

The Role of Fundamental Factor in Mediating The Effect of Macroeconomic Factor on Banking Performance in Indonesia

Wa Ode Harliyanti Unga¹, A Student of Doctoral Program PPS UHO
Buyung Sarita², Dedy Takdir Syaifuddin³, Sujono⁴, Lecturers of Business and Economics Faculty UHO Kendari,
Southeast Sulawesi, Indonesia
waodeharliyanti.uho@gmail.com

Abstract—This research aims to find out and examine the role of a fundamental factor in mediating macroeconomic factors on the banking profitability in Indonesia. The sample of this research was determined by using purposive sampling method, which was a sampling method based on objectives/criteria, where the criteria used in determining sample members were banking companies listed on the Indonesia Stock Exchange and issuing annual financial statements for the period 2011 to 2017 totaling 22 banking companies, or banking companies that published audited financial statements using the financial year ending December 31. The data in this research were analyzed by using the Structural Equation Modeling (SEM) method based on variance was known as the Partial Least Square (PLS) method. The banking profitability could be assessed with a financial ratio analysis approach which included ROA and ROE. To achieve this, an analysis of macroeconomic factors including inflation, BI rate, and GDP as well as fundamental factors including CAR, DER, LDR, NPL, BOPO, and NIM were crucial to the success of the banking industry in achieving maximum profitability.

The results of this study indicate that, the result of testing the influence of macroeconomics on bank profitability indicate a negative effect and significant significant . While fundamental factors on the profitability of banks showed a negative effect and significant . The influence of macroeconomic factors on fundamental factors shows the existence of negative effect and significant influences. Furthermore, the influence of the Fator's Role of fundamental factors in mediating macroeconomic factors on profitability indicates a positive and significant effect on banking profitability.

Index Term: Economicmacro, Fundamental dan bank profitability

1 INTRODUCTION

The banking sector plays a role in the financial system to prioritize interactions with the economic system clearly and function in a healthy structure (Parasız, 2000). Institutional banking in promoting economic growth through savings mobilization and using mobilized savings to finance the most productive economic sectors (Alkhazaleh & Almsafir, 2014). With the existence of the banking sector in the financial system the bank will prioritize interactions with the economic system clearly and function in a healthy structure (Parasız, 2000). Banks must have sufficient capital to provide funds to meet internal needs and for expansion and ensure safety for savers (Pradhan & Parajuli, 2017).

In achieving bank performance in general, it will be influenced by several factors, both macroeconomic factors, and bank fundamental factors. Research by Ashraf et. al (2017) concerning the influence of macroeconomic factors on the profitability of commercial banks in Asia found that macroeconomic variables significantly influence profitability. Macroeconomic indicators used were GDP and inflation, the findings were: GDP had a negative effect and significant on bank profitability, while inflation had a positive effect and not significant on bank profitability. Similarly Tan & Floros (2017), Combey & Togbonou (2017) research, revealed that GDP had a negative influence on the profitability of commercial banks in

China. The results of this research were not in line with the research of Marthinho et. al (2017), Hasanov et al (2018), found that GDP had a positive effect and significant on bank profitability. Furthermore Hasanov et al (2018) research showed that macroeconomics had a positive effect and significant on bank profitability. Rostami and Mosavi (2016), Kanwal and Nadeem (2013), Khan & Sattar (2014), revealed that inflation had a positive and significant effect on bank performance. In contrast to the results of the study of Muhammad Sajid Saeed (2014) which revealed that GDP and inflation had a negative impact.

The same research also by Suffian et al (2008); Staikouras & Wood (2003), Goddard et al. (2004), Pasiouras & Kosmidou (2007), and Kosmidou (2008) with the result that there was a positive relationship between the profitability of commercial banks and the level of capital adequacy. On the other hand, research conducted by Pradhan and Paradjuli (2017) has different findings, where CAR negatively affected bank performance (ROA). Similarly, research conducted by Chou and Buchdadi (2016) found that CAR had no significant effect on ROA.

Previous research on the effect of NPL on profitability found various results. Research by Serwada (2018), Akter & Ro (2017), Kusmayadi (2018) and Kusmayadi (2018) found that NPL had a negative effect and significant on banking ROA.

But, it was not in line with the results of the research by Fajari & Sunarto (2017) who found that NPL had a positive effect and significant on banking ROA.

Furthermore, the effect of LDR on profitability also found various results. Anwar & Oemarzai's research (2018), Kusumayadi (2017) found that LDR had a positive effect and significant on bank profitability. On the other hand, Yudha et al (2017), Ingawati & Hermanto (2018) found that LDR had a negative effect and significant on bank profitability.

Tan & Floros (2017) research on the effect of efficiency on bank profitability in China found that cost efficiency had a significant impact on bank profitability. Operating expenses operating income (BOPO) was the ratio between operating costs to operating income (Siamat, 2005). The smaller the BOPO showed the more efficient the bank was in carrying out its business activities so that the bank was healthier (Herdingtyas, 2005).

Furthermore, the influence of the BOPO on profitability also still found various results. Kusumayadi (2018), Mismiwati (2016), Chou and Buchdadi (2016) research found that the BOPO had a negative effect and significant on bank profitability. Likewise Yusuf's research (2017) found that the BOPO had a positive effect on ROA.

Salas and Saurina (2002) showed a relationship between GDP and NPL. The results of the study were confirmed by Jimenez and Saurina (2005) that NPL was influenced by GDP. Wu, et. al (2003) in their research showed that GDP had a significant negative effect on problem loans.

While in Rahmawulan's research (2008), Ahmed (2006) showed the opposite, GDP had a significant positive effect on problem loans. Another study by Soebagia (2005), Nasution and Williasih (2007), in their research found that GDP had no significant effect on problem loans. While studies such as research by Soebagio (2005), Rahmawulan (2008), and Faiz (2010), it was known that inflation had a significant positive effect on problem loans. Whereas in the research of Wu, et al. (2003) and Ihsan (2011) stated there was no significant effect between inflation on problem loans.

In addition to the above phenomenon, this research departs from the results of research conducted by Vincent okoth Ongore (2013). Vincent okoth Ongore who raised the financial performance of commercial banks in Kenya. This research applies the CAMEL approach to check financial health in commercial banks, in line with the recommendations of the Basel Committee on Banking Supervision of the Bank of International Settlements (BIS) in 1988 (ADB in Baral, 2005). Furthermore, the study in this research also included macroeconomic variables (inflation, BI and GDP) as key variables in banking analysis.

The results of this research indicated that capital adequacy, asset quality, and management efficiency significantly affected the performance of commercial banks in Kenya. However, the effect of liquidity on this matter was not strong. In addition, the results of this research also showed that there was a relationship between bank performance and capital adequacy and management efficiency, but for asset quality the relationship was negative. This indicated that low asset quality was associated with poor banking performance. Then, it became possible

to conclude that banks that had high asset quality and loans were slightly more profitable. The liquidity management factor shown by the liquidity ratio showed no significant effect on commercial banks in Kenya

2 LITERATURE REVIEW

Growth Concept

The theory of growth experiences rapid development in the decade's 50s until now. But, broadly speaking, there are two broad currents of theory, namely, the analytical school of thought dealing with the historical school of thought. Analytical school of thought emphasizes theories that can express the process of growth logically and consistently, but often (though not always) are abstract and lack emphasis on (historical) empirical content.

Classic School of Thought

The ideas of Adam Smith, David Ricardo, and Thomas Robert Malthus showed that the classical school of thought thinkers embraced a broad view of economic activity in people's lives (Djojohadikusumo, 1994). This school of thought places economic phenomena in an overall economic system of society. The framework of thought and pattern of approach of the classical school of thought of experts on economic phenomena in the process of development are marked by a number of basic propositions that are still simple; even by today's measurements it is possible to be oversimplified. His attention was directed to economic development as it was happening to people in developed countries. These countries already have an industrial base so that the economy takes place in the form of production that can be seeded and generates increased income.

The system of analysis of thinkers in the Classical school of thought is based on the assumption that it is as if economic development is operating in a free market condition with perfect competition without any monopoly elements. Although they have views and directions of thought that contain many similarities, of course these Classical schools of thought thinkers have differences in their approaches and models of study.

Adam Smith

Adam Smith is often referred to as the "father" of modern economics. He is actually better known as the Theory of Value which is a theory that investigates the factors that determine the value or price of an item. In his monumental book "An Inquiry into the Nature and Causes of the Wealth of Nations", we can see the main theme of how the capitalist economy grows. In the book, the theory of economic growth for the first time is expressed at length and systematically. Therefore, Adam Smith's theory is often regarded as the beginning of a systematic study of economic growth problems.

According to Adam Smith, economic growth is divided into 5 sequential stages, starting from the hunting stage, the rising stage, the farming stage, the trade stage and finally the industrial stage. According to this theory, society will move from traditional society to modern capitalist society. In the process, economic growth would be increasingly encouraged

by the existence of a system of division of labor between economic actors (Kuncoro, 1997).

David Ricardo

Classical growth theory is developing more rapidly in the hands of David Ricardo. This development is in the form of a description in which the growth model becomes sharper, both in the concepts used and in terms of the mechanism of the growth process itself. However, it should be emphasized here that the outline of the growth process and the general conclusions drawn by Ricardo are not too different from Adam Smith's theory. The main difference lies in the use of analytical tools on income distribution (based on Ricardo's famous theory) in the elaboration of the growth mechanism and the disclosure of the clearer role of the agricultural sector among other sectors in the growth process. The conclusion is that if the population growth is too large, the labor will be abundant and there will be a decline in wages so that the economy stagnates.

Thomas Robert Malthus

In the view of the classical school of thought of economic development in general, there appears to be an influence from Malthus's idea of the significance of the problem of population growth on economic development. Thus, this matter needs to be considered because the problem of population has meaning and relevance to economic development. According to Malthus, naturally the population will continue to increase faster than the food supply. Food production per capita, of course, will decrease, while the population will increase. Malthus argues that there is no guarantee that quantitative population growth will affect growth sustainability. Malthus revealed a number of factors constraining the continuity of growth. Increasing the population quantitatively is by no means a guarantee that real income will also increase in proportion.

Theories of Neoclassical Economic Growth

Harrod-Domar

The classical economic growth theory pioneered by Harrod-Domar said the need for capital formation (investment) as a condition to achieve steady economic growth (steady growth). If the capital formation has been carried out, then the economy will be able to produce goods in greater quantities.

Schumpeter

According to Schumpeter that when others consider the population as a central aspect in the process of economic growth and development, Schumpeter believes that economic growth is largely determined by the ability of entrepreneurship because they dare to innovate in production activities.

Robert Solow

According to Solow, in the long run, the savings rate can determine capital in the production process. That is, the higher the level of savings, the higher the capital and output produced.

Evolution of Inflation Theory

Broadly speaking, there are three groups of theories regarding inflation, namely the quantity theory, Keynes theory, and Structuralist theory (Boediono, 1982).

Quantity Theory

The theory of inflation initially developed from a theory known as the quantity theory (about money). Quantity theory is basically a hypothesis about factors that cause changes in the price level when an increase in the money supply is a determining factor or a factor that influences an increase in the price level.

Quantity theory not only states that the money supply is a factor causing changes in the price level. The quantity theory of money is also related to the theory of (1) the proportionality of the amount of money to the price level, (2) the mechanism of monetary transmission, (3) the neutrality of money, and (4) the monetary theory of the price level. Monetary economists who adhere to the quantity theory in their development are better known as Monetarist economists. One of these monetarist figures is Milton Friedman who was an economist who perfected the quantity theory and further formulated the quantity theory of money and developed a theory of money demand. The theory of the demand for money in its development became a very important theory in macroeconomic theory. The theory of the demand for money in its development has also experienced many variations and very rapid development.

Keynes Theory

In its development, not all economists agree with the quantity theory of money. Example: Keynesian economists do not fully agree with the theory. Keynesian economists state that the quantity theory is invalid because it assumes that the economy is in full employment (full economic capacity). In a condition of economic capacity that is not yet full, the expansion (increase) of the money supply will actually increase output (increase economic growth and employment opportunities) and will not increase prices. Further it is said that money is not completely neutral, the increase in the money supply can have a permanent effect on real variables such as output and interest rates.

Keynes's approach also states that the quantity theory which assumes the elasticity and velocity of circulation is also incorrect. The elasticity and velocity of money are very difficult to predict and much is influenced by public expectations and changes in goods that are substitutes for money (financial assets). This is evident that in an economy whose financial sector has advanced and there are financial instruments that function as money substitutes, then the velocity of money will become increasingly difficult to predict.

Interest Rate Theory

The interest rate theory developed by the British economist John Maynard Keynes, who has criticized the classical economic theory of the development of interest rate theory. According to Keynes, classical theory applies only to long-term interest. He developed this theory of liquidity preference to explain interest rates for the short term. The interest rate ac-

According to Keynes is the price issued by the debtor to encourage a creditor to move their scarce resources (money), however, the money issued by the debtor has the possibility of loss in the form of the risk of not receiving a certain interest rate.

In this theory there are two types of investments developed, namely money and bonds. Money is the most liquid wealth because money has the ability to buy at any time. Whereas bonds cannot buy something unless they are first converted into cash. Keynes said that, the demand for money is a rational act, increasing demand for money will raise interest rates.

The theory of interest which is largely supported by Austrian economists is the theory of interest called 'pure time preference theory', which states that interest is the exclusive result of human time preference, ie things they like in general that are closer to time than things further in time (Mises, 1949) 2008. But this theory contradicts many other positions. Neoclassical economists, for example, see interest rates simultaneously determined by (and equivalent to) the marginal productivity of capital, the time preference of representative agents, and the share of income of capitalists, whereas in Keynes's account, interest is seen as the price of money, mainly determined by preference liquidity.

Evolution of Fundamental Theory

Capital Structure Theory and Agency Theory

Two financial theories that have been well established are capital structure theory and agency theory, both theories have a very close relationship. Modern capital structure theory starts with Modigliani and Miller's (1958) papers, which are new breakthroughs in modern financial management. The propositions put forward by Modigliani and Miller have had very large supporters until now. Propositions stating the irrelevance of financing decisions have important implications, namely the conditions under which such decisions become irrelevant, and implicitly also raise questions about the conditions under which these decisions become relevant (Harris and Raviv, 1991).

After a very long discussion, Modigliani and Miller (1963), relaxed one of their assumptions about the existence of corporate tax. What if there is a corporate tax, then the financing decision becomes relevant, the use of debt will increase the value of the company. Further development for more than forty years, various theoretical and empirical researches have been carried out by releasing some basic assumptions from the Modigliani and Miller propositions. Various studies have enriched Modigliani's and Miller's propositions by including tax factors, costs of financial distress, bankruptcy costs, agency costs, and transaction costs (Myers, 1977, 1984 and Jensen & Meckling, 1976).

Efforts to incorporate various factors and remove one by one from various market imperfections have given rise to two new financial theories from the capital structure theory, which are opposites, namely trade-off theory or known as balancing theory and pecking order theory (Myers and Majluf, 1984). Although both theories state that financing decisions are relevant in capital structure policies in imperfect capital market conditions.

The next development of capital structure theory is the discovery of agency theory (agency theory) by Jensen and Meckling (1976), which states that between owners and management have different interests. The main principle of this theory states that there is a working relationship between the party that gives authority (the principal), ie the owner and the party who receives the authority (agent), namely the manager. The existence of these various interests, each party seeks to increase profits for himself. The principal (owner) wants a maximum and maximum return on the investment made. Whereas the agent (manager) wants his interests to be maximally accommodated for his performance.

Agency theory assumes that all individuals act on their own behalf. Shareholders as principals are assumed to only be interested in financial results in the form of increased dividends. While managers as agents are assumed to receive satisfaction in the form of high financial compensation and the conditions that accompany the relationship. Thus, the difference in interests between shareholders and managers lies in maximizing the benefits (utility) of shareholders (principal) with constraints of benefits (utility) and incentives that will be received by managers (agents). The existence of differences in interests is what triggers a conflict between the owner (principal) and manager (agent)

Signaling Theory

The signaling theory was first conceived by Akerlof et al. which earned them the Nobel Prize in Economics in 2001. The signaling theory was developed in economics and finance to take into account the fact that company insiders generally have better and faster information regarding current conditions and company prospects compared to outside investors. This theory explains that a good financial report is a signal or a sign that the company has also been operating well. Signal Theory also suggests how a company should give signals to users of financial statements. These signals are information about the company's condition to the owner or interested parties.

Fundamental Factor

The Concept of Operating Income Operating Expenses (BOPO)

Operating Income Operating Expenses Ratio (BOPO) is the ratio between operating costs to operating income. Operating costs are costs incurred by the bank in the context of carrying out its main business activities such as interest costs, marketing costs, labor costs, and other operating costs. Operating income is the main income of the bank, which is the income obtained from the placement of funds in the form of credit and other operating income. The lower the BOPO means the more efficient the bank is in controlling its operational costs, with the existence of cost efficiency the greater profits the bank will get (Dendawijaya, 2009).

Capital Adequacy Ratio (CAR) Concept

Capital Adequacy Ratio is a capital ratio that shows the ability of banks to provide funds for business development needs and to accommodate the possibility of loss risk caused by

bank operations. The greater the ratio, the better the capital position (Achmad and Kusuno, 2003). Capital Adequacy Ratio is capital adequacy that shows the ability of banks to maintain sufficient capital and the ability of bank management to identify, measure, supervise, and control the risks that arise that can affect the amount of capital.

DER (debt to equity ratio)

The debt to equity ratio (DER) is used to measure the level of leverage (use of debt) to the total equity owned by the company. A high debt ratio has a bad impact on company performance, because the level of debt is higher, which means the interest expense will be greater so that it can reduce profits. The higher the DER shows the high dependence of the company's capital to outsiders so that the financial risk or risk of failure of the company to repay loans will be higher.

Loan to Deposit Ratio (LDR) Concept

Almilia and Herdiningtyas (2005) Loan to Deposit Ratio (LDR) is used to assess the liquidity of a bank by dividing the amount of credit by the number of funds. Loan to Deposit Ratio (LDR) is a ratio that shows the ability of a bank to provide funds to its debtors with the capital owned by banks and funds that can be collected from the public.

Net Interest Margin (NIM)

Net Interest Margin (NIM) is important to evaluate the ability of banks to manage risks to interest rates. NIM is a measure of the difference between interest income generated by banks and the amount of interest paid to their lenders (for example, deposits), relative to the amount of their assets (Ongore, 2012).

Non-Performing Loan (NPL) Concept

In extending credit to customers, banks will be exposed to credit risk that the debtor cannot afford to pay, leading to problem loans. According to Ismail (2009), the non-performing loan is a situation where the customer is unable to pay part or all of his obligations to the bank as agreed. Each bank must be able to manage credit well in providing credit to the public and in returning credit in accordance with applicable terms and conditions so as not to cause problem loans.

Return on Assets (ROA) Concept

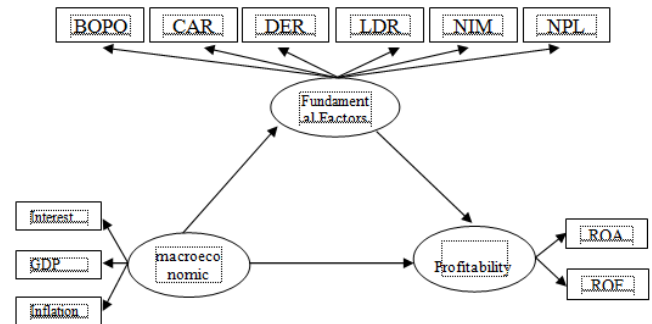
Return on Assets (ROA) is a ratio that is used to measure the ability of bank management to obtain profitability and manage the level of efficiency of the overall bank business. The greater the value of this ratio indicates the level of profitability of the bank's business better or healthier (Mahrinasari, 2003). The greater Return on Assets (ROA) shows the company's performance is getting better because the greater the return. So in this study using Return On Assets (ROA) as an indicator of measuring the financial performance of banking companies.

ROE (return on equity)

This ratio is often referred to as return on net worth is a profitability ratio that shows the ratio between earnings after tax or earnings after tax (EAT) to total own capital (equity) that comes from the owner's paid-in capital, unpaid profits and other reserves collected by a company. This ratio shows the

extent to which companies manage their own capital (equity) effectively, measuring the level of return on investment made by the owners of their own capital or shareholders.

Framework



3 RESEARCH METHOD

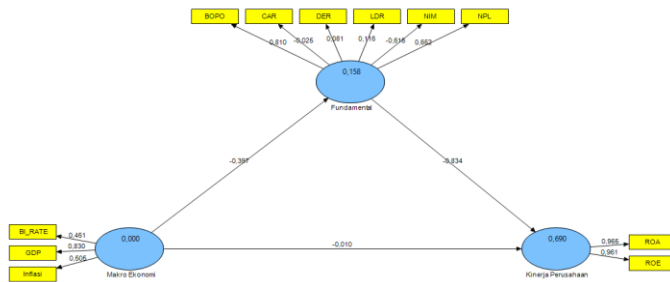
This research used a quantitative approach. Quantitative approaches used the postpositivist paradigm in developing science using research strategies such as experiments and surveys that require statistical data (Emzir, 2008: 28). The type of data used in this research was secondary data, namely macroeconomic data and bank financial ratios: Capital Adequacy Ratio (CAR), Non Performing Loans (NPL), Loan to Deposit Ratio (LDR), Debt to Equity Ratio (DER), Operating Expenses against Operating Income (BOPO), Net Interest Margin (NIM) and profitability proxied by ROA and ROE. The data is taken from financial statements that are public every year for the period 2011 - 2017

To test the strength of the determinant variables (economic factors and fundamental factors) on bank performance, this research used a variance-based analysis of Structural Equation Modeling (SEM) known as the Partial Least Square (PLS) method. Hypothesis testing (β , γ and δ) was performed by the bootstrap resampling method developed by Geiser and Stone (Solimun, 2012). Test statistics that allowed data to be distributed freely (free distribution), so it did not require the assumption of a normal distribution and did not require a larger sample than the original sample.

Analysis Result of Partial Least Square

In an effort to obtain a full power structural model, then after determining the structural model (inner model) and measurement model (outer model), which is explained in the methodology section in this section an empirical model of research is evaluated. Partial Least Square analysis result, empirical models can be seen visually in the following picture;

Picture 5.1 Analysis Result of Partial Least Square



Picture 5.1. Research Empiric Model

Based on the results of the PLS analysis, it was necessary to test the suitability of the theoretical model and the empirical model (goodness of fit). This research contained four latent variables with 11 indicators. Two latent variables namely macroeconomic factors and fundamental factors were formative. Whereas the bank performance variable was reflective then the fundamental variable was moderation. Evaluation of the latent variable measurement model with formative indicators was based on the content of substantive namely by comparing the relative weight and seeing the significance of the weight size (Chin in Solimun, 2008, 2010; and Ghozali, 2008). Evaluation of measurement models for each latent variable can be explained as follows:

Table.1 Macroeconomic Variable Indicator Testing Results

Indicator	Outer Loadings	T-Statistik (t critical : 1,96)
BI RATE <- macroeconomics	0.450729	1.110472
GDP <- macroeconomics	0.829941	3.76371
INFLASI <- macroeconomics	0.242303	1.322505

Source: data processing results of PLS, 2019.

Based on Table 5.1 it appears that of the three indicators that reflect macroeconomic variables namely interest rates, inflation and GDP, only one indicator is significant, namely GDP. This fact does not mean that indicators of interest rates and inflation must be removed from the model.

Table. 2 Fundamental Variable Indicator Testing Results

Indicator	Outer Loading	T-Statistik (t critical : 1,96)
CAR <- Fundamental	-0.024938	0.074638
DER <- Fundamental	0.080506	0.247648
LDR <- Fundamental	0.116472	0.5816
NPL <- Fundamental	0.652244	4.7274
BOPO <- Fundamental	0.810203	6.952942
NIM <- Fundamental	-0.651687	3.170687

Source: data processing results of PLS, 2019.

Based on Table 5.12. it appears that outer loading that reflects fundamental variables with a statistical t above 1.66 is that there are only three dimensions, namely NPL, BOPO, and NIM. Based on outer loading values, it is known that CAR and NIM have negative values informing fundamental variables.

Table 3. Test Results of Bank Profitability Variable Indicators

Indicator	Outer Loading	T-Statistic (t critical : 1,96)
ROA <- Profitability	0.965476	9.21045
ROE <- Profitability	0.961476	9.0835

Source: Secondary data processed, 2019.

Based on Table 5.14. it appears that outer loading which re-

fects bank performance variables with a statistical t above 1.66 is all indicators of ROA and ROE. This shows that ROA and ROE indicators are dominant in shaping bank performance variables

Tabel 4. Hasil Analisis Jalur

Path coefficient	Path coefficient	T. Calculate (t _{kritis} = 1.66)	Information
Fundamental -> Profitability	-0.834312	11,733539	Significant
Macroeconomi-> Fundamental	-0.397432	2,076787	Significant
acroeconomi -> Profitability	-0.009828	0.085503	Not significant

Source: data processing results of PLS, 2019.

4 DISCUSSION

The influence of macroeconomic factors on banking fundamental factors.

The results of the analysis of macroeconomic influences on fundamental factors found a negative and significant effect. These findings indicate that macroeconomic variables such as: interest rates, GDP and inflation have not been able to influence bank fundamental factors. Negative and significant influence implies that if these macroeconomic factors decline it will affect the fundamental factors of the bank to decrease, such as increasing interest rates will encourage the amount of credit payments that must be paid immediately becomes higher. This condition occurs because when interest rates are raised indicating economic conditions are experiencing problems such as high inflation, the situation will certainly affect the business sector developed by debtors, an increase in central bank interest rates certainly aims to attract local currency in circulation in the community, the tendency of the community will certainly prefer to save when interest rates are raised, but if we observe in the process of credit payments, an increase in interest rates will certainly push the greater the value of the credit bills to be met, the situation would certainly make debtors panic and heighten the value of problem loans as seen in the Non ratio Performing Loans owned by the bank, Muthia. et al (2015).

This means that banks are required to have adequate sensitivity to changes in macroeconomic conditions, so that they can identify risks that will arise as a result. In addition, banks are also required to manage it through the formation and implementation of anticipatory strategies so that changes that occur in external factors do not have an impact on the internal bank. The results of this study do not support the results of research conducted by Ida Bagus. et.al (2018) which states that external factors (inflation, interest rates and exchange rates) have a positive and significant effect on the symbolized risk factor (NPL) in BPD banks in Indonesia. However, Sufian and Chong's research (2008) shows the negative relationship between inflation and bank size, credit risk and profitability.), Rahmawulan (2008), and Faiz (2010), note that inflation has a significant positive effect on problem loans.

The influence of macroeconomics on bank profitability

The test results show a negative effect but not significant. This finding shows that macroeconomic variables have not been able to explain the increase and decrease in bank profitability.

Macroeconomics has a negative but not significant effect on bank profitability, meaning that economic growth does not directly affect bank profitability, but macroeconomics will trigger business growth in the real sector, which in turn will facilitate business managers in returning their loans to banks, thus banking profitability will improve. Of the 3 dimensions to measure macroeconomic factors, only the GDP dimension has a positive and significant effect, then inflation and interest rates have a positive but not significant effect.

The results of this research are not in line with the results of research conducted by Owusu et.al (2017). The results of the findings show that inflation and, BI Rate and GDP growth have a negative effect and not significant on ROA. The results of this research are also not in line with the results of Ongore's (2012) research that GDP macroeconomic factors have a negative correlation with ROA and NIM but are positive with ROE. Furthermore, the results of this research also do not support the research of Kanwal and Nadeem (2013) and Hasanov et. al (2018) that macroeconomics has a positive and significant effect on bank profitability. The results of this research are also not in line with research conducted by Ayaidin (2015). The results of this research indicate that the inflation rate (INF) has a negative effect and significant on ROA, ROE, and ITA, except for NIM.

The influence of fundamental factors on bank profitability

Based on the results of the analysis of the influence of fundamental factors / specific banks on profitability found a negative effect and significant. The results of this research support the opinion of Flamini et al (2009) that the profitability of commercial banks can be influenced by internal factors that can be classified into bank-specific variables (internal). In addition, the results of this study also support the theory of performance behavior structure (SCP), that banks are able to extract monopolistic rent in concentrated markets with their ability to offer lower deposit rates and charge higher loan rates.

Based on the results of the analysis of the effect of CAR on profitability found a positive but not significant effect. The results of this research, in line with research conducted by Serwada (2018) that CAR did not significantly influence the profitability of banks in Hungary. Likewise Chou and Buchdadi's (2016) research showed that CAR had no significant effect on profitability. On the other hand this research is not in the same direction as the research conducted by Ashraf et al (2017) that CAR has a positive effect and significant on the profitability of banks in Pakistan and Kusmayadi (2018) CAR has a positive effect and significant on the profitability of BPR banks in Indonesia.

Based on the analysis of the effect of LDR on profitability found a positive effect and not significant. This finding contradicts the modern portfolio theory proposed by Markowitz (1985) that the return of a financial instrument is determined by the risk, in other words, the higher the risk it bears, the higher the profit it will get, there is a positive relationship between risk and profitability. The further results of this research also do not support the research of Yudha et. al (2017) and Inggawati, Susi & Hermanto (2018) that LDR has a negative effect and significant on profitability.

Based on the analysis of the effect of NPL on profitability found a positive effect and significant. The results of this research support the opinion of Mudrajad Kuncoro (2002: 462), Kithinji (2010) and Kaaya and Pastory (2013) credit risk arising as a result of the failure or inability of customers to repay long-term loans gradually affecting the profitability of commercial banks. Also in line with the opinion of Samir and Kamra (2013) argues that bad loans have a bad impact on bank profits because they reduce interest income, and erode current earnings and the capital base through provisions. However, the results of this study do not support Serwada's research (2018) examining the effect of non-performing loans on bank profitability in Hungary, finding that NPL has a negative and significant effect on bank ROA. Likewise Akter & Ro's research (2017) on the effect of NPLs on the profitability of banks listed on the Dhaka Bangladesh Stock Exchange found that NPLs had a negative effect and significant on bank profitability.

Based on the results of the analysis of the effect of DER on profitability found a negative effect and not significant on profitability. The findings of this research support the proposition of Jensen (1986) that the use of debt will increase corporate profits because an increase in debt will increase stock prices, a decrease in debt will reduce stock prices. Furthermore, the findings of this research also support the study of Leland & Pyle (1977) who found that the higher the ratio of debt to capital, the higher the implications of bankruptcy risk which have an impact on decreasing company profitability. The results of this research support the balancing theory (Baxter, 1967), that the use of debt that exceeds a certain threshold can reduce the profitability of the company, this is due to increased bankruptcy costs. However, the results of this research do not support the Capital Structure theory of Modigliani and Miller (1963), stating that with the corporate tax, the funding decision becomes relevant, which will increase the value of the company.

Based on the analysis of the effect of NIM on profitability found a negative effect and significant. The results of this research are not in line with the results of Hasdillah (2017) research finding that NIM has a positive effect and significant profitability. However, the results of this research contradict the research of Mismiwati (2016) who found that NIM had no significant effect on profitability.

Based on the analysis of the effect of BOPO on ROA found a positive effect and significant. The results of this research do not support the opinion of Dendawijaya (2003) that the more efficient operational costs incurred by banks, the greater the ability to generate profits. Conversely, the greater the costs incurred by the bank, the smaller the profits. The results of this research are also not in line with previous researches on the effect of BOPO on profitability found that BOPO has a significant negative effect on profitability (Mismiwati, 2016), (Buchory Herry Achmad, 2015), (Chou and Buchdadi, 2016).

The results of this research are in line with the results of research conducted by Demirguc-Kunt and Huizinga (1998) reflecting that the stock market capitalization ratio to GDP is positively related to net interest margins, which indicate that a larger stock market allows banks to obtain more interest mar-

gins high, with a positive impact on profitability.

The results of this research contradict the results of research by Waweru and Kalani (2009) on commercial banks in Kenya. The results of his research show that the high-interest rates charged by banks are one of the internal factors that lead to the emergence of risk and bad credit which in turn will cause the bank's profitability to earn profits to decline. But on the contrary if the interest rates at the bank are not too high, it will increase the ability to pay credit, thereby reducing risk and increasing bank profitability.

The Role of Fundamental Factors in mediating the influence of macroeconomic factors on the profitability of banks

Based on the results of the analysis of the influence of the role of fundamental factors in mediating economic factors on bank profitability, found a positive and significant effect. This finding shows that macroeconomic factors have been able to explain the increase and decrease in bank profitability through the role of fundamental factors. In the case of internal factors, the authority in banking management in terms of policies governing bank management has supported the acceleration of growth in assets, loans and third party funds so that bank profitability is increasing. In addition, external factors must also have received attention, especially on interest rates. Interest that will affect the economic sector, in addition to affecting changes in the inflation rate and Bank Indonesia policies which will all affect profitability.

The role of fundamental factors is proven as a factor that has a very large influence on profitability. Credit growth is the most dominant manifestation of internal bank factors, followed by indicators of asset growth, and finally third party fund growth. In addition, the strategy used in achieving bank profitability is that the bank management regularly checks information on economic developments and changes in market behavior, both from customer information, print and electronic media, local communities, other financial institutions, and local governments. Good relations and support from local governments as partners and shareholders will be very helpful in updating information, especially on central and regional government regulations and policies that can affect macroeconomic factors. The information collected is very useful in the formulation of strategies aimed at increasing bank profitability.

All components of the bank must monitor the fundamental factors, both the risks that occur in addition to anticipating the risks that might occur, to be considered in determining the strategy, because fundamental factors are variables that directly or indirectly affect bank profitability. NPL became the most dominant manifest of bank risk factors, followed by LDR, followed by the latest DER, BOPO, CAR and NIM. It can be noted that, in monitoring NPLs, risk mitigation has been carried out since the credit is processed, realized and managed until the credit is repaid. All must be in accordance with the SOP of each bank Handling of problem loans must be resolved through an approach to the debtor to explore information about the main causes of the problem, so that later can determine the resolution steps.

5 CONCLUSION

The results of testing the influence of macroeconomic factors on fundamental factors indicate a negative effect and significant. The results of this test prove that as macroeconomic factors increase as indicated by GDP, interest rates and inflation, bank profitability as indicated by ROA and ROE increases. The results of this research also mean that macroeconomic factors are in the same direction and contribute significantly to bank profitability.

The results of testing the macroeconomic influence on bank profitability indicate a negative effect but not significant. This finding shows that macroeconomic variables have not been able to explain the increase and decrease in bank profitability. Macroeconomics has a negative effect but not significant on bank profitability, meaning that economic growth does not directly affect bank profitability, but macroeconomics will trigger business growth in the real sector, which in turn will facilitate business managers in returning their loans to banks, thus banking profitability will improve. Of the 3 dimensions to measure macroeconomic factors, only the GDP dimension has a positive and significant effect, then inflation and interest rates have a positive but not significant effect.

The results of the analysis of the influence of specific fundamental / bank factors on profitability found a negative effect and significant. The test results prove that the more fundamental factors of the bank, the bank's profitability as indicated by ROA and ROE decreases.

6 RECOMMENDATION

Based on the results of this study, that macroeconomic factors and fundamental factors do not have an influence on bank profitability, it is expected that future studies can use or re-test the indicators used in this study that are more specific to certain banks, especially at foreign exchange banks or commercial banks. as a whole and by adding other relevant variables, for example the variables of bank size and bank ownership to get a deeper study.

REFERENCES

- [1] Achmad, T, Kusuno, 2003. *Analysis of Financial Ratios as Indicators in Predicting the Potential of Bankruptcy in the Indonesian Banking* ", Media Economics and Business, Vol XV, No 1, Juni, Hal 54-75.
- [2] Ahmed .2006. *Determinan of the Net Interes Margins of Banks in Turkey*, Journal of Ekonomic and Social Resears,
- [3] Akter, R.and Roy,J.K. 2017. *TheImpactsof Non-performing Loan on Profitability: An Empirical Study on Banking Sector of Dhaka Stock Exchange. International Journal of Economics andFinance; Vol.9,No.3;2017.*
- [4] Alkhazaleh dan Alamsafir. 2014,*Ayman Mansour dan Mahmoud Khalid Almsafir, "Does Asymmetry of Information Drive Banks' Capital Structure? Empirical Evidence from Jordan"*, International Journal of Economics and Finance. 2015, Vol. 7, No. 3, pp. 89, 93.
- [5] Almilia dan Herdiningtyas . 2005, *Analysis of CAMEL Ratio to Prediction of Problematic Conditions in Banking Institutions for the Period 2000-2002*, *Journal of Accounting and Finance*, Vol. 7 No. 2 November
- [6] Ashraf et al 2017. *Bank Specific and Macroeconomic Determinants Impact on Banks Profitability: Evidence from Asian Countries*. University of

- Gujrat sub campus Narowal.
- [7] Baxter .1967. *Leverage, Risk of Ruin and The Cost of Capital*, *Journal of Finance*, septembet, 395-403
- [8] Boediono,1992*Pengantar Ilmu Ekonomi*No. 4:*Teori Pertumbuhan Ekonomi*, Edisi Pertama, Yogyakarta: BPFE
- [9] Buchory Herry Achmad. 2014.*Analysis of The Effect of Capital, Net Interest Margin, Credit Risk and Profitability in the Implementation of Banking Intermediation*. *European Journal of Business and Management* ISSN 2222 - 1905 Vol 6 No. 24.
- [10] Solimun .2008. *Multivariate Analysis Structural Equation Modeling (SEM)* Amos
- [11] Chou, T.-K., & Buchdadi, A. D. (2016). *Bank performance and its underlying factors: A study of rural banks in Indonesia*. *Accounting and Finance Research*, 5, No.3, 55-63.
- [12] Dendawijaya, Lukman. 2003.*Banking management*. Jakarta: Ghalia Indonesia.
- [13] Djojohadikusumo, Sumitro. 1994. *Development of Economic Thought: Basic*
- [14] Ediningsih. 2004. *Financial Ratios and Earnings Growth Predictions: Empirical Studies in Manufacturing Companies "*, *Wahana Journal*, Vol. 7, No.1, February, pp. 29-42.
- [15] Emzir.(2008).*Quantitative & Qualitative Education Research Methods*.Jakarta: Rajawali Pers
- [16] Fahmi, Irham. 2012. *Financial Statement Analysis*. 2nd printing. Bandung: Alfabeta.
- [17] Flamini, V., McDonald, C., Schumacher, L. 2009. *The Determinants of Commercial Bank Profitability in SubSaharan Africa*. *Journal of Law and Economics*, 15-20.
- [18] Ghozali,Imam. 2008. *Application of Multivariate Analysis with Programs SPSS*. Semarang: Badan Penerbit Universitas Diponegoro.
- [19] Hasanov *et al.* 2018.*The Effects of Fiscal Policy on non-Economic Growth*.
- [20] Hasdillah. 2017. *The Effect of LDR, NPL, NIM and CAR on ROA in the Regional Development Bank of East Kalimantan for the 2010-2016 Period*. *Journal of Business Administration* No. 4 Vol. 5
- [21] Ismail, Solihin. 2009.*Introduction to Management*. Jakarta: Erlangga
- [22] Jensen dan Meckling. 1976. *Theory of The Firm:Manajerial behavior, agency costs and their impact and owndershipstructure*. *Journal Financial of Economic*.
- [23] Jimenez dan Saurina2003.*CreditCycles,CreditRisk,andPrudential Regulation*,*InternationalJournalofCentralBanking*,Vol.2No.2,June 2006,Hal.66-98.
- Keynes.1936.*The Genaral Theory of Employment, interes, and money*.
- [25] Kasmir. 2008.*Banking Management Revised EditionRevisi* . Jakarta: PT Raja Grafindo Persada
- [26] Kuncoro, Mudrajad dan Suhardjono. 2002.*Banking Management: Theory and Application*, Yogyakarta: BPFE.
- [27] Kusmayadi, dedi. 2018. *Analysis of the Effect of CAR, LDR, NPL, BOPO, and Measures on Return of Assets in Rural Credit Banks in Indonesia*. *Journal of economics*. ISSN 2415-6671
- [28] Leland,E dan Pyle, David .1977. *Informational Asymmetries, Financial Structure, and FinancialIntermediation*.*TheJournalof Finance*., page371-387
- [29] Mahrinasari .2003.*Pengelolaan Kredit pada Bank Perkreditan Rakyat BRI Kota Lampung*.
- [30] Miller, Majluf .1984. *Coorporate Financing dan Investment Decision firm Have Information that Investor do Not Have*,*journal of financial economic*
- [31] Mismiwati (2016). *Effect of CAR, NIM, BOPO, LDR and NPL on ROA*. *Journal of I-Finance* Vol. 2 No. 1 Juli 2016
- [32] Modigliani, F & Miller, M.H. 1967. *The Cost of Capital, Corporation Finance and The Theory of Investment*. *The American Economic Review*. 13(3): 261- 297
- [33] Muljono Teguh Pudjo. 1999. *Financial Statement Analysis for Banking*. 1999 revised edition. Prints 6. Jakarta Djambat. 1999
- [34] Munawir, S. 2000. *Analysis of financial statements*, Liberty, Yogyakarta.
- [35] Myers, S. 1984,*Capital Structure Puzzle*. *Journal of Finance*, 39 (3), July, pp 575-592.
- [36] Ongore, V., Kusa, G.B. 2013.*Determinants of Financial Performance of Commercial Banks in Kenya*. *International Journal of Economics and Financial Issues*, 3(1), 237-252.
- [37] Owusu-Antwi, G.,Banerjee, R., &Antwi, J. (2017).*Interest Rate Spread on Bank Profitability: The Case of Ghanaian Banks*.*Journal of Accounting, Business and FinanceResearch*, 1(1),34
- [38] Parasiz. 2000. *ParaBanka ve Financial Piyasalar*, 7 Baski Bursa, EzgikitabeviYaymlan
- [39] Rahmawulan, Yunis. (2008). *Comparison of Factors Causing the Occurrence of NPLs and NPFs in Conventional and Sharia Banking in Indonesia*.
- [40] Salas, Vicente dan Saurina, Jesus. (2002). *Credit Riskin Two Institutional Regimes: Spanish Commercial and Savings Banks*. *Journal of Financial Services Research*, Vol. 22(3), pp.203 – 224
- [41] Serwadda, Isah. 2018. *Determinants of Commercial Banks' Profitability. Evidence from Hungary* *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*.
- [42] Siamat, Dahlan. 1993. *Commercial Bank Management*. Jakarta: Intermedia.
- [43] Solimun,2012.*Analysis of Moderation and Mediation Variables*. *Study programStatistika FMIPA Universitas Brawijaya*. Malang.
- [44] Sadono Sukirno, 2008.*Micro Economics Introduction Theory*. PT. Raja Grafindo Persada, Jakarta
- [45] Sufa,M.F.2008.*Performance Improvement Strategies at Bank X With Business Process Map*. *Proceedings of the National Seminar on Management of Technology VII*.
- [46] Sufian dan Chong 2008. *Determinans of bank profitability in a developing economi : emperical evidence from Philipies*. *Asian Academy o Managemen Journal of Accounting and Finance*.
- [47] Werdaningtyas, Hesti. 2002. *Factors Affecting the Profitability of Bank Take Over Pramerger in Indonesia*.
- [48] Watkins, et al. 2004. *Audit Quality: A Synthesis Of Theory and Empirical Evidence*. *Journal Of Accounting Literature* Vol 23.