

“The impact of Indonesian financial accounting standard implementation, credit risk, and credit restructuring on allowance for credit losses in Indonesia”

AUTHORS	I Gusti Ngurah Agung Suaryana  Naniek Noviari  I Gusti Ayu Eka Damayanthi 
ARTICLE INFO	I Gusti Ngurah Agung Suaryana, Naniek Noviari and I Gusti Ayu Eka Damayanthi (2022). The impact of Indonesian financial accounting standard implementation, credit risk, and credit restructuring on allowance for credit losses in Indonesia. <i>Banks and Bank Systems</i> , 17(3), 177-187. doi: 10.21511/bbs.17(3).2022.15
DOI	http://dx.doi.org/10.21511/bbs.17(3).2022.15
RELEASED ON	Tuesday, 27 September 2022
RECEIVED ON	Wednesday, 10 November 2021
ACCEPTED ON	Thursday, 25 August 2022
LICENSE	 This work is licensed under a Creative Commons Attribution 4.0 International License
JOURNAL	"Banks and Bank Systems"
ISSN PRINT	1816-7403
ISSN ONLINE	1991-7074
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

49



NUMBER OF FIGURES

0



NUMBER OF TABLES

5

© The author(s) 2022. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10,
Sumy, 40022, Ukraine
www.businessperspectives.org

Received on: 10th of November, 2021
Accepted on: 25th of August, 2022
Published on: 27th of September, 2022

© I Gusti Ngurah Agung Suaryana,
Naniek Noviari, I Gusti Ayu Eka
Damayanthi, 2022

I Gusti Ngurah Agung Suaryana,
Associate Professor, Faculty of
Economics and Business, Department
of Accounting, Udayana University,
Indonesia. (Corresponding author)

Naniek Noviari, Faculty of Economics
and Business, Department of
Accounting, Udayana University,
Indonesia.

I Gusti Ayu Eka Damayanthi, Lecturer,
Faculty of Economics and Business,
Department of Accounting, Udayana
University, Indonesia.



This is an Open Access article,
distributed under the terms of the
[Creative Commons Attribution 4.0
International license](https://creativecommons.org/licenses/by/4.0/), which permits
unrestricted re-use, distribution, and
reproduction in any medium, provided
the original work is properly cited.

Conflict of interest statement:
Author(s) reported no conflict of interest

I Gusti Ngurah Agung Suaryana (Indonesia), Naniek Noviari (Indonesia),
I Gusti Ayu Eka Damayanthi (Indonesia)

THE IMPACT OF INDONESIAN FINANCIAL ACCOUNTING STANDARD IMPLEMENTATION, CREDIT RISK, AND CREDIT RESTRUCTURING ON ALLOWANCE FOR CREDIT LOSSES IN INDONESIA

Abstract

This study examines the impact of the implementation of the Indonesian Financial Accounting Standard, credit risk, and credit restructuring on the formation of Allowance for Credit Losses (ACL) of commercial banks listed on the Indonesia Stock Exchange. The formation of ACL is regulated in PSAK 71 which is part of the Indonesian Financial Accounting Standard. The implementation of PSAK 71, and credit risk are expected to increase the ACL of commercial banks, however, credit restructuring programs will reduce the ACL. The research population is commercial banks listed on the Indonesia Stock Exchange in 2019–2020. The research sample is the entire research population. This study uses panel data regression analysis to examine the effect of the application of PSAK 71, credit risk, and credit restructuring on ACL for commercial bank loans. The findings show that the implementation of PSAK 71 and credit risk have a positive effect on the ACL, meanwhile, credit restructuring has a negative effect on the ACL.

Keywords

PSAK 71, credit policy, credit restructuring, credit risk,
COVID-19

JEL Classification

G32, G21, M48

INTRODUCTION

Banks are financial institutions that run the business of collecting funds from the public and channeling them to the public in the form of loans. Banks must be prepared to face the risk of loss from various fund investments. Bank's Allowance for Credit Losses (ACL) is established to recognize losses that may occur due to the risk of default. Allowance for Credit Losses (also known as loan loss provisioning) is a reserve established to cover possible losses arising in connection with the investment of funds into productive assets, both in rupiah and in foreign currency (Ikatan Akuntan Indonesia, 2006). The ACL must reflect the expected future losses on the loan portfolio disbursed by banks (Curcio et al., 2017). ACL changes will be recorded in the form of accruals as expenses by the bank in the income statement, so the greater the additional ACL formed, the greater the ACL costs recorded and then reduce the profit reported by the bank.

ACL is considered by the central bank and accounting standard-setting institutions (Ozili & Outa, 2017). The formation of ACL is regulated in Indonesia Financial Accounting Standards (PSAK) 71 con-

cerning Financial Instruments (Ikatan Akuntan Indonesia, 2020). PSAK 71 adopts the expected loss model which requires companies to form ACL on all credit collectability, namely current, doubtful, non-current, and loss so that the adoption of PSAK 71 is expected to have an impact on increasing ACL that must be formed by banks.

At the beginning of 2020, banks in Indonesia were faced with the COVID-19 pandemic. The decline in the economic activity reduces the income and profits received by a company, thereby reducing the ability to pay off the principal and/or interest on loans received from banks, which will increase the risk of credit disbursed by banks. Banks will anticipate increased risk by increasing ACL formed by banks. The decline in the company's ability to pay off loans extended by banks during the COVID-19 pandemic was overcome by a restructuring program. The restructuring program is expected to reduce credit risk, then reduce the amount of ACL formed by banks.

1. LITERATURE REVIEW AND HYPOTHESES

Allowance for Credit Losses (ACL) is a non-cash fee charged by banks to anticipate possible future losses from non-performing loans (Ajekwe et al., 2017). ACL accounting policies are regulated by PSAK 71, which was adopted from International Financial Reporting Standard (IFRS) 9. Research on the impact of the ACL formation method on income smoothing or manipulation of earnings reports has been carried out by many researchers (Ozili & Outa, 2017, 2018; Ozili, 2017; Ozili & Arun, 2018; Lim & Yong, 2017; Shala et al., 2020). Meanwhile, empirical research that examines the impact of changing the ACL determination method (based on established rules) on ACL formation by banks is still limited (Marton & Runesson, 2017; Camfferman, 2015; Oberson, 2021). This study examines the impact of changing the ACL estimation model from the incurred loss model to the expected loss model using data from the banking sector in Indonesia.

The effect of PSAK 71 implementation on the determination of the ACL amount can be explained by the theory of economic consequences proposed by Zeff (1978). Economic consequences is a concept that asserts that accounting policies will affect the economic value of the company and have an impact on the behavior of businesses, governments, and creditors in making decisions. The essence of economic consequences is that accounting policies and changes in accounting policies are a problem for management. Changes in accounting policies are very important because management will change the company's opera-

tions. Changes in accounting operations will have an impact on the performance of companies and investors. Changes in accounting policies are considered important because the company has contracts based on financial statements with various parties, such as executive compensation, debt contracts, and important sources of information for investors. The convergence of IFRS in Indonesia has economic consequences.

The application of PSAK 71 has economic consequences because it affects management decisions in determining the amount of ACL for loans. Changes in PSAK 50, 55, and 60 to PSAK 71 have an impact on the number of ACL formed by a company. The application of the Expected Credit Loss method in PSAK 71 requires companies to establish an allowance for impairment losses from the time the credit is granted and securities are purchased by recording impairment losses in other comprehensive income. Standard differences in estimating ACL will have an impact on the amount of ACL due to differences in measurement models (Marton & Runesson, 2017; Camfferman, 2015; Oberson, 2021).

The change in the ACL estimation method from the loss incurred model to the expected credit loss model increases management discretion in determining ACL (Bholat et al., 2018; Marton & Runesson, 2017) and affects the amount of ACL formed by banks (Pastiranová & Witzany, 2021). The impact of the application of PSAK 71 is that a company provides a greater ACL than the application of PSAK 55 (Nugroho et al., 2021; Ilat et al., 2020). This assumption is based on the consideration that the expected credit loss model requires

banks to form ACL from the beginning of lending without considering credit collectibility, so it is estimated that the application of PSAK 71 will increase the ACL for banks in Indonesia.

Credit risk or often referred to as non-performing loans can be interpreted as loans that have difficulty repaying due to intentional factors or due to external factors beyond the ability of the debtor's control (Siamat, 2005). The COVID-19 pandemic has resulted in a decline in economic activity. A decline in economic activity increases credit risk. The increase in credit risk during the pandemic was responded to by a bank by increasing the ACL. Several studies have proven the impact of fluctuations in economic conditions on the formation of ACL, such as Merilainen (2019), De Haan and Van Oordt (2018), Danisman et al. (2021), Soh (2019), Pastiranová and Witzany (2021). Banks will establish ACL to absorb credit risk in the future. In the loss incurred model approach, the proportion of non-performing loans is recognized as a loan loss to anticipate the possibility of default by the borrower (Zamore et al., 2018). The determination of ACL is based on the expected credit loss model approach, determined by the estimation of the possibility of future credit defaults for all loans disbursed. Although considering all loans disbursed, the expected credit loss model approach will take into account the proportion of non-performing loans in determining the estimation of loan loss allowance.

Credit Restructuring is an effort made by a Bank to improve credit activities for debtors who have difficulty fulfilling their obligations. The Bank believes that by conducting credit restructuring for debtors, the debtor's financial condition will be better. Better financial conditions will reduce credit risk, and then the amount of ACL credit must be formed by banks. Research on credit restructuring has been carried out by many researchers, such as Mo and Jiang (2020), Halford and Li (2020), Jiang et al. (2019), Kim et al. (2019), Frantz and Insteford (2019), Gosh (2018), Azhari and Kadir (2018), Damijan (2017), Sung and Kim (2017), Micucci and Rossi (2016), Kaur and Srivastava (2017), Curcio et al. (2017), Paterson (2016), Demiroglu and James (2015), Das and Kim (2014), Burakov (2014), J.-C. Huang & C.-S. Huang (2011), Pawlina (2010). Previous studies discussed problems in debt restructuring in the private and

public sectors. Restructuring topics were discussed, including the determinants of debt restructuring; the relationship between the credit cycle and credit restructuring; the impact of debt restructuring on investment, as well as the relationship between political connections and the implementation of debt restructuring. However, previous studies have not discussed the impact of restructuring on the ACL for bank loans. Based on the previous studies and the phenomenon (the change in Indonesian accounting standard and credit restructuring program due to the increase of credit risk), the formulation of the hypothesis is as follows:

- H1: *The application of PSAK 71 has a positive effect on the Allowance for Credit Losses (ACL).*
- H2: *Credit risk has a positive effect on the ACL.*
- H3: *Credit restructuring has a negative effect on the ACL.*

2. RESEARCH METHODS

This research was motivated by the application of PSAK 71 on financial instruments to replace PSAK 50, 55, and 60. PSAK 71 adopted IFRS 9 which was issued by the International Accounting Standard Board. PSAK 71 regulates the formation of Allowance for Credit Losses (ACL) on productive assets. In the banking sector, productive assets are loans. PSAK 71 requires banks to establish credit allowances for the Expected Credit Loss method. The application of this method is expected to increase the ACL. At the same time, in early 2020 the banking sector faced the PSBB problem as a result of the COVID-19 pandemic.

The variables of this study consisted of independent and dependent variables. The dependent variable of the study is the ACL for bank credit. The independent variables of the study were the application of PSAK 71, credit risk, and credit restructuring. ACL is the amount of allowance made by banks to anticipate losses on debtor defaults. The higher the ACL, the better the bank is ready to face the credit risk that will occur. The ACL variable is measured by the following ratio:

$$ACL = \frac{\text{Financial Asset CKPN}}{\text{Total Earning Assets}} \cdot 100\%. \quad (1)$$

PSAK 71 is applied as of January 1, 2020. The application of PSAK 71 replaces PSAK 50, and 55 regarding the accounting treatment of financial instruments. The period of application of PSAK 71 is measured by a dummy, namely dummy 1 for the period of application of PSAK 71, while dummy 0 for the period of application of PSAK 50 and 55.

Credit risk is the percentage of non-performing loans owned by banking companies. Credit risk is measured by the number of non-performing loans divided by the number of loans granted by the bank. The credit risk variable is measured by the following ratio:

$$\begin{aligned} \text{Credit Risk} &= \\ &= \frac{\text{amount of non - performing loans}}{\text{Credit amount}}. \end{aligned} \quad (2)$$

Restructuring is an effort made by banks to improve credit activities for customers who have difficulty meeting obligations. Loan restructuring is measured by the number of restructured loans divided by the number of loans extended by the bank. The credit restructuring variable is measured by the following ratio:

$$\begin{aligned} \text{Credit Restructuring} &= \\ &= \frac{\text{amount of restructured loans}}{\text{Credit amount}}. \end{aligned} \quad (3)$$

The type of data used is secondary data in the form of 2019 and 2020 audited financial statements of banks listed on the Indonesia Stock Exchange. The data obtained from audited financial statements, namely ACL established by the bank, the number of restructured loans, and the application of PSAK 71. The data is obtained in the notes section of the financial statements. The source of financial report data is from the Indonesia Stock Exchange web site www.idx.co.id. The research population is all banking companies listed on the Indonesia Stock Exchange in 2019 and 2020. The method of determining the sample is purposive sampling, namely companies that have met the criteria. The criteria for the companies used in the research sample are that in 2019 and 2020, respectively, they are listed on the Indonesia Stock Exchange. The ana-

lytical method used in this research is descriptive statistical analysis and inductive statistical analysis. The panel data regression coefficient estimation method is carried out using three approaches, which include common effects, fixed effects, and random effects.

3. RESULT

Descriptive statistical analysis describes the average, median, maximum value, minimum value, and standard deviation of research variables, namely the application of PSAK71, Credit Risk, Credit Restructuring, and ACL. The descriptive statistics of this research variable are reported in Table 1, which presents descriptive statistics, including the mean, median, standard deviation, maximum value, and minimum value. This study presents descriptive statistics for three groups of data, namely data for 2019 and 2020, data for 2019, and data for 2020.

The average and median allowance for impairment losses on credit in 2019 and 2020 was 0.036. This means that the average amount of ACL formed by banking companies in 2019 and 2020 is 4.6% of the total loans disbursed, and the median value of ACL is 3% of the total loans disbursed by banking companies. The maximum and minimum ACL values for credit are 0.09 and 0.00, respectively. The largest amount of ACL formed by banking companies in 2019 and 2020 was 9%, while the lowest ACL was 0.00%.

The mean and median values of credit restructuring are 0.112 and 0.126, respectively. This means that the average number of loan restructurings is 11.2% of the total loans disbursed and the median value of loan restructuring is 12.6% of the loans disbursed. The restructuring standard deviation of 0.066 means the spread of restructuring data from an average of 6.6% of loans disbursed. Finally, the maximum and minimum values for restructuring are 0.268 and 0.00. The results of data analysis in 2019 and 2020 report that the mean value of the application of PSAK 71 is 0.5. This value means that 50% of the observations have implemented PSAK 71. The median value of the application of PSAK 71 is 0.5, which means that the median value of the application of PSAK 71 is 50% of all ob-

Table 1. Descriptive statistics of research variables

Source: Processed data.

Year	Variables	Mean	Median	Standard deviation	Maximum	Minimum
2019 and 2020	ACL	0.036	0.030	0.023	0.090	0.000
	Restructuring	0.112	0.126	0.066	0.268	0.000
	PSAK 71	0.500	0.500	0.503	1.000	0.000
	Credit Risk	0.066	0.042	0.079	0.452	0.000
2019	ACL	0.027	0.030	0.017	0.070	0.000
	Restructuring	0.091	0.069	0.071	0.252	0.000
	PSAK71	0.000	0.000	0.000	0.000	0.000
	Credit Risk	0.052	0.042	0.044	0.213	0.000
2020	ACL	1.00	1.00	0.00	1.00	1.00
	Restructuring	0.22	0.18	0.15	0.62	0.00
	PSAK71	0.12	0.04	0.17	1.00	0.00
	Credit Risk	0.05	0.04	0.03	0.22	0.00

servations. The maximum and minimum values are 1 and 0 respectively. The standard deviation for the application of PSAK 71 is 0.50.

Credit risk is the percentage of non-performing loans owned by banking companies. The results of descriptive statistical analysis for 2019 and 2020 data report the mean and median values of credit risk variables of 0.066 and 0.042, respectively. This means that the average number of non-performing loans in banking companies is 6.6% of the total loans disbursed in 2019 and 2020, with a median value of 4.2%. The standard deviation value is 0.079. The maximum and minimum credit risk values are 0.452 and 0.00. The maximum value of 0.452 indicates that 42.5% of loans disbursed are non-performing, while the minimum value of 0.00 indicates the absence of non-performing loans owned by banking companies.

The average and median allowance for impairment losses on credit in 2019 was 0.027. This means that the average amount of ACL formed by banking companies in 2019 was 2.7% of the total loans disbursed, and the median value of ACL was 3% of the total loans disbursed by banking companies. The maximum and minimum ACL values for credit are 0.070 and 0.000, respectively. The largest amount of ACL formed by banking companies in 2019 and 2020 was 7.00%, while the lowest ACL was 0.00%.

The mean and median values of credit restructuring in 2019 were 0.091 and 0.03. This means that the average amount of loan restructuring is 9.10%

of the total loans disbursed and the median value of credit restructuring is 3% of the loans. The restructuring standard deviation of 0.17 means the spread of restructuring data from an average of 17% of loans disbursed. Finally, the maximum and minimum values for restructuring are 0.252 and 0.000. The results of data analysis in 2019 reported the mean value of the application of PSAK 71 of 0.000. This value means that there are no companies implementing PSAK 71 in 2019 because PSAK 71 is effective on January 1, 2020. The median value of PSAK 71 application is 0.000, which means the median value of PSAK 71 is 0% of all observations.

Credit risk is the percentage of non-performing loans owned by banking companies. The results of descriptive statistical analysis for 2019 data report the mean and median values of credit risk variables of 0.052 and 0.042, respectively. This means that the average number of non-performing loans in banking companies is 5.20% of the total loans disbursed in 2019, with a median value of 4.20%. The standard deviation value is 0.44. The maximum and minimum credit risk values are 0.213 and 0.000. The maximum value of 0.213 indicates that 21.3% of credit disbursed is non-performing, while the minimum value of 0.000 indicates the absence of non-performing loans owned by banking companies.

The average and median allowance for impairment losses on credit in 2020 was 0.044 and 0.05, respectively. This means that the average amount of ACL formed by banking companies in 2020 is 4.4% of the total loans disbursed, and the median

value of ACL is 5% of the total loans disbursed by banking companies. The maximum and minimum ACL values for credit are 0.090 and 0.00, respectively. The largest amount of ACL formed by banking companies in 2020 was 9.00%, while the lowest ACL was 0.00%.

The mean and median values of credit restructuring in 2020 are 0.133 and 0.140. This means that the average amount of credit restructuring is 13.30% of the total loans disbursed and the mean credit restructuring is 14.00% of the loans disbursed. The restructuring standard deviation of 0.066 means the spread of restructuring data from an average of 6.60% of the loans disbursed. Finally, the maximum and minimum values for restructuring are 0.268 and 0.00. The results of data analysis in 2020 report the mean value of the application of PSAK 71 of 1.00. This value means that all banking companies implement PSAK 71 in 2020 because PSAK 71 is effective on January 1, 2020. The median value of PSAK 71 implementation is 1.00, which means the median value of PSAK 71 implementation is 100% of all observations.

Credit risk is the percentage of non-performing loans owned by banking companies. The results of descriptive statistical analysis for 2020 data report the mean and median values of credit risk variables of 0.081 and 0.042, respectively. This means that the average number of non-performing loans in banking companies is 8.10% of the total loans disbursed in 2020, with a median value of 4.20%. The standard deviation value is 0.084. The maximum and minimum credit risk values are 0.452 and 0.009. The maximum value of 0.452 indicates 45.20% non-performing loans, while the minimum value of 0.009 indicates 0.90% non-performing loans owned by banking companies.

The estimation of the panel data regression model consists of three approaches, including the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). Chow-test and Hausman-test are used to select the best regression model from the three approaches. Chow-test is conducted to compare and choose the best model between CEM or FEM. The results of the Chow-test show the probability

values of cross section F and chi square which are smaller than alpha 0.05. Therefore, FEM is better than CEM.

Table 2. Chow test result

Source: Processed data.

Effects test	Statistic	df.	Prob.
Cross-section F	2.563726	(44.42)	0.0013
Cross-section Chi-square	117.404079	44	0.0000

Hausman test is used to compare and choose the best model between FEM and REM. The decision is made based on the probability value of Cross-section random. If the p value > 0.05 then the selected model is REM. On the other hand, if p < 0.05, the model chosen is FEM. The Chi Square Statistics value from the Random Cross-section is 7.427485 with p-value of 0.0595, which is greater than 0.05. Thus, the best model to use is the REM model.

Table 3. Hausman test result

Source: Processed data.

Test summary	Chi-Sq. statistic	Chi-Sq. df.	Prob.
Cross-section random	7.427485	3	0.0595

The regression model refers to the panel data regression results estimated by REM as shown in Table 4.

Table 4. Regression result

Variable	Coefficient	Std. error	t-statistic	Prob.
C	0.030672	0.004199	7.304148	0.0000
PSAK 71	0.017618	0.003372	5.225122	0.0000**
CRES	-0.073050	0.030530	-2.392757	0.0189**
CR	0.063979	0.024757	2.584252	0.0114**
R-squared			0.319727	
Adjusted R-squared			0.295996	
F-statistic			13.47326	
Prob(F-statistic)			0.000000	

Note: ** – significant at 0.05 level (one-tailed).

The classical assumption test consists of three tests: normality test, multicollinearity test, and autocorrelation test. This is because the regression method chosen is the REM and the advantage of REM is that heteroscedasticity can be eliminated. The regression model does not contain multicollinearity, there is no problem of normality and there is no autocorrelation in the model.

Table 5. Classical assumption test results

Source: Processed data (2021).

No.	Classic assumption	Result
1	Multicollinearity	No multicollinearity
2	Normality	Normal distributed residual
3	Autocorrelation	No autocorrelation

Based on Table 4, regression model can be formulated as follow:

$$ACL = 0.030672 + 0.017618PSAK71 + 0.063979CR - 0.073050CRES + \varepsilon, \quad (4)$$

where *ACL* = Allowance for Credit Losses; *PSAK71* = Indonesia Financial Accounting Standard 71; *CR* = Credit risk; *CRES* = Credit restructuring; α = constant; $\beta_1, \beta_2, \beta_3$ = regression coefficients; ε = error.

According to the test result described in Table 4, adjusted R-squared is 0.295996. This means that the implementation of PSAK 71, credit risk and credit restructuring explain the variation of ACL by 29.5996 %. The significance level of F-statistic is 0.000000, which implies that the entire regression model is feasible to interpret the effect of the independent variables on ACL.

The t-statistics of all independent variables are statistically significant (less than 0.05). These results indicate that all proposed hypotheses are accepted. Thus, all independent variables (implementation of PSAK 71, credit risk, and credit restructuring) have an impact on the allowances for credit losses (ACL).

4. DISCUSSION

The result shows that the implementation of PSAK 71 affects the amount of allowance for credit losses formed by commercial banks listed on the Indonesian Stock Exchange (support *H1*). The increase in the amount of allowance after the implementation of PSAK 71 is confirmed from the results of the t-test, which reports a positive regression coefficient. The findings support the theory of economic consequences proposed by Zeff (1978) and the results of empirical research, such as Nugroho et al. (2021), Ilat et al. (2020). The theory of economic consequences suspects that the

changes in accounting policies will affect management decisions in determining the amount of ACL formed by the bank. The number of ACL formed by bank is getting bigger with the adoption of PSAK 71 because the expected credit loss method in PSAK 71 requires a bank to form ACL, since the loan is disbursed by recording impairment losses in other comprehensive income. This implementation is different compared to PSAK 55. PSAK 55 requires a bank to form ACL when there is an event that causes the risk of default or incurred loss. PSAK 71 requires a bank to calculate ACL for all credit categories, ranked from current, doubtful, non-current, and loss status. Banks must form ACL of current credit at the expected credit loss over the next 12 months. Banks also have to rise ACL for non-performing loans. Recognizing a higher ACL indicates conservatism in PSAK 71. According to PSAK 71, the formation of allowance is defined as the expectation of credit losses that may occur due to various factors in the future, such as economic predictions in the future.

The finding shows that credit risk positively affects the number of ACL formed by commercial banks listed on the Indonesia Stock Exchange (support *H2*). The increase in the number of ACLs formed by commercial banks was due to an increase in credit risk. This result support the results of previous studies such as Liyas (2018), Damayanti et al. (2012), and Rahayu et al. (2021). Responsibility to provide allowance for losses arising from impairment is regulated by the Decree of the Board of Directors of Bank Indonesia (Central Bank of Indonesia) Number 31/147/KEP/DIR dated November 12, 1998 concerning the establishment of Allowance for Asset Losses (AAL). The term AAL was changed to Allowance for Impairment Losses (AIL) in PSAK 55 of 2006. The amount of AIL in PSAK 55 is determined by credit collectability. PSAK 55 requires the Bank to establish an AIL on credit when a credit loss event occurs in accordance with available objective evidence (trigger event). In 2020, PSAK 71 came into effect to replace PSAK 55. PSAK 71 necessitates instant recognition of the effect of changes in anticipated credit losses after the initial recognition of financial assets. The Bank measures the ACL at the amount of expected credit losses over its lifetime, if the credit risk has increased significantly since initial recognition. Furthermore, PSAK 71 stip-

ulates that if the risk of credit default does not rise up significantly since initial recognizance at the reporting date, then the Bank should calculate the allowance for losses in the amount of 12 months' expected credit losses. These losses represent expected credit losses arising from credit default that might occur within 12 months after the reporting date.

The amount of ACL will differ between PSAK 55 and PSAK 71. However, both PSAK 55 and PSAK 71 require the establishment of an ACL to anticipate risks arising from default events that may occur in the future. Bank is required to evaluate credit value impairment every balance sheet date. An increase in credit risk or default risk will have a positive impact on the number of ACL formed by banks.

The finding shows that credit restructuring has negatively affect the number of ACL that formed by commercial banks listed on the Indonesia Stock Exchange (support H3). The larger the amount of credit restructuring, the smaller the amount of ACL formed by the Bank. Credit restructuring is a financial term, which is intensively used in the banking industry to save non-performing loans. According to Hasibuan (2008, p. 116), "*credit restructuring is a change in credit terms regarding the additional funds, conversion of some or all arrears of interest into new loan principal, or alteration of part or all of credit into bank participation or taking other partners to upsurge participation.*" Credit restructuring is an effort to improve credit

activities for debtors who have difficulty meeting their obligations. Restructuring is one way of controlling credit risk disbursed by banks. In terms of credit recipients, credit restructuring will provide flexibility for companies to fulfil their obligations. In such a way, it will indirectly provide space for companies to allocate funds to company operations. It is expected to have an indirect impact on a company's financial performance in the form of a significant difference in the company's financial performance in the period before and after the credit restructuring.

A company provides credit restructuring facilities to debtors with certain conditions. Banks can only restructure loans for debtors who have difficulty in paying credit principal and/or interest. Moreover, credit restructuring is analyzed based on the debtor's business prospects and ability to pay according to cash flow projections and analyzed by a party who is competent in credit analysis, independent and has a good reputation. Thus, to ensure that the restructured credit can be returned by the debtor.

Restructuring is a bank program to assist debtors who have difficulty in repaying loan principal and/or interest. Restructuring is carried out by taking into account the business prospects of the debtor and the ability to repay the principal and/or interest on the loan in the future. Credit restructuring is expected to control credit risk (i.e., controlling credit defaults, and reducing the amount of reserve for impairment losses on credit).

CONCLUSION

This study proves that the formation of ACL for credit is higher after the implementation of PSAK 71. This result proves that the expected credit loss method is more conservative than the loss incurred method. The enactment of PSAK 71 has economic consequences because it affects the behavior of the management in making decisions on the formation of ACL.

This study proves that the establishment of credit allowances takes into account credit risk. The results of this study indicate bank compliance in implementing PSAK 55 and 71. PSAK 55 and PSAK 71 require the establishment of ACL to anticipate risks arising from default events that may occur in the future. Banks are required to evaluate credit impairment every Balance Sheet Date. The increase in credit risk or the risk of default will have a positive impact on the amount of ACL formed by a bank.

This study proves that credit restructuring has a negative effect on the amount of ACL formation. The credit restructuring program aims to control credit risk. This program to control credit risk is carried

out by providing concessions to debtors to fulfill their obligations. Credit risk is expected to decrease and reduce the formation of ACL for bank loans. Restructuring is given to debtors who have difficulty in paying off loan principal and/or interest, are estimated to have good business prospects, and have the ability to expand loan principal and/or interest in the future.

Based on the results of the study, some suggestions can be given to several parties. This study proves that the implementation of PSAK 71 to replace PSAK 55 has economic consequences. This is indicated by the increasing number of ACL formations after the implementation of PSAK 71. These results provide input for investors in analyzing the comparison of the financial performance of banking sector companies listed on the Indonesia Stock Exchange in 2020 and the previous year. This study found that credit restructuring had a negative effect on the amount of ACL formed by banks. Restructuring is proven to be able to control credit risk and the amount of allowance for impairment losses on credit established by banks. Banks should be careful in implementing the restructuring program by considering the business prospects and the debtor's ability to repay the loan principal and/or interest.

AUTHOR CONTRIBUTIONS

Conceptualization: I Gusti Ngurah Agung Suaryana, I Gusti Ayu Eka Damayanthi.

Data curation: I Gusti Ngurah Agung Suaryana, Naniek Noviari, I Gusti Ayu Eka Damayanthi.

Formal analysis: I Gusti Ngurah Agung Suaryana, Naniek Noviari, I Gusti Ayu Eka Damayanthi.

Funding acquisition: I Gusti Ngurah Agung Suaryana, Naniek Noviari, I Gusti Ayu Eka Damayanthi.

Investigation: I Gusti Ngurah Agung Suaryana, Naniek Noviari.

Methodology: I Gusti Ngurah Agung Suaryana.

Project administration: I Gusti Ngurah Agung Suaryana, I Gusti Ayu Eka Damayanthi.

Resources: I Gusti Ngurah Agung Suaryana, Naniek Noviari, I Gusti Ayu Eka Damayanthi.

Software: I Gusti Ngurah Agung Suaryana.

Supervision: I Gusti Ngurah Agung Suaryana, Naniek Noviari, I Gusti Ayu Eka Damayanthi.

Validation: I Gusti Ngurah Agung Suaryana.

Visualization: I Gusti Ngurah Agung Suaryana.

Writing – original draft: I Gusti Ngurah Agung Suaryana.

Writing – reviewing & editing: I Gusti Ngurah Agung Suaryana.

REFERENCES

- Ajekwe, C. C., Ibiame, A., & Silas, M. F. (2017). Loan Loss Provisions, Earnings Smoothing and Capital Management Under IFRS: The Case of Deposit Money Banks in Nigeria. *American Journal of Management Science and Engineering*, 2(4), 58-64. <https://doi.org/10.11648/j.ajmse.20170204.12>
- Azhari, A., & Kadir, A. (2018). The Effect of Liquidity Profitability and Board Characteristics on Debt Restructuring Likelihood Among Malaysian GLCs. *The Journal of Social Sciences Research Special Issues*, 6, 942-950. <http://dx.doi.org/10.32861/jssr.spi6.942.950>
- Bank Indonesia. (2012). *Peraturan Bank Indonesia Nomor 14/15/PBI/2012 tentang Penilaian Kualitas Aset Bank Umum*. Jakarta. Retrieved from <https://peraturan.bpk.go.id/Home/Details/137449/peraturan-bi-no-1415pbi2012>
- Bholat, D., Lastra, R., Markose, S., Miglionico, A., & Sen, K. (2018). Non-performing loans at the dawn of IFRS 9: regulatory and accounting treatment of asset quality. *Journal of Banking Regulation*, 19, 33-54. <https://doi.org/10.1057/s41261-017-0058-8>
- Burakov, D. (2014). Credit Cycles & Debt Restructuring: Refining Theoretical Flaws. *Review of European Studies*, 6(4), 1-11. <https://doi.org/10.5539/res.v6n4p1>
- Camfferman, K. (2015). The Emergence of the 'Incurred-Loss' Model for Credit Losses in IAS 39. *Accounting in Europe*, 12(1), 1-35. <https://doi.org/10.1080/17449480.2015.1012526>
- Curcio, D., Simone, A., & Gallo, A. (2017). Financial crisis and international supervision: New evidence on the discretionary use of loan loss provisions at Euro Area commercial banks. *British Accounting Review*, 49(2), 181-193. <https://doi.org/10.1016/j.bar.2016.09.001>
- Damayanti, P., Savitri, M., & Andanarini, D. (2012). Analisis Pengaruh Ukuran (Size), Capital Adequacy Ratio (CAR),

- Pertumbuhan Deposit, Loan to Deposit Ratio (LDR), terhadap Profitabilitas Perbankan Go Public di Indonesiatahun 2005–2009. *Jurnal Ilmu Manajemen dan Akuntansi Terapan (JIMAT)*, 3(2), 45-54. Retrieved from <http://jurnal.stietotalwin.ac.id/index.php/jimat/article/view/42>
9. Damijan, J. (2017). Corporate financial soundness and its impact on firm performance: implications for corporate debt restructuring in Slovenia. *Post-Communist Economies*, 30(2), 156-192. <https://doi.org/10.1080/14631377.2017.1398518>
 10. Danisman, G., Demir, E., & Ozili, P. (2021). Loan Loss Provisioning of US Banks: Economic Policy Uncertainty and Discretionary. *International Review of Economics and Finance*, 71, 923-935. <https://doi.org/10.1016/j.iref.2020.10.016>
 11. Das, S., & Kim, S. (2014). Going for Broke: Restructuring Distressed Debt Portfolios. *The Journal of Fixed Income*, 24(1), 5-27. <http://doi.org/10.3905/jfi.2014.2014.1.031>
 12. De Haan, L., & Van Oordt, M. (2018). Timing of Banks' loan provisioning during the crisis. *Journal of Banking and Finance*, 87, 293-303. <https://doi.org/10.1016/j.jbankfin.2017.10.003>
 13. Demiroglu, C., & James, C. (2015). Bank loans and troubled debt restructurings. *Journal of Financial Economics*, 118(1), 192-210. <https://doi.org/10.1016/j.jfineco.2015.01.005>
 14. Frantz, P., & Instefjord, N. (2019). Debt Overhang and Non Distressed Debt Restructuring. *Journal of Financial Intermediation*, 37, 75-88. <https://doi.org/10.1016/j.jfi.2018.08.002>
 15. Gosh, S. (2018). Corporate Distress, Troubled Debt, Restructurings, and Equity Stripping: Analyzing Corporate Debt Restructurings in India. *South Asian Journal of Business Studies*, 8(1), 105-126. <https://doi.org/10.1108/SAJBS-05-2018-0059>
 16. Halford, J., & Li, C. (2020). Political Connections and Debt Restructurings. *Journal of Corporate Finance*, 65, 101497. <https://doi.org/10.1016/j.jcorpfin.2019.101497>
 17. Harris, T., Khan, U., & Nissim, D. (2018). The Expected Rate of Credit Losses on Banks' Loan Portfolios. *The Accounting Review*, 93(5), 245-271. <https://doi.org/10.2308/accr-52012>
 18. Hasibuan, M. S. P. (2008). *Dasardasar Perbankan*. Edisi kelima. Jakarta: PT. Bumi Aksara
 19. Huang, J.-C., & Huang, C.-S. (2011). The effects of bank relationships on firm private debt restructuring: Evidence from an emerging market. *Research in International Business and Finance*, 25(1), 113-125. <https://doi.org/10.1016/j.ribaf.2010.09.001>
 20. IASC. (1998). *IAS 39 Financial Instruments: Recognition and Measurement*. London: International Accounting Standard Committee.
 21. Ikatan Akuntan Indonesia. (2006). *Akuntansi Perbankan*. Jakarta
 22. Ikatan Akuntan Indonesia. (2014). *PSAK 55 tentang Instrumen Keuangan: Pengakuan dan Pengukuran*. Jakarta, Indonesia. Retrieved from <https://staff.blog.ui.ac.id/martani/files/2011/04/ED-PSAK-55-2013.pdf>
 23. Ikatan Akuntan Indonesia. (2020). *PSAK 71 (Penyesuaian TAHUNAN 2020) Instrumen Keuangan*. Jakarta. Retrieved from https://web.iaiglobal.or.id/assets/files/file_berita/DE%20PENYE-SUAIAN%20TAHUNAN%20PSAK%2071.pdf
 24. Ilat, V., Sabijono, H., & Rondonuwu, S. (2020). Evaluasi Penerapan PSAK 71 Mengenai Instrumen Keuangan Pada PT. Sarana Sulut Ventura Manado. *Jurnal Riset Akuntansi*, 15(3), 514-520. Retrieved from <https://www.onesearch.id/Record/IOS1946.article-30178#holdings>
 25. Jiang, J., Liu, B., & Yang, J. (2019). The Impact of Debt Restructuring on Firm Investment: Evidence from China. *Economic Modelling*, 81, 325-337. <https://doi.org/10.1016/j.econmod.2019.05.019>
 26. Kaur, D., & Srivastava, S. (2017). Corporate debt restructuring and Firm performance: A study of Indian firm. *Serbian Journal of Management*, 12(2), 271-281. <http://dx.doi.org/10.5937/sjm12-11916>
 27. Kim, W., Ko, Y., & Wang, S. (2019). Debt Restructuring Through Equity Issues. *Journal of Banking and Finance*, 106, 341-356. <https://doi.org/10.1016/j.jbankfin.2019.07.002>
 28. Lim, C., & Yong, K. (2017). Regulatory Pressure and Income Smoothing by Banks in Response to Anticipated Changes to the Basel II Accord. *China Journal of Accounting Research*, 10(1), 9-32. <https://doi.org/10.1016/j.cjar.2016.08.003>
 29. Liyas, J. N. (2018). Analisis Perhitungan Cadangan Kerugian Penurunan Nilai Pt. Bank Bri Agroniaga Tbk Cabang Pekanbaru Tahun 2016. *Equilibrium*, 6(1), 1-10. <http://doi.org/10.25273/equilibrium.v6i1.2181>
 30. Marton, J., & Runesson, E. (2017). The predictive ability of loan loss provisions in banks – Effects of accounting standards, enforcement and incentives. *The British Accounting Review*, 49(2), 162-180. <https://doi.org/10.1016/j.bar.2016.09.003>
 31. Merilainen, J. (2019). Western European Stakeholders Banks' Loan Loss Accounting. *Journal of Financial Services Research*, 56(2), 185-207. <https://doi.org/10.1007/s10693-017-0283-4>
 32. Micucci, G., & Rossi, P. (2016). Debt Restructuring and the Role of Banks' Organizational Structure and Lending Technologies. *Journal of Financial Services Research*, 51, 339-361. <https://doi.org/10.1007/s10693-016-0250-5>
 33. Mo, X., & Jiang, J. (2020). Political Connections, Debt Restructuring, and Enterprise. *Discrete Dynamic in Nature and Society*, 2020, 1-13. <https://doi.org/10.1155/2020/5041768>
 34. Nugroho, M., Arif, D., & Halik, A. (2021). The effect of loan-loss provision, non-performing loans

- and third-party fund on capital adequacy ratio. *Accounting*, 7, 943-950. <https://doi.org/10.5267/J.AC.2021.1.013>
35. Oberson, R. (2021). The Credit-Risk Relevance of Loan Impairments Under IFRS 9 for CDS Pricing: Early Evidence. *European Accounting Review*, 30(5), 959-987. <https://doi.org/10.1080/09638180.2021.1956985>
 36. Ozili, P. (2017). Bank earnings smoothing, audit quality and procyclicality in Africa: The case of loan loss provisions. *Review of Accounting and Finance*, 16(2), 142-161. <http://doi.org/10.1108/RAF-12-2015-0188>
 37. Ozili, P., & Arun, T. (2018). Income Smoothing European Systemic And Non-Systemic Banks. *The British Accounting Review*, 50(5), 539-558. <https://doi.org/10.1016/j.bar.2018.03.001>
 38. Ozili, P., & Outa, E. (2017). Bank loan loss provisions research: A review. *Borsa Istanbul Review*, 17(3), 144-163. <https://doi.org/10.1016/j.bir.2017.05.001>
 39. Ozili, P., & Outa, E. (2018). Bank Income Smoothing in South Africa: Role of Ownership, IFRS and Economic Fluctuation. *International Journal of Emerging Market*, 13(5), 1372-1394. <https://doi.org/10.1108/IJoEM-09-2017-0342>
 40. Pastiranová, O., & Witzany, J. (2021). IFRS 9 and its behavior in the cycle: The evidence on EU countries. *Journal of International Financial Management and Accounting*, 33, 5-17. <https://doi.org/10.1111/jifm.12140>
 41. Paterson, S. (2016). The Paradox of Alignment: Agency Problems and Debt Restructuring. *European Business Organization Law Review*, 17, 497-521. <https://doi.org/10.1007/s40804-016-0056-9>
 42. Pawlina, G. (2010). Underinvestment, capital structure and strategic debt restructuring. *Journal of Corporate Finance*, 16(5), 679-702. <https://doi.org/10.1016/j.jcorpfin.2010.06.010>
 43. Rahayu, F. S., Samsiah, S., & Hinggo, H. T. (2021). Analisis Prinsip 5C dan 7P dalam Pemberian Kredit untuk Meminimalisir Kredit Bermasalah dan Meningkatkan Profitabilitas: Studi Kasus pada Swamitra Pekanbaru. *Prosiding Seminar Nasional Ekonomi Bisnis & Akuntansi*, 1, 20-27. Retrieved from <https://ejournal.umri.ac.id/index.php/sneba/article/view/2653>
 44. Shala, A., Toci, V., & Ahmeti, S. (2020). Income Smoothing Through Loan Loss Provisions in South And Eastern European Banks. *Zbornik Radova Ekonomskog Fakultet au Rijeci*, 38(2), 429-452. <https://doi.org/10.18045/zbefri.2020.2.429>
 45. Siamat, D. (2005). *Manajemen Lembaga Keuangan: Kebijakan Moneter dan Perbankan*. Jakarta: Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.
 46. Soh, W. (2019). Non-performing loan and economic determinants in Asia-Pacific countries: Evidence from credit card debt. *International Journal of Recent Technology and Engineering*, 7(6), 1609-1614.
 47. Sung, T., & Kim, D. (2017). How chaebol restructuring after the 1997 crisis has affected corporate decision and performance in Korea: debt financing, ownership structure, and investment. *China Economic Journal*, 10(2), 47-161. <https://doi.org/10.1080/17538963.2017.1319630>
 48. Zamore, S., Djan, K., Alon, I., & Hobdari, B. (2018). Credit Risk Research: Review and Agenda. *Emerging Markets Finance and Trade*, 54(4), 811-835. <https://doi.org/10.1080/1540496X.2018.1433658>
 49. Zeff, S. A. (1978). The Rise of 'Economic Consequences'. *The Journal of Accountancy*.