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Determinants of Banks Profitability: A Comparative Study of Islamic Verses Non Islamic, Foreign Verses Local, and Public Verses Private Banks in Pakistan

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Abstract

This study examines the determinants of banks profitability in Pakistan. The main objectives of the study are to determine the factors that influence banks profitability in Pakistan and to make recommendations for management decision making and policy objectives. A panel data of 25 banks (commercial, Islamic, foreign and local banks) in Pakistan was analyzed over period of 2006-2015, using panel data regression method to estimate common, fixed and random effect regression models. The two key measures of profitability (dependent variables) analyzed in this study comprised of ROA and Return ROE. The bank-specific factors were incorporated into the regression models, were Credit risk, Expenses Management, Deposits to total assets, non-interest income and size. The results for the ROA model indicate that size and deposit to total assets of bank is positively significant to bank profitability while credit risk, expenses management and non interest income are negatively affect the profitability. Moreover the results of ROE model indicates that credit risk and NII are negatively significant and Size is positively significant with banks profitability. This study also indicates the comparison between Islamic verses non Islamic,

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Foreign verses local, and public verses private banks which shows there different results on banks profitability.

Keywords: Banks Profitability, Panel Data, Return on Asset, Return on Equity.

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Introduction

The financial institutions play an imperative role in economic development and the growth. The presence of bank financial institutions and non-bank financial institutions, supported by effective money and capital business sector keeps the financial system complete, while upgrading the overall development of the economy. The financial institutions play the role of financial intermediation by gathering and assembling assets to fund business and expansion the projects that are vital for economic progress. The proficient financial framework is an essential for justifiable financial intermediation prompting supportable private sector investment and the development of business enterprise. As such, an indulgent of determinants of the profitability of financial organizations, for example, the banks are fundamental and vital to the steadiness of the economy.

Banks is a decisive point to financial framework and plays a imperative part as control and helps development to the economic region. The exercises in a bank are lending funds to borrower which is that business firm by utilizing issuing securities, bonds and acquire cash from lender which is household by utilizing the ways of fund deposited in current account, saving accounts, or fixed deposit. In this course of action of lending and borrowing money, the interest rate is ascertain by paying lesser interest to lender in a certain rate and getting higher interest from borrower in order to ascertain a profitability intensity.

Other than financial and administrative factors, innovation has reformed banking process and reshaped the business. The E-commerce and internet banking were examples of innovation driven items that have in a broad sense changed the way banks and other financial services suppliers contended. The broad selection of condition of state-of-the-art technology in banking industry has without a doubt made the Pakistani banking industry progressively aggressive. The economic and administrative forces and also increased rivalry may influence bank performance absolutely or adversely. It can be contended that because of bank-particular factors like nature of administration, business scope and size of capital. The different banks are influenced with distinctive level of severity.

The different groups are occupied with bank profitability for different reason. The bank shareholders would need to know whether the estimation of their investments are made or wrecked. The investors excessively utilize present and past performance to

structure desire concerning future price of the bank's shares exchanged on the stock exchanged. The administration of the bank as trustee of the shareholders is assessed and repaid on the basis of how well their choices and arranging have contributed to development in assets and benefits of their banks.

The financial sector assumes a fundamental part in the financial improvement. The financial division in Pakistan includes Commercial Banks, Development Finance Institutions (Dfis), Microfinance Banks (Mfbs), Non-saving money Finance Companies (Nbfcs) Investment Banks, Discount Houses, Housing Finance Companies, Venture Capital Companies, Mutual Funds), Modarabas, Stock Exchange and Insurance Companies. Under the pervasive authoritative structure the supervisory obligations if there should be an occurrence of Banks, Development Finance Institutions (Dfis), and Micro finance Banks (Mfbs) falls inside lawful ambit of State Bank of Pakistan while the rest of the Financial institutions are checked by different authorities, for example, Securities and Exchange Commission and Controller of Insurance (State Bank of Pakistan, 2009).

The primary part of a financial system is to the stream of trusts from financial specialists to help money lenders. In the event that a budgetary framework is proficient, then it is productivity enhancements, expanding the volume of funds spilling out of speculators to borrowers, and enhanced eminence administrations for customers. The banking sector part assumes an essential financial part in the provision of financial intermediation and monetary speeding up the change of deposits into profitable venture.

The financial system is ruled by the conventional banks in Pakistan. The Structure of banking system has experienced huge changes in Pakistan after 1997 when the banking supervision and procedure line with worldwide preeminent performs. The privatization of public owned banks and continuous methodology brought to consolidation the progressions in possession, clear the configuration and deliberation in the banking segment.

In early days of Pakistan as another nation without assets it was troublesome for Pakistan to run it, managing an account framework promptly, so it was chosen that the Reserve Bank of India ought to keep on functioning in Pakistan until 30th September 1948, and Pakistan would take over the administration managing of communal debt and exchange control from Reserve Bank of India on first April, 1948. By 30th June 1948, the quantity of work places of scheduled banks in Pakistan declined from 487 to 195, on the grounds that enrolled banks exchanged from Pakistani domains to India. Around then there were 19 non Indian (remote banks) and just one Pakistani bank (Habib Bank). In 1st July 1948, of the aggregate bank deposits of Rs. 1.1081 billion apprehended in Pakistan, as much as 73% was held by foreign banks whose exercises were generally kept to outside exchange.

In the beginning eighteen months of the maneuver of State Bank of Pakistan, 51 new extensions were opened in both East and West Pakistan out of which 28 were Pakistani Banks ,12 were Indian Banks 4 were Exchange Banks, 7 were as of late organized NBP of which 6 were in East Pakistan. By December 1949, there were 35 scheduled banks in

Pakistan out of which 4 were Pakistani Banks, 23 were Indian Banks, 8 were Exchange banks.

Presently a-days, banks are presented to different inward and outside elements that impact their productivity. The inner aspects are those that a bank's management controls. These aspects comprise of bank size, credit risk, expenses management, Deposits and non-traditional actions or non interest income we also say it diversification. The outer aspects are those over which the management of the bank has no power. These factors commonly associated with the industry and macro-economic variables within the banks industry. These components banking improvement, securities exchange advancement and inflation.

The return on assets and return on equity have been widely used as a measure of profitability. The return on assets shows how efficiently a bank is managing assets worth it to generate income. The return on assets is income per unit asset, usually expressed as a percentage.

The credit risk administration is portrayed as recognizable proof, checking and control of risk emerging from the probability of default in loan repayments (Early, 1996; Coyle, 2000). Coyle (2000) acknowledge credit risk as adversities from the refusal or disappointment of credit customers to fork over the obliged trusts and on time. To proxy this variable uses the loan-loss provisions to loans ratio. Theory prescribes that stretched introduction to credit risk is usually joined by means of diminish firm profit and thus anticipate a negative association between return on asset, return on equity and credit risk. The bank size measure in this study is incorporated as independent variable, speaking to economies and diseconomies of degree related size. In a large portion of the literature, the aggregate resources of banks are utilized as an issue for bank size. Then again, since the aggregate resources deflate the dependent variable in the model (return on assets) would be fitting to seize the regular logarithm earlier than incorporating it in the model to be reliable with different connections. The Bank size demonstrates the quality of the bank in its benefits concerning their amount. It can be calculated by comparative offer of each one bank aggregate of the entire assets of all banks in an economy.

According to the different studies, the expenses management is insignificant as well. In order to shore up this testimonial (Kateb, 2004) communicated that the bank great expenses administration which could upgrade bank benefit is not the component that chose the bank bits of the offer and execution. This was demonstrated by the inspected of the structure accomplish performance (SCP) theory against the contending effective structure (ES) speculation. The aggregate sum of 20 Malaysian commercial banks above the period from 1989 to 1996 was incorporated in the exam by utilizing a vigorous estimation system. Along these lines, the control variables ratio of total operating expenditures to total assets (RTOE) has been utilized as a part of the exam to reflect the capacity of the banks to work at lower costs. Furthermore, the proportion of total loans and advances to total assets (TLTA) as an issue of risk component and the fraction of demand (current account) deposits to total deposits (RCDD) is to gauge the shabby wellspring of funds for the bank. Expense to-pay proportion is utilized as an issue of working proficiency. This seems to be supported by the empirical findings of Karkrah

and Ameyaw (2010), which revealed that the non- interest income is a key driver of commercial banks profitability in Ghana and there is a positive association among non-interest income and profitability in the Ghanaian banking sector.

In the advent of declining industry profit in an increasingly complex banking sector, it has become imperative that bank managers understand the variables that significantly relate to the profitability of their business. This is paramount considering the fact that banks play a critical role in the development of the economy. The factors that influence profitability are myriad in theory but one needs to conduct empirical study to know the exact aspects that influence the profitability of banks in Pakistan. The problem of the study therefore is to investigate some key determinants of profitability and the extent to which they impact on profitability in the banking sector of Pakistan. Some studies have already been done in this region but there concern is about only with internal determinants and or external determinants. However to investigate this issue in Pakistan I conduct this study by focusing on internal determinants and with comparison in between which group of banks are more effective positively or negatively. So this is the main purpose of this study.

The principle goal of the study was to examine the determinants of banks execution in Pakistan over the period 2006 to 2015. The research ought to help to draw strategy suggestions for industry change in the sub-regions. The study used both bank level elements to gauge performance.

In other words the target is to assess the effect of bank specific factors on the productivity of banks in Pakistan. This may give some western banks that are struggling an alternate strategy which will empower them to survive and make benefit. Numerous banks in the western nations are attempting to survive and to make benefit. Some have gotten tremendous bailout funds from the legislature yet stalling to survive and some excessively are putting high investment rate to draw in more capital. This study may offer these banks some answer for their difficulties by disentangling the riddle encompassing the survival and the productivity of the banks in an underdeveloped nation like Pakistan. The information gave by this thesis could likewise offer investors some background information data on investment in the Pakistani banking sector.

This study of determinants of banks profitability is very important from perspective of managerial together with regulatory views. From the managerial perspective it is vital to research the determinants connected with success to make sense of the activities that can push up the performance of banks.

This study is also useful to overcome on those determinants which get to be barrier among the profitability and to overcome on those variables. Controllers of banks are interested in protection along with soundness of the banking system and they are protecting the confidence of public and other stakeholder can also get benefit from this study to know that how banks are performing. With the findings of this study the monetary authorities will be able to strengthen their policies and advisory services in order to stabilize the banking sector. This study is significant as a reference material to further researchers who may wish to carry out further research in this area. Finally, this

study closely observed the relationship between the profitability and the variables. This is the first study in Pakistan which focused on only internal factors on the basis of different group of banks and makes the comparison in between banks performance.

Review of literature

A glance at past studies done on managing profits uncovers different components which influences it. These variables could be microeconomic elements and bank particular components. The return on equity and the return on assets have been utilized widely as measures of profitability. The return on assets demonstrates how effectively a bank is overseeing it resources to generate income. The return on assets is the income earned on every unit of benefit typically communicated as rate. The issue with return on assets is that it eliminate from the total assets off-balance sheet items (for example, resources obtained through a lease) consequently downplaying the estimation of advantages. This can in the long run make a positive bias where return on assets is exaggerated in the assessment of bank performance.

According to (Golin J. , 2001; P & S, 2005) contended that ROA is a standout amongst the most paramount measures of profitability in late banking literature. The studies of (Hassan & Bashir, 2003; Haron, 2004; Alkassim, 2005; Devinaga, 2010) have all adopted ROA as a measure of profitability. Although the important part of the earlier crams have utilized return on assets and return on equity or one of them as an independent variable to actions the bank profitability, the independent variables that signify the bank-particular, industry-particular and macroeconomic productivity determinants were unique in relation to one study to an alternate. The equivalent thing can be eminent in the experimental results brings about these crams which imitate the variety in the country's economic circumstances, the scale of monetary division and liberalization and the time of study the banks precise particular attributes and in addition the regulatory environment.

Theoretical framework and hypothesis development

According to Hassan and Bashir (2003) originate a positive association amid the profitability and size. But their results are different in the sagacity that the banks potency have diverge extensively, where larger banks in sense of abundance in capital having weaker association with interest income and these banks then operate on a lesser cost. On the other hand the smaller banks that have amassed a moderately higher loan reserves and hold a higher degree of fluid assets. Regardless of taking the log of total assets as the measure of size, results varied in the different studies. Hassan and Bashir (2003) discovered size to negatively influence the productivity of banks. This association was additionally originate by Kosmideu et al (2005) and Sufiaan and Habibulah (2009) for ordinary banks. A part, (Golin J. , 2001; Athanasglou et al 2006; Flamni et al 2009) found size to decidedly influence the productivity of the banks they examined.

The measure of bank is also incorporated to record for size-related economies and diseconomies of degree. The size is a outcome of a bank system; however the variable unaided does not assurance the acquiring of abundance in returns. According to the Boyyd

and Runklle (1993) in their banking recital study, coming about that a converse association exists in the size and profitability.

The comparable domino effect are found by Milleer and Noulaas (1997) in the USA, Naceeur (2003) in Tunissia and Jiaang et al. (2003) in Hong Kong, suggesting that bigger banks attain lesser benefits than littler ones. However, the findings from both (Sinkeey, 1992; Staikoras and Wood, 2003) are assorted. The past studies demonstrate that firm size impacts bank profitability unfavorably for substantial banks yet especially positive for little ones. The last similarly reasons that medium-sized banks gain maximum profit as compared by undersized banks. This may propose that interbank business is violent and capable since bank with a huge retail deposits taking system don't fundamentally gain an expense advantage. Furthermore, according to Karkrah and Ameyaw (2010) market share or size of banks is typically used to catch impending economies or diseconomies of scale in the banking segment. Secondly, the size of banks as a variable control for cost differentiation, product and risk diversification. They argue that the first factor (economies or diseconomies of scale) is projected to lead a affirmative association connecting bank size and profitability if there are significant economies of scale and their argument was based on the experiential evidence of (Bourrke, 1989; Molynex & Thorntn, 1992; Akhaveein, Bergar & Humprey, 1997; Bikkeer & Hui, 2002; Goddrd, Molynex & Wilsoon, 2004) which they cited.

According to the Anthony and Aaron (2010) accessible that the second part which needs to do with danger enrichment could prompt a pessimistic association between bank size and output. In the same logic, extended diversification may prompt lower acknowledge dangers and therefore cause lower returns. There are very much various researchers which appear to help this thought of negative relationship which exists between the bank size and profitability. All of these researchers the negative correlation was a symbol of smaller banks earning higher profits than larger banks and in ropes to the previous crams which experiential economies of scale and compass for smaller banks or diseconomies of scale for larger banks. Even though, researchers like (Hanweeck & Humprey, 1987; Boyd and Runkkle, 1993; Milleer & Nouulas, 1997; Athanasoglu, Brissmis & Deles. 2008) who were cited by Sufien et al. (2008) have concluded that reducing minimal expense can be accomplished by expanding the measure of the banking firm amid the time of business sectors developments. Eichengren and Gibsen (2001) recommend that the outcome of a developing bank's size on its benefit may be sure up to a convinced utmost. Beyond this border, the consequence of its size could be negative because of bureaucratic and different elements (Anthony & Aaron, 2010).

H_{10}: There is no direct relationship between Size and bank's profitability.

H_{1A}: There is a direct relationship between Size and bank's profitability.

A standout significant internal variable that can be developed by the income statement is the proficiency in costs administration (expenses management). As reliable method for intuition proposes, the high the expense of a bank, the smaller the bank's productivity will be. The negative connection in the middle of costs and productivity has been upheld by investigations of (Bourrke, 1989; Jiaang et al, 2003), intimating that profitability of banks

are ready to work at lesser cost. On the other side, Molynex and Thorntoon (1992) locate that the cost variable influences European banking productivity emphatically. They prescribe that lofty benefits earned by firms in a controlled industry may be proper as higher compensation and pay consumptions. Their results help the proficiency wage theory, which expresses that the output of workers increments with the pay rate. This encouraging association amid the profitability and expenses is also experimental in Tunisia (Naceuur 2003) and Malaysia (Guru et al. 2002). The researchers squabble that these banks are ready to pass their overheads to investors and borrowers as far as lesser deposit rates and bigger lending resources.

A poor costs administration helps poor profit, and a productivity costs lift up a bank's profit. A bank's expenditure incorporated sum of wages and compensations and the expenses of consecutively of branches. The expenses management pointers are required to be adversely identified with profit as bring down the utilization of operational expenses might help to build the high earnings of a bank. there are a few studies recommended the positive association of costs and profitability in light of the fact that higher payroll expense could help require more beneficial for human resources.

In spite of the fact that huge numbers of the researchers demonstrated a noteworthy after effect of costs effect on bank profitability, Izhaar and Asutaay (2007) attested insignificant and positive relationship with productivity markers in the study on Islamic banks. It suggests that the more gainful the bank the higher pay expenses will be.

H_{20}: There is no direct relationship between Expenses Management and bank's profitability.

H_{2A}: There is a direct relationship between Expenses Management and bank's profitability.

One more significant determinant which might be resulting from the income statement is the non-interest income. The exactly when banks are additional expanded they can create additionally winning resource, appropriately falling its reliance on premium income which is adequately exaggerated by the unfavorable macroeconomic atmosphere. The pronouncement of Jianng et al. (2003) demonstrates that diversified banks in Hong Kong seem, by all accounts, to be supplementary productive. According to the Gischr and Juttnr (2001), although, uncover that fee-income engender businesses in fact apply a pessimistic collision on banks' profitability. They ascribe such an resulting to the way that those fee income creating business, for example, deal in money and derivatives, credit cards provisions, are liable to further solid struggle, particularly on a worldwide premise than those conventional interest income actions.

As the earnings growth increases, banks have broadened their organizations by developing consumer finance and fee generating services. They have more and more moved to higher risk and return items, for example, credit cards and different sorts of individual finance. Likewise, banks have needed to amplify their part monetary service providers procuring charge pay from wealth management and advancement securities,

unit trusts, insurance, pension, and private banking. However, banks in Malaysia still depend more significantly on interest income than their US partners and there is space for further extending the non-interest income share of benefits. (Stiroh, 2002).

According to the Devinaga Rasiah (2010) expressed that the conventional bank business as to money related intermediation has steadily been change towards the provision of other financial services as consequence of on-going budgetary globalization and liberalization and due to that commercial banks have the capacity to expand their income and profit. This seems to be supported by the empirical findings of Anthony and Aaron (2010) which found that non-premium wage is a huge driver of commercial banks benefit in Ghana and there is a positive association existing between non-premium income and profitability in the Ghanaian banking sector.

H_{30}: There is no direct relationship between Non Interest Income and bank's profitability.

$H3_A$: There is a direct relationship between Non Interest Income and bank's profitability.

There is a general idea that deposits are the least expensive source of funds for banks along these lines to this degree of deposits have positive effect on banks profitability if the interest for bank credits is high. That is, the more deposits of commercial banks is capable aggregate the more noteworthy is its ability to offer more advances and make profits. Devinaga (2010) one should to be mindful that if banks credits are not high demand, having more deposits could diminish profit and may bring about low benefit for the banks. This is on the grounds that deposits like Fixed, Time or Term deposits pull in high enthusiasm from the banks to the depositors. The investigation done by Husni (2011) on the determinants of conventional banks execution in Jordan expose that there is significant affirmative association between ROA and ROE. To capture deposits in the model Anna P. I. Vong et al (2009) presented the effect of deposits (DETA) on profitability as deposits to total assets ratio.

H_{40}: There is no direct relationship between Deposit and bank's profitability.

H_{4A}: There is a direct relationship between Deposit and bank's profitability.

The numerous researchers had intentional reasons after bank problems and recognized a number of aspects (Chjoriga, 1997, Santomera 1997, Brown, Bridge and Harveey, 1998). The problems in respect of credit particularly, the flaws in credit risk administration have been recognized to be the main part of the foremost causes following banking complicatedness.

The loans form huge percentage of credit as they normally accounted for 10 – 15 times the equity of a bank (Kitwa, 1996). In this way, the business of banking is potentially faced with difficulties where there is small corrosion in the eminence of loans. The underprivileged loan eminence starts from the information processing mechanism Liuksila (1996) and then increases more at the loan endorsement, scrutinize and calculating period. This problem is magnified especially, when credit risk management

guiding principle in terms of plan and approach and procedure regarding credit dispensation do not exist or pathetic or unfinished. According to the Brown Bridge (1998) experimental that these troubles are at their sharp period in developing countries. The credit risk leads to the risk that a borrower will non-payment on a sort of obligation by neglecting to make payments it is obliged to do .This is one of the most important element to find out the profitability, the risk cannot be eradicate, but curtail leading to increased profits for the reason that secured loan reduced loan loss provisions and improve profitability. The negative correlation testimony in credit risk and profitability, due to a higher risk connected with the loan results in a high echelon of loan loss provisions because these banks are not able to pursue the profit maximization imperative.

H_{50}: There is no direct relationship between credit risk and bank's profitability.

H_{5A}: There is a direct relationship between credit risk and bank's profitability.

Overall, the experimental review for this research endow with back ground information of bank's performance in common and concentrates specifically on profitability and total factor productivity measures. There is ample evidence of comprehensive account of bank's performance in developed countries and a few of the emerging ones. There is extensive literature on bank profitability and total factor productivity growth measurements which provides support that these measures are influenced by both internal, sector explicit as well as macroeconomic aspects. Whereas extensive research has been done in developed countries using larger scope and robust econometric methods, such studies in Pakistani financial systems are lacking. Information on Pakistani banking systems appears to be inadequate and preventive in conditions of compass and type econometric techniques to adequately inform policy for the banking systems. In radiance of these knowledge gaps and practical requirements, the thesis sought to provide further experimental confirmation using a larger scope of sample of banks applying panel regression econometric methods.

Methodology

In this section the determinants of bank profitability in Pakistan were estimated. This analysis was based on balanced panel of a sample set 25 banks indexed in Karachi Stock Exchange (KSE) for the period from 2006 to 2015. Three sorts of banks: Islamic banks, foreign banks and public banks were spawned to further weigh against the impact of the bank's profitability. It was by utilization of dummies in the panel regression analysis espoused with this thesis. The three panel estimators involving common effects (CE), fixed effects (FE) and random effects (RE) had been employed to appraisal the bank's profitability in this particular thesis.

Model and Method

The General form of the model as follows:

$$Б = f(CR, EM, DETA, NII, SZ)$$

The model can be econometrically stated, as follows:

$$Return\ on\ Asset_{it} = \alpha_0 + \beta_1\ CR_{it} + \beta_2\ EM_{it} + \beta_3\ DETA_{it} + \beta_4\ NII_{it} + \beta_5\ SZ_{it} + \beta_6\ DI_{it} + \beta_7\ DI * CR_{it} + \beta_8\ DI * EM_{it} + \beta_9\ DI * DETA_{it} + \beta_{10}\ DI * NII_{it} + \beta_{11}\ DI * SZ_{it} + \varepsilon \ldots\ldots\ldots\ldots\ldots (3.1)$$

Where

CR = Credit Risk

EM = Expense Management
DETA = Deposit to Total Assets

NII = Non-interest Income

SZ = Size

DI = Islamic Dummy (1 for Islamic banks and 0 for non-Islamic banks)

$$Return\ on\ Equity_{it} = \alpha_0 + \beta_1\ CR_{it} + \beta_2\ EM_{it} + \beta_3\ DETA_{it} + \beta_4\ NII_{it} + \beta_5\ SZ_{it} + \beta_6\ DI_{it} + \beta_7\ DI * CR_{it} + \beta_8\ DI * EM_{it} + \beta_9\ DI * DETA_{it} + \beta_{10}\ DI * NI_{it} + \beta_{11}\ DI * SZ_{it} + \varepsilon \ldots\ldots\ldots\ldots\ldots (3.2)$$

Where

CR = Credit Risk

EM = Expense Management
DETA = Deposit to Total Assets

NI = Non-interest Income

SZ = Size

DI = Islamic Dummy (1 for Islamic banks and 0 for non-Islamic banks)

$$Return\ on\ Asset_{it} = \alpha_0 + \beta_1\ CR_{it} + \beta_2\ EM_{it} + \beta_3\ DETA_{it} + \beta_4\ NI_{it} + \beta_5\ SZ_{it} + \beta_6\ DF_{it} + \beta_7\ DF * CR_{it} + \beta_8\ DF * EM_{it} + \beta_9\ DF * DETA_{it} + \beta_{10}\ DF * NI_{it} + \beta_{11}\ DF * SZ_{it} + \varepsilon \ldots\ldots\ldots\ldots\ldots (3.3)$$

Where

CR = Credit Risk

EM = Expense Management
DETA = Deposit to Total Assets

NII = Non-interest Income

SZ = Size

DF = Foreign Dummy (1 for foreign banks and 0 for local banks)

$$Return\ on\ Equity_{it} = \alpha_0 + \beta_1\ CR_{it} + \beta_2\ EM_{it} + \beta_3\ DETA_{it} + \beta_4\ NII_{it} + \beta_5\ SZ_{it} + \beta_6\ DF_{it} + \beta_7\ DF * CR_{it} + \beta_8\ DF * EM_{it} + DF * DETA_{it} + \beta_{10}\ DF * NII_{it} + \beta_{11}\ DF * SZ_{it} + \varepsilon \ldots\ldots\ldots\ldots (3.4)$$

Where

CR = Credit Risk

EM = Expense Management
DETA = Deposit to Total Assets

NI = Non-interest Income

SZ = Size

DF = Foreign Dummy (1 for foreign banks and 0 for local banks)

$$Return\ on\ Asset_{it} = \alpha_0 + \beta_1\ CR_{it} + \beta_2\ EM_{it} + \beta_3\ DETA_{it} + \beta_4\ NII_{it} + \beta_5\ SZ_{it} + \beta_6\ DP_{it} + \beta_7\ DP * CR_{it} + \beta_8\ DP * EM_{it} + \beta_9\ DP * DETA_{it} + \beta_{10}\ DP * NII_{it} + \beta_{11}\ DP * SZ_{it} + \varepsilon \ldots\ldots\ldots\ldots (3.5)$$

Where

CR = Credit Risk

EM = Expense Management
DETA = Deposit to Total Assets

NII = Non-interest Income

SZ = Size

DP = Public Dummy (1 for public banks and 0 for private banks)

$$Return\ on\ Equity_{it} = \alpha_0 + \beta_1\ CR_{it} + \beta_2\ EM_{it} + \beta_3\ DETA_{it} + \beta_4\ NI_{it} + \beta_5\ SZ_{it} + \beta_6\ DP_{it} + \beta_7\ DP * CR_{it} + \beta_8\ DP * EM_{it} + \beta_9\ DP * DETA_{it} + \beta_{10}\ DP * NII_{it} + \beta_{11}\ DP * SZ_{it} + \varepsilon \ldots\ldots\ldots\ldots\ldots (3.6)$$

Where

CR = Credit Risk

EM = Expense Management

DETA = Deposit to Total Assets

NII = Non-interest Income

SZ = Size

DP = Public Dummy (1 for public banks and 0 for private banks)

This study in hand used the panel data. The panel data evaluations are well thought-out to be the mainly up to date and proficient diagnostic technique in managing the econometric data. The panel data scrutiny has turn into well-liked with social scientists for the reason that it allows the insertion of data for N cross section (countryside, households, organizations, and individuals) and T time periods (years, quarters, months, etc). The pooled panel information format set consist of a times grouping for each cross-sectional parts in the set of information, and offers a differences of estimations systems. In this case, the number of observations available increases by including enlargement over time.

In general, the advantages of using panel data can be recapitulated as follows: (a) they provide extra proficient assessment of constraint in view of broader basis of discrepancy, (b) they farm out more information to the forecaster and analyst, and (c) they consent to the study of the vibrant behavior of the parameters. Given the limited number of cross-sections and the often dynamic nature of economic relationship that cannot be confine in a cross-sectional scaffold, this approach seems to solve two problems of unadventurous quantitative approaches in one. Assuming that each problems solution requires effort and time , so here would add that time series and cross-sectional studies are the quickest and most proficient econometric problem-solving approaches, although in many cases they valor prove to be invalid. On the other hand panel studies are considered to be the most

wide-ranging technique of testing statistical samples as they enhancement all previous studies and lucratively respond the causality matters.

Variable Description

In light of the contentions of Golin (2001), and Rose et al., (2005), this study utilized the ratio of return on assets (ROA) and return on equity (ROE), as measures of bank's profitability. The return on assets is the net profit divided by the total assets and it show the returns engender from the assets funding by the bank. The return on equity is the fraction of the net profit to the total equity for the year.

The expense management variable, which is describe as the ratio of operating expenses to total assets, give information on deviation in the operating cost. The consequence of the variable on banking performance is assorted on the one side; a negative association implies that the proficient banks are capable to work at lesser cost. On the other hand, a affirmative coefficient may be originate if banks are proficient to transmit a piece of their operating cost to their borrowers and depositors.

The significance of fee bases services of banks and their artifact diversification is imprisoned by the non interest income to gross income fraction. Even though the fee-based services add income to banks, those services in general produce smaller profits when compared to loans. When banks move from interest income services to non-interest come services, the profitability possibly will turn down. As a result, the fraction is expected to have a unenthusiastic effect on profitability

The result of fund source on profitability is taken into custody by the deposits to total assets ratio. Being the main and conceivably the cheapest basis of endowment for banks, it is commonly whispered that customer deposits impact banking performance positively as long as there is a sufficient demand for loans in the market. Therefore, if there is inadequate loan demand, the additional deposits in fact may demoralize pay envelope, since this category of funding is costly in conditions of the essential branching system.

Results and Discussion

Descriptive statistics

The results have been classified into tables. Table 1 reports the descriptive statistics of our main variable; Table 2 reports the correlation matrix; Table 3, 4, 5,6,7,8 presents the different panel data results which we obtain through process.

Table 1 Descriptive statistics

Variable	Mean	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
Credit Risk	0.5156	0.8359	0.2581	0.1150	0.1112	2.7680
Expense Management	0.0350	0.0934	0.0001	0.0185	1.5755	5.5489
DETA	0.7395	0.9006	0.4513	0.1058	-0.853	2.8653
Non-Interest Income	0.8588	29.8366	-37.9347	4.6066	-1.2469	29.0618
Return on Assets	0.0003	0.0772	0.0313	0.0258	1.1172	3.5167
Return on Equity	0.0818	2.3471	0.0942	1.1386	2.8799	25.2725
Size	18.5389	20.5264	15.9478	1.3562	0.2936	2.0395

The table previously mentioned exhibits descriptive statistics for dependent and also the explanatory variables within this particular research. The evaluation on this stand wraps up that the mean value associated with credit rating risk is 0. 5156 as well as for expense management is 0. 0350. The average share of deposit to total asset is 7.395 percent, amid some sort of assortment of 0.4 to 0.9 per cent. The mean value of non-interest income is 0.8588 percent in a year. The average return on asset is 0.0003; with a minimum 0.0372 to a maximum 0.0713 and the average return on equity is 0.0818 amid a range of 0.0942 to 2.3471.

Alternatively, regarding standard deviation, the most variant from mean value is observed in case of the particularly non-interest income. The lowest variation from mean value is expense management, return on asset and DETA, its value is 0.0185, 0.0258, 0.1058 respectively which signify that these variables are the most unswerving and sleek variables in this study.

Correlation

Table 2 Correlation Matrix

	CR	EM	DETA	NII	RA	RE	SZ
CR	1						
EM	0.0565	1					
DETA	0.065	-0.5251	1				
NII	-0.0103	-0.0422	-0.0402	1			
RA	-0.3236	-0.6106	0.3335	0.108	1		
RE	-0.1688	-0.0758	0.0262	0.0454	0.3825	1	
SZ	-0.0709	-0.6862	0.4324	0.0657	0.5923	0.1173	1

Correlation matrix determines the direction and strength of the relationship in between almost all within study specifics. If in the correlation matrix the relationship in between variables locates substantial, it could lead to the multicolinearity, which can change results of the study. To ensure the best fit model of the explanatory variables should be free from this sort of problem. The base value intended for correlation is 0.76 and beyond this limit multicolinearity are present. The above table shows there's zero multicolinearity and definitely will not necessarily change the results connected with estimated model.

Estimation of the Model with ROA (Islamic vs. Conventional)

Table 3 Random Effect Model

Variable	Coefficient	Std. Error	t-statistics	Prob
C	0.0032	0.0482	0.0656	0.9477
CR	-0.0188	0.0122	-1.5410	0.0352
EM	-0.7608	0.0990	-7.6831	0.0398
DETA	0.0197	0.0197	0.9968	0.0203
NII	-0.0005	0.0002	-2.1693	0.0315
SZ	0.0029	0.0027	1.0562	0.0240
DI	1.4938	0.2710	5.5100	0.0189
DI*CR	0.9934	0.1746	5.6900	0.6500
DI*EM	-1.5761	1.2901	-1.2200	0.2240
DI*DETA	-0.2394	0.3337	-0.7200	0.4740
DI*SZ	-0.0041	0.0028	-1.4800	0.1400
DI*NII	0.0798	0.0485	1.6500	0.1020
R-Squared	0.6900			
Adjusted R-Squared	0.6372			
F-statistics	13.0503			
Prob(F-statistics)	0.0000		Durbin Watson Stat	1.6694

The random effect model presented the subsequent results. The F-statistics is 13.0503 and p-value is also significant which often enlightens us the fitness of the model. The value of coefficient perseverance R-Squared is 69 percent. It ensures that all independent variables triggered 69% variation in the return on asset. Even so there are simply no other factors that happen to be impacting this dependent variable simply because C is statistically trivial.

The random effect model wrap up that CR, EM, NII, SZ and DETA are significant. The association between credit risk and return on asset is negative which means that because these banks are not able to follow the profit maximization rule owing to a high risk allied with the loan results in a high level of loan loss provisions. Whilst, the expense management had been observed for being inversely related with return on asset implying of which much extra expenses incur because of the bank, the particular less profit the bank will make. The rapport between non-interest income of the banks and return on asset is negative.

It demonstrated by the paying attention is usually caused by the fact that non-interest income will be more vulnerable to intensive rivalry as opposed to traditional income activities to do on the banking institutions. The liaison between size of the banks and return on asset is positive which means that banks using large size qualified prospects in direction of more profit. The Islamic banks have significant positive impact on return on asset as compared to the non-Islamic bank.

Estimation of the Model with ROE (Islamic vs. Conventional)

Table 4 Common Effect Model

Variable	Coefficient	Std. Error	t-statistics	Prob
C	1.1938	1.9584	0.6096	0.5429
CR	-1.8696	0.7664	-2.4396	0.0356
EM	-2.0792	7.2763	-0.2857	0.7754
DETA	0.3121	0.9985	0.3126	0.0530
NII	-0.0302	0.0251	-1.2039	0.0301
SZ	0.1231	0.0899	1.3691	0.0426
DI	0.0984	6.5676	0.0150	0.9881
DI*CR	1.6636	2.4021	0.6926	0.4894
DI*EM	0.3416	16.5599	0.0206	0.9836
DI*DETA	-0.0877	0.7016	-0.1251	0.9006
DI*SZ	-0.0335	0.3241	-0.1034	0.9178
DI*NII	-0.0296	0.0367	-0.8073	0.4205
R-Squared	0.5914			
Adjusted R-Squared	0.5409			
F-statistics	17.0743			
Prob(F-statistics)	0.0031		Durbin Watson Stat	2.1848

The common effect model presented the subsequent results. The F-statistics is 17.0743 and p-value is also significant which often enlightens us the fitness of the model. The value of coefficient perseverance R-Squared is 59.14 percent. It ensures that all independent variables triggered 59.14 % variation in the return on equity. Even so there are simply no other factors that happen to be impacting this dependent variable simply because C is statistically trivial.

The common effect model wrap up that CR, NII, SZ and DETA are significant and in conjunction with that EM is insignificant. The relationship between credit risk and return on equity is negative which means that because these banks are not able to follow the profit maximization rule due to a higher risk associated with the loan results in a high level of loan loss provisions.

The rapport between non-interest income of the banks and return on equity is negative. It demonstrated by the paying attention is usually caused by the fact that non-interest

income will be more vulnerable to intensive rivalry as opposed to traditional income activities to do on the banking institutions. The liaison between size of the banks and return on equity is positive which means that banks using large size qualified prospects in direction of more profit. The relationship concerning expense management and return on equity are negative nevertheless this connection isn't significant. The Islamic banks have the no significant impact on return on equity.

Estimation of the Model with ROA (Foreign vs. local)

Table 5 Random Effect Model

Variable	Coefficient	Std. Error	t-statistics	Prob
C	0.0032	0.0482	0.0656	0.9477
CR	-0.0188	0.0122	-1.5410	0.0252
EM	-0.7608	0.0990	-7.6831	0.0356
DETA	0.0197	0.0197	0.9968	0.2203
NII	-0.0005	0.0002	-2.1693	0.0315
SZ	0.0029	0.0027	1.0762	0.0224
DF	1.4938	0.2710	5.5121	0.0267
DF*CR	0.9934	0.1746	5.6900	0.3477
DF*EM	-1.5761	1.2901	-1.2216	0.2240
DF*DETA	-0.2394	0.3337	-0.7200	0.4740
DF*SZ	-0.0041	0.0028	-1.4800	0.1400
DF*NII	0.0798	0.0485	1.6500	0.1020
R-Squared	0.6900			
Adjusted R-Squared	0.6372			
F-statistics	14.0503			
Prob(F-statistics)	0.0000		Durbin Watson Stat	1.6694

The random effect model presented the subsequent results. The F-statistics is 14.0503 and p-value is also significant which often enlightens us the fitness of the model. The value of coefficient perseverance R-Squared is 69 percent. It ensures that all independent variables triggered 69% variation in the return on asset. Even so there are simply no other factors that happen to be impacting this dependent variable simply because C is statistically trivial.

The random effect model wrap up that CR, EM, NII and SZ are significant. The relationship between credit risk and return on asset is negative which means that because these banks are not able to follow the profit maximization rule due to a higher risk associated with the loan results in a high level of loan loss provisions.

Whilst, the expense management had been observed for being inversely related with return on asset implying of which much more expenses incurred because of the bank, the

particular less profit the bank will make. The rapport between non-interest income of the banks and return on asset is negative.

It demonstrated by the paying attention is usually caused by the fact that non-interest income will be more vulnerable to intensive rivalry as opposed to traditional income activities to do on the banking institutions. The liaison between size of the banks and return on asset is positive which means that banks using large size qualified prospects in direction of more profit. The relationship concerning DETA and return on asset is positive nevertheless this connection isn't significant. The foreign banks have significant positive impact on return on asset as compared to the local banks

Estimation of the Model with ROE (Foreign vs. local)

Table 6 Common Effect Model

Variable	Coefficient	Std. Error	t-statistics	Prob
C	0.4807	1.9079	0.2519	0.8014
CR	-1.1945	0.7688	-1.5539	0.0219
EM	-0.5375	7.4040	-0.0726	0.9422
DETA	-0.2059	0.9688	-0.2126	0.0319
NII	-0.0063	0.0196	-0.3235	0.0467
SZ	0.0690	0.0868	0.7941	0.0540
DF	-1.8493	5.3031	-0.3487	0.7277
DF*CR	-2.4746	1.7538	-1.4110	0.1599
DF*EM	15.6445	15.2720	1.0244	0.3070
DF*DETA	-3.5662	2.7875	-1.2794	0.2023
DF*SZ	0.2341	0.2628	0.8908	0.3742
DF*NII	0.0069	0.0418	0.1645	0.8695
R-Squared	0.4572			
Adjusted R-Squared	0.4150			
F-statistics	13.0522			
Prob(F-statistics)	0.0258		Durbin Watson Stat	2.4084

The common effect model presented the subsequent results. The F-statistics is 13.0522 and p-value is also significant which often enlightens us the fitness of the model. The value of coefficient perseverance R-Squared is 45.72 percent. It ensures that all independent variables triggered 45.72 % variation in the return on equity. Even so there are simply no other factors that happen to be impacting this dependent variable simply because C is statistically trivial.

The common effect model wrap up that CR, NI, SZ and DETA are significant and in conjunction EM is insignificant. The relationship between credit risk and return on equity is negative which means that because these banks are not able to follow the profit maximization rule due to a higher risk associated with the loan results in a high level of

loan loss provisions. The rapport between non-interest income of the banks and return on equity is negative.

It demonstrated by the paying attention is usually caused by the fact that non-interest income will be more vulnerable to intensive rivalry as opposed to traditional income activities to do on the banking institutions. The liaison between size of the banks and return on equity is positive which means that banks using large size qualified prospects in direction of more profit. The relationship concerning expense management and return on equity are negative nevertheless this connection isn't significant. The foreign banks have no significant impact on return on equity.

Estimation of the Model with ROA (Public vs. Private)

Table 7 Random Effect Model

Variable	Coefficient	Std. Error	t-statistics	Prob
C	0.0032	0.0482	0.0656	0.9477
CR	-0.0188	0.0122	-1.5410	0.0152
EM	-0.7608	0.0990	-7.6831	0.0238
DETA	0.0197	0.0197	0.9968	0.0203
NII	-0.0005	0.0002	-2.1693	0.0315
SZ	0.0029	0.0027	1.0562	0.0224
DP	1.4938	0.2710	5.5100	0.0325
DP*CR	0.9934	0.1746	5.6900	0.1400
DP*EM	-1.5761	1.2901	-1.2200	0.2240
DP*DETA	-0.2394	0.3337	-0.7200	0.4740
DP*SZ	-0.0041	0.0028	-1.4800	0.2389
DP*NII	0.0798	0.0485	1.6500	0.1520
R-Squared	0.3164			
Adjusted R-Squared	0.3094			
F-statistics	13.4330			
Prob(F-statistics)	0.0335		Durbin Watson Stat	2.5019

The random effect model presented the subsequent results. The F-statistics is 13.4330 and p-value is also significant which often enlightens us the fitness of the model. The value of coefficient perseverance R-Squared is 31.64 percent. It ensures that all independent variables triggered 31.64 % variation in the return on asset. Even so there

are simply no other factors that happen to be impacting this dependent variable simply because C is statistically trivial.

The random effect model wrap up that CR, EM, NII, SZ and DETA are significant. The relationship between credit risk and return on asset is negative which means that because these banks are not able to follow the profit maximization rule due to a higher risk associated with the loan results in a high level of loan loss provisions.

Whilst, the expense management had been observed for being inversely related with return on asset implying of which much more expenses incurred because of the bank, the particular less profit the bank will make. The rapport between non-interest income of the banks and return on asset is negative.

It demonstrated by the paying attention is usually caused by the fact that non-interest income will be more vulnerable to intensive rivalry as opposed to traditional income activities to do on the banking institutions. The liaison between size of the banks and return on asset is positive which means that banks using large size qualified prospects in direction of more profit. The public banks have significant positive impact on return on asset as compared to the private banks.

Estimation of the Model with ROE (Public vs. Private)

Table 8 Common Effect Model

Variable	Coefficient	Std. Error	t-statistics	Prob
C	1.5005	1.9637	0.7641	0.4458
CR	-1.0346	0.8029	-1.2885	0.0192
EM	-0.1835	6.7258	-0.0273	0.9783
DETA	0.1719	0.9809	0.1753	0.0011
NII	-0.0076	0.0177	-0.4317	0.0064
SZ	0.1111	0.0962	1.1549	0.0491
DP	4.3871	11.0704	0.3963	0.6923
DP*CR	-2.3152	1.7796	-1.3009	0.1949
DP*EM	-4.1412	40.6953	-0.1018	0.9191
DP*DETA	-1.3181	6.3534	-0.2075	0.8359
DP*SZ	-0.1108	0.3003	-0.3689	0.7126
DP*NI	0.2089	0.2607	0.8010	0.4241
R-Squared	0.4568			
Adjusted R-Squared	0.4016			
F-statistics	17.0293			
Prob(F-statistics)	0.0422		Durbin Watson Stat	2.1364

The common effect model presented the subsequent results. The F-statistics is 17.0293 and p-value is also significant which often enlightens us the fitness of the model. The value of coefficient perseverance R-Squared is 45.68 percent. It ensures that all independent variables triggered 45.68 % variation in the return on equity. Even so there are simply no other factors that happen to be impacting this dependent variable simply because C is statistically trivial.

The common effect model wrap up that CR, NII, SZ and DETA is significant and in conjunction with that EM are insignificant. The relationship between credit risk and return on equity is negative which means that because these banks are not able to follow the profit maximization rule due to a higher risk associated with the loan results in a high level of loan loss provisions.

The rapport between non-interest income of the banks and return on equity is negative. It demonstrated by the paying attention is usually caused by the fact that non-interest income will be more vulnerable to intensive rivalry as opposed to traditional income activities to do on the banking institutions. The liaison between size of the banks and return on equity is positive which means that banks using large size qualified prospects in direction of more profit. The relationship concerning expense management and return on equity are negative nevertheless this connection isn't significant. The public banks have no significant positive impact on return on equity.

The principle goal on this review is to research the determinants associated with bank's profitability in Pakistan. The pragmatic evidence around the determinants associated with banks' profitability is base on well balanced panel data, where each of the variables tends to be seen for every single cross-section and each time period.

The results propose that the log of assets possess significant positive relation with return on asset and return on equity, where total assets designate the size of the bank. This positive association demonstrates that the size of the bank have significant positive outcome on profitability. It recommends that larger banks pull off a higher return on asset and return on equity. The same results have been originated by Bourke (1989). Therefore the null hypothesis is rejecting and accepts the alternative hypothesis.

The non-interest income represents other sources besides earrings from loans of the commercial banks. These sources of revenue fees earned from offering unit trust services, deposit account service, standard fees and charges for other bank services included that the traditional commercial banking business related to financial intermediation has gradually changed to the provision of other financial services as a result of continued financial globalization and liberalization, as a result of the commercial banks are able to increase their income and profits. Devinaga (2010) declared that the traditional commercial banking business related to financial intermediation has gradually changed to the provision of other financial services as a result of continued financial globalization and liberalization, as a result of the commercial banks are able to increase their income and profits.

The credit risk administration is portrayed as recognizable proof, checking and control of risk emerging from the probability of default in loan repayments (Early, 1996; Coyle, 2000). Coyle (2000) portrays recognize acknowledge credit risk as adversities from the refusal or disappointment of credit customers to fork over the obliged trusts and on time. The credit risk leads to the risk that a borrower will failure to pay on a sort of obligation by neglecting to make payments it is obliged to do. This is one of the most important element to find out profitability, the risk cannot be eradicate, but curtail the leading to increased profits because secured loan reduced loan loss provisions and improve profitability. The results of this study reported negative correlation involving the credit risk and profitability , due to a high risk associated with the loan results in a high level of loan loss provisions ; because these banks are not able to pursue the profit maximization rule. So reject the null hypothesis and supported to the alternative hypothesis.

Based on the results of this study, expenses management and return on asset is significant and negative but expense management is insignificant with return on equity. In order to shore up this testimonial, originate that (Katib, 2004) expressed that the bank good costs management which could enhance bank productivity is the element that decided the bank pieces of the share and recital. This was demonstrated by the inspected of the structure conduct performance (SCP) theory against the contending effective structure (ES) speculation. Furthermore, the proportion of total loans and advances to total assets as an issue of risk component and the ratio of demand (current account) deposits to total deposits (RCDD) is to gauge the shabby wellspring of funds for the bank. Expense to-pay proportion is utilized as an issue of working proficiency. Cost to-income ratio is characterized as working costs over aggregate incomes.

The deposits are the ratio of total deposits to total assets (DETA) which is an alternate liquidity indicator but it is well thought-out as liabilities. The deposits are the fundamental wellspring of bank funding and subsequently it has an effect on the productivity of the banks. The deposits to total assets proportion is incorporated as an independent variable in this study.

The banks are said to be very dependent on the funds mainly by the public as deposits to fund the loans that are offered to the customers. There is a general belief that deposits are the cheapest source of funds for banks and so to this extent deposits have positive impact on banks profitability as demand for bank loans is very high. This is the more commercial bank deposits able to gather the greater its ability to increase loans to offer and make profit (Rasiah, 2010). However, one should be aware that if banks loans are not high in demand, having more deposits could decrease earnings and may result in low profit for the banks. This is because deposits like Fixed, Time or Term deposits attract high interest from the banks to the depositors (Rasiah, 2010).The results of this study are matched with the investigation done by Husni (2011) determinants of performance on commercial banks in Jordan revealed that there is a significant positive relationship between ROA and the total liability of total assets . The proponents argue that these banks are capable of managing their overall costs in terms of lower deposit to give to depositors and borrowers rates and / or higher loan assets.

Conclusion

The main objective of this thesis is to investigate and examine determinants connected with bank's profitability in Pakistan for the period of 2003 to 2013. The pragmatic evidence around the determinants associated with banks' profitability is based on well balanced panel data, where each of the variables tends to be seen for all single cross-sections and each time period.

On the notion of this analysis and results of this study evident that banks with more size, deposits to total assets ratio, non-interest income, expense management and credit risk are superficial to have more security and such a gain can be turned into high profitability. The results of this study show that size seized significant positive relation with return on asset and return on equity. This positive rapport demonstrates that the bank size have significant positive effect on profitability. It proposed that bigger banks pull off a high profitability. The results of this study show that non-interest income has negative effect on banks' profitability. That entails that paying attention is usually caused by the fact that non-interest income will be more vulnerable to intensive rivalry as opposed to traditional income activities to do on the banking institutions. The results of this study reported that negative correlation found among credit risk and bank's profitability , due to a high risk connected with the loan results in a high level of loan loss provisions because these banks are not able to pursue the profit maximization imperative. The results of this study demonstrate that expenses management and return on asset is significant and negative but expense management is insignificant with return on equity. A negative connection is normal between the expense management and profitability infers that higher operating expenses mean lower benefits and the other way around. The results of this study revealed that that there is a significant positive association among profitability and the deposits to total assets (DETA). The proponents argue that these banks are capable of managing their overall costs in terms of lower deposit to give to depositors and borrowers rates and / or higher loan assets.

There are numbers of researchers that have completed with the study of determinants that affect the profitability banks; therefore, this study suggests that future researchers should study on the determinants that were not studied by any researchers before. The future researchers can take more demanding determinants in their future research so that a helpful research and study can be produced. Other than that, because of there are now only some commercial banks are opened to Islamic bank branch in Pakistan, and this study believe that in future there will be more Islamic banks set up in Pakistan, therefore, this study recommend that future researchers can collect more data and have larger sample size for scrutiny and can have more precise result in their researches. Because of our field of study, this study only touched on the E-views and Stata techniques by using panel regression to run our data, therefore, this study advocate for future researchers can use other technique and methods to run their model, which might generate diverse results from what this study have done.

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