Competitive Social Sciences Research Journal (CSSRJ), 3(1), 161-171
ISSN(Print):2708-9029,ISSN(Online):2708-9037
www.cssrjournal.com

Investigating the Impact of Bank Specific Factors on Risk Taking in Commercial Banks: Evidence from Pakistan

*** Muhammad Imran Khan**

Abdul Wali Khan University Mardan.

Junaid Athar Khan

Institute of Business Studies and Leadership, Abdul Wali Khan University, Pakistan.

Afifa Anjum Khattak

Institute of Management Studies University of Peshawar .

Bisma Javed

Institute of Business Studies and Leadership, Abdul Wali Khan University Mardan.

Arif Hussain

Institute of Business Studies and Leadership, Abdul Wali Khan University, Mardan

Shumaila Malik

Department of Business Administration, Northern University Nowshera

*Email of the corresponding author: Imran_khan7750@yahoo.com

ABSTRACT

The banking industry in any of economy is suffered with the risks that are unique in nature due to the nature of the operations of their business. The current study analyzed the impact of the bank specific factors on the risk taking in commercial banks in Pakistan. For this reason, data was collected from the years 2015 to 2021.The analysis showed that bank specific factors impact the risk-taking in the commercial banking business. The study findings agrees with some of the earlier studies who found out that reduced competition among commercial banks boosted risk taking. The researchers stated that when the banking market structure evolved, banks raised the loan interest rates hence incurring more risks that eventually led to riskier loan portfolio. Banks' capital plays essential functions in absorbing risks but raises moral hazard difficulties. Commercial banks are regulated and each bank is obliged to meet with capital requirements as per legislative standards. Commercial banks with big capital base may believe they are too large to fail and continue to amass dangerous loan portfolio. Commercial banks have to re-examine the quality of their assets. Both bank risk appetite and credit growth effect risk-taking among commercial banks and both impinge on the banks assets. Diversification from the typical banking operations as well as ideal balance between capital growth and lending can generate beneficial outcomes in limiting risk-taking in banking business.

***Keywords*:** Credit growth, bank size, bank risk appetite, bank risk taking

To cite this article: Khan, M,I., Khan, J,A., Khattak, A,A., Javed, B**.,** Hussain, A & Malik, S., (2021). Investigating the Impact of Bank Specific Factors on Risk Taking in Commercial Banks: Evidence from Pakistan. Competitive Social Science Research Journal (CSSRJ), 3(1), 161-171

INTRODUCTION

The banking industry in any of economy is suffered with the risks that are unique in nature due to the nature of the operations of their business. The type of the specific risks that are faced by any industry is caused by the operations that are carried out by the influence of the regulatory in industry, the players in the industry, the number of the firms that are working in any industry and the size of that industry. The size of a bank has an impact on its overall performance (Chang, 2021). Zarutskie (2017) said that technologies including different types of the information also have an impact on the risks of the industry. The definition of a financial crisis is subject to debate. Several researchers have sought to define what defines a financial crisis. Schwartz (1987) argued that there were two major financial crises in history; one in Britain and other in USA, while other crises were only "pseudo crises" because of prompt action by the regulators. In the USA, the crises in the banking begin in November 1930 when total 256 of the banks failed, and as the result of the contagion effect, another 352 more banks failed in December, the same year. The definition of size of a bank is subject to debate because there are many aspects which can be factored into consider a bank as large or small. These aspects includes the capitalize, loan portfolio, number of customer accounts/deposits, number of branches, profitability of a bank, number of employees or a combination of all of these.

Risk taking is regarded as the common failure of the banks. As stated by Kroszner & Strahan (2011) that the risks are associated with the crises of the banking. It is evident from the previous researches and the studies that are carried out on risk taking that the factors that are specific to bank are significant to be considered in the risk taking of the bank (Altunabas, 2010).As there is lake of the understanding that how the factors that are related to the banks have an influence on the risk taking in the Banking industry of Pakistan. Therefore the aim of the current research is to explore the influence of the bank related factors i.e. credit growth, bank size, and bank risk appetite and bank profitability on risk taking in commercial banks in Pakistan.

Study Objectives

- To examine the impact of the credit growth on risk taking in commercial banks in Pakistan.
- To investigate the impact of the bank size on risk taking in commercial banks in Pakistan.
- To analysis the impact of the bank risk appetite on risk taking in commercial banks in Pakistan.

- To determine the impact of the bank profitability on risk taking in commercial banks in Pakistan.

LITERATURE REVIEW

Risk Taking

The banking sector, and ultimately the whole economy, is at risk because of excessive risk-taking. Banks operating in rural areas are at risk from a variety of dangers. Commercial banks may not be able to completely eliminate risk-taking, and this necessitates a well-informed risk management. The banking sector in Kenya is very competitive, and there are severe laws that must be followed in order to do banking operations. There is less competition and higher earnings for businesses when the market is highly concentrated. There are just a few of significant companies in the business, and they may work together to keep costs high. This will reduce the amount of people who will purchase the product while all other variables are held constant. As a result, banks will have no incentive to lend to borrowers who may fail on their repayment obligations, as established by the due diligence of a bank loan officer. There is a danger in banking rivalry being too fierce. Thakor, Greenbaum, and Chan (1986). Banks' surpluses in a less competitive market are eroded when competition is intense. As a result, a bank's loan portfolio is put at risk because of a decrease in the franchise value of the company.

Theoretical Review

This section presents the theoretical review of the current study. The below mentioned theories provides theoretical underpinning to the construct of the study.

Agency Theory

The agency theory was formally documented by Ross (1973) and Mitnick (1973) and is defined as a relationship which exists when one party, the agent acts for, as a representative of, or on behalf of another, the principal. Jensen & Meckling (1976) describes the agency relationship as the contract in which one person or more persons (principal) engages some other person (agent) for the performance of some kind of the services in their place that involves the decision making.

According to Goetz (2010), the administrative structure of a bank affects the bank's lending behavior and, as a result, its unique risk-taking performance and the risk-attractive behavior of the rival banks. According to Goetz (2010), the bank manager is the principle and the loan officers are the subordinates in this case. For the sake of the management, the loan majors pick an equivalent amount of risk. As a result, a situation of potential moral hazard occurs, and two distinct categories of knowledge are distinguished: quantitatively quantifiable hard data and qualitatively verifiable soft data. When it comes to Petersen, you can't go (2004). To convey soft information, such as the connection between a loan officer and his or her borrowers, is difficult.

Expected Utility Theory

A person's position in terms of the anticipated utility theory (EUT) is determined by his or her ability to select between the risks and the expected values (Mongin, 1997). There are numerous riskier options to choose from in the banking industry. The risk that a bank takes on when lending money to someone is inherent in every loan that it makes. However, even if the borrower is creditworthy, there may be additional risks to consider before the loan is granted or as part of the pricing procedures chosen by a bank, even when credit risk is not part of the deal. The degree to which a product's use provides enjoyment is referred to as its utility (a good or service). In its most basic form, this theory examines the degree of pleasure a decision maker receives while making a choice between hazardous options. To a large extent, sensible customers (the ones who make the purchasing decisions) are taken for granted. If the decision-maker is sane, the best option will be the one that provides the most pleasure.

Impact of bank Specific Factors on Risk Taking

Study conducted by Stein (2002) argued that the organizational structures influence lending behavior of the banks. Also, Petersen (2004) stated that the factors associated with the performance of the bank are also related to the risk-taking ability of the organization and banks considered these factors while taking decision regarding the risk taking. Soft info creates from a loan major's contact with a debtor and is qualitative. Soft info is not demonstrable and is harder to connect between a loan officer and the bank manager. Most of the banks have a dedicated team that monitors the bank specific factors of the banks and its influence on the performance (Goetz, 2010). The organizational structure of the larger banks is more complex and diversified.

According to Petersen (2004), hard information involves financial statement analysis. When it comes to loan portfolios, Goetz (2010) notes that small banks grow by lending to people, whereas major banks focus on secured real estate loans. Financing to people is mostly based on soft information, whereas lending for real estate is primarily based on hard facts, according to this reasoning The Zarutskie (2007). In Kenya, major commercial banks are more likely to take on risk by making loans based on soft information, if this theory applies. This conduct was related to the dominance of the Kenyan banking industry's market system, according to this research.

The banking industry's risk-taking is directly influenced by the growth of credit, according to Altunbas, Manganelli & Marques-Ibanez (2011), Foos, Norden & Weber (2010), Jimenez & Saurina (2011), and Jimenez & Saurina (2012). (2007). As a result, credit growth is a significant factor in the number of non-performing loans (NPLs). There is evidence that banks with rapid loan expansion are more dangerous, according to Kohler (2012). Banking standards might be lowered to attract riskier consumers who have been turned down by other banks, Kohler claims.

Acharya and Naqvi (2011) present another component of the organization issues in the financial business. They contend that when there is overabundance liquidity in the banks, the chiefs will have an affectation to misprice the advances

dependent on the basic hazard. This happens in light of the fact that the probability of feeling liquidity need is low (Basheer et al., 2021). This at last prompts extraordinary crediting which depends on under-estimation of the hidden dangers. Abundance liquidity disturbs hazard taking by business banks through unnecessary loaning and resource value bubbles Acharya and Naqvi (2011). With over the top loaning (right now with undervaluing of dangers), there is abundance demand for assets in the genuine subdivision which principals to values expanding over their significant qualities. This is what is alluded to as a value bubble Acharya and Naqvi (2011). The development of the value bubbles makes investors to support to spare their money in bank installments which are evident to be more secure instead of put resources into the genuine segment. This denotes the start of emergency in the money related division. Credit growth is a component of loans that a bank advances to customers over a specific period. Businesses generally expect their annual sales to grow annually and in the case of commercial banks, loans advanced to customers should follow the same growth tendency. In banking industry, the amount of total loans has been increasing. In 2006, the aggregate loans by commercial banks in Kenya was KES: 382 million and continued to grow to reach KES: 1,497 million in 2013CBK.

CBK bank supervision report (2012) shows that the quantity of gross loans granted to families was highest (24.6%), and the matching NPL level is highest in the same classification (33.2 percent). Almost all of Kenya's commercial banks' income comes from loan advances, accounting for 78.72 percent of their total revenue in 2012. The CBK has reviewed the asset risk classification to eliminate the sectors originally grouped under “others”. The main goal was to enhance monitoring of risks CBK report (2009). Following the review, three sectors were found to account for large proportion of NPLs in 2009 (63.9%). These sectors are personal/households, trade, and manufacturing sectors, (CBK 2009).

Kohler (2012), Altunabas et al. (2011), Foos et al. (2010) show indication that credit growing is positively related to carefree in the banking manufacturing. Kohler (2012) posit that for banks to grow their credit, they lower their lending standards. Foos et al. (2010) show that banks that grow their credits fast usually attract risky customers who could not qualify for credit from other banks. With continued growth of credit among profitable banks, it is important to investigate whether the banking industry is taking more risks.

Taking into account that organizations should focus on amplification of investor’s riches, the bank director, confronted with high liquidity will look to amplify that open door with a desire that all the credits propelled will yield the normal outcomes. This may prompt over the top loaning (Basheer et al., 2019). Albeit most banks differentiate their advance portfolios to diminish the impact of terrible advances, rivalry may drive the bank to have a couple of choices to look over. With the presence of value bubbles, the entire economy will be in danger. The value bubbles have been recommended as one of the significant grounds of the ongoing money related calamity Masha (2009). Empirical evidence available in this field is contradictory and leaves confusion. Commercial banks’ regulators often make policies that are expected to be based on scientific evidence and

commercial banks are expected to comply with the policies. These policies are mainly implemented to foster soundness and stability of the financial sector. Thus, this study aims to investigate the impact of bank specific factors on risk taking considering the commercial banks in Pakistan.

HYPOTHESIS

Hypotheses are developed based on the above discussion.

H1: There is significant impact of the credit growth on risk taking in commercial banks in Pakistan.

H2: There is significant impact of the bank size on risk taking in commercial banks in Pakistan.

H3: There is significant impact of the bank risk appetite on risk taking in commercial banks in Pakistan.

H4: There is significant impact of the bank profitability on risk taking in commercial banks in Pakistan.

RESEARCH METHODOLOGY

In this study quantitative type of the research is chosen to investigate the impact of the bank specific factors on risk taking. The selected population of the current study was the commercial banks of the Pakistan. Secondary data was collected from published annual reports of commercial banks. Twenty commercial banks were randomly selected from the whole population for this research and data was gathered from 2015 to 2021.

Study Instruments

Below is the measurement proxies adopted in the current study

Table1: Measurement of Variables

S.No	Variable	Measurement
1	Risk Taking	Z-score
2	Credit Growth	Change in total loans
3	Bank Size	Core Capital
4	Bank Risk Appetite	Ration of loans to total assets
5	Bank Profitability	Pre-tax Profit

Study Model

The below is the model of the current study;

$$RT = \alpha + \beta 1CG + \beta 2\, BS + \beta 3BRA + \beta 4BP + \varepsilon$$

Whereas;

RT is risk taking

CG is credit growth

BS is bank size

BRA is bank risk appetite

BP is bank profitability

Data Analysis and Presentation

Different statistical analysis tools and techniques were used in the current study. Descriptive analysis tool was used to find the normality of the data. Correlation analysis technique was used for the reason to explore the relationship that exists between the variables of the study and likewise the regression analysis tools and techniques were used to find the extent of the relationship of the data (Basheera et al., 2019).

Descriptive Statistics

The below sections show the mean and the standard deviation of variables of the study.

Variables	Mean	Std. Deviation
Risk Taking	3.42	0.71
Credit Growth	3.11	0.64
Bank Size	3.21	0.63
Bank Profitability	3.24	0.63
Bank Risk Appetite	3.36	0.63

: Descriptive Statistics

Variables	RT	CG	BS	BRA	BP
RT	1.000			.	
CG	0.40**	1.000			
BS	0.20*	.21**	1.000		
BRA	0.04**	.44**	.22*	1.000	
BP	0.21**	0.23*	0.13*	2.23**	1.000

Table 3: Correlation Analysis

The above table is showing the mean value and value of standard deviation for the study variables. The table is depicting that mean value for risk taking is higher i.e. 3.42 while the credit growth has lowest mean value i.e. 3.11, while standard deviation for all the variables is showing normal distribution.

Correlation Analysis

As shown in the above table, the value of the correlation analysis between the credit growth and risk taking is 0.40 which is showing that there exists a very strong and a significant relationship between the credit growth and risk taking. Similarly, the above table is showing that the value of the correlation coefficient between the bank size and risk taking is 0.20 which is showing that there is a weak and a positive relationship between the bank size and risk taking. Likewise, the above table is showing that the correlation coefficient value between bank risk appetite and risk taking is the 0.04 showing that there is a weak and positive

relationship between the bank risk appetite and risk taking. At last, the above table is depicting that the relationship between the bank profitability and risk taking is 0.21 which is showing that there is a weak and positive relationship between the bank profitability and risk taking.

Regression Analysis

The below sections shows the results of the regression analysis of the current study.

Model Summary

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.63	0.52	0.42	0122	2.21

a

bove table is showing that the value of the value of the adjusted R square is 0.42. The value of the adjusted R square is showing us that the independent variable is causing 42 percent of the variation in the dependent variable of the current study.

ANOVA

Table5: ANOVA

Model	Sum of the Squares	Df	Mean Square	F	Sig.
Regression	15.25	5	4.11	14.2	.000
Residual	12.40	33	0.11		
Total	27.65	37			

a: Predictors: credit growth, bank size, bank risk appetite, bank profitability

b: Dependent Variable: Risk Taking

Above table is showing good fitness of the study model as the value of the regression is lesser than value of the residual.

Coefficients

Table 4.6: Coefficients

Model	Coefficients	T	Sig
(Constant)	.722	3.31	.000
CG	.069	3.21	.001
BS	.061	3.12	.002
BRA	.022	1.13	.044
BP	.041	2.11	0.43

The values of the regression coefficient are depicted in the above table. The table is showing that credit growth has the highest value of the coefficient that is significant at

0.000 meaning that credit growth is contributing more towards the risk taking. Likewise, the values of the coefficient for the bank size, bank risk appetite and bank profitability are 0.61, .022 and .041 respectively are these are significant at the relevant values that leads to the acceptance of the study hypothesis.

Risk-taking and bank capital have a positive and substantial link. Studies by Koehn & Santomero (1980), Allen & Santomero (1998), Allen and Gale (2004), Repullo (2004), and Von Thadden (2004) all support the conclusions of this study's research team (2004). Research by Morrison & White (2005) and Holmstrom & Tirole (1998), however, does not support the conclusions of this study (1997). Loan-to-assets ratio was used as an indicator of bank risk appetite. There was a negative and substantial correlation between bank risk appetite and risk-taking throughout the time period studied (bin Hidthiir). A favorable correlation was found between risk-taking and risk-appetite by Altunbas, Manganelli & David (2011) and Sinkey & Greenwalt (1991). That's contrary to the conclusions of this study. When it came to profitability, risk-taking had a negative correlation. It didn't matter, however. De Nicolo & Loukoianova's earlier research somewhat agrees with the study results (2007) Boyd, De Nicolo, and Al Jalal (2006) found a link between profitability and a willingness to take risks.

RECOMMENDATIONS

The research found that commercial banks are taking more risks because of the low regulatory capital requirements. While this was originally intended to help the banking sector remain stable, it has now created a new set of problems. Liquidity issues have been suggested in previous research as a possible explanation for this situation. The regulator should put in place procedures to control liquidity in the banking business in order to limit risk-taking in the banking industry.

Keeping an eye on asset quality in the banking sector is essential. In the banking business, risk appetite and credit expansion are leading to increased risk taking. These two indicators touch on the banks' asset portfolio, and commercial banks need to assess their asset portfolio in order to control risk-taking. As a result of increased competition, banks are left with little choices except to lend at a higher interest rate that will ultimately be unrecoverable.

CONCLUSION

Other than bank-specific issues, excessive risk-taking in the banking business may be driven by a variety of other causes. Risk-taking was studied in relation to bank-specific characteristics. Macroeconomic variables including GDP, interest rates, inflation and currency rate changes were also taken into account by other researchers in order to determine how bank-specific factors influenced risk-taking. As a result, further study into macroeconomic variables and bank indicators is needed in order to determine the link between bank-specific parameters and risk-taking behavior. Researchers have argued that a growth in hazardous loan portfolios and high interest rates go hand in hand, however interest rates were not taken into account in this study. If interest rates on loans have an influence on risk-taking, additional research is needed. More study is needed to determine how credit factors effect risk-taking after their implementation.

REFERENCES:

Acharya,V.& H. Naqvi (2011): The Seeds of a Crisis: A Theory of Bank Liquidity and Risk-taking over the Business Cycle. *Journal of Financial Economics. Volume 106, Issue 2, November 2012, Pages 349-366*

Akhigbe, A., J. McNulty, & J. Verbugge (2001):"Small Bank Loan Quality in a Deregulated Environment: The Information Advantage Hypothesis," *Journal of Economics and Business 53, 325- 339.*

Allen, F., & A. M. Santomero (1998): The theory of financial intermediation, *Journal of Banking and Finance* 21: 1461–1485.

Altunbas, Y., S. Manganelli & M. I. David (2011): Bank risk during the financial crisis do business models matter? *European Central Bank (ECB), working paper series.*

Bain, J. (2016): Barriers to New Competition. Cambridge, Harvard University Press. Banking Act (2010), Laws of Kenya

Barrell, R., E. P. Davis, T. Fic, & D. Karim: Is there a link from bank size to risk taking? *De Nederlandsche Bank NV, Working Paper, 2011*

Basel Committee on Banking Supervision (2013). Global systemically important banks: Updated assessment methodology and the higher loss absorbency requirement

Basheer, M. F., Saleem, M., Hameed, W. U., & Hassan, M. M. (2021). Employee voice determinants and organizational innovation: Does the role of senior manager matter. *Psychology and Education Journal*, *58*(3), 1624-1638.

Basheer, M., Ahmad, A., & Hassan, S. (2019). Impact of economic and financial factors on tax revenue: Evidence from the Middle East countries. *Accounting*, *5*(2), 53-60.

Basheera, M. F., Hidthiirb, M. H., & Waemustafac, W. (2019). What Determines the Usage of Off-Balance Sheet Activities in Pakistan? A Conceptual Framework. *International Journal of Innovation Creativity and Change*, *6*(10), 291-305.

Berger, A. N. & T. H. Hannan (1989): "The Price-Concentration Relationship in Banking" *The Review of Economics and Statistics, 291 – 299.*

Berger, A. N., L. F. Klapper, & R. Turk-Ariss (2009): "Bank Competition and Financial Stability,"*Journal of Financial Services Research, 35, 99–118.*

Chang, S.J., (2021) Business Group and Social Welfare in emerging Markets

Chaudron, R. Profitability and risk taking in a prolonged environment of low interest rates: a study ofinterestrateriskinthebankingbookofDutchbanks.*DeNederlandscheBankNV,WorkingPaper No. 526, October2016*

De Finetti (1973): Probability Induction and Statistics, Wiley, New York.

Driscoll, J. & Kraay, A.: (1998), Consistent covariance matrix estimation with spatially dependent panel data, *Review of Economics and Statistics, 1998, vol. 80, issue 4, 549-560. Economic Review, 80, 1183–1199.*

Fisher, I. (1906): The nature of capital and income, New York, Macmillan

Foos, D., Norden L. & Weber, M. (2010), "Loan Growth and Riskiness of Banks", *Journal of Banking and Finance, Vol. 34(12), pp. 2929-2940.*

Fung, D. S. (2016). Methods for the Estimation of Missing Values in Time Series. *Edith Cowan University*. *Retrieved from http://ro.ecu.edu.au/theses/63*

Goncalves, S.: (2011), The moving blocks bootstrap for panel linear regression models with individual Fixed-effects. D´epartement de Sciences Economiques, CIREQ and CIRANO, Universit´e de Montr´eal ´ March 17, 2010

Heimdal, K. W., & K.J. Solberg (2015). The effect of competition on non-performing loans rates; Evidence from the Norwegian banking market. *SNF Working Paper No 11/15*

Hellmann, T. F., K. C. Murdock & J. E. Stiglitz, (2000):"Liberalization, moral hazard in banking, and prudential regulation: Are capital requirements enough?" *American Economic Review, VOL. 90, NO. 1, March 2000 (pp. 147-165)*

Jimenez, G., J. A. Lopez, & J. Saurina (2017): "How does Competition impact Bank Risk-Taking? Keeley, M. C. (1990): "Deposit Insurance, Risk, and Market Power in Banking," *American*

Köhler, M. (2012), "Which banks are more risky? The impact of loan growth and business model on bank risk-taking", *Discussion Paper Deutsche Bundesbank, No 33/2012*

Mishkin,S.&Edwards,F.R.(1995),TheDeclineofTraditionalBanking:ImplicationsforFinancial Stability and Regulatory Policy, Economic Policy Review, July 1995 Volume 1, Number 2 Mitnick, B. M., Fiduciary Rationality and Public Policy: The Theory of Agency and Some Consequences (1973). *In Proceedings of the American Political Science Association,1973.*

Morrison, A. D., & L. White, (2015): Crises and capital requirements in banking. *American Economic Review, 2005, vol. 95, issue 5, 1548-1572*

Petersen, M. A. (2004): "Information: Hard and Soft," Kellogg School of Management, Northwestern University, Mimeo

Schwartz, A. J. (1987). Money in Historical Perspective, University of Chicago Press

Sinkey, J. F., Greenwalt, M. (1991): Loan-loss experience and risk-taking behavior at large commercial banks. *Journal of Financial Services Research, 5(1),43-59.*

Song, G., Xia, Z., Basheer, M. F., & Shah, S. M. A. (2021). Co-movement dynamics of US and Chinese stock market: evidence from COVID-19 crisis. *Economic Research-Ekonomska Istraživanja*, 1-17.

Stein, J. C. (2002*):* "Information Production and Capital Allocation: Decentralized versus Hierarchical Firms," *Journal of Finance, 57, 1891–1921*.

William, A., J. Davis, L. Ebrill & C. Lindgren, (1997): "Systemic bank restructuring and macroeconomic policy", *Washington, International Monetary Fund.*

Zarutskie, R. (2017): "Do Venture Capitalists Affect Investment Performance? *Fuqua School of Business, Duke University, 2007 - hillcrestvp.com.*