Internal and External Factors of Non-performing Loan (NPL): A Study on the Economic Enterprise of Savings and Loans (UEK-SP) in Rumbai District, Pekanbaru, Riau in 2020-2022

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ABSTRACT

Credit-related problems often arise both at the initial stage of lending by UEK-SP to customers and in the middle of the credit period. It is important for UEK-SP to ensure that each credit is granted with strict procedures and is based on a clear agreement. This study aims to analyze the influence of internal factors and external factors on NPL at UEK-SP in the district of Rumbai, Pekanbaru. This study uses a quantitative and qualitative approach, with the object of research are internal factors such as internal control system, internal audit function, credit collectability and external factors such as capacity, collateral, and NPL. This study found that internal control, internal audit function, credit collectability, collateral and capacity have a significant impact on NPL. In essence, these variables together affect NPL, so management needs to pay special attention to these factors as a strategy to reduce the number of NPL.

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INTRODUCTION

Choosing a community empowerment and village development agency by establishing a microfinance institution such as Economic Enterprise of Savings and Loans or UEK-SP is an appropriate step to reach all levels of society, especially the most marginalized. Through these UEK-SPs, communities can feel supported by opportunities like getting loans to expand or start new businesses (Saputra, 2022). With these microfinance institutions in place, communities gain access to previously hard-to-reach financial services, such as small loans (Palloan & Nafurbenan, 2023). It allows them to increase their income and welfare through the small businesses they manage (Putri, 2021). In the context of community empowerment and village development, UEK-SP has a critical role in improving welfare and economic development at the local level (Rusli, 2017).

Credit-related problems often arise at the initial stage of UEK-SP's lending to customers and in the middle of the lending period. UEK-SP must ensure that every loan is granted with strict procedures and is predicated on an explicit contractual agreement. In addition, there needs to be an effective mechanism to deal with debtors experiencing financial difficulties to minimize the risks arising (Sepang et al., 2021). UEK-SP requires attention to internal and external factors that can lead to non-performing loans (NPLs). Strategies that can be applied to overcome non-performing loans are paying attention to the internal control system (Sepang et al., 2021), internal audit function (Sepang et al., 2021), credit collectability (Silalahi & Hulu, 2021), capacity (Suhendar, 2022), and collateral (Nursyahriana et al., 2017).

Internal factors that can encourage NPL are internal control (Sepang et al., 2021), internal audit function (Sepang et al., 2021), and credit collectability (Silalahi & Hulu, 2021). Sepang et al. (2021) state that the internal control system has limitations. The system can affect the quality of loans disbursed, meaning that if the company implements the internal control system correctly, it can reduce non-performing loans.

Sepang et al. (2021), Putri (2021), and Effendi and Harahap (2020) in their research state that the internal audit function harms non-performing loans. The internal audit function in a company can help oversee the company's operational activities (Gramling et al., 2004; Zaidan and Neamah, 2022). Internal audits can help oversee the credit granting procedures the credit analyst team provides to reduce non-performing loans (Ben Saada, 2018; Sholihah, 2022). Wulandari & Latupeirissa (2021) and Silalahi and Hulu (2021) state that collectibility groupings are divided based on credit age (aging) since the debtor's last payment status.

External factors encouraging NPL are capacity (Suhendar, 2022) and collateral (Nursyahriana et al., 2017). Previous research by Suhendar (2022) found that capacity has a negative and insignificant effect on NPL. This means that if the debtor's ability to fulfill his obligations is running smoothly, it will reduce the risk of NPL (Haris & Aryani, 2018), and vice versa, if the debtor's capacity (ability) to fulfill his obligations is not running smoothly, it will increase the risk of NPL. Previous research by Nursyahriana et

al. (2017) found that collateral negatively and significantly affects NPL. It suggests that in the credit application, the debtor provides collateral (guarantee) and can be disbursed at a reasonable value (meeting the value criteria of the guarantee itself). It will lower the risk of NPL, which occurs, and vice versa. If, in the credit application, the debtor does not provide collateral (guarantee), it will increase the NPL.

The danger of NPL is non-payment, in part or whole. This also transpires in the credit distribution activities of UEK-SP Rumbai Subdistrict, Pekanbaru City. In carrying out its business activities, the main target of the UEK-SP is the lower middle-class people who need funds to continue and develop their businesses. As initial capital, the Village Economic Business-Savings and Loans or *Usaha Ekonomi Kelurahan-Simpan Pinjam* (UEK-SP) of Rumbai Subdistrict received funding assistance from the government totaling Rp 500,000,000. The following is data that displays the number of NPL arrears from UEK-SP Rumbai Subdistrict:

Table 1: Total arrears of NPL from UEK-SP of Rumbai Subdistrict
Pekanbaru City.

Village	Year		
	2020 (Rp)	**2021(Rp)**	**2022 (Rp)**
Palas	450.009.009	486.657.562	507.029.340
Sri Meranti	431.510.167	452.696.222	476.009.989
Meranti pandak	342.703.278	371.800.944	381.884.333
Limbungan baru	171.172.456	170.995.911	154.576.261
Umban sari	164.758.500	155.535.889	160.924.444
Lembah damai	49.034.211	62.389.122	71.485.289

Source: Financial report on Village Economic Business-Savings and Loans (UEK-SP) of Rumbai Subdistrict, Pekanbaru City.

Based on the data, from 2020 to 2022 the number of NPL arrears has increased significantly in all UEK-SPs in Rumbai Subdistrict, Pekanbaru City. The increase in the number of arrears not only ranged from 10-15% but there were UEK-SPs in Rumbai Subdistrict which experienced an increase in the number of arrears of more than 50%. As a result, there was an escalation in the Non-Performing Loan (NPL) of the UEK-SP. The following data indicates the percentage of arrears from UEK-SP:
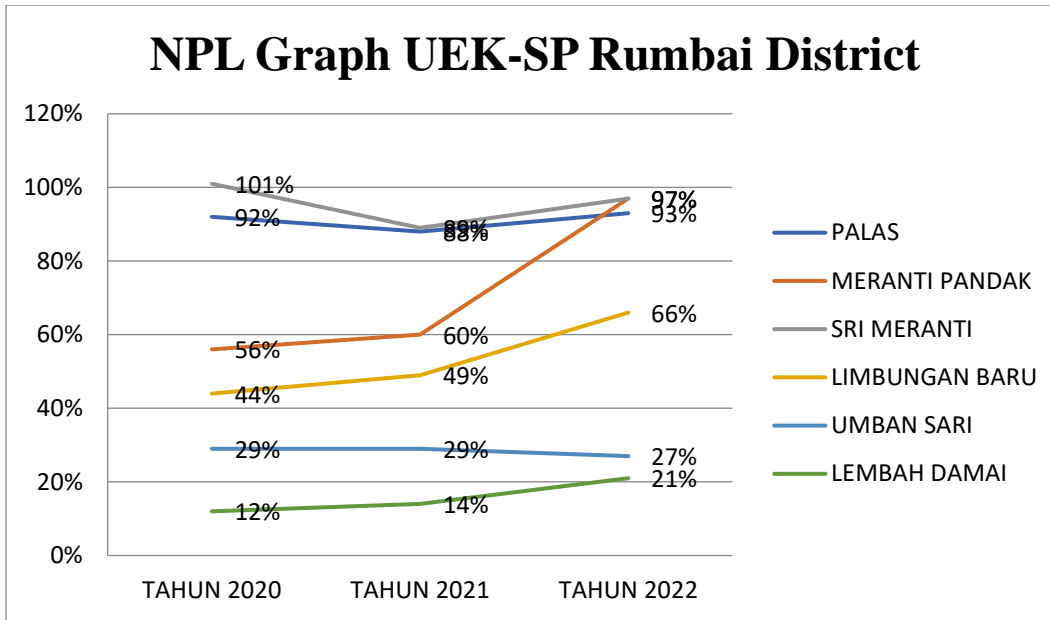
Source: Processed Data, 2024

Figure 1. Graph of Non-Performing Loan of UEK-SP in Rumbai

The data in Figure 1 exhibits that the Non-Performing Loan from UEK-SP in Rumbai subdistrict is immense. With all its ownership, it provides credit facilities to the community. With the convenience offered by UEK-SP, few people make returns that are not appropriate and sometimes even become problematic. UEK-SP Rumbai Subdistrict for the last three years has experienced an increase in non-performing loans, this shows that the management of credit provided has not been maximized.

External conditions of the debtor do not solely cause NPL at UEK-SP in the Rumbai subdistrict. There are also constraints in the internal management. Based on observations at several UEK-SPs with high credit delinquency conditions, it is known that the UEK-SP receives buildings that are not in accordance with the credit provided. Not only is there the problem of SOP inequality, but the UEK-SP is also proven to have committed fraud in granting credit.

Based on the description, the researchers are interested in conducting further research to analyze the influence of internal and external factors on NPL at UEK-SP in the Rumbai subdistrict. This research provides significant contributions for various parties, including UEK-SP agencies, as information and suggestions for improving and maintaining the performance of savings and loan businesses at the village level. In addition, this research is helpful for academics as a reference or comparison in the study of company performance assessed from efficiency or other related aspects, as well as a basis for development for further research. For future researchers, this study also adds insight into the field of economics, specifically related to NPL, and serves as a guide for parties needing similar research information.

METHODOLOGY

This study uses a quantitative and qualitative approach, with the object of research being internal factors such as internal control systems, internal audit functions, credit collectibility and external factors such as capacity, collateral, and NPL, with the following hypothesis formula:

H1 : It is suspected that internal control has a significant effect on NPL

H2 : It is suspected that the internal audit function has a significant effect on NPL

H3 : It is suspected that credit collectability has a significant effect on NPL

H4 : It is suspected that capacity has an insignificant effect on NPL

H5 : It is suspected that collateral has an insignificant effect on NPL

H6 : It is suspected that internal control, internal audit function, credit collectability, capacity and collateral have a joint effect on NPL.

In this study, the sampling technique used was nonprobability sampling with the technique taken, namely saturated sampling (census). The sample in this study consists of two types of samples. First, is a sample that represents the internal factors that cause NPL. The sample of this study was determined by purposive sampling using the saturated sample method, namely the technique of determining the sample taken from the total population as a whole. Determination of samples on internal factors using the following criteria:

1. Head of UEK-SP
2. UEK-SP cashier
3. UEK-SP Administration
4. Credit Analysis Staff (SAK) of UEK-SP
5. UEK-SP Supervisor

Thus the number of samples in this study is as follows:

Table 2. Samples of Internal Factors

No	UEK-SP/Subdistrict	Number of employees
1	Village of Meranti Pandak	5
2	Village of Umban Sari	5
3	Village of Limbungan Baru	5
4	Village of Lembah Damai	5
5	Village of Sri Meranti	5
6	Village of Palas	5
Total		**30**

Source: Processed Data, 2024

Second is a sample that represents external factors that cause NPL. The sample criteria for external factors are all UEK-SP customers in Rumbai Subdistrict, Pekanbaru City. Determination of the sample on external factors using a proportional stratified random sampling technique with the following formula:

$$ni = \frac{Ni}{N} . n$$

Description:

ni   : Number of samples by stratum/level

n   : Total sample size
Ni   : Total population by stratum/level
N   : Total population (Sugiyono, 2019)
The following is data on the number of customers:

Table 3. Sample of External Factors

No	UEK-SP/subdistrict	Number of customers	Number of samples
1	Village of Meranti Pandak	980	42
2	Village of Umban Sari	1.107	47
3	Village of Limbungan Baru	562	24
4	Village of Lembah Damai	850	36
5	Village of Sri Meranti	293	12
6	Village of Palas	487	20
Total		4.279	181

Source: Processed Data, 2024

Based on the data, the number of samples on external factors is 181 people from six UEK-SP in Rumbai, Pekanbaru City.

This study used various data collection techniques to obtain accurate information. Literature studies were conducted to review literature, such as books, regulations, and previous research. In addition, a Likert scale-based questionnaire was used to obtain measurable responses from participants by providing five scale options for each question. Observation techniques were applied to collect primary data directly from the research object, while interviews were conducted to explore in-depth information regarding organizational history, geographical location, and learning effectiveness.

For data analysis techniques to evaluate the relationship between the research variables, descriptive analysis techniques were employed to provide an overview of the data collected, while interviews were conducted to gain in-depth information about the organization's history, geographical location, and learning effectiveness. Multiple regression tests were applied to predict the dependent variable based on the relevant independent variables and supplemented with classical assumption tests such as normality, multicollinearity, autocorrelation, and heteroscedasticity tests to ensure the feasibility of the regression model. Hypothesis testing using the T-test and F-test was conducted to test the partial and simultaneous effects of the independent variables on the dependent variable. Finally, the coefficient of determination (R^2) measures how much the independent variable can explain the dependent variable in the research model.

RESULTS AND DISCUSSION
Variable Description Analysis of Internal Factors Affecting NPL
1. Internal Control
Internal control in the context of UEK-SP (Usaha Ekonomi Kelurahan-Simpan Pinjam/ Village Economic Enterprises-Savings and Loans) NPL is a series of procedures, policies, and mechanisms implemented to ensure effectiveness, efficiency, and compliance in credit management. Internal control aims to prevent, detect, and correct NPL and ensure that the credit provided can be returned on time.

This study's analysis of internal control variables consists of indicators: internal environment, risk assessment, control activities, information and communication, and supervision. Based on the results of the analysis, the most dominant indicator affecting NPL is the internal control variable (X1):
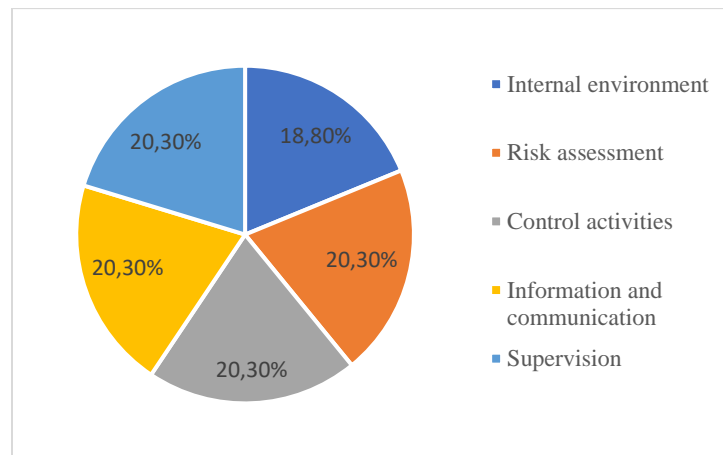

Figure 2. Indicators of Internal Control Variables Affecting NPL

2. Internal Function
NPL control in UEK-SP is an effort to manage credit risk to prevent bad or unrecoverable loans. Internal functions in NPL control include various activities and procedures designed to prevent, detect, and resolve NPL problems in UEK-SP institutions.

Theoretically, respondents may strongly agree or agree with these statements because they believe that a good and routine internal audit function can improve transparency and accountability in financial management. A regular and accurate evaluation by internal auditors is essential to ensure that all transactions and financial reporting are in accordance with applicable standards, which in turn can reduce the risk of NPL. Respondents may also feel that adequate internal controls can prevent and detect errors or irregularities promptly, thereby minimizing the negative impact on the organization's financial performance.

Based on the results of the analysis, the most dominant indicator affecting NPL is the internal function variable (X2):
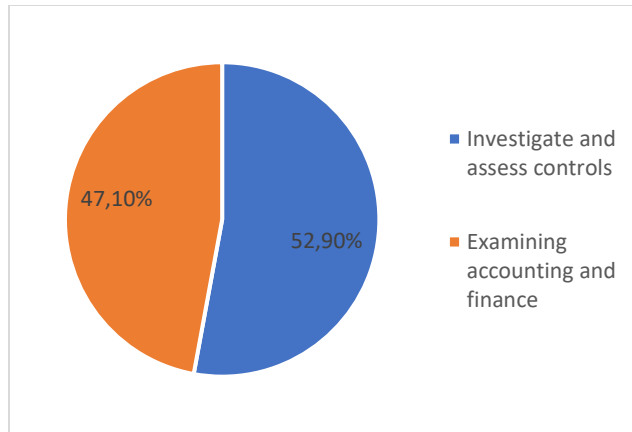
Figure 3. Internal Function Variable Indicators that Affect NPL

3. Credit collectability

Credit collectability in UEK-SP refers to the assessment of debtors' ability to repay their loans. Usually, credit collectability is grouped based on the level of regularity in loan repayments. This collectability assessment is important because it helps financial institutions or UEK-SP manage credit risk and take appropriate actions to maximize the recovery of non-performing loans.

In essence, this study's results reflect that most respondents experience difficulties in paying their credit obligations on time and have sufficient funds to do so. The main reasons underlying respondents answering as such could theoretically include poor financial management, unstable income, unexpected expenses, and other debts that affect their ability to meet their credit obligations. This indicates the need for interventions or programs to help customers better manage their finances and ensure income stability to reduce NPL.

Based on the data that has been presented, the internal factors that most affect the NPL at UEK-SP in Rumbai are internal functions, with a percentage of 61.60%. As for external factors, the relevant data are not yet complete to give a definite conclusion. Based on the results of the analysis, the most dominant indicators affect NPL on credit collectability variables (X_3):
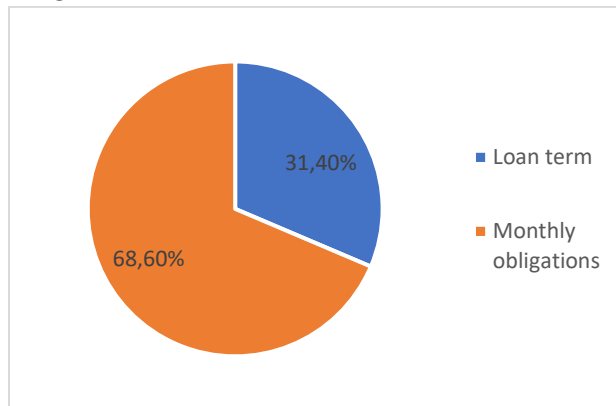

Figure 4. Variable Indicators of Credit Collectability That Affect NPL

Analysis of Variable Descriptions of External Factors Affecting NPL
1. Capacity

Capacity refers to the borrower's ability to repay the loan. This factor greatly affects NPL since low repayment ability increases the risk of default.

Table 4. Recapitulation of Respondents' Responses Regarding Capacity Indicators

Alternative Answers

No	Questionnaire items	SS F	SS %	S F	S %	CS F	CS %	TS F	TS %	STS F	STS %
1	1	42	23.3	138	76.7	-	-	-	-	-	-
2	2	12	6.7	-	-	-	-	168	93.3	-	-
3	3	60	33.3	120	66.7	-	-	-	-	-	
4	4	168	93.3	12	6.7	-	-	-	-	-	-
5	5	53	29.4	53	29.4	-	-	-	-	-	-
6	6	132	73.3	48	26.7	-	-	-	-	-	-
7	7	150	83.3	30	16.7	-	-	-	-	-	-
8	8	29	16.1	151	83.9	-	-	-	-	-	-
Total		646	358,7	552	290.1	-	-	168	93.3		
Average		80,12	44,83%	69	36,26%	-	-	21	11,66		

Source: Field Findings, 2024

The results showed that respondents gave varied responses to Capacity indicators measured using a Likert scale. Most respondents (76.7%) strongly agreed that they applied for credit because they experienced income limitation problems. This point exhibits that the majority of respondents feel that credit is a solution to overcome the problem of limited income. In general, these results illustrate that respondents' understanding and awareness of their financial capacity influence credit application behavior, emphasizing disciplined financial management and understanding of possible financial risks.

2. Collateral

A collateral is an asset that is employed as collateral for a loan. If the borrower fails to pay, UEK-SP can use this guarantee to cover losses. This guarantee can reduce the risk of UEK-SP because assets can be resold if the borrower does not pay. Collateral can be property, vehicles, or other valuables. If the collateral provided is of low value or less liquid, UEK-SP may face difficulties covering loans the borrower fails to pay.

Table 5. Recapitulation Of Respondents On Collateral Indicators

Alternative Answers

No	Questionnaire items	SS		S		CS		TS		STS	
		F	%	F	%	F	%	F	%	F	%
1	1	47	26.1	133	73.9	-	-	-	-	-	-
2	2	163	90.6	17	9.4	-	-	-	-	-	-
3	3	72	40.0	108	60.0	-	-	-	-	-	-
4	4	134	74.4	46	25.6	-	-	-	-	-	-
5	5	105	58.3	75	41.7	-	-	-	-	-	-
6	6	72	40.0	108	60.0	-	-	-	-	-	-
7	7	25	13.9	155	86.1	-	-	-	-	-	-
8	8	146	81.1	34	18.9	-	-	-	-	-	-
9	9	59	32.8	121	67.2	-	-	-	-	-	-
10	10	144	80.0	36	20.0	-	-	-	-	-	-
11	11	65	36.1	115	63.9	-	-	-	-	-	-
12	12	163	90.6	17	9.4	-	-	-	-	-	-
Total		1195	663,9	965	536,1	-	-	-	-	-	-
Average		99,58	55,32	80,41	44,68	-	-	-	-	-	-

Source: Field Findings, 2024

Based on the results of research on the effect of customer collateral on NPL at UEK SP Rumbai district, it can be analyzed that most respondents showed a positive attitude towards using collateral as a credit condition. As many as 90.6% of respondents strongly agree that the existence of a guarantee or collateral that they apply for is in accordance with the requirements of the UEK-SP. In this context, increased supervision of the collateral evaluation process and assistance to property owners in preparing standard-compliant collateral will be important steps to reduce the risk of NPL in the future. External factors that affect NPL are Capacity of 49.38% and Collateral of 50.62%. This total percentage is exactly 100%, reflecting the contribution of each factor to NPL. The dominant factors affecting NPL at UEK-SP district Rumbai can be seen in the following diagram:
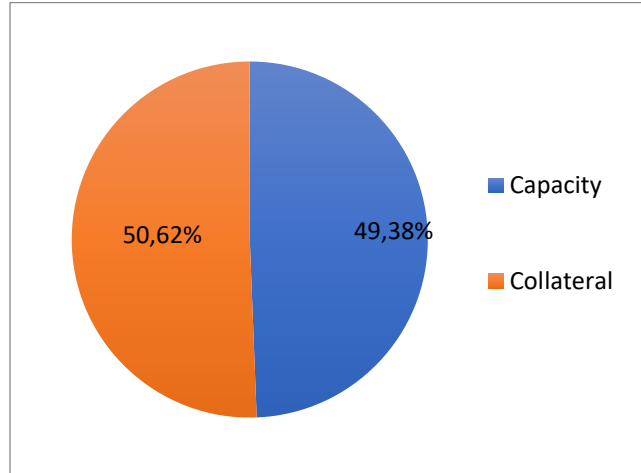
Figure 5. Variable Indicators Of External Factors Affecting NPL

Analysis Of Variable Description of NPL

NPL at UEK-SP are a condition in which the borrower cannot fulfill the obligation to pay the loan installments according to a predetermined schedule. NPL can occur for a variety of reasons, such as the borrower's inability to pay, changes in economic conditions that affect the borrower's ability to pay, or other factors that cause the borrower to be unable to meet its obligations.

Table 6. Recapitulation Of Respondents Regarding the Variable NPL

Alternative Answers											
No	**Questionnaire items**	**SS**		**S**		**CS**		**TS**		**STS**	
		F	**%**	**F**	**%**	**F**	**%**	**F**	**%**	**F**	**%**
1	1	10	33.3	20	66.7	-	-	-	-	-	-
2	2	28	93.3	2	6.7	-	-	-	-	-	-
3	3	21	70.0	9	30.0	-	-	-	-	-	-
4	4	12	40.0	18	60.0	-	-	-	-	-	-
5	5	22	73.3	8	26.7	-	-	-	-	-	-
6	6	17	56.7	13	43.3	-	-	-	-	-	-
7	7	27	90.0	3	10.0	-	-	-	-	-	-
Total		137	456,6	73	243,4	-	-	-	-	-	-
Average		19.5	65,22 %	10.4	34.78 %	-	-	-	-	-	-

Source: Field Findings, 2024

Table 6 presented various responses of respondents using the Likert scale. Based on the table, the majority of respondents showed a strong tendency to give strongly agreed and agreed responses to the various questionnaire items provided. Here is a detailed analysis of the results of the respondents' responses.

Classical Assumption Test

1. Normality test

The test technique is Kolmogorov-Smirnov one sample testing technique. Here are the results of the normality test:

Table 7. Normality Test Results
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		181
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	3.52697207
Most Extreme Differences	Absolute	.131
	Positive	.131
	Negative	-.042
Test Statistic		.131
Asymp. Sig. (2-tailed)		.065[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

Derived from the Table 7, the test statistic value is 0.131. This value is a measure of how far the data distribution (in this case, the non-standardized residue) is from the normal distribution. The significance value is .065. It is the p-value resulting from the normality test. This p-value indicates the probability that the observed data distribution comes from the same normal distribution. Generally, if the value of $p > 0.05$, there is not enough evidence to reject the hypothesis that the data comes from a normal distribution.

In this case, the value of $p = .065$. Since the p-value is greater than the general alpha level (e.g. 0.05), there is insufficient evidence to conclude that the data is not normally distributed. At that time, the research data should be used in research analysis.

2. Multicollinearity test

This test aims to test whether the regression model found a high or perfect correlation between the independent variables. The detection method is that if the multicollinearity is high, the possibility of obtaining a high R^2 but no or very few coefficients is estimated to be statistically significant/essential. A respectable Model

should not have a high correlation between independent variables. Here are the results of the multicollinearity test:

Table 8. Multicollinearity Test Results

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	16.674	1.694		9.845	.000		
internal control	.574	.119	.708	4.810	.000	.061	16.432
internal function	-.083	.018	-.181	-4.644	.000	.871	1.148
credit collectibility	-.350	.241	-.291	-9.957	.000	.102	9.815
capacity	-.607	.189	-.649	-17.269	.000	.062	6.223
collateral	.121	.062	.151	1.935	.055	.215	4.645

a. Dependent Variable: NPL

Variables of internal control, internal function, credit collectability, capacity, and collateral have a Tolerance of 0.061, 0.871, 0.102, 0.062, and 0.215, respectively. The internal control variable has a VIF of about 16.432, while the others (internal function, credit collectability, capacity, and collateral) have a VIF below 10 (1.148, 9.815, 6.223, and 4,645, respectively). Based on this information, it can be concluded that the variables of control, internal functioning, credit collectability, capacity, and collateral do not present significant multicollinearity problems since their Tolerance is more than 0.1 and their VIF is below 10.

3. Autocorrelation test

The autocorrelation test conducted by this study aims to determine whether, in a linear regression model, there is a correlation between the disturbance error in period T and the error in period t-1 (previous). If there is a correlation, it is called an autocorrelation problem. Of course, a decent regression model is free from autocorrelation. In the detection procedure of the autocorrelations problem, Durbin-Waston magnitude can be used. Here are the results of the autocorrelation test.

Table 8. Autocorrelations Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.877[a]	.769	.763	3.577	2.241

a. Predictors: (Constant), collateral, internal function, credit collectibility, internal control, capacity

b. Dependent Variable: NPL

Based on the table, the regression Model has a reasonably high value for R Square (0.769) and Adjusted R Square (0.763), which presents that the independent variables (collateral, internal function, credit collectability, internal control, capacity) together can explain about 76.9% variation of the dependent variable (NPL). A simple correlation (R) between the independent and dependent variables (0.877) displays a strong positive relationship between these variables. This indicates that factors such as collateral, internal functions, credit collectability, internal control, and capacity significantly influence the level of NPL. The Durbin-Watson value of 2.241 indicates the absence of autocorrelation potential in the model residue. Overall, this regression model indicates that the selected independent variable is strong enough to explain the variation of NPL.

4. Heteroscedasticity test

The heteroscedasticity test is a statistical test used to test whether the variability of the dependent variable is not constant across the levels of the independent variable in a regression model. In simple terms, this test checks whether there is a particular pattern in the variability of the regression residue. The heteroscedasticity test in this study was observed through a heteroscedasticity Scatterplot diagram:
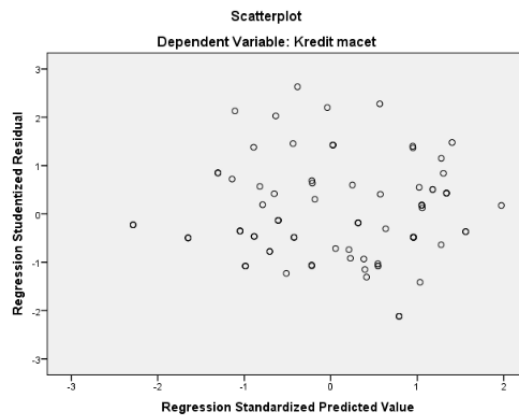

Figure 6. Heteroscedasticity Scatterplot Diagram

In a appropriate regression model, there is usually no heteroscedasticity. The scatterplot graph illustrates whether a regression model is heteroscedastic or not. If there is a specific pattern in the chart, it indicates that heteroscedasticity has occurred. Figure 6 shows that the points spread randomly, above and below the number 0 on the Y-axis. It can be concluded that there is no heteroscedasticity in the regression model in this study.

Multiple Linear Analysis Tes

In conformity with Sugiyono (2017;277), multiple regression analysis intends to predict how the state (ups and downs) of the independent variable when two or more

independent variables as predictor factors are manipulated (increased and decreased in value). So, multiple regression analysis will be done when the number of independent variables is at least two (2). Regression analysis will be known as independent variables that significantly affect the dependent variable, with a significant independent variable that can be used to predict the value of the dependent variable. The linear regression model assumes a linear relationship between the dependent variable and each independent variable. Here are the results of the multiple regression analysis:

Table 10. Multiple Regression Test Results

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	16.674	1.694		9.845	.000
	internal control	.574	.119	.708	4.810	.000
	internal function	-.083	.018	-.181	-4.644	.000
	credit collectibility	-.350	.241	-.291	-9.957	.000
	capacity	-.607	.189	-.649	-17.269	.000
	collateral	.121	.062	.151	1.935	.055

a. Dependent Variable: NPL

The table of multiple linear regression analysis test results provides essential insight into the factors that affect NPL. The dependent variable in this model is NPL, while the independent variables include internal control, internal functions, credit collectability, capacity, and collateral. From a statistical perspective, the resulting coefficients show a significant relationship between most independent variables and NPL.

Internal control has a coefficient of 0.574 with a value of $p < 0.05$, which indicates that an increase in internal control is associated with an increase in NPL. This may indicate that overly strict internal control procedures could slow the credit process, increase friction, or costs, which in turn could increase the rate of NPL.

Internal control has a coefficient of 0.574 with a value of $p < 0.05$, which indicates that an increase in internal control is associated with an increase in NPL. This may indicate that overly strict internal control procedures could slow the credit process and increase friction or costs, increasing the rate of NPL.

The internal function has a negative coefficient of -0.083. It is significant at $p < 0.05$, indicating that an increase in efficiency in the internal function is associated with a decrease in NPL. This means that effective internal management and efficient operational procedures can help reduce the risk of NPL.

Credit collectability showed a negative coefficient of -0.350, which is also significant. This indicates that the ability to collect good credit can reduce NPL. This

displays that effective collection strategies and strong efforts in credit collection are essential to reducing the level of NPL.

Capacity, with a negative coefficient of -0.607 and significant, indicates that a higher borrower's financial capacity is associated with a decrease in NPL. It emphasizes the importance of proper credit capacity assessment during credit approval to minimize the risk of NPL.

On the other hand, collateral has a positive coefficient of 0.121 but is not statistically significant ($p > 0.05$). This illustrates that, in this context, the additional guarantees provided by collateral do not significantly affect the reduction of NPL.

From an accounting perspective, this analysis underscores the importance of effective credit risk management. The findings emphasize the need for balance in internal controls to avoid unnecessary costs or barriers, the importance of efficiency in internal functioning and credit collectability, and an accurate assessment of borrower capacity. The credit management strategy must consider all these factors to minimize the risk of NPL.

Hypothesis Test

Hypothesis testing is a statistical procedure used to make decisions about a statement or hypothesis against a population or phenomenon based on existing sample data.The purpose of a hypothesis test is to determine whether the available evidence from the sample data is strong enough to support or reject the hypothesis.

1. T Test

T-Tests in the context of hypothesis testing refer to the use of the T-Student distribution to test the significance of the difference between the mean values of two groups or the effect of a predictor variable on a response variable. Here are the T test results:

Table 11. T Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.674	1.694		9.845	.000
	pengendalian internal	.574	.119	.708	4.810	.000
	fungsi internal	-.083	.018	-.181	-4.644	.000
	kolektebilitas kredit	-.350	.241	-.291	-9.957	.000
	capacity	-.607	.189	-.649	-17.269	.000
	collateral	.121	.062	.151	1.935	.055

a. Dependent Variable: NPL

Based on the results of the t-test, it can be determined that the variables of internal control, internal functions, credit collectability, and capacity significantly affect NPL.

An internal control coefficient value of 0.574, a t value of 4.810, and a significance value of 0.000 indicate that internal control has a positive and significant effect on NPL. This signifies that increased internal control will increase the level of NPL.

The internal function has a coefficient value of -0.083, a t value of -4.644, and a significance value of 0.000, indicating that the internal function has a negative and significant effect on NPL. In other words, an increase in internal functioning will reduce the level of NPL.

Furthermore, credit collectability has a coefficient value of -0.350, a t value of -9.957, and a significance value of 0.000, which indicates that credit collectability also has a negative and significant effect on NPL. This means that an increase in credit collectability will reduce NPL.

Capacity has a coefficient value of -0.607, a t value of -17.269, and a significance value of 0.000, indicating that capacity has the most significant adverse effect on NPL. The increase in capacity significantly reduces NPL.

In contrast, collateral has a coefficient value of 0.121, a t value of 1.935, and a significance value of 0.055. Although collateral positively influences NPL, this influence is insignificant at a significance level of 5% since the p-value is more significant than 0.05.

Generally, these results indicate that internal control, internal function, credit collectability, and capacity are important factors that affect NPL. Management should focus on improving internal controls, internal functions, credit collectability, and capacity to reduce NPL. While collateral, although it has little effect, it is not significant enough to be the main focus of the strategy of reducing NPL.

2. F-Test

The F-test is used to test a more general hypothesis, namely whether at least one predictor variable significantly affects the response variable. In the context of regression analysis, the F-test is used to ascertain that the regression model is significant, i.e., whether the predictor variables incorporated into the model collectively affect the dependent variable.

Table 12. F Test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7471.801	5	1494.360	116.793	.000[b]
	Residual	2239.116	175	12.795		
	Total	9710.917	180			

a. Dependent Variable: NPL
b. Predictors: (Constant), collateral, fungsi internal, kolektebilitas kredit, pengendalian internal, capacity

The results of the F test on the ANOVA table showed that the regression model as a whole was significant in predicting the dependent variable, namely NPL. An F value of

116.793 with a significance value of 0,000 indicates that the regression model involving predictor variables such as internal control, internal function, credit collectability, capacity, and collateral together has a significant effect on NPL.

In this context, the Sum of Squares Regression value of 7471.801 compared to the residual Sum of Squares of 2239.116 shows that most of the variation in NPL can be explained by the predictor variables present in the model. This is reflected in the Mean Square Regression value of 1494.360, much higher than the mean Square Residual value of 12.795.

The total number of squares of 9710.917 indicates the total variation in the NPL data. With the number of degrees of freedom (df) for the regression of 5 and the residual of 175, this model illustrates significant predictive power. Therefore, with a minimal p-value (0.000), it can be concluded that the regression model used in this study can significantly explain the variation in NPL, thus providing strong evidence that variables such as internal control, internal function, credit collectability, capacity, and collateral collectively affect the level of NPL.

3. Coefficient Of Determination Test

The coefficient of determination (R^2), according to Ghozali (2016:95), is essentially used to measure how far the ability of the model to explain the dependent variables. Suharyadi and Purwanto's (2016: 233) coefficient of determination exhibits a proportion of the variance that can be explained by the regression equation (regression of sum square-RSS) to the total variance (total sum of squares-TSS).

Table 13. The coefficient of determination

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.877[a]	.769	.763	3.577

a. Predictors: (Constant), collateral, internal function, credit collectability, internal control, capacity
b. Dependent Variable: NPL

The results of the coefficient of determination test presented in the model Summary table show that the regression model used has excellent predictive power. The R-value of 0.877 shows a robust correlation between the predictor variables (internal control, internal function, credit collectability, capacity, and collateral) and the dependent variable (NPL).

The R Square value of 0.769 indicates that the predictor variables present in the model can explain 76.9% of the variation in NPL. This reveals that this model is very effective at explaining the variability of NPL.

The Adjusted R Square of 0.763 is slightly lower than the R Square but still exhibits that this model can explain more than 76% of the variation in NPL after considering the number of predictor variables used. Adjusted R Square provides a more accurate

estimation of the model's predictive power, with adjustments for the number of independent variables.

The Standard Error of the Estimate of 3.577 indicates the magnitude of the standard deviation from the residual (prediction error). This value presents how well the regression model matches the existing data. In this case, the smaller the value of the Standard Error of the Estimate, the better the model predicts NPL.

In conclusion, the results of this coefficient of determination test show that the regression model used is very good at predicting the level of NPL based on the variables of internal control, internal function, credit collectability, capacity, and collateral. This Model can explain most of the variations in NPL, so it can be considered a powerful and reliable model for this analysis.

Discussion

An internal control coefficient value of 0.574 with a t value of 4.810 and a significance value of 0.000 indicates that internal control has a positive and significant effect on NPL. This means that increased internal control will increase the level of NPL. The study's findings showed a strong relationship between the implementation of reasonable internal control and a decrease in NPL. The coefficient of internal control of 0.574 with a t value of 4.810 and significance of 0.000 indicates that improvements in the internal control system can significantly reduce the risk of NPL.

The internal function has a coefficient value of -0.083, a t value of -4.644, and a significance value of 0.000, indicating that the internal function has a negative and significant effect on NPL. In other words, an increase in internal functioning will reduce the level of NPL. The findings of this study are relevant to the findings of Kim et al. (2022) (2022), who mention that a robust internal control system significantly reduces the level of NPL in commercial banks. These results are consistent with the finding that internal functions play a role in mitigating credit risks. Also, Wang and Zhang (2024) researched that good internal audit quality can improve a bank's ability to manage credit risk, which has implications for decreasing NPL.

Credit collectability has a coefficient value of -0.350, a t value of -9.957, and a significance value of 0.000, which reveals that credit collectability also has a negative and significant effect on NPL. This means that an increase in credit collectability will reduce NPL. Empirically, the results of this study are consistent with findings from previous studies that support a negative relationship between credit collectability and the level of NPL in various regional contexts.

Capacity has a coefficient value of -0.607, a t value of -17.269, and a significance value of 0.000, indicating that capacity has the most significant adverse effect on NPL. An increase in capacity will significantly reduce NPL. This study reveals that capacity has a very significant negative influence on the level of NPL. In this context, capacity refers to the capacity or ability of a financial institution to manage credit risk (Kwagara, 2006). The results showed a coefficient of -0.607, with a t value of -17.269 and a significance of

0.000, confirming that the increase in capacity could significantly reduce the level of NPL. These findings are essential to understand in the context of credit risk management in financial institutions.

Collateral has a coefficient value of 0.121, a t value of 1.935, and a significance value of 0.055. Although collateral positively influences NPL, this influence is insignificant at a significance level of 5% since the p-value is more significant than 0.05. Weber (2023) suggested that financial institutions should have clear policies regarding the use of collateral and strict evaluation and valuation procedures to ensure that the collateral effectively reduces credit risk. Marx (2021) also suggests that careful risk assessment is necessary to understand how adequate collateral is in reducing credit risk, especially in the face of changing economic conditions.

In summary, these results indicate that the variables of internal control, internal function, credit collectability, and capacity are important factors that affect NPL. Management should focus on improving internal controls, internal functions, credit collectability, and capacity to reduce NPL. While collateral, although it has little effect, it is not significant enough to be the main focus of the strategy of reducing NPL.

CONCLUSION

This study concluded that internal control, internal audit function, credit collectability, collateral, and capacity significantly influence NPL. These variables simultaneously affect NPL, so management must focus on these factors as a strategy to reduce NPL. Based on the results of the research and data analysis that has been conducted, here are some suggestions that researchers can give. For UEK-SP, focus efforts on improving the internal control system. Implement tighter controls and more structured audit procedures to reduce the risk of NPL. For Customers, improve financial literacy for UEK-SP customers. Provide better education and information on personal financial management, including the importance of timely repayment.

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