

Impact of Borrowers' Specific Factors on Level of Non-Performing Loans of Nepalese Commercial Banks: A Perception of Bankers

Dinesh Kumar Pant (MPhil)

Graduate School of Management (MU)

E-mail: dineshpant27@gmail.com

Abstract

The operations of banks are significantly shaped by non-performing loans (NPLs), which have an impact on risk management, financial stability, and the profitability and efficiency of commercial banks. The primary goal of the research is to examine how certain borrower characteristics affect the amount of non-performing loans that Nepalese commercial banks have. The study was conducted using a descriptive and causal-comparative research approach. The bank employees employed by the many commercial banks operating in the province of Karnali as well as their branch offices at the provincial level comprised the study's population. A convenience sample strategy was used to gather the responses. 406 individuals provided the data, which was gathered through the structured questionnaire. Using SPSS software, descriptive and regression analysis were used to evaluate and interpret the survey results.

The research findings indicate that the level of non-performing loans in Nepalese commercial banks is significantly influenced by certain criteria related to the borrowers.

Keywords: borrowers' honesty, borrowers' specific factors, commercial banks, non-performing loan, perception of bankers'.

1. Background

According to Ganawali (2018), the long-term effectiveness and efficiency of the banking industry ensure a country's financial stability, especially in areas where financial systems underpin economies. The IMF (2015) states that non-performing loans (NPLs) are particularly detrimental to economic activity in countries where banks are the primary players in financial intermediation.

One of the potential reasons why non-performing assets are increasing is the commercial banks' lending practices. Similar banking inadequacies, a downturn in the economy and industry, lax legal provisions for

collecting debts owed, erratic government actions, a lack of supervision and oversight from the central bank, high and conservative provisions, lax credit policy, lax monitoring, lax portfolio analysis, lax security, lax credit concentration, and poor bank management are all factors (Golcha, 2007).

The concept of non-performing loans lacks consensus, however, there are variations in how they are classified and what they consist of. Banks often categorize non-performing loans based on the latest internationally approved criteria (Rwegasira Phunto, 2011). Different countries use different criteria to classify loans as non-performing loans (Rajeev and Mahesh, 2010). Non-performing loans, as defined by Waweru and Kalani (2009), are loans where the principal and/or interest remains unpaid for 90 days or more beyond the due date.

Regarding categorization and substance, there are variations but no widely agreed definition of non-performing loans exists. Rwegasira and Phunto (2011) noted that banks often categorize non-performing loans based on the most current international protocols. Various countries have various criteria for classifying certain loans as non-performing (Rajeev & Mahesh, 2010). Waweru and Kalani (2009) define non-performing loans as those for which the principal and/or interest has not been repaid ninety days or more after the loan's due date.

According to Berger et al. (2008), bank size and asset quality are related. Since bigger banks maintain a comparatively lesser amount of non-performing loans, their loan portfolio quality is superior. In addition to the bank's size, the borrower's ability to repay the loan, the market for selling the troublesome assets, and the regulations controlling the settlement of non-performing loans all have an impact on the proportion of non-performing loans. Reducing the amount of non-performing loans (NPLs) in the banks and improving credit quality within the banking system are indicators of how effective a method of assessing a borrower's creditworthiness is (Tarantola, 2007).

By lowering loan disbursement often referred to as a credit crunch brought on by the depreciation of a company's assets and equity NPLs also have an impact on private spending. A company's long-term viability is threatened when loans fail to provide profits and return capital. This also affects the amount of private investment since it increases the amount of needed provision and loss accumulation in the financial system (Rifat 2017).

Mwakajumilo (2014) investigated the growth of the NMB Bank banking industry in Tanzania as well as the impact of non-performing assets on the economy. The results showed that performance assets that were made feasible by loan defaults harmed the economy, consumers' declining buying power, the public's declining faith in dishonest individuals, and legal proceedings.

It has been noted in prior studies that consumers are particularly eager to invest their borrowed money from banks in a variety of unprofitable activities, which in certain cases causes NPLs to occur. Businessmen avoid paying loan payments by refusing the contract (Turner, 1996). When repaying loans, some clients are dishonest with the banks. To avoid making loan payments, they attempt several frauds (Patrick, 1994).

Careless lending, dishonesty, fraud, corruption, and inadequate credit paperwork are examples of internal problems. They also consist of concentrating lending operations, not using responsible credit categorization and risk assessment methods, and having insufficient supervisory capabilities. Examples of external factors include sluggish and ineffective monetary policies and procedures, bank regulation or deregulation policies, the status of the economy, GDP, and so on (Fama, 1985).

2. Statement of Problem

Non-performing loans (NPLs) are crucial indicators of a bank's financial health and stability. In Nepalese commercial banks, understanding the impact of borrower-specific factors on NPLs is essential for effective risk management and decision-making. However, there is a lack of research on bankers' perceptions of this relationship. This research aims to identify and analyze key factors contributing to NPLs in Nepalese banks, providing valuable insights for bankers, policymakers, and regulators to develop strategies and policies to mitigate NPL levels and promote financial stability in the banking sector.

3. Theoretical Review

The adverse selection gives low-quality borrowers the chance to displace high-quality borrowers, which eventually causes NPLs to increase and accumulate (Bofondi et al., 2011; Makri et al., 2014). Due to knowledge asymmetry, financial institution managers might also be unable to control operational costs and credit risk underwriting. The bad management hypothesis is related to this phenomenon. As per Berger and Young (1997), bank managers typically offer greater resources to managing and overseeing problem loans in response to the rise in NPLs brought on by the information gap between lenders and borrowers. Operating costs eventually surpass interest income as a result of this. Therefore, a higher cost-to-income ratio indicates that a bank is using subpar loan portfolio management practices (Vardar et al. 2015; Muratbek, 2017).

4. Empirical Review

Chandran and Alamelu (2020) analyzed non-performing loans (NPA) in the Indian banking industry, focusing on trends, causes, and solutions. The study used primary and secondary data from 2002 to 2017, revealing a significant increase in NPA due to willful default and fund misappropriation. The findings suggest improving credit management practices and asset quality in Indian banks to mitigate the impact of growing NPA on profitability and reputation.

Khan, et al. (2020) analyzed factors affecting non-performing loans (NPLs) in developing nations' banking industries. They examined profitability, operating efficiency, capital adequacy, and income diversification. The research found that operating efficiency and profitability were negatively associated with NPLs, while capital adequacy and income diversification were negatively associated but statistically insignificant. These findings highlight the importance of addressing NPLs in developing countries to prevent financial crises.

Pokheral and Pokheral (2020) revealed that non-performing assets positively impact Nepalese commercial banks' profitability, but government-owned banks had a higher rate of non-performing loans compared to private-sector banks, indicating the need for improved lending procedures.

Zheng et al. (2020) conducted a study on the impact of industry-specific and macroeconomic factors on non-performing loans (NPLs) in Bangladesh's banking sector from 1979-2018. The findings were validated using a VEC model, and it was found that industry-specific drivers, such as bank loan growth and net operating profit, negatively affected NPLs.

Singh et al. (2021) conducted a study on the impact of non-performing loans (NPLs) on Nepalese commercial banks' profitability and found that ROA, bank size, GDP, and inflation significantly influence NPLs. The study recommends policymakers and bankers in Nepal consider GDP growth when addressing NPLs, emphasizing the need for better understanding.

Alnabulsi et al. (2022) studied the factors affecting non-performing loans (NPLs) during financial and health crises in the MENA region, focusing on 74 banks from 11 countries. Results showed that bank-specific factors had a greater impact on NPLs.

All of these study cases simply serve to highlight the fact that there are essentially two types of drivers influencing the evaluation of non-performing assets (NPA) in various contexts: external, macroeconomic factors, and internal, bank-specific ones. As a result, the current research is to examine how certain borrower characteristics affect the amount of non-performing loans held by Nepalese commercial banks, particularly those aspects that the last study did not address.

5. Research Objective

The objective of this study is to analyze the impact of borrowers' specific factors on the level of non-performing loans of Nepalese commercial banks.

Research Hypothesis

HA: There is a statistically significant impact of borrowers' specific factors on the level of non-performing loans.

6. Research Methodology

This study has used the causal-comparative research design, also known as ex post facto design which allows for the examination of cause-and-effect relationships by comparing groups that have already been exposed to different conditions. The population for this study was the entire banking sector employees of commercial banks in Karnali Province, which includes individuals working in various positions, such as managers, loan officers, credit analysts, and other banking professionals involved in loan underwriting and risk assessment. Convenience sampling was employed as the respondents were selected based on convenience and accessibility. The sample size for this study was 406 banking sector employees from various commercial banks in Karnali Province. The sample size determination can be based on statistical formulas or prior research studies, considering the level of precision required and the variability in the population. Responses were collected through a structured survey questionnaire designed to capture information about borrower-specific factors and the level of non-performing loans.

Frequency, mean, and standard deviation were used in the descriptive analysis. Regression analysis has been used to evaluate the connection between the dependent and independent variables.

7. Results and Analysis

Demographic Profile of the Respondents

Through the structured questionnaire form, respondents were asked about their employment sector, job position, age, gender, and marital status. The presentation's overview portion in this part focuses on the frequency and percentage analysis of the respondents' demographic characteristics.

Table 1
Demographic Profile of the Respondents

SN	Demographics	Frequency	Percentage
1	Gender Status		
	Male	252	62.1
	Female	154	37.9
	Total	406	100
2	Age Status		
	Below 25 years	70	17.2
	25-30 years	192	47.3
	30 -35 years	115	28.3
	35 years and above	29	7.2
	Total	406	100
3	Job Sector		
	Private	299	73.6
	Public	107	26.4
	Total	406	100
4	Job Position		
	Junior Assistant	68	16.7
	Assistant	188	46.3
	Senior Assistant	65	16
	Officer	74	18
	Senior Officer	11	3
	Total	406	100
5	Marital Status		
	Married	275	67.7
	Unmarried	131	32.3
	Total	406	100
6	Educational Status		
	Up-to Secondary Level	8	2
	Bachelor Level	142	35
	Master Level	250	61.6
	Above Master Level	6	1.4
	Total	406	100

Source: Field Survey 2024

Table 1 shows that 62.1 percent of the respondents were male, with the remaining 37.9 percent being female, indicating that men constituted the majority of the respondents. The survey revealed that 17.2 percent of respondents were under 25, 47.3 percent were between 25 and 30, 28.3 percent were between 30 and 35, and 7.2 percent were between 35 and 40 years old. The majority of respondents (73.6 percent) worked in the private sector, while 26.4 percent were employed in the public sector. The majority of respondents were assistants, with 16.7 percent being junior, 46.3 percent assistants, 16 percent senior, 18 percent officers, and

3 percent senior assistants, indicating that most positions were assistant-level. The majority of respondents (67.3 percent) are married, while the remaining 32.3 percent are unmarried. The majority of respondents held master's degrees, with 1.4 percent above the master's level, 2 percent at the secondary level, 35 percent at the bachelor's level, and 61.6 percent at the master's level, indicating a high level of education.

Descriptive Analysis

The ability of the borrower to make full and on-time payments on its debt obligations is referred to as one of the borrower's specific factors. It is related to the idea that a borrower's capacity to make full and on-time payments on all of its debt commitments is influenced by both internal and external elements. The character of the borrower affects the level of NPL of the bank, the nature of business of borrowers affects the level of NPL of the bank, financial literacy/level of education of borrowers can affect the level of NPL of the bank, borrowers' honesty helps to reduce the level of NPL, entrepreneurial history of borrowers affects the level of NPL of the bank, household status of borrowers can affect the level of NPL of the bank, other sources of income of borrowers' can help to reduce the level of NPL of the bank, taken as the items to observe the impact of borrower specific factors. Therefore, six statements have been presented regarding borrowers' specific factors with the views of respondents. The table shows the rating scale of respondents in the following six statements as well as its descriptive characteristics.

Table 2

Descriptive Analysis of Borrowers' Specific Factors

S N	Statement	Frequency (Percentage)					N	Mean	SD
		SA	A	N	D	SD			
1	The character of the borrower affects the level of NPL of the bank	224 (59.6)	157 (38.7)	7 (1.7)			406	4.58	0.528
2	The nature of the business of borrowers affects the level of NPL of the bank.	203 (50)	193 (47.2)	8 (2)	2 (0.5)		406	4.74	0.565
3	Financial literacy/level of education of borrowers affects the level of NPL of the bank.	187 (46.1)	211 (52)	6 (1.5)	2 (0.5)		406	4.44	0.553
4	Borrowers' honesty helps to reduce the level of NPL.	288 (70.9)	114 (28.1)	4 (0.1)			406	4.7	0.48
5	Entrepreneurial History of borrowers affects the level of NPL of the bank.	200 (49.3)	195 (48)	10 (2.5)	1 (0.2)		406	4.46	0.56
6	Household status of borrowers affects the level of NPL of the bank.	204 (50.2)	199 (49)	3 (0.7)			406	4.5	0.515

Note: Figures in parenthesis are in percentage

Source: Field Survey 2024

Table 2 shows that 38.7 percent of respondents agreed, 1.7 percent were unsure, and 59.6 percent strongly agreed. This suggests that the non-performing loans held by the banks may be impacted by the borrower's character.

Regarding the nature of the borrowers' business effects on the non-performing loan, it is observed that of the total respondents, 50 percent strongly agreed, 47.2 percent agreed, 0.5 percent disagreed, and the remaining 2 percent were unsure.

Of those who responded, 46.1 percent strongly agreed, 52 percent agreed, and 0.5 percent disagreed. Additionally, 1.5 percent of respondents expressed uncertainty about the claim that borrowers' educational attainment and financial literacy might influence the bank's non-performing loan (NPL) level.

Regarding the statement that borrowers' honesty helps to minimize the number of non-performing loans, 70.9 percent of respondents strongly agreed, 28.1 percent disagreed, and 0.1 percent were unsure.

It is found that, when it comes to the claims that borrowers' entrepreneurial history affects the bank's non-performing loan (NPL) level, 49.3 percent of respondents strongly agreed, 48 percent agreed, 0.1 percent disagreed, and 2.5 percent stayed neutral.

The results indicate that 50.2 percent of respondents strongly agreed, 49 percent agreed, and 0.7 percent were still unclear regarding the claim that borrowers' household status might have an impact on the amount of non-performing loans (NPLs) held by Nepalese commercial banks.

Additionally, Table 2 displays the replies' mean score and standard deviation. In the data above, the lowest mean score is 4.44, and the greatest mean score is 4.74, both of which are greater than the average score. This suggests that every statement affects the Nepalese commercial bank's non-performing loan (NPL). In a similar vein, the norm for every item ranges from 0.48 to 0.565.

Regression analysis

To identify the impact of the independent variable on the dependent variable, non-performing loan is regressed with borrowers' specific factors of the study.

Table 3

Model Summary of Univariate Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.407 ^a	0.166	0.164	0.29530

a. Predictors: (Constant), BSFN

Univariate regression analyses are shown in Table 3. Adjusted R² is 0.164 in this case. It indicates that the unique circumstances of the borrowers account for 16.4 percent of the variation in the non-performing loan. However, there are additional elements that account for the remaining percentage difference that the research could not identify.

Table 4*ANOVA of Independent Variable and Dependent Variable*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.005	1	7.005	80.331	.000 ^b
	Residual	35.231	404	0.087		
	Total	42.236	405			

a. Dependent Variable: NPL

b. Predictors: (Constant), BSF

The ANOVA findings, shown in Table 4, indicate a substantial linear association between the dependent variable (non-performing loans) of Nepalese commercial banks and the independent variable (borrowers' particular variables). There is a positive correlation between the two variables, as shown by the F-test result of 80.331 and p-value of 0.000. At the five percent significance level, this is in favour of the alternative hypothesis.

Table 5*Coefficient of Regression Analysis*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.685	0.186		14.438	0.000
	BSFN	0.368	0.041	0.407	8.963	0.000

a. Dependent Variable: NPL

The results of the univariate regression analysis are shown in Table 5. Here, non-performing loans have been designated as the dependent variable and borrower-specific characteristics as the independent variable. Given that the observed beta is 0.368 and the T is 8.963 at a 5 percent significance level and 95 percent confidence level, the p-value is 0.000, which is less than the significant threshold ($\alpha=0.05$). Consequently, it can be said that the amount of non-performing loans and the unique characteristics of the borrowers have a strong linear connection. The results also demonstrate that a rise of one unit in the borrower-specific variables causes the level of non-performing loans in Nepalese commercial banks to rise by 0.368 units.

The coefficients of regression analysis are shown in Table 5. Here, the borrowers' unique characteristics served as the independent variable, while the amount of non-performing loans held by Nepalese commercial banks served as the dependent variable. The observed Beta, T, and p-value are less than 0.05 ($\alpha=0.05$) at a 5 percent significance level, with the observed Beta being 0.368 and T being 8.963. The findings therefore indicate a substantial linear link between the percentage of non-performing loans and borrower-specific characteristics.

8. Discussion

According to the research by Pokheral and Pokheral (2020), return on assets and profits per share indicate that non-performing assets (NPA) have a beneficial impact on the profitability of Nepalese commercial banks. The researchers did not, however, take into account the unique characteristics of borrowers as a significant factor in non-performing loans. Zheng et al. (2020) discovered that several variables, including

GDP, unemployment, domestic credit, bank lending rates, deposit rates, bank liquidity, and currency rates, had an impact on non-performing loans (NPLs). Singh, et al. (2021) found that NPLs were significantly influenced by ROA, bank size, GDP, and inflation, while CAR had no significant impact. Alnabulsi, et al. (2022) found that bank-specific factors had a greater impact on NPLs than macroeconomic factors, and the COVID-19 pandemic did not have a discernible effect. Therefore, the previous scholars as mentioned above did not observe the borrowers' specific factors as an important determinant of the level of non-performing of Nepalese commercial banks. Thus, the above-all comparative discussion confirms that the present research has been conducted taking into consideration the universal constructs and confirmed in the context of Nepal.

9. Conclusion and Implications

The study reveals a significant positive association between borrowers' specific factors and the level of non-performing loans in Nepalese commercial banks. For every unit increase in borrowers' specific factors, there is a corresponding 0.368 unit increase in non-performing loans. Factors such as borrower's character, nature of business, financial literacy, honesty, entrepreneurial history, household status, and other income sources contribute to the occurrence of non-performing loans in the Nepalese commercial banking sector. The study emphasizes the importance of considering borrowers' specific characteristics when evaluating and managing loan portfolios to mitigate the risk of non-performing loans. Managers should focus on assessing and monitoring borrowers' specific factors throughout the loan lifecycle, conducting thorough due diligence, regularly reviewing financial health, and implementing proactive measures to address potential risks.

Reference

- Alnabulsi, K., Kozarevic, E., & Hakimi, A. (2022). Assessing the determinants of non-performing loan under financial crisis and health crisis: *Evidence from MENA banks. Cogent Economics & Finance* 10(1), 1-23.
- Berger, N. A., & De Young, R. (1997). Problem loans and cost efficiency in commercial banks, Washington DC. *Journal of Banking and Finance*, 21.
- Berger, A. N., Klapper, L. F., & Turk-Ariss, R. (2009), "Bank competition and financial stability", *Journal of Financial Services Research*, 35(2), 99-118.
- Bhattarai, S. (2015). Determinants of non-performing loans: perception of Nepali bankers. *Economic Journal of Development Issues*, 19 & 20 (1-2) 22-38.
- Bofondi, M., & Ropele, T. (2011). Macroeconomic determinants of bad loans: Evidence from Italian banks, No. 89, Bank of Italy, Economic Research and International Relations Area.
- Chandran, S. R., & Alamelu (2020). NPA and its impact on asset quality- Bankers' perception. *International Journal of Recent Technology and Engineering*, 8(26) 704-713.
- Fama, E. F. (1985). "What is the Difference about Banks?" *Journal of Economics*, vol 15,5-29
- Gnawali, A. (2018). Non-performing asset and its effects on profitability of Nepalese commercial banks. *International Journal of Research in Business Studies and Management*, 5(9), 39-47. <https://www.ijrbsm.org/papers/v5-i9/5>.
- International Monetary Fund (2015). The treatment of nonperforming loans. 18th meeting of the IMF committee on balance of payments statistics.

- Kangimba, E. J. (2010). Assessment of causes for non-performing loans in commercial Banks: Case of the standard chartered bank, MBA thesis, University of Dodoma.
- Khan, M. A., Siddique, A., & Sarwar, Z. (2020, March 24). Determinants of non-performing loans in the banking sector in developing states. *Asian Journal of Accounting Research*, 5(2), 135-145. doi://10.1108/AJAR-10-2019-0080.
- Makri, V., Tsagkanos, A., & Bellas, A. (2014). Determinants of non-performing loans: The case of Eurozone. *Panoeconomicus*, 61(2), 193-203.
- Muratbek, D. (2017). Determinants of non-performing loans in Kazakhstan (Doctoral Dissertation, Nazarbayev University, School of Humanities And Social Sciences).
- Mwakajumilo, S. L. (2014). Full-length research article on non-performing assets and their impact on the growth of the banking industry in Tanzania: A case of NMB bank.
- Pokheral, S. P., & Pokheral, B. P. (2020). Impact of non-performing assets on the profitability of Nepalese commercial banks. *Patan Pragya*, 7(1), 222-229.
- Rifat, A. M. (2017). An Analytical Study of Determinants of Non-performing Loans: Evidence from Non-Bank Financial Institutions (NBFIs) of Bangladesh. *Journal of Business and Technology (Dhaka)*.
- Rajeev, M., & Mahesh, H. P. (2010). Banking Sector Reforms and NPA: A study of Indian Commercial Banks, Working Paper 252 ISBN 978-81-7791-108-4, The Institute for Social and Economic Change, Bangalore.
- Rwegasira, K., & Phuntsho, D. (2009). Banking Lending and Non-Performing Loans in Small Emerging Market Economies: Bhutan (Asia), A paper presented in the June 2009 International Management Development Association (IMDA) conference Charleston S.C. (USA).
- Singh S. K., Basuki B., & Setiawan R. (2021). The effects of non-performing loan on profitability: Empirical evidence from Nepalese commercial banks. *Journal of Asian Finance, Economics and Business*, 8(4), 0709-0719.
- Tarantola, A. M. (2007), "La funzione di compliance nei sistemi di governo e controllo delle imprese bancarie e finanziarie", Seminario tenuto pressol' Università Cattolica del Sacro Cuore di Milano.
- Vardar, G., & Ozguler, I. C. (2015). Short-term and long-term linkages among nonperforming loans, macroeconomic and bank-specific factors: An empirical analysis for Turkey/Takipteki Krediler, Makroekonomik ve Banka Özellikli Faktörler Arasındaki Uzun ve Kisa Dönemli Iliskiler: Türkiye için Ampirik bir Analiz. *Ege Akademik Bakis*, 15(3), 313.
- Waweru, N. M., & Kalani, V. M. (2009). Commercial Banking Crises in Kenya: Causes and Remedies. *African Journal of Accounting, Economics, Finance and Banking Research*, 4 (4), 12 – 33.
- Zheng, C., Bhowmik, P. K., & Sarker, N. (2020). Industry-specific and macroeconomic determinants of non-performing loans. *Sustainability*, 12, 2-17. Retrieved 2022.