International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Risk Management in South Asian Banks: Are they well Equipped to Combat the Next Financial Crisis?

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A B S T R A C T

This study investigates the risk management practices of South Asian banks, with a focus on capital adequacy and non-performing loans (NPLs) as indicators of credit risk and potential bank failures. By analyzing data from Bangladesh, India, Maldives, Nepal, Pakistan, and Sri Lanka between 2015 and 2021, the research highlights the varying credit risk trends across the region and the importance of maintaining a strong capital base to absorb potential losses arising from credit risk. The findings reveal that capital adequacy ratios in South Asian countries generally indicate resilience against potential financial stress, with most countries exhibiting stable or increasing ratios over time. Additionally, the study underscores the significance of effective risk management practices in ensuring the stability of individual banks and contributing to the overall financial stability of the region.

Keywords: Risk Management, Basel III, Financial Crisis

1. Introduction

The global financial crisis of 2008 exposed the vulnerabilities of the financial sector and the need for robust risk management practices. South Asia, a region comprising Bangladesh, India, Pakistan, Sri Lanka, Nepal, and the Maldives, has experienced rapid economic growth in recent years, accompanied by an expansion of the banking sector. As the financial landscape continues to evolve, the effectiveness of risk management practices in South Asian banks has become increasingly important in ensuring the stability and resilience of the financial system. The question of whether South Asian banks are well equipped to combat the next financial crisis is both timely and relevant, as the global economic environment becomes more interconnected and susceptible to shocks. This paper aims to assess the risk management practices of banks in South Asia and evaluate their preparedness for potential crises.

To achieve this objective, we will review the existing literature on bank risk management in South Asia, focusing on four key areas: (1) risk management frameworks, (2) risk management practices, (3) risk culture and governance, and (4) the impact of macroeconomic factors on the risk profile of banks. By synthesizing the findings from these studies, we will provide a comprehensive understanding of the current state of risk management in South Asian banks and discuss the implications of these findings for their ability to withstand future financial crises.

In the following sections, we will present a literature review on bank risk management in South Asia, discuss the methodology used in this study, analyze the findings, and conclude with a summary of the implications for the region's banking sector and recommendations for further research.

2. Literature Review

Bank risk management is a critical aspect of ensuring the stability and sustainability of financial institutions in South Asia. Various factors contribute to the overall risk profile of banks in the region, including credit risk, market risk, operational risk, liquidity risk, and interest rate risk. This literature review focuses on the existing research on bank risk management in South Asia, with a particular emphasis on Bangladesh, India, Pakistan, Sri Lanka, Nepal, and the Maldives. During last two decades south Asian countries experienced substantial economic growth especially in India and Bangladesh. Bangladesh's impressive growth, with an 8.15% GDP growth rate in 2019, stems from its rapidly expanding manufacturing sector, robust remittance inflows, sustained reforms, prudent macroeconomic policies, and political stability, resulting in a decade-long GDP growth rate of nearly 7% accompanied by stable inflation, low public debt, and sufficient foreign reserves (Naoaj 2021).

A robust risk management framework is essential for banks to navigate the complexities of financial markets and mitigate potential losses. Basel Accords, a series of international banking regulations, have been increasingly adopted by South Asian countries to strengthen their risk management practices (Das & Ghosh, 2016). Arora and Singh (2016) analyzed the impact of Basel III regulations on the capital adequacy of Indian banks, highlighting the importance of these regulatory frameworks in promoting financial stability. Similar findings have been reported in Bangladesh (Islam & Nishiyama, 2016) and Pakistan (Khan & Ashraf, 2018). Ahmed and Anis (2015) studied the relationship between corporate governance and risk management practices in Bangladeshi banks. They found that a strong risk culture and governance structure significantly influenced risk management effectiveness. Ghosh (2016) examined the challenges faced by Indian banks in managing credit risk and highlighted the need for a comprehensive risk management approach. Sarkar and Das (2016) emphasized the role of board composition and risk committees in promoting sound risk management practices in Indian banks. Rahman and Saeed (2013) investigated the relationship between credit risk and bank performance in Pakistan, emphasizing the importance of effective credit risk management practices. Jabeen et al. (2017) focused on the role of board independence and risk committees in Pakistani banks, demonstrating their impact on risk management practices. Wijesinghe (2017) explored the determinants of credit risk in Sri Lankan banks and provided insights into the factors that influence credit risk management practices in the country. Bhattarai (2017) conducted a study on the implementation of advanced risk measurements techniques, such as Value at Risk (VaR) and stress testing, in Nepali banks, highlighting their significance in effective risk management. Ahmed et al. (2016) examined the role of macroeconomic factors, such as GDP growth and inflation, on bank risk management in the Maldives, providing insights into the influence of the macroeconomic environment on the risk profile of banks.

The literature on bank risk management in South Asia has extensively examined non-performing loans (NPLs) and capital adequacy as key indicators of banks' financial stability and risk management effectiveness. This review provides an overview of the existing research on NPLs and capital adequacy in the context of South Asian banks, focusing on Bangladesh, India, Pakistan, Sri Lanka, Nepal, and the Maldives.

NPLs are considered a significant measure of credit risk, as they can impact the profitability and stability of banks. Several studies have investigated the determinants of NPLs in South Asian banks, identifying factors such as macroeconomic conditions, credit growth, and bank-specific characteristics. For instance, Dash and Kabra (2010) found that macroeconomic factors, such as GDP growth and inflation, played a crucial role in shaping the NPLs of Indian banks. Similarly, Farooqi et al. (2019) analyzed the factors affecting NPLs in Pakistani banks, highlighting the influence of credit growth and bank size on credit risk. Capital adequacy is another critical aspect of bank risk management, as it reflects a bank's ability to absorb losses and maintain stability during financial crises. Banerjee (2022) found that deposit management is particularly important for banks’ risk management as it derives 30% of banks’ profitability. The Basel Accords, which provide guidelines for capital adequacy requirements, have gained prominence in South Asia to ensure a resilient banking sector. Several studies have explored the impact of Basel regulations on the capital adequacy of South Asian banks, such as Arora and Singh (2016), who assessed the implications of Basel III norms on Indian banks. They found that the adoption of Basel III regulations enhanced the capital adequacy and financial stability of Indian banks. Bangladesh Bank introduced Basel III in 2014 (Bangladesh Bank 2014). Similarly, Khan and Ashraf (2018) examined the effect of Basel III capital standards on risk-taking behavior in Pakistani banks, revealing that the implementation of these standards improved capital adequacy and reduced risk-taking. In the context of Bangladesh, Islam and Nishiyama (2016) investigated the determinants of capital adequacy in Bangladeshi banks and found that factors such as bank size, profitability, and ownership structure significantly influenced capital adequacy ratios. Naoaj (2023) found that capital adequacy is significantly affected by several independent variables, with leverage and liquidity risk having a negative and positive relationship, respectively. However, capital adequacy comes with cost as Naoaj and Hosen (2021) found that 10 percent increase in capital would reduce the cost of equity by 4.39 percent.

The literature on bank risk management in South Asia highlights the importance of robust risk management frameworks, effective risk management practices, strong risk culture and governance, and the impact of macroeconomic factors on the risk profile of banks. Country-specific literature provides valuable insights into the unique challenges and trends in risk management across the region. Further research is needed to explore the interdependencies among these factors and develop comprehensive risk management strategies to enhance the stability and resilience of the financial sector in South Asia.

3. Analysis

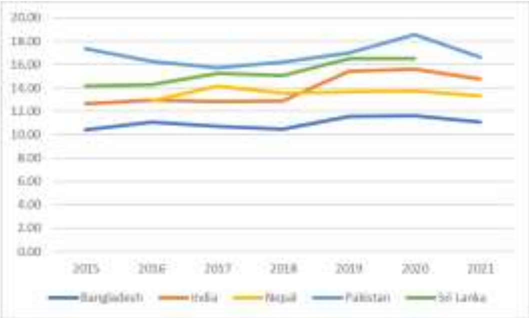
3.1 Capital Adequacy

Chart 1 presents the regulatory capital to risk-weighted assets ratio for Bangladesh, India, Maldives, Nepal, Pakistan, and Sri Lanka from 2015 to 2021. The ratios indicate the banks' capital adequacy in these countries, with higher ratios signifying stronger capital buffers against potential losses. Over the years, Maldives consistently maintains the highest ratios, while Bangladesh and Nepal exhibit relatively lower and stable ratios. India and Sri Lanka show an increasing trend, while Pakistan's ratio fluctuates during the period. Throughout the period, Pakistan consistently maintains the highest ratios among these nations, while Sri Lanka follows closely. India's capital adequacy ratios show a noticeable upward trend, while Bangladesh and Nepal's ratios remain relatively stable and lower compared to the other countries.

Chart 2 presents the Tier 1 capital to risk-weighted assets (RWA) ratio for Bangladesh, India, Maldives, Nepal, Pakistan, and Sri Lanka from 2015 to 2021. The Tier 1 capital to RWA ratio measures a bank's financial stability and its ability to withstand financial stress, with higher ratios indicating stronger core capital buffers.

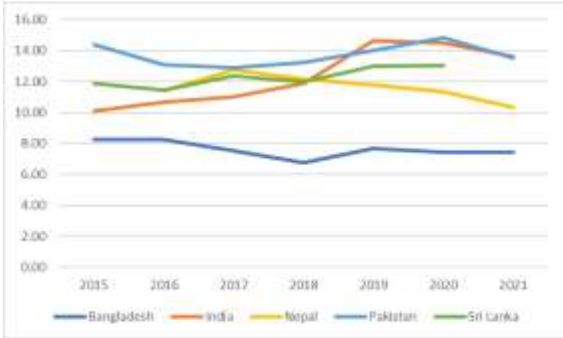
Comparing this table to the previous table (regulatory capital to RWA), we observe that the Tier 1 capital to RWA ratios are generally lower than the regulatory capital to RWA ratios. This is expected, as Tier 1 capital is a subset of regulatory capital, focusing on the core capital of banks. Excluding Maldives, which consistently maintains the highest ratios, India exhibits an increasing trend in Tier 1 capital to RWA ratios, followed by Sri Lanka. Pakistan's Tier 1 capital ratios are relatively stable, while Bangladesh and Nepal display lower and more stable ratios throughout the period. Excluding the Maldives, which consistently posts the highest ratios, India demonstrates a steady increase in its Tier 1 capital to RWA ratios over the years, followed by Sri Lanka. Pakistan's Tier 1 capital ratios remain relatively stable during the period, while Bangladesh and Nepal exhibit more modest and stable ratios throughout the years.

Chart 1: Regulatory capital to risk-weighted assets



Author’s own calculation; data source: IMF

Chart 2: Tier 1 capital to risk-weighted assets



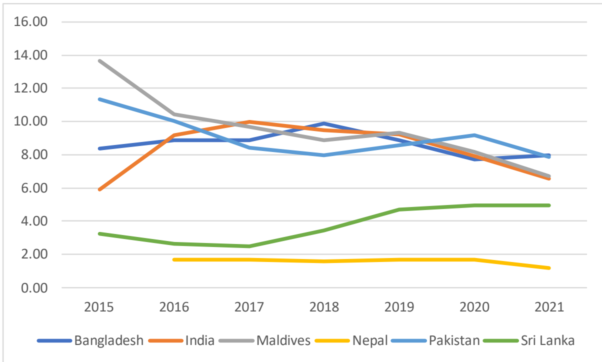
Author’s own calculation; data source: IMF

3.2 Non-Performing Loans

Chart 3: Non-Performing Loans Heat Map (2021)

Author’s own calculation; data source: IMF

Chart 4: Non-Performing Loans Trend (2015-2021)



Author’s own calculation; data source: IMF

Charts 3 and 4 present the non-performing loans (NPLs) as a percentage of total loans for Bangladesh, India, Maldives, Nepal, Pakistan, and Sri Lanka from 2015 to 2021. NPLs are loans on which borrowers have failed to make interest or principal payments for a specified period, typically 90 days. High NPL ratios can indicate elevated credit risk within the banking sector and may be associated with potential bank failures, as they can significantly impact a bank's profitability and capital adequacy. In this chart, we observe the following trends in NPL ratios:

Bangladesh: The NPL ratio shows an increasing trend from 2015 to 2018, followed by a decrease until 2020 and a slight increase in 2021, indicating varying credit risk levels over time.

India: The NPL ratio increases sharply from 2015 to 2017, then gradually decreases through 2021, suggesting improvements in credit risk management over time.

Maldives: The NPL ratio exhibits a consistent decline from 2015 to 2021, indicating a reduction in credit risk within the banking sector.

Nepal: The NPL ratio remains low and relatively stable throughout the period, reflecting well-managed credit risk.

Pakistan: The NPL ratio declines from 2015 to 2018, increases in 2019 and 2020, and then drops in 2021, showing fluctuating credit risk levels.

Sri Lanka: The NPL ratio increases from 2015 to 2020, indicating rising credit risk, and remains stable in 2021.

High NPL ratios can increase the risk of bank failure, as banks may struggle to recover the defaulted loans, leading to reduced profitability and eroding capital buffers. In turn, this can affect the bank's ability to withstand financial stress and, in severe cases, result in insolvency. The NPL ratios in this chart highlight the varying credit risk trends across these South Asian countries and the importance of effective credit risk management to maintain financial stability and minimize the risk of bank failures.

4. Findings

The comparison of non-performing loans (NPLs) and capital adequacy for each country sheds light on the relationship between credit risk and banks' ability to absorb potential losses in the South Asian region.

Bangladesh: The NPL ratio exhibits fluctuations, with a peak in 2018, followed by a decline until 2020 and a slight increase in 2021. Meanwhile, capital adequacy, as measured by the regulatory capital to risk-weighted assets, remains relatively stable. This indicates that despite fluctuations in credit risk, the banking sector in Bangladesh has maintained a steady capital buffer to absorb potential losses.

India: The NPL ratio increases sharply from 2015 to 2017 and then decreases gradually until 2021, while the capital adequacy ratio shows a consistent increase over time. This suggests that the Indian banking sector has not only managed to reduce credit risk but also strengthen its capital base, enhancing its resilience to financial stress.

Maldives: The NPL ratio shows a consistent decline from 2015 to 2021, indicating a reduction in credit risk. Simultaneously, the capital adequacy ratio remains the highest among the countries, highlighting the Maldivian banking sector's strong capital buffers to absorb potential losses.

Nepal: The NPL ratio remains low and relatively stable throughout the period, reflecting well-managed credit risk. However, the capital adequacy ratio is relatively lower compared to other countries, suggesting that the Nepalese banking sector may have less room to absorb potential losses arising from unforeseen credit events.

Pakistan: The NPL ratio fluctuates during the period, while the capital adequacy ratio generally remains high, indicating that the banking sector in Pakistan is well-capitalized to withstand potential losses arising from credit risk fluctuations.

Sri Lanka: The NPL ratio increases from 2015 to 2020, indicating rising credit risk, but the capital adequacy ratio also shows an increasing trend during the same period. This suggests that the Sri Lankan banking sector has managed to maintain a capital buffer to counter the increasing credit risk.

In conclusion, the comparison of NPLs and capital adequacy across these South Asian countries underscores the importance of maintaining a strong capital base to absorb potential losses arising from credit risk. While credit risk varies across the region, most countries exhibit stable or increasing capital adequacy ratios, indicating resilience against potential financial stress.

5. Conclusion

In conclusion, this report has analyzed the risk management practices within South Asian banks, focusing on capital adequacy, non-performing loans (NPLs), and the potential risk of bank failures. Our findings highlight the varying credit risk trends across the region, with some countries experiencing fluctuating NPL ratios, while others have successfully managed credit risk through effective risk management practices.

Capital adequacy ratios in the South Asian countries generally indicate resilience against potential financial stress, with most countries exhibiting stable or increasing ratios over time. The analysis emphasizes the importance of maintaining a strong capital base to absorb potential losses arising from credit risk and minimize the risk of bank failures.

As South Asian economies continue to grow and integrate with the global financial system, it is crucial for their banking sectors to remain vigilant in managing risk, particularly credit risk. Strengthening risk management practices and maintaining adequate capital buffers will not only improve the stability of individual banks but also contribute to the overall financial stability of the region.

Future research may consider investigating other dimensions of risk management within South Asian banks, such as market risk, operational risk, and liquidity risk, as well as exploring the role of regulatory frameworks and macroeconomic factors in shaping the region's banking sector risk profile. Moreover, a comparative analysis of South Asian banks with their counterparts in other regions could provide valuable insights into best practices and lessons learned in risk management across different financial systems.

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