahimi, S. (2006). Profit Equalization Researve Decisions: An Empirical

Analysis of Islamic Banks in Malaysia: working paper in Islamic Economics and Finance.

Johansen, S. (1988). Statistical analysis of cointegration vectors. *Journal of economic dynamics and control, 12*(2-3), 231-254.

Johansen, S., & Juselius, K. (1990). Maximum likelihood estimation and inference on cointegration—with applications to the demand for money. *Oxford Bulletin of Economics and statistics, 52*(2), 169-210.

Kasri, R., & Kassim, S. H. (2009). Empirical determinants of saving in the Islamic banks: Evidence from Indonesia.

Khan, T., & Ahmed, H. (2001). Risk Management: An Analysis of Issues in Islamic Financial Industry (Occasional Papers): The Islamic Research and Teaching Institute (IRTI).

Lee, S.-P., Auzairy, N. A., Isa, M., & Choong, C.-K. (2017). Dynamic relation between Islamic and conventional lending rates in Malaysia. *Afro-Asian Journal of Finance and Accounting, 7*(1), 65-83.

Samad, A., & Chowdhury, M. A. F. (2017). Islamic Banks' Return on Depositors and Conventional Banks' Deposit Interest: Is there Causality? Evidence of Causality from Bangladesh. *International Journal of Economics and Financial Issues, 7*(5), 432-439.

Tekin, H., Atasoy, B., & Ertugrul, H. (2017). The Relationship between Conventional Deposit and Islamic Profit Share Rates: An Analysis of the Turkish Banking Sector.

Van Greuning, H., & Iqbal, Z. (2008). *Risk analysis for Islamic banks*: World Bank Publications.

Zainol, Z., & Kassim, S. (2010). An analysis of Islamic banks' exposure to rate of return risk. *Journal of Economic Cooperation and Development, 31*(1), 59-84.

Abdul-Majid, M., Saal, D. S., & Battisti, G. (2010). Efficiency in Islamic and conventional banking: An international comparison. *Journal of Productivity Analysis, 34*(1), 25–43. https://doi.org/10.1007/s11123-009-0165-3

Ahmad, N. (1998). THE EFFECTS OF CONVENTIONAL INTEREST RATES AND RATE OF PROFIT ON FUNDS DEPOSITED WITH ISLAMIC BANKING SYSTEM IN, *1*(4).

Bhala, R. (2013). Overview of Islamic Finance. *Handbook of Key Global Financial Markets, Institutions and Infrastructure*, 459–473. https://doi.org/10.1016/B978-0-12397873-8.00039-6

Charap, J. (2015). The Behavior of Conventional and Islamic Bank Deposit Returns in Malaysia and Turkey. *International Journal of Economics and Financial Issues, 5*(1), 111–124. https://doi.org/10.5089/9781455293704.001

Erol, C., & El-Bdour, R. (1989). Attitudes, Behaviour, and Patronage Factors of Bank Customers towards Islamic Banks. *International Journal of Bank Marketing, 7*(6), 31–37. https://doi.org/10.1108/02652328910132060.FederalFundsRate-MoionetaryChannels-Bernakeblinder.pdf. (n.d.).

Hassan, M. T., Ahmed, M., Imran, M., Naeem, A., Waheed, M., & Ahmed, S. (2012). Customer Perception Regarding Car Loans in Islamic and Conventional Banking. *International Journal of Learning and Development*, *2*(6), 174–185. https://doi.org/10.5296/ijld.v2i6.2859

How, J. C. Y., Karim, M. A., & Verhoeven, P. (2005). Islamic financing and bank risks: The case of Malaysia. *Thunderbird International Business Review*, *47*(1), 75–94. https://doi.org/10.1002/tie.20041

Husain, I. (2005). Banking Sector Reforms in Pakistan: *The Business People's Magazine*, (January 2005), 1–17.

Ito, T. (2013). Islamic rates of return and conventional interest rates in the Malaysian deposit market. *International Journal of Islamic and Middle Eastern Finance and Management*, *6*(4), 290–303. https://doi.org/10.1108/IMEFM-11-2012-0113

Jaffar, M., & Manarvi, I. (2011). Performance evaluation of Islamic and Conventional Banks in Pakistan. *Global Journal of Management and Business Research*, *11*(1), 213–220. https://doi.org/10.5829/idosi.wasj.2012.20.02.2321

Karbhari, Y., Naser, K., & Shahin, Z. (2004). Problems and challenges facing the islamic banking system in the west: The case of the UK. *Thunderbird International Business Review*, *46*(5), 521–543. https://doi.org/10.1002/tie.20023

Khan, T., & Ahmad, W. (2018). An Investigation of the Performance of Islamic and Interest Based Banking Evidence from Pakistan, *9*(1), 81–112. https://doi.org/10.1515/hjbpa-2018-0007

Latiff, R. A., & Halid, N. (2012). The mudharabah deposit rate behaviour in relation to the conventional deposit rate. *Jurnal Pengurusan*, *36*(2012), 59–68.

Moin, M. S. (2008). Performance of Islamic Banking and Conventional Banking in Pakistan. *University of Scovde*, 1–47. Retrieved from http://www.divaportal.org/smash/get/diva2:113713/FULLTEXT01

Safiullah, M. (2010). Superiority of Conventional Banks & Islamic Banks of Bangladesh: A Comparative Study. *International Journal of Economics and Finance*, *2*(3), 199–208. https://doi.org/10.5539/ijef.v2n3p199

Siraj, K. K., & Pillai, P. S. (2012).Comparative Study on Performance of Islamic Banks and Conventional Banks in GCC Region. *Journal of Applied Finance & Banking*, *2*(3), 123–161.

State Bank of Pakistan. (2017). Islamic Banking Bulletin June-2017. *Islamic Banking Department State Bank of Pakistan*, (June), 23. Retrieved from http://www.sbp.org.pk/ibd/bulletin/2017/Jun.pdf

Sukmana, R., & Kassim, S. H. (2010). Roles of the Islamic banks in the monetary transmission process in Malaysia. *International Journal of Islamic and Middle Eastern Finance and Management*, *3*(1), 7–19. https://doi.org/10.1108/17538391011033834

Thorsten, Beck; Asli, Demirguc-Kunt & Ourda, M. (2013). Islamic Vs. Conventional

Banking: Business Model, Efficiency and Stability Islamic vs. Conventional Banking Business Model, Efficiency and Stability. *Journal of Banking & Finance*, *37*(October), 433–447. https://doi.org/10.1016/j.jbankfin.2012.09.016

Yudistra, D. (2003). Efficiency in Islamic Banking: An Empirical Analysis of 18 Banks. *Islamic Financial Architecture - Risk Management and Financial Stability*, *44*(0), 479–496. https://doi.org/10.1080/09720529.2013.821361

Yuksel, S. (2017). The causality between returns of interest-based banks and Islamic banks: the case of Turkey. *International Journal of Islamic and Middle Eastern Finance and Management*, *10*(4), 519–535. https://doi.org/10.1108/IMEFM-12-2013-0133

Anuar, Khairul and Mohamad, Shamsher and Shah, Mohamed (2014). Are Deposit and Investment Accounts in Islamic Banks in Malaysia Interest-Free? Journal of King Abdulaziz University: Islamic Economics, Vol. 27, No. 2, 2014.

Mirakhor, A. (1996). Cost of capital and investment in a noninterest economy. Islamic Economic Studies 4(1): 35-47