THE EFFECT OF CAR, BOPO RATIO, AND NPL RATIO ON THE PROFITABILITY (ROE) OF FOREIGN EXCHANGE BUSINESS IN INDONESIA (2012-2016 PERIOD).

Fauzan akbar[1], Fauzi isnaen[2]
Universitas Bina Sarana Informatika Indonesia[1,2]
fauzan.fab@bsi.ac.id[1],fauzi.fsn@bsi.ac.id[2]

ABSTRACT

Banking financial performance comes from several factors, namely that it is very important for a bank's capital to be achieved within the limits set by Bank Indonesia. The ratios that are quite significant in banking are the capital adequacy ratio (CAR), the BOPO Ratio, OJK explained that efficiency continues to be encouraged for banks so that they are able to reduce operational costs to operating income, as well as the ratio of non-performing loans or non-performing loans (NPL). . This study emphasizes the effect of CAR, BOPO ratio, and NPL ratio on the profitability of foreign exchange BUSN in Indonesia. Researchers used a sample of 35 banks for the 2012-2016 period, with secondary data types and quantitative analysis methods, statistical calculations in this study using Eviews 8 software. and NPL have no significant effect on ROE. The ratio of CAR, BOPO, and NPL statistically significant effect on bank profitability.

INTRODUCTION

Indonesia's economic growth in 2016 was recorded at 5.02%, improving compared to 2015 which was 4.88%, in line with Bank Indonesia's forecast. Economic growth in 2016, particularly in the fourth quarter, was supported by growth in household consumption, improved investment performance, and increased exports. (source: bank indonesia). Financial growth in Indonesia has increased significantly every year, although inflation has increased or decreased drastically (Widayati & Effendi, 2021). Banking in Indonesia includes conventional banks and Islamic banks, the two banks have different principles (Usman, 1998). The existence of financial growth in terms of banking can have an influence on the macro economy in Indonesia (Ulum, 2014). then a bank is required to achieve good performance or be said to be healthy so as to facilitate the financial aspects of the state.

The financial services authority noted that the growth of conventional commercial banks was lower than that of Islamic commercial banks (Tamitiadini, Adila, & Dewi, 2019). In nominal terms, the largest increase was still occupied by conventional banks of Rp 31.46 trillion (Rauch & Evans, 2000). Meanwhile, the assets of Islamic commercial banks (BUS) only increased by Rp. 1.55 trillion. However, this is not the case with asset growth. In percentage terms, the growth of conventional commercial banks (BUK) is still lower than that of BUS. The growth of BUS assets was recorded at 14.70%, while the growth of BUK assets (YoY) was only 13.32%. On the other hand, the LDR for the position of April 2017 was recorded at 91.44% or slightly lower than the LDR as of April 2016 (91.54%) and December 2016 (93.25%).

If viewed from the previous period, according to the president director of the independent Islamic bank, Agus Sudiarto, stated that the aggregate growth of Islamic banks

in Indonesia in the period 2000-2014 exceeded that of conventional banks, this can be seen from several indicators (Takagi, Esteban, Mikami, & Fujii, 2016). Total asset growth of BUS if calculated based on the compound annual growth rate (CAGR). In terms of financing, the growth was 43% higher than conventional banks which only amounted to 19%. (source: Republika.co.id).

Banking financial performance comes from several factors, namely that it is very important for a bank's capital to be achieved within the limits set by Bank Indonesia. Adequate capital allows for increased financial growth in Indonesia (Sutopo, 2002). However, in the midst of slowing economic growth, the capital adequacy ratio (CAR) of commercial banks increased (Van Voorst, 2016).Based on Indonesian banking statistics (SPI) at the OJK, as of the first quarter of 2016, the CAR of commercial banks reached 22%, an increase of 61 basis points from the end of last year which was 21.39%. Groups of business activity banks (BUKU) III and IV recorded a year-to-date increase of 75 bps from 19.26% to 20.01%. The size of the bank's CAR ratio illustrates the resilience of the bank to face credit risk, market risk, and other risks.

Bank efficiency is one of the important indicators to analyze the performance of a bank and also as a means to further increase the effectiveness of monetary policy (Sedarmayanti, 2018). OJK explained that efficiency is continuously encouraged for banks so that they are able to reduce operational costs against operating income (BOPO).(Ripley & Franklin, 1986) Arilajiji (director of bank supervision at the Sulampua ojk office) said that BOPO is indeed the concern of the OJK, so that banks are able to reduce the ratio to a lower level (Rijanta, Hizbaron, & Baiquni, 2018). The maximum BOPO ratio is 85%, and if it is more than that, it means that the banking system is not efficient. As is known as of October 2013, the average BOPO ratio for commercial banks nationally is 73.74%. This figure decreased 12.7% compared to the position in October 2011 which amounted to 86.44% (Putera, Valentina, & Rosa, 2020). Therefore, as an effort to reduce the BOPO ratio, the OJK requested that banks pay attention to their overhead costs. In addition, careful planning must be carried out to anticipate excessive loads (Pressman & Wildavsky, 1973). For example, when banks expand their network openings.

The ratio of non-performing loans or non-performing loans (NPL) of national banks as of March 2017 was recorded to be improving compared to the February period. However, since 2015 non-performing loans have continued to increase (Pratama, 2016). From the Indonesian banking statistics (SPI) in February 2017 published by the Financial Services Authority (OJK), commercial bank lending as of February was recorded at Rp. 4.308 trillion with an NPL ratio of Rp. 135.99 trillion or 3.16%. This amount is higher than the period at the end of 2016, credit distribution was recorded at Rp. 4.377 trillion with the number of non-performing loans of Rp. 128.13 trillion or with a percentage of 2.93%. Then in the 2015 period, lending reached Rp 4.057 trillion, the total NPL was Rp 100.93 trillion or the percentage of non-performing loans was 2.49%. In 2014, loans were recorded at IDR 3.674 trillion with non-performing loans at IDR 79.38 trillion with a percentage of 2.16%. The head of the OJK's communications and international department, Triyono, said in a written statement that the credit risk was considered stable, because OJK saw that there was still a global economic recovery process that could have a positive impact on the financial services sector (Prasojo, 2020). "Credit risk is stable, the gross NPL ratio as of March is 3.04%, Net is 1.43%," said Triyono. OJK also sees that there is still room in the financial services sector to spur further domestic economic growth by taking advantage of the ongoing improvement momentum (Pearce, Robinson, & Subramanian, 2000).Some downside risks to policy normalization in developed countries and the issue of euroscepticism are expected to begin to

subside. Despite this, OJK will continue to monitor various developments, both global and domestic, that could disrupt financial system stability.

Based on the background of problems regarding capital adequacy, bank operations or bank efficiency and non-performing loans in foreign exchange BUSN. The research that reflects the background of this problem.(Wijayanti, 2020) entitled the effect of NPL, LDR, CAR on the profitability of National Private Commercial Banks foreign exchange. The results of this study explain that the non-performing loan (NPL) variable has an effect on the profitability of foreign exchange BUSN ROA (O'Toole, 1986). LDR and CAR have no effect on ROA of foreign exchange BUSN registered with BI with assets exceeding 50 billion.

A healthy bank is a necessity for an economy that wants to grow and develop well, bank management is guided to always maintain its health (Olsen & Morgan, 2005). Based on bank indonesia regulation no. 13/1/PBI/2011,

Bank Indonesia refined the method for assessing the soundness of commercial banks by using a risk-based bank rating approach, the RGEC method. Profit growth is an indicator to measure the soundness of a bank. The author aims to analyze the effect of banking soundness level using NPL LDR, PDN, BOPO, and CAR on profit growth. This research is included in the type of descriptive veritative and causal research (Nursanjaya, 2021).By using purposive sampling, the population in this study is a national private foreign exchange bank for the period 2012-2015 with 33 samples (Merton, 1963). The method used in this research is multiple linear regression. The data used in this research is secondary data (Masdar, Asmorowati, & Irianto, 2009). The data analysis technique used is the multiple regression analysis test and the classical assumption hypothesis test. The results showed that NPL, LDR, and CAR had no significant effect on profit growth, while the ratio of PDN and BOPO had a significant effect on profit growth.

Based on the background of problems regarding capital adequacy, bank operations or bank efficiency and non-performing loans in foreign exchange BUSN. The research by Putri, Chandra (2015), entitled the effect of NPL, LDR, CAR on the profitability of National Private Commercial Banks foreign exchange. The results of this study explain that the non-performing loan (NPL) variable has an effect on the profitability of foreign exchange BUSN ROA. LDR and CAR have no effect on ROA of BUSN registered with BI with assets exceeding 50 billion.

METHOD RESEARCH
A. Research Strategy
In this study the data used is a quantitative approach. The data is a type of secondary data in the form of banking financial ratios (BUSN) of foreign exchange in Indonesia (Maryani & Nainggolan, 2019). The secondary data was taken on the official website of each bank during the period of this study, namely 2012-2016. In accordance with the analysis in this study, the secondary data taken are bank capital adequacy (CAR), operating costs to operating income (BOPO), the ratio of bad loans (NPL) and bank profitability (ROE).
B. Research population
The population in this study is distinguished between:
1. General population, overall foreign exchange banking companies registered with BI and still operating during the study period 2012-2016 were 35 banks.

Table 1
Foreign Exchange Bank Population

No.	Nama Bank

1.	Bank Rakyat Indonesia Agroniaga, Tbk
2.	Bank Antar Daerah
3.	Bank Artha Graha Internasional, Tbk
4.	Bank BNI Syariah
5.	Bank Bukopin, Tbk
6.	Bank Bumi Arta
7.	Bank ICB Bumiputera Indonesia, Tbk
8.	Bank Central Asia, Tbk
9.	Bank CIMB Niaga, Tbk
10.	Bank Danamon Indonesia, Tbk
11.	Bank Ekononomi Raharja, Tbk
12.	Bank Ganesha
13.	Bank Hana
14.	Bank Himpunan Saudara 1906, Tbk
15.	Bank ICBC Indonesia
16.	Bank Index Selindo
17.	Bank SBI Indonesia
18.	Bank Internasional Indonesia, Tbk
19.	Bank QNB Kesawan, Tbk
20.	Bank Maspion Indonesia
21.	Bank Mayapada Internasional, Tbk
22.	Bank Mega, Tbk
23.	Bank Mestika Dharma
24.	Bank Metro Express
25.	Bank Muamalat Indonesia
26.	Bank Mutiara, Tbk
27.	Bank Nusantara Parahyangan, Tbk
28.	Bank OCBC NISP, Tbk
29.	Pan Indonesia Bank, Tbk
30.	Bank Permata, Tbk
31.	Bank Sinarmas, Tbk

32.	Bank Of India Indonesia, Tbk
33.	Bank Syariah Mandiri
34.	Bank Syariah Mega Indonesia
35.	Bank UOB Indonesia

2. Target population, based on the population of foreign exchange banks that were still operating during the study period. According to Sugiyono (2013: 215) in research, population is defined as a generalization area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Mahadiansar & Romadhan, 2021). The population is for example the population in a certain area, the number of employees in a particular organization. So the population of this study is a total of 35 companies located in Indonesia (Luhmann, 1992). The population of the company is a foreign exchange bank that is still operating during this research period 2013-2016.

C. Research Sample

The sample selection (BUSN Foreign Exchange) is by purposive sampling, if it has the following criteria:
1. The bank selected as the sample is a foreign exchange BUSN in Indonesia (Lipsky, 1971).
2. The sample bank must have a ratio financial report during the research period, namely 2012-2016 (Lindblom, 1968).
3. Total sample N minimum 30.

Based on the above sample selection criteria, Foreign Exchange BUSNs that meet the criteria are shown in the table below:

Table 2
Sample Selection Criteria

No	Kriteria	Amount
1	foreign exchange BUSNs in Indonesia which were still operating during the study period	35
2	foreign exchange BUSNs that have ratio financial reports in the study period	35
3	Banks that meet the research sample criteria	8
	Total N sample data (8x5). 8 foreign exchange BUSN and 5 years research period	40

Source: Bank Indonesia

Based on the sample selection criteria above, the list of foreign exchange BUSN samples is as follows.

Table 3
List of Research Sample Banks

No	Nama Bank
1	Bank Bukopin,Tbk
2	Bank Central Asia,Tbk

3	Bank CIMB,Tbk
4	Bank Danamon Indonesia,Tbk
5	Bank Mega,Tbk
6	Bank Sinarmas, Tbk
7.	Bank Rakyat Indonesia Agroniaga, Tbk
8.	Bank Mayapada internasional, Tbk

Source: Bank Indonesia

D. Research data

The type of secondary data is in the form of annual financial statement ratios obtained from each foreign exchange BUSN (Lamport, 1986). This study uses a period of 8 years. (Kurnianingsih, Edison, & Safitri, 2017)The research data variables (CAR, BOPO Ratio, and NPL Ratio) allow for an influence on ROE.

E. Method of collecting data

The data collection method in using this research archive strategy is in the form of secondary data taken on the official website of the foreign exchange BUSN (Kodoatie, 2021). The data is the annual financial report of each bank during the period 2012-2016.

F. Multiple Linear Regression Analysis

In this study, there are 3 independent variables, namely CAR, BOPO Ratio and NPL Ratio, and one dependent variable, namely ROE profitability(Kim & Gim, 2020). Then the general equation of regression analysis used in this study is as follows.

ROE= +β_1 X_1+β_2 X_2+ _(3) X_(3)+ _3

Information:

ROE (Return On Equity) = Bank Profitability

= Constant

1, 2, 3 = Regression Coefficient

X1 = CAR

X2 = BOPO Ratio

X3 = NPL Ratio

1 = Error / intruder error

RESULT AND DISCUSSION

A. Analisis Deskriptif Statistik

Table 4

Statistik Deskriptif .

	BOPO	CAR	NPL	ROE
Mean	81,679	17,113	1,917	14,832
Maximum	97,900	26,210	3,680	30,400
Minimum	60,400	10,440	0,220	1,150
Std, Dev,	9,290	3,539	0,839	7,155

Source: processed data.

Descriptive statistics provide an overview or description of a data seen from the average value (mean), standard deviation, variance, maximum, minimum, sum, range, kurtosis and skewness (skewed distribution) of each variable, (Kasih, Juaeni, & Harijono, 2007).

Statistical testing shows the average BOPO variable is 81,679 with a smaller standard deviation of 9,290; the CAR variable is 17,113 with a smaller standard deviation of 3,539;

The NPL is 1.917 with a standard deviation of 0.839 and the ROE variable is 14,832 with a standard deviation of 7.155. So from the overall comparison of the average value and standard deviation, the four variables are normally distributed. The lowest and highest value variables of BOPO are 60,400 and 97,900; The CARs are 10,440 and 26,210; NPLs are 0.220 and 3,680; and ROE are 1,150 and 30,400.

In table 1 above, an overview of the descriptive statistics of the dependent variable is presented. independent, moderating and controlling. Based on the table above, it can be explained as follows:

1. In the BOPO variable, this variable has a maximum value of 97.9 and a minimum value of 60 (Johnston, 2014).40 with an average value of 81.68, and a standard deviation of 9.29. With this value, it can be said that the average company has the same operational costs for operations, meaning that there are not enough operational costs, thus reducing the BOPO ratio, so that a small BOPO ratio illustrates that the company is quite efficient.

2. In the CAR variable, this variable has a maximum value of 26.21 and a minimum value of 10.44 with an average value of 17.11, and a standard deviation of 3.54. With this value, it can be said that the average value of the deviation describes the data that the data is normally distributed (Emaliyawati, Prawesti, Yosep, & Ibrahim, 2016).

3. In the NPL variable, this variable has a maximum value of 3.68 and a minimum value of 0.22 with an average value of 1.92, and a standard deviation of 0.84. With this value, it can be said that the company's average NPL is still below the NPL required by the government, which is 2 percent (Hapsari & Djumiarti, 2016).

4. In the ROE variable, this variable has a maximum value of 30.40 and a minimum value of 1.15 with an average value of 14.83, and a standard deviation of 7.16. With this value, it can be said that the average ROE can be said to be good because it has an average above current bank interest (Fowler, 2019).

Regression using panel data is called panel data regression. According to Widarjono (2013) there are several advantages to using panel data. First, panel data which is a combination of two time series and cross section data is able to provide more data so that the degree of freedom is greater (Egeberg, 1999). Second, combining information from time series and cross section data can overcome problems that arise as a result of variable reduction.

Panel data regression can be done with three models, namely common effect, fixed effect, and random effect, each model has its own advantages and disadvantages (EDWARD III, 1980). The selection of the model depends on the assumptions used by the researcher and the fulfillment of the correct statistical data processing requirements, so that the results can be justified statistically (Dunsire, 1978). Therefore, the first step that must be done is to choose the right model from the three available models (Danar, 2020). Panel data that has been collected, regressed using the common model, fixed effect model and random effect can be seen in table 4

To determine the right model to be used in this study, a common effect and fixed effect model was carried out using the chow test and if the chow test obtained the model, namely the fixed effect model, it is necessary to do the Hausman test to better know which model is between the fixed effect model (FEM) and random effect model (REM) are more appropriate for data estimation that can be used. The following table compares the estimation results:

Table 5
Chow test.

Effects Test	Statistic	d.f.	Prob.

Cross-section F	5,961	(7,29)	0,000
Cross-section Chi-square	35,661	7	0,000

Source: processed data.

To find out the common effect model and the fixed effect model that will be selected for data estimation, a chow test will be carried out (Garros-Berthet, 1994). The following are the processed results with the help of Eviews 7 from the chow test, which can be seen in table 5

Testing the effect model with the Chow test, the results of the chi square probability of 0.000 <0.05 are significant. So Ha is accepted which means the Fix Effect model is better than the Common Effect model.

H0 is rejected if the P-value is less than the value of a (Berlo, 1960). On the other hand, H0 is accepted if the P value is greater than the value of a. The value of a used is 5%.

If the probability of F-count < 0.05, then H0 is rejected.

If the probability of F-count > 0.05, then H0 is accepted.

Information :

H0 : Common Effect Model

Ha: Fixed Effect Model

CONCLUSION

Suggestions from researchers for further research to obtain even better results are as follows The use of data in this study is annual financial report data, the use of quarterly financial report data is likely to produce more accurate results (Lamidi, 2022).Expansion of research objects to be used by selecting certain bank categories such as foreign exchange banks, regional development banks and others. Extending the period (time) of research is also suggested so that the amount of data obtained is more representative so as to get better results.With a predictive ability of 88% which is shown in the adjusted R Square value which indicates the need for other bank financial ratios that have not been included as independent variables that affect ROE such as NIM, GWM and others.

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