

Original Paper

Financial Risk and Governance Nexus in Nepalese Cooperative Societies

Gyanendra Prasad Paudel¹

¹ National College, Tribhuvan University, Nepal

Received: October 5, 2023 Accepted: October 25, 2023 Online Published: November 30, 2023

doi:10.22158/elp.v6n3p27

URL: <http://dx.doi.org/10.22158/elp.v6n3p27>

Abstract

This study aims to investigate the relationships between credit default risk, leverage risk, liquidity risk, and investment risk and their connection to the governance system of Nepalese cooperative societies. The research hypothesis tries to explore that these financial risks are not significantly associated with the governance system of cooperatives. The findings reveal a significant connection between the governance system of cooperatives and credit default risk, leverage risk, and investment risk. However, liquidity risk does not demonstrate a substantial link with the governance system, suggesting the influence of additional factors. These results underscore the pivotal role of effective governance in mitigating financial risks within cooperative societies. Interestingly, the lack of a significant connection between liquidity risk and the governance system implies that other factors are at play in influencing liquidity risk. These insights provide valuable guidance for policymakers and cooperative management, facilitating the enhancement of governance and risk management strategies, and ultimately contributing to the sustainability of cooperative societies in Nepal. The evaluation involves a comprehensive analysis of financial risks and the governance system in Nepalese cooperative societies, utilizing data from a sample of 126 cooperative societies in Kathmandu.

Keywords

governance system, credit default risk, leverage risk, liquidity risk, and investment risk

1. Introduction

Cooperatives in Nepal have evolved within a distinctive and well-defined framework, characterized by the primacy of member participation in decision-making. This comprehensive exploration will delve into Nepalese cooperative governance, highlighting the essential roles played by members, the board of directors, management, and employees in shaping the cooperative's success and commitment to inclusivity.

At the conceptual level, the cooperative model in Nepal illustrates a form of collective action where individuals join together to achieve common minimum economic, social, and cultural objectives. It reflects cooperative norms that center on democratic decision-making, shared ownership, and equitable distribution of benefits. This conceptual foundation aligns with international cooperative principles while adapting to the specific social and economic contexts of Nepal.

Within the Nepalese context, cooperatives have emerged as vital institutions that address various economic and social challenges. They play a significant role in rural and urban settings, bridging gaps in financial services, agriculture, and other sectors. This contextual significance is underscored by the country's unique socio-economic landscape, characterized by diverse ethnicities, geographical variations, and developmental needs.

The historical cornerstone of cooperative movements in Nepal traces back to early grassroots efforts to address economic disparities and empower marginalized communities. Over time, these efforts culminated in a structured cooperative framework that aimed to promote self-sufficiency, financial inclusion, and community development. The cooperative sector has grown significantly from its inception, evolving in response to historical imperatives and changing economic paradigms.

This study is driven to understand the relationships between credit default risk, leverage risk, liquidity risk, and investment risk concerning the governance system of Nepalese cooperative societies. The primary aim is to explore whether there is a substantial correlation between these financial risks and the governance system.

This inquiry arises from the recognition that effective governance is pivotal to the sustainability and prosperity of cooperatives. Through an examination of how financial risks and governance interact, the research aims to illuminate both the strengths and possible weaknesses of the Nepalese cooperative model. This understanding is crucial for policymakers, cooperative management, and members alike, as it can inform strategies to enhance governance and risk management, ensuring the continued success of cooperative societies in Nepal.

Nepalese cooperatives serve as dynamic entities, driven by the active involvement of their members, prudent governance practices, and a faithful commitment to collective prosperity and inclusivity. This sequential breakdown emphasizes the integral role of each stakeholder in the cooperative's achievements.

Drawing from the economic survey for the year 2022/23, as of mid-March 2023, the cooperative sector has achieved noteworthy milestones. It encompasses a total of 31,373 cooperatives, catering to the needs of 7,381,218 members. Remarkably, this sector has played a pivotal role in creating direct employment opportunities for 93,771 individuals. In terms of its financial impact, the cooperative sector has made substantial contributions, accumulating a share capital of 94.15 billion rupees, collecting deposits totaling 478.03 billion rupees, and providing loans amounting to 426.35 billion rupees to their members. These statistics underscore the substantial role of cooperatives in Nepal's socio-economic landscape, affirming their significance at both the national and regional levels.

2. Literature Review

The governance of cooperative societies in Nepal constitutes a multifaceted and dynamic domain, as evidenced by a wealth of scholarly studies and insights. This literature review offers an in-depth exploration of significant findings and perspectives concerning cooperative governance in the Nepalese context. It interplay between independent and dependent variables, emphasizing the relationship between these variables for the purpose of generalizing results to a wider context.

Multifaceted approach: Paudel (2022) proposed approach to foster the development of the cooperative movement is characterized by several dimensions, including the promotion of cooperative-friendly policies, expansion into rural underserved areas, establishment of cooperatives as a cornerstone of national prosperity, reinforcement of cooperatives self-regulation, and the maintenance of good governance. This approach lays the groundwork for understanding the intricate relationships between these independent variables and their impact on the dependent variable, cooperative development.

Significance of accountability: Ernst and Young (2012) underscores the vital importance of accountability in cooperative governance. It highlights accountability as a pivotal independent variable that influences governance outcomes. Weak oversight and control mechanisms are identified as barriers to effective governance, emphasizing the direct relationship between accountability practices and governance failures.

Holistic nature of governance systems: Eckart (2009) conceptualization of governance systems as encompassing structures, processes, and dynamic interactions places emphasis on alignment with cooperative objectives, member interests, and core values in Nepal. This definition underscores the interdependence of various elements within governance systems and their direct influence on the dependent variable, cooperative performance.

Adaptability in cooperative governance: Novkovic et al. (2023) stress the adaptability of cooperative governance structures, highlighting their dependence on the organization's purpose and member relationships. This adaptability is a crucial independent variable as it influences cooperative evolution while upholding democratic processes, signifying the need for flexibility and responsiveness in governance approaches.

Policy implementation and member participation: Ekhurutomwen and Peters (2021) & Prakash (2004) underline the importance of policy implementation in Nepal for strengthening cooperative systems. Effective governance through regulation, networking, and innovative management is identified as influential independent variables in enhancing performance, benefitting members, and ensuring satisfaction. Member participation, another independent variable, plays a pivotal role in governance, underlining the importance of policy and active member involvement.

Management, human resource quality, and adaptability: Paudel (2021) & Fairbairn et al. (2015) conclude that effective management, governance, and human resource quality are emphasized as independent variables that shape the evolution of the cooperative savings culture. Capacity-building initiatives and adaptable governance practices further reinforce the interdependence of these variables with cooperative success.

Cooperative networks and governance: Fairbairn et al. (2015) conclude that the value of cooperative networks in sharing collective knowledge for effective governance practices underscores the influence of these networks as an independent variable in cooperative governance. The nuanced nature of “Good governance” highlights the context-specific and knowledge-sharing aspects that affect governance outcomes.

Agency problems, cooperative identity, and democratic control: Brasil (2008), Novkovic and Miner (2015), Birchall (2017) & Cornforth (2004) delve into agency problems, distinctive features of cooperative identity, and the balance between representation and expertise in cooperative boards. These aspects, considered independent variables, influence governance outcomes through their impact on the alignment of interests and democratic principles.

Humanistic perspective on governance: Novkovic and Miner (2015), Bager (1994), Sacchetti & Tortia (2016) introduce diversity and context-dependence as essential components of decision-making structures. Human dignity and needs satisfaction emerge as pivotal independent variables influencing governance practices.

The four pillars of cooperative governance model: This model provides a holistic framework that includes teaming, accountable empowerment, strategic leadership, and democracy, serving as independent variables applicable at all cooperative levels in Nepal.

Member engagement and context-specific variables: Novkovic et al. (2023) highlighted the significance of member engagement as an independent variable is emphasized, as is the influence of context-specific variables on various forms of “best cooperative governance”. These variables navigate the dynamic interplay between member expectations and external pressures, underlining the need for adaptive governance strategies.

Governance in financial cooperatives: Brasil (2008) highlights the unique challenges and importance of governance in financial cooperatives as an influential independent variable.

Link between governance and performance: Dayanandan and Dagnachew (2015) conclude the vital connection between good governance and cooperative performance underscores the critical impact of governance as an independent variable on the dependent variable, cooperative success.

Empirical evidence: Puri and Bunchapattanasakda (2019) conclude that good governance exhibits a statistically significant and positive correlation with the financial performance of savings and credit cooperatives. The independent variables of participation, accountability, and transparency were also found to have not only statistically significant but also positive relationships with the financial performance of these cooperatives. This empirical evidence serves as a significant reference for generalizing the impact of governance components on cooperative financial success.

Policy implications: Puri and Bunchapattanasakda (2019) show the discovery of a significant relationship between participation, accountability, and transparency as pivotal components of good governance and cooperative performance carry direct policy implications for enhancing cooperative governance, particularly within local governments in Nepal.

In summary, cooperative governance in Nepalese cooperative societies represents a dynamic and multifaceted field. This literature review underscores the importance of various independent variables such as adaptability, accountability, management, human resource quality, member engagement, and context-specific variables in shaping cooperative governance and, subsequently, cooperative success. The diverse insights and perspectives from these studies contribute to a comprehensive understanding of cooperative governance in the Nepalese context and provide valuable reference points for generalizing results to a wider cooperative landscape.

3. Methodology

We collected secondary data from the annual audited financial statements of saving and credit cooperatives and multipurpose cooperatives operating in Kathmandu, which serves as the capital city of the country.

To account for the demographic and economic heterogeneity of the population, we employed stratified sampling, considering all of Nepal as the target population. Our sample consisted of 126 cooperatives selected from the Kathmandu district, ensuring a diverse representation of the cooperative landscape. We conducted a multi-faceted analysis of the secondary data, utilizing descriptive analysis, correlation analysis, and regression analysis:

The statistical analyses were carried out using SPSS 16.0 and Stata SE10 applications, providing a robust framework for data manipulation and analysis. Furthermore, the organization of results and the tabulation of data were performed in MS Excel 2007.

4. Data Analysis

To assess the governance system of Nepalese cooperative sectors independent correlation hypotheses I, II, III and IV have been tested as:

Hypothesis I: Credit default risk is not significantly associated with the governance system of cooperatives.

Step I: Conceptual framework

Default risk means debt or loan investment default risk. It is measured by exposure limit of personal guaranteed loan i.e., loan supplied without collateral (Lpg). Lpg is calculated from structured questionnaire survey, by assigning score as:

What is single party exposure limit of personal guarantee loan in your cooperative?

- a. does not have any PG loan, score is 0 b. less than 0.1 million, score is 0.5
c. 0.2 to 0.5 million, score is 1.75 d. more than 0.5 million, score is 2.5

Governance system is measured by % of member's participation on board meeting (BMP). BMP is calculated from structured questionnaire survey, by assigning score as:

What percentage of total board members usually participates in decision making process?

- a. 100%, score is 100 b. 66 - 99%, score is 66
c. 51- 66%, score is 51 d. less than 50%, score is 0

Well governance system reduced the default risk. The expected output is therefore rejection of null hypothesis.

Step II: Setting up of hypothesis

Null Hypothesis H_0 : $\rho=0$, i.e., Population correlation coefficient is zero or there is no significant relationship between Lpg and BMP.

Alternative Hypothesis H_1 : $\rho \neq 0$, i.e., Population correlation coefficient is not zero or there is a significant relationship between Lpg and BMP.

Step III: Level of significance $\alpha=0.05$ or 5%; degree of freedom $df=n-2=126-2=124$

Step IV: Test statistics

Table 1. Correlation of Lpg and BMP

		Lpg
BMP	Pearson Correlation	0.211*
	Signification (2-tailed)	0.018
	N	126

Note. *Correlation is significant at the 0.05 level (2-tailed).

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} = \frac{-0.220\sqrt{126-2}}{\sqrt{1-(-0.220)^2}} = -2.511, \text{ where, } r = \text{correlation coefficient, } n = \text{no of observation.}$$

$$t_{\text{calculated}} = -2.511$$

Step V: Critical value

At $df=124$ and level of significant $\alpha=0.05$ or 5%, $t_{\text{tabulated}}=1.98$

Step VII: Result

Since the absolute value of the calculated t score is greater than the absolute value of the critical t score, the null hypothesis H_0 is rejected, and alternative hypothesis H_1 is accepted i.e. as the theoretical assumption behind hypothesis testing, the population correlation coefficient is not zero that suggests investment risk is significantly associated to governance system of cooperatives.

5. Findings

In the first hypothesis, the absolute value of the calculated t-score exceeds the absolute value of the critical t-score. Therefore, the null hypothesis H_0 is disapproved, and the alternative hypothesis H_1 is affirmed. In accordance with the foundational principles of hypothesis testing, this implies that the population correlation coefficient is non-zero, indicating a substantial connection between credit default risk and the governance system of cooperatives.

For the second hypothesis, the absolute value of the calculated t-score surpasses that of the critical t-score. Consequently, the null hypothesis H_0 is negated, and the alternative hypothesis H_1 is validated. This aligns with the theoretical framework of hypothesis testing, signifying a substantial association between leverage risk and the governance system of cooperatives, as the population correlation coefficient is found to be non-zero.

Contrastingly, the third hypothesis exhibits a different outcome, as the absolute value of the calculated t-score is less than that of the critical t-score. Consequently, the null hypothesis H_0 is accepted, and the alternative hypothesis H_1 is rejected. This challenges the theoretical premise of hypothesis testing, indicating that the population correlation coefficient is zero, implying that there is no significant association between liquidity risk and the governance system of cooperatives.

In the case of the fourth and final hypothesis, the calculated t-score's absolute value surpasses that of the critical t-score. Consequently, the null hypothesis H_0 is dismissed, and the alternative hypothesis H_1 is embraced. This aligns with the foundational tenets of hypothesis testing, suggesting that the population correlation coefficient is not zero, highlighting a substantial relationship between investment risk and the governance system of cooperatives.

6. Conclusion

This research provides a comprehensive exploration of the governance landscape within Nepalese cooperative societies by examining the intricate relationships among critical financial risks: credit default risk, leverage risk, liquidity risk, and investment risk, in conjunction with the governance system. The findings, summarized herein, offer a nuanced understanding of these associations.

The study consistently found that the calculated t-score values surpassed the critical t-score values, unequivocally rejecting the null hypotheses. This unequivocal outcome signifies a substantial and undeniable linkage between credit default risk, leverage risk, and investment risk with the governance system of cooperative societies. These results highlight the pivotal role of effective governance in navigating and mitigating these financial risks, ultimately contributing to the resilience and prosperity of cooperative societies.

Conversely, the analysis revealed that the calculated t-score for liquidity risk failed to reach the critical t-score threshold, leading to the acceptance of the null hypothesis. This observation suggests that, within the context of Nepalese cooperative societies, liquidity risk is not significantly associated with the governance system. It implies the presence of other influential factors that play a more prominent role in shaping liquidity risk within these cooperative societies.

In summary, this research underscores the substantial and noteworthy connections between credit default risk, leverage risk, and investment risk with the governance system, as assessed through member participation in board meetings. These findings underscore the pivotal role of effective governance in managing financial risks within cooperative societies, emphasizing the significance of robust governance practices.

Nevertheless, the absence of a significant association between liquidity risk and the governance system highlights the intricate nature of the cooperative landscape, suggesting that additional factors, beyond governance, may underlie liquidity challenges. These research outcomes offer valuable insights for policymakers and cooperative management, serving as a foundation for the enhancement of governance and risk management strategies within the cooperative sector. Ultimately, this research contributes to a comprehensive understanding and the advancement of governance systems in Nepalese cooperative societies, nurturing their long-term sustainability and prosperity.

7. Recommendations

The study offers a set of recommendations aimed at strengthening cooperative societies in managing financial risks and ensuring their long-term success. It suggests enhancing governance practices to effectively handle financial risks, such as credit default, leverage, and investment risks.

The study emphasizes the importance of training and education. It advises providing specialized training and education for board of directors, members, and staff, enabling them to identify and manage financial risks while ensuring that their decisions align with the cooperative's financial stability. It highlights the significance of involving members in governance decisions, thus ensuring their meaningful engagement in the cooperative's decision-making processes.

Furthermore, the study urges cooperative societies to diversify their liquidity risk management strategies beyond governance. This includes a focus on exploring liquidity challenges and developing a range of approaches to address them. In a dynamic cooperative sector, continuous research is vital. The study recommends ongoing research to identify evolving risks and their relationship with governance, allowing for timely adaptations of governance and risk management practices.

The study also advises policymakers to base policies on research findings, encouraging the adoption of best practices and providing resources for training and development within cooperative societies. Promoting knowledge sharing and collaboration among cooperative societies is another crucial aspect. The study suggests that sharing governance and risk management best practices, experiences, and lessons can benefit the entire cooperative sector.

Finally, the study underscores the need to prioritize the long-term sustainability and prosperity of cooperative societies. This can be achieved through effective governance and risk management practices, with close collaboration between policymakers and cooperative practitioners.

Reference:

- Bager, T. (1994). Isomorphic processes and the transformation of cooperatives. *Annals of Public and Cooperative Economics*, 65(1), 35-54. <https://doi.org/10.1111/j.1467-8292.1994.tb01505.x>
- Banco Central Do Brasil. (2008). *Cooperative Governance, Guidelines for Good Practices of Financial Cooperatives Governance*.
- Birchall, J. (2017). The Performance of Member-Owned Businesses since the Financial Crisis of 2008. In J. Michie, J. R. Blasi, & C. Borzaga (Eds.), *The Oxford Handbook of Mutual, Co-operative and Co-owned Business* (pp. 570-584). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199684977.013.40>
- Cornforth, C. (2004). The Governance of Cooperatives and Mutual Associations: A Paradox Perspective. *Annals of Public and Cooperative Economics*, 75(1), 11-32. <https://doi.org/10.1111/j.1467-8292.2004.00241.x>

- Dayanandan, R., & Dagnachew, S. (2015). Good Governance Practice for Cooperative Development in Ethiopia: How it works? In National conference on cooperative development in Ethiopia (p. 2). Hawassa: Hawassa University.
- Department of Cooperatives. (2021). *Cooperative Glance (in Nepali)*. Department of Cooperatives. Ministry of Land Management, Cooperative, and Poverty Alleviation. New Baneshwor, Kathmandu. 2077.
- Eckart, M. (2009). *Cooperative Governance: A Third Way towards Competitive Advantage*. Südwestdeutscher Verlag für Hochschulschriften.
- Ekhurutomwen, A. A., & Peters, O. B. (2021). *International Journal of Knowledge Content Development & Technology*, 11(4).
- Ernst and Young. (2012). *Enlighten Co-operative Governance*. America: EYGM Limited.
- Fairbairn, B., Fulton, M., & Pohler, D. (2015). *Governance as a Determinant of Success and Failure: What Other Co-ops Can Learn from Co-op Atlantic*. Centre for the Study of Co-operatives, University of Saskatchewan
- Government of Nepal, Ministry of Finance. (2022). *Economic Survey, 2022/023*. Retrieved from https://www.mof.gov.np/uploads/document/file/1687415151_Economic%20Survey%207980.pdf
- Novkovic, S., & Miner, K. (Eds.). (2015). *Co-operative governance fit to build resilience in the face of complexity. International Co-operative Alliance*. Retrieved from <https://www.ica.coop/en/media/library/cooperative-governance-fit-build-resilience-face-complexity>
- Novkovic, S., Miner, K., & McMahon, C. (2023). *Cooperative Governance in Context*. International Centre for Co-operative Management, Saint Mary's University, Halifax, NS, Canada. https://doi.org/10.1007/978-3-031-17403-2_4
- Novkovic, S., Miner, K., & McMahon, C. (2023). Humanistic Governance in Democratic Organizations: The Cooperative Difference. *Humanism in Business Series*. <https://doi.org/10.1007/978-3-031-17403-2>
- Oll, M., & Sherwood, A. (n.d.). *Four Pillars of Cooperative Governance: A New Model Grounded in the Cooperative Difference*. Retrieved from <https://columinate.coop/wp-content/uploads/2014/01/CG-Four-Pillars-of-Cooperative-Governance.pdf>
- Paudel, G. P. (2021). Risk Management and Efficiency of Cooperatives: A Study of Nepalese Cooperative Societies. *International Journal of Scientific & Engineering Research*, 12(12), 274-288.
- Paudel, G. P. (2022). Sixty-five Years of Nepalese Cooperative Movement and its Direction. *Asian Journal of Economics, Business and Accounting*, 22(14), 25-42. <https://doi.org/10.9734/ajeba/2022/v22i1430621>

- Prakash, D. (2004). *Professionalisation in Co-operatives Promotes Good Governance*. Retrieved from <https://www.icaap.coop/sites/icaap.coop/files/Professionalisation%20of%20Coops%20Promote%20Good%20Governance.pdf>
- Puri, D. L., & Bunchapattanasakda, C. (2019). Good Governance for Performance of Nepalese Cooperatives: A Study of Savings and Credit Cooperatives in Kathmandu District. *Asian Journal of Science and Technology*, 10(11), 10493-10498.
- Sacchetti, S., & Tortia, E. C. (2016). The Extended Governance of Cooperative Firms: Inter-firm Coordination and Consistency of Values. *Annals of Public and Cooperative Economics*, 87(1), 93-116. <https://doi.org/10.1111/apce.12058>
- Sherwood, A. L. (2013). *Democratically Owned and Controlled Businesses: Identifying Common and Unique Expectations of Co-op Board Governance Systems*. Retrieved from https://ostromworkshop.indiana.edu/pdf/seriespapers/2013s_c/sherwood_paper.pdf
- University of Wisconsin, Center of Cooperatives, Madison. (n.d.). Retrieved from <https://uwcc.wisc.edu/resources/governance-2/#:~:text=Cooperatives%20have%20a%20unique%20governance,directors%2C%20management%2C%20and%20employees>