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REVIEW ARTICLE

# IMPACT OF RISK MANAGEMENT ON PROFITABILITY OF BANKS

Shahbaz Bhatti<sup>1\*</sup>, Naveed Tariq<sup>2</sup>, Muhammad Rizwan<sup>2</sup>, Muhammad Ajmal<sup>2</sup>, Abdul Rehman Aslam<sup>2</sup>, Kamran Javed<sup>3</sup>

- <sup>1</sup>Institute of Agricultural and Resource Economics, University of Agriculture, Faisalabad.
- ${\it ^2Department\ of\ Business\ Administration,\ UAF\ Sub-Campus\ Burewala-Vehari.}$
- <sup>3</sup>Cotton Research Station, Vehari
- \*Corresponding author e-mail: bhattimphil@gmail.com

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## **ARTICLE DETAILS**

#### **ABSTRACT**

### Article History:

Received 10 October 2019 Accepted 18 November 2019 Available Online 24 March 2020 Banks today are the biggest budgetary establishments around the globe, with branches and auxiliaries for an amazing duration. In any case, business banks are confronting dangers when they are working. Credit hazard is one of the most critical dangers that banks face, taking into account that conceding credit is one of the fundamental wellsprings of pay in business banks. Subsequently, the administration of the hazard identified with that credit influences the benefit of the banks. The point of the exploration is to furnish partners with precise data in regards to the credit hazards the executives of business keeps money with its effect on benefit. The principle motivation behind the exploration is to research if there is a connection between credit chance administration and productivity of business banks in Europe. We additionally expect to examine if the relationship is steady or fluctuating. In the examination model, ROE and ROA are characterized as intermediaries of gainfulness while NPLR and CAR are characterized as intermediaries of credit chance administration. The exploration gathers information from the biggest 3 commercial banks in Pakistan from 2016 to 2018 and formulate hypothesis which are identified with the examination question. A progression of measurable tests are performed so as to test if the relationship exists. Other measurable tests are performed to explore if the relationship is steady or not.

# KEYWORDS

Risk management practice, profitability, Pakistan's commercial banks.

### 1. INTRODUCTION

Banks speak to the monetary heart of any advanced society. Banks today are the biggest monetary organizations around the globe, with branches and backups for an amazing duration. They can be utilized as a center of reserve funds to numerous people or foundations, and it likewise can be utilized for ventures, loaning, and anticipating others. Banks attempted to facilitate the keep running of items and administrations between the individuals from the network by giving them straight forwardness and advance installment techniques. In the seventies, Business banks went out on a branch which were anything but difficult to control. In any case, after the seventies of the only remaining century the financial market saw numerous advancements and new practices, for example, changeability of the loan costs, scanning conversion scale, presentation of numerous items, and spread of the banks all around and nearby. The new time of changes in banks after the seventies, caused and expanded volume of work, wave of deregulation, and accelerated competition.

The new changes of banking practices after the seventies, kept on manipulating the economic markets and constructed by banks, which controlled them to press net revenues for the challenge, and consequently prompted a decrease in banking benefit. Similarly those new practices particularly over the most recent two decades prompted the expansion of the dangers looked by these banks in all nations, where the financial business risk is never again controlled to the dangers of borrowers, and even past that to the experience of a few dangers, some of which result from the bank choices which will increase or decreasing the danger what's more, thus influence its gainfulness.

Liquidity risk consider as the most significant factor influence consistency and endurance of bank. Hence, if the bank had the option to deal with this risk, this mean he will have the option to execute the commitments towards the contributors, notwithstanding that, the liquidity in the bank will improve the benefit and afterwards lead to extend the wealth of its investors. Additionally, credit dangers which results when the counterparty disregards to meet its commitments appropriate and completely as per the agreed terms, encouraging troubles because of this disappointment. Notwithstanding that operational risk speaks to the misfortunes that outcome from the disappointment of internal procedures, work force and frameworks. At long last, chances out of bank control are spoken to by market risk, which brought about by macroeconomic factors, for example, a difference in financing costs, swelling rate, instability of costs, money trade rates.

The achievement and development of banks, connected to its skilled job in the main request to decide changeable dangers and attempting to keep away from them. This subject has turned into a region of worry of various specialists and investigators in business and account condition locally and globally, yet these examinations tended to this issue through anticipating these dangers exclusively, particularly in the commercial condition. As it is seen from the specialist, there is just one investigation which has been applied on the Islamic banks, While thinks about in business banks have managed the effect of risk the board trains on execution independently, Therefore, this examination endeavors to break down the effect of risk the executives rehearses on the gainfulness of commercial business banks all in all and exclusively.

The banking sector had entered the crisis with too much leverage and inadequate liquidity buffers. These defects were joined by poor

administration and risk management, just as wrong motivation structures. The MCB was set up in November 1949 as an initial move towards making a national financial framework. A significant occasion throughout the entire existence of banking framework in the nation happened on January first 1974, when all the 13 residential banks were nationalized and joined into five nationalized business banks. In this way, this investigation events of three Banks HBL, MCB and UBL bank all in all and entirely.

### 1.1 The objectives are as follow:

- 1- The main objective is to explore the risk in commercial banks.
- 2- To explore the effect of risk management practices as wholes and separately on commercial banks.
- 3- How risk management affect profitability.
- $\hbox{4-} \quad \hbox{To find out the relation between risk management and profitability}.$
- 5- How the proportion of profitability can increase.

### 2. REVIEW OF LITERATURE

Alqisie and Ahmad examined the profitability of Jordanian commercial banks get affected by risk management practices [1]. independent variables are liquidity, operational risk, credit risk and market risk which are measured by CP, LQ, IC, EFFC, CICF, PRCF, INF and INT. ROA is used to measure the dependent variables profitability of banks. Risk management practices have significant role in profitability of JCB. Liquidity, credit risk and market risk management does not affect significantly. While operational risk management effect significantly.

Fan li examined the impact of credit risk management on profitability of commercial bank [2]. ROE and ROA are dependent variables. CAR and NPLR are independent variable. A relationship exists in credit risk management and profitability. The result show that there is not a significant relationship between CAR and ROE which is due to the controversy in theoretical predictions of the relationship between NPLR and ROE and between NPLR and ROA. The higher the NPLR is less the available capital for bank to invest. The interesting thing about result is ha although the relationship is not significant, the correlation, co-efficient of CAR for both ROE and ROA is negative. CAR could negatively affect the bank profitability.

The impact of risk management practices on financial performance of the Islamic banks in Jordan. ROA and ROE are measures of the performance, while, Liquidity risk, Operational risk, Credit risk and Market risk represent risk management practices. The study concluded that the performance of Islamic banks in Jordan was affected negatively and significantly by liquidity risk, credit risk and operational risk, while performance was affected positively and significantly by market risk.

Alzorqan examined the relationship between bank liquidity risk and performance of the Jordanian commercial banks. Execution was estimated by (ROI and ROE), while current and credits to stores proportions speak to liquidity chance. The aftereffects of the investigation presumed that present and advances to stores proportions impact ROI and ROE essentially. A studied the effect of credit risk management on financial performance of the Jordanian commercial banks. The dependent variable represents profitability measured by ROA and ROE. The independent variables represent the credit risk management indicators which include the CAR, CI, CFR, LR, NPL/GL. Nonperforming loans/Gross loans ratio have a positive effect. Capital adequacy ratio credit interest /credit facilities and the leverage ratio do not affect the profit of the bank measure by the ROE. Leverage effect negatively on bank profitability. Credit risk is important in explaining profitability.

Saeed and Zahid examined the impact of credit risk on profitability of the commercial banks [3]. Dependent variables are measured by ROA and ROE and independent variables are credit risk, bank size, growth and leverage. The author observed that the credit risk is the most dangerous risk especially from the bank that can put them into deep trouble. According to the observation in 2008 several banks passed through the deep recessions

due to the mismanagement of credit risk. In 2008 after financial crises the bank learned the lesson but still, they need to improve the credit risk management. Bank can improve it through tackling asymmetrical information flow and giving guarantee of loan repayment. The Author conclude that the bank size, leverage and growth are also positively interlinked with each other. Over the year bank learned how to tackle credit risk and achieved profitability after financial crises. There is no disclose relation between credit risk and profitability.

Sun and Chang had worked on the impact of credit risk on profitability of commercial Banks [4]. The ROE and ROA are dependent variables and CAR and NPLR are independent variables. Data resources is WADS. The author concludes the positive relationship between credit risks and profitability from data. They find the negative relationship between NPLR and ROE and NPLR and ROA. By combining the result, they conclude the positive relationship between credit risk management and profitability. The author conclude that bank managers should control the risk management to improve profitability. The significant relation is not present between CAR and profitability.

A studied the relationship between risk management and profitability of commercial banks in Albania [5]. The author observed the negative relationship between credit risk and profitability ROA and ROE. Capital adequacy has a positive relationship with two profitability variables with return on assets and return on equity. The return on equity is more efficient profitability measurement than return on assets. There is strong relationship between credit risk and profitability of commercial banks.

Sayilgan examined the determinants of profitability in Turkish banking sectors 2002 to 2007 [6]. The author observed regressions results for ROA which is dependent variable. The balance sheet in turkey become more and stronger in 2002 to 2007. The author obtained the result related to the micro independent variables the profitability of banking sectors seems to have increased along with declining inflation rate, consistently increasing industrial production index and improving budget balance.

Abel observed the determinants of banking sectors profitability in Zimbabwe [7]. The profitability of banking institutes is measured by ROE and ROA. Independent variables are INF, CADEQ, credit risk, bank management an economic growth. The author observed the result which shows the banking sectors profitability in Zimbabwe is mostly driven by bank specific factors. Profitability depends upon the bank level managements variables. Profitability is associated with bank that hold a relatively high amount liquid assets high capital and low level NPLs together with efficient expense management. OEM should be enhanced by the banking sectors. The study show positive relationship between profitability and LIRISK. Profitability can be increased by increasing the liquidity.

Kithinji credit risk management and profitability of commercial banks in Kenya [8]. The profit is not dependent on the amount of credit and nonperforming loans amount to Ks 2.676 billion. The author concludes that there is no relationship between profit amount of credit and the level of nonperforming loans. The result reveals that the bulk of the profit of commercial banks is not by the amount of credit affected and nonperforming loans suggesting that other variables other than credit and nonperforming loans impact on profits.

Staikauras and wood had studied the determinant of European bank profitability. The result suggest that the profitability of European bank is affected not only by factors related to their management decisions but also to the change in the external micro economics environment. The results are in contrast to studies that have examined structure performance relationship for European banking and find a positive effect of concentration and market share variables on bank profitability. The limitation of the analysis may be related to the specification of the functional form of the estimating equation.

Shijaku does concentration matter for bank stability? Evidences from the Albanian banking sector [9]. The variable of capital structure as measured by LEVERAGE has the most important effect on bank stability among the

internal variables. The author conclude that concentration is negatively related to the bank stability. In term of other variables, the microeconomic variables seem to have a significant effect on bank stability small banks are more sensitive to market concentration.

Short investigated the relation between commercial bank profit rates and banking concentration in Canada, Western Europe and Japan [10]. Some variable should be considered to take account of profit rates or capital scarcity in these countries. The average discount rate is considered as independent variable. Profit rate are dependent variable. The result shows that market size measured by total deposits or broadly defined money is able to explain over three fifth of the variation in concentration across twenty-three countries. Legal environment has small effects on concentration and bank profit rates.

Goddard has worked on the profitability of European bank: A cross sectional and dynamic panel analysis [11]. The result of empirical analysis suggests that despite the growth in competition in European financial market, there is still significant persistence of profit from one year to the next. The author also concludes the difference between countries in the relationship between the importance of OBS business in a bank portfolio and its profitability. The general conclusion of empirical analysis is that the increasing integration of European banking market not withstanding national factors still seem to play an important role among the determinant of bank performance.

#### 3. METHODOLOGY

The examination configuration grips the strategies on which the exploration work is established on Saunders et al. As it were, it tends to be said that it is made out of the kind of the investigation which is utilized by the specialists to achieve the targets. The sort of study covers different perspectives, for example, theories, factors, techniques, and separate structure. Revealing and exploratory research plans are the two key classifications of research structure. The utilization and selection of both research structures is basically founded on the nature and necessities of the examination. The distinct research configuration is improper for this examination due to logical need, for example, lab try. The exploratory research configuration can more readily fit in this examination on account of featuring the connections (critical or immaterial) between credit hazard and bank profitability. It is assumed that finding these connections will help the Pakistani banks to stay away from credit hazards later on. What's more, the investigation's preference is flexible and unmistakable in responding to the examination questions. Consequently, the examination targets can be practiced all the more unequivocally while receiving exploratory research structure. Additionally, the after effects of this examination are to a great extent established in the quantitative information and subsequently cautious and intensive examination is required which can be accomplished by embracing exploratory research. Secondary data is used which work on E view and SPSS to find regression and correlation.

# 3.1 Population

The key aim of this research is to determine the links between bank profitability and credit risks associated with banks. The numerical data for analyses is acquired from three big Pakistani commercial banks for the period of eight years starting from 2016 to 2018. The big three Pakistani banks refer top three Pakistani commercial banks which include:

- 1. HBL
- 2. UBL
- 3. MCB

### 3.2 Data Collection

The empirical data about study variables for the period of three years (2016-2018) is collected from Bank Scope database which contains the data of all commercial Pakistani banks. Two types of empirical data (dependent variables and independent variables) are collected based on the theoretical model of the study. The dependents variables are ROE (Return on Equity) and ROE (Return on Assets) and conversely the

independent variables are the factors that affect bank profitability including the credit risk.

### 3.3 Hypothesis

There are two types of hypothesis.

### 3.3.1 Null Hypothesis

Ho1= there is no significant relationship between ROA and CP. Ho2= there is no significant relationship between ROA and LQ. Ho3= there is no significant relationship between ROA and IC. Ho4= there is no significant relationship between ROA and INF. Ho5= there is no significant relationship between ROA and INT. Ho6= there is no significant relationship between ROA and CICF.

### 3.3.2 Alternative Hypothesis

Ho1= there is significant relationship between ROA and CP. Ho2= there is significant relationship between ROA and LQ. Ho3= there is significant relationship between ROA and IC. Ho4= there is significant relationship between ROA and INF. Ho5= there is significant relationship between ROA and INT. Ho6= there is significant relationship between ROA and CICF

#### 4. RESULTS AND DISCUSSION

Dependent Variable: ROA
Method: Panel Least Squares
Date: 10/16/19 Time: 15:27
Sample: 2016 2018
Periods included: 3
Cross-sections included: 3
Total panel (balanced) observations: 9

Variable	Coefficient	Std.	t-Statistic	Prob.	
С	-0.037475	0.106199	-0.352880	0.7579	
СР	0.001668	0.000745	2.240269	0.1544	
LQ	-0.008694	0.005146	-1.689278	0.2332	
IC	0.002391	0.001785	1.339331	0.3124	
CICF	-0.000498	0.000390	-1.275833	0.3302	
INF	-0.298928	0.467016	-0.640081	0.5877	
INT	0.421966	0.834540	0.505628	0.6633	

R-squared	0.959679			
Adjusted R-squared	0.838715			
S.E. of regression	0.002594			
Sum squared reside	1.35E-05			
Log likelihood	47.58861			
F-statistic	7.933610			
Prob (F-statistic)	0.116152			
Mean dependent var	0.012856			
S.D. dependent var	0.006459			
Akaike info criterion	-9.019691			
Schwarz criterion	-8.866294			
Hannan-Quinn criter.	-9.350721			
Durbin-Watson stat	3.250714			
<u> </u>	1			

For relapse investigation 1 exhibit that the connection among CAR and ROE is unimportant while the connection among NPLR and ROA is critical. With regards to the LNTA, the p-esteem more than 0.05 shows that we can't dismiss that the connection between bank size and ROE isn't noteworthy.

Correlations										
		СР	LQ	IC	INT	CICF	INF	ROA		
СР	Pearson Correlation	1	053	.580	734*	220	564	.854**		
	Sig. (2-tailed)		.893	.101	.024	.570	.114	.003		
	N	9	9	9	9	9	9	9		
LQ	Pearson Correlation	053	1	215	.413	290	.131	486		
	Sig. (2-tailed)	.893		.579	.270	.449	.736	.184		
	N	9	9	9	9	9	9	9		
IC	Pearson Correlation	.580	215	1	388	.322	331	.663		
	Sig. (2-tailed)	.101	.579		.303	.398	.384	.051		
	N	9	9	9	9	9	9	9		
INT	Pearson Correlation	734*	.413	388	1	.230	.784*	823**		
	Sig. (2-tailed)	.024	.270	.303		.552	.012	.006		
	N	9	9	9	9	9	9	9		
CICF	Pearson Correlation	220	290	.322	.230	1	075	158		
	Sig. (2-tailed)	.570	.449	.398	.552		.848	.684		
	N	9	9	9	9	9	9	9		
INF	Pearson Correlation	564	.131	331	.784*	075	1	525		
	Sig. (2-tailed)	.114	.736	.384	.012	.848		.147		
	N	9	9	9	9	9	9	9		
ROA	Pearson Correlation	.854**	486	.663	823**	158	525	1		
	Sig. (2-tailed)	.003	.184	.051	.006	.684	.147			
	N	9	9	9	9	9	9	9		

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

# 5. CONCLUSION

The reason for this examination is to research the impact of hazard the executives rehearses on the productivity of commercial banks in the period (2016 - 2018). For this reason, information from the yearly fiscal summaries of 3 commercial banks have been utilized to test the theories of the investigation. Benefit of banks was spoken to by Return on resources (ROA), while chance administration practices were spoken to by (liquidity hazard, operational hazard, credit hazard and market chance). Each hazard the executive's practice was spoken to by two proportions as found in tables. The investigation finishes up the accompanying outcomes: Risk the board practices have fundamental job in clarifying an enormous variety of the benefit of commercial banks, consequently the clarifying intensity of the models (FE and RE) R2 clarified about (82.69%, 79.94%) separately of variety in productivity as indicated by the hazard the board rehearses. Liquidity hazard the executives practices have unimportant impact on the productivity of commercial banks with negative relationship, which prosecuted, that the commercial banks during the investigation time frame had the option to oversee liquidity chance and in a similar time doesn't experienced this kind of hazard.

- Operational chance the executives' practices impact contrarily and fundamentally the gainfulness of commercial banks with respect to just its proficiency in overseeing overheads, which implies that commercial banks experienced this sort of hazard during the examination time frame. In opposite, commercial banks during study period had the option to deal with the working pay chance; in light of the fact that the impact of salary on gainfulness was sure and critical, which implies that these banks don't experience the ill effects of dealing with this sort of hazard.
- Credit chance the executive's practices don't have any critical impact on the gainfulness of JCBs during study period, which implies that proposals banks don't experienced credit hazard or dealing with this sort of hazard.

- Market hazard the board practices don't have any huge impact on the productivity of commercial bank during study period, which implies that proposals banks don't experienced market chance or dealing with this sort of hazard.
- 4. Contingent upon the discoveries the specialist would state, that Commercial Banks have overseen liquidity, credit and market hazards adequately during the investigation time frame, while these banks neglected to oversee operational dangers spoke to by overheads, and yet they had the option to deal with the salary chance emphatically.

## RECOMMENDATIONS

In view of our discoveries, we need to draw a few proposals for further research. One of the proposals that should be possible to the exploration model is to incorporate more markers. As we referenced previously, our model is referenced from different looks into with same point however just determined in one nation. Our model has a very low R2 dependent on information from Pakistan, which shows that our model doesn't have a delightful by and large fit. Along these lines, we believe the model should be improved. Including more factors could be one recommendation. In our exploration, we use CAR to speak to credit chance administration and use ROE and ROA as productivity pointers. But the markers we associated with the exploration, different measures can likewise show the productivity and credit hazard the executives. In this way, if could be all the more fascinating to incorporate more markers to test the relationship. In the interim, it can assist scientists with enhancing the exactness of the exploration model with the most reasonable factors. Also, we suggest including more organizations for this examination. In our examination, we include 3 banks in Pakistan which we accept are the most agent. We at first mean to cover many banks however at last we just gain admittance to the information of 3 banks. On the off chance that the time and assets are accessible, it could be all the more persuading to include more examples in the investigation. Nonetheless, numerous commercial banks in Pakistan are too little to even consider publishing their yearly reports or key figures. Some of them just have impact to their nearby market however

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

difficult to speak to the entire Pakistan. To gather more information, the association with the banks or specialists may be fundamental.

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