

Factors Influencing the Occurrence of Non-Performing Loans (NPLs) among Pico Finance Borrowers in Sisaket Province, Thailand

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DOI: <https://doi.org/10.56293/IJMSSSR.2024.5225>

IJMSSSR 2024

VOLUME 6

ISSUE 5 SEPTEMBER - OCTOBER

ISSN: 2582 - 0265

Abstract: This research investigates the factors contributing to the occurrence of non-performing loans (NPLs) among Pico Finance borrowers in Sisaket Province, Thailand. The study analyzes data from the company's database, including variables such as gender, age, occupation, salary, expenses, collateral, and debtor classification. Using descriptive statistics and logistic regression analysis, the findings reveal that the majority of the sample population were female, aged between 51-60 years. Most were farmers, with an income ranging from 5,001-10,000 THB, and monthly expenses in the same range. Additionally, most borrowers had collateral. Monthly income, expenses, and collateral are the key significant factors contributing to NPLs. These factors hinder borrowers from effectively generating income, thereby increasing the likelihood of loan default.

Keywords: Pico Finance, Non-performing loans (NPLs), Debtor

1. Introduction

Thailand is currently grappling with rising household debt, ranking 17th globally. By the end of 2020, the outstanding household debt stood at 14.58 trillion baht, equivalent to 90.1% of the country's gross domestic product (GDP), marking a 3.9% increase compared to 2019 (Kasikorn Research Center, 2021). In 2021, this figure rose to 15.9 trillion baht (Thairath Online Publication Department, 2022), and further escalated to 16.07 trillion baht in 2022 (PPTV Online, 2023) in Table 1.

Table 1: Household Debt

List	At the end of the annual period		
	2021	2022	2023
Household Debt (trillion baht)	14.58	15.9	16.07
%YoY	3.9	3.7	3.6

Source: PPTV Online (2023)

The data indicates a rising trend in household debt, likely stemming from limited access to formal loans, which leads many individuals to resort to high-interest informal lending. As a result, approximately 1.4 million people in Thailand are indebted to informal loans, totaling around 86 billion baht. In response, the government aims to increase the accessibility of formal loans, restructure debts between creditors and debtors, and encourage informal lenders to integrate into the formal system, ultimately enabling citizens to become debt-free (Thairath Online Publication Department, 2022).

Pico Finance aligns with government policy to address the informal loan issue by providing low-income citizens with fast and convenient access to structured financial services. This initiative not only offers an alternative to informal loans but also encourages informal lenders to transition into the formal system through the application for a license to operate as a Pico Finance microcredit business. This licensing allows informal lenders to conduct microcredit operations at the provincial level under regulatory oversight, specifically as Pico Finance (Office for the Development of Public Financial System Policy and Fiscal Policy Office, 2020).

To ensure sustainability and reduce the problem of non-performing loans (NPLs), Pico Finance Limited Company emphasizes effective debtor and risk management (Kammathit & Nakbanleng, 2022). This approach is supported by the quantitative asset classification data of Pico Sri Lamduan Limited Company from 2020 to 2022, as shown in Table 2.

Table 2: The percentage of debtors based on the quantitative asset classification of Pico Sri Lamduan Limited Company from 2020 to 2022

Debtors	2020	2021	2022
Number of Contracts (individuals)	1,837	1,498	2,238
Group 1	93.52%	89.59%	82.26%
Group 2	1.80%	3.27%	9.38%
Group 3	1.52%	1.94%	4.38%
Group 4	0.93%	2.54%	2.86%
Group 5	2.23%	2.67%	1.12%

Note: Group 1: Ordinary Assets: Normal debtors and debtors with overdue principal or interest for a combined period of no more than 1 month.

Group 2: Special Mention Assets refers to debtors with overdue principal or interest for a total period exceeding 1 month from the due date.

Group 3: Substandard Assets refers to debtors with overdue principal or interest for a total period exceeding 3 months from the due date.

Group 4: Doubtful Assets refers to debtors with overdue principal or interest for a total period exceeding 6 months from the due date.

Group 5: Loss Assets refers to debtors with overdue principal or interest for a total period exceeding 12 months from the due date, and where legal action has been taken against the debtor.

Pico Sri Lamduan Limited Company is facing challenges with debt collection due to a decline in borrowers' repayment abilities, leading to an increase in non-performing loans (NPLs). This is evidenced by the NPL ratio for the years 2020-2022, which reflects loans that have been overdue for more than three consecutive months: 4.68%, 7.14%, and 8.36%, respectively (Pico Sri Lamduan Limited Company, 2023). As a result, the company aims to investigate the factors contributing to the occurrence of NPLs among Pico Finance borrowers in Sisaket Province. The goal is to utilize this information to enhance the management practices of Pico Finance loans for improved efficiency.

2. Research objectives

To study the factors contributing to the occurrence of non-performing loans (NPLs) of Pico finance debtors in Sisaket Province, Thailand.

3. Literature Review

The research is based on two main theories, which include: 1) Pico Finance, and 2) debtors management.

3.1 Pico Finance

The Pico loan is a small, provincially-supervised loan designed to provide easy and convenient access to funding. It is a multi-purpose loan that can be borrowed with or without collateral and operates as a Declining Balance Loan. Creditors involved are officially recognized and operate under legal financial status. The calculation of interest rates, lending profit margins, late payment penalties, fines, service charges, and any other fees strictly adheres to the regulations set forth by the Ministry of Finance (Office for the Development of Public Financial System Policy, Fiscal Policy Office, 2021).

3.2 Debtors Management

According to Whaley and Bradley (2021), debtors play a crucial role in the financial cycle, as they reflect a

company’s financial liquidity. Poor debtor management and the inability to collect debts on time, or having a significant number of overdue debtors, can lead to a loss of liquidity for the business. This, in turn, may cause a slowdown in operations and potentially lead to further financial damage.

Burton, Nesiba, and Brown (2015) outline the five C's of credit, which include Character, Capacity, Capital, Collateral, and Conditions. These factors are essential in evaluating whether to approve a loan. By effectively applying these criteria, lenders can enhance debtor management and reduce the incidence of non-performing loans (NPLs).

4. Research Methodology

4.1 Population and Sample

The sample for this study consists of 10,404 borrowers from Pico Finance Limited Company in 2023.

4.2 Data Collection

Data was collected from the company's database, focusing on current borrowers. The information gathered includes gender, age, occupation, monthly income, monthly expenses, collateral, and debtor classification.

4.3 Data Analysis

The data were analyzed using Descriptive Statistics and Logistic Regression Analysis to identify the factors contributing to the occurrence of non-performing loans (NPLs) among Pico Finance borrowers.

The variables and their details are presented in Table 3.

Table 3: Variables Used in the Study

Variables	Description
Dependent Variable (Y)	
Debtors Classification	1. Ordinary debtors, 2. NPLs debtor
Independent Variable (X)	
Gender	1. Male, 2. Female
Age	1. 40-50 2. 51-60 3. more than 60
Occupation	1. Farmers 2. Merchant
Monthly Income	1. 2,000-5,000 2. 5,001-10,000 3. 10,001-15,000 4. more than 15,000
Monthly Expense	1. 2,000-5,000 2. 5,001-10,000 3. 10,001-15,000 4. more than 15,000
Collateral	1. Have Collateral 2. Do not Have Collateral

5. Result

5.1 The sample's general personal

The sample population was predominantly female (57.18%), with 67.43% aged between 51-60 years. A significant portion, 79.46%, were farmers. Most participants had an income and monthly expenses in the range of 5,001-10,000 THB, with 61.46% and 57.85%, falling into this expense bracket. Additionally, 65.84% of the borrowers had collateral, while the remaining 34.16% did not. Lastly, most of the samples were ordinary debtors (90.57%) and 9.43% of NPLs debtor (Table 4).

Table 4: Characteristics of Respondents

Characteristics	Number	Percentage
1. Gender		
Male	4,455	42.82
Female	5,949	57.18
Total	10.404	100.00
2. Age		
40-50	1,987	19.10
51-60	7,015	67.43
more than 60	1,402	13.48
Total	10.404	100.00
3. Occupation		
Farmers	8,267	79.46
Merchant	2,137	20.54
Total	10.404	100.00
4. Monthly income		
2,000-5,000	535	5.14
5,001-10,000	6,394	61.46
10,001-15,000	2,146	20.63
more than 15,000	1,329	12.77
Total	10.404	100.00
5. Monthly expense		
2,000-5,000	436	4.19
5,001-10,000	6,019	57.85
10,001-15,000	2,748	26.41
more than 15,000	1,201	11.54
Total	10.404	100.00
6. Collateral		
Have Collateral	6,850	65.84
Do not Have Collateral	3,554	34.16
Total	10.404	100.00
7. Debtors Classification		
Ordinary Debtors	9,423	90.57
NPLs debtor	981	9.43
Total	10.404	100.00

5.2 Factors contributing to the Occurrence of Non-Performing Loans (NPLs) of Pico Finance

The research results indicate that all variables in the model can effectively explain the factors contributing to the occurrence of non-performing loans (NPLs) among Pico Finance debtors in Sisaket Province, Thailand. The detailed findings are presented in Table 5.

Table 5: Estimated Factors contributing to the Occurrence of Non-Performing Loans (NPLs) of Pico Finance Debtors

Independent Variable (X)	Adjusted Odds Ratio	P-value	95% Confident interval for Adjusted Odds Ratio
1. Gender			
Male	1.705	0.183	0.772-1.344
Female ^(t)	1.000		
2. Age			
40-50	0.712	0.495	0.715-1.594
51-60	0.759	0.387	0.406-1.418
more than 60 ^(t)	1.000		
3. Occupation			
Farmers	1.832	0.154	0.580-2.163
Merchant ^(t)	1.000		
4. Monthly income			
2,000-5,000	2.487	0.001**	2.241-3.784
5,001-10,000	2.082	0.005**	2.125-3.172
10,001-15,000	1.913	0.015*	1.423-2.607
more than 15,000 ^(t)	1.000		
5. Monthly expense			
2,000-5,000	1.863	0.032*	1.242-2.127
5,001-10,000	2.519	0.017*	1.389-3.264
10,001-15,000	3.432	0.001**	1.519-4.017
more than 15,000 ^(t)	1.000		
6. Collateral			
Have Collateral	2.025	0.005**	1.366-3.148
Do not Have Collateral ^(t)	1.000		

Note: *, **, *** are statistically significant at 0.05, and 0.01 respectively.

Table 5 shows that monthly income, monthly expenses, and collateral significantly contribute to the occurrence of non-performing loans (NPLs), which impede Pico Finance borrowers in Sisaket Province from effectively generating income.

6. Conclusion

The majority of the sample population were female, aged between 51-60 years. Most were farmers, with an income ranging from 5,001-10,000 THB, and monthly expenses in the same range. Additionally, most borrowers had collateral.

The analysis reveals that monthly income, monthly expenses, and collateral significantly contribute to the occurrence of NPLs, hindering Pico Finance borrowers from effectively generating income. However, gender, age, and occupation showed no significant contribution to the likelihood of NPLs.

7. Discussion

The findings indicate that monthly income, monthly expense, and collateral significantly contribute to the occurrence of NPLs, hindering Pico Finance borrowers from effectively generating income. These results align with Suardi, Siregar and Hakim (2016), who found that monthly income and collateral had significantly affected NPL of microloan.

The study also shows that gender, age, and occupation do not have a significant impact on NPLs or the borrowers' ability to generate income. This is consistent with Kosen (2013), who found the borrowers' demographic characteristics (gender and age) had no relationship with loan performance in Kenyan banks.

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