

Customer Patronization differences and its effect on Islamic Banking Profitability

Shakeel Riaz

Ph.D. Scholar – Islamic Banking and Finance

University of Management and Technology

CII Johar Town Lahore, Pakistan

Email: riaz.shakeel@yahoo.com(Corresponding author)

Talat Hussain

Dean Institute of Islamic Banking

University of Management and Technology

CII Johar Town Lahore Pakistan.

Email: talat.hussan@umt.edu.pk

Abstract

Introduction and Background: Financial intermediation is a proven function of the banking sector which advocates its growth-promoting role. But Islamic banks cover an extra mile by sharing risk and synchronizing the income of the rich and the poor. But to function smoothly, the services sector like Islamic banks must ensure that their clients/customers are patronizing them with a higher degree of engagement. A most important source of patronizing is the deposits that customers are keeping in their accounts with Islamic banks. In terms of practice, there are two types of patronizing customers. First, who places their deposits in the current account, and second who places their deposits in the saving accounts. Both of them have different expectations from the services extended by Islamic banks.

Objective: The objective set by this study is to empirically evaluate whether changes in the current and saving account patronization have a role to play in Islamic banking profitability. And to determine how banks need to manage their deposit structure in order to increase the odds of profits.

Design/methodology/approach: This quantitative study is based on a deductive approach and will collect the data from audited financial statements of Islamic banks for the time period from 2008 to 2018.

Findings: It is expected that this study will provide the breakdown of the share of current and saving deposits for the Islamic banks, which provides the profit promoting and profit undermining shares. This breakdown will be instrumental for the policymakers to lay down a framework in managing the share of current and saving deposits in their favor.

Value: Previous studies have been nosedive in providing a country-level comparison of different types of deposit to profitability.

Paper Type: Research Paper

Keywords: Diminishing Returns to Scale, Returns to Asset, Full-Fledged Islamic Banks

1. Introduction

It is evident that countries that have a larger financial system tend to build up more strong economic development. Banking is the backbone of any economy as it plays an intermediary role, provides funds for, private sectors as well as government, and ultimately contribute to the economy [1]. It is considered as the main pillar of any economy. [2][3] stated that there is a relatively proven correlation between the banking sector and the economic growth of any country. There are main streams of the banks one is the asset side, and the other one is the liability side. For a stronger asset side, banks need to strengthen their liability side. For stronger liability side banks need low-cost inflow or deposit instead of recouring to shareholders equity. Deposits transmit the benefit to the organization and the economy in three dimensions. First of all, it regulates the liquidity problem, second, it brings new avenues for investment, and lastly, it supports the assets side by assisting the businesses with capital much needed by the banks for expansion. Moreover, the position of the deposits of any Islamic bank depicts the patronization level of the public or its customer to its bank [4].

Islamic banking denotes the system of banking where banking activities are persistently in-line with shariah rulings. The Islamic banking system is based upon shariah rulings which is derived from the Holy Quran and the life of the Holy Prophet (PBUH) called Sunnah. Fiqh-ul-Muamlat known as a law of commerce caters the issues like social justice, equity, and fair dealing in all business transactions. It also covers the promotion of entrepreneurship and protection of four P's and sanctity of contractual obligation [2]. The Quran, through its ruling, prohibits interest usury and permits to earn profit or trade (Gerrad & Cunningham, 1997). One of the keys and main differences or problems with the conventional bank is interest, as Allah has prohibited interest in Quran e Karim in Surah Baqra Ayat No 275: ***But Allah has permitted trade and has forbidden interest***".

Conventional banking treats money as their asset, they contemplate it, as a commodity, while Islamic banking places money just as a medium of exchange. In Islamic banking third difference is based on the relationship. In conventional banking, customer and bank relation are of debtor and creditor while, in Islamic banking, the relation may change and vary from time to time and according to contract like Mudarib and Rub ul mal in Mudarbah contract, seller and buyer in Murabaha contract, lessee and lessor in Ijarah contract, Agent and principal in fee-based contract in Wakalah contract. Another difference is, conventional banking transfers the risk and enjoys the benefits while Islamic banking shares the risk. As it is indicated or based upon the legal maxim i.e. Revenues goes with liability.

1.1. Modes of Deposits in Islamic and conventional banks

To cater to the needs of the customer bank serves different products on the deposit side. To serve the mere safekeeping with maximum flexibility with withdrawal and deposit facility. Bank offers demand deposits to the customers. To cater to the need of the customer, principals with some return with the liberty of easy deposit and withdrawal banks offer general saving accounts. While for constant income for a specific period banks offers time deposits. Returns in all ruminations-based accounts are interest-based and well predicted by conventional banks[5].

On the other hand, Islamic banking primarily depends upon Qard or guarantee, custody, and Mudarbah based contract for current and saving accounts. The current account is a fundamentally non-profit bearing account. The customer has instant access to the money and can withdraw any time and any amount of money. Mudarbah is a contract between two parties, where one party the capital provider (Rabb ul mal) delivers the capital to the other party, the plutocrat (Mudarib) to commence the real economic activity or business. The capital provider is not allowed to play a role in the management of the funds or the particular business. The plutocrat becomes the trustee (Amin) for the capital provided by the capital provider. Profit is distributed on the principle of a pre-agreed profit sharing ratio between the fund provider and fund manager. Profit belongs to the capital provider due to its capital and profit to the fund manager due to its contribution to managing an enterprise[4]

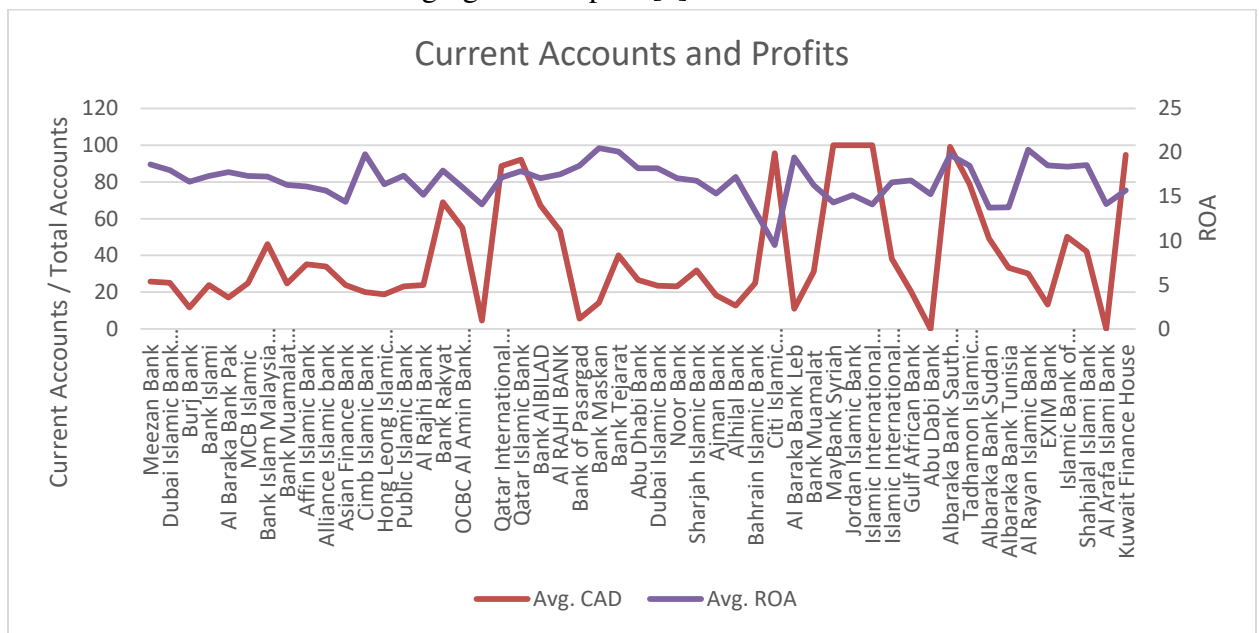


Figure 1: Bank wise incidence of Current Accounts and Profits

Source: Authors Self Calculation

In figure No 1, showcases the bank-wisecomparison between current to total deposit and profitability. Here we can see that for some cases high current deposit has high profits while in some cases high deposit has low profits. This shows that the current account does lead to profit

every time so there is a need to explore the association between types of patronization and profitability.

Considering all the aforementioned probing differences, it is very challenging to attract deposits in Islamic banking with varying rates of return. Under the conventional system, total risk is born by the bank and total reward belongs to it after compensating the depositors at a fixed rate. While in the Islamic system risk and reward both are communal with depositors. Customer patronization brings expectations to the customer's mind for its concern institute. Expectations from the customers' side create demand. Demand contains its major variable price and market condition. Pricing is the key factor in customer patronization to Islamic banks. Pricing is the synonyms of the rate of return. The rate of return, product and services, and reputation in the market of the banks influence the customer to patronize the particular bank. The reward of depositors is associated with outcomes of investments made by Islamic banks[6].

Conventional banking due to fix rate of return can manage their cost of deposit as they can predict and plan their deposit and profits while Islamic banking profits are unpredictable due to the nature of their contract and Islamic banking is more delicate in comparison to conventional banking. So unpredictability in the rate of return and management in cost of deposit craft the research gap to explore these avenues. Due to such alluring nature of Islamic banking, it is very delicate to the capriciousness in deposit and withdrawal rates. In such stimulating circumstances, Islamic banks have to foreknow how changes in Banking traits, external economic traits, and efficiency of the banks hit the deposits and its inflows, which is the lifeline of the Islamic banking sector.

1.2.Objective

The objectives set by this study are to empirically evaluate and track out the changes in current and saving account patterns. After spotting the changes in the pattern the changed implication and operation will be evaluated. Moreover, whether the current and saving account patronization have a role to play in the Islamic banking profitability. Furthermore, it is to empirically evaluate the level of profitability promotion of current as compared to saving account. Finally, it is to determine how banks need to manage their deposit structure in order to increase the odds of profits. The model will be tested using macroeconomic indicators and banking traits from full-fledged Islamic banks of the world.

1.3.Research Question

Q1 Is there any difference between current and saving deposit effects in terms of profitability on the Islamic banks of the world?

Q 2 What proportion of the current account is profit promoting as compare to the saving account?

The model will be tested using macroeconomic indicators and banking traits from full-fledged Islamic banks of the world.

To proceed further study will be engaged in a different section in section-2 literature will be reviewed. In section -3 a theoretical model will be built, in section-4 data source, model, and estimation procedure will be under discussion. Section-5 will be comprised of an estimated result

and discussion. Lastly, in section-6 finding concluding remarks, and policy implications will be discussed.

2. Literature Review

In this section, we will review the literature that has examined the profitability of banking worldwide with the aim of converging on the most imperative profitability variable recognized in prior writings.

The profitability determinants of Islamic banks are mostly studied in two main groups i.e. banking traits and economic indicators to cater the studies according to the need. The internal factors consist of those factors which are within the control of the banks. The assets side of the banks generally has a positive association with the profitability while liability items have a negative association with the profitability of the banks [7].

Divergent to the assets side, in the liability side, deposits are fictional to be considered to have a significant impact on the profitability of the banks. Time and saving patronization have a negative association with profitability (Hegessted, 1977). While, [8] found a positive association between demand patronization and profitability.

[9] in his paper “concentration and other determinants of bank profitability in Europe, North America and Australia” study the performance of the Banks in the region of Europe, North America, and Australia, statements of 90 banks from 1972 to 1981 were taken. In internal factors, fund management capital ratio, liquidity ratio, and expense management. For external factors interest rate and government, ownership was taken to see the impact of internal and external factors on profitability. The result showed that money supply has a significant positive relationship with profitability ratios. [10] in his paper, “the determinants of the Tunisian deposit Banks performance”. They examined the determinants of the Tunisian banks' performance. The sample was taken of 11 banks for a period from 1980 to 1995. ROA and ROE were taken as performance proxies. As internal factors productivity, bank size, portfolio, and bank capitalization were taken, and as external factors, stock exchange rate was taken as an external factor. The results showed that labor and capital productivity improves the bank performance.

[11] in his paper “The determinants of the Tunisian banking industry Profitability: Panel Evidence” the data was taken for the Tunisian banking industry from 1980 to 2000. Net interest margin, bank size, overhead was taken as bank characteristics. The inflation rate and the gross domestic product were taken as an external factor and ROA and ROE were taken as a proxy for the performance measure. The result indicated that within a bank, the bank characteristics make a drastic impact on net interest margin and profitability. Secondly, the external factors have no impact on the bank's interest margin and profitability. [12] in their paper “Factors influencing the profitability of domestic and foreign commercial banks in the European Union” the dependent variable Return on Average Asset was taken as a proxy for profitability. Equity, cost, liquidity, bank size variables were served as internal factors while, inflation and GDP as an external factor. The sample was a panel data set of 584 commercial bank operating in the 15 European Countries and the time period was 1995 to 2001. The results shed light on the lines that both internal and

external factors affect the profitability of the European Union commercial banks, regardless of their ownership.

Athanasoglou et al. (2008) in their paper "Bank specific, industry-specific and macroeconomic determinants of bank Profitability". Capital, credit risk, productivity growth, expense management, and bank size as bank-specific characteristics, industry-specific as concentration, and macroeconomic indicators as inflation were taken. The data was taken from Greek banks' profit and loss and accounts and from the balance sheet that covered 1985 to 2001. The result showed that all bank-specific characteristics, except bank size effect significantly profitability.

[14] In his paper "Factors affecting bank performance: Cases of Top Ten Biggest Government and Private Banks in Indonesia in 2004-2013" took the top ten Indonesian banks whose assets were at the top during the period 2004 to 2013. They examined the internal factor that affects the performance of Government and Private Banks of Indonesia. ROA was taken as a dependent variable and as a proxy for the bank performance. Independent variables, capital adequacy ratio, net interest margin, non-performing loans, and operating efficiency were taken. The results showed that operational efficiency and NIM and NPL affect the performance of the private banks and CAR effects for Government banks profitability. [15], in his paper "Financial Performance of The Best African Banks. A comparative Analysis through CAMEL rating" analyzed only 7 banks of Africa for the period of 2012 to 2014 for the financial performance. The result showed that according to CAMEL rating all banks were aggregatedly rated as fair.

Emirates (1996) is one of the earlier studies on the profitability of the bank. In his paper "Competition and other external determinants of the profitability of Islamic banks," he examined the impact of competition and external factors i.e., Market share, CPI, Money Supply, and Size on Islamic bank's profitability. The data was taken from 14 Islamic banks for the period from 1982 to 1994. The result suggested that Islamic banks which operated other than monopolistic market earned more in a competitive market, and it was also found that profit and loss sharing basis were more beneficial for both customer and banks. [17]: in their article titled "Risk and Profitability Measures in Islamic Banks: The Case of two Sudanese banks." They investigated to analyze the size of the bank concerning the performance of the bank. The data was taken from two Sudanese banks, and the results showed that the size and performance of the bank are significant.

Gorus (2017) investigated the banks of Turkey, Siddik et al. (2017) studied the commercial banks of the Bangladesh, Ramadan et al. (2011) investigated the Jordanian Islamic banks, the large book value of equity to total asset ratio 'CAR' and investment to total deposit ratio, management efficiency lead to more return on assets and more profitability in Jordanian banks. [21] studied the Islamic banks of Pakistan from 2006 result showed that the gearing ratio and capital adequacy ratio has a positive relation.

Bashir (2003) in their research study, namely "Determinants of Profitability in Islamic banks: Some evidence from the Middle East." They analyzed how a bank's internal characteristics and external factors affect the performance of the banks. The data used in this

study was taken from 14 banks from eight Islamic countries from 1993 to 1998. The dependent variable was ROA, ROE, and Profit before taxes and as well the proxies for profitability while, Equity, Ratio of PLS, the ratio of Non-interest earnings, the ratio of overhead, ratio of total liabilities to total Assets were presented as internal factors and real GDP and annual inflation rate were set for external variable. The study showed the results in conformance with the previous studies i.e. internal and external factors impact the profitability of the banks. [23], in his working paper series 2 titled “Determinants of Islamic bank profitability” has examined the factors that contribute to the profitability of the banks. As they discussed the internal factors like limited total expenditure, funds invested in Islamic securities and the percent of profit-sharing ratio and for external factors market share, interest rates and bank size. The study established empirical result that all three sources of funds were positively significant with profitability of the bank.

2.1. Research Gap

Most of the previous studies like (Naceure, 2003; Olweny & Shipho, 2011; Gul, Irshad, & Zaman, 2011; Javaid, et al., 2011; Nacur & Goaid, 2001) primarily fixated on overall banking traits and external determinants of the profitability but have botched of shedding light on the line which, empirically evaluate whether changes in the current and saving account patronization have a role to play in the Islamic banking profitability. It indicates one of the major components of the capital providing side to Islamic banks i.e. customer deposits, [24] which is the main feature of our study. This factor incorporated explicitly in analysis to examine the contribution of deposit to Islamic banks profitability. There is a dearth of studies who worked on its subtype. Moreover, other studies have worked on its liner form. But we are going to conduct research on its quadratic angle (non-linear). The need of the hour is to find out the intercepting phase of the deposit and its contribution to the profitability of the Islamic banks.

3. Theoretical Model

The core purpose of every business entity is to earn profit with all other secondary goals. Islamic banking is also a financial institution alongside all its Islamic duties and traits. While discussing the source of funds, both Islamic and conventional banks very much depend upon the money of the depositors. As per the Keynesian approach to the demand for money (Miskin, 2007). There are three motives behind the story of public usage of money. First is transaction demand for money, second is precautionary demand for money, and the third is speculative demand for money. Transaction demand for money people hold money for day-to-day usage of their current obligations. In the precautionary stage after the meeting, the day-to-day obligation people hold money for some unforeseen circumstances at the individual level and business level but at the same time, people want some earning or profit. On the third stage of Keynesian demand for money theory i.e. Speculative demand for money individual and businessman after fulfilling the current needs and saving for unforeseen circumstances put their idle funds) for investment for future gain. To cooperate with the depositors need Islamic banks customized the deposit accounts like for transactional mode, current accounts cater to the needs for meeting the current

obligations. Saving accounts cater to the needs of the savers and meet their short-term obligations, while, for speculative demand of the depositors' banks provide time deposit accounts (Sriram, 1999).

Hence according to this the clients who patronize the Islamic banks via current account and saving account have different expectations for the banks. If Islamic banks want to strengthen patronization then they have to provide the needs to their clients. According to the theory of money demand, the current account clients' needs ease of transaction and the saving account client needs the returns from their deposits. But the issue is not that simple banks keep both of these sources of funds in a single pool for investment purposes. For the case of saving accounts, the treasury knows that this amount is tied to the bank for a longer time period though it is a bit expensive. This amount can be invested in long-term investment to earn higher profits. While though the current account deposits are cost-free, but their ease of withdrawal makes it difficult for the treasury to manage them. Hence, they prefer it to be invested in short-term investments.

As discussed earlier, many studies have been indulged on the financing or assets side but very few studies investigated the liability side of the Islamic banks internationally, especially on their subtypes or quadratic specification. A deposit is the lifeline of any banking sector. Deposit patronization leads to expectation i.e., maybe in the shape of product line range, excellence in services perception of the bank, or rate of return on the customers' deposit.

In figure 2 the foundation has discussed the assumptions. Here this model proposes that the proportion of current or saving accounts do not have a linear effect on the profitability of the bank. Let's consider the case of current accounts when the bank has 100% deposits in the current account. Then the patronization composition will constitute clients who are there just for transaction facilitation. Then the bank will have to face a withdrawal risk which will force them to look for short-term investments. Because of this, there will be a high reserve account which will lead to a low return on investment as the bank has parked its investment in short-term ventures. While if the bank has 0% deposits in the current account, then the composition of patronization will constitute clients who are savers expecting returns to their deposits. It would mean that banks have to share their profits leading to a higher cost of deposits.

All in all, when the bank is shifting from 0% current account to a higher ratio (i.e., 100%) it will tend to increase profits as the cost of deposits is falling. But after a certain share of current account deposits (i.e. $k\%$ of the current account to saving account), any further increase in the current account will increase the cost of withdrawal risk more than the benefit of falling cost of deposit. Hence this shows that the current account is expected to follow an inverted U-shaped relationship with the profitability, while the opposite (U-shaped) will be the case of saving accounts to the current account ratio.

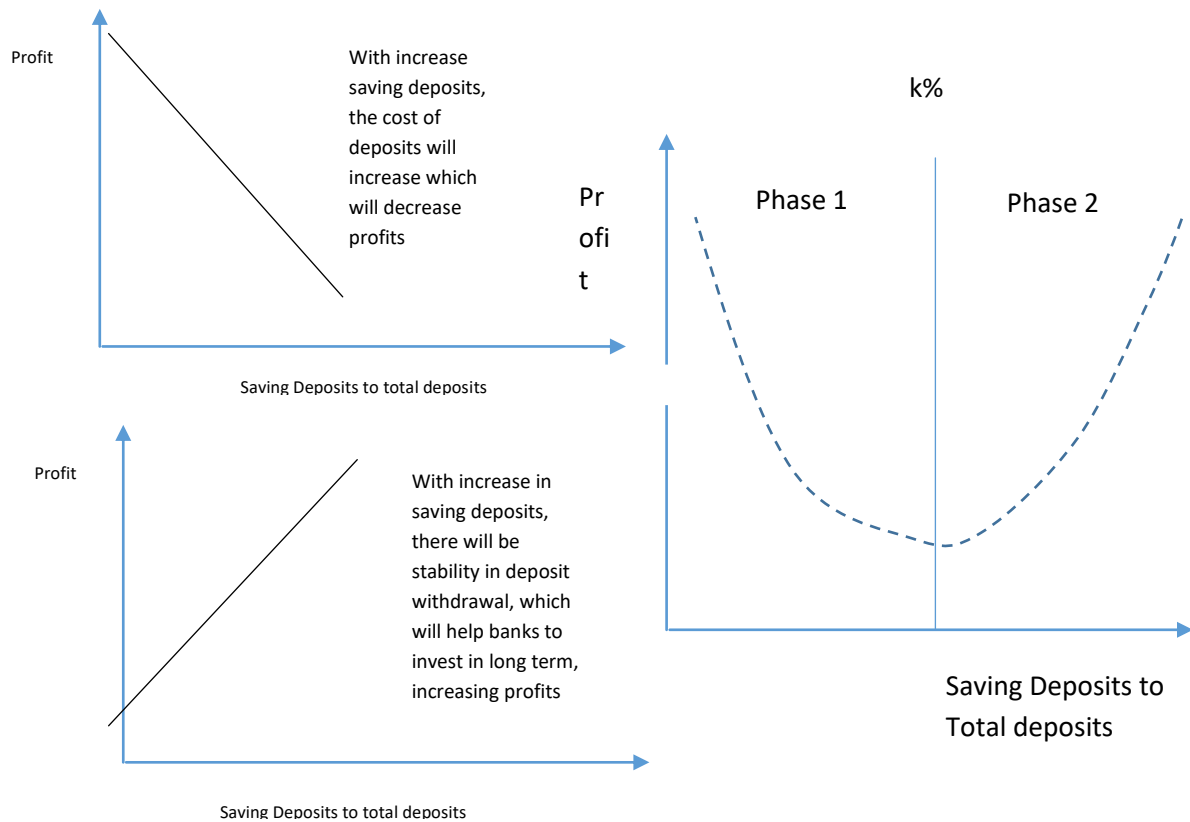


Figure 2: theoretical model diagram

4. Methodology

4.1. Variable and data sources

The above discussion shows that there is a link between performance and the deposit in the presence of banking traits and external economic indicators. To fulfill the objective of this paper we have taken Return on Assets(ROA), Log of total assets as a bank (SIZE), and for an external factor of economic indicator annual gross domestic product taken as (GDP) money market as an indicator of interest rate.

Table 1

Construction and Source of Variables

Variable	Method	Source
ROA	Net Income/Total Asset	Annual Reports
CATD	Current Account to Total Accounts	Annual Reports
SATD	Saving Account to Total Accounts	Annual Reports
Banks size	Logarithm Of Total Assets	Annual Reports
Admin Expenses	Admin Expenses	Annual Reports

GDP	Annual Gross Domestic Product	WDI
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- **ROA** is calculated by dividing Net Income to Total Assets. In most of the studies ROA has been used for the measurement of the profitability of the firm and it is considered to be the most common indicator of the Profitability used in both Islamic and Conventional sectors of banking[25]. ROA compares income with total assets, it can be explained in two ways. First, it is the ability and efficiency of the management that how well they use the firm's assets in generating the operating profit, and secondly, it explains the total return accumulating to all capital providers, independent of the source of the capital[26].
- **Size** is taken to consider the fact that the larger the size of the bank the larger sphere of profitability will be enjoyed by the bank. It is the logarithm value of the total assets of the bank. The total assets of each bank are the proxy of the particular bank size. This variable is included in the study to testify that how significant the bank size is in profitability. [22] considered the bank size positively affects and reduces the operational risk that ultimately affects the profitability. [23] has also confirmed the positive relationship between bank size, interest rate, and inflation rate to conventional banks and the same was the case observed in Islamic banking side.
- **Admin expenses** denoted as expense management that how efficiently management is focusing on reducing the cost.(Guru et al.2002) finds in his study that efficient expense management was one of the most significant variables in presenting in high profitability. Bhatia, (Mahajan et al 2012) has also found a negative relationship between expense management profitability of the Indian banks.
- **GDP** is Gross Domestic Product, the total value of finished goods produced within the country annually. Basically, it is the size of the economy. The components of GDP comprises Personal Consumption, Business Investment, Government Spending, and Export minus Import [27] (Bashir 2003) and (Zeitun2012) and other several studies have reported the GDP as positively correlated with Islamic banking. Positive correlation illustrates the auspicious economic conditions in the specific sphere which craft opportunities for a better productive environment for the banking sector.

All the variables, symbols units, and their sources are sketched in Table 1. Variable are collected through different reliable sources like data for external indicators is collected from World Development indicator, data from the central bank of the respective countries and data for internal banking traits have been collected from Audited Annual reports. The data is collected from 2008 to 2018 based on the availability of indicators for 48 full-fledged Islamic banks of the world enlisted in the table.

4.2. Functional Form

As the variables have been defined by the above discussion the functional form of the model for the estimation of this study is as below.

$$ROA = \alpha + \beta_1 * CD + \beta_2 * SD + \beta_3 * BC + \beta_4 * EF + \varepsilon$$

$$ROA = \alpha + \beta_2 * \frac{CD}{TD} + \beta_2 * \frac{CD^2}{TD} + \beta_3 * BC + \beta_4 * EF + \varepsilon$$

$$ROA = \alpha + \beta_1 * \frac{SD}{TD} + \beta_2 * \frac{SD^2}{TD} + \beta_3 * BC + \beta_4 * EF + \varepsilon$$

Here ROA represents a proxy for the profitability, Return on Assets α is the sign of proportionate β is the sign of beta CD stands for Current Deposit and SD means Saving deposits, BC stands for Banking characteristics, banking traits or internal factor i.e. SIZE and EF stands for External factors or economic factors viz. GDP.

4.3. Estimation Approach

Since the data is varying across banks/countries and across time periods, both of these dimensions must be catered to have efficient estimation results. This calls for the use of panel data variants of regression models. The advantage of these models is that since there are two dimensions along which data can change, hence data is more dynamic, the results are more realistic and the sample is bigger as compared to other approaches (Gujarati, 2009).

For quantitative analysis, this study is using the data and its placement in terms of dependent and independent variables which are discussed above. As it was specified in the objectives that this study is exploring the impact of deposit on several banking performance indicators while controlling bank-specific and country-specific factors. This object will be operationalized using the regression analysis approach using the equation specifications provided in the previous section. Regression analysis assumes that variables are normal so we use the median method rather than the mean method. Quantile regression is a median regression method that provides reliable estimates when variables are not normal. Panel quantile regression is estimated in STATA (Canay, 2011).

5. Results and Discussions

5.1. Descriptive Statistics

Table 2

Variable name	Obs	Mean	Std. Dev	Prob (JB Test)
ROA	440	0.128	0.032	0.0000
CATD	415	5.214	22.20	0.0000
SATD	379	21.28	127.3	0.0000
LGDP	989	8.855	1.410	0.0000
LTA	462	16.90	2.206	0.0000

ADEXP	434	2.399	2.164	0.0000
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In the descriptive statistics table 2, there are two groups which divided into two different groups i.e. under dispersed and overdispersed group. The data that parades a variability that differs from expectation based on the model, overdispersion. If the observed variability exceeds the expectation and variability of data lower than the expectation called under dispersion. ROA, GDP, Bank Size, and Admin expenses under dispersed while Current Account and saving accounts are overdispersed. Under dispersed data reflects that variables are compact near to mean and the mean is a good representative of the data. On the other hand, overdispersed data signals that mean is not a good indicator of the data if the analysis based on the single mean value it may cause to hurt the reliability of the results. To wardoff this culpability we use a panel data method that calculates the mean for each bank. SK test is skewness Kurtosis test by Jarque and Bera (1980). This test is used for checking the normality of the variable. In above table 2 in the column of probability, all the values are less than 0.05 so none of the variables is normal. The abnormality of the variable indicates, pointed out by the skewness test that OLS (Ordinary least square) method will not be applied. This study will use the quantile regression which uses the median as a central tendency which is more representative when the data abnormal.

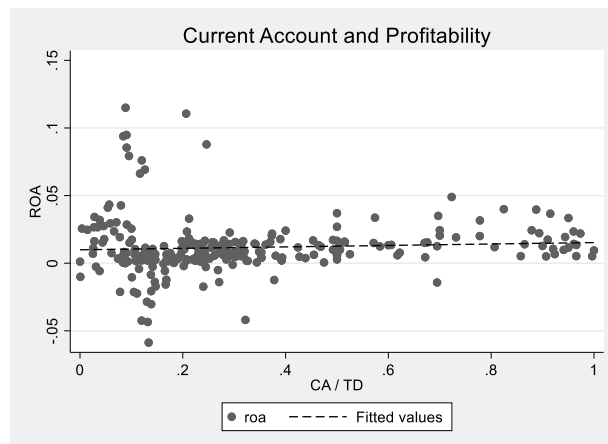


Figure 3 – Scatter plot of Profitability and deposits

Figure 3 representing the scatter plot of the current account and profitability. The graph shows that as the current account progresses profitability increases, so profitability is positively associated with the current account. Customers can demand it back at any time without giving any prior notice. As the contract behind the current account is qard, so no compensation is given on the depositor’s money to depositors. Islamic banks are at liberty to use this pool of funds without any cost of deposits.

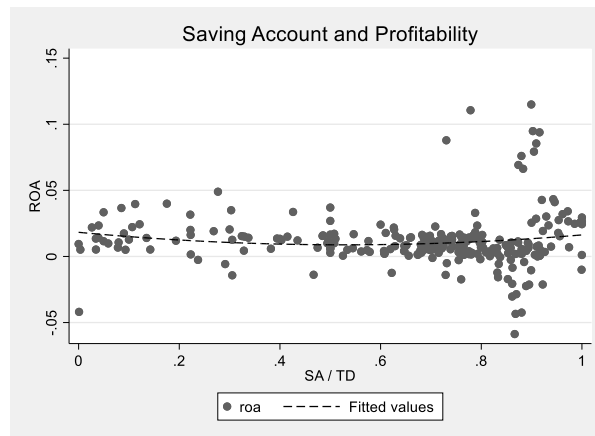


Figure 4 – Scatterplots of profitability and saving accounts

Figure 4 shows the U shape relationship between saving accounts and the profitability of Islamic banks. The graph shows that the banks which have very low saving accounts tend to have more profitability because on the other hand in deposit combination bank will be supported by current accounts deposit that assists in contributing in profitability and covers the other expense related operations. So banks profitability increases. But as it progresses to a modest level it may face the challenge of the cost of deposit, a bank has to pay profit on a saving account. Considering U Shape the banks which have the higher saving accounts may get the advantage of the vast pool of funds which they use for some more investment avenues to generate more profitability and with higher funds generated by saving pool bank also remain safe from quick and unexpected withdrawals and enjoys deposit retention.

5.2. Quantile Regression for Panel Data Model for Both Account

The sample consists of 290 banks-year and 48 banks. In the above table 3, 1% increase in size leads to a 0.198% increase in ROA. Since its P-value is less than 0.05 so it is significant, this corresponds that the banks which are larger in size generate more profit. [21] found the size significant with profitability. (Short 1979), (Genay 1999), (Dermiguc and Huizing 2000) has concluded that large-size banks are better to perform with respect to the profitability in comparison to the bank which is smaller in size. The more the firm is larger with their assets it contributes to the profitability It could be larger in branch network that facilitates the more customer all over the territory and increase the customer base that ultimately converts to profitability. This shift is also called economies of scale on the economic side the more the business size the huge amount of profit the particular entity will generate the profit.

Table 3: Panel Quantile Regression (Dependent Variable: ROA)

Variables	Coef.	Std.Err	Z	P > z
SATD	-0.001	0.000	-8.45	0.000
CATD	0.010	0.001	10.31	0.000
LTA	0.198	0.043	4.57	0.000

ADEXP	0.044	0.044	0.99	0.321
LGDP	0.293	0.244	12.00	0.000
Number of Obs.	290	Number	of 48	
		Groups.		

In this study, admin expenses do not affect ROA. This could be the reason that the bank only increases expense if at least the benefit is equal to cost. Or this refers to the good expense management of the management. There must be a benefit but they invested for further investment for profit that is why the expense canceled out the cost which is showing in results that are called optimization of expenses. Anyway, (Molyneux and Thornton 1992) in their study found a positive relationship which indicates the scenario that the more profit earned by the entity expensed out to high payroll which led to well-trained and productive humane capital which ultimately contribute to the profitability. Several studies have indicated that improved expense management results in an increase in profitability.

In table 3, the finding shows that a 1% increase in GDP per person increases ROA by 0.29%. That depicts the picture that the growth in the capacity of the person enhances real economic activities that trigger the transactions in the economy, which contribute to the profitability of the banks. (Al Khulaifi et al 1999) concluded that GDP is significant with the economic growth of the country. (Hamza and Khan 2014), (Ibrahim 2013) Khattab, Juliot and (Abid 2015) (Ghalfy and Khiyar 2012) all have conformed through their different studies on different banks with different countries that performance of the banking sector contribute to the real economic sector that ultimately refers to economic growth. So our study articulately promotes the previous studies.

In our study statistics shows that saving accounts are negatively associated with Islamic banks' profits. Here 1% increase in saving account will decrease in profitability by 0.002%. This shows that after a specific threshold increase in saving accounts will affect inversely the profitability of banks. Our study is confirming the previous study, (Alkassim 2005), which concluded that there is a negative relationship between deposit and profitability of Islamic banks. Alrashdan 2002 found a negative relationship between interest expense (cost of deposit) and a proxy of the profitability of the bank. Obeidat et al. (2013) evaluated the profitability of Jordanian bank and found a positive relationship between COD and profitability which he justified that Jordanian bank was not working under the pressure of fluctuation of the interest rate. So in our study, there may be the case of such circumstances that most of the countries are working under the pressure of the conventional interest or have set the interest rate as bench-mark. Saving accounts are remuneration based under the contract of Mudarbah in which the bank act as a fund manager and the customer retains its position as the capital provider and the bank being the fund manager has to pay the profit to the depositor. As saving accounts will increase the banks has to pay the return which increases the cost of the Deposit. As COD will increase it will hit the profitability of the entity.

In the case of the current account, the situation is reversed with profitability, with a 1% increase in current account profitability will increase .010%. The current account is positively associated with profitability. This particular variable in our study confirms the previous study of Smirlock (1985) he found a significant relationship between demand deposit and profitability. Janakiraman, Professor from Bangalore India, studied the Syndicate bank in the era of demonetization of currency notes and found that CASA deposit impacted positively on the profitability of the syndicate bank. As the current account is non-remunerative and the bank has to pay no cost on it to the depositors this results in no COD that ultimately contributes to the profitability of the banks. The opposite sign of both variables in the results viz. current and saving confirms that there is a different effect of current and saving deposit on the profitability of the Islamic banks which conforms to our research question.

5.3. Model of current account quadratic specification

As shown in table 4, a 1% increase in GDP per person increases ROA by 0.198%. The more the economy grows up the more business transaction will be taken place that will be a source for the increment in the profitability of the banks. Our study confirms the findings of the previous studies like Demetriades and Hussein (1996), Alkhazaleh (2017), and Abbas and Olanike (2015), which has interpreted that financial development positively significant with economic development.

Table 4: Panel Quantile Regression (Dependent Variable: ROA)

Variables	Coif.	Std.Err	Z	P > z
CATD	0.0164	0.002	7.01	0.000
CATD ²	-0.000	0.000	-5.29	0.000
LTA	0.006	0.020	0.32	0.750
ADEXP	0.132	0.006	21.48	0.000
LGDP	0.198	6.66	6.66	0.000
Number of Obs.	328	Number	of 51	
		Groups.		

Admin expense are positively associated with profit as a 1% change in admin expense increases the profitability by 0.132% this may refer to the case of increasing return to scale theory which portrays that return is more than the cost and also depicts the management of expense in a controlled manner as indicated in earlier literature.

The sign of the level of CATD is positively significant with profitability as we mentioned earlier these are non-profit bearing account and the bank has to pay nothing on it that ultimately contribute to the profitability but as we move on further to the square of the Current account deposit it is negatively associated with profitability of the Islamic banks, which conform u shape relationship between current account deposit and profitability. Obeidet et al. (2013) in their study in Jordanian bank found a significant negative relationship between total deposit to total assets against profitability which they indicated that the Jordanian bank might not able to invest the

funds in such good avenues or they might not have available the good tool for investment in the domestic market. Moreover, the Square of current account deposit may lead to an excess of deposit which no doubt increases the profitability but alongside the profitability, it may lead to generate a pool of idle funds. In other words, banks may not find a suitable investment avenue for this excess deposit. While, on the other hand, with the square of the current deposit bank may face the challenge of frequent withdrawal which can be catastrophic for bank management to anticipate their futuristic investment and liquidation matter.

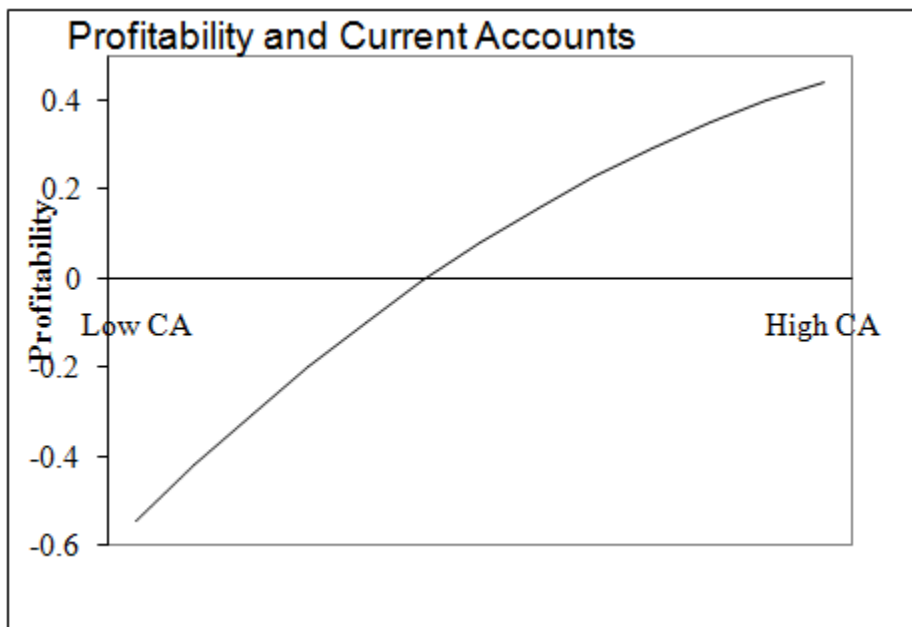


Figure 5: Non linear patten of current accounts

In figure 5 confirmation is being made of the quadratic model of the current account i.e. as the current will increase profitability will increase. But it can be seen in the graph that at some point in the stage curve is generating a bell shape that shows after a specific point current account will not hit profitability.

5.4. Model of saving account quadratic specification

Table 5: Panel Quantile Regression (Dependent Variable: ROA)

Variables	Coef.	Std.Err	Z	P > z
SATD	-0.011	0.004	-2.64	0.008
SATD ²	7.92	3.60	2.20	0.028
LTA	0.346	0.049	7.07	0.000
ADEXP	-0.167	0.080	-2.07	0.038

LGDP	0.323	0.131	2.47	0.014
Number of Obs.	306	Number of Groups.	50	

In table 5 of Saving Account Quadratic Regression, Admin expenses are significant at a negative level. This confirmed the previous study. The level variable SATD is negative and significant which predicts that in the start increase in saving account leads to a decrease in profitability by 0.01 but after some stage addition in saving account may lead to an increase in profitability as shadowed in the table by the square variable is SATD² which is positive and significant. This confirms the U shape hypothesis.

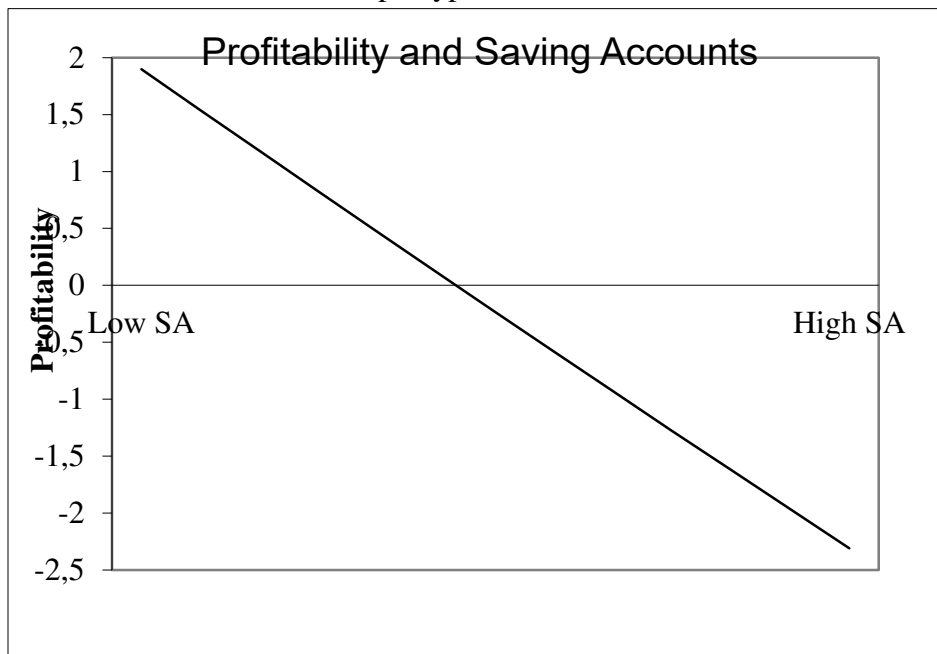


Figure 6 Linear pattern of saving accounts

In figure 6 confirm our studies analysis that low saving account will turn into low profitability but as will increase it will generate more profit. It is confirming the U shape hypothesis but the graph is not showing because in our data none of the banks having so high a saving account that it could create the U shape graph.

6. Conclusion

This study employed the most relevant banking traits and economic factors to recognize those factors that shape up the profitability of Islamic banks. As per studies reviewed, erstwhile studies have been failed to depict non-linear relationship and deeper insight of bifurcated patronization between customer patronization and profitability of Islamic banks which leads to frailer policy upshots for Islamic banks and the governing authorities. This study analyzed current and saving patronization in respect of the customer and bank perspective firstly and then ultimately effect of patronization on profitability of Islamic banks in two different dimensions i.e., linear and non-linear (quadratic) form.

This study selected 55 full-fledged Islamic banks of the world between 2008 and 2018. Two types of variable sets were used to proceed with this study viz. Banking traits and Economic factors. The data regarding banking traits taken from the audited annual financial statements of the concerned banks and the data regarding economic factors are taken from World Development Indicators for respective countries. With the blend of the banking traits and economic variables, this study used the Panel Quantile Regression estimation approach to control for non-normal variables.

The results unveiled in the case of linear form, current account deposits, bank size, and GDP are positively associated and significant in affecting the profitability of Islamic banks. While coefficient of saving a deposit is negative particularly shows that in the inception of the banks saving account hits the profitability as they are remuneration based and the cost of funds hits by the saving accounts. Moreover, admin expenses do not affect the profitability of Islamic banks.

Furthermore, in the quadratic case of the current account, the results clarify that the current account admin expenses and GDP are playing the role to the profitability while the square form of the current account is negatively associated with profitability. While in quadratic case of saving account square form of saving account bank size GDP crafting positive difference to the profitability. On the other hand, saving accounts is negatively affecting profitability. The negative coefficient of current account square form and saving account confirms the intercepting behavior of both current and saving account patronization. It is maybe the perception that the increased saving account may lead to higher cost of deposit as they are remuneration based and ultimately create a downward slope in profitability. But with Islamic banking perspective with the increase in saving accounts promotes partnership and real economic transaction that enhances trades that ultimately results in real economic activities and promotes goodwill of the bank and contribute to stabilizing the deposits in the banking systems. It further confirms that each bank has a different combination of their current and saving patronization according to their region and country.

6.1. Policy implications

This study provided three major implications i.e., the linear model implication for both current and saving account, the nonlinear model of current account deposits, and finally, the quadratic model for saving account deposits.

This study proved that current and saving accounts do not have a similar effect on the profitability of Islamic banks. The treasury and management need to apply possible measures to balance their capital structure to stabilize the profitability.

This study also proved that in the quadratic current account model the relationship is inverted U shape that suggests that heavy dependence upon the current account may cause of reduction in profitability. Because over-reliance on the current account may lead to withdrawal risk that could cause hindrance in projecting the long-term project. Management should build the efforts to use the tactics to convert the current account to a saving account or management may try to facilitate the customer in such an appropriate manner they could hold their money instead

of quick withdrawals. It may be a complimentary free locker facility, and free takaful facility, etc.

As we found from the quadratic model of saving account deposits the relationship of saving account is U shape. As discussed earlier in the conclusion of this study small amount of saving accounts will hurt but as they grew up it will up-lift the profitability of the banks and will promote the real image of Islamic banks. So if policymaker has to devise the long term strategy for banks they have to craft or build up abundant saving accounts that automatically promotes the real economic activities in the society that fulfills the clause of decentralization of wealth or it promotes the negation of concentration of wealth in few aristocrats.

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6.3.Authors Contribution

Both authors have equally contributed in preparing the manuscript.

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