Impact of Effective Risk Management System on the Profitability of Banking Sector of Pakistan

Adil Sattar
Karachi University Business School – University of Karachi, Pakistan
adilsattarkubs@gmail.com

Abstract

The study examined the effect of risk management system on financial stability and profitability in the banking sector of Pakistan. The study has taken bank's financial stability as its dependent variable and risk management system as independent variable. Researcher gathered data from hundred participants and performed primary and secondary analysis. The data was obtained for non-performing loans and ROA of five Pakistani banks, along with descriptive analysis of the employees' perspective. Moreover, qualitative analysis was done based on the interviews from respondents. The analysis reveals that when the bank confirms a guarantor's intention to guarantee loans with a signed document, this is the most significant factor to effectively incorporate risk management system. The study also recommends that as a way to eliminate these risks and stop them from resurfacing, banks can also create risk mitigation techniques. Respondents have recommended utilizing the five fundamental risk management tactics of avoidance, retention, spreading, as well as loss prevention and reduction measures. It's critical to evaluate demands for automation. The study recommends

Keywords: Risk Management, Profitability, Banking Sector, Pakistan.

1. Introduction

1.1. Background/overview

Commercial banks, savings banks, credit unions, and investment banks all fall under the umbrella of the banking sector, which is the area of the financial services sector that deals with deposit-taking institutions (Beck et al., 2022). These organizations provide a range of financial services, such as checking and savings accounts, loans, mortgages, investment guidance, and financial planning, to private citizens, public entities, and enterprises (Guénette, 2022). By facilitating the movement of money and credit, allowing companies to develop and expand, and assisting families with financial management, the banking sector plays a critical role in the economy (Elsaid, 2021). The capacity of a bank to retain its financial soundness and to endure shocks that might impair its solvency, liquidity, and profitability is referred to as financial stability (Sikalao-Lekobane, 2022). It serves as a gauge of a bank's capacity to uphold its commitments and continue operating normally, notwithstanding challenging economic circumstances (Dakila Jr, 2021).

A bank's financial stability may be attributed to a variety of factors, such as robust capitalization, appropriate liquidity, prudent risk management procedures, and a diverse source of financing (Mihai et al., 2022). The economy's and the financial system's overall stability depend on the maintenance of financial stability (Jungo et al., 2022). Bangladesh, a developing nation, has a financial sector that is dominated by banks (Rouf & Hossan, 2021). The banking industry in Bangladesh consists of 57 banks, including 9 foreign commercial banks with 9955 branches around the nation, 40 private commercial banks, 2 development financial institutions, and 6 state-owned commercial banks (Juwel, 2021).

However, the State Bank of Pakistan governs the banking industry in Pakistan (Khalid, 2021). Twenty-one commercial banks, four microfinance institutions, and five development finance organisations make up the industry as of 2021. National Bank of Pakistan, Habib

Bank Limited, MCB Bank Limited, United Bank Limited, and Allied Bank Limited are the top five banks in terms of assets (Khalid, 2021). Additionally, the sector has expanded steadily in recent years, with the banking sector's total assets rising from Rs. 12.2 trillion in 2015 to Rs. 22.4 trillion in 2020 (Benfratello & Kalhoro, 2021). Return on assets (ROA), which rose from 1.1% in 2015 to 1.6% in 2020, indicates that the industry is now more profitable (Murad, 2021). Additionally, the SBP has put in place a number of steps to improve the banking industry, including raising the capital requirements for banks and establishing a framework for risk-based supervision (Alim et al., 2021). With programmes like branchless banking and mobile banking services, the government has also made attempts to increase financial inclusion in the nation (Manzoor et al., 2021). Non-performing loans (NPLs) and low levels of financial inclusion are two issues the industry still has to deal with. In the banking industry, the NPL ratio was 7.7% as of 2020, although only 36% of Pakistan's adult population has access to formal financial services (Hasan & Pareek, 2022).

1.2. Statement of the problem

The banking industry in Pakistan has been dealing with a multitude of problems, many of which have posed a danger to the country's monetary security (Sultan & Mohamed, 2022). Additionally, the high levels of non-performing loans, commonly known as loans that are very unlikely to be repaid, have placed pressure on the balance sheets of companies operatingin this industry (Karanasios, 2022). In addition, the industry has been plagued by bad practices such as mismanagement and political meddling because of lax rules and control (Lazzarini et al., 2021). Competition and access to financial services for consumers and smaller enterprises are both hindered as a result of the market's high concentration, which is characterized by the dominance of a limited number of major banks (Harasim, 2021). Furthermore, the small capital buffers and weak corporate governance practices have further undermined trust in the industry, making it harder for banks to recruit depositors and access capital markets (Okodugha, 2021). This is making it difficult for the sector as a whole to recover (Mustafa et al., 2021). All of these issues constitute a significant threat to the soundness of Pakistan's banking industry as well as the economy as a whole (Shair et al., 2021).

1.3. Research objective

The study examined the effect of risk management system on financial stability in the banking sector of Pakistan.

2. Review of the Literature

Risk management systems (RMS) are set up so that an organization can find, evaluate, and control risks (Zainuddin et al., 2022). The primary objective of RMS is to keep risks from negatively affecting the organization's finances and stability as much as possible (Ma et al., 2022). Financial stability means that an organization is able to pay its bills and stay in business over the long term (Bartle et al., 2021). Wang et al. (2022) shown that specific systems for managing risks can help maintain the economy's stability. This is because the RMS gives organizations a systematic and structured way to manage risks, which helps make sure that possible risks are found and dealt with quickly (Zhao et al., 2021). By managing risks well, organizations can make it less likely that bad things will happen to their finances, like losing money or going bankrupt, and improve their overall financial performance and stability (Kajwang, 2022). Effective risk management systems can also help organizations meet legal requirements and industry standards, which can also help them, stay financially stable (Miglionico, 2022). This is because regulatory bodies often require organizations to use RMS and follow certain standards and best practices for risk management. By following these rules, companies can avoid legal and regulatory penalties that could hurt their ability to make money (Olujobi et al., 2022). Therefore, there is a positive and interdependent link between risk management systems and financial stability (Yfanti et al., 2023). Effective RMS can help promote financial stability by reducing the negative effects of risks on an organization's financial performance and by helping organizations meet regulatory requirements (Gadekar et al., 2022).

3. Methodology

3.1. Sample and population

The banking industry contributes significantly to the nation's money mobilisation. The State Bank of Pakistan is in charge of establishing the country's monetary policy and overseeing all measures taken to stabilise the economy. Almost 17% Pakistanis have bank accounts. Five banks named Meezan Bank Ltd , United Bank Ltd ,Bank Alfalah Ltd,HBL and MCB have been selected for the collection of data in this study.

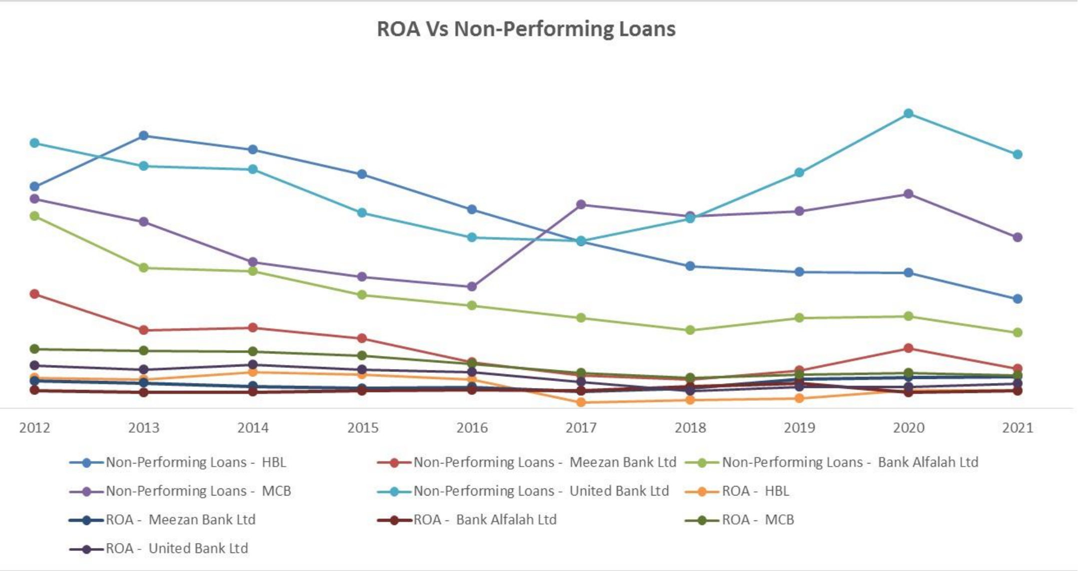
3.2. Data collection

Any dataset collected by a source other than the one utilising it is referred to as secondary data (also known as second-party data). Secondary sources of information are quite useful. This allows researchers and data analysts to create sizeable, excellent databases that assist in the settlement of commercial issues. The present analysis made use of secondary data culled from annual reports (El Khatib et al., 2022). Surveys and questionnaires are often used in quantitative social research to gather data that may be utilised to understand people's wants inrespect to certain topics. Surveys are used to gather statistical data on the members of a population (Cao et al., 2021). A survey approach was used in the investigation. Additionally, senior management members of the sample population took part in qualitative interviews and completed a five-point Likert scale questionnaire.

4. Results and Findings

4.1. Secondary analysis

The non-performing loans of HBL gradually increased in value from 2012 to 2013 and started decreasing from 2013 onwards up till 2021. The non-performing loans of MCB also gradually kept decreasing from 2012 to 2016, then had a sharp increase from 2016 to 2017, somewhat remain in equilibrium from 2017 to 2020 then decreased in 2021. The non- performing loans of Meezan Bank have had a trend of decreasing from 2012 to 2018 and started increasing in 2019 to 2020 then again dropped in 2021. The non-performing loans of UBL kept decreasing from 2012 to 2017 then saw an increment from 2017 onwards to 2020 and again had a sharp fall in 2020 to 2021. The non-performing loans of Bank Alfalah Ltd decreased in 2012 and further decreased from 2013 to 2018 then somewhat remain constant from 2018 to 2021.



The ROA of Meezan Bank Ltd gradually decreased in value from 2012 to 2016 and started showing constant behavior from 2016 onwards up till 2021. The ROA of United Bank Ltd also gradually kept decreasing from 2012 to 2013, then had a sharp increase from 2013 to 2014, somewhat remain in equilibrium from 2014 to 2016 then had a gradual decrease from 2016 to 2021. The ROA of Bank Alfalah Ltd have had a trend of somewhat remaining in equilibrium from 2012 to 2015 and started increasing in 2016 to 2029 then again dropped in 2020 and shows straight path till 2021. The ROA of HBL remains somewhat constant from 2012 to 2013 then saw an increment from 2013 to 2014 then a gradual decrease in from 2014 to 2016 and had a sharp fall in 2016 to 2017 then a constant behavior shown in from 2017 till 2019 with a gradual rise in from 2019 to 2021. The ROA of MCB shows a somewhat constant behavior from 2012 to 2015 with a gradual decrease from 2015 till 2018 and then a gradual rise till 2021.

4.2. Primary analysis

Table 1 provides demographic profile of 100 respondents.

Table 1: Respondents' Profile (n = 100)

		N	%
Your Company	Habib Bank Limited	14	14.0
	Meezan Bank	19	19.0
	Bank Alfalah	23	23.0
	MCB Bank	17	17.0
	United Bank Limited	27	27.0
Working Experience	Less than 1 year	29	29.0
	1 to 3 years	23	23.0
	3 to 5 years	21	21.0
	More than 5 years	27	27.0

Total number of respondents is 100 and out of them 14 (14.0%) work in Habib Bank Limited. Those who work in Meezan Bank are 19 (19.0%), those who work in Bank Alfalah are 23 (23.0%), those who work in MCB Bank are 17 (17.0%), and those who are employees in United Bank Limited are 27 (27.0%). Those who have been working in their respective banksfor less than 1 year are 29 (29.0%), those who are working for 1 to 3 years are 23 (23.0%),and those who have been employed in their banks for 3 to 5 years are 21 (21.0%). And finally, respondents working for more than 5 years are 27 (27.0%).

Table 2 provides descriptive analysis of the employee perspective towards risk management and financial stability in the banking sector of Pakistan.

Table 2: Descriptive Analysis of the Employees' Perspective

Questions/Factors	**Mean**	**Std. Dev.**
There is a computerized support system for estimating risk management.	1.910	1.016
The bank regularly conducts simulation analysis.	2.280	1.173
The bank regularly measures benchmark (interest) rate risk sensitivity.	2.420	1.121
The bank uses estimates of worst case scenarios for risk analysis.	2.380	1.179
The bank use Risk Adjusted Rate of Return on Capital (RAROC).	2.300	1.185
The bank use has other Internal Risk Rating System.	2.290	1.008
The bank uses Value at Risk analysis.	2.420	1.139
The bank has a quantitative support system for assessing customers' credit standing.	2.290	1.113
The bank confirms a guarantor's intention to guarantee loans with a signed document.	2.460	1.218
The bank monitors the borrower's business performance after loan extension.	2.240	1.129

The researcher has investigated 10 items to check the impact of effective risk management system on the profitability of banking sector of Pakistan. The highest mean (2.460 ± 1.218) is for the item "the bank confirms a guarantor's intention to guarantee loans with a signed document." Two items have the same second highest mean value; "The bank regularly measures benchmark (interest) rate risk sensitivity" (2.420 ± 1.121) and "The bank uses Value at Risk analysis" (2.420 ± 1.139). Based on their standard deviation, first item is more significant as compared to next one with same mean value. In addition, "The bank uses estimates of worst case scenarios for risk analysis" (2.380 ± 1.179) has moderate significance. Next item is "The bank use Risk Adjusted Rate of Return on Capital (RAROC)"(2.300 ± 1.185) which comes fifth in terms of its significance. "The bank use has other Internal Risk Rating System" (2.290 ± 1.008) holds sixth position when it comes to impact of effective risk management system on the profitability of banking sector. Moreover "The bank has a quantitative support system for assessing customers' credit standing" (2.290 ± 1.113) is the fourth least significant indicator. "The bank regularly conducts simulation analysis"

(2.280 ± 1.173) is third least significant item. “The bank monitors the borrower’s business performance after loan extension’ (2.240 ± 1.129) holds the second last place in this table in terms of its mean value and “There is a computerized support system for estimating risk management” (1.910 ± 1.016) is the least important item.

4.3. Qualitative analysis

The qualitative analysis is based on the responses gathered through interviews, to investigate the impact of effective risk management system on the profitability of banking sector of Pakistan. Banks in Pakistan create these types of risk management systems by establishing a risk identification process and employing a root-cause methodology. Then, banks identify the risks that are pertinent to their companies and the causes of such occurrences. As a way to eliminate these risks and stop them from resurfacing, banks can also create risk mitigation techniques. Respondents have recommended utilizing the five fundamental risk management tactics of avoidance, retention, spreading, as well as loss prevention and reduction measures. Not to mention transfer via contracts and insurance in Pakistani banks. The respondents have also stated that regulators have put increasingly strict regulations in place to address the most obvious fraud risk, and financial institutions must be ready to meet the rising compliance demand—these needs won't be readily satisfied using manual techniques. It is not always simple or quick to adapt manual processes, tools, and strategy with automation. It's critical to evaluate demands for automation.

5. Conclusion and recommendations

5.1. Conclusion

The objective of the research was to investigate how risk management practises affect the financial stability of Pakistani banks. Researchers examined data from several Pakistani banks, both those with and those without defined risk management systems, to achieve this. The findings demonstrated that banks with well-developed risk management systems were better able to recognise, evaluate, and manage a variety of risks, including credit risk, market risk, operational risk, and reputational risk. These banks were also found to be better able to take proactive steps to lessen the effect of possible risks on their operations and to make informed choices regarding lending and investing. In turn, this improved the banks' overall financial stability and strengthened their resistance to changes in the economy. In contrast, it was shown that banks without strong risk management systems were more susceptible to danger and less able to act quickly in the case of a financial crisis. Their capacity to weather financial hardships and sustain operations was compromised, which made it more challenging for them. According to the study's findings, putting in place a risk management system is essential for guaranteeing the financial stability of Pakistani banks. These systems assist banks in making informed choices, managing possible risks, and preserving their stability and resilience in the face of financial problems by offering a systematic and organised approach to risk management.

5.2. Practical recommendations

The results of our research have a number of implications for Pakistani policymakers and bank management. To reduce credit risk, bank management should implement proceduresthat guarantee safe loan issuance and prompt client repayment. In addition, the management should pay close attention to the cash situation. The research found that liquidity risk makes banks' finances less stable. This report is useful for practitioners since it gives a comprehensive picture of the state of Pakistan's banking system overall. The report is also important for Pakistan's State Bank of Pakistan, Securities and Exchange Commission, Pakistan Stock Exchange, banks, depositors, investors, managers, and other participants inthe country's banking system. The results show that the regulators' competent oversight and well-established norms for the banks provide positive effects in terms of profitability and market outcomes. Furthermore, as shown by the study's findings, it is important to adjust to the new obstacles when there is a crisis. In order to achieve financial stability, banks also need to efficiently mobilise the deposits of their clients. According to this research, risks may be identified, evaluated, and mitigated by creating a complete risk management framework, including rules, processes, and recommendations. Additionally, by adopting strong internal audit and compliance activities, strengthening data quality, and enhancing risk reporting and communication systems, as well as by enhancing internal controls and procedures, Improve risk monitoring and reporting by reviewing the bank's exposure to various risks on a regular basis and by creating early warning systems to find possible risk occurrences. Additionally, promote risk awareness within the company and incorporate risk management into the business strategy and operations of the bank.

Work together with authorities to manage risks effectively and make sure that regulatory and supervisory systems are suitable and efficient. Adopt cutting-edge technology to increase monitoring, automate procedures, and expand risk management skills, such as big data analytics and AI. To keep the risk management system relevant and efficient, evaluate and update it often. Banks must improve their risk management procedures and confirm that they adhere to international best practices. Banks should have enough capital reserves on hand to cover losses during hard times. To make sure they have adequate liquid assets to pay their short-term commitments, banks should strengthen their liquidity management procedures. In order to increase accountability and transparency, banks should update their corporate governance procedures. Banks should use digital technology to enhance operations, save costs, and boost productivity. To enhance client satisfaction and loyalty, banks should concentrate on improving their customer services. In order to preserve their stability and reputation, banks must make sure they adhere to all relevant regulatory standards. To lessen their reliance on established revenue sources and to lower overall risk, banks should diversifytheir sources of income.

5.3. Limitations and future research

The current research has significant limitations in addition to its numerous implications. The few traditional banks were the only ones employed in this study. The reliability and accessibility of the data may have an effect on the study's findings. The validity of the findings might be impacted by the limitations of the models used in the research. A research study that just covers a certain time period may not adequately capture changes in the financial stability of institutions. Future research might analyse the stability differences between conventional and Islamic banks using both types of institutions. Additionally, the current research exclusively uses bank-specific characteristics. Future research might include both internal and external variables as predictors of bank stability. Updated analyses using recent data that take into account the state of the market may be included in future research. Future research might look at how macroeconomic variables like inflation and economic growth affect banks' financial stability. Future research might look at how government policies affect banks' and the banking industry's overall financial soundness. Future research might create updated models that take into account the most recent advancements in financialeconomics and mathematics to assess the financial viability of institutions.

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