

## FINANCIAL PERFORMANCE AND INFLATION'S EFFECTS ON INDONESIA'S NATIONAL PRIVATE COMMERCIAL BANKS' RETURN ON ASSETS



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### Abstract

This research was conducted to investigate the effect of financial performance as represented by Loan Deposit Ratio (LDR), Non-Performing Loans (NPL), and Net Interest Margin (NIM), as well as Inflation on profitability at National Private Commercial Banks listed on the Indonesia Stock Exchange (IDX). This research adopts a quantitative approach with empirical analysis using panel data from 2017 to 2021. The sampling method uses purposive sampling, with 23 banks selected as samples. Data analysis was performed using the panel data regression method through Eviews software. The panel data estimation showed a significant influence between the Loan Funding Ratio (LFR) and Inflation variables on the Return on Assets (ROA) of national private commercial banks in Indonesia in 2017-2021. These findings provide a solid empirical basis for providing better financial policy recommendations to these banks in the future.

**Keywords:** ROA, Inflation, LFR, NIM, and NPL

## INTRODUCTION

Banking has a very vital role in the economy of a country. Thus, the development of banking will impact a country's economy. This condition shows the important role of banking in collecting and channeling funds from the public to support the implementation of national development as mandated in Law Number 10 of 1998 (*Pemerintah RI*, 1998). The Covid-19 pandemic has had a detrimental impact on the growth of the national economy, with a contraction of 2.41% in the first quarter of 2020 and a further contraction of 5.32% in the second quarter of 2020 (*Badan Pusat Statistik*, 2021). The slowdown in economic growth during this pandemic is due to the disruption of almost all economic activities. Weaknesses in the real sector have contributed to the deceleration of credit growth and led to a decline in the banking industry's profitability.

One indicator for analyzing the banking industry's profitability is the return on assets (ROA). ROA represents the ratio of pre-tax earnings to total assets. The ROA ratio reflects the efficiency of asset management (Kasmir, 2018). The higher the ROA value, the greater the potential profit and the better the bank's position in utilizing its assets. Several factors influence banking profitability, including external and internal factors (al Arif & Rahmawati, 2018). External factors are related to fluctuating and unpredictable macroeconomic conditions. In addition to external factors, internal factors play an important role in banking profitability. Some of these internal factors include Loan Funding Ratio (LFR), Net Income Margin (NIM), and Non-Performing Loan (NPL). Here is the fluctuation of Inflation, Average CAR Ratio, LFR, and ROA in National Private Commercial Banks in Indonesia during 2017-2021.

**Table 1**  
**Development of Inflation, Average CAR Ratio, LFR, and ROA in National Private Commercial Banks in Indonesia 2017-2021.**

Tahun	ROA		INFLASI		LFR		NIM		NPL	
2017	1.42%		3.81%		79.46%		8.09%		4.92%	
2018	1.54%	↑ 7.60%	3.20%	↓ -19.13%	83.61%	↑ 4.96%	7.60%	↓ -6.40%	3.44%	↓ -43.22%
2019	1.45%	↓ -5.97%	3.03%	↓ -5.56%	84.97%	↑ 1.60%	7.57%	↓ -0.42%	5.85%	↑ 41.22%
2020	1.15%	↓ -26.40%	2.04%	↓ -48.79%	71.63%	↓ -18.62%	4.57%	↓ -65.70%	4.15%	↓ -40.76%
2021	1.36%	↑ 15.29%	1.58%	↓ -28.93%	66.82%	↓ -7.20%	4.33%	↓ -5.45%	3.89%	↓ -6.77%

Data Source: OJK, Data processed, 2022

Table 1 shows the fluctuation in the annual average Return on Assets (ROA) of National Private Commercial Banks (BUSN). In the year 2018, there was an increase in ROA by 7.60%, but in 2019, there was a decline in ROA by 5.97%. In 2020, amidst the global pandemic Covid-19, ROA significantly decreased, amounting to 26.40%. In response to this situation, Bank Indonesia, the Ministry of Finance, and the Financial Services Authority (OJK) implemented monetary stabilization policies, fiscal stimulus, and large-scale social restrictions to promote economic recovery and alleviate the burden on the public caused by the impact of Covid-19. These efforts yielded results by increasing the annual average ROA of BUSN to 15.29%.

Additionally, there is a phenomenon of inflation movement from 2017 to 2020, showing stability and low inflation rates. However, this phenomenon did not contribute to an increase in the annual average ROA of BUSN. Nevertheless, in 2021, despite the decrease in inflation below the threshold set by Bank Indonesia (2%-4%), it managed to increase the annual average ROA of BUSN by 15.29%.

There is also a phenomenon of the annual average movement of the Loan to Funding Ratio (LFR) of BUSN in 2019, where the LFR value experienced an increase of 1.60%. However, the average ROA of BUSN decreased by 1.6%. Similarly, in 2021, despite the average LFR value of BUSN decreasing by 7.20%, the average ROA of BUSN increased by 15.29%.

Furthermore, the annual average movement of the Net Income Margin (NIM) of BUSN throughout the years 2017-2021 shows a tendency to decrease NIM values. The most profound decrease occurred in 2020, with a decline of 65.70% in NIM. The decrease in NIM values impacts the fluctuation of ROA values throughout the year.

Previous research shows that several variables affect Return on Assets (ROA). Research on the inflation variable by Arumingtyas & Muliati, (2019), Kalengkongan, (2013), and Solihin et al., (2022) showed a positive influence on ROA. However, research by Saleh (2021) stated that inflation does not affect ROA. These findings indicate a research gap that requires further investigation.

Furthermore, research on the Loan Funding Ratio (LFR) variable by Bernardin, (2016) and Wicaksono & Debora, (2020) showed that LFR does not affect ROA, while research by Maulana et al., (2021) showed the opposite. These findings also indicate a research gap that needs further investigation.

Furthermore, research on the Net Income Margin (NIM) variable by Rembet & Baramuli, (2020) and Syamsuddin, (2018) showed that NIM does not affect ROA, while research by Cahyani et al., (2022), Putra & Rahyuda, (2021), and Wicaksono & Debora, (2020) showed the opposite. These findings also indicate a research gap that requires further investigation.

Lastly, research on the Non-Performing Loan (NPL) variable by Maulana et al., (2021), Wicaksono & Debora, (2020), and Widyastuti & Aini, (2021) showed that NPL affects ROA, while research by Putra & Rahyuda, (2021) and (Rembet & Baramuli, 2020) showed different results. These findings also indicate a research gap that needs to be further examined.

## **REVIEW OF LITERATURE**

### **Agency Theory**

Agency theory explains that agency relationships arise when one or more people (principals) hire others (agents) to carry out an activity and then delegate the decision-making authority to the agent (Jensen & William, 1976). The relationship between principals (public) and agents (banking management) in banking companies is influenced

by the existence of a regulator, namely the government through BI. The principal (community) gives responsibility to the agent (banking management) in accordance with the agreed work contract in accordance with the policy passed by the regulator. Thus, 3 (three) agency relationships appear, which can lead to information asymmetry, namely: (1) the relationship between depositors, banks, and regulators, (2) the relationship between owners, managers, and regulators, (3) the relationship between borrowers (borrowers), managers and regulators

### **Principal-Agent Control**

From an agency perspective, banking control concerns who controls, who is controlled, and what the control mechanism is (Taswan, 2010). This problem is related to who owns it, who acts as a management decision-maker, and who bears the risk. The bank owner can directly act as a strategic decision-maker in the management field and also act as the person in charge of the risk of the decision. However, in its development, bank owners can involve professionals to carry out these actions. The process for determining the bank's management structure is meticulous because the determination of trusted people is in addition to being under the control of the bank owner and the control of the monetary authority (Bank Indonesia). Bank owners can determine and propose professionals to occupy management positions. Bank Indonesia has the authority to conduct a fit and proper test on these professionals.

### **Agency-Debt Control**

Control over the performance of banking institutions is carried out by shareholders and also carried out by creditors or investors, or depositors (Taswan, 2010). In banking terms, it is called market discipline; from the agency, perspective can be explained through the debt agency relationship. The use of debt by banks will be an incentive tool for managers to work more carefully in order to avoid the threat of bankruptcy risk.

Besides that, debt will also encourage managers to hand over free cash flow to shareholders for investment purposes. From the perspective of banking management, debt is the main source of funds for banks, as indicated by the relatively large risk of debt to bank capital, most of which place bank funds financed by third-party funds (savings, public deposits). Thus, the role of debt to the bank is quite large. However, using debt or public

funds can cause agency problems when shareholders and managers make high-risk investment decisions.

### **Return on Assets (ROA)**

ROA is a profitability ratio that serves to assess a company's ability to obtain profits from the assets used (Kasmir, 2018). This ratio is used to evaluate whether management has received appropriate compensation for the assets it already has. The formulation of ROA is the ratio between profit after tax to total assets (Ramadhani & Rizkan, 2021).

### **Effect of Inflation on ROA**

*Inflation* is a symptom in which the general price level increases continuously. Inflation has both positive and negative impacts on the economy. When a country's economic condition is sluggish, the government, through Bank Indonesia, carries out an expansionary monetary policy by lowering interest rates. High and unstable inflation reflects economic instability, which results in a general and continuous increase in the price value of goods and services and an increasingly high poverty rate in Indonesia (Salim et al., 2021). Likewise, low inflation is a reflection of failure in spurring economic growth. Therefore, low inflation indicates that the government is experiencing difficulties controlling and boosting national economic growth. Based on this description, the research hypothesis can be formulated:

H1: Inflation has a positive effect on ROA

### **The Influence of LFR on ROA**

Loan to Funding Ratio (LFR). LFR describes a ratio that measures a bank's ability to issue a credit from third-party funds collected at the bank. This ratio provides information about the number of third-party funds channeled in the form of credit (Kasmir, 2018). The higher the LFR, the more profit the bank earns, with the assumption that the bank can extend its credit effectively. It is hoped that the number of bad loans will be low so that it will impact increasing profitability (ROA). Based on Bank Indonesia Regulations, the LFR limit is 78% to 92% (*Bank Indonesia*, 2015). Based on this description, the research hypothesis can be formulated:

H2: LFR has a positive effect on ROA

### **The Influence of NIM on ROA**

Net Income Margin (NIM) is a ratio that measures the ability of bank management to manage its productive assets to generate net interest income. Bank net interest income is obtained by providing credit or loans, while banks have interest expense obligations to depositors. The greater this ratio, the higher the interest income on productive assets managed by the bank, so the possibility of a bank in a troubled condition is getting smaller. Thus, the greater the change in a bank's Net Income Margin (NIM), the greater the bank's profitability, which means that the financial performance is increasing (Kasmir, 2012). Based on this description, the research hypothesis can be formulated:

H3: NIM has a positive effect on ROA

### **The Influence of NPL on ROA**

Non-Performing Loan (NPL) is a ratio that indicates the ability of bank management to manage non-performing loans. The higher the NPL value, the greater the risk of credit failure, which has the potential to reduce interest income and reduce profits (Kasmir, 2012). So, the higher the NPL, the lower the profitability value will be due to the loss of the bank's opportunity to earn profits. Hence banking must be more careful in extending credit so as not to cause high NPLs. Based on this description, the research hypothesis

H4: NPL has a negative effect on ROA

## **RESEARCH METHOD**

The population in this study are all national private commercial banks in Indonesia listed on the Indonesia Stock Exchange (IDX) during 2017-2021. While the sampling method used purposive *sampling*. Based on predetermined criteria, 23 national private commercial banks were obtained for 5 years, so the number of samples determined was 115.

The type of data used in this research is quantitative data. The data source used in this research is the secondary data source. The data used in this study were obtained through annual reports and financial reports on banking companies published by the Indonesia Stock Exchange (IDX) in 2017-2021.

Data analysis used Panel Data Regression with Eviews software. Panel data is a combination of time series data and cross-section data. This panel data is used to determine significant factors based on repeated observations of an object at different times.

## RESULTS AND DISCUSSION

### Descriptive Statistics

Descriptive statistical analysis provides an overview or description of data seen from the average, standard deviation, maximum, and minimum (Sugiyono, 2007)

**Table 2**  
**Statistical Descriptive Results**

	<b>ROA</b>	<b>Inflation</b>	<b>LFR</b>	<b>NIM</b>	<b>NPL</b>
Mean	0,0139	0,0273	0,7730	0,0643	0,0445
Median	0,0105	0,0303	0,8417	0,0462	0,0276
Maximum	0,0910	0,0381	1,6476	0,6362	0,5058
Minimum	0,0002	0,0158	0,0001	0,0025	0,0000
Std,Dev,	0,0157	0,0081	0,3447	0,0882	0,0590
Observations	115,0000	115,0000	115,0000	115,0000	115,0000

Data Source: Eviews, Data Processed, 2022

Based on the results of descriptive statistical testing, it can be concluded that:

The ROA variable has an average value of 0.0139; the highest value is 0.091, and the lowest is 0.0002. With a total of 115 observations, the ROA variable has small data variations because the standard deviation value (0.0157) is smaller than the average value.

The inflation variable has an average value of 0.0273; the highest value is 0.0381, and the lowest is 0.0158. With a total of 115 observations, the LFR variable has small data variations because the standard deviation value (0.0081) is smaller than the average value.

The LFR variable has an average value of 0.7730; the highest value is 1.6476, and the lowest is 0.0001. With a total of 115 observations, the LFR variable has small data variations because the standard deviation value (0.3447) is smaller than the average value.

The NIM variable has an average value of 0.0643; the highest value is 0.6362, and the lowest is 0.0025. With a total of 115 observations, the LFR variable has small data variations because the standard deviation value (0.0882) is smaller than the average value.

The NPL variable has an average value of 0.0445; the highest value is 0.5058, and the lowest is 0.0000. With a total of 115 observations, the LFR variable has small data variations because the standard deviation value (0.0590) is smaller than the average value.

**Modeling**

Regression Analysis with Panel Data states that the panel data technique combines cross-section and time series data types (Winarno, 2015). The panel data model equation is as follows:

$$ROA = \alpha + \beta_1INFL + \beta_2LFR + \beta_3NIM + \beta_4NPL + e$$

The results of regression estimation using panel data with the Common Effect Model (CEM) approach, Fixed Effect Model (FEM), and Random Effect Model (REM) can be seen in the following table:

**Table 3**  
**Regression Results of Cross-Section Panel Data**

Variable	Coefficient		
	CEM	FEM	REM
INFL	0,6465	0,3485	0,5483
LFR	-0,2468	0,1456	-0,1017
NIM	-0,0948	0,1355	-0,0220
NPL	-0,1968	-0,1862	-0,1888
C	-3,5982	-3,6772	-3,6210
R-squared	0,1766	0,7450	0,1002
Adjusted R-squared	0.1455	0.6661	0.0662
F-statistic	5,6835	9,4392	2,9506
Prob(F-statistic)	0,0003	0,0000	0,0234

Data Source: Eviews, Data processed, 2022

### Best Model Selection

Based on the results of this analysis which model is the most appropriate/appropriate chosen based on the characteristics of the data to answer the research objectives, the test is carried out as follows:

#### Chow Test

The Chow test helps determine the model type to choose between the common and fixed effect models. The hypothesis in determining the panel data regression model is that the fixed effect model will be selected if the chi-square cross-section value  $<$  significant value (0.05). Conversely, if the value of the chi-square cross-section  $>$  significant value, then the common effect model will be used, and the Hausman test is unnecessary (Winarno, 2015). The results of the Chow test are as follows:

**Table 4**  
**Chow Test Results**

Effects Test	Statistic	d.f.	Prob.
Cross-section F	8.511188	(22,84)	0.0000

Data Source: Eviews, Data processed, 2022

Based on the results of the Chow test analysis, the probability value of the chi-square cross section was 0.0000 ( $<$ 0.05); thus, it can be concluded that the best-estimated model is FEM.

#### Hausman Test

The Hausman test is a test to determine the type of model to choose between the Fixed Effect Model (FEM) and the random effect model (CEM). The hypothesis in determining the panel data regression model is that if the random cross-section value  $<$  significant value (0.05), then the fixed effect model. Conversely, if the random cross-section value  $>$  significant value (0.05), then the random effect model is selected (Winarno, 2015). The results of the Hausman test are as follows:

**Table 5**  
**Hausman Test**

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	5.163289	4	0.2709

Data Source: Eviews, Data processed, 2022

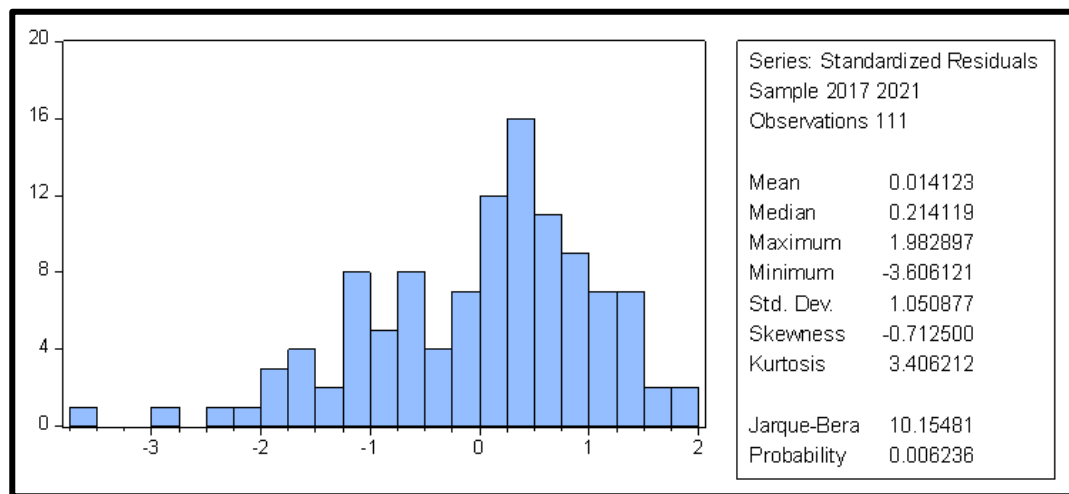
Based on the results of the Hausman test, the random cross-section probability value was 0.2709 (> 0.05), so it can be concluded that the random effect model was selected. Based on the Chow test and Hausman test, it can be concluded that the correct/appropriate regression equation model is an equation model using the random effect model. So that the multiple linear regression equation can be arranged as follows:

$$ROA = -3.6210 + 0.5483 INFL - 0.1017 LFR - 0.0220 NIM - 0.1888 NPL + e$$

**Classic Assumption Test**

**Normality Test**

To detect that the data used has a normal distribution, the research uses the Jarque-Berra method. If the Jarque-Berra Probability value is less than the probability value of 0.05, then the data used is not normally distributed. Vice versa, if the Jarque-Berra Probability value is more significant than 0.05, it can be concluded that the data used is normally distributed (Winarno, 2015).



**Figure 1**  
**Normality Test**

Data Source: Eviews, Data Processed, 2022

Based on the results of the analysis, the Jarque-Bera value is 0.006236 or less than 0.05, so it can be concluded that the data is not normally distributed. However, because the data used is less than 30, violations of the normality assumption test are not a big problem (Ghasemi & Zahediasl, 2012).

### Heteroscedasticity

The heteroscedasticity test is a test that is used to assess whether there are variance differences from the residuals for all observations (Winarno, 2015). This test absolutely must be done in a linear regression analysis. In this study, the white heteroscedasticity test was used, with the following results:

**Table 6**  
**Heteroscedasticity Test**

Variable	Coefficient	t-Statistic	Prob.
C	-0.165611	-0.274283	0.7844
INFL	-0.155465	-0.965984	0.3363
LFR	-0.075212	-1.512903	0.1333
NIM	-0.188871	-2.327480	0.0518
NPL	0.051984	0.940918	0.3489

Data Source: Eviews, Data processed, 2022

Based on the results of the analysis, the value of prob. For each variable greater than 0.05, the null hypothesis (H0) is accepted, which means that the regression model is homoscedasticity, or in other words, there is no problem with the assumption of non-heteroscedasticity.

### Multicollinearity Test

To ensure whether or not there is a high correlation between the independent variables in a linear regression model, a multicollinearity test is performed. If, in a regression model, it is found that there is a high correlation between the independent variables, then the relationship between the independent/independent variable and the dependent variable becomes disrupted (Winarno, 2015). The results of testing the assumption of multicollinearity are as follows:

**Table 7**  
**Multicollinearity Test**

	<b>INFL</b>	<b>LFR</b>	<b>NIM</b>	<b>NPL</b>
<b>INFL</b>	1	0.101655	0.217201	-0.01208
<b>LFR</b>	0.101655	1	0.127308	-0.0454
<b>NIM</b>	0.217201	0.127308	1	-0.03196
<b>NPL</b>	-0.01208	-0.0454	-0.03196	1

Data Source: Eviews, Data processed, 2022

Based on the results of this analysis, it can be seen that the correlation coefficient between each independent variable is less than 0.8, so no correlation is found between each independent variable.

**Model Feasibility Test**

After testing the best model selection, the random effect model was chosen. The feasibility test of the selected model, namely the random effect model, is carried out in the following way:

**Table 8**  
**F Test**

<b>F-statistic</b>	<b>Prob(F-statistic)</b>
29,506	0,0234

Data Source: Eviews, Data processed, 2022

Based on the random effect modeling results, the Prob value (F-statistic) is 0.0234, which is smaller than the significance level of 0.05. It can be concluded that all the independent variables jointly affect the dependent variable. The selected model is declared feasible to interpret the effect of the independent variables on the dependent.

**Table 9**  
**T-Test**

<b>Variable</b>	<b>t-Statistic</b>	<b>Prob,</b>
C	-4,5291	0,0000
INFL	2,5525	0,0121
LFR	-1,0560	0,2934

NIM	-0,1691	0,8660
NPL	-2,2202	0,0285

Data Source: Eviews, Data Processed, 2022

Based on the results of the t-test, it can be concluded that: a) The inflation variable has a probability value of  $0.0121 < \alpha$  significance level of 0.05, so it can be concluded that inflation has a significant positive effect on ROA at BUSN in 2017-2021; b) The LFR variable has a probability value of  $0.2934 > \alpha$  significance level of 0.05, so it is concluded that LFR has no significant adverse effect on ROA at BUSN 2017-2021; c) The NIM variable has a probability value of  $0.8660 > \alpha$  significance level of 0.05, so it is concluded that NIM has no significant adverse effect on ROA at BUSN 2017-2021; d) The NPL variable has a probability value of  $0.0285 > \alpha$  significance level of 0.05, so it is concluded that NPL has a significant negative effect on ROA at BUSN 2017-2021.

**Coefficient of Determination**

**Table 10**  
**Test Results for the Coefficient of Determination**

R-squared	0.100187
Adjusted R-squared	0.066231
S.E. of regression	0.655475

Data Source: Eviews, Data Processed, 2022

Adjusted R-Squared indicates the value of the coefficient of determination. Based on the table, it can be seen that the Adjusted R-Squared value is 0.0662, meaning that the profitability value proxied by the ROA variable from BUSN in 2017-2021 can be explained by the Inflation, LFR, NIM, and NPL variables of 6.62% while the remaining is 93.38% influenced by other variables outside this model.

**Inflation**

The inflation coefficient value was obtained at 0.5483; this shows that if there is an increase in Inflation of 1%, it will impact the profitability of the 2017-2021 BUSN by 54.83%. The probability value obtained is 0.0121, which is smaller than the whole level (5%); this indicates that the inflation variable has a significant positive effect on the profitability of the State-Owned Enterprises 2017-2021.

There is a reciprocal relationship (causality) between the growth rate economy and the inflation rate (Nadirin, 2017). Inflation can have a positive and negative effect on the level of banking profitability. The low inflation rate reflects the failure of the state to spur economic growth, so low Inflation indicates that the government is experiencing difficulties in controlling and boosting national economic growth. On the other hand, high Inflation will suppress people's purchasing power, thereby reducing the growth economy (Erbaykal & Okuyan, 2008). This results in export costs becoming more expensive, and the competitiveness of export products decreasing, the foreign exchange the country earns decreases.

The results of this study strengthen the research that has been conducted by Arumingtyas & Muliati, (2019); Kalengkongan, (2013); and Solihin et al., (2022), which examines Inflation against ROA at different periods. But the results of the research are contrary to research conducted by Saleh, (2021), who stated that Inflation does not affect ROA.

#### **Loan to Funding Ratio (LFR)**

The inflation coefficient value was -0.1017; this shows that if there is an increase in the LFR of 1%, it will have an impact on reducing the profitability of the 2017-2021 BUSN by 10.17%. The probability value obtained is 0.2934, greater than the significant level (5%); this indicates that the LFR variable has a non-significant negative effect on profitability at BUSN in 2017-2021.

The Commercial Loan Theory emphasizes that a bank will remain liquid if most of the credit disbursed is short-term trade credits and can be disbursed under normal business circumstances (Hasibuan, 2006). This theory states that banks will only provide short-term, self-liquidating loans through repaying installments on these loans as a source of liquidity. Phenomenon Loan to Funding Ratio (LFR) in the research period has increased, but the Return on Assets (ROA) has decreased.

This study's results strengthen the research conducted by Bernardin, (2016); and Wicaksono & Debora, (2020), which state that LFR does not affect ROA. But this study's results contradict the research obtained by Maulana et al., (2021), which stated that LFR effect ROA.

### **Net Income Margin (NIM)**

The inflation coefficient value was -0.0220; this shows that if there is an increase in NIM of 1%, it will have an impact on decreasing the profitability value of BUSN for 2017-2021 by 2.20%. The probability value obtained is 0.8660, greater than the significant level (5%); this indicates that the NIM variable has a non-significant negative effect on profitability at BUSN in 2017-2021.

The NIM ratio at BUSN for 2017-2021 indicates that bank income earned from interest does not affect bank profit derived from bank assets (ROA) because ROA is heavily influenced by bank capital adequacy, small operating costs, and the bank's ability to fulfill its financial obligations.

The results of this study strengthen the research conducted by Rembet & Baramuli, (2020); Syamsuddin, (2018), which state that NIM does not affect ROA. But the results of this study contradict the results of research obtained by Cahyani et al., (2022); Putra & Rahyuda, (2021); and Wicaksono & Debora, (2020), which states that NIM affects ROA.

### **Non-Performing Loan (NPL)**

The inflation coefficient value was -0.1888; this shows that if there is an increase in the NPL of 1%, it will have an impact on reducing the profitability of the 2017-2021 BUSN by 18.88%. The probability value obtained is 0.0285, which is smaller than the significant level (5%); this indicates that the NPL variable significantly negatively affects the profitability of the 2017-2021 BUSN.

The results of this study indicate that the greater the NPL value, the higher the bank must bear the risk of credit risk. So that the higher the bank's NPL ratio, the more it will weaken banking operations. This is because bad loans erode bank profitability so banks can incur high disposal costs. Non-performing loans have an opportunity cost in that interest-free productive asset (especially in money) can be invested elsewhere and provide income.

The results of this study reinforce the research that has been conducted by Maulana et al., (2021); Wicaksono & Debora, (2020); and Widyastuti & Aini, (2021), which stated that NPL had a negative and significant effect on ROA. However, the results of this study contradict the research results obtained by Putra & Rahyuda, (2021); and Rembet & Baramuli, (2020), which state that NPL does not affect ROA.

## CONCLUSION

This study empirically tested the effect of Inflation, Loan Deposit Ratio (LFR), Net Interest Margin (NIM), and Non-Performing Loans (NPL) to Return On Assets (ROA) of national private commercial banks in Indonesia in 2017-2021. I used panel data consisting of time series data for 2017-2021 and cross-section data from 23 national private commercial banks in Indonesia.

Based on the results of multiple linear regression analysis with Eviews software, it shows that: a) Inflation has a significant positive effect on ROA, b) Loan to Deposit Ratio (LFR) no significant negative effect on ROA, c) Net Interest Margin (NIM) no significant negative effect on ROA dan d) Non-Performing Loan (NPL) significant negative effect on ROA.

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