

DO MACROECONOMICS VARIABLES AFFECT CONVENTIONAL AND ISLAMIC BANKING PROFITABILITY?

DO MACROECONOMICS VARIABLES AFFECT CONVENTIONAL AND ISLAMIC BANKING PROFITABILITY?

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Abstract

This study aims to examine the impact of external macroeconomic variables on the profitability of conventional banking and Islamic banking in Indonesia. Macroeconomic variables included in the model are inflation, gross domestic product, exchange rate, and money supply. This study took a period from 2007 to 2017, quarterly. Using an Engle-Granger cointegration test and error correction model, this study will analyze a short and long-term correlation of macroeconomic variables again banking profitability. The results of this study indicate that in short term, conventional banking's profitability is influenced by money supply, while in long term is influenced by inflation and currency exchange rates. Then, other results show that macroeconomic variables do not affect Islamic banking's profitability in the short term, while in the long term Islamic banking's profitability is only influenced by an exchange rate of the currency. This study provides recommendations to banking management to optimize the management of its instruments so that it can adjust to macroeconomic turmoil in the economy.

Keywords: *Macroeconomics; Conventional Bank; Islamic Bank; Cointegration; Error Correction Model.*

1. INTRODUCTION

Financial institutions play an important role in the economy. These important roles are in charge as a holder of a payment system, as a financial intermediary between economic actors, and as a provider of economic transaction transparency (Alper & Anbar, 2011:139). Banking is one of the most important financial institutions because banks play a role in allocating economic resources from one to another. Because of its important role, banks must be sustainable and profitable (Ongore & Kusa, 2013:237). Profitability can be measured in many ways, but Indonesian Bank as the central bank of Indonesia prioritizes the use of profitability ratio of return on assets (ROA) rather than the ratio of return on equity (ROE) because ROA measures profitability based on assets whose sources come from public funds, while ROE measured on banking capital which is the source of investment.

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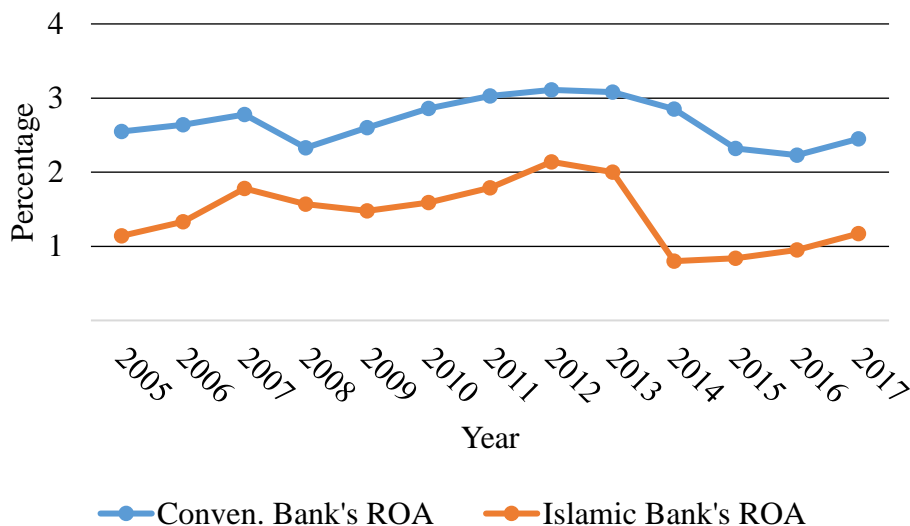


Fig. 1: Movement of conventional and Islamic ROA from 2005 - 2017.

Figure 1 shows the movement of ROA from conventional and Islamic banks in Indonesia. It can be seen that the ROA movement of banks, both conventional and Islamic, experienced two decreasing trends in the same period, in 2008 and 2014. In both periods, it was known that the national economy was experiencing macroeconomic turmoil. In 2008 we all know about *the subprime mortgage crisis* that affected global financial stability, while in 2014 Indonesia faced a financial outflow caused by *tapering policy* from the FED. Guru *et al.*, argues that the influence of macroeconomic turmoil is categorized into the influence of external banking factors (Anto & Wibowo, 2012:150).

Much research has been examined macroeconomic influences on banking profitability in many countries, but the results haven't shown consistent conclusions. Several studies abroad, such as a research of Topak & Talu (2017:583) in Turkey; Rover *et al.* (2013:175) in Brazil; and Sufian & Kamarudin (2012:24) in Bangladesh, found that macroeconomics had a significant influence on banking profitability. However, research conducted in Indonesia such as Wibowo & Syaichu (2013:8), Anto & Wibowo (2012:158), and Hendrayanti & Muharam (2013:13), concluded that macroeconomics didn't have a significant influence on banking profitability in Indonesia. This gap indicates the need for further research. This study will examine two banking objects at once, that is conventional banking and Islamic banking, because of the banking structure in Indonesia which is a country with a dual banking system. This study will use Engle-Granger cointegration methods and error correction models, so it can describe how the effects of macroeconomics on banking profitability both in the short-term and long term.

2. LITERATURE STUDY

Bank Profitability, according to Guru *et al.* (cited by Anto & Wibowo, 2012:150), is influenced by two factors, that is factors of internal banking itself and factors of external banking. Abduh & Idrees (2013:209); Davydenko (2011:26); and Sufian & Kamarudin (2012:24), explained that internal banking factors included capital ratio, liquidity ratio,

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credit risk, and operations expense. Rover *et al.* (2013:175); Vejzagic & Zarafat (2014:10); Davydenko (2011:26); and Topak & Talu (2017:583) explained that external banking factors are macroeconomic conditions such as inflation, economic growth, exchange rates, and money supply. Van Horne (cited by Swandayani & Kusumaningtyas, 2012:149) argued that profitability is generally more often measured using the ratio of return on assets (ROA). According to him, ROA is the most objective measurement method based on accounting data and ROA shows the efficiency of banking policies. Banking profitability in Indonesia from 2005 to 2017 generally experienced two crises that resulted in a decline of ROA's trend, that is in 2008 and 2014. In both periods it was known that the national economy was volatile, so this study will focus more on analyzing the influence derived from external banking.

Alper & Anbar (2011:144) use two-factor classifications to examine variables that affect banking in Turkey, that is specific bank variables and macroeconomic variables. Specific banks variables include asset size, capital adequacy, asset quality, liquidity, deposits, and income-expenditure structure, while macroeconomic variables are real GDP, inflation, and interest rates. Their research found that macroeconomic variables don't affect profitability proxied by return on assets, while proxied by return on equity only interest rate variables have a positive influence on profitability.

Kiganda (2014:46) only included macroeconomic variables in his research model on banking in Kenya. These variables include economic growth, inflation, and currency exchange rates. His research produced findings that economic growth, inflation, and exchange rates did not affect the profitability of banks in Kenya. This results from the findings of Rao & Lakew (2012:13) and Ongore & Kusa, (2013:237), who also concluded that macroeconomic variables did not affect banking profitability.

Petria *et al.* (2015:522) analyze the profitability of banks in the Europe Union (EU27). His research included several internal and external variables. Internal variables he uses are bank size, capital adequacy, credit risk, management efficiency, liquidity risk, and business mix indicators, while the external variables are market concentration, inflation, and economic growth. The findings are that credit risk, liquidity risk, management efficiency, business mix indicators, market concentration, and economic growth affect the profitability of banks in the EU27. The interesting thing is the finding of the conclusion that market competition has a positive effect on profitability, meaning that tighter competition in the banking industry will increase the profitability of banks in the industry.

Rover *et al.* (2013:156) analyze bank profitability in Brazil. His research uses financial and macroeconomic variables. Variables used include liquidity, credit risk, operating expenses, operational efficiency, leverage, economic activity, inflation, money supply, interest rates, and credit markets. His research produced findings that liquidity, credit risk, operating expense, and operational efficiency negatively affected profitability,

while leverage, economic activity, inflation, and interest rates had a positive effect on profitability, and other variables in the model were found to not affect Brazil's banking profitability.

Davydenko (2011:24) analyzes determinants of bank profitability in Ukraine. His research classifies independent variables into three parts, that is bank-specific, industry-specific, and macroeconomic. The variables categorized as bank-specific are capital level, credit risk, bank size, cost management, liquidity, loans to total assets ratio, and deposits to total assets ratio. Industry-specific variables include market concentration and foreign ownership. Then macroeconomic variables are GDP, inflation, exchange rate, and economic crisis. The results of his study concluded that all macroeconomic variables in the model had a significant effect on bank profitability in Ukraine. GDP and exchange rate have a positive effect while inflation and crisis have negative effects on Ukraine's banking profitability.

Abduh & Idrees (2013:204) conducted a study of the profitability of banks in Malaysia. Factors that affect the profitability of banks in Malaysia that he entered into the model are bank-specific variables, that is capital ratios, liquidity ratios, credit risks, financial risk, operational efficiency, and bank sizes; industry-specific variables that are financial market development and market concentration; while the macroeconomic variable is GDP growth and inflation. The findings are that only bank sizes, financial market development, market concentration, and inflation variables have a significant effect, while other variables do not affect the profitability of Malaysian banks.

Topak & Talu (2017:574) conducted a study of banking profitability in Turkey. Their research classifies independent variables into two, bank-specific variables and macroeconomic variables. Bank-specific variables include net interest margin, capital adequacy, bank sizes, credit risk, liquidity, operating expenses, and non-interest revenues, while macroeconomic variables are inflation/interest rate, exchange rate, and GDP. His research found that all bank-specific variables had a significant effect, only credit risk and liquidity had negative effects. While the macroeconomic variables that have a positive effect are inflation/interest rate and GDP, the exchange rate has a negative effect on bank profitability in Turkey.

Kanwal & Nadeem (2013:193) conducted a study on the effect of macroeconomic variables on the profitability of commercial banking in Latvia. Their research uses three different endogenous variables, namely Return on Assets (ROA), Return on Equity (ROE), and Equity Multiplier (EM). Meanwhile, the exogenous variables used are inflation, economic growth, and interest rates. Using the pooled ordinary least square method, this study found that inflation has a negative effect on return on asset, return on equity, and equity multiplier. Interest rates have a positive effect on return on asset, return on equity, and equity multiplier. The last, economic growth does not affect the return on asset, return on equity, or equity multiplier. Through these findings, we can understand that ROA, ROE, and EM do not have different effects due to macroeconomic upheavals.

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Anto & Wibowo (2012:157) examined the profitability of Islamic banking in Indonesia. His research focuses on macroeconomic variables that influence bank profitability. Macroeconomic variables used are GDP, inflation, interest rate, market share, and money supply. His research uses short and long-term analysis. The conclusion is that only the interest rate variable that affects the profitability of Islamic banking in Indonesia both in the short term and long term, has a negative effect; while GDP, inflation, market share, and money supply have no effect both in the short and long term. This finding shows that Islamic banking profitability in Indonesia is more resistant to macroeconomics interferences.

Swandayani & Kusumaningtias (2012:158) analyze the effect of inflation, interest rates, foreign exchange rates, and the money supply on the profitability of Islamic banking in Indonesia. The results of his study concluded that interest rates, foreign exchange rates, and the money supply had a significant positive effect on profitability, while inflation did not significantly influence profitability. The insignificance of inflation is by Erina & Lace's (2013:7) research which also examines bank profitability in Latvia.

Aviliani *et al.* (2015:392) conducted an analytical study on the effect of macroeconomic indicators on the profitability of banks in Indonesia from 2006 to 2013. Several macroeconomic indicators used include production index, inflation, Bank Indonesia rate, Jakarta stock index, exchange rate, and crude oil prices. While the bank performance indicators used some data, namely net interest margin (NIM), return on assets (ROA), operating costs/operating income (BOPO), non-performing loans (NPL), loan to deposit ratio (LDR), third party funds, total credits, and net income. The findings of the impulse response function (IRF) test from this study are that indicators of operating costs/operating income, net income, return on assets are indicators that respond a lot to macroeconomic changes. Specifically for ROA, this indicator is positively influenced by the exchange rate and inflation but negatively affected by the production index, BI rate, and crude oil prices.

3. RESEARCH METHODOLOGY

Research Design

This study uses a quantitative approach which purposes to identify the effect of exogenous variables on endogenous variables. In this study, it is assumed that the research data is not stationary at level (0), but will be stationary at a higher degree, so this study uses the Engle-Granger cointegration test and error correction model. The statistical tool used here is Eviews 6. This study examines the effect of inflation, gross domestic product, exchange rates, and the money supply on the profitability of conventional and Islamic banking in Indonesia, with an observation period from 2007 to 2017.

Data and Sample

The object of this research is conventional and Islamic banking in Indonesia. Banking profitability will be proxied by return on assets (ROA). The conventional and Islamic banking's ROA data comes from banking statistics published by Indonesian Bank (BI) and the Financial Services Authority (OJK). Data published by BI and OJK include ROA from all banks in Indonesia which will later be classified into conventional banks and Islamic banks. The period of observation is from 2007 to 2017, with a quarterly period.

The exogenous variable data in this study were also obtained through literature study and documentation. Data on inflation, gross domestic product, exchange rates, and money supply were obtained through reports and publications from the Indonesian Bank (BI), Financial Services Authority (OJK), the Central Statistics Agency (BPS), and The Republic of Indonesian Ministry of Trade. Data obtained is quarterly data from 2007 to 2017. All data can be seen in Appendix 1.

Variables Definition

Variable return on assets (ROA) is a comparison ratio between banking profits after being taxed with total assets owned by banks. The unit of return on assets is a percentage. Inflation is an increasing general price of goods and services in an economy at a certain period. The unit of inflation is a percentage. Gross domestic product is the total amount of output produced in an economy in a certain period. GDP data used is GDP on the business field with a basis for calculation in 2010. The unit of GDP is billion Rupiah. The exchange rate used is the Rupiah value of the US Dollar. The unit of the exchange rate is the rupiah. The money supply is proxied by a total amount of money in a narrow sense (M1). The unit of the money supply variable is billion rupiahs.

Empirical Models

This study aims to analyze the long-term and short-term effects of external macroeconomic variables on the profitability of conventional and Islamic banking so that cointegration analysis and error correction models are used. The cointegration model used for conventional and Islamic models is as follows:

- Conventional Banking Model:

$$ROAC_t = \alpha_0 + \alpha_1 INF_t + \alpha_2 GDP_t + \alpha_3 EXC_t + \alpha_4 MON_t + e_{1t}$$

- Islamic Banking Model:

$$ROAI_t = \beta_0 + \beta_1 INF_t + \beta_2 GDP_t + \beta_3 EXC_t + \beta_4 MON_t + e_{2t}$$

While the error correction model is the following:

- Conventional Banking ECM:

$$\Delta ROAC_t = \gamma_0 + \gamma_1 \Delta INF_t + \gamma_2 \Delta GDP_t + \gamma_3 \Delta EXC_t + \gamma_4 \Delta MON_t + \gamma_5 ECTC_{1-t} + e_{3t}$$

- Islamic Banking ECM:

$$\Delta ROAI_t = \delta_0 + \delta_1 \Delta INF_t + \delta_2 \Delta GDP_t + \delta_3 \Delta EXC_t + \delta_4 \Delta MON_t + \delta_5 ECTI_{1-t} + e_{4t}$$

Model's information:

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ROAC	: Return on asset of conventional banking
ROAI	: Return on asset of Islamic banking
INF	: Inflation rate
GDP	: Gross Domestic Product
EXC	: Exchange rate
MON	: Money Supply
ECT	: Error correction term

4. RESULT AND DISCUSSION

Stationarity Test

Using Augmented Dickey-Fuller (ADF) test, the results of unit root test show that all variables are not stationary neither conventional banking model nor Islamic banking model. Table 1 shows the result.

Table 1. Unit Root Test with ADF

Variables	ADF Value	MacKinnon Critical Value		
		1%	5%	10%
ROAC	-1,734845	-3,59	-2,93	-2,60
ROAI	-2,155879	-3,59	-2,93	-2,60
INF	-2,252726	-3,59	-2,93	-2,60
GDP	-1,720591	-3,59	-2,93	-2,60
EXC	-0,676481	-3,59	-2,93	-2,60
MON	0,228096	-3,61	-2,94	-2,61

Source: Eviews 6 unit root test with ADF.

When we know all variables are not stationary, the next step is to test the degree of integration by looking for the level of data stationarity.

Integration Degree Test

First, check the data stationarity at the first difference level (1) using ADF test. The result can be seen in table 2.

Tabel 2. First Difference (1) Test with ADF

Variables	ADF Value	MacKinnon Critical Value		
		1%	5%	10%
ROAC	-8,527146**	-3,59	-2,93	-2,60
ROAI	-8.170304**	-3,59	-2,93	-2,60
INF	-5,702461**	-3,61	-2,94	-2,61
GDP	-2,593288	-3,62	-2,94	-2,61
EXC	-5,360648**	-3,60	-2,93	-2,61
MON	-2,551138	-3,61	-2,94	-2,61

Source: Eviews 6 first difference test with ADF.

The result shows that variable gross domestic product and money supply aren't stationary at the first difference level (1). Therefore, the ADF test must be continued to the second difference level (2). The result can be shown below:

Table 3. Second Difference (2) Test with ADF

Variables	ADF Value	MacKinnon Critical Value		
		1%	5%	10%
ROAC	-8,425246**	-3,61	-2,94	-2,61
ROAI	-8,271399**	-3,61	-2,94	-2,61
INF	-5,411881**	-3,61	-2,94	-2,61
GDP	-4,912396**	-3,63	-2,95	-2,61
EXC	-5,834782**	-3,63	-2,95	-2,61
MON	-13,64442**	-3,61	-2,94	-2,61

Source: Eviews 6 second difference test with ADF.

From table 3, it can be seen that all the variables have been stationary at the second difference level (2). Hence, there is a possibility that the estimation model has a long-term relationship and needs to be tested by cointegration methods.

Cointegration Test

The cointegration test is carried out to determine whether or not there is a long-term effect of the variables in the model. This study applies the Engle-Granger cointegration test. This test will estimate the ADF statistical value from the residuals of ordinary least square (OLS) regression. The test results are as follows:

Table 4. Conventional and Islamic Banking Cointegration Test (Engle-Granger)

Model	ADF Residual Test Value	Critical Value		
		1%	5%	10%
Conventional Banking	-3.414050 (0.0158)	-3.59	-2.93	-2.60
Islamic banking	-4.208197 (0.0018)	-3.59	-2.93	-2.60

Source: The results of the residual unit root test with ADF.

From Table 4, the ADF statistical value for conventional banking is -3.414050, while the ADF statistical value for Islamic banking is -4.208197. Both values are bigger than the critical value at the 5% level (-2.93). The probability value of conventional and Islamic banking models are smaller than α 5%. So it can be stated that the residuals of the conventional model and the Islamic model are stationary. This means that both the

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conventional and Islamic banking models are co-integration models that have a long-term balance.

Therefore, the long-term estimation model of both banking models can be formed as follows :

Table 5. Long-Term Estimation

Variables	Conventional Banking		Islamic Banking	
	Coefficient	t-Statistic	Coefficient	t-Statistic
Constant	-4.652610 (0.2682)	-1.123160	23.74080 (0.0620)	1.921843
INF	0.065125** (0.0499)	2.023994	0.039032 (0.6864)	0.406779
GDP	0.672512 (0.1832)	1.355196	-1.921766 (0.2017)	-1.298615
EXC	-0.728444** (0.0000)	-6.492933	-1.239012* (0.0007)	-3.703372
MON	-0.127061 (0.5623)	-0.584489	0.851441 (0.1967)	1.313399
F-statistics	13.90385 (0.000000)		11.70811 (0.000002)	

Sources: Regression estimation of eviews 6, processed.

From the table above, in the long-term, conventional banking profitability is positively affected by inflation and negatively affected by the exchange rate, while economic growth and money supply are not affecting conventional banking's profitability. The coefficient of the inflation rate is 0.065125, this means that a 1% increase in the inflation rate will increase 0.065% of the profitability of conventional banking. While the coefficient of the exchange rate is -0.728444, meaning that a 1% increase in the exchange rate will decrease 0.73% of the profitability of conventional banking. Then, Islamic banking in a long term is only negatively affected by the exchange rate. The coefficient of the exchange rate is -1.239012, meaning that a 1% increase in the exchange rate will decrease 1.24% of the profitability of Islamic banking. Hence, we can form an estimation model for both bankings as follow:

The long-term estimation model for conventional banking is:

$$ROAC_t = -4.653 + 0.065INF_t + 0.673GDP_t - 0.728EXC_t - 0.127MON_t$$

The long-term estimation model for Islamic banking is:

$$ROAI_t = 23.741 + 0.039INF_t - 1.922GDP_t - 1.239EXC_t + 0.851MON_t$$

Error Correction Model

The error correction model is the stage of forming a short-term model. After the model is declared to be cointegrated and has a long-term relationship, it is possible that the model also has a short-term balance. Formation of error correction models as follows :

Table 6. Short-Term Estimation

Variables	Conventional Banking		Islamic Banking	
	Coefficient	t-Statistic	Coefficient	t-Statistic
Constant	-0.000315 (0.9797)	-0.025672	-0.006150 (0.8781)	-0.154411
DDINF	0.046923 (0.1926)	1.327951	0.003898 (0.9727)	0.034467
DDGDP	0.0539337 (0.1217)	1.585196	-0.575033 (0.6034)	-0.524092
DDEXC	-0.303942 (0.1586)	-1.439506	-0.025031 (0.9711)	-0.036425
DDMON	-0.280509** (0.0373)	-2.163069	-0.443823 (0.3111)	-1.027351
ECT(-1)	-0.727830** (0.0005)	-3.831825	-0.953167** (0.0001)	-4.577159
F-statistics	4.995003 (0.001414)		5.685259 (0.000579)	

Source: ECM estimation used eviews 6, processed.

Tabel 6 shows the short-term estimation for conventional and Islamic banking. In a short-term period conventional banking's profitability is only negatively affected by money supply. It can be seen that the coefficient of the money supply is -0.280509, meaning that a 1% increase in money supply will decrease 0,28% of conventional banking's profitability. The coefficient of error correction term (ECT) of the conventional banking model is -0.727830 and significant at 5%. It means the short-term model of conventional banking is a valid estimation. The ECT coefficient of conventional banking's ECM model shows that the difference between short-term and long-term values is corrected by 0.73% over a quarter of the time. Then, the table also shows that none of the macroeconomic variables in the model affect Islamic banking's profitability. The coefficient of ECT is -0.953167 and significant at 5%, which means the short-term model of Islamic banking is a valid estimation, and the ECT coefficient shows that the difference between short-term and long-term values is corrected by 0,95% over a quarter of the time. Hence, we can form an estimation model for conventional and Islamic model as follow:

The short-term estimation model of conventional banking is:

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$$DDROAC = -0.000315 + 0.047DDINF_t + 0.054DDGDP_t - 0.304DDEXC_t - 0.281DDMON_t - 0.728ECTC_t$$

Short-term estimation model of Islamic banking is:

$$DDROAI_t = -0.00615 + 0.0039DDINF_t - 0.575DDGDP_t - 0.025DDEXC_t - 0.444DDMON_t - 0.953ECTI_t$$

Discussion

Based on the results of the analysis, it can be concluded that simultaneously in short term and long term, inflation, gross domestic product, currency exchange rates, and the money supply have a significant effect on the profitability of conventional banking and Islamic banking in Indonesia. It can be seen in the F statistic results from all estimation models that are bigger than the F table value, also the F probability value is less than the 5% significance level.

Inflation variables have no effect in the short-term, but in the long-term, it has a significant influence on increasing the profitability of conventional banking, following the findings of Rover *et al.* (2013:175); Sufian & Kamarudin (2012:24); and Abduh & Idrees (2013:209), meaning that when general prices increase, conventional banks can maintain their profits through the interest rate adjustments. While for Islamic banking both in the short-term and long-term, inflation does not affect profitability, this finding accordance with the results of Anto & Wibowo (2012:158), that inflation doesn't affect the profitability of Islamic banking in Indonesia. Alper & Anbar (2011:144) and Kiganda (2014:46) also found similar results, the inflation variable didn't affect bank profitability in Turkey and Kenya.

Variables gross domestic product in the short-term and the long-term do not affect the profitability neither conventional banking nor Islamic banking. This result is precisely contrary to the findings of Rover *et al.* (2013:175) and Vejzagic & Zarafat (2014:11) who concluded that gross domestic product has a positive influence on banking profitability, as well as the findings of Sufian & Kamarudin (2012:24) which state that gross domestic product has a negative effect on profitability. This is because when Indonesia's gross domestic product increases or decreases, the impact doesn't directly affect the income of individuals from the community and the will of their savings. The impact of a gross domestic product increase will last long until it eventually increases per capita income from the community.

Variable currency exchange rates in the short-term do not affect the profitability of conventional banking and Islamic banking, but in the long-term, the effect is significant on reducing the profitability of both conventional banking and Islamic banking. These results accordance with the findings of Topak & Talu (2017:583). The negative relationship here means when the value of the Rupiahs weakens, the profitability of the banking will decrease, either the profitability of conventional banking or the profitability

of Islamic banking. This happens because, in the current era, banking has been operating in the foreign exchange sector, which not only depends on the savings and loan sector, so the fluctuations in exchange rates will greatly affect banking income.

The money supply only in short term affects the decline in profitability of conventional banking, while in the long run, it has no effect. This finding is in line with the findings of Rover *et al.* (2013:175) who also concluded that money supply had a negative effect on profitability. In the short term, the condition of the high money supply indicates that people prefer to hold cash rather than save it, as a result, this condition decreases profitability but enters long-run conditions, no matter how much money circulation in the community will not affect banking income, due to management conditions banking that has been stable in the long run. Regarding Islamic banking, both in the short and long term, the money supply does not affect the profitability of banks. This means that the amount of money circulating in the community does not cause a negative or positive impact on the income of Islamic banks. The result in Islamic banking is in line with the research of Anto & Wibowo (2012:158) who concluded that the profitability of Islamic banking isn't influenced by money supply both short and long term.

5. CONCLUSION

The results of this study indicate that conventional banking is more influenced by macroeconomic conditions than Islamic banking. In the short-term model, the profitability of Islamic banking isn't influenced by any macroeconomic variable in the model, while the profitability of conventional banking is negatively affected by the money supply. In the long-term model, the profitability of Islamic banking is only influenced by currency exchange rates, the effect is negative, while the profitability of conventional banks is influenced by currency exchange rates and inflation, the exchange rate has a negative effect and inflation has a positive effect. This result concludes that the management of conventional banks must be aware of the macroeconomic fluctuations. Their preparation for facing crises that may occur in the future must be optimal because the state desperately needs a stable banking condition to maintain an economic process. From this result, we can also see that the movement of Islamic banking should be even more optimal because it is not much influenced by conditions outside its operations, such as macroeconomic fluctuations. Islamic banking management must be able to take advantage of this condition so they can expand the scope of its performance because we know that the condition of Islamic banking is still far behind when compared to conventional banking. On other side, the government must be able to take control of fluctuations of macroeconomic movements, so that financial stability can be maintained.

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