



## INTERNAL AND EXTERNAL FACTOR ON NON-PERFORMING LOANS AND ITS IMPLICATIONS TOWARDS PROFITABILITY

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### Abstract

Non-performing loans will effect to the bank losses due to non-receipt of the funds that have been distributed along with the interest income. This research aims to find out and analyze the impact of internal and external factors on non-performing loans distributed to the Small and Medium-sized Enterprises and its implications towards profitability of Bank BJB. The method used in this research is descriptive and verifiative, while data collection was carried out through interview, observation, and documentation. The sample was also collected by purposive sampling, by analyzing and using path analysis. The result showed that the internal and external factor did give impact to the non-performing loans, both simultaneously and partially. The loans also gave impact to the profitability of Bank BJB.

**Keywords:** internal factors; external factors; non-performing loans; profitability; path analysis

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### INTRODUCTION

Basically, there are three common factors leading to the occurrence of non-performing loans in banking sector, that are bank internal and external factor, and debtor. The factor of debtor includes business experience, character, mismanagement, financial issues, production, and marketing strategy error, as well as business setback. Bank internal factor includes Loan to Deposit Ratio (LDR), Earning Asset Quality (KAP), Capital Adequacy Ratio (CAR), loan interest rate, collateral appraisal, location, bank officers, credit amount, mark-up done on purpose, feasibility studies made so that the project is very feasible, the practice of Collusion, Corruption and Nepotism (KKN), and lack of strict credit monitoring. Meanwhile, the bank external factor includes inflation, exchange rate, Gross Domestic Product (GDP) per real capita, natural disaster, reduction in the monetary condition of the country, the level of GDP, business climate, and government regulations.

External factor in this research is represented by the condition of macro-economy of a country by using GDP variable, interest rate and exchange rate. The increase of economic growth reflected by the increase of GDP shows that there are also increase of public income, which will further give impact to their ability to pay the increasing credit. It will also lead to the decrease of Non-Performing Loan (NPL).

The research done by F. Ahmad & Bashir (2013) showed that there are relations and impacts between loan to assets ratio, CAR, management performance and bank dimension on Non-Performing Loans. Barus & Erick (2016) showed that Non-Performing Loan was influenced by the internal and external factors. Its increase could lead negative impact to the bank as creditor, because it will increase the reserve for non-

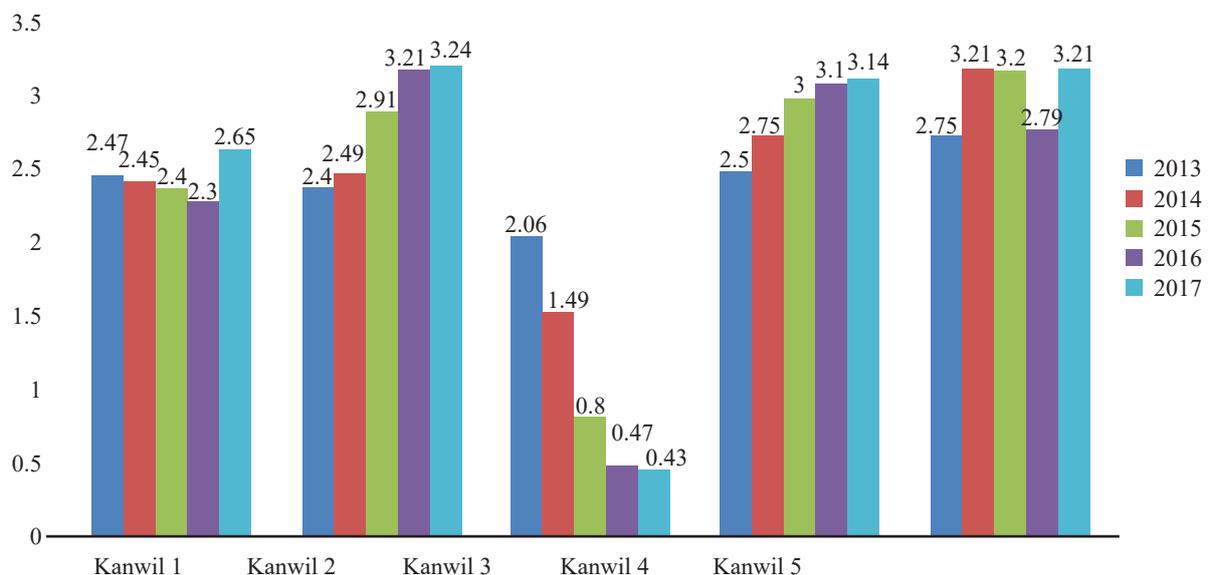
performing loans which will cause a decrease in profits and thus reduce capital. A decrease in the amount of bank capital can lower CAR which will reduce public confidence and threaten the sustainability of the banking business. The broader impact is when non-performing loans are no longer collectible, meaning that there is a termination of revolving funds which disrupts business development, hinders economic growth, increases unemployment, and decreases people's income.

Bank financial performance is often measured by how its ability is to gain profit. Bank's ability to gain profit during certain period stated in percentage is called profitability. It is measured by its success and ability in maintaining and taking advantage of the resource owned to gain profit. Abera (2012) and Almazari (2014) measured the banking performance by using the return on assets (ROA). Similar to Abera and Almazari, Gul (2011) who have done research in Pakistan, Hutagalung et. al (2013) and Margaretha, Farah and Zai (2013) who have done research in Indonesia also used ROA as a proxy of banking performance.

Profitability is the most appropriate indicator to measure the financial performance of a bank. The level of profitability is a benchmark for bank performance because it is a financial ratio which is the result of a number of policies and decisions taken by bank management. Factors that affect bank profitability can be derived from various financial ratios shown by several indicators in bank financial reports and are commonly used as the basis for assessing the soundness of a bank.

Bank Indonesia emphasizes the importance of assessing the amount of ROA, which is the ratio between profit before tax and total assets. This is because Bank Indonesia prioritizes the value of profitability as measured by assets whose most of the funds come from public savings. ROA is used to measure the effectiveness of a company in generating profits by utilizing its assets. A bank's high ROA ratio indicates good financial performance because the rate of return is getting bigger. An increase in ROA means that profitability increases so that the greater the level of profit achieved by the bank and the better the position of the bank in terms of asset use.

Bank bjb currently has 65 Branch Offices, 314 Sub-Branch Offices, 349 Cash Offices, and 5 Regional Offices. Based on Figure 1, it can be seen that the profitability for Regional Office (Kanwil) 3 which includes Patrol, Indramayu, Majalengka, Cirebon, Sumber, Kuningan, Ciamis, Tasikmalaya, Singaparna, Banjar, Pangandaran, and Garut branches, for the SME segment has decreased every year. Based on the ROA condition at Bank bjb, management needs to take active action to increase its profitability. Efforts that can be made include implementing strategies and policies related to the quality of earning assets. Investments of funds collected from various sources in the form of productive assets are aimed at earning income which in turn will have an impact on bank profitability.



Source: Bank bjb Branch Office, 2017

Figure 1. ROA Condition for SME Segment

Basically, bank profitability derives from asset management and handling transactions (income that comes from outside of asset management). Management of bank assets will be related to the earning assets it owns. Proper management of funds in productive assets will result in high profits and subsequently will result in a high level of profitability. The very poor quality of the bank's productive assets will wipe out the bank's capital. This is related

to various problems such as the formation of reserves, asset valuation, and the provision of loans to related parties. Maintenance of asset quality is one way to maintain the soundness of the bank so that public trust can be maintained.

Bank Indonesia has already prepared series of policies in banking sector which is expected to strengthen bank's resilience in supporting stability of financial system as well as becoming a stimulus for economic growth. The regulations are in the form of Bank Indonesia Regulation Number 11/2/PBI/2009 concerning the third amendment to PBI No. 7/2/PBI/2005 concerning asset quality assessment for commercial banks.

Asset quality assessment is intended to evaluate the condition of bank assets and the adequacy of credit risk management (PBI No. 14/15/PBI/2012). This aspect shows the quality of assets in relation to credit risk faced by banks due to the provision of credit and investment of bank funds in different portfolios. Every investment of bank funds in productive assets is assessed for quality by determining the level of collectability, namely whether it is current, substandard, special mention, doubtful, and loss. Differences in the level of collectability are necessary to determine the minimum allowance for earning assets write-offs that must be provided by the bank to cover the risk of possible losses.

A bank's ability to extend credit is influenced by its ability. Somoye, Russell Olukayode Christopher; Ilo, Bamidele M; Yunusa (2019) stated that bank ratios such as bank's deposit to capital ratio, loan to capital ratio, natural log of bank's own assets have a significant effect on lending, apart from macro factors such as inflation and exchange rates. Many researches have studied the influence of bank internal factors on non-performing loans, including LDR, credit growth and reserves (F. Ahmad & Bashir, 2013).

The amount of bank credit is determined by the condition of financial ratios and macroeconomic factors. Somoye, Russell Olukayode Christopher; Ilo, Bamidele M; Yunusa (2019) found that macroeconomic factors, inflation, and exchange rates had a significant effect on bank credit. The same thing also happened to other banking characteristic variables, namely LDR, Loans to Asset Ratio (LA), bank size, and ROA.

The research result carried by Alper, Deger; Anbar (2011), R. Ahmad et al., (2016), Puspitasari (2009), U. N. A Setiawan & Indriani (2016) found that non-performing loans gave negative impact on profitability. The increase of non-performing loans will reduce bank profitability while non-performing loans are an important parameter in measuring the soundness of a bank (Panggabean, 2012). Banks with high non-performing loans tend to decline in profitability, so that the its soundness score will also decline. The research results carried out by Febriyono (2015), Sudarsono (2017), Afrizal (2017) and A. Setiawan (2017) found that non-performing loans have no significant effect on profitability.

The purpose of this research is to find out and obtain the analysis result about (1) internal and external factor, SMEs' non performing loans and profitability at Bank bjb; (2) the impact of internal and external factor on SMEs' non-performing loans and (3) the impact of SMEs' non-performing loans on profitability at Bank bjb.

## METHOD

This research uses descriptive and verifiative method. The research population is a monthly financial report issued by Bank bjb from 2015-2019 which included data of Regional Office 1, 2, 3, 4 and 5, with 65 Branch Offices amounted to 60 data. Sampling technique used in this research is purposive sampling, with the criteria (1) data used is a monthly financial report showing non-performing loans, profitability and other informations; (2) data used is during 2015-2019.

Descriptive analysis is carried out by calculating the average score which will further be categorized based on regulations of Bank Indonesia No. 13/1/PBI/2011. For variables that are not regulated through BI provisions, a range is made by subtracting the maximum and minimum score, then dividing them by the range created. Verification analysis uses path analysis.

## RESULTS

Figure 2 shows the development of CAR, bank dimension and LDR at Bank BJB during during 2015-2019. The average of CAR for 5 years was 17.26% and was included in the very healthy criteria. The average of bank dimension was 18.42, which was considered in the high category. The average of LDR was 82.69% in the healthy category. Figure 3 shows the average development of interest rate per year, which is 5,92% and considered as proper criteria. Figure 4 shows the average development of exchange rate, as much as Rp 13.653,00 and was considered in the proper category. Figure 5 shows the average development of GDP in 2015-2019, as much as 5,03 and was considered in the high category. Figure 6 shows the average development of ratio of SMEs' non-performing loans, as much as 19,01% and was considered as in the poor category. Figure 7 shows the average development of profitability ratio at Bank BJK in 2015-2019, as much as 2,01 and was condisered as in the perfect healthy category.

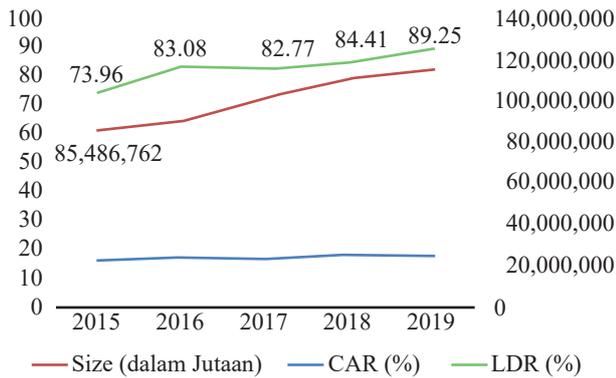
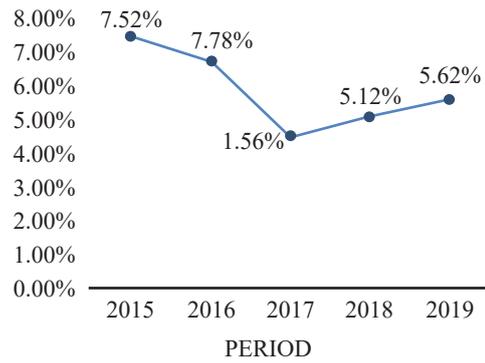
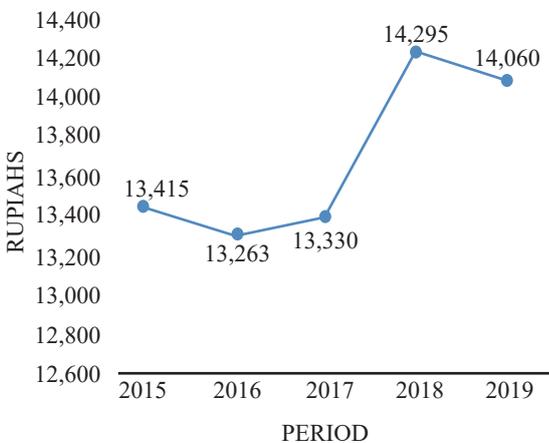


Figure 2. Bank bjb CAR, Bank Size, and LDR 2015 – 2019



Source: <https://www.bi.go.id>

Figure 3. BI Rates 2015-2019



Source: <https://www.bi.go.id>

Figure 4. Exchange Rates to USD

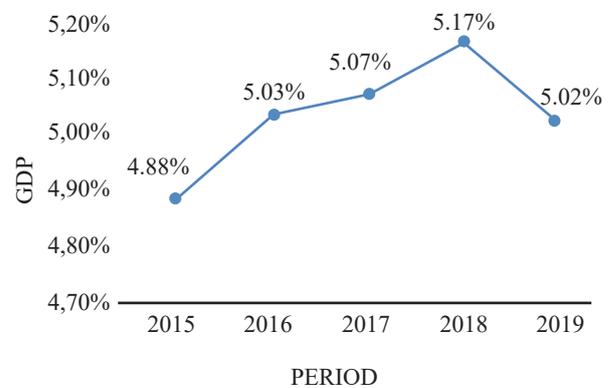
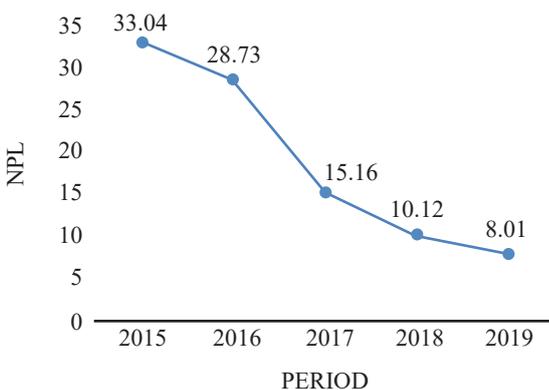
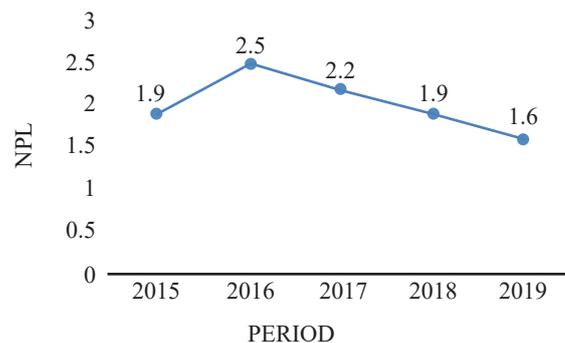


Figure 5. EDP 2015-2019



Source: Bank bjb, Tbk. Financial Report 2019

Figure 6. NPL 2015 – 2019



Source: Bank bjb, Tbk. Financial Report 2019

Figure 7. Profitability 2015 – 2019

Table 1 shows the amount of correlation coefficient between internal and external factor, as much as 0.747 and was considered in the high correlation. Table 2 shows the result of regression analysis, stating that the internal and external factor have significant impact on non-performing loans. Table 3 shows the amount of path coefficient of internal factor on non-performing loans as much as 0.531 and external factor as much as 0.535. Table 4 shows the impact of internal factor of non-performing loans directly as much as 28.2% and indirectly as much as 14%. It is seen that the direct impact is higher than the indirect one. Figure 8 shows the impact of external factor on non-performing loans directly as much as 12.46% and indirectly as much as 14%. It is seen that the indirect impact is higher than the direct one.

Table 1. Correlations

		NPL	Internal Factors	External Factors
Pearson Correlation	NPL	1.000	.795	.750
	Internal Factors	.795	1.000	.747
	External Factors	.750	.747	1.000
Sig. (1-tailed)	NPL	.	.000	.000
	Internal Factors	.000	.	.000
	External Factors	.000	.000	.
N	NPL	60	60	60
	Internal Factors	60	60	60
	External Factors	60	60	60

Table 2. Regression Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.216	.873		3.683	.001
	Internal Factors	.182	.038	.531	4.771	.000
	External Factors	.137	.043	.353	3.174	.002

Table 3. F Test ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	160.739	2	80.370	62.810	.000 <sup>b</sup>
	Residual	72.935	57	1.280		
	Total	233.674	59			

a. Dependent Variable: NPL

b. Predictors: (Constant), External Factors, Internal Factors

Table 4. Determination Coefficient Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics	
					R Square Change	F Change
1	.829 <sup>a</sup>	.686	.677	1.13118	.688	62.810

a. Predictors: (Constant), External Factors, Internal Factors

b. Dependent Variable: NPL

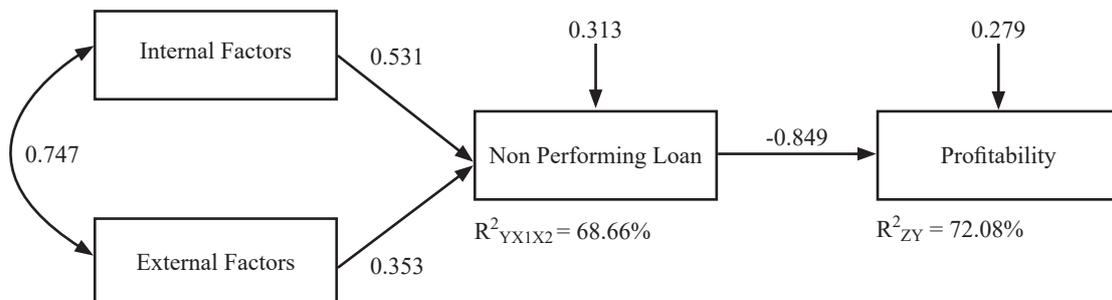


Figure 8. Path Analysis

The coefficient calculation result of multiple determination of internal and external factor on non-performing loans was 68.8%. The total amount of internal factor as much as 42.20% and external factor as much as 26.46% are shown in Table 6. Figure 8 shows that the internal and external factor have impact on non-performing loans, both simultaneously and partially. Non-performing loans have negative impact on financial performance at Bank BJB as much as 72,08%.

Table 5. Impact Internal and External Factors on Non-Performing Loan

Variable	Direct Impact	Indirect Impact		Sub Total Indirect Impact	Total Impact
		Internal Factors	External Factors		
Internal Factors	28.20	–	14.00	14.00	42.20
External Facators	12.46	14.00	–	14.00	26.46
Total Impact	68.66				
Residual Factors	31.34				

Table 6. Non-Performing Loan Impact on Profitability Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients		t	Sig.
		B	Std. Error	Beta			
1	(Constant)	8.145	4.699			1.733	.100
	NPL	.753	.167	-.849		4.498	.000

a. Dependent Variable: ROA

## DISCUSSION

The result of this research showed that there are significant impacts of internal factor on non-performing loans at Bank BJB in a positive way. A poor management also gave contribution in increasing non-performing loans. It demanded the bank supervisor to be involved in determining credit loss, debtor quality and credit risk; and also implementing a strong system and department of credit supervisor (F. Ahmad & Bashir, 2013). A big-sized bank needs to diversify their credit to reduce non-performing loans.

The research result carried out by Voordeckers, Wim; Steijvers (2009) by using continuation ratio logit method showed that the internal condition on SMEs' in Belgium had positive impact on the occurrence of existing strategy in the division of banking credit. Kosmidou (2003) argued that a bank's internal condition can be assessed from the soundness level of the bank itself. The better its health level, the better its ability to provide credit. The delegation of some of the duties, powers and responsibilities requires a way that can provide effectiveness and efficiency of company operations, providing adherence to the established policies and procedures.

The result of this research also showed that there are positive and significant impact of external factor of non-performing loans (NPL) at Bank BJB with a positive way. When the economy goes into recession, it will cause various credit issues. The same thing is also found in research carried out by Abid et al. (2014) who stated that the banks are advised to pay more attention to macroeconomic indicators, because this factor is one of the determinants of an increase in non-performing loans. Ćurak et al., (2013) stated that low economic growth, inflation, and high interest rates are associated with high non-performing loans.

External factors that affect the provision of a credit are the economic environment, natural factors, and competition between banks or other financial institutions. If the condition of external factors is getting better, it can be said that the people's economy is also improving. Kosmidou (2003) arguef that if the level of public welfare increases, it is expected that the demand and supply of loans and savings from the public to banks will be higher. The high level of demand and supply of loans and savings has a positive effect on credit extension. This result contradicted the research conducted by Voordeckers, Wim; Steijvers (2009) who used the continuation-ratio logit method, stating that in Small and Medium enterprises in Belgium, environmental conditions outside the company have a negative effect on the formation of strategies in the credit division. This is also supported by research conducted by (Achou & Tenguh, 2008) on several factors that influence MSME credit distribution, including inflation, economic growth rates, third party funds, debt, equity, profits, access to information, and collateral value.

The result of this research also showed that there are negative and significant impact of non-performing

loans on profitability at Bank BJB. This is in line with few theories which stated that non-performing loans will lead to bank losses due to non-receipt of funds that have been distributed along with interest income which results in a decrease in total income. Failure of the debtor to pay will reduce the profitability of the bank itself (Kristianti and Yovin, 2016), therefore banks are required to always keep credit not in a high non-performing loan position.

This result also strengthens the empirical research carried out by Sohilauw (2016), A. Deger (2011), Anbar (2011), R. Ahmad et al., (2016), Puspitasari (2009) and U. N. A Setiawan & Indriani (2016) who showed that the level of non-performing loans will reduce the profitability of the banking. Non-performing loans is an important parameter in measuring bank's level of health (Panggabean, 2012). Banks which have a large number of non-performing loans tend to decline in profitability, so that the health value of operations in the community and in the banking field will also decline.

## CONCLUSION

An overview of internal factors at Bank BJB, namely the average of CAR during 2015 - 2019 is included in the very healthy criteria, the dimension of the bank is high, and the LDR is in the healthy category. The SBI interest rate and the exchange rate are included in the medium criteria, GDP is considered as in the high criteria. The MSMEs' non-performing loans at Bank BJB fall into the unhealthy category, while profitability falls into the very healthy criteria. There are strong and positive relation of internal and external factor on MSMEs at Bank BJB. These factors have positive and significant impact simultaneously on non-performing loans as much as 68,66%. The internal factor has higher impact on it. Apart from that, non-performing loans also has negative and significant impact on profitability as much as 72,08%. It is important for the banks to pay attention more to the internal factor of MSMEs as prospective debtor, in order to avoid non-performing loans issues and reduce profitability.

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