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Analyzing the Impact of Indonesian Financial Accounting Standards (IFAS) 71 on Allowance for Impairment Losses

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ABSTRACT

This article analyzes the factors that impact allowance for impairment losses on banks in Indonesia, after the implementation of Indonesian Financial Accounting Standards (IFAS) 71. IFAS 71 became effective in 2020, replacing IFAS 55. IFAS 71 introduced several new methods for calculating the allowance for impairment losses. We collected data from conventional banks listed on the Indonesia Stock Exchange from 2016—2020. We created two models: the first will test the impact of several key factors like loans provided by banks, non-performing loans, and interest income towards allowance for impairment losses, while the second will test IFAS 71 implementation for these factors towards allowance for impairment losses. Out of these three factors, we concluded loans provided by banks hurt impairment loss allowance while the other two have a positive effect, regardless of IFAS 71 implementation. However, while this allowance is found to be higher after IFAS 71, the three key factors do not have a significantly stronger effect after IFAS 71 implementation.

Introduction

The banking industry is a significant sector influencing the economic development of a country. The strategic role of banks is to provide funds to support financing activities in the real sector (ARHAMI, 2022). Given the importance of financing activities as one of the bank's revenue-generating activities, risk management is essential to mitigate the risks banks face as creditors, specifically through the allowances for receivables (Prina, Suparman, & Prina, 2023).

Allowance for impairment losses is a reserve for receivables based on the estimated uncollectible value of receivables by the bank. The value of this allowance is evaluated at each financial reporting date using the expected credit loss impairment model. This model measures whether the credit risk of financial instruments has significantly increased since initial recognition, using a fair and supported forward-looking approach by the Indonesian Financial Accounting Standards (IFAS) 71 regarding Financial Instruments.

IFAS 71, which adopts the International Financial Reporting Standard (IFRS) 9 regarding Financial Instruments, became effective on January 1, 2020. This new standard, replacing IFAS 55 regarding Measurement and Recognition: Financial Instruments, requires the calculation of loan allowances based on expected or non-payment by the debtor. This approach takes into account the probability of future impairment due to economic changes that induce credit risks. To recognize a decline in credit quality, this approach does not require a specific event to record credit losses, as long as timely information on each indicator suggesting potential credit losses is available. IFAS 71 requires the measurement and substantiation of expected credit loss through accurate estimation of the expected amount, consideration of the time value of money, and provision of documented and supported information based on past and current conditions, as well as anticipated future scenarios (Dewi, 2021).

In theory, this would increase banks' allowances for impairment losses. With a more lenient way that IFAS 71 introduces, banks would probably become more conservative in regards to recognising impairment losses, compared to the period when IFAS 55 was still in effect.

Previous studies like those (Sultanoğlu, 2018) have confirmed that the implementation of IFRS 9 will result in a significant increase in banks' impairment loss allowances. (Abad & Suarez, 2017) also confirmed that the expected credit loss stipulated in IFRS 9 is highly responsive to economic condition changes compared to the IAS 39 model. IFRS 9 governs the expected credit loss model for the timely recognition of credit losses, calculated based on actual credit losses and future information related to the current loan portfolio (Zaman Grof & Mörec, 2021). IFRS 9 also introduces new principles for classifying and measuring financial instruments, managing the depreciation of financial assets, and hedge accounting (Ercegovac, 2018). A study by (Blažeková, 2017) indicates that IFRS 9 is designed to enhance the integrity of the banking financial system by increasing allowances for impairment loss compared to the situation before its implementation.

The non-performing loan ratio is a key performance indicator for banks to assess the quality of their assets. This ratio indicates the risk of a bank failing to receive interest and principal payments on loans. Therefore, to address this risk, banks need to adjust their impairment loss allowance funds according to the risk of credit default. A high proportion of non-performing loans is associated with an increase in a bank's impairment loss allowance (Islam, 2018). Previous research by (Mohd Isa & Abdul Rashid, 2018) has proven a positive and significant effect of non-performing loans on the impairment loss allowance. A positive and significant influence implies that as non-performing loans continue to increase, so too will the impairment loss allowance.

This study aims to examine the factors influencing the magnitude of the impairment loss allowance in Indonesian banks listed on the Indonesia Stock Exchange and assess the impact of IFAS 71 implementation on the impairment loss allowance. It is still unclear to what extent the implementation of IFAS 71 affects the amount of impairment loss allowance, its role in enhancing the capacity and efficiency of impairment loss allowance, and in reducing the use of receivables related to impairment loss allowance by bank administration to achieve specific objectives, such as signalling risk-taking and others.

Research Methods

Research Data

This study focuses on investigating the factors influencing the allowance for impairment losses using three independent variables: loans provided, non-performing loans, and total income, along with adding IFAS 71 as a moderating dummy variable to understand the role of IFAS 71 in moderating the relationship between loans provided, non-performing loans, and total income towards the allowance for impairment losses. This study will further examine the impact of the first-time implementation of IFAS 71 in Indonesia based on empirical data reported by banks before and after the implementation of IFAS 71 during the period 2016 to 2020. The study is conducted by examining actual data from financial statements that have been prepared and published by companies on the Indonesia Stock Exchange.

The study uses secondary data consisting of data processed by companies and made public. This secondary data includes financial statements and annual reports. The data source for this study is taken from the financial statements for the years 2016—2020, published on the Indonesia Stock Exchange website. The sampling method used in this research is purposive sampling based on predetermined criteria.

Table 1
Research Samples

Criteria	Amount
Conventional banks listed in the Indonesia Stock Exchange from the years 2016—2020 consecutively	43
Conventional banks listed in the Indonesia Stock Exchange from the years 2016—2020 non-consecutively	0
Incomplete data	(1)
Data used	**42**
Number of years observed	5
Total observation (42 x 5)	**210**
Outliers	(29)
Total samples	**181**

Research Models

This study uses the multiple regression analysis method because it consists of one dependent variable and several independent variables. The regression equation of this study is formulated in two empirical models because the study examines the factors influencing the allowance for impairment losses before and after the implementation of IFAS 71. The regression equation for model 1 used in this study is adopted from previous research (Mohd Isa & Abdul Rashid, 2018) and model 2 is formulated as follows:

$$LLP_{i,t} = \beta_0 + \beta_1 LOANS_{i,t} + \beta_2 NPL_{i,t} + \beta_3 GI_{i,t} + \beta_4 PSAK71_{i,t} + \beta_5 SIZE_{i,t} + e \quad \text{.(Model 1)}$$

$$LLP_{i,t} = \beta_0 + \beta_1 LOANS_{i,t} + \beta_2 NPL_{i,t} + \beta_3 GI_{i,t} + \beta_4 PSAK71_{i,t} + \beta_5 (LOANS \times PSAK71)_{i,t} + \beta_6 (NPL \times PSAK71)_{i,t} + \beta_7 (GI \times PSAK71)_{i,t} + \beta_8 SIZE_{i,t} + e \quad \text{(Model 2)}$$

with

LLP : Loan Loss Provision or Allowance for Impairment Losses
$\beta_1 LOANS_{i,t}$: Beta variable for loan ratio
$\beta_2 NPL_{i,t}$: Beta variable for non-performing loans
$\beta_3 GI_{i,t}$: Beta variable for gross interest income
$\beta_4 PSAK71_{i,t}$: Beta dummy variable for IFAS 71, where 1 represents the year after the implementation of IFAS 71 and 0 for the year before its implementation
$\beta_5 SIZE_{i,t}$: Beta variable for company size
β_0 : Intercept parameter
i,t : Indicator for company i and year t
e : Error term distributed with a mean of zero and variance σ^2

The regression equation for model 1 is used to test hypotheses H_1, H_2, H_3, and H_7. The β_1 coefficient value in model 1 is the focus for testing hypothesis H_1. The β_2 coefficient value in model 1 is the focus for testing hypothesis H_2. The β_3 coefficient value in model 1 is the focus for testing hypothesis H_3. The β_4 coefficient value in model 1 is the focus for testing hypothesis H_7.

The regression equation for model 2 is used to test hypotheses H_4, H_5, and H_6. The β_5 coefficient value in model 2 is the focus for testing hypothesis H_4. The β6 coefficient value in model 2 is the focus for testing hypothesis H_5. The β_7 coefficient value in model 1 is the focus for testing hypothesis H_6.

Research Variables

Dependent Variable – Allowance for Impairment Losses

The dependent variable in this research is the allowance for impairment losses on loans issued by conventional commercial banks. The allowance for impairment losses used in this study is a contra account or a reduction to the loans issued by the bank, presented in the financial position statement. The measurement of the allowances for impairment losses in this study follows the methodology of (Casta, Lejard, & Paget-Blanc, 2019), formulated as follows:

$$LLP = \frac{Loan\ loss\ Provision}{Total\ Loan}$$

Moderating Variable – IFAS 71

This study employs IFAS 71 as a moderating variable concerning financial instruments. This standard adopts IFRS 9 and replaces IFAS 55. The implementation of IFAS 71 influences the accounting treatment for the recognition and measurement of financial assets. The proxy for the IFAS 71 variable uses a dummy variable, where 1 represents the years following the implementation of IFAS 71, and 0 represents the years before its implementation.

Independent Variable – Loans Provided by Banks (Loans)

Loans are represented by the total credit or loans issued by the bank divided by total assets. A higher ratio of credit issued by a bank leads to greater losses due to higher credit risk exposure. The formula for loans used in this study is based on the methodology of Al (Casta et al., 2019).

$$\text{ns} = \frac{\text{Total Loans}}{\text{Total Assets}}$$

Independent Variable – Non-Performing Loans (NPL)

Non-performing loans (NPL ratio) are the ratio of the total loans issued to the level of doubtful, substandard, and non-performing loans, compared to the total loans issued by the bank (Slamet Riyadi, 2006). Credit risk indicates a bank's failure to earn interest and/or loan receivables, necessitating increased allowances for anticipated default losses. The operationalization of NPL in this study follows previous research.

$$NPL = \frac{Nonperforming\ Loan}{Total\ Loan}$$

Independent Variable – Gross Interest Income

Banks use loans to generate income. The larger the loans issued to customers, the higher the bank's interest income. This study uses the gross interest income ratio (GI), calculated as the bank's total income divided by total assets. Significant increases or decreases in gross income lead to corresponding adjustments in the allowances for impairment losses to normalize the rate of return on assets. The operationalization of GI is formulated as follows:Cap$CaGI = \frac{Interest\ Income\ (Loans)}{Total\ Assets}$

Control Variable – Company Size

The size of a company positively affects the allowances for impairment losses, as larger banks have higher business levels compared to smaller banks (Ozili, 2017). The formula for company size in this study is operationalized as in previous research (Casta et al., 2019):

$$Size = \ln\ (total\ assets)$$

Results and Discussion

Table 2 presents the summary of descriptive statistics for the research variables. The average value of the allowance for impairment losses (LLP) on gross loans during the 2016—2020 period is 0.02591 (approximately 2.6%). This generally reflects credit risk management of 2.6% of the gross loans issued by banks. The 2.6% value is lower than the average nonperforming loan rate of 3.6%. This lower rate may indicate weaknesses in credit risk management and may also reflect the bank's administrative interest in increasing profitability by reducing loan loss provisions. The allowance for impairment losses ratio ranges from 0.07% to 8.6%, with a standard deviation of 1.7%.

Table 2
Descriptive Statistics Summary

Variable	N	Mean	Median	Min	Max	Std. Dev.
LLP	181	0.02591	0.02350	0.00074	0.08601	0.01718
LOANS	181	0.63852	0.65764	0.34742	0.82054	0.09464
NPL	181	0.03552	0.02895	0.00000	0.11678	0.02082
GI	181	0.08008	0.07954	0.04386	0.12305	0.01432
PSAK71	181	0.17127	0.00000	0.00000	1.00000	0.37779
SIZE	181	17.39434	17.13792	13.55332	21.19954	1.08897

The variable for loans issued by banks (LOANS) has an average value of 0.6385229, meaning that on average, the credit facilities provided by the bank constitute 63.8% of its assets. This implicitly reflects the high exposure of the bank to the credit risk emanating from these facilities. The loan ratio ranges from 34.7% to 82.05%, with a standard deviation of 9.5%.

The non-performing loans (NPL) variable has an average value of 0.0355218. A value of 3.5% reflects a high-quality credit portfolio in conventional commercial banks, yet remains within a globally safe level (not exceeding 10%). The proportion of non-performing loans ranges from 0% to 11.7%, with a standard deviation of 2.1%, indicating a reasonable ratio convergence within the research year range.

The variable for the interest income ratio (GI) is calculated based on total interest income divided by the total assets of the bank. The average value of the interest income ratio during the study period is 0.0800789, ranging from 4.4% to 12.3% with a standard deviation of 1.4%. This also indicates relative stability in the interest income of Indonesian commercial banks during the study period.

The variable for the implementation of IFAS 71 (PSAK71) is a dummy variable. The value is 0 for the years before the implementation of IFAS 71 and 1 for the years of implementation of PSAK 71 in the study period. The standard deviation value of the IFAS 71 implementation variable is 37.78%.

SIZE is a control variable for company size. The average value of company size is 17.39434, meaning that the average size of the company based on the assets owned is 17.39434. The minimum value of company size is 13.55332, while the maximum value of company size is 21.19954. The standard deviation of the company size is 1.88971.

Correlation Analysis

Correlation analysis is a method used to determine the presence or absence of a linear relationship between two variables. If the correlation coefficient is statistically significant, it indicates that the two variables are correlated. However, if the correlation coefficient is not statistically significant, then the two variables are not correlated.

Table 3
Correlation Analysis

Variable	*LLP*	*LOANS*	*NPL*	*GI*	*PSAK71*	*LOANS × PSAK71*	*NPL× PSAK71*	*GI × PSAK71*	*SIZE*

LLP	1								
LOANS	-0.0027 0.9717	1							
NPL	0.5119* 0.0000	0.0264 0.7245	1						
GI	-0.0813 0.2764	0.4683* 0.0000	0.0904 0.2263	1					
PSAK71	0.2943* 0.0001	-0.3503* 0.0000	0.0305 0.6832	-0.4556* 0.0000	1				
LOANS× PSAK71	0.2982* 0.0000	-0.2835* 0.0001	0.0369 0.6222	-0.4340* 0.0000	0.9864* 0.0000	1			
NPL× PSAK71	0.3801* 0.0000	-0.2863* 0.0001	0.2063* 0.0053	-0.3877* 0.0000	0.8749* 0.0000	0.8717* 0.0000	1		
GI× PSAK71	0.2911* 0.0001	-0.3255* 0.0000	0.0349 0.6412	-0.4013* 0.0000	0.9862* 0.0000	0.9815* 0.0000	0.8690* 0.0000	1	
SIZE	0.4067* 0.0000	0.2656* 0.0003	-0.1275 0.0871	-0.1277 0.0867	0.0291 0.6976	0.0429 0.5663	0.0609 0.4158	0.0351 0.6386	1

The correlation analysis shows that the LLP variable has a significant 5% correlation with the NPL variable with a coefficient of 0.0000, PSAK71 with a coefficient of 0.0001, LOANS×PSAK71 with a coefficient of 0.0000, NPL×PSAK71 with a coefficient of 0.0000, GI×PSAK71 with a coefficient of 0.0001, and SIZE with a coefficient of 0.000. Meanwhile, LOANS and GI do not have a correlation relationship with LLP as they have significant values above 5%. Almost all variables have a correlation coefficient below 0.8, indicating no signs of multicollinearity problems, except for LOANS with a correlation coefficient of 0.9717. Furthermore, multicollinearity issues will be analyzed in the multicollinearity test.

Classical Assumption Test

Research can be proven using multiple linear regression methods, provided that all independent variable data are normally distributed. To determine whether the data used in the study are normally distributed, BLUE (Best Linear Unbiased Estimates) Gauss-Markov divides the classical assumption test into four types: normality test, multicollinearity test, heteroskedasticity test, and model specification test.

Normality Test

A regression model is considered good if it has a normal or near-normal distribution. This study uses the Shapiro-Wilk normality test, Shapiro-Francia normality test, and skewness/kurtosis test for normality. If the probability value (prob>z) is more than 0.05, then the data is normally distributed. Conversely, if the probability value is less than 0.05, then the data is not normally distributed. The results of the normality test are presented in Table 4.

Table 4
Normality Test Result

Variables	Shapiro-Wilk Test	Shapiro-Francia Test	Skewness/ Kurtosis Test	Conclusion
LLP	0.00000	0.00001	0.0000	Not significant
LOANS	0.00007	0.00021	0.0021	Not significant
NPL	0.00000	0.00001	0.0000	Not significant
GI	0.25791	0.22849	0.1060	Significant
PSAK71	0.00002	1.00000	0.0000	Not significant
LOANS×PSAK71	0.00000	0.00717	0.0000	Not significant
NPL×PSAK71	0.00000	0.00003	0.0000	Not significant
GI×PSAK71	0.00000	0.03309	0.0000	Not significant
SIZE	0.00192	0.00746	0.0074	Not significant

Based on Table 4, each variable is not significant except for the GI variable. It can be concluded that the data is not normally distributed except for the GI variable. The Central Limit Theorem states that the larger the sample data, the more normally the data is distributed. According to Gujarati (2012), data is considered large if the number of observations exceeds 100 data points. The data observed in this study, totalling 181 data points, can be assumed to be normally distributed based on the Central Limit Theorem.

Multicollinearity Test

To detect correlation, one can use the variance inflation factor (VIF) or tolerance = 1/VIF (TOL). If the VIF is less than 10, then the sample does not have a multicollinearity problem.

Table 5
Multicollinearity Test Result

Model	Mean VIF	Conclusion
1	1.33	No multicollinearity exists
2	22.00	Multicollinearity exists

Based on Table 5, the test results for multicollinearity issues show that the VIF value in model 1 is 1.33, indicating that there is no multicollinearity problem in model 1. However, in model 2, the VIF value is 22.00, which means that a multicollinearity problem among variables is found because the VIF is more than 10.

Heteroskedasticity Test

Table 6
Heteroskedasticity Test Result

Model	Breusch-Pagan Test		White Test	
	Prob>chi^2	**Conclusion**	***Prob>chi***^{2}	**Conclusion**
1	0.0000	Significant	0.4169	Not significant
2	0.0000	Significant	0.5157	Not significant

Based on Table 6, the heteroskedasticity test results for model 1 and model 2 using the Breusch-Pagan test indicate significant results, which means there is a problem of heteroskedasticity. In the testing using the White test for model 1 and model 2, the results show insignificance, which means there is no problem of heteroskedasticity. To perform statistical inference, this study applies robust standard error to correct the standard error without changing the regression coefficients.

Coefficient of Determination Analysis (R2 Test)

Table 7
Coefficient of Determination Analysis Result

Model	Dependent Var	Independent Var	R^2 Value
1	*LLP*	*LOANS + NPL + GI + PSAK71 + SIZE*	0.5684
2	*LLP*	*LOANS + NPL + GI + PSAK71 + LOANS×PSAK71 + NPL×PSAK71 + GI×PSAK71 + SIZE*	0.5725

Based on Table 8, it is known that the R-squared value for model 1 is 0.5684. This indicates that the independent variables can explain 56.84% of the allowance for credit losses, and the remaining 43.16% is explained by other factors outside those used in model 1 of this research. The R-squared for model 2 is 0.5725, which indicates that the independent variables can explain 57.25% of the allowance for credit losses. Meanwhile, the remaining 42.75% is explained by other factors outside those used in model 2 of this research.

Model Specification Test (F-Test)

The test is conducted by comparing the significance level of the F-statistic from the test results with the significance level determined in this research, which is 5%. If the F-statistic from the test results is below 5%, then all the independent variables simultaneously affect the dependent variable. Based on the F-test results presented in Table 9, the F-statistic for model 1 and model 2 is 0.0000 and 0.0000 respectively, or below the 5% significance level. It can be concluded that the independent variables of model 1 and model 2 have a simultaneous effect on the allowance for credit losses.

Tabel 8
F-Test Result

Model	**Dependent Var**	**Independent Var**	***Prob>F***
1	*LLP*	*LOANS + NPL + GI + PSAK71 + SIZE*	0.0000
2	*LLP*	*LOANS + NPL + GI + PSAK71 + LOANS×PSAK71 + NPL×PSAK71 + GI×PSAK71 + SIZE*	0.0000

Hypothesis Test (t-Test)

The hypothesis test in model 1 aims to determine whether the independent variables (loans provided by the bank, non-performing loans, income, and the implementation of IFAS 71) individually affect the allowance for credit losses. The hypothesis test in model 2 aims to determine whether the implementation of PSAK71 as a moderating variable strengthens or weakens the influence of the independent variables (loans provided by the bank, non-performing loans, income, and the implementation of IFAS 71) on the allowance for credit losses. The analysis of the t-test results is summarized in Table 10, and the research model tested is as follows.

Table 9
t-Test Result

Variables	**Model 1**			**Model 2**		
	coefficient	**t-value**	**sig.**	**coefficient**	**t-value**	**sig.**
Intercept	-0.071742	-9.06	0.000	-0.073339	-9.41	0.000
LOANS	-0.019796	-1.68	0.095	-0.023265	-2.05	0.042
NPL	0.463796	10.59	0.000	0.459151	9.58	0.000
GI	0.131112	1.81	0.072	0.167016	2.40	0.018
PSAK71	0.012456	4.18	0.000	0.020606	1.10	0.273
SIZE	0.004667	11.70	0.000	0.004728	12.09	0.000
LOANS×PSAK71				0.017625	0.44	0.664
NPL×PSAK71				0.027354	0.21	0.835
GI×PSAK71				-0.286115	-0.99	0.325

The t-test results from the research model, conducted using STATA v.16, present two-tailed probabilities. Thus, for testing the hypotheses of this study, which use one-sided tests, the two-tailed probability values are divided by two.

H1: Loans provided by banks have a positive effect on the allowance for impairment losses.

According to the t-test results presented in Table 10, the regression coefficient for loans provided (LOANS) is -0.019796, with a one-tailed probability value of 0.0475 (calculated by dividing the significance in Table 10 by two). This value is less than the 5% significance level, implying that loans granted negatively affect the allowance for impairment losses. Therefore, the first hypothesis, which states that loans provided by banks positively affect the allowance for impairment losses, is not supported and is rejected.

The first hypothesis test result indicates that loans provided by banks negatively impact the allowance for impairment losses, leading to the rejection of the hypothesis. This outcome suggests that the credit risk exposure borne by the bank from its loan portfolio inversely affects the formation of the allowance for impairment losses. As the volume of loans provided by banks increases, the allowance for loan losses set aside decreases. The high lending activity of the bank is inversely proportional to the size of the allowance for losses established by the bank.

The results contradict the first hypothesis due to two factors: first, a lack of evidence supporting the impact of credit from the loan portfolio on the formation of the allowance for impairment losses. Second, the allowance for impairment losses is formed based on the credit risk exposure of the loans granted by the bank. When the majority of loans are estimated not to have significant credit risk from the initial recognition (stage 1) or when loans improve from previously having significant credit risk, the provision for impairment losses does not significantly increase or decrease. This is predicted to influence the absence of a positive effect of bank-issued loans on the allowance for impairment losses.

H2: Non-performing loans have a positive effect on the allowance for impairment losses.

Based on the t-test results presented in Table 10, the regression coefficient for non-performing loans (NPL) is 0.463796, with a one-tailed probability value of 0.000. This value is less than the 5% significance level, indicating that non-performing loans positively affect the allowance for impairment losses. Consequently, the second hypothesis stating that non-performing loans positively affect the allowance for impairment losses is supported and accepted.

The second hypothesis test result shows that non-performing loans positively impact the allowance for impairment losses, leading to the acceptance of the hypothesis. The influence of non-performing loans on the formation of the allowance for impairment losses can be explained by the fact that an increase in the nonperforming loan ratio drives the formation of the allowance for losses due to a change in the credit quality to non-performing, doubtful, and less than satisfactory. This change in credit quality is assessed based on the business prospects, performance of the debtor, and payment ability supported by objective evidence. As non-performing loans increase, the formation of the allowance for losses, which is a contra account to the loans granted by the bank in the financial position statement, also increases. Similarly, the position of the allowance for impairment losses as an expense reducing earnings before tax and provisions decreases the accounting profit.

H3: Interest income has a positive effect on the allowance for impairment losses.

Based on the t-test results presented in Table 10, the regression coefficient for total income (GI) is 0.131112, with a one-tailed probability value of 0.036. This value is less than the 5% significance level, indicating that total income positively affects the allowance for impairment losses. Thus, the third hypothesis stating that total income positively affects the allowance for impairment losses is supported and accepted.

The positive relationship indicates that when the bank anticipates high income, it increases the allowance for impairment losses. The link between income and loans (as a means to generate income) is also related to credit risk due to the increased capacity of borrowers corresponding to the rising loan portfolio.

The bank's asset management performance in generating income becomes one of the financial performance indicators that attract public attention. Banks maintain a normal return on assets level by increasing the allowance for impairment losses when interest income rises or decreasing the allowance for impairment losses when interest income falls. The allowance for impairment losses represents each bank's discretion in estimating the value of the allowance formed. This estimation nature is used to absorb losses arising from loan defaults by debtors.

H4: The amount of the allowance for impairment losses will be higher in the period after the implementation of IFAS 71.

Based on the t-test results presented in Table 10, the regression coefficient for the implementation of IFAS 71 (PSAK71) is 0.0124561, with a one-tailed probability value of 0.000. This value is less than the 5% significance level, meaning that the implementation of IFAS 71 positively affects the increase in the amount of allowance for impairment losses formed by the bank. Therefore, the fourth hypothesis stating that the amount of the allowance for impairment losses will be higher in the period after the implementation of IFAS 71 is supported and accepted.

From these results, it is concluded that after the implementation of IFAS 71, the amount of the allowance for impairment losses is higher. This finding aligns with the research of (Mohd Isa & Abdul Rashid, 2018), which demonstrated that the implementation of IFRS 9 led to an increase in the formation of the allowance for impairment losses. A higher allowance for impairment losses indicates that banks are aware that setting aside an allowance for impairment losses is a preemptive step against future credit risks that may disrupt banking performance, financial system stability, and economic growth.

H5: The positive influence of loans provided on the allowance for impairment losses will be stronger in the period after the implementation of IFAS 71.

Based on the t-test results presented in Table 10, the regression coefficient for the variable of loans granted after the implementation of IFAS 71 (LOANS×PSAK71) is 0.017625, with a one-tailed probability value of 0.332. This value is greater than the 10% significance level, indicating no difference in the effect of loans granted by banks on the allowance for impairment losses before and after the implementation of IFAS 71. Thus, hypothesis H5 is rejected.

From these results, it is concluded that there is no difference in the effect of loans granted by banks on the allowance for impairment losses before and after the implementation of IFAS 71. The addition of an expectation factor in calculating losses from the impairment of financial assets as part of IFAS 71's implementation does not prove to strengthen or weaken the effect of loans granted by banks on the allowance for losses. No correlation is found between the credit risk borne by the bank and the provision for the allowance after the implementation of IFAS 71.

The absence of a moderating effect of the implementation of IFAS 71 on the relationship between loans provided by banks and the formation of the allowance for impairment losses is estimated to be due to banks not significantly increasing their allowance for impairment losses after the implementation of IFAS 71.

H6: The positive influence of non-performing loans on the allowance for impairment losses will be stronger in the period after the implementation of IFAS 71.

Based on the t-test results presented in Table 10, the regression coefficient for the variable of non-performing loans after the implementation of IFAS 71 (NPL×PSAK71) is 0.0273543, with a one-tailed probability value of 0.4175 (significance in Table 10, 0.835 divided by two). This value is greater than the 10% significance level. Previously, the t-test results for the non-performing loans (NPL) variable showed a one-tailed probability value of 0.000 and a regression coefficient of 0.463796, meaning that non-performing loans positively affected the allowance for impairment losses before the implementation of IFAS 71. However, after the implementation of IFAS 71, non-performing loans do not significantly affect the allowance for impairment losses. In other words, there is no difference in the effect of non-performing loans on the allowance for impairment losses before and after the implementation of IFAS 71. Therefore, hypothesis H6 is rejected.

The absence of a moderating effect of the implementation of IFAS 71 on the relationship between non-performing loans and the formation of the allowance for impairment losses is estimated to be due to banks not significantly increasing their allowance for impairment losses after the implementation of IFAS 71. This is concerning because it may imply that banks are not aware of forming an allowance for impairment losses. The lack of consideration in forming an allowance for impairment losses by banks could be due to two reasons. First, banks are optimistic about the collectability of loans granted. Lastly, estimating the allowance for impairment losses based on IFAS 71 is very complex and incurs significant costs. The substantial cost of estimating the allowance for impairment losses, especially in terms of macroeconomic forecasts and forward-looking information, requires economic expertise.

H7: The positive influence of interest income on the allowance for impairment losses will be stronger in the period after the implementation of IFAS 71.

Based on the t-test results presented in Table 10, the regression coefficient for the variable of total income after the implementation of IFAS 71 (GI×PSAK71) is -0.286115, with a one-tailed probability value of 0.1625. This value is greater than the 10% significance level, indicating no difference in the effect of interest income on the allowance for impairment losses before and after the implementation of IFAS 71. Thus, hypothesis H7 is rejected.

The absence of a significant moderating effect of the implementation of IFAS 71 between total interest income and the formation of the allowance for impairment losses is due to a lack of supporting evidence. Management discretion in estimating the likelihood of credit losses by charging the allowance for impairment losses in the income statement is not utilized by banks. The measurement of the allowance for impairment losses using the expected credit loss approach in IFAS 71 gives management discretion to measure losses on loans granted by banks. The determination of forward-looking factors as part of the expected loss provisioning requires management's judgment in estimating the likelihood of credit losses based on macroeconomic condition projections.

Conclusion

Through a series of statistical tests, it was found that loans provided by banks had a negative impact on the impairment loss reserve; The larger the loan amount given, the smaller the loss reserve set aside. In contrast, non-performing loans have a positive impact on impairment loss reserves; An increase in the non-performing loan ratio leads to an increase in loss reserves due to a deterioration in credit quality to substandard, doubtful, and problematic. Total revenue also has a positive impact on impairment loss reserves; The larger the loan that the bank gives to the customer, the higher the interest income earned by the bank, thus increasing the risk of payment default by the borrower. The implementation of IFAS 71 increases the amount of impairment loss reserves, indicating that banks recognize the importance of setting aside reserves as a preemptive measure against future credit risks that could disrupt banking performance, financial system stability, and economic growth.

In addition, there was no significant difference in the effect of loans provided by banks on impairment loss reserves before and after the implementation of IFAS 71, which may indicate that banks are not fully aware of the need to establish impairment loss reserves due to optimism about loan collection capabilities and the complexity and high cost of estimating losses. The same applies to non-performing loan securities and interest income against impairment loss reserves before and after the implementation of IFAS 71; No significant differences were found. Based on the limitations of this study, researchers are further advised to consider other factors that affect impairment loss reserves, such as the capital adequacy ratio, the CET 1 ratio, and the income tax rate as suggested by Molla (2021). Future research may also include longer study periods to generate more data, especially data from the period following the implementation of IFAS 71.

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