



Fundamental Role of Macro and Microeconomics to Profitability and the Implications on Stock Return: Evidence from Banking Companies on the Indonesia Stock Exchange

Luqman Hakim^{1*}, Martono Martono²

¹Faculty of Economics, University of Persada Indonesia YAI, Jakarta, Indonesia, ²Faculty of Economics, University of Pamulang, Tangerang, Indonesia. *Email: luqman106@yahoo.com

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ABSTRACT

This study is intended to analyze the fundamental role of Macro and Micro on profitability which has implications for Stock Return in the banking industry on the Indonesia stock exchange. Macro and micro fundamentals in this study use gross domestic product, inflation (INF), rupiah exchange rate against the US Dollar (exchange rate), CAR, non-performing loans (NPL), BOPO, LDR. The results of partial testing of independent variables that significantly influence (ROA) in the first research model are BOPO, LDR, PDB, KURS, INF, other variables are not significant. Tests together show that the independent variables significantly influence ROA. Of the 24 banking companies that became the study sample, the banking companies that had the greatest sensitivity influence were the SDRA bank (Bank Himpunan Saudara 1906, Tbk) and the banking company that had the smallest sensitivity effect was the BABP bank (Bank Bumiputera Indonesia, Tbk). Based on the formed R², the independent variable is able to explain changes in the rise and fall of ROA of 24.05%. The results of the second model of the study showed that the NPL, INF and ROA variables significantly affected the stock returns of banking companies where the most dominant ROA variable and in testing together resulted that the variables of all independent variables significantly affected the stock returns of banking companies listed on the Exchange Indonesian effect. Of the 24 banking companies that became the study sample, the banking company that had the greatest sensitivity influence was the BABP bank (Bank Bumiputera Indonesia, Tbk). While the banking company that has the smallest sensitivity effect is the BNGA bank (Bank CIMB Niaga, Tbk). Based on the formed R², the independent variable is able to explain changes in the rise and fall of stock returns by 53.35%.

Keywords: Profitability, Stock Markets, Banking, Indonesia

JEL Classifications: E10, E32, E60

1. INTRODUCTION

Investment decisions for banking companies in this globalization era can be seen by analyzing the financial condition of the company, so that it can be seen whether the selected investments can provide reciprocity as expected. Encouraged by the ASEAN Economic Community (AEC), banking companies in the Southeast Asian region will compete to demonstrate their financial capabilities and business portfolios to investors. So that this MEA is a means for banking companies, to open the door to companies that need capital through lending. With the composition of developing

countries in ASEAN, capital will be needed to increase the country's economic growth. The greater the credit extended to the public, the banking income will also increase, if the credit portfolio is able to be managed properly. The income will have implications for the greater stock returns of investors, as well as attracting potential new investors.

One of the things that can be assessed by potential investors is the profitability of the company, how a company is able to anticipate existing investment risks and convert them into profits and increase the value of its shares. According to (Vatansever and Hepsen, 2015)

that if a company has financial performance in good condition, it will have implications for stock prices that will rise as an effect of good company performance.

Investors will choose stocks that have a good reputation and optimal, because of this will get a high rate of return from the investment that has been invested. Good or bad the company's performance can also be used as a benchmark for investors in determining the purchase of company shares. Stock returns allow investors to find the difference between the actual profits or the expected profits by various company stock investments. Investors will be willing to invest their funds through the capital market to companies that are transparent and accountable, because their financial performance can continue to be monitored and allows investors to speculate to achieve the return of the desired stock.

A good banking industry must be in a state of significant financial soundness. In an assessment of the health of a banking company, it can be done based on the financial statements of banking companies in accordance with Bank Indonesia standards as the Central Bank. As a basis for consideration of fundamental analysis, financial statements can be used as an indication through CAMELS financial ratios in accordance with Bank Indonesia Regulation (BI) Number: 6/10/PBI/2004 concerning Rating System for Commercial Banks, with Capital, Asset Quality, Management, Earning Ability, Liquidity, and Sensitivity to Market Risk. Still in (Acharya and Ryan, 2016), it was also explained that some other financial ratios that are commonly used in conducting fundamental analysis are price earnings ratio (PER), return on investment (ROI), current ratio (CR), debt to equity ratio (DER), and total assets turnover (TATO). It is expected that with this ratio, banking companies can maintain their financial health and increase their contribution to the development of economic development that is attractive to investors, both domestic and foreign investors.

Achieving a good level of profit for the banking business and investors can be influenced by several factors, one of which is profitability performance. Shareholders and potential investors are very concerned about the profitability of a company because it will relate to the share price and dividends that will be received in the future. The level of stock returns given to investors is in line with the company's business profitability performance. In this case, the level of profitability of banking companies can be influenced by internal factors and external factors of the company.

According to (Niode and Chabachib, 2016), the profitability of the financial sector of banking companies is very sensitive and influenced by government policies and macro and micro economic conditions. Theoretically there are several factors that can affect the performance of a bank, both from within (internal) and from outside (external) banks. These internal factors include capital adequacy ratio (CAR), non-performing loans (NPL), operational costs to operating income (BOPO), loan to deposit ratio (LDR), net open position (PDN), net profit margin (NPM), net interest margin (NIM), market share, credit strategy, risk management, and others. While bank external factors include gross domestic product (GDP), exchange rates (exchange rates), inflation (INF), monetary, interest rates, competition between banking companies and non-bank

financial institutions and others (André et al., 2009). According to (Lumpkin and Dess, 2001) that an external factor is a factor that cannot be controlled and affects the profitability of banking companies. From the management of banking companies must understand the conditions of the banking external environment, so that business decisions are made that can support the interests of all parties, in this case the main are investors and users of banking facilities.

The ability of companies to obtain profits, or how a company can measure in terms of managing and estimating profits in a certain period is the effectiveness of profitability (Niode and Chabachib, 2016). The profitability scale can be measured using the financial ratio of return on assets (ROA). According to Bank Indonesia Regulation (BI) Number: 6/10/PBI/2004 concerning the reference for rating the level of soundness of commercial banks written in article 4 paragraph 4, ROA indicators can be used to estimate the condition of profitability (the bank's ability to generate profits for a certain period) banking in Indonesia. Bank Indonesia prioritizes measuring the profitability value of a bank based on assets whose funds come from DPK, so ROA represents a measurement of the level of profitability of banking companies (Sofiaty and Limakrisna, 2017). The higher the ROA, the more effective the bank is in using its assets to generate profits and provide beneficial returns for shareholders.

According to (Nurainy et al., 2013), that in order for investment decisions not to miss, investors need to do an analysis other than micro factors and can also understand macro environmental factors. Variables that need to be considered include; GDP, Exchange Rate, Inflation, Unemployment Rate, Interest rates, Budget Deficits, Private Investment. In developing countries, the risk of lending will be far greater in terms of the level of prosperity of a country. The level of prosperity can be seen from the high and stable per capita GDP indicators. In ASEAN, there are 6 countries (ASEAN 6) that have relatively high GDP compared to other ASEAN countries.

Based on the phenomena, it can be concluded that there is a gap between the theories applied to banking companies and the empirical conditions of the banking company industry in Indonesia. Specifically for stock returns, the actual condition will be greatly influenced by facts on the ground or on the Indonesia stock exchange (IDX). The occurrence of cases of crime in the capital market such as the case of Antaboga Sekuritas and Century Bank has caused public confidence in the capital market to decline. Therefore this study intends to find out more about the influence of micro and macro economics on stock returns on banking companies listed on the IDX for the period 2009-2014.

2. LITERATURE REVIEW

This study aims to analyze the company's internal and external influences projected with CAR, NPL, BOPO, LDR, PDN, GDP, exchange and inflation of ROA and the implications for stock returns. In this study will take the object of banking companies listed on the IDX for the period of 2009-2014.

2.1. Effect of CAR on ROA

The effect of CAR on ROA was examined by (Said and Ali, 2016), all of which were in harmony concluding that CAR had a positive and significant effect on ROA. The results of the study indicate that the higher the CAR ratio, the higher the ROA ratio. The high CAR shows that bank capital is getting bigger which makes banks more free to expand and diversify their products to customers.

CAR, which means the amount of own capital needed to cover the risk of loss arising from the investment in assets that contain risks and to finance all fixed assets and inventory. The greater the CAR, the greater the profits of banking companies. In other words, the smaller the risk of a banking company, the greater the benefits of a banking company (Siahaan et al., 2016).

2.2. Effect of NPL on ROA

The effect of NPL on ROA was investigated by (Saba et al., 2012) that NPL has no significant negative effect on ROA. The NPL ratio shows the ability of bank management in managing non-performing loans provided by banking companies. The higher the NPL ratio, the worse the quality of credit which causes the number of problem loans is greater so that it can cause the possibility of a banking company in a greater problematic condition (Messai and Jouini, 2013). The higher the NPL, the greater the credit risk disbursed by banks, so the lower income is proxied by ROA.

2.3. Effect of BOPO on ROA

The influence of BOPO on ROA was studied by (Effendi et al., 2017) that the BOPO ratio had a negative and significant effect on ROA. This shows that the greater the ratio of BOPO will result in a decrease in ROA. The higher the level of financing burden for banking companies, the smaller profits will be for banking companies. The high burden of operational costs for banking companies that are borne by banking companies will generally be charged to income earned based on the allocation of financing. The higher credit costs or costs will reduce the capital and profits of the banking company.

BOPO ratio is the ratio between operating costs to operating income (Ilham et al., 2015). Operational costs are used to measure the level of efficiency and the ability of banking companies to carry out operational activities. Banking companies that are efficient in suppressing operational costs can reduce losses due to inefficiency of banking companies in managing their business so that the benefits obtained will also increase. The smaller the BOPO ratio shows the more efficient a banking company is in carrying out its business activities so that the banking company is healthier (Prasanjaya and Ramantha, 2013).

2.4. Effect of LDR on ROA

The effect of LDR on ROA was examined by (Prasanjaya and Ramantha, 2013) that LDR had a positive and significant effect on ROA. According to (El-Sayed Ebaid, 2009), the LDR shows that there is a tendency for LDR to have a positive effect on ROA, but the effect is not significant or insignificant. This condition illustrates that the performance of banking companies in general is inefficient, so that it cannot maximize the existing DPK (third party funds) to lend to the public and earn income. This inefficiency can

be caused by a lot of credit that is at risk and fails, thus increasing the burden on banking companies.

LDR shows the ability of a banking company in providing funds to debtors with capital owned by a banking company or from funds that can be collected from the public (Wahyuningsih et al., 2015). LDR reflects the ability of banking companies to repay depositors' withdrawals by relying on credit that is provided as a source of liquidity, in other words how far the provision of credit to credit customers can offset the obligations of banking companies to immediately meet the demand of depositors who want to withdraw their used money by the banking company to provide loans given with total third party funds.

2.5. Effect of PDN on ROA

The NOP ratio is the ratio used to measure risk management in foreign exchange rates. The NOP ratio is a position controller for foreign exchange management because fluctuations in exchange rate changes are not easy to predict. Important management in foreign exchange risk is to limit the position of each foreign exchange as a whole and monitor foreign exchange trading in a controlled position. The control of foreign currencies aims to fulfill obligations in foreign currencies and to obtain income as high as the income from the difference between the selling rate and foreign exchange buying rate (Andrés-Martínez et al., 2013). The effect of PDN as sensitivity to market risk was examined by (Acharya and Ryan, 2016) who concluded that PDN had no effect on ROA.

2.6. Effect of GDP on ROA

The effect of GDP on ROA was investigated by (Vatansever and Hepsen, 2015) who analyzed profitability indicators from commercial and private banking companies in Pakistan showed that from macroeconomic factors namely GDP had a positive and significant effect on ROA. This is also consistent with research conducted by (Said and Ali, 2016), (Tassey, 2000) who examined that the rate of economic growth helped raise profitability, GDP had a significant effect on the increase and decrease in the banking business cycle. Finally (Akinlo & Emmanuel, 2014) through his research in Nigeria shows the implications of GDP growth on profitability, that banks can achieve (decrease) profitability under desirable (undesirable) conditions. The government can make regulations on banking companies that encourage banking companies to regularly raise their assets and provide an environment that drives economic growth.

2.7. Effect of EXCHANGE on ROA

The effect of exchange rates on ROA examined by (El-Sayed Ebaid, 2009) shows that the exchange rate has a significant negative effect on profitability (ROA). After the transition process of the fixed exchange rate regime system in Nigeria which previously had a positive effect on profitability became the liberalization of the foreign exchange market showed a significant negative effect on profitability. To maximize the profitability and stability of banking companies in Nigeria, the central bank or CBN should pay more attention to the adaptation and application contained in macroeconomic indicators. Research conducted by (Beck et al., 2013) is also supported by research conducted by (Tanasković and Jandrić, 2015) that there is a significant negative

effect of currency exchange rates on the profitability of banking companies. Another case with (Rizan et al., 2014) which states that the exchange rate or exchange rate is not a significant positive effect on ROA. The hedging decision is needed to minimize the risk of currency appreciation and depreciation due.

2.8. Influence of Inflation on ROA

The effect of inflation on ROA was investigated by (Said and Ali, 2016) as a whole who took one of the variables, Inflation as an independent variable on profitability, showed that the inflation rate had a positive and significant effect on ROA. (Farhan et al., 2012) in their research in Pakistan explained that banks expect high inflation in the future, they believe that they can raise prices without reducing market demand for output. The same thing was explained in a study by (Effendi et al., 2017), that the higher the inflation rate, the better the performance of banking companies in generating profits. This is because the anticipated inflation rate by bank management, can show that banking companies can adjust interest rates appropriately in order to increase revenue faster than costs so as to generate high profits. Different from the results of research by (Wibowo and Syaichu, 2013) in his research concluded that the inflation rate had a significant negative effect on ROA.

2.9. Effect of CAR, NPL, BOPO, LDR, PDN, GDP, EXCHANGE, INF on ROA

Internal factors of banking companies, especially related to the performance of banking companies which are often measured by financial ratios, among others: CAR, NPL, BOPO, LDR greatly affect the operations of banking companies and changes in profitability fluctuations. (Lemiyana and Litriani, 2016) concludes that CAR, NPL, BOPO, LDR ratios together affect the financial performance of banking companies. Likewise (Liu et al., 2016), his research results concluded that the CAR, NPL, ROE, LDR and NIM ratio variables as indicators of financial performance negatively affect the stock returns of banking companies. While the BOPO variable is an indicator of the level of efficiency of bank operations that negatively affects ROA.

2.10. Effect of CAR on RSHM

The effect of CAR on stock returns was investigated by (Jappelli and Padula, 2015) with the conclusion that CAR has a positive effect on stock returns. The more healthy the financial condition of banking companies will further strengthen the stock price on the market. Basically, the higher the CAR, the higher the share price will be, because banking companies that have sufficient capital to carry out their business activities and also bear enough risk, if the banking company is liquidated. The higher CAR can also describe the banking company the more solvable. The results of research conducted by (Acharya and Ryan, 2016), (Sharma and Kumar, 2010) which concluded that CAR has a positive and significant effect on stock returns

2.11. The Effect of NPL on RSHM

The influence of NPLs on RSHM is explained by (Saba et al., 2012), namely the increase in NPLs is caused by external factors that cannot be controlled by management such as declining economic conditions. (Saba et al., 2012), conducted an NPL study

of stock returns with the result that NPL has no influence on stock returns. High NPL conditions affect the ballooning costs, both the costs of reserves of productive assets and other costs incurred, so that the potential to cause significant losses and will reduce the profitability of banking companies, which in turn will affect the decline in stock prices.

NPL is a measurement of the business risk ratio of a banking company that shows the magnitude of the risk of non-performing loans that exist in a banking company. NPL is a ratio that is used to measure the ability of banking companies in refuting the risk of credit repayment failure by debtors (Beck et al., 2013). NPLs reflect credit risk, the smaller the NPL the smaller the credit risk borne by the banking company. In other words, the greater the amount of problem loans will reduce the share price. Various empirical studies show that NPL negatively affects stock returns. The results of research conducted by concluded that NPL has a significant negative effect on stock returns in banking companies.

2.12. Effect of BOPO on RSHM

(Effendi et al., 2017) states that the BOPO ratio has no significant negative effect on RSHM, the higher the BOPO ratio, the lower the profitability and decreases stock returns. That is because investors will prefer profits rather than how much costs companies must incur in the context of lending now and in the future.

BOPO ratio shows the level of efficiency of the national banking company industry. The greater the BOPO ratio, the more inefficient a banking company is. Various empirical studies show that the effect of the BOPO ratio on stock returns is still a contradiction. The results of research conducted by (Niode and Chabachib, 2016) concluded that there was no significant effect between the BOPO ratio with stock prices.

2.13. Effect of LDR on RSHM

The influence of LDR on RSHM was investigated by (Prasanjaya and Ramantha, 2013), that LDR had a significant negative effect on RSHM. The lower the LDR value, the healthier the condition of the banking company, thereby increasing company performance and stock prices will increase.

Liquidity aspects, namely LDR, will affect the stock price. A high LDR means the risk of investing is high. If the liquidity of a banking company is low, it will have an impact on the loss of consumer confidence. This will have an impact on investors being reluctant to buy shares of the company concerned, and will automatically reduce the stock price and ultimately result in a decrease in stock returns.

If the LDR ratio is high, the company will experience a decrease in liquidity and can have an impact on financial distress. Financial difficulties have implications for the decline in the ability of banking companies to meet their obligations and provide a negative signal to stock prices. Several empirical studies show that the results still contradict the effect of the LDR ratio on stock returns. The results of research conducted by (Wang and Lutsey, 2014) concluded that LDR has no effect on stock returns.

2.14. Effect of PDN on RSHM

The effect of PDN on RSHM was investigated by (Eisenberger and Stinglhamber, 2011), which concluded that sensitivity to market risk had no effect on stock returns. The effect of PDN as an indicator of sensitivity to market risk on stock returns by (Frank et al., 2009) which states in his research that sensitivity to market risk does not significantly affect stock returns. Although according to (Duh et al., 2012) that the risk sensitivity indicator to the market is important, so that the health and purpose of banking companies to seek profits and attract investors can be more secure.

2.15. Effect of GDP on RSHM

The effect of GDP on RSHM was investigated by (Vatansever and Hepsen, 2015) which concluded that GDP had no significant effect on RSHM. (Farhan et al., 2012), that GDP has a significant effect on stock returns on ASEAN and Asia Pacific countries (Malaysia, Korea, Thailand, Hong Kong, Japan, and Australia).

2.16. The Influence of KURS on RSHM

The influence of the exchange rate on RSHM was examined by (Heard et al., 2012), stating that the exchange rate affected RSHM. (Ngoc et al., 2009) in the period of 1986-2006 when the liberalization of the forex market economy was implemented, showed that changes in currency exchange rates negatively affected the profitability of banking companies. (Royle and Laing, 2014) in his research showed that changes in currency exchange rates did not have a significant positive effect on ROA profitability. Whereas (Simatupang and Franzlay, 2016), in his research shows that there is a significant negative effect of the exchange rate on bank profitability. The higher the exchange rate, the lower the ROA. This happens if the exchange rate appreciates or depreciates, so that it will result in foreign currency liabilities when due. As a result, profitability will change, if in that case hedging is not done. If the company's profitability decreases, it will result in a decrease in stock prices and in turn will affect the level of stock returns.

2.17. Influence of Inflation against RSHM

(Wibowo and Syaichu, 2013), stated that inflation has a significant effect on RSHM. (Farhan et al., 2012) states that inflation has no effect on RSHM, because if there is an increase in inflation the bank will raise interest rates so that it has implications for bank income. If the income of the banking company can offset the increase in inflation, then it will not affect the banking company's stock return.

2.18. The Effect of ROA on RSHM

The effect of ROA on RSHM was investigated by (Hamblen, 2011), stating that ROA had a significant positive effect on RSHM. The company's financial performance in generating profits from the assets used will have an impact on the company's shareholders. Higher ROA illustrates the company's better performance and shareholders will benefit from the increasing dividends received. Increased ROA means increasing company value and in turn will increase RSHM. This statement is supported by the results of research conducted by (El-Sayed Ebaid, 2009), stating that ROA has a significant positive effect on RSHM.

According to (Ilham et al., 2015), the lower the ROA ratio the less good, and vice versa. This means that this ratio is to measure the

effectiveness of the overall activities of the company. Companies that are able to generate high profits will attract investors to invest in these companies, so that the company's stock price will increase and ultimately affect stock returns will also increase.

2.19. Effect of CAR, NPL, BOPO, LDR, PDN, GDP, Exchange Rate, Inflation, ROA Simultaneously Against RSHM

Internal factors of banking companies, especially related to the performance of banking companies which are often measured by financial ratios, among others: CAR, NPL, BOPO, LDR, ROA greatly affect bank operations and changes in the ups and downs of stock prices and ultimately affect stock returns. Concludes that CAR, NPL, BOPO, and LDR ratios together influence the performance of banking company shares. Likewise (Simatupang and Franzlay, 2016), his research results concluded that the CAR, NPL, ROE, LDR and NIM ratio variables as indicators of financial performance negatively affect the stock returns of banking companies. While the BOPO variable is an indicator of the level of efficiency of banking company operational activities that negatively affects the banking company's stock returns.

3. METHODOLOGY

The research method used is quantitative. This quantitative approach prioritizes numbers and statistics to answer specific research questions or hypotheses, and to make predictions that a variable influences other variables. Furthermore, it is expected that the conclusions and recommendations from the analysis and discussion can be useful for several related parties.

3.1. Variable Operations

Operational research variables are defined operationally based on the observed characteristics to make it easier for researchers to make careful observations of an object of research.

3.2. Population

The population used for this study is the banking companies listed on the IDX for the period 2009 - 2014 as many as 41 companies.

3.3. Sample

The sampling technique used in this study is non probability sampling, which is a sampling technique that does not provide equal opportunity for every element or member of the population to be selected as a sample (Sugiono P.D, 2014). In the non probability sampling technique there are systematic sampling, accidental quota, purposive, saturation and snowball. The sample selection in this study was determined by purposive sampling in order to get a representative sample in accordance with specified criteria.

4. RESULTS AND DISCUSSION

4.1. Determinant ROA

4.1.1. CAR

Empirical evidence of this study shows that CAR does not significantly affect ROA with a positive coefficient sign, meaning that changes in CAR do not affect the rise and fall of ROA.

This is caused by the average CAR ratio position of 15.74%, which is a small part compared to the leverage ratio of 84.26%.

4.1.2. NPL

Empirical evidence of this study shows that NPL does not significantly affect ROA with a positive coefficient sign, meaning that changes in NPL do not affect the rise and fall of ROA.

This is due to the average NPL ratio position of 1.85%, while according to Bank Indonesia regulations the maximum NPL ratio is 5%. Thus the NPL conditions are still quite under control.

4.1.3. Operating costs against operating income (BOPO)

Empirical evidence of this study shows that BOPO significantly influences ROA with a negative coefficient sign, meaning that changes in BOPO affect the rise and fall of ROA.

The BOPO coefficient with a negative sign means that if an increase in the BOPO ratio will result in a decrease in ROA, and vice versa.

This is in line with the research results of (Aulia, 2016) that BOPO has a negative and significant effect on ROA. Based on the results of the study, the average BOPO ratio was 84.99%, while according to Bank Indonesia regulations the normal BOPO ratio ranged from 94%-96%.

4.1.4. LDR

Empirical evidence of this study shows that LDR significantly influences ROA with a negative coefficient sign, meaning that changes in LDR affect the rise and fall of ROA.

LDR coefficient with a negative sign means that if an increase in the LDR ratio will result in a decrease in ROA, and vice versa.

LDR variable affects bank ROA negatively and significantly. This can be explained in theory that the higher the LDR ratio indicates that banks are increasingly expansive in lending, if not done carefully will lead to the potential for increasing non-performing loans. With the increasing non-performing loans, it will result in a decrease in ROA. However, based on (Erlangga and Mawardi, 2016), it shows that investors in Indonesia see that banks are still not optimal in lending. Based on the results of the study, the average LDR ratio was 78.29%, while according to Bank Indonesia regulations the LDR ratio was 78%-100% with a maximum tolerance level of 110%.

4.1.5. PDN

Empirical evidence of this study shows that PDN does not significantly affect ROA with a positive coefficient sign, meaning that changes in PDN do not affect the rise and fall of ROA.

The results of this study are in line with research by (Heard et al., 2012), concluding that PDN has no effect on ROA. This can be explained that if management is careful in the sense that the source of foreign exchange funds is used to finance foreign exchange transactions or to minimize the risk can be overcome by hedging. Based on the results of the study, the average PDN ratio of 9.92%, is an amount that is still under control.

4.1.6. GDP

Empirical evidence of this study shows that GDP significantly influences ROA with negative coefficient sign, meaning that changes in GDP affect the rise and fall of ROA.

The coefficient of GDP with a negative sign means that if there is an increase in the ratio of GDP it will result in a decrease in ROA, and vice versa.

The GDP variable affects bank ROA negatively and significantly. Based on the results of the study of (Farhan et al., 2012), concluded that GDP has a positive and significant effect on ROA. The results of this study are not in line with previous studies, which concluded that GDP has a positive and significant effect on ROA. This can be explained that, the main income of a banking company is from channeling funds to customers. If the level of prosperity of customers increases, the need for loan funds will decrease so that it will affect the business income of banking companies. Therefore, to overcome this, the company must be able to expand its business, if possible to become a multinational company.

4.1.7. Currency exchange rates (EXCHANGE)

Empirical evidence of this study shows that the exchange rate significantly influences ROA with a negative coefficient sign, meaning that changes in GDP affect the rise and fall of ROA.

An exchange rate coefficient with a negative sign means that if there is an increase in the exchange rate ratio it will result in a decrease in ROA, and vice versa.

The results of this study are in line with the study of (Erlangga and Mawardi, 2016), (Simatupang and Franzlay, 2016), who concluded that there was a significant negative effect of currency exchange rates on ROA.

4.1.8. INF

Empirical evidence of this study shows that inflation significantly influences ROA with a positive coefficient sign, meaning that changes in inflation affect the rise and fall of ROA.

The coefficient of inflation with a positive sign means that if there is an increase in the inflation ratio, it will result in an increase in ROA, and vice versa.

The results of this study are in line with the research of (Yap et al., 2012), (Saba et al., 2012), overall concluded that the inflation rate has a positive and significant effect on ROA.

4.1.9. CAR, NPL, BOPO, LDR, PDN, GDP, EXCHANGE, INF simultaneously against ROA

CAR, NPL, BOPO, LDR, PDN, GDP, EXCHANGE, INF variables together have a positive and significant effect on ROA of 24.05% while 75.95% is influenced by other factors not included in this research variable. This is indicated by R-squared of 0.240518 and the probability (F-statistic) of 0.000008 is smaller than $\alpha = 0.05$. This is in line with Sri's (2008) research which concluded that the CAR, NPL, BOPO, and LDR ratios together

affect positively and significantly on the financial performance of banking companies.

4.2. Implications for Stock Returns (RSHM)

4.2.1. CAR

Empirical evidence of this study shows that CAR does not significantly affect RSHM with a negative coefficient sign, meaning that changes in CAR do not affect the ups and downs of RSHM.

(Liu et al., 2014) concluded that the relationship between CAR and company value (share price) cannot be explained. Investors do not consider the bank's capital to make investment decisions.

4.2.2. NPL

Empirical evidence of this study shows that NPL significantly influences RSHM with negative coefficient sign, meaning that changes in NPL affect the rise and fall of ROA. The coefficient with a negative sign means that if there is an increase in NPL, it will result in a decrease in stock returns, and vice versa.

The results of this study are in line with the findings of the (Saba et al., 2012), studies which concluded that the NPL ratio was negatively and significantly related to firm value (stock prices).

4.2.3. BOPO

Empirical evidence of this study shows that BOPO affects RSHM but is not significant with a positive coefficient sign, meaning that changes in BOPO do not affect the ups and downs of RSHM.

The results of this study are in line with research conducted by (Lemiyana and Litriani, 2016) which states that there is no significant effect between the BOPO ratio to stock prices. Based on the results of research on banking companies listed on the IDX in the 2009-2014 period, the average BOPO ratio was 84.99%, far below Bank Indonesia regulations. Based on Bank Indonesia regulations, the normal BOPO ratio ranges from 94% to 96%. The lower the BOPO ratio means the better the performance of company management, because the more efficient in using existing resources in the company, or conversely the higher the BOPO ratio, the more inefficient the performance of a banking company. The improvement that should be done is to increase efficiency by decreasing the value of BOPO so that the impact will increase stock prices.

4.2.4. LDR

Empirical evidence of this study shows that LDR affects RSHM but is not significant with negative coefficient sign, meaning that changes in LDR do not affect the ups and downs of RSHM.

The coefficient with a negative sign means that if an LDR ratio increases, it will result in a decrease in stock returns.

It can be added that the higher LDR ratio indicates that banks are increasingly expansive in lending, if not done carefully will lead to the potential for increasing non-performing loans. This potential is captured by investors as a bad signal, so the demand for shares will decline and the implication is that stock prices will decline as well. According to (Dimitrios et al., 2016), investors in Indonesia

see that banking companies are still not optimal in lending. Based on the results of research that the average LDR or rate of lending of banking companies during the 2009-2014 period was 78.29%, still below the safe limit agreed upon by practitioners at 85%, while government regulations allow a maximum rate of lending or LDR of 110%. Thus it can be said that the level of lending during the 2009-2014 period is still below the safe level or in other words the lending of banking companies during the 2009-2014 period is still not optimal.

4.2.5. PDN

Empirical evidence of this study shows that PDN affects RSHM but is not significant with a positive coefficient sign, meaning that changes in PDN do not affect the ups and downs of RSHM.

The coefficient with a positive sign means that if there is an increase in the ratio of PDN, it will result in an increase in stock returns, and vice versa.

Based on the results of this study, the average PDN ratio for the 2009-2014 period was 8.92%, far below Bank Indonesia regulations, which is a maximum of 20% of bank capital (Effendi et al., 2017). The determination of the magnitude of the PDN is intended so that banks in taking forex positions are always under surveillance, and if there is a miss calculation resulting from sudden changes in exchange rates in large numbers does not cause significant disruption.

4.2.6. GDP

Empirical evidence of this study shows that GDP affects RSHM but is not significant with a positive coefficient sign, meaning that changes in GDP do not affect the ups and downs of RSHM.

The coefficient with a positive sign means that if there is an increase in the ratio of GDP it will result in an increase in RSHM.

GDP is one tool to measure a country's economic growth rate. The higher level of GDP of a country means the higher level of prosperity of a country. Based on the results of research (Messai and Jouini, 2013), concluded that GDP has a positive and significant effect on stock returns. Thus the results of this study are not in line with the results of previous studies, which means that with an increase in income investment in the form of shares has not yet become the main choice.

Investment in the form of shares carries a great risk because if the issuer suffers losses then the share price will fall which means investors will suffer losses (capital loss), if the issuer goes bankrupt then stock investors can experience total losses or investment funds cannot return. But investments in the form of shares can also generate large profits (capital gains) if the issuing company (issuer) develops well. Based on the ratio of the number of share investors to the population in Indonesia is still very low, around 0.20%, while neighboring countries such as Malaysia the ratio is above 12.80% even Singapore has reached more than 30%. Judging from the capital market capitalization of GDP, Indonesia is also far behind, namely for Indonesia around 19.43%, Malaysia 60.68% and Singapore 93.60%.

4.2.7. EXCHANGE

Empirical evidence of this study shows that the exchange rate affects the RSHM but is not significant with a positive coefficient sign, meaning that changes in the exchange rate do not affect the ups and downs of the RSHM.

The coefficient with a positive sign means that if an increase in the exchange rate ratio will result in an increase in RSHM and vice versa.

The results of this study are in line with research by (Limakrisna and Juju, 2008) who concluded that the exchange rate had no effect on stock returns.

4.2.8. INF

Empirical evidence of this study shows that inflation affects RSHM and is significant with a negative coefficient sign, meaning that changes in inflation affect the ups and downs of RSHM.

The coefficient with a negative sign means that if there is an increase in the inflation ratio it will result in a decrease in RSHM.

The results of this study are in line with research conducted by (Von Geibler, 2013) which states that inflation has a significant negative effect on stock returns. While research conducted by (Frank et al., 2009) states that inflation has no significant negative effect on stock returns. Another study conducted by (Agar et al., 2017) stated that inflation partially had no effect on stock returns.

4.2.9. ROA

Empirical evidence of this study shows that ROA affects RSHM and is significant with a positive coefficient sign, meaning that changes in ROA affect the ups and downs of RSHM.

The coefficient with a positive sign means that if an increase in the ROA ratio will result in an increase in RSHM and vice versa.

ROA is the ratio between profit before tax to total assets. This ratio is commonly used to measure the ability of management to manage their assets for profit. This study is in line with the results of research by (Sundararajan, 2004), which states that ROA has a positive and significant effect on stock returns.

Other studies conducted by (Homburg et al., 2014), all of which states that companies with good financial performance will attract investors to buy company shares, so that it can have an impact on increasing demand for shares and will affect the increase in stock prices which will ultimately have an impact on the increase in the company's stock returns in question. While the results of this study contradict the research results of (Mackie and Sim, 2013; Simatupang and Franzlay, 2016), which states that ROA has a significant negative effect on stock returns. The difference in the results contained in the studies above shows the existence of a research gap, so it is necessary to conduct a research study on the relationship between other factors on stock returns.

4.2.10. CAR, NPL, BOPO, LDR, PDN, GDP, EXCHANGE, INF, ROA simultaneously against RSHM

CAR, NPL, BOPO, LDR, PDN, GDP, EXCHANGE, INF variables simultaneously had a positive and significant effect on RSHM of 53.35% while 46.65% was influenced by other factors not included in this research variable. This is indicated by R-squared of 0.533487 and Probability (F-statistic) of $0.000000 < \alpha = 0.05$. In line with, which concluded that the CAR, NPL, BOPO, LDR ratios simultaneously influence positively and significantly on the financial performance of banking companies.

Another study conducted by (Effendi et al., 2017) concluded that the CAR, ALR, NPM, LDR, ROA ratios simultaneously had a significant positive effect on banking company stock returns. (Wahyuningsih et al., 2015) which stated that Forex Rate, Inflation, GDP had a positive and significant effect on stock returns.

5. CONCLUSION

1. BOPO, this variable negatively and significantly affects ROA meaning that if the BOPO ratio increases, the ROA ratio will decrease and vice versa. The results of this study are in line with the research results of (Effendi et al., 2017; Niode and Chabachib, 2016), who all state that BOPO has a negative and significant effect on the profitability of banking companies, namely ROA. Based on research results, the average BOPO ratio is 84.99%, based on Bank Indonesia regulations, the normal BOPO ratio ranges from 94% to 96%. Therefore, company management must always suppress and control the BOPO ratio in order to remain in a safe condition so that profits can be maintained. This is consistent with the Firm Characteristic Theories which states that companies tend to diversify sources of funding for projects that are more quality and profitable.
2. LDR, this variable negatively and significantly affects the ROA ratio meaning that if the LDR ratio increases, the ROA ratio will decrease and vice versa. This condition is not in line with the results of previous studies (Prasanjaya and Ramantha, 2013) which states that, LDR has a significant positive effect on ROA. Based on the research results, the average LDR ratio is 78.29%, according to the recommendation of Bank Indonesia, the safe LDR is in the range of 78% - 100% with a maximum tolerance limit of 110%. Thus it can be concluded that the level of lending is still not optimal. However, if lending is too expansive if it is not followed by the precautionary principle, it will lead to higher NPLs. If the NPL is high, the company's profit will decrease or in other words ROA will decrease. This is in line with the Anticipated Income Theory which states that the customer's repayment schedule in the form of principal and interest installments will provide regular cash flow that can be used to meet bank liquidity needs and The Liability Management Theory which states that company management banks can manage their liabilities as a source of liquidity.
3. GDP, this variable negatively and significantly affects ROA meaning that if the ratio of GDP has increased the ROA ratio will decrease and vice versa. This condition is not in line with the results of research by (Effendi et al., 2017) which

states that GDP has a positive and significant effect on ROA. This can be explained that, the main income of a banking company is from channeling funds to customers. If the level of prosperity of customers increases, the need for loan funds will decrease so that it will affect the business income of banking companies. Therefore, to overcome this, the company must be able to expand its business, if possible to become a multinational company. This is in line with the Income Approach/Method which states that the value of economic output is the total value of remuneration for the factors of production used in the production process.

4. Exchange rates, this variable negatively and significantly affects ROA, meaning that if the exchange rate ratio increases then the ROA ratio will decrease and vice versa. This is in line with the results of research (Wardana, 2015) which states that the exchange rate has a significant negative effect on ROA. To minimize losses due to changes in foreign exchange rates, companies can do with hedging. This is consistent with the theory of Purchasing Power Parity Theory which states that the price of similar products in two different countries will be the same if valued in the same Currency or currency.
5. Inflation, this variable influences positively and significantly on ROA, meaning that if the inflation ratio increases, the ROA ratio will increase and vice versa. This is in line with the results of AI abuse which states that Inflation has a positive and significant effect on profitability. If there is inflation, the banking company will adjust the interest rate so that the income level will also increase. This is consistent with the theory of Purchasing Power Parity Theory which states that the price of similar products in two different countries will be the same if valued in the same Currency. This theory analyzes the relationship between changes and differences in inflation rates with foreign exchange rate fluctuations.

REFERENCES

- Acharya, V.V., Ryan, S.G. (2016), Banks' financial reporting and financial system stability. *Journal of Accounting Research*, 2(5), 3-12.
- Agar, J., Shivlani, M., Solís, D. (2017), The commercial trap fishery in the commonwealth of puerto rico: An economic, social, and technological profile. *North American Journal of Fisheries Management*, 7(1), 11-19.
- Akinlo, O., Emmanuel, M. (2014), Determinants of non-performing loans in Nigeria. *Accounting and Taxation*, 6(2), 23-30.
- André, P., Cazavan-Jeny, A., Dick, W., Richard, C., Walton, P. (2009), Fair value accounting and the banking crisis in 2008: Shooting the messenger. *Accounting in Europe*, 4(1), 2-9.
- Andrés-Martínez, M.E., Gómez-Borja, M.Á., Mondéjar-Jiménez, J.A. (2013), A review of the price fairness perception concept. *Academia*, 9(2), 80-89.
- Aulia, F. (2016), Pengaruh CAR, FDR, NPF, DAN BOPO terhadap profitabilitas (return on equity) (Studi empiris pada bank umum syariah di Indonesia periode tahun 2009-2013). *Diponegoro Journal of Management*, 5(6), 1-10.
- Beck, R., Jakubik, P., Piloiu, A. (2013), Non-performing Loans: What Matters in Addition to the Economic Cycle? Vol. 3. *European Central Bank Working Paper Series*. p15-24.
- Dimitrios, A., Helen, L., Mike, T. (2016), Determinants of non-performing loans: Evidence from Euro-area countries. *Finance Research Letters*, 1(9), 22-30.
- Duh, R.R., Hsu, A.W.H., Alves, P.A.P. (2012), The impact of IAS 39 on the risk-relevance of earnings volatility: Evidence from foreign banks cross-listed in the USA. *Journal of Contemporary Accounting and Economics*, 6(3), 81-88.
- Effendi, J., Thiarany, U., Nursyamsiah, T. (2017), Factors influencing non-performing financing (NPF) at sharia banking. *Walisongo: Jurnal Penelitian Sosial Keagamaan*, 25(1), 109-120.
- Eisenberger, R., Stinglhamber, F. (2011), Perceived organizational support. In: *Perceived Organizational Support: Fostering Enthusiastic and Productive Employees*. Vol. 31. Washington, DC: American Psychological Association. p25-60.
- El-Sayed Ebaid, I. (2009), The impact of capital-structure choice on firm performance: Empirical evidence from Egypt. *Journal of Risk Finance*, 25(1), 10-20.
- Erlangga, O.P., Mawardi, I. (2016), Pengaruh total aktiva, capital adequacy ratio (Car), finance to deposit ratio (Fdr) dan non performing financing (Npf) terhadap return on assets (Roa) bank umum syariah di Indonesia periode 2010-2014. *Jurnal Ekonomi Syariah Teori Dan Terapan*, 3(7), 561-574.
- Farhan, M., Sattar, A., Chaudhry, A.H., Khalil, F. (2012), Economic determinants of non-performing loans : Perception of Pakistani bankers. *European Journal of Business and Management*, 4(19), 87-99.
- Frank, M.M., Lynch, L.J., Rego, S.O. (2009), Tax reporting aggressiveness and its relation to aggressive financial reporting. *The Accounting Review*, 84(2), 467-496.
- Hamblen, M. (2011), *Mobile Business 2.0 : It's Location, Location, Location*. Available from: http://www.computerworld.com/s/article/9013099/Mobile_business_2_0_It_s_location_location_location.
- Heard, R., Hendrickson, C., McMichael, F.C. (2012), Sustainable development and physical infrastructure materials. *MRS Bulletin*, 37(4), 389-394.
- Homburg, C., Wilczek, H., Hahn, A. (2014), Looking beyond the horizon: How to approach the customers' customers in business-to-business markets. *Journal of Marketing*, 78(5), 58-77.
- Ilham, R., Wardana, P., Widyarti, E.T. (2015), Analisis pengaruh CAR, FDR, NPF, BOPO, dan size terhadap profitabilitas pada bank umum syariah di Indonesia (studi kasus pada bank umum syariah di Indonesia periode 2011-2014). *Diponegoro Journal of Management*, 4(4), 1-12.
- Jappelli, T., Padula, M. (2015), Investment in financial literacy, social security, and portfolio choice. *Journal of Pension Economics and Finance*, 7(1), 12-18.
- Lemiyana, L., Litriani, E. (2016), Pengaruh NPF, FDR, BOPO terhadap return on asset (ROA) pada bank umum syariah (studi kasus pada bank umum syariah di Indonesia tahun 2005-2010). *I-Economic Journal*, 2(1), 1-19.
- Limakrisna, N., Juju, U. (2008), Pengaruh sinergi, kredibilitas, kepemilikan baru, budaya, tata kelola perusahaan pada kinerja bank pasca privatisasi. *Trikonomika*, 7(2), 97-105.
- Liu, H., Wei, S., Ke, W., Wei, K.K., Hua, Z. (2016), The configuration between supply chain integration and information technology competency: A resource orchestration perspective. *Journal of Operations Management*, 2(1), 17-28.
- Liu, Z., Mao, X., Tu, J., Jaccard, M. (2014), A comparative assessment of economic-incentive and command-and-control instruments for air pollution and CO₂ control in China's iron and steel sector. *Journal of Environmental Management*, 3(5), 27-37.
- Lumpkin, G.T., Dess, G.G. (2001), Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16(5), 429-451.

- Mackie, P., Sim, F. (2013), Location, location, location. *Public Health*, 127(4), 299-300.
- Messai, A.S., Jouini, F. (2013), Micro and macro determinants of non-performing loans. *International Journal of Economics and Financial Issues*, 8(1), 112-121.
- Ngoc, Q.T.K., Flaaten, O., Anh, N.T.K. (2009), Efficiency of fishing vessels affected by a marine protected area - the case of small-scale trawlers and the marine protected area in nha trang bay, Vietnam. In: *Integrated Coastal Zone Management*. Vol. 27. US: Wiley-Blackwell. p12-25.
- Niode, N.N., Chabachib, M.C.M. (2016), Pengaruh Car, Pembiayaan, Npf, Dan Bopo Terhadap Roa bank umum syariah di Indonesia periode 2010-2015. *Diponegoro Journal of Management*, 5(3), 1-13.
- Nurainy, R., Nurcahyo, B., Sri, A.K., Sugiharti, B. (2013), Implementation of good corporate governance and its impact on corporate performance : The mediation role of firm size (empirical study from Indonesia). *Global Business and Management Research: An International Journal*, 9(2), 8-17.
- Prasanjaya, A.A.Y., Ramantha, I.W. (2013), Analisis pengaruh rasio CAR, BOPO, LDR DAN ukuran perusahaan terhadap profitabilitas bank yang terdaftar di bei. *Jurnal Akuntansi Universitas Udayana*, 7(4), 41-52.
- Rizan, M., Warokka, A., Listyawati, D. (2014), Relationship marketing and customer loyalty: Do customer satisfaction and customer trust really serve as intervening variables? *Journal of Marketing Research and Case Studies*, 7(4), 1-12.
- Royle, J., Laing, A. (2014), The digital marketing skills gap: Developing a digital marketer model for the communication industries. *International Journal of Information Management*, 6(1), 21-23.
- Saba, I., Kouser, R., Azeem, M. (2012), Determinants of non performing loans: Case of US banking sector. *The Romanian Economic Journal*, 2(3), 76-89.
- Said, M., Ali, H. (2016), An analysis on the factors affecting profitability level of sharia banking in Indonesia. *Banks and Bank Systems*, 11(3), 28-36.
- Sharma, A.K., Kumar, S. (2010), Economic value added (EVA) - literature review and relevant issues. *International Journal of Economics and Finance*, 7(9), 154-165.
- Siahaan, E., Gultom, P., Lumbanraja, P. (2016), Improvement of employee banking performance based on competency improvement and placement working through career development (case study in Indonesia). *International Business Management*, 10(3), 255-261.
- Simatupang, A., Franzlay, D. (2016), Capital adequacy ratio(CAR), non performing financing (NPF), efisiensi operasional (BOPO) dan financing to deposit ratio (FDR) terhadap profitabilitas bank umum syariah di Indonesia. *Administrasi Kantor*, 4(2), 466-485.
- Sofiati, N.A., Limakrisna, N. (2017), Holistic marketing implementation to increase company trust and image on state banking industries (a customer survey on customers of state banks in West Java province). *International Journal of Applied Business and Economic Research*, 15(6), 117-130.
- Sri, M. (2008), Implications process take over national private bank go public on the level of health and performance bank. *Jurnal Keuangan dan Perbankan*, 13(2), 346-358.
- Sugiono, P.D. (2014), *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif Dan R&D*. Bandung: Alfabeta.
- Sundararajan, A. (2004), Managing digital piracy: Pricing and protection. *Information Systems Research*, 5(1), 75-84.
- Tanasković, S., Jandrić, M. (2015), Macroeconomic and institutional determinants of non-performing loans. *Journal of Central Banking Theory and Practice*, 6(1), 27-36.
- Tassey, G. (2000), Standardization in technology-based markets. *Research Policy*, 10(5), 34-44.
- Vatansever, M., Hepsen, A. (2015), Determining impacts on non-performing loan ratio in Turkey. *Journal of Applied Finance and Banking*, 8(6), 97-105.
- Von Geibler, J. (2013), Market-based governance for sustainability in value chains: Conditions for successful standard setting in the palm oil sector. *Journal of Cleaner Production*, 9(1), 55-64.
- Wahyuningsih, T., Oemar, A., Suprijanto, A. (2015), Pengaruh Car, Npf, Fdr, Bopo, Dan Gwm terhadap laba perusahaan (Roa) pada bank umum syariah di Indonesia. *Journal of Accounting*, 1(1), 22-31.
- Wang, H., Lutsey, N. (2014), Long-term potential to reduce emissions from international shipping by adoption of best energy-efficiency practices. *Transportation Research Record: Journal of the Transportation Research Board*, 7(9), 12-23.
- Wardana, R.I.P. (2015), Analisis pengaruh CAR, FDR, NPF, BOPO dan size terhadap profitabilitas pada bank umum syariah di Indonesia (studi kasus pada bank umum syariah di Indonesia periode 2011-2014). *Universitas Diponegoro Semarang*, 4(2), 466-485.
- Wibowo, E.S., Syaichu, M. (2013), Analisis pengaruh suku bunga, inflasi, Car, Bopo, Npf terhadap profitabilitas bank syariah. *Diponegoro Journal of Accounting*, 2(2), 1-10.
- Yap, B.W., Ramayah, T., Shahidan, W.N.W. (2012), Satisfaction and trust on customer loyalty: A PLS approach. *Business Strategy Series*, 13(4), 154-167.