Factors Affecting Banks' Profitability in Pakistan

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Abstract

Financial sector plays a very important role in the economic development of a country. The strong and healthy banking system is the basic requirement for sustainable economic growth of a country. The purpose of the study is to analyze the factors affecting the profitability of commercial banks in Pakistan for a period of 2004 to 2014. The study is focused only on internal (bank specific) factors. The study used the panel data and the Fixed Effects Model is used to investigate the effect of Assets, Loans, Deposits, Equity, Asset Quality, Management Efficiency and Liquidity on three different profitability indicators Return on Assets (ROA), Return on Equity (ROE) and Net Interest Margin (NIM). The result found that Bank Size (LSIZE) has a negative effect on banks profitability. Total Loans to Total Assets (TLTA) and Asset Quality Ratio (AQR) have also a negative but significant relationship with ROA and ROE but this relationship is positive and significant with NIM. Deposits to Total Assets (DTA) show a negative as well as insignificant relationship with all of the dependent variables ROA, ROE and NIM. Capital Adequacy Ratio (CAR) has a positive but insignificant relationship with the bank's profitability while measured by ROA and ROE and NIM. Liquidity Ratio (LQR) has also a positive effect on ROA and NIM. However, the impact of LQR is negative on ROE. Management Efficiency (EFF) shows a negative as well as insignificant relationship with ROA and NIM" but it has a positive impact on ROE.
Key Words: Profitability, Commercial Banks, ROA, ROE, NIM, Fixed Effects Model, Pakistan.

Introduction

Financial institutions are working almost from 18th century, at that time these institutions was not known as a bank but only a place where people can keeps their valuable items (Moussa, 2012). These institutions perform a very important role in country's growth and development. Banking sector and non-banking sector maintain the financial system and enhance the overall growth of a country by supporting the money market as well as capital market. In order to maintain a successful entrepreneurship and to promote a private investment in a country, effective and efficient financial system is required which support proper financial intermediation (Kutsienyo, 2011). "The role of banking sector is very important in the modern business as it provides a huge finance to business and considered as a big source of finance. The role of Commercial banks is very important in financial resource provision of countries (Ongore, 2013). They play a significant role in financial development and contributing a big share in economic growth of a country by providing huge funds to investors to borrow and also extent finance in a country (Otuori, 2013). The success and growth of the banks are mostly determined by the competitive marketing strategy. The models and techniques of the banking sector have been completely changed in recent years as compared to past few decades" (Gul, Irshad, and Zaman, 2011). In the past few years the banking system of entire world practiced a key revolution in its surroundings, thus as a result its performance is also affected dramatically. The performance and the profitability

of banks are affected by both the internal and external determinants and there are different methods to measure their performance. Recognizing the main factors of banks allow to formulate different strategies in order to increase the bank's profitability". Thus, the factors which are affecting the bank attract not only the academicians for research but also the bank management, financial markets and bank supervisors (Dietrich and Wanzenried, 2009). The role of banking system of Pakistan is also very important in economic and financial growth and development of Pakistan. "The banking system of Pakistan is completely diversified. The study is mainly focused on the determination of the commercial banks profitability in Pakistan by using the internal factors like "Bank Size, Capital, Total Loans, Deposits, Asset Quality, Management Efficiency and Liquidity on different profitability indicators such as Return on Assets (ROA), Return on Equity (ROE) and Net Interest Margin (NIM)". For this purpose the study selects the top 10 Pakistani commercial banks on the basis of their total assets because these banks covered 75% of total assets on overall banks in Pakistan (SBP, 2014)". It is to analyze the factors (internal) affecting profitability of banks by using Fixed Effects Model. The objectives of the study include to determine and describe the effect of internal factors on the profitability of commercial banks for the period of 2004-2014, to describe the profitability of selected banks for a period of 2004-2014 and to establish a relationship between the internal factors and bank's profitability.

Based on the above objectives the study seeks to test the following hypothesis.

H_1: There is a relationship between SIZE and bank's profitability.

H_2: There is a relationship between CAPITAL and bank's profitability.

H_3: There is a relationship between LOANS and bank's profitability.

H_4: There is a relationship between DEPOSITS and bank's profitability.

H_5: There is a relationship between ASSET QUALITY and bank's profitability.

H_6: There is a relationship between MANAGEMENT EFFECIENCY and bank's profitability.

H_7: There is a relationship between LIQUIDITY and bank's profitability.

Review of Literature

There "are many internal and external factors which can be taken as determinants of bank's profitability. The research studies review, included specific only to one country and some of them are specific to a group of different countries for the determination of the bank's profitability. In order to determine the bank's profitability, all the studies proposed the internal and external factors. These studies identify the profitability indicators" such as; "Return on Assets (ROA), Return on Equity (ROE), Return on Average Assets (ROAA), Return on Capital Employed (ROCE), and Net Interest Margin (NIM) etc." as dependent variables. Burki and Niazi (2003) determine the effect of financial modification on the effectiveness of state, private and foreign banks of Pakistan for the period of 1991 to 2000. They select 40 banks in their study. Their study found that interest income to earning assets, bank size and loans to deposit ratio have a significant positive effect on bank's profitability. Ataullah, Cockerill & Le (2004) evaluate the Pakistani and Indian commercial banks during a period of 1988-1998. They find out that the loan based model was much more efficient comparatively income based model. Both of the country's banks need to improve their performance. Athanasoglou, Brissimis, and Delis (2005) analyze the factors affecting the banking sector of Greek for a period of 1985 to 2001. Their study finds out that there is a positive relationship between labor and inflation and bank's profitability, while the credit risk and operational expenses have negatively affect the bank's profitability. Herwany

and Anwar (2006) investigate the profitability of Government banks and private banks in Indonesia by using ROA and ROE as major determinants of profitability. The study used both the internal and external factors for bank's profitability. The study concludes that ROA and ROE are directly related with capital to assets and credit to deposit. The study also shows that capital adequacy ratio has a significant impact on banks profitability. So it indicates that the impacts of internal factors are positive on bank's profitability.

Havrylchyk and Jurzyk (2006) describe that capital has a significant and direct impact on bank's profitability. Thus the banks which are well-organized will increase their net interest margin and achieve more profits. Aysan and Ceyhan (2007) examined the profitability of Turkish banks. They suggest that the banks which are medium in size are more efficient as compared to large banks. The study also found loans ratio has a positive impact on bank's profitability. Their study also shows that ROE is insignificant indicator for the determination of bank efficiency. Alper and Anbar (2011) examine the profitability of Turkish banking industry. They used a data of 10 commercial banks for a period of 2002-2010. They concluded that size has positively affected the profitability, thus a bank which has a large size have more profitable. They also determine that the other internal elements such as capital, NIM, liquidity and deposit do not have effect on the commercial banks profitability in Turkey. "Gul et al. (2011) evaluates the factors affecting the profitability of banks in Pakistan for a period of 2005 to 2009. They select the top fifteen banks of Pakistan and used the internal and external factors and apply Pooled Ordinary Least Square Method (POLS) on key profitability determinants ROA, ROE, ROCE and NIM. Their result shows that the impact of both the bank-specific and macroeconomic variables is positive and significant on bank's profitability. Moreover the banks with a more equity capital, Total Assets, Loans, Deposits, economic growth and stock market capitalization" are safer and have a higher profitability.

Hoffmann (2011) analyzed the factors affecting the profitability of US banking sector over a period of 1995 to 2007 by using the internal and external determinants. The study shows that the relationship between capital ratio and the bank's profitability is negative. "Javaid, Anwar, Zaman and Gafoor (2011) evaluate the factors affecting the profitability of Pakistani banking sector for a period of 2004 to 2008. They select the top ten banks of Pakistan by using the pooled ordinary least square method. The study finds out that the loans have a positive but insignificant impact on bank's profitability". Moreover, the study shows that relationship between Total deposit to total assets and total equity to total assets and bank's profitability is positive and significant. Ongore and Kusa (2013) analyze the factors affecting the bank performance in Kenya for a period of 2001-2010 by using the both internal and external variables. They used ROA, ROE and NIM as dependent variables and "liquidity ratio, asset quality, capital adequacy, management efficiency, GDP and inflation" as independent variables. Study shows that there is a significant impact of capital adequacy, asset quality and management efficiency on profitability of banks in Kenya. However, liquidity has not strong effect on profitability of banks in Kenya. Moreover the study also shows that there is positive association between the capital adequacy, management efficiency and bank performance but this is negative with asset quality.

Methodology

The study is based on the panel data which covers a 11-years period from 2004 to 2014, with a sample of top 10 commercial banks of Pakistan (see appendix I) on the basis of their total assets from the population of all the 37 banks of Pakistan (SBP, 2014) see appendix II. The purposive sampling technique which is a type of non-probability

sampling is used, in which the purpose is to select the top 10 commercial banks of Pakistan. The data of the banks sample is obtained from the State Bank of Pakistan (SBP) and also from the annual reports of the selected banks which are available on the websites. The study is using the panel data, so the model of the study is as follows.

Model of the Study

$$Y_{it} = \beta^{\circ} + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \beta_5 X_{5it} + \beta_6 X_{6it} + \beta_7 X_{7it} + u_{it}$$

Where;

Y_{it} = "Return on Asset (ROA), Return on Equity (ROE) and Net Interest Margin (NIM) for bank i at time t".

X_{1it} = "Natural logarithm of Total Asset (SIZE) for bank i at time t"

X_{2it} = "Ratio of Equity Capital to Total Asset (CAPITAL) for bank i at time t"

X_{3it} = "Ratio of Total Loans to Total Asset (LOAN) for bank i at time t"

X_{4it} = "Ratio of Total Deposits to Total Assets (DEPOSITS) for bank i at time t

X_{5it} = "Ratio of Net provision for loans to gross loans (Asset Quality) for bank i at time t"

X_{6it} = "Ratio of Interest Income to Interest Expense (EFFICIENCY) for bank i at time t"

X_{7it} = "Ratio of Liquid Assets to Total Assets (LIQUIDITY) for bank i at time t"

i = "1 to 10 banks"

t = "2004-2014"

u_{it} = "Error term".

The paper includes only the internal factors to estimate the bank's profitability and limited only to the following variables.

Return on Asset (ROA)

Return on Asset (ROA) is a one of the most important and useful indicator of bank profitability. ROA is calculated by dividing the net income over total assets which give a ratio of earnings generated from invested capital. ROA is management effective in generating profit on each dollar of investment (Hassoune, 2002). Both Hassan and Bashir (2003) and Naceur (2003) used ROA in their studies as a performance indicator and dependent variable.

Return on Equity (ROE)

ROE is a ratio of profitability which shows the rate of return on shareholder equity. ROE is the ratio of net income to total equity (Fraker, 2006). This ratio is also a good indicator to measure the bank's profitability, because it shows the amount earned which is invested by owners from the assets. In another words, it is a percentage return of owns fund.

Net Interest Margin (NIM)

NIM is a ratio of net interest income divided by total assets. In other words it is a measure of the difference between the interest income produced by banks or other financial institutions and the amount paid in the form of interest to lenders relative to the amount of their assets. It is also a profitability indicator and similar to the gross margin of non-financial institutions. The focus of NIM is on the profit which is earned on interest activities (Berger, 1995; Barajas, Steiner & Salazar, 1999 and Naceur and Goaied, 2005).

Bank Size

In most of the studies the total asset is characterize by bank size. Bank Size (LSIZE) indicates that the banks which are large in size are more profitable as compared to small banks in control economies of scale. Therefore, a positive association is expected between size and profitability, in other words the bank which is large in size is more profitable (Athanasoglou et al., 2005). The studies of Molyneux and Thornton (1992), Bikker and Hu (2002) and Goddard, Molyneux, and Wilson (2004) show a positive association between size and bank's profitability.

Capital adequacy

Total equity over total asset measures the capital adequacy (CAR) of the banks. It is used to determine the ability of the banks to absorb the losses and to control the risk with shareholders. The study of Hassan and Bashir (2003) found a positive relationship between CAR and bank's profitability. It is expected that CAR have a positive and significant relation with performance because the banks which are well capitalized have less risky and more profitable (Bourke, 1989).

Total Loans to Total Assets

Total loans over total assets (TLTA) measures the liquidity of bank assets tied to loans. The banks which have a higher the TLTA ratio, the bank is less liquid. The operations of Banks are mostly based on loans. However the Islamic banks are operating on basis of profit and loss, which is interest-free lending. Moreover, previous studies such as the study of Demirguc-Kunt and Huizinga (1999) on conventional banks show a positive relationship between TLTA and profitability.

Deposits to Total Assets

The ratio of deposits to total assets (DTA) is also a liquidity indicator but it is considered a liability. Deposits are also one of the main sources of bank funding. Deposits are calculated by divide it on total assets. Hassan and Bashir (2003) used deposits as an indicator in their study and find out that there is a negative relationship between deposits and profitability of banks.

Asset Quality

Asset Quality ratio (AQR) is measured by dividing the Non-Performing Loans on Gross Loans. The study of Gunsel (2007) described that Asset quality is the major cause of risk that could be faced by the banks, as the bank which includes net provision for loans in the portfolio, the exposure of failure are expected. Thus as the loans are increased it could lead to the failure in profitability.

Management Efficiency

Management Efficiency (EFF) is used to estimate that how well an organization internally utilizes its assets and liabilities. It is calculated by dividing the Interest Income over Interest Expenses. The banks which have more interest income over interest expense have a higher efficiency ratio.

Liquidity

Liquidity is a ratio which is estimated by dividing the Liquid Assets on Total Assets (LQR). Inefficient liquidity is one of the main reasons of bank's failure. Bourke (1989) found a positive relationship between liquidity and the profitability of banks. But at the stage of instability, in order to mitigate the risk the banks may try to increase their cash holding. The study of Molyneux and Thorton (1992) which is opposite to the Bourke (1989) found a negative relationship between liquidity and profitability.

Results

   This section highlights the descriptive statistics, correlation matrix analysis, multicollinearity diagnostic test (VIF) and the regression analysis for all the profitability indicators such as ROA, ROE and NIM are presented.

Descriptive Statistics

Table 1: Descriptive Statistics of all Variables

Variables	Observations	Mean	Std. Deviation	Minimum	Maximum
ROA	110	0.0146497	0.008239	-0.0136	0.0372
ROE	110	0.2017018	0.1032029	-0.3186	0.53
NIM	110	0.0386015	0.011697	0.0189	0.0699
LSIZE	110	0.08615	0.003258	0.0783	0.0927
LOANS	110	0.4757982	0.0929523	0.2987	0.6526
DEPOSITS	110	0.7825318	0.0597376	0.5995	0.8954
CAPITAL ADQ	110	0.0761227	0.0307401	0.0271	0.1696
ASSET QUALITY	110	0.0853445	0.0526006	0.0002	0.2199
MGT EFFICENCY	110	2.356158	1.072487	1.0372	7.002
LIQUIDITY	110	0.1069674	0.0351529	0.05001	0.2607

   Table 1 shows a descriptive statistics for all the dependent variables ROA, ROE and NIM and all independent variables SIZE, TLTA, CAR, DTA, AQR, EFF and LQR. All of these variables have shown a positive mean value which ranges from a low value of ROA= 0.0146 to higher value of EFF= 2.356.

Correlation analysis

Table 2: Correlation analysis Matrix

	ROA	ROE	NIM	LSIZE	TLTA	DPT	CAR	AQR	EFF	LQR
ROA	1.000									
ROE	0.737	1.000								
NIM	0.534	0.183	1.000							
LSIZE	0.092	-0.137	0.269	1.000						
TLTA	-0.030	0.211	-0.011	-0.473	1.000					
DPT	-0.299	0.031	-0.369	0.165	0.114	1.000				
CAR	0.416	-0.111	0.723	0.193	-0.243	-0.703	1.000			
AQR	-0.108	-0.458	0.192	0.523	-0.420	0.009	0.317	1.000		
EFF	0.246	0.186	0.389	-0.058	0.232	-0.065	0.216	0.187	1.000	
LQR	-0.049	0.081	-0.074	0.158	0.293	0.382	-0.219	0.117	0.141	1.000

The table 2 shows that ROA, ROE and NIM are positively correlated. The LSIZE and CAR are positively related to both ROA and NIM but negatively related to ROE. Similarly TLTA, DTA and LQR are positive related only to ROE and negatively to ROA and NIM. AQR is negatively related to ROA and ROE and positively related to NIM. The only EFF is positively related to all the dependent variables ROA, ROE and NIM. Moreover, the important point is that there is not a high correlation between all the explanatory variables, thus it conclude that there is no Multicollinearity.

Multicollinearity Diagnostic Test

In order to identify that whether there is a problem of multicollinearity among the variables is exist or not; besides of the correlation analysis the Variance Inflation Factor (VIF) test is also performed to support the validity of the regression analysis. If the result of VIF is below 10, then it suggests that there is no multicollinearity (Gujrati, 2003).

Table 3: Multicollinearity Diagnostic test

Variables	VIF	1/VIF
SIZE	1.87	0.533558
LOANS	1.85	0.539952
CAPITAL ADEQUACEY	2.86	0.350193
DEPOSITS	2.72	0.367149
ASSET QUALITY	1.76	0.569262
LIQUIDITY	1.43	0.698975
MANAGEMENT EFFICIENCY	1.27	0.784995
MEAN VIF	1.97	

In table 3 the result of VIF is reasonably good. The result shows that all the variables have a VIF value less than five. The values of VIF in this model range from 1.27 to 2.86 for management efficiency and capital adequacy and as all the variables have a value of less than 10 thus it shows that there is no multicollinearity among variables of the model.

Regression Analysis

In this section the result of regression analysis of all the dependent variables (ROA, ROE and NIM) is given. The Fixed Effects Model is used which is selected on the basis of Chow test, Breusch Pagan test and Hausman test see appendix III.

Regression Analysis of Dependent variable ROA

Table 4: Regression Analysis of Dependent variable ROA

Variable	Coefficient	Std. Error	t-statistics	Probability
CONSTANT	0.0971362*	0.0530642	1.83	0.070
LSIZE	-0.7637198	0.5181858	-1.47	0.144
TLTA	-0.0230714**	0.0112704	-2.05	0.043
DTA	-0.0044957	0.0211209	- 0.21	0.832

CAR	0.0520717	0.0469712	1.11	0.270
AQR	-0.0679531***	0.0237192	-2.86	0.005
EFF	-0.0005492	0.0009326	-0.59	0.557
LQR	0.0087221	0.0345325	0.25	0.801
R- Squared	0.1684	F-statistics	2.69
		Probability > F	0.0139

Note: *, ** and *** Shows 1%, 5% and 10% level of significance respectively.

The table 4 summarizes the empirical results for dependent variable ROA. The result shows that size has a negative impact on bank's profitability. This result shows that the banks which are large in size achieve a lower ROA. The studies of Bourke (1989) and Javaid et al. (2011) also found the same result. TLTA have a significant at 5 % of level but negative relationship with dependent variable ROA. Deposit to total assets (DTA) has a negative effect on the bank's profitability.   TETA shows a positive association with ROA, its mean that the banks which are well-capitalized have higher returns. The results are opposite to the results of Vong and Chan (2006), Burki and Niazi (2006) and Alkassim (2005). Asset quality (AQR) indicates a negative but significant relationship with bank's profitability. Ahmad et al. (2011) and Kosmidou (2008) also found the same result. Management Efficiency also shows a negative and insignificant relationship with ROA. It means that interest expenses are more than interest income which show a poor Management Quality that leads to negative bank's profitability in Pakistan. Liquidity shows a positive influence on the profitability of commercial banks in Pakistan.

Regression Analysis of Dependent variable ROE

Table 5: Regression Analysis of Dependent variable ROE

Variable	Coefficient	Std. Error	t-statistics	Probability
CONSTANT	1.292004*	0.652339	1.98	0.051
LSIZE	-8.492123	6.370266	-1.33	0.186
TLTA	-0.3002328**	0.1385512	-2.17	0.033
DTA	-0.0087138	0.2596477	-0.03	0.973
CAR	-1.209407**	0.5774356	-2.09	0.039
AQR	-1.503201***	0.2915893	-5.16	0.000
EFF	0.0085433	0.0114647	0.75	0.458
LQR	-0.0823852	0 .4245218	-0.19	0.847
R- Squared	0.4203	F-statistics	9.63
		Probability > F	0.0000

Note: *, ** and *** Shows 1%, 5% and 10% level of significance respectively.

The table 5 shows the result of regression analyses for the dependent variable ROE. The result shows that there is a negative relationship between size and ROE. TLTA show a negative but significant at a 5% level of significance impact on ROE. Thus increase in total loan will bring a negative change in ROE. Deposit to Total Asset show a negative as well as insignificant impact on ROE. It means that the increase in deposits will bring a negative change in the profitability of banks in Pakistan. CAR has a significant (5%) but the effect is negative on the bank's profitability. The result is opposite to other studies such as Brock and Suarez (2000), Demirguc-Kunt and Huizinga (1999). Asset Quality has a significant (1%) negative effect on ROE. Management Efficiency shows insignificant but positive relationship with ROE. The result indicates that management quality has a strong impact on the profitability of banks; the banks where the management efficiency is high the higher will be the profitability. Finally Liquidity also has insignificant and negative impact on bank's profitability in Pakistan.

Regression Analysis of Dependent variable NIM

Table 6: Regression analysis of Dependent variable NIM

Variable	Coefficient	Std. Error	t-statistics	Probability
CONSTANT	0.035998	0.0493726	0.73	0.468
LSIZE	-0.0909766	0.4821366	-0.19	0.851
TLTA	0.0283051***	0.0104863	2.70	0.008
DTA	-0.0297381	0.0196516	-1.51	0.134
CAR	0.2373383***	0.0437035	5.43	0.000
AQR	0.0375881*	0.0220691	1.70	0.092
EFF	-0.001056	0.0008677	-1.22	0.227
LQR	0.013632	0.0321301	0.42	0.672
R- Squared		0.4441	F-statistics	10.61
			Probability > F	0.0000

Note: *, ** and *** Shows 1%, 5% and 10% level of significance respectively.

The result of NIM shows that size is negatively affecting the profitability of banks in Pakistan. Its means that the effect of increasing size of banks will leads to positive profits for a certain level, but when the bank becomes too large than the effect is expected to be negative because of bureaucracy or any other reasons. The result is similar to the result of Naceur and Goaeid (2003). TLTA has a positive and significant at 1% level effect on NIM. The result concludes that increase in the total loans of the banks will leads a positive increase in the NIM and profitability of the commercial banks in Pakistan. Result also shows that there is a positive and significant relationship between CAR and NIM. It shows that the banks which are well capitalized with own funds have strong and have advantages to those banks which have low ratio of own funds. The studies of Heffernan and Fu (2008), Kosmidou (2008), Berger (1995), Demirguc-Kunt and Huizinga (1999) and Brock and Suarez (2000) also found the same result. The Assets Quality is positive as well as a significant (10%) impact on NIM. Moreover the result shows that there is negative and insignificant relationship between Management Efficiency and NIM. It means that the banks have more interest expense and low interest income. Moreover any change in this variable brings negative effect on NIM. At last the

relationship between Liquidity and NIM is also positive. The result concludes that the banks which have more liquid assets are more stable as compared to which does not have. Moreover increase in liquidity brings positive increase in the profitability of commercial banks in Pakistan. The same result is found by the study of Bourke (1989).

Conclusions and Recommendations

The result of regression analysis is performed differently with all the dependent variables (ROA, ROE and NIM). The study found that the LSIZE has a negative effect on banks profitability while measuring with ROA. It means increase in size bring negative change in ROA. TLTA has a significant at 5% level of significance but negative effect on ROA. AQR also negatively affecting the ROA but the relationship is significant (1%). DTA and EFF show a negative as well as insignificant relationship with ROA. The only CAR and liquidity show a positive relationship with the bank's profitability while measuring by ROA. But this relationship is not significant. On the other hand, when ROE is used as the profitability indicator (dependent variable) it also shows that there is a negative relationship between bank SIZE and bank's profitability in Pakistan. The TLTA and AQR both have the statistically significant but negative relationship with ROE. This result is similar to ROA. However the CAR has an inverse result to ROA and show a negative and significant relationship to ROE. DTA and LQR are negatively affecting the profitability of commercial banks of Pakistan. The only one explanatory variable EFF shows a positive but insignificant impact on ROE. Furthermore, the NIM is also used as an indicator to determine the profitability of banks. The results show that TLTA, CAR and ARQ have a positive as well as a significance relationship with NIM. Moreover, the LQR also has a positive impact on NIM, but this relationship is insignificant. The LSIZE, DTA and EFF have a negative as well as insignificant relationship with bank's profitability in Pakistan while measured by NIM. The study concludes that the size shows a negative relationship with bank's profitability. It is due to diseconomies of scale. So the banks must have to pay an attention on his official procedures, bureaucracy and managerial efficiency. This will help to increase the profitability of banks. The TLTA shows a negative impact on both ROA and ROE but this affect is significant. Thus it is required by banks to increase the capacity of loans, this will bring a positive increase in profitability. CAR negative relationship with ROE suggests that the banks need to pay more concentrated on equity to increase profits. The negative impact of EFF shows that the banks have more interest income over interest income. Hence, it is essential for the banks to increase the interest income, thus as a result the overall profit of the banks will also increase. As loans play a significant and main role in the increase of interest income so the banks requires increasing their loans which will ultimately increase the profit the banks. The AQR result suggests that the banks have more credit risk and they need by management to monitor and control the loans and investment portfolio. The negative impact of LQR on ROE will leads that banks have less amount of liquid assets, so they need to pay a close attention on liquid assets to increase profitability.

Future Research

Further research can be extended by increasing some other internal variables such as credit risk, productivity growth, net interest margin, non-interest expenses etc. It can also be extended by using the external factors such as GDP, Inflation, market capitalization, economic growth, market structure, monetary policy, export and foreign exchange reserves etc. Moreover it can also be extended by using the data of panel of countries. Similarly the comparison between conventional banks and Islamic banks is also a way of doing a research in future.

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