

IMPACT OF FINANCIAL RISK ON THE FINANCIAL PERFORMANCE OF MICROFINANCE INSTITUTIONS: A LITERATURE REVIEW

Ms. Aayushi Gupta

Research Scholar, Department of Commerce, Delhi School of Economics, University of Delhi

Ms. Sweety Gupta

Assistant Professor, University of Delhi

Prof. Ritu Sapra

Professor, Department of Commerce, Delhi School of Economics, University of Delhi

Abstract

Microfinance is an economic means designed to encourage financial inclusion to reach poor people that traditional formal financial institutions like banks are unable to reach. In recent decades, the microfinance sector has experienced remarkable expansion. The aim of this study is to review the existing literature in order to ascertain how financial risk impacts MFIs' capacity to maintain their financial viability. Numerous research on efficiency, the twin goal of achieving sustainability and social performance, and financial sustainability have been carried out in the past and few have been conducted on analyzing the financial risk's effect on the financial performance of MFIs. Liquidity risk and credit risk are potentially serious risks for the financial system's stability and the long-term viability of financial institution management.

Keywords: *Microfinance institutions, financial risk, liquidity risk, credit risk, financial sustainability.*

INTRODUCTION

Due to the enormous potential of microfinance in the process of rural financial intermediation, particularly in developing countries, the microfinance industry is a crucial part of the financial system of any economy. Professor Muhammad Yunus, the microfinance pioneer from Bangladesh, initiated microfinance, which later emerged as a crucial development instrument for eradicating poverty, empowering women, and fostering entrepreneurship in emerging nations. The distinctive purpose of microfinance is to provide development through financial inclusion by meeting the non-financial and financial requirements of those who are socially and economically marginalized. Microfinance institutions differ from conventional banking institutions in several ways, including their lending practices and product or service types (Quayes, 2012). MFIs prioritize achieving societal goals by meeting the needs of the underprivileged while maintaining their financial viability known as the 'Microfinance Promise'(Morduch, 1999).

MFIs, which are hybrid organizations, facilitate the accessibility of credit, health, agricultural, educational, and housing services. Statistics show that over the previous five years, MFI loans have grown at an average yearly rate of 11.5%. A total of 139.9 million borrowers accessed MFI services in 2018, 65% of whom were agricultural borrowers and 80% of whom were female borrowers. (Microfinance Barometer, 2019). They must be liquid to undertake this crucial role of financial intermediation, which involves meeting the funding requirements of their customers, who are poor and financially disadvantaged. For organizations operating in inefficient capital markets, cash is an essential source of financing (Chen et al., 2018).

In many developing nations, the microfinance industry has recently seen growth at an unprecedented rate. Both the number of clients served and the number of microfinance service providers have experienced significant increase (Assefa et al., 2013). MFIs nowadays have changed from being primarily impact-driven development programs to being commercially focused and profit-driven organizations. However, a recent commercialization trend toward individual lending methods along with rapid MFI expansion, greater reliance on debt, and increased market competition (D'Espallier et al., 2017) led to poor loan portfolio quality.

Risks associated with deposits include the potential for sudden withdrawals of money (liquidity risk), Interest rate fluctuations, and loan defaults known as interest-rate risk and credit risk respectively, or that their financial infrastructure will deteriorate, or that their computer system will fail (operational risk) are just a few of the financial risks that banks are subject to. Liquidity and credit risk are the two key business conditions that have the most effects on how banks conduct their business (Ghenimi et al., 2017).

Microfinance institutions (MFIs), like all other financial institutions, are subject to risks that they must effectively and efficiently manage in order to be financially sustainable. The MFI is likely to fail in achieving its social and financial goals if it does not effectively manage its risks.

Information asymmetry between lenders and borrowers raises the biggest problem for these kinds of organizations, particularly in developing markets (Stiglitz, 1990), which can lead customers to act opportunistically and poses risks to MFIs' sustainability. Due to the asymmetric information in the multi-lender market brought on by greater competition, the MFIs' portfolio quality declines. (Kar & Bali Swain, 2018), and also the absence of traditional collateral makes the screening and scrutiny of the clients more difficult. This increases their credit risk exposure, which lowers the quality of their loan portfolio (Tchuigoua, 2016). Although an MFI's loan portfolio is by far its biggest asset, the risks involved in it can have negative effects. The objective of this research is to determine how credit risk and liquidity risk impact financial performance and long-term viability of MFIs and to identify new research areas which need more attention in this area.

The following sections of this research article cover the background of existing studies, the factors selected for analysis, the methodology used, and the results, conclusions, and future directions for research in this field of study.

LITERATURE REVIEW

Liquidity risk and the financial performance

Arif & Anees (2012) investigated liquidity risk in Pakistani banks and evaluated how it impacts the banks' financial performance. The study used multiple regression analysis for the sample comprising 22 banks for the period of 5 years i.e., 2004 to 2009. The findings demonstrated that there are two core aggravating aspects of liquidity risk i.e., liquidity gap and the non-performing assets which have a substantial negative impact on bank profitability.

Adusei (2015) used the sample data of Ghanaian banks for four years (2009-2013) to analyze the factors influencing bank profitability and it was discovered that the bank profitability is favorably affected by the liquidity risk, among other factors.

Gietzen (2017) discovered that the microfinance industry is less prolonged to foreign exchange risk than is generally believed, has high interest rate risk, and little exposure to liquidity risk. The findings imply that the development community may not anticipate substantial benefits after adding to the extensive list of existing steps taken to reduce both liquidity or foreign exchange risk. The data also demonstrates that while regulatory quality has no bearing on risk exposure, legal status and regional affiliation do.

Hamdi & Hakimi (2019) discovered that this relationship is nonlinear and that a threshold level exists at which the effect of liquidity risk on bank profitability is independent. The research employed sizable sample data from 127 nations examined between 2005 and 2015. The total sample consisted of 81 low- and middle-income nations and 46 high-income countries. Results also showed that different groups of countries have different optimal liquidity levels and how they affect bank profitability.

Ghenimi et al. (2020) study 76 banks functioning in the MENA region from 2005 to 2015 to investigate the connection between liquidity risk and several bank-specific and macroeconomic indicators within conventional and Islamic banks. However, the most frequent variables affecting liquidity risk in both financial systems are CAR, ROE, liquidity gap, and credit risk. The outcomes indicate that the macroeconomic variables that best predict the liquidity risk that is posed by conventional banks are the inflation rate, the financial crisis, and economic growth. Islamic institutions are an exception to this, though. According to the findings, Islamic institutions are more adverse to bank-related variables than macroeconomic aspects.

Djebali & Zaghoudi (2020) confirmed the existence of a threshold effect in the liquidity-profitability connection. The study employed the panel dataset for the years 1999 to 2017 of 75 conventional banks of MENA nations, investigates the impacts of both the risks i.e., liquidity and credit risk on bank stability. The findings indicate that the two ideal levels for the correlations between bank stability and liquidity risk and credit risk are 13.16% and 19.03%, respectively. Credit risk and liquidity risk are harmful to bank stability when they are elevated and decline below these levels.

Yahaya et al (2022) examined how liquidity risk impacts deposit money banks' performance. (DMBs). The outcome of the study show that liquidity risk negatively effect the performance of banks. The nonperforming loan and bank performance are significantly but negatively correlated. The interface between liquidity risk and nonperforming debts was also discovered to have a very inverse effect on bank performance.

Credit Risk and the Financial Performance

McIntosh & Wydick, (2005) argued that competition in the MFI industry worsens the information asymmetry among the microfinance providers, incentivizing the most impatient borrowers to take out more loans and increase the amount of debt they have. Overall, the results showed that while more wealthy and impatient borrowers are supposed to gain an advantage in case of increased competition among MFIs,

there are very probable scenarios that as the number of lenders increases in the market, the welfare of both the poor and the patient borrowers may decline.

D'espallier et al. (2011) comprehensive research of 350 MFIs in 70 nations, showed that having large numbers of female borrowers associated, results in reduced portfolio risk, lower write-offs, and provisions for credit losses.

Ayayi (2012) investigated MFIs of Vietnamese and East Asian and Pacific regions to determine the variables that influence credit risk. They conducted a qualitative in-depth analysis of three major MFIs over 3 years and further extended the research to conduct the econometric analysis on 91 MFIs in 6 countries of over 2003–2009. The results revealed that while liquidity impacts positively, operating inefficiency and the size of the gross loan portfolio have an inverse impact on the credit risk of MFIs and findings also demonstrated the positive link between increased operational financial sustainability and higher portfolio quality.

Tabari et al. (2013) examined how the profitability of Iranian commercial banks during 2003–2010 is affected by credit risk and liquidity risk. They found that Iranian banks' profitability is negatively and significantly impacted by both credit and liquidity risks.

Lassoued (2017) investigates different elements that stimulate credit risk in microfinance institutions (MFIs) globally. Credit risk is assessed using institutional variables as well as specific considerations. The findings demonstrate how credit risk is decreased by group financing practices, the percentage of loans given to women, and diversification initiatives. The credit quality is enhanced when the data is released by the bureaus (public or private), whereas the credit risk is raised due to the cost of law enforcement. Finally, a strong institutional environment tends to restrict credit risk. According to the report, MFI managers can improve their credit quality by utilizing group lending, extending credit to more women, and diversifying their business ventures. To assist MFIs in reducing their credit risk, authorities must strengthen institutions for loan repayment and their institutional environment.

Ekinci & Poyraz (2019) investigated the performance of 26 Commercial banks (Turkish banks) by analyzing the impact of credit risk on it for the period 2005 and 2017 and the research findings suggested an inverse relationship between profitability indicators i.e., ROA and ROE and the credit risk as assessed by NPLs.

Abbas et al. (2019) Abbas et al. (2019) studied the profitability of commercial banks in selected Asian nations to analyze the impact of credit risk and other factors from 2011 to 2017. It was discovered that while the consequences are detrimental and substantial for large-sized and medium-sized business banks, they are immaterial for smaller banks.

Zamore et al. (2019) investigated how regional diversification affects credit risk in microfinancing. According to the research, in microfinance, there is a positive correlation between geographic diversification and credit risk. In contradiction of shareholder-owned MFIs, this association is more pronounced among NGOs and cooperatives, which are non-shareholder microfinance institutions (MFIs). The research also reveals that MFIs can use group lending techniques to reduce the impact of geographic diversification on risk.

Afrifa et al. (2019) examined the performance of MFIs around the globe concerning buffer capital. As per the study, an inverse correlation exists between MFIs' performance and buffer capital. The research does discover, however, that in MFIs, the buffer capital is becoming more valuable with poor loan portfolio quality. The research further investigates whether this relationship differs in MFIs that accept deposits, make a profit, and are subject to regulation and concludes that it does not. The research offers fresh insight into the importance of capital to microfinance institutions overall.

Duho et al. (2021) investigated MFIs in Ghana about how revenue diversification strategies affect credit risk and market risk. According to the research, income diversification helps microfinance companies manage credit risk and improve the quality of their loans, but market risk rises as income diversification increases. The findings imply that MFIs should pay close attention to effective cash management because they have a tendency of having higher loan loss provisions and a large number of government securities when they retain more cash and cash equivalents.

Interaction Effect of credit risk and liquidity risk

Imbierowicz & Rauch, (2014) analyzed the U.S. commercial banks about how both credit risk and financial risk related between 1998 and 2010 and the findings suggest that both risks individually enhance the possibility of default, and the level of overall bank risk determines their combined effect.

Ghenimi et al. (2017) investigated 49 banks in MENA countries from 2006 to 2013 to analyze how banking stability is affected by liquidity risk and credit risk. The findings disclosed that both credit risk and liquidity risk create a greater impact on the stability of banks while they don't have any significant reciprocal or time-lag relationship which implies that bank stability declines as credit risk rises. This outcome could be the result of increased consumer demand for credit risk, which raises lending rates. On the other hand, liquidity risk has a statistically significant but inverse effect on banking stability, suggesting that banks with more liquidity are highly secure. It was also discovered that the interaction between the two risk groups greatly impairs banking stability.

Harb et al. (2022) conducted a panel data regression analysis with a sample of 51 listed commercial banks from MENA nations to know how credit risk management and liquidity risk influence banks' financial statements and their market performance for the period between 2010 to 2018. The outcomes show that there is no influence of credit risk management on banks' financial performance but have a non-linear relationship with the market performance of selected banks. It's interesting to note that neither of the organizations under study's

performance metrics has liquidity risk management as its main driver. This research also examines the combined impact of the two hazards on bank performance. According to this research, combined risk has different effects on accounting and market performance.

METHODOLOGY AND OBJECTIVES

The present study is descriptive research. The secondary data sources were used to gather the data. The research papers have been extracted from the Scopus database.

This study's main objective is to examine how the financial performance of microfinance institutions is affected by financial risk, particularly credit risk and liquidity risk by reviewing the existing literature, in order to identify research areas that have not yet been explored and specify the future direction of this field of study.

FINDINGS AND DISCUSSION

It has been observed from summarising the results of empirical studies reviewed in this paper depicting the financial risk's impact on the financial performance of the microfinance industry that liquidity risk and credit risk have been identified as major threats to the financial system's stability and financial institution management's ability to continue operating. Even though some researchers have claimed that the risk of liquidity has very less or no effect on financial institutions in terms of their financial performance, other studies have found that it significantly reduces the stability of those institutions (Arif & Anees, 2012). Similarly, there are diverse results of the studies regarding how credit risk affects these financial organizations' sustainability. It has been also seen that most of the empirical research considering the impact of credit risk on the financial institutions' sustainability has used portfolio at risk to measure the credit risk. Findings support the claim made by several researchers that the inverse impact turns into a positive effect when there is a combination of credit risk and liquidity risk. According to this, liquidity risk positively impacts the MFI's financial performance through the channel of credit risk. It suggests that liquid MFIs are more prospective to experience better financial outcomes when they lend more, increasing their credit risk. This might be a result of MFIs using distinct lending strategies, like group lending, to outperform traditional lending institutions in terms of debt recovery.

It has been observed that various business environmental factors, including obtaining credit, safeguarding small investors, and paying taxes, have a substantial consequence on the financial performance of specific institutions (Farooq et al., 2022). Group lending reduces the possibility of morally hazardous behavior and unfavorable selection. Co-signers are bound to loans under group lending agreements, tumbling issues occurred in between Lenders and borrowers due to the problem of information asymmetry. Co-signers are encouraged to check on each other and eliminate risky borrowers, which boosts rates of repayment even when collateral is not there. (Morduch, 1999). According to the results, policymakers and practitioners should focus on creating policies that will enable these institutions to operate more effectively in their external business environment.

It has been observed that there are no such studies in India that examine how financial risk affects MFIs' financial performance. However, some studies which have been conducted in the Indian context are limited to the banking sector which again shows a need to examine how financial risk affects the microfinance sector, as from the available literature it is evident that MFIs are vulnerable to credit risk and that this has a detrimental consequence on their financial performance because of the problem of information asymmetry among the lenders in the microfinance industry (Kar & Bali Swain, 2018).

CONCLUSION AND DIRECTIONS FOR FUTURE RESEARCH

This study focused on the specific effects of credit risk, liquidity risk, and financial risk on the financial sustainability of microfinance organizations. In recent years, the microfinance industry has expanded significantly in terms of both market size and the number of microfinance firms, making a major contribution to the economic development of developing countries. For the sector to remain operational, microfinance institutions must be financially sustainable. As a result, over the past few years, emphasis has been placed on MFIs' ability to sustain their financial operations. However, since achieving social outreach is the industry's main objective, the focus on financial sustainability has raised concerns about a possible negative impact on outreach. MFIs nowadays have changed from being primarily impact-driven development programs to being commercially focused and profit-driven organizations. However, a recent commercialization trend toward individual lending methods along with rapid MFI expansion, greater reliance on debt, and increased market competition led to poor loan portfolio quality.

The two main risks to the financial system's stabilization and the financial institution management's ability to continue functioning are liquidity risk and credit risk. While some academics have claimed that liquidity risk imposed little or no impact on the financial performance of financial institutions, other academics have discovered a markedly negative relationship between liquidity risk and the stability of financial institutions. Similar research has been done on the sustainability of these financial organizations and credit risk.

This review of the literature supports the finding that all three risks i.e., credit risk, liquidity risk, and financial risk are the key factors affecting the success of the microfinance sector. Therefore, it will be intriguing to look into the connections between credit risk and liquidity risk in developing country microfinance institutions. The existing literature is mostly related to the banks but studies on microfinance

institutions are limited. Additionally, there aren't many studies investigating how financial risk affects MFIs' ability to maintain their financial stability, particularly in India.

First, given the relationship between financial risk and the sustainability of MFIs, this research will bring light on the operational dynamics of MFIs. This research will assist in developing policies and strategies for the microfinance sector that will make it financially viable and accomplish outreach goals. These policies and strategies will be related to a targeted market.

Therefore, further research can be done on this area covering these research gaps. Also, studies involving empirical analysis are required in this area to better comprehend how financial risk affects the sustainability of microfinance institutions (MFIs) in developing nations like India.

REFERENCES

- Abbas, F., Iqbal, S., & Aziz, B. (2019). The impact of bank capital, bank liquidity and credit risk on profitability in postcrisis period: A comparative study of US and Asia. *Cogent Economics & Finance*, 7(1), 1605683.
- Adusei, M. (2015). Bank profitability: Insights from the rural banking industry in Ghana. *Cogent Economics & Finance*, 3(1), 1078270.
- Afrifa, G. A., Gyapong, E., & Zalata, A. M. (2019). Buffer capital, loan portfolio quality and the performance of microfinance institutions: A global analysis. *Journal of Financial Stability*, 44, 100691.
- Arif, A., & Anees, A. N. (2012). Liquidity risk and performance of banking system. *Journal of Financial Regulation and Compliance*.
- Assefa, E., Hermes, N., & Meesters, A. (2013). Competition and the performance of microfinance institutions. *Applied Financial Economics*, 23(9), 767–782.
- Ayayi, A. G. (2012). Credit risk assessment in the microfinance industry: An application to a selected group of Vietnamese microfinance institutions and an extension to East Asian and Pacific microfinance institutions 1. *Economics of Transition*, 20(1), 37–72.
- Chen, Y.-K., Shen, C.-H., Kao, L., & Yeh, C.-Y. (2018). Bank liquidity risk and performance. *Review of Pacific Basin Financial Markets and Policies*, 21(01), 1850007.
- D'espallier, B., Guérin, I., & Mersland, R. (2011). Women and repayment in microfinance: A global analysis. *World Development*, 39(5), 758–772.
- D'Espallier, B., Hudon, M., & Szafarz, A. (2017). Aid volatility and social performance in microfinance. *Nonprofit and Voluntary Sector Quarterly*, 46(1), 116–140.
- Djebali, N., & Zaghdoudi, K. (2020). Threshold effects of liquidity risk and credit risk on bank stability in the MENA region. *Journal of Policy Modeling*, 42(5), 1049–1063.
- Duho, K. C. T., Duho, D. M., & Forson, J. A. (2021). Impact of income diversification strategy on credit risk and market risk among microfinance institutions. *Journal of Economic and Administrative Sciences*, ahead-of-print.
- Ekinci, R., & Poyraz, G. (2019). The effect of credit risk on financial performance of deposit banks in Turkey. *Procedia Computer Science*, 158, 979–987.
- Farooq, S., Ahmad, A., Liaqat, F., & Ali, F. H. (2022). Understanding Relevance of Business Environment for Financial Performance: The Case of Asian Non-Banking Microfinance Institutions. *Vision*, 09722629221081915.
- Ghenimi, A., Chaibi, H., & Omri, M. A. B. (2017). The effects of liquidity risk and credit risk on bank stability: Evidence from the MENA region. *Borsa Istanbul Review*, 17(4), 238–248.
- Ghenimi, A., Chaibi, H., & Omri, M. A. B. (2020). Liquidity risk determinants: Islamic vs conventional banks. *International Journal of Law and Management*.
- Gietzen, T. (2017). The exposure of microfinance institutions to financial risk. *Review of Development Finance*, 7(2), 120–133.
- Hamdi, H., & Hakimi, A. (2019). Does liquidity matter on bank profitability? Evidence from a nonlinear framework for a large sample. *Business and Economics Research Journal*, 10(1), 13–26.
- Harb, E., El Khoury, R., Mansour, N., & Daou, R. (2022). Risk management and bank performance: Evidence from the MENA region. *Journal of Financial Reporting and Accounting*.
- Imbierowicz, B., & Rauch, C. (2014). The relationship between liquidity risk and credit risk in banks. *Journal of Banking & Finance*, 40, 242–256.
- Kar, A. K., & Bali Swain, R. (2018). Competition, performance and portfolio quality in microfinance markets. *The European Journal of Development Research*, 30(5), 842–870.
- Lassoued, N. (2017). What drives credit risk of microfinance institutions? International evidence. *International Journal of Managerial Finance*, 13(5), 541–559.
- McIntosh, C., & Wydick, B. (2005). Competition and microfinance. *Journal of Development Economics*, 78(2), 271–298.
- Morduch, J. (1999). The microfinance promise. *Journal of Economic Literature*, 37(4), 1569–1614.
- Quayes, S. (2012). Depth of outreach and financial sustainability of microfinance institutions. *Applied Economics*, 44(26), 3421–3433.
- Stiglitz, J. E. (1990). Peer monitoring and credit markets. *The World Bank Economic Review*, 4(3), 351–366.

- Tabari, N. A. Y., Ahmadi, M., & Emami, M. (2013). The effect of liquidity risk on the performance of commercial banks. *International Research Journal of Applied and Basic Sciences*, 4(6), 1624–1631.
- Tchuigoua, H. T. (2016). Buffer capital in microfinance institutions. *Journal of Business Research*, 69(9), 3523–3537.
- Yahaya, A., Mahat, F., MH, Y., & Matemilola, B. T. (2022). Liquidity risk and bank financial performance: An application of system GMM approach. *Journal of Financial Regulation and Compliance*, 30(3), 312–334.
- Zamore, S., Beisland, L. A., & Mersland, R. (2019). Geographic diversification and credit risk in microfinance. *Journal of Banking & Finance*, 109, 105665.