

ANALYSIS OF THE EFFECT OF NPL, NIM, NON INTEREST INCOME, AND LDR TOWARD ROA WITH SIZE AS CONTROL VARIABLES (Differences Study on Domestic and Foreign Banks Listed on BEI Period 2010-2015)

Aji Yudha¹, Mochammad Chabachib², Irene Rini Demi Pangestuti³

- ¹ Master of Management, Economics and Business Faculty of Diponegoro University
- ² Master of Management, Economics and Business Faculty of Diponegoro University
- ³ Master of Management, Economics and Business Faculty of Diponegoro University

ABSTRACT

This study aims to examine the factors that determine the difference ROA on domestic and foreign banks in Indonesia. The population in this research is data bank domestic and foreign listed on BEI in 2015. The sample used in this research totaled 228 banks. The result of the study showed that, in domestic banks, Non-Performing Loan (NPL) influential negative and significantly to Return On Assets (ROA). Net Interest Margin (NIM) have had a positive impact significantly to Return On Assets (ROA). While Non-Interest Income and Loan to Deposit Ratio (LDR) influential negative but not significantly to Return On Assets (ROA).

Category foreign banks Non-Performing Loan (NPL) influential negative and significantly to Return On Assets (ROA). Net Interest Margin (NIM) influential negative and significantly to Return On Assets (ROA). Non-Interest Income influential negative and insignificant to Return On Assets (ROA). Loan to Deposit Ratio (LDR) influential negative and significantly to Return On Assets (ROA). Size proved as a control variable. In this research used chow test to knows the difference between domestic and foreign banks. The result shows that there is no difference between domestic and foreign banks.

Key Words: Non Performing Loan (NPL), Net Interest Margin (NIM), Non Interest Income, Loan to Deposit Ratio (LDR), Size, Return On Assets (ROA).

I. INTRODUCTION

The banking industry has an important position on the financial system, which helps ease payment, monetary decision process, and the establishment of a stable financial system. The Bank serves as a collector of public funds and distributes it to the debtor in the form of credit. A healthy bank will perform its function well, so the bank will gain the trust of the community (Agent of Trust) (Susilo, 2000).

In Indonesia, banks are still considered a promising sector by foreign investors, as evidenced by the emergence of foreign banks in Indonesia. This can not be separated from the large market share and margin obtained (Mawardi, 2014). Foreign banks in Indonesia have differences in policies where foreign banks are more dependent on their headquarters. In addition, foreign banks in Indonesia have legal entities following their headquarters overseas while domestic banks

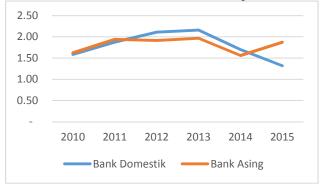
 $^{^1}$ Corresponding author, email: ajiyudha@live.com



in Indonesia are in the form of limited liability companies as stipulated in the law.

The entry of foreign banks in Indonesia has several advantages. The gains in question are the creation of domestic capital inflows of domestic economy, increased the competition banks, and among the emergence of a variety of products (Hadad and Santoso, 2004). With the entry of foreign banks in Indonesia, it will increase competition with domestic banks which will then affect the profitability of domestic and foreign banks. Figure 1.1 shows the ROA of domestic and foreign banks in Indonesia in the period 2010-2015.

Figure 1 **Differences of Domestic and Foreign Bank** ROA in Indonesia 2010 - 2015 period



Source: The bank's annual report, data is processed

Differences in bank profitability during the period 2010 - 2015 showed a downward trend which compared to foreign banks, domestic banks decreased significantly. This decline in profitability can be attributed to factors that affect it. The purpose of this study is to examine the factors that affect the profitability shown by bank ROA which is compared whether then there comparison between domestic and foreign hanks.

II. LITERATURE REVIEW

1. Risk Theory

The definition of risk in this theory is the risk arising because of the uncertainty or inability of the business partner (counterparty) to pay off the debt. Marrison (2002) states that loan defaults are a form of credit risk in which the borrower can not pay off the liabilities plus interest.

2. Managerial Efficiency Theory Of Profit

The definition of risk in this theory is the risk arising because of the uncertainty or inability the business of partner (counterparty) to pay off the debt. Marrison (2002) states that loan defaults are a form of credit risk in which the borrower can not pay off the liabilities plus interest.

3. The **Financial** Theory of Intermediation

The theory of financial intermediation suggests that commercial banks are advised to select borrowers, to minimize potential problems such as moral hazard and other adverse problems between banks and borrowers (Hughes & Mester, 2008). Moral hazard appears as a form of fraud against the borrower (Sinkey, 1998).

III. HYPOTHESES FORMULATION

1. Effect of Non Performing Loan (NPL) toward Return on asset (ROA)

Banks derive most of their income from loans. Because of the form of loans, banks are vulnerable in default. NPL indicates the ratio of bad debts to total credits. The problem of bad loans will hamper bank growth. High NPLs indicate low credit quality, so banks have to bear losses in operating activities. In the end the problem loans will reduce the bank's profitability (Kasmir, 2004). The problem of bad loans is in accordance with the risk theory where if the proportion of loans is higher than the total assets and the rapid growth of the loan portfolio is an early



signal of the problem on the quality of the loan which will affect the default. On the other hand, the low non-performing loan indicates good loan quality that impacts on the bank's high profitability. The statement is supported by the results of research conducted by M. VLAD & S. VLAD (2014), Socol (2013), Albulescu (2015), dan Dumicic & Rizdak, (2013).

H1a: Non Performing Loan (FDR) has a negative effect toward ROA Domestic Bank.

H1b: Non Performing Loan (FDR) has a negative effect toward ROA on Foreign Bank.

2. Effect of Net Interest Margin (NIM) toward Return On Assets (ROA)

The largest source of bank income comes from credit activities. Therefore, banks are required to take advantage of productive assets which are then distributed in the form of credit in order to obtain interest income. Net interest income is the interest difference earned by bank interest. If bank interest income is greater than interest cost, then bank profitability will increase. This is in accordance with the theory of managerial efficiency earnings where banks that can take advantage of productive assets well it will also increase profitability. The statement is supported by research conducted by Azam & Siddiqui, (2012).

H2a: Net Interest Margin (NIM) has a toward ROA positive effect Domestic Bank.

H2b: Net Interest Margin (NIM) has a positive effect toward ROA on Foreign Bank.

3. Effect of Non Interest Income toward Return on Assets (ROA).

Non Interest Income (NII) is one source of bank income derived from bank operating profit. Non interest income is a form of income made by banks in diversifying types of business in addition to lending. As a source of income for banks, an increase in the operational side of banks also increases profitability for banks. Conversely, a decrease in non-interest income will reduce bank profitability. This is consistent with the theory of managerial efficiency earnings where reductions in costs and efficiencies established bv **banks** will increase profitability. The statement is supported by M. M. Rahman et al. (2015), Alper & Anbar, (2011).

H3a: Non Interest Income (NII) has a positive effect toward ROA on Domestic Bank.

H3b: Non Interest Income (NII) has a positive effect toward ROA on Foreign Bank.

4. Effect of Loan to Deposit Ratio (LDR) toward Return On Assets (ROA)

LDR describes the ability of the bank as intermediary institution, which channeled in the form of credit and yields. Third party funds that are not distributed or idle money, the bank suffers losses (Muljono, 2011). LDR is the ratio of credit to third party funds. If the credit is given more, then the bank's profit increases. Therefore, the higher LDR ratio of banks that have built its function so as to increase the profitability of banks. In accordance with the theory of financial intermediation, banks are advised to select prospective borrowers so that moral hazard problems can be minimized (Berger & Mester, 1997). Thus, it is expected that no information asymmetry is reinforced by the bank so that the bank can run the intermediation function well. The statement is supported by research conducted by Almazari (2014), and Yong et al., (2013).

H4a: Loan to Deposit Rato (LDR) has a positive effect toward ROA Domestic Bank.



H4b: Loan to Deposit Ratio (LDR) has a positively affects toward ROA on Foreign Bank.

5. Differences in the effect of NPL, NIM, Non Interest Income, and LDR toward ROA on Domestic Bank and Foreign Bank.

The status of a bank owned by a domestic party is called a domestic bank, while a bank whose ownership status is owned by a foreign party is called a foreign bank which is divided into three types: as a branch office, as a subsidiary (either through a joint venture, merger or acquisition), and As representative offices (Hadad, Santoso, Besar, & Rulina, 2004). The effect of different ownership is the implementation of each bank policy differently. In general, the strategies and policies applied to foreign banks tend to be in the interest of mothers abroad. A foreign bank in determining its future or operational plans depends on the decision of the headquarters and the regional office.

Differences in ownership of each bank will determine the strategy applied, so there are differences in the amount of NPL, NIM, Non Interest Income, and LDR against ROA at Domestic and Foreign Banks.

H5: There are simultaneous differences in influence of NPL, NIM, Non Interest Income, and LDR variables toward ROA between Domestic Bank and foreign bank.

IV. RESEARCH METHODOLOGY

The population in this study are all commercial banks listed in the Indonesia Stock Exchange 2010 - 2015 period as many as 42 banks. The sample of this study took as many as 38 domestic and foreign banks listing on Indonesia Stock Exchange period 2010-2015 shown in table 1.

Table 1 Sample of Domestic Banks and Foreign Banks

No	Bank Domestik
1	Bank Central Asia
2	Bank Rakyat Indonesia
3	Bank Mandiri
4	Bank Negara Indonesia
5	Bank Danamon
6	Bank Mega
_ 7	Bank Tabungan Negara
8	Bank Panin
9	Bank BPD Jabar dan Banten
10	Bank Tabungan Pensiunan Negara
11	Bank Permata
12	Bank Sinarmas
13	Bank Mayapada
14	Bank Jatim
15	Bank Mestika Dharma
16	Bank Bukopin

No	Bank Asing
1	Bank Maybank Indonesia
2	Bank CIMB NIAGA
3	Bank OCBC NISP
4	Bank Woori Saudara
5	Bank Windu Kentjana
6	Bank QNB Indonesia
7	Bank of India
8	Bank Capital Indonesia
9	Bank Victoria
10	Bank Agris



17	Bank BRI AGRO
18	Bank Pundi
19	Bank Nationalnobu
20	Bank MNC International
21	Bank Artha Graha
22	Bank Maspion
23	Bank Yudha Bhakti
24	Bank Bumi Artha
No	Bank Domestik
25	Bank Dinar Indonesia
26	Bank Harda Internasional
27	Bank Artos Indonesia
28	Bank Nusantara
-	m

Source: The bank's annual report

The research data used is annual data obtained from the Bank Annual Report in Indonesia period 2010-2015. Table 2 shows

the operational definition of each variable used in this study.

Table 2 Summary of Operational Definition

Variable	Operational Definition	Measurement	Scale
ROA	The ratio between profit before tax toward the average of total asset.	(profit before tax / the average of total asset) X 100%	Ratio
NPL	Measures the bank's management capability in managing nonperforming loans provided by banks to total loans held	(problem loans / total credit) X 100%	Ratio
NIM	Measuring bank profits derived from net interest margin	(net interest income / average earning asset) X 100%	Ratio
Non Interest Income	Measures the level of bank non- interest income on total bank assets	(non interest income / total asset) X 100%	Ratio
LDR	Measures the level of bank	(credit / third party	Ratio



Variable	Operational Definition	Measurement	Scale
	intermediation in lending	fund) X 100%	
LnSize	Measure the amount of assets owned by the bank	Log n total assets	Ratio

Source: Rahman et al (2015), and Circular Letter of Bank Indonesia Number 3/30 / DPNP

Analysis Method

The analytical tool used is Statistical Package for the Social Sciences 23 program or better known as SPSS version 23 for windows. The test stages of the analysis were normality test, classical assumption test, hypothesis test, chow test, and t-test. The research model used is as follows:

Model 1 (Domestic Bank):

ROA = α 0 + β 1 NPL + β 2 NIM + β 3 Non Interest Income + β 4 LDR + β 5 Size

Model 2 (Foreign Bank):

ROA = $\alpha 1 + \beta 5$ NPL + $\beta 6$ NIM + $\beta 7$ Non Interest Income + $\beta 8$ LDR + $\beta 5$ Size

Variables:

ROA: Return on Asset
NPL: Non Performing Loan
NIM: Net Interest Margin
LDR: Loan to Deposit Ratio

V. STATISTICAL RESULTS

1. Coefficient Determination Test / R²

Coefficient determination is used to test the influence of independent variables (NPL, NIM, Non Interest Income, and LDR) to dependent variable (ROA). Table 3 shows the value of R² of domestic and foreign banks.

Table 3 Coefficient Determination

Model	Adjusted R Square	Std Error of the Estimate
ROA (Domestic Bank)	0,827	0,7131
ROA (Foreign Bank)	0,465	0,6334

Source: secondary data that has been processed, 2017

Table 3 shows each R² shown in the adjusted R square column where the ROA of the domestic bank shows the value of 0.827, which means the NPL, NIM, Non Interest Income, and LDR variables affect the ROA of 82.7%. While 17.3% influenced by other variables outside this research. The adjusted R square of foreign banks is 0.465, which means that 46.5% ROA in foreign banks is influenced by NPL, NIM, Non Interest Income, and LDR. While 53,5% influenced by other variable outside this research.

2. F Statistic Test

F test is used to know the effect of simultaneously independent variable to dependent variable. Table 4 shows the test value of F.

Table 4
Results of F Statistical Test

Model	F	Sig.
ROA (Domestic Bank)	150,851	0,000
ROA (Foreign Bank)	9,685	0,002

Source: secondary data that has been processed, 2017



The value of F test at domestic bank regression is 150,861 and significant at 0,000 so that independent variable of NPL, NIM, Non Interest Income, LDR and size simultaneously influence ROA variable. Meanwhile, F value of F test at foreign bank regression is 9,685 and significant at 0,000 so that independent variable of NPL, NIM, Non

Interest Income, LDR and size simultaneously influence ROA variable.

3. T Statistic Test

T statistic test is used to see the effect of each variable of NPL, NIM, Non Interest Income, and LDR to ROA. Table 5 shows the effect of each variable on domestic banks and foreign banks.

Table 5
Results of t Statistics Test

Domestic Bank	В	Beta	t	Sig
Constant	-4,121		-6,580	0,000
NPL	-2,77	-0,678	-20,166	0,000
NIM	0,250	0,323	9,263	0,00
Non Interest Income	-0,38	-0,033	-0,959	0,339
LDR	-0,006	-0,41	-1,191	0,235
Foreign Bank				
Constant	-3,218		-3,224	0,002
NPL	-0,115	-0,269	-2,501	0,016
NIM	0,335	0,638	5,763	0,000
Non Interest Margin	-0,125	-0,141	-1,254	0,216
LDR	-0,017	-0,307	-2,303	0,026

Source: secondary data processed, 2017

Table 5 shows the domestic banks the coefficient value of the NPL variable shows a value of -0.277 with a significance level of 0.000, which means the NPL variable affects ROA significantly negative. The NIM variable shows a coefficient value of 0.250 with a significance value of 0,000 indicating a NIM variable affecting ROA positively significant. Non-Interest Income and LDR variables show coefficient of -0.038 and -0.006 with significance level of 0.339 and 0.235 or above 0.05 indicating that Non-Interest Income and LDR variables have no effect on ROA. The regression equation can be formulated as follows:

 $\Delta ROA = -0.277 \ \Delta NPL + 0.250 \ \Delta NIM - 0.038 \ \Delta NII - 0.006 \ \Delta LDR + \varepsilon t$

The foreign bank column shows the value of NPL coefficient of -0.511 with a significance level of 0.016 indicating that the NPL variable affects the ROA is negatively significant on the foreign Bank. The NIM variable has a coefficient value of 0.335 with a significance level of 0,000 indicating that the NIM variables affect the ROA positively significant. Variable Non Interest Margin has a coefficient of -0.125 with a significance value of 0.216 indicating that the variable Non Interest Income has no effect on ROA. LDR variable has a significance value of -



0.017 with a significance value of 0.026 which indicates that the LDR variable affects ROA is negatively significant. The regression equation can be formulated as follows:

 $\Delta ROA = -0.155 \ \Delta NPL + 0.335 \ \Delta NIM - 0.125 \ \Delta NII - 0.017 \ \Delta LDR + \varepsilon t$

4. Chow Test

The Chow test is used to determine whether there is a difference between a domestic bank and a foreign bank. The Chow test is performed by comparing the sum of square residual values of all banks with each model of domestic and foreign banks separately. Table 6 shows the results of chow test.

Table 6
Restricted Residual Sum of Square

Model	Restricted Residual Sum of Square (RSS)
Domestic Bank	77,303
Foreign Bank	18,053
Domestic Bank and	98,869
Foreign Bank	

Source: secondary data processed, 2017

From the RSS that has been described, it can be seen that:

RSS1 (RSS Domestic Bank) = 77,303

RSS2 (RSS Foreign Bank) = 18,053

RSSur = RSS1 + RSS2 = 95,356

RSSr (RSS overall model) = 98,869

k (Total number of parameters) = 5+5=10n1 + n2 = 209

The chow test is obtained as follows:

$$F = \frac{\frac{(R - R)/k}{(R)/(2 - 1)}}{\frac{(9,8 - 9,3)/1}{(9,3/1)}}$$
$$F = \frac{(9,3513/0,4792)}{(9,3/1)}$$

F = 0.733

The above calculation results note that the value of F arithmetic is 0.733, and the known value of F table with df = 199 and k = 5 on 0.05 significance obtained F table value of 2.26. Therefore, the value of F arithmetic <F table, indicating there is no difference of influence of NPL, NIM, Non Interest Income, and LDR to ROA between domestic and foreign bank.

5. T test

Although there is no difference between domestic and foreign banks in Indonesia, this study still uses the T test to find out deeper the factors causing the unavailability of domestic and foreign banks in Indonesia. Table 7 shows the results of the T test.

Table 7
Test Results t-test Average Independent 2
Sample

·	t-test for Equality of Means		
-	Т	Sig. (2-tailed)	
ROA	-0,924	0.357	
NPL	652	0.515	
NIM	3.278	0.001	
Non	-0.527	0.599	
Interest			
Income			
LDR	0,280	0,781	

Table 7 shows that NIM variables are significant at 5% level, which can be concluded that domestic and foreign banks have no differences because the ROA, NPL, Non Interest Income, and LDR variables are not statistically different and have only difference in NIM.



Table 8
Summarizes The Results Of The Research Hypothesis Test

No.	Hypothesis	Results	Decision
1a	Non Performing Loan (NPL) has a negative effect	Negative	Accepted
	toward the profitability of Domestic Bank.	significant	
1b	Non Performing Loan (NPL) has a negative effect	Negative	Accepted
	toward the profitability of Foreign Bank	significant	
2a	Net Interest Margin (NIM) has a positive effect	Positive	Accepted
	toward the profitability of Domestic Bank	significant	
2b	Net Interest Margin (NIM) has a positive effect	Positive	Accepted
	toward the profitability of Foreign Bank.	significant	
3a	Non Interest Income (NII) positively affects the	Negative not	Not
	profitability of Domestic Bank.	significant	accepted
3b	Non Interest Income (NII) positively affects the	Negative not	Not
	profitability of Foreign Bank.	significant	accepted
4a	Loan to Deposit Ratio (LDR) has a positive effect	Negative not	Not
	toward the profitability of Domestic Bank	significant	accepted
4b	Loan to Deposit Ratio (LDR) has a positive effect	Negative	Not
	toward the profitability of Foreign Bank	significant	accepted
5	There are simultaneous differences in influence of	There is no	Not
	NPL, NIM, Non Interest Income, and LDR variables	Difference in	accepted
	toward ROA between Domestic Bank and Foreign	Influence	
	bank.		

VI. DISCUSSION

Table 8 summarizes the results of the research hypothesis test.

1. Domestic Bank

According to risk theory, banks that have a lot of bad credit will reduce profitability. NPL shows the amount of bad loans owned by the bank so the greater the NPL value will lower the ROA in the bank (Sinkey, 1998). The results of this study indicate that the NPL has a significant negative effect on bank ROA, so banks need to anticipate the possibility of default that will occur. OJK establishes a maximum limit of non-performing loans that are tolerated at 5%, so more than that the bank can go bankrupt.

NIM in this study showed a significant positive value indicating that an increase in NIM will have an impact on increasing profitability. The NIM increase occurs because interest costs are lower than interest income, so an increase in NIM will increase ROA. The results of this study support the theory of managerial efficiency earnings that states that banks capable of running operations efficiently than competitors will get high profits (Hughes & Mester, 2008).

The results showed that Non Interest Income has negative but not significant effect. This can be caused by the Non-Interest Income Average of only 1.20260 indicating that the average income other than this interest is small, so the Non Interest Income



change has no effect on ROA. Negative influences indicate that banks are less likely to provide services and this is evidenced by the small average value of Non Interest Income of Domestic Banks. Although it has a negative impact on the bank, it does not affect the ROA of Domestic Bank.

LDR in this study showed negative but not significant value. This is not in accordance with the theory of financial intermediation which shows that if the bank is able to perform the intermediation function well, it will have an impact on the increase of profitability (Diamond, 1984). Negative influence indicates that the higher the bank channeling funds to the public, then what happens is the bank suffered losses that impact on the decrease in profitability. LDR is insignificant to ROA indicating that inefficient performance of domestic banks maximizes the value of funds income lent to the public, the amount of bad debts faced by banks, thus adding to the burden for banks, the LDR does not affect the ROA.

2. Foreign Bank

Foreign bank NPLs show negative and significant values. **Negative** influence indicated by NPL indicates that the higher level of bad credit or credit risk owned by foreign bank. will further decrease profitability which is reflected on ROA. Risk theory explains that bank earnings will be reduced if the bank can not overcome the credit risk of failure of the debtor who is unable to pay off its obligations. The risk will have an impact on bank profitability, since most of the bank's income comes from credit. The amount of uncollectible credit will result in a lack of profit for the bank which then decreases the bank's ROA.

NIM shows positive and significant value against ROA. The positive value shown by NIM indicates that NIM as net interest margin can increase bank ROA. The results of this study in accordance with the theory of profit managerial efficiency that states the bank needs to make efficiency to memploeh above average earnings - average. Efficiency is an important step for the bank to take. Banks that are not able to do the efficiency will lose a number of opportunities to increase profitability which will then lower the ROA. The comparison between the amount of interest given by the customer and the interest earned on the credit needs to be considered. If the interest earned from the credit is greater than the interest given to the customer, the bank is increasingly profitable, thus increasing its profitability.

Non Interest Income in this study has a negative but not significant. Non-significant Non-interest Income can be caused by the small average-owned compared to noninterest income so that Non Interest Income changes have no effect on ROA. Bank operating income derived from the noninterest sector is more fluctuating compared to interest income. The negative effect of Non Interest Income on ROA indicates that the lack of services provided by the bank. The lack of these services then affects the small Non Interest Income income. Small Non Interest Income is not able to affect the increase in profit so Non Interest Income has no effect on ROA.

LDR shows a negative and significant influence. The results of this study explain the increase in LDR actually lower ROA. The results of this study are not in accordance with the theory of bank intermedias. This theory states that to gain more profit, banks should perform the intermediary function by channeling funds to the public and in return will get the loan principal and interest. Negative effect can be caused by decrease of profit before tax with size of bank which mean during period 2010 - 2015, bank



decrease so that more bank performs intermediation function, so that happened is bank decreased profitability.

3. Differences of NPL, NIM, Non Interest Margin, and LDR to ROA on Domestic and Foreign Banks

Table 6 explains that in the chow test, it is concluded that there is no difference between domestic banks and foreign banks. The results of this study indicate that changes in NPL, NIM, Non Interest Income, and LDR values do not affect the difference between domestic and foreign bank ROA. Partial test explains that in domestic banks, the affecting variables are NPL and NIM. Meanwhile, the variables affecting foreign banks are NPL, NIM, and LDR. Table 7 shows the results The t test conducted in this study explains that only NIM variables become the differentiator between domestic and foreign banks while other variables are not different.

Although domestic banks and foreign banks have different legal entities, different strategies and policies, the results of this study show no difference between domestic and foreign banks. The results of this study can be due to domestic and foreign banks operating in Indonesia have the same provisions regulated by BI. As Regulator in Indonesia, BI sets the same terms that must be complied with by Domestic and foreign Banks, thus causing no difference between domestic and foreign banks in Indonesia.

VII. CONCLUSION AND SUGGESTION

VIII. REFERENCES

Akhtar, M. F., K. Ali, and S. Sadaqat. 2011. "Factor Influencing the Profitability of Islamic Banks of Pakistan". International Research Journal of Finance and Economics.

Al Smadi, O. M., and Ahmad, H.N. 2011. "Factor Affecting Bank Credit Risk: Evidence From Jordan". Journal Banking System.

1. Conclusion

The conclusion of this research is the factors that affect the ROA in domestic and foreign banks are NPL and NIM. This indicates that the size of the bank's profitability is influenced by the size of the credit risk faced by the bank. The smaller the bank faces the risk of default, the bank profitability will increase. Therefore, bank management needs to select more strictly prospective borrowers, in order to obtain debtors with good credit so as to reduce the NPL and increase ROA. Bank interest income affects the profitability of banks, therefore banks that earn more interest profitability. earnings will increase Therefore, management needs to plan to increase interest income and lower interest expense to its customers. This reduction of interest expense can be done by forming a portfolio of fund sources that provide minimal funding costs.

This study also finds that there is no difference in the influence of each variable on roa in domestic and foreign banks.

2. Suggestion

This research has limitations so that research is suggested to expand the research object is not only limited to Banks listed on the Stock Exchange but also all domestic and foreign banks residing in Indonesia. Then, future research is suggested to add other variables such as CAR, and OCOI (operational cost of operating income).

- Al-Jafari, M.K, and Mohamad Alchami. 2014. "Determinants of Bank Profitability: Evidence from Syria". Journal of Applied Finance & Banking, vol. 4, no. 1
- Almazari, Ahmad Aref. 2014. "Impact of Internal Factors on Bank Profitability: Comparative Study between Saudi Arabia and Jordan". Journal of Applied Finance & Banking, vol 4, no. 1, 125-140.
- Almilia & Herdaningtyas. 2005. "Analisis rasio camel terhadap prediksi kondisi bermasalah pada lembaga perbankan 2000-2002". Jurnal Akuntansi dan keuangan,vol 7, no.2.
- Anggraeni, Made Ria and I Made Sedha Suardhika. 2014. "Pengaruh Dana Pihak Ketiga, Kecukupan Modal, Risiko Kredit, dan Suku Bunga Kredit pada Profitabilitas". E-Jurnal Akuntansi Universitas Udayana ISSN:2302-8556. Bali
- Antonio, Muhammad Syafi'i. 2001. **Bank Syariah: Dari Teori ke Praktik**. Jakarta: Gema Insani Press.
- Ascarya and Diana Yumanita. 2010. "Determinants Of Bank's Net Interest Margin In Indonesia". International Conference On Eurasian Economies. Central Bank Of Indonesia.
- Ascarya. 2006. "Comparing Islamic Banking Development In Malaysia and Indonesia: Lessons For Instruments Development". Center for Central Banking Education and Studies. Bank Indonesia
- ASEAN Secretariat, 2008. **ASEAN Economic Community Blueprint**. Jakarta: ASEAN Secretariat.
- Bank Indonesia, 2008. Peraturan Bank Indonesia Nomor 3/30/DPNP, Jakarta: Bank Indonesia
- Bilal, M., A. Saeed, A.A. Gull, and T. Akram. 2013. "Influence of Bank Spesific and Macroeconomic Factors on Profitability of Commercial Bank: A Case Study of Pakistan". Research Journal of Finance and Accounting, vol.4, No.2
- Demirguic-Kunt, A. and A. Huizinga. 1998. "Determinants of Commercial Bank Interest Margins and Profitabilitas: Some International Evidence". World Bank Economic Review 13.
- Dendawijaya, Lukman. 2005. **Manajemen Perbankan**. Jakarta: Penerbit Ghalia Indonesia
- Diamond, D. 1984. "Financial Intermediation and Delegated Monitoring". Review of Studies Vol 51 No 3.
- Diamond, D., and P. Dybvig. 1983. "Bank Runs, Deposite Insurance and Liquidity". Journal of Political Economy Vol 91 Issue 3.
- Eng, Tan Sau. 2013. "Pengaruh NIM, BOPO, LDR, dan CAR Terhadap ROA Bank Internasional dan Bank Go Publik 2007-2011". Jurnal Dinamika. Vol.1. No.3. ISSN: 2338-123X

- Ghozali, Imam. 2016. **Aplikasi Analisis Multivariate dengan program IBM SPSS 23**. Semarang: Badan Penerbit Universitas Diponegoro
- Husnan, Suad. 1997. Manajemen Keuangan: Teori Dan Penerapan (Keputusan Jangka Panjang). Yogyakarta: BPFE
- Ikatan Bankir Indonesia. **Manajemen Risiko 1.** Jakarta: PT. Gramedia Pustaka Utama
- Karim, B.K, B.A.M. Sami, and B.K. Hichem. 2010. "Bank-specific, Industry-specific and Macroeconomic Determinants of African Islamic Banks' Profitability". International Journal of Business and Management Science, 3(1): 39-56.
- Lev, Baruch and Thigarajan, S. Ramu. 1993. "Fundamental Information Analysis". Journal of Accounting Research Vol 31 No 2.
- Machfoedz, Mas'ud. 1994. "Financial Ratio analysis and The Prediction of Earnings Change in Indonesia". Gadjah Mada University Business Review, No. 7/III/1994.
- Mawardi, Wisnu. 2005. "Analisis Faktor-Faktor yang Mempengaruhi Kinerja Keuangan Bank Umum di Indonesia (Studi kasus pada Bank Umum dengan Total Asset Kurang dari 1 Triliun)". Jurnal Bisnis Strategi, vol 14, no. 1.
- Mawardi, Wisnu. 2014. **Membangun Model Profitabilitas Bank Melalui Kualitas Kompetensi Fungsional Kredit Dan Penggunaan Teknologi Informasi Berbasis Pendapatan.** Semarang: Penerbit Pustaka Magister
- Mokni, R.B.S., and H. Rachdi. 2014. "Assessing the bank profitability in the MENA region A comparative analysis between conventional Islamic bank". International Journal of Islamic and Middle Eastern Finance and Management Vol. 7 No. 3, 2014 pp. 305-332
- Moore, Frederick.T. 1959. "Economies of Scale: Some Statistical Evidence". Quarterly Journal of Economics. Volume 73.
- Muda, et al. 2013. "Comparative Analysis of Profitability Determinants of Domestic and Foreign Islamic Banks in Malaysia". International Journal of Economics and Financial Issues
- Muhamad. 2005. Manajemen Bank Syariah. Yogyakarta: UUP AMPY KPN
- Otley, D.T. 1980. "The Contingency Theory of Management Accounting: Achivment and Prognosis". Accounting Organisation and Society Vol 5 No 4.
- Owoputi, et al. 2014. "Bank Specific, Industry Specific And Macroeconomic Determinants Of Bank Profitability In Nigeria". European Scientific Journal
- Petria, Nicolae, B. Capraru, and I. Ihnatov. 2015. "Determinants of banks' profitability: evidence from EU 27 bankingSystems". Procedia Economics and Finance 20 (2015) 518 524

- Putranto, Arief, Aldrin Herwany and Erman Sumirat. 2014. "The determinant of commercial bank profitability in Indonesia". Master of Management Departement of Management and Business Universitas Padjajaran. Bandung
- Quirin, Jeffery J., et al. 2000. "A Fundamental Analysis Approach to Oil and Bags Firm Valuation". Journal of Business Finance and Accounting Vol 27
- Ross, S. Peter and Hudgins C. Sylvia. 2008. **Bank Management and Financial Services**. Mc Graw Hill, International Edition.
- Salvatore, Dominick. 2005. Ekonomi Manajerial, Edisi 5 Buku 1. Jakarta: Salemba Empat
- Saunders, Anthony. 2000. **Financial Institutions Management: A Modern Perspective.**McGraw-Hill
- Scott, W. Richard. 1981. *Organizations: Rational, Natural and open Systems.* Englewod Cliffs. NJ: Prrentice Hall 1st edition.
- Van Horne C. James and Wachowicz M. John J.R. 2009. **Fundamental of Financial Management.** Jakarta: Salemba Empat.

INTERNET REFERENCES

Azwar. 2015. Industri Perbankan Syariah Menghadapi Masyarakat Ekonomi Asean (MEA) 2015: Peluang dan Tantangan Kontemporer. Kementrian keuangan. Accessed online on September 1st 2016 on http://www.bppk.kemenkeu.go.id/publikasi/artikel/150-artikel-keuangan-umum/20434-industri-perbankan-syariah-menghadapi-masyarakat-ekonomi-asean-mea-2015-peluang-dan-tantangan-kontemporer

www.<u>bi.go.id</u>. Accessed online on July 4th 2016 www.<u>bnm.gov.mv</u>. Accessed online on July 4th 2016