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THE EFFECT OF EXTERNAL AND INTERNAL FACTORS ON FINANCIAL PERFORMANCE OF ISLAMIC BANKING

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Abstract

Research on the sharia bank financial performance level was first conducted by SudinHaron (1996), then similar research was conducted by Anna P.I. Vong(1997), M. Kabir Hassan (2002), Abdel-Hameed M. Bashir (2003), Samy Ben Naceur (2003), Muhammad Farhan, Khizer Ali and ShamaSadaqat (2011), and Nor Hayati Ahmad (2011). Macroeconomic factors and internal factors are variables that have an effect on sharia banking. These factors are GDP, inflation, and interest rates, FDR, OER which can affect directly or indirectly the financial performance of sharia banks in Indonesia. The result has shown GDP has a significant positive effect on ROA, it is match with several previous research, Inflation has no significant and negative effect on ROA, because when inflation central bank will give policy to increase BI rate, and sharia bank doesn't effect with interest rate because interest is riba, interest rate has no significant effect on ROA because sharia bank doesn't effect with the interest but use profit and loss sharing to financing, so in macroeconomic the result only GDP has significant and positive effect on ROA. The result has shown FDR has no significant effect on ROA, but has positive effect and the result match with previous research in relationship FDR and ROA, OER has negative significant effect on ROA and match with previous research (Sianturi, 2013).

Keywords: GDP, Inflation, Inreterest Rate, FDR, ROA.

1. Introduction

Motivation Sharia banking in Indonesia has develop increasingly after seeing empirical evidence that sharia banking in the world and Indonesia are not so affected by the crisis experienced by many countries including Indonesia. The monetary crisis has made many banks liquidated in Indonesia and also experienced globally by other banks in the world when affected by the monetary crisis. Sharia banks have proven that the system implemented in sharia banking can guarantee the welfare of banks and the public as customers while maintaining bank assets and customers in difficult situations.

The global crisis experienced by many countries in the year 2008 which shows the fragility of modern economic systems that exist at this time cannot provide certainty about the welfare and sustainability of conventional banking, sharia financial institutions again prove their resilience from the crisis. Sharia financial institutions remain stable and provide benefits, convenience and security for their shareholders, holders of securities, borrowers, and depositors in sharia banks.

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Chapra (2008) stated that recent financial innovations are so complex that the gigantic conventional financial institutions and financial analysts had failed to assess the inherent financial risk accurately on their securitized loans. According to Muslim scholars, the recent financial crisis in the US and the rest of the world was caused to a significant extent by excessive and imprudent lending (market discipline), the structure of the system with inadequate regulations and the imprudent practices (greediness).

The strategic steps of sharia banking development that have been attempted are the granting of licenses to conventional commercial banks to open sharia business units or to convert a conventional bank to sharia banks. With the issuance of Government Regulation No. 72 of 1992 concerning profit sharing banks that expressly provide a limitation that "profit sharing banks may not conduct business activities that are not based on the principle of profit sharing (interest), on the contrary the bank whose business activities are not based on profit sharing principles are not allowed to conduct business activities based profit sharing "(article 6), the way for sharia banking operations is broader. At present the culmination point has been reached with the passage of Law No.21 of 2008 about sharia bank clearly regulating the system of sharia banks.

To assess the development of sharia banks from year to year several standards are usually used, including:

1. Amount of assets.
2. Third party funds.
3. Bank financing.

At present there are 11 sharia commercial banks in Indonesia. According to the Bank's Published Financial Report issued by Bank Indonesia, as of September 31, 2013, the assets of sharia commercial banks reached IDR 196.922 trillion. The funds raised by sharia banks will certainly increase, considering that the Ministry of Religion currently entrusts the management of the Hajj funds to the appointed sharia banks.

The limited involvement of government funds in the sharia banking industry has been proposed by Ariff (1998). Ismail (2011) tends to categorize sharia banking in Indonesia as informal arrangements. The intention is that sharia banking comes from the demand of the downstream. This situation is certainly related to the government's strong commitment to fight for sharia banking. Furthermore, because the last one according to Ismail (2011) is the limited number of unattainable sharia banking networks and insufficient socialization of the banks.

One more reason of the few sharia banking market sharein Indonesia is the role of ulama and Islamic organizations in Indonesia. According to Yunus (2010) in his empirical study in Pekanbaru found that the Indonesian Islamic Scholar Council (MUI) had an effect on the development and dissemination of sharia banking. As also found in the quantitative study carried out by Kurniawan (2010), it shows that the ratio of sharia banking financialperformance rate is improving with the existence of the MUI fatwa in 2004 concerning bank interest prohibition laws. The results of this study also indicate a different of the sharia banking financial performance before and after the MUI fatwa regarding bank interest. Even though it was acknowledged that the MUI fatwa had a positive impact on the development of sharia banking. However, according to Abduh& Omar, 2010 the impact is not so significant on the addition of consumers, namely those who move their money to sharia banks, the amount is not comparable to those who do not move their money. Wahyuni, (2009) further stated that the MUI fatwa was "only" able to increase DPK1 by as much as 25% from the previous one and did not have significant implications for the total addition of total sharia banking assets. Apart from the slight impact of the role of the ulama and religious unity he still gives effect.

Seeing this phenomenonit cannot be denied that Islamic Scholars through religious organizations also determine the development of sharia banking. Muhlis (2011) has carried out empirical research on saving behavior in sharia banking in Central Java and found that open debate about illegitimate bank interest laws or not between 2 Islamic organizations, NU (NahdatulUlama) and Muhammadiyah, was among the important factors slowing sharia banking growth.

When viewed from these explanations, the small problem of market share is caused by 4 main elements, namely the commitment of the government, consumers, the bank itself and the role of Islamic Scholar or Islamic organizations. These four elements constitute an inseparable synergy that determines the future of sharia banking. This is in line with what Haron and Yamirudeng (2003) stated, that government support alone is not sufficient without the support of the community itself or Muslim individuals and Islamic organizations in the country.

This is due to each increase in operations will be due to the decline in pre-tax profits and ultimately will reduce profits or profitability (ROA) of the bank concerned (MochammadFahlevi, 2006). According to Dendawijaya (2001) based on Bank Indonesia regulations the amount of normal OER ranges from 94% -96%

The existence of sharia banking for the past 20 years has given its own color to the financial industry in Indonesia, particularly the banking industry. However, until now the market share of sharia banking has only reached 4.23% of the total national banking. Various development and research efforts have been carried out by practitioners, observers and academics who are engaged in this field. One issue that arises is about the determinants of the level of profit (financial performance) in sharia banking.

Macroeconomic indicators play an important role in stabilizing economy. A stable economy can be seen from the results of profits or profitability of banking financial institutions. One macroeconomic indicator which can be used to see the economic stability of a country is inflation, because changes in this indicator will have a direct impact on dynamics of economic growth. Inflation is one of the macroeconomic variables. The occurrence of inflation will affect the amount of money circulating and is also the monetary policy that the government does through central bank. The money circulating will be controlled by the government in a way that affects the process of making money.

Remembering the importance the function and role of Islamic banking in Indonesia, then the Islamic bank needs improve its performance to create Islamic banking principles healthy and efficient. Profitability is the most appropriate indicator to measure the performance of a bank (Syofyan, 2002). According to the Work and Rakhman, the level of bank profitability sharia in Indonesia is the one best in the world measured by profit ratio against assets, return on assets (ROA), good for full fledge and category banks for the Sharia Business Unit category (Diah Aristya, 2010: 8)

Liquidity ratio as the proxy for Financing to Deposit Ratio (FDR) is used as a variable thatmight affect ROA. There is a conflict of interest between liquidity and profitability. If you want to maintain a liquidity position with enlarge cash reserves, the bank will not use all loanable funds that exist because in part returned in the form cash reserve, this means efforts to achieve profitability will reduced. Conversely if the bank wants to enhance profitability, then with cash reserve for used liquidity by the bank's business, so the position liquidity will go down (Sinungan, 2000: 98). If this ratio increases within the limit certain funds will increase which is distributed in the form financing, so it will increase bank profits, assuming the bank distributes funds for effective financing. With increase in profits, then Return on Assets (ROA) will also increase, because profit is a component forming Return On Asset.

OER is a ratio that is show the ability of the bank in run its operations efficient. The theory explains that the relationship between EOR and ROA is inversely proportional. Number the standard for EOR ratio is below 90% (PBI), if the EOR ratio more than one bank produces 90%, it can be concluded that the bank is not inefficient operate it. If ratio EOR is in a condition of efficiency, profit the greater will be obtained because operating costs borne by the bank getting smaller. With increasing profit, it can be ascertained that ROA can increase. The research done by Mawardi (2005), concluded that EOR negative effect on performance bank that is proxied by ROA.

In the last four decades a lot of research has been conducted to test the determinants of theconventional banks financial performance rate. The research was first done by Hester and Zoellner (1966) then further research was conducted by Short (1979); Bourke, (1989); Molyneux and Thornton, (1992), and Steinherr withHuveneers, (1994).

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Macroeconomic factors and internal factors are variables that have an effect on sharia banking. These factors are GDP, inflation, and interest rates, FDR, OER which can affect directly or indirectly the financial performance of sharia banks in Indonesia. Sharia bank is believed to be a bank that adheres to an sharia system that prioritizes justice and togetherness and security, so that the system in sharia banks can be tested when the macro conditions of a country are unstable or volatile which make conventional banks suffer losses, so we can draw a conclusion whether sharia banks are immune from the impact of the crisis because of their small market share compared to conventional banks or because the system contained in sharia banks does have a well-integrated system to manage public funds fairly and safely.

2. **Literature Review**

Definition of Sharia Bank

Before we discuss the notion of Sharia banks, it needs to be understood that many leaders give opinions on the meaning of Sharia banks, so that the assumptions between one person and another will vary. Broadly speaking, the notion of Sharia banks is a banking institution which in principle adheres to Islamic law. However, for more details, refer to some figures in describing the notions of Sharia banks.

The word bank comes from the word Banque in French, and from the word Banco in Italian, which means a chest or a cupboard or a bench. The word crate or cupboard implies a function as a place to store valuable objects, such as gold, diamond chests, money chests and so on. According to HeriSudarsono(2003), in general the notion of Sharia banks is a financial firm whose principal business is to servefinancing and other services in the payment traffic and circulation of money operating in accordance with sharia principles. Therefore, the bank's business will always be related to money issues which are its main merchandise.

Sharia banks or known as Sharia banks have an operating system in which they do not rely on interest. Sharia banks, or commonly referred to as interest-free banks, can be said to be financial or banking institutions that are operationally and products developed based on the Quran and the Hadith of the Prophet Muhammad. Or in other words, Sharia banks are financial institutions whose major business is to serve financing and other services in the payment traffic and circulation of money whose operations are adjusted to the principles of Sharia law. (KarnaenPerwataatmadja and M. Syafe 'i Antonio 2001).

The definition of Sharia banks is actually regulated in a law. Article 2 PBI No. 6/24 / PBI / 2004 Concerning Commercial Banks Conducting Business Activities Based on Sharia Principles, provides a meaning that sharia commercial banks are institution that provides business activities based on sharia principles in payment traffic. The legal form that is permitted is a limited liability company or PT. In a book entitled Sharia Bank Management, broadly the economic relationship based on Sharia is determined by the contract relationship in which consists of five basic concepts of contract. Based on these five basic concepts, Sharia banking institutions and non-Sharia financial institutions can be found to be operated. The five concepts are:

(1) deposit system
(2) profit sharing
(3) profitability
(4) rent
(5) services (fee)

The main activities of Sharia banking must use the basic principles of Sharia banks that have been determined, namely: *Mudharabah, Musyarakah, Wadi'ah, Murabahah, Salam, Istishna.*

Financial performance

Profitability (Simorangkir, 2004: 152) is the ability of a bank within make a profit. ROA is a ratio used in getting profit overall. The greater it is the ROA of a bank is getting the better is the position of the bank in terms of use of assets (Dendawijaya,2005: 118).According to (Dendawijaya,2005: 118).

This study will analyze two profitability ratios that will used as the dependent variable, are Return on Assets (ROA). Profitability is a company's ability to improve performanceoverall business. According to Sugiyarso and Winarni (2005) explain thatprofitability is the firm's ability to earn profits in relationshipssales, total assets and own capital. Sustainability of a business organizationdetermined how to be able to increase revenue from business sources.Some of the factors that determine the company's business continuityconsist ofthe profitability of the company itself, the product received by consumers, is capablesurvive with business competition, and adapt to the business trends that are carried outby competitors.

Return on Assets (ROA) are defined as the ratio of net income after tax on total assets as a whole. This ratio is a measure for assess how much the percentage of the rate of return of assets owned. A high ratio shows the efficiency carried out by the management. Return on assets is used to measure a firm's ability generate net income based on the level of certain assets. This ratio shows the ability of economic resources invested in the overall assets for generate net profits. In other words, how much profit is earned on eachrupiah which is embedded in assets. In calculating this ratio, total assets areused is the total amount of total assets (end of year)

during the periodcalculation. This is because the use of the total amount of total assets can providevalue for investors to know growth, decline or factorsother significant in a business. The higher the percentage ratio the betterefficient use of assets to obtain net profits in activitiescompany operations. This further increases the attractiveness of the companymaking the company more attractive to investors, because of the level of acquisitionthe return on investment in assets will be even greater.

Kasmir (2012) explains that Return on Assets (ROA) sre defined as a ratio thatshow the results (return) of the amount of assets used in the company ". Besidesthat, Return on assets (ROA) provides a better measure of the profitability of thecompanybecause it shows management effectiveness in using assets to obtainincome. Understanding the return on asset ratio according to Margaretha (2007) "return on assetsis the ratio used to measure the ability of the company's management ingetting the overall profit. The greater the return on asset valuea company, the greater the level of profit achieved by the companyand the better the company in terms of the use of assets".

Sharia Banking Market Share

Even if viewed from the aspect of asset development, DPK and Sharia banking institutions show positive developments. Even the average growth of Sharia banking so far (47%), is higher than the average growth of conventional banking which is only around 15-20% per year. However, when viewed from the overall market share, the overall Sharia banking is still too small compared to conventional banking. After 2 decades of Sharia banking operating in Indonesia, the market share is only 3.2% of the total market share of the national banking industry. Reality as above is termed by Adnan (2010) that the control of public funds by Sharia banking is still low. This situation, similarly means that Sharia economics is still in the stage of opinion, where the evidence is only about 3% of Sharia banking takes an economic role in Indonesia. This number is very small and it is not fitting for Indonesia which dominates its population to be Muslim (Amin, 2010).

Although the development of assets or institutions is quite rapid, the development of market share also remains important because it will show the existence of a company in the industry. Sula (2011) emphasized that the development of Sharia banking in Indonesia must be followed by an increase in market share. This is important because, as Schuster (1984) stated in Stiawan (2009), market share reflects the achievement of marketing that is associated with the competitive position of companies in an industry. If viewed from the consumer side, roughly calculated according to Karim (2008) of 200 bank customers, only one person uses the services of a Sharia bank. Sharia banking consumers only 2.8% of the total number of people using national level financial services.

This situation is of course rather disappointing as Rais (2008) stated that the small market share is caused by limited funds both in terms of capital and the amount of public funds collected. The small amount of public funds in Sharia banking has implications for the small share of the Sharia banking market. This situation finally embodies the issues related to consumer uncertainty and the issue of Muslim consumer compliance with Sharia banking.

National Income

GDP are define as the market value ofall final goods and services areproduced in a country(Mankiw, 2006: 6).To get an overview of the structure and function of the economy as a whole, macroeconomic analysis in the success of an economy will tend to view consumers or households as units and companies as business sectors, actors in the public sector, both at the local and central levels. The magnitude also includes national output, aggregate consumption and investment expenditures, national savings, the level of general prices and inflation, unemployment and employment, currency exchange rates, balance of payments, government budgets, interest rates, demand for money, money supply, and so forth.

Gross domestic product (GDP) are also define as one of the macroeconomic indicatorsthe mostly used to computed total economic activity, which caninfluencingvarious factors both in the demand and supply of servicesbanking. Ramadhan et al (2011) have concluded that there is a relationshippositive between GDP and bank profitability.

Job opportunities, price stability, and economic growth are often planned as national development goals to prevent inflation and try to encourage economic growth. The economic success of a nation can also be seen from the results of the calculation of national income and national products. National income is an important

measure of economic performance both short and long term. National products such as the amount of research and new innovations found and developed. These innovations make it possible for the emergence of new industries that can affect the acceleration of economic growth, both in the short and long term.

Countries that have economic strength are countries that have advantages, especially excellence in the field of technology. Because, by having technological advantages, a country will produce new innovations, starting from products, processes, designs and also the ability to apply and market these innovations.

The export-import trade balance from the country will be onefrommanyreflections of the strength of the economy. The economic strength of a country depends not only on the small amount of natural resources it has, but also on the ability to manage natural resources sustainably with the mastery of technology. In general, the mastery of technology will produce innovations that can be illustrated.

The impact of the socialization of innovation will actually increase a country's income by suppressing funds abroad, in the sense of royalty payments on licensed technology. Intellectual property assets such as patents for inventors, the right to duplicate for authors, composers, or mineral resources (oil, gas, metal materials and other mines). For this reason, efforts are needed to support the acceleration of development through the development of new innovations in various fields.

Inflation

Inflation is one of the influential macroeconomic indicatorstowards the company's financial performance. Based on scientific journals from the Sahara(2013: 153), Inflation has a positive impact on Bank Return On Assets (ROA)Sharia, which means the higher the inflation rate the greater (ROA)Islamic Bank. The increase in inflation will be followed by increases in assets and Party FundsThird (DPK) of Syaria Banks, which will improve the profitability rate of Syaria Banksbased on Return on Assets (ROA).

Inflation is interpreted as increasing prices continuously.Boediono (1987) in Julianti (2013: 23) states that inflation istendency of prices to increase in general and to continue for a long time. The increase of good price of one or two products alone are not called inflation, unless the increase is extended to(or resulting in an increase) mostly from the prices of other items.

Interest Rate

The Interest rate from bank central is the policy interest rate that reflects the policy attitudemonetary stipulated by Bank Indonesia and announced to the public. Bank Indonesia (BI)Rate is an indication of the short-term interest rate that the Bank wantsIndonesia in an effort to achieve the inflation target. The BI Rate is used as a referencein monetary operations to direct the interest rate of Bank CertificatesIndonesia (SBI) 1 month the results of the auction of open market operations are around BIRate.

According to Pohan (2008: 53) Development of an unnatural interest ratecan directly disrupt banking development. The interest ratehigh on the one hand will increase people's desire to save sothe amount of bank funds will increase. But on the other hand the interest rates arehigh will increase the costs incurred by the business world so thatresulting in a decrease in domestic production activities. Decreaseproduction will reduce the funding needs of the business sector and result indecreased interest credit demand. This will cause problemswhere will the funds be channeled.

Finance to Deposit Ratio

Financing to Deposit Ratio (FDR) is defined as the ratio used to measure the liquidity of a bank in repaying withdrawals funds made by depositors relying on financing given as a source of liquidity, namely by dividing the amount financing provided by banks for Third Party Funds (TPF). The more value of the Financing to Deposit Ratio (FDR), the more the funds which is channeled to Third Party Funds (TPF). By channeling Party Funds Third (DPK) which is large, the bank's income Return on Assets (ROA) will increasing, so the Financing to Deposit Ratio (FDR) has an effect positive for Return on Assets (ROA). With an increase in the FDR, the funds disbursed to third party funds also increase. With large third party funding, the bank's ROA would be greater. The same conclusion, was reached by Sistiyarini (2016), and Nugroho (2011). HoweverMa'isyah research (2015) found little effect FDR on ROA.

Financing to Deposit Ratio (FDR) is a comparison between financingprovided by the bank with fundsthird party that was successfully deployedby the bank (Muhammad, 2005). RatioFDR which is analogous to Loan to Deposit Ratio (LDR) to banksconventional is that ratioused to measure levelsbank liquidity that showsbank's ability to fulfillcredit request by usingtotal assets owned by the bank.(Dendawijaya, 2003). The FDR valueallowed by Bank Indonesiais in the range of 78% to 100%.

Operational Efficiency Ratio

OER according to the financial dictionary is a ratio group that measures operational efficiency and effectiveness companies with comparing lines one against the other. Various numbers income and expenditure from the report profit and loss to numbers on the balance sheet. Operational cost ratio is a comparison between costs operational and operating income. The operational cost ratio is used for measure the level of efficiency and the ability of the bank to do so operating activities (Dendawijaya, 2000). The lower OER means the more efficient bank inside controlling its operational costs, hence the cost efficiency the profits obtained by the bank will the greater it is.

OER is a bank effort to minimize operational risk, which is uncertainty about bank business activities. Operational risk comes from operational losses if a decrease in profits influenced by the cost structure bank operations, and possibilities failure of services and products offered.

Operational Efficiency Ratio (OER), provides a comparison between operating expense and operating income. With a bigger the OER, the bank's ROA gets smaller, because of the profit earned by the small bank. This finding has received considerable other support (Solihin, 2016, Ma'isyah 2015, Muh. Sabir, Muhammad Ali, and Abd. Hamid Habbe, 2012).

Framework

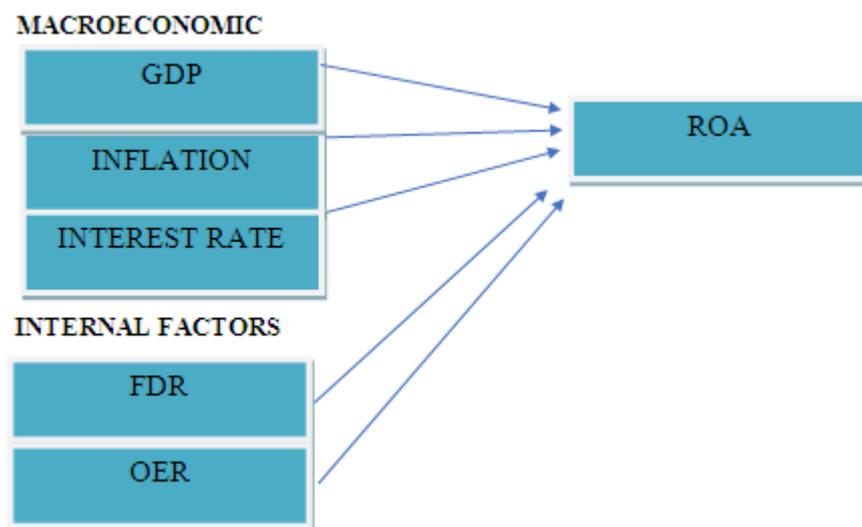Based on the theoretical description above, the framework can be drawn and described as follows.

Figure 1. Research Framework

Hypothesis:

Based on the problems that have been identified previously, then the hypothesis formulation is proposed to be tested empirically as follows:

- **Hypothesis 1**:There is an effect between GDP and the level of financial performance of *Islamic Banking*.
- **Hypothesis 2**: There is an effect between inflation on the level of financial performance of *Islamic Banking*.
- **Hypothesis 3**: There is an effect between interest rates on the level of financial performance of *Islamic Banking*.
- **Hypothesis 4**: There is an effect between FDR on the level of financial performance of *Islamic Banking*.
- **Hypothesis 5**: There is an effect between OER on the level of financial performance of *Islamic Banking*.
- **Hypothesis 6**: There is a simultaneous effect between GDP, inflation and interest rates, FDR, OER on the level of financial performance of *Islamic Banking*.

3. Methods

This research uses quantitative descriptive research. Descriptive method is a method based on analysis by describing factors related to the problem that are intended as support for quantitative method analysis. While the quantitative method is research conducted to find various variables that are the object of research. While the estuary of this research is library research.

The object of this research is the level of financial performance of sharia banks which are effected by macroeconomic factors and internal factors. To study and verify the impact of the macroeconomic factors and internal factors on Islamic commercial banks in Indonesia.

This research is quantitative research using time series data. Research data is obtained from the Sharia Banking Statistics documents issued by Bank Indonesia. Based on data tabulation and complete information from the documents. Research Location in Bank SyariahMandiri, Bank BCA Syariah, Bank Muamalat, Bank BNI Syariah, and Bank BRI Syariah which is used as research sample. Bank Indonesia and IDX are also the location of research to perfect the financial report data issued by the two government institutions, so that Islamic Banking data and financial reports are expected to be collected perfectly. The time of the study focused on the financial statements of Islamic Banking, and the period of research was the first quarter of 2013 to the fourth quarter of 2017.

The sample in this study was chosen according to its characteristics using a purposive sampling method. Purposive sampling method are defined as a method of determining the sample with the object of research is the level of financial performance that is effected by GDP, inflation,interest rates, FDR, and OER. The sample in this study is as follows:
- *Bank SyariahMandiri (BSM)*
- *Bank BCA Syariah*
- *Bank Muamalat*
- *Bank BNI Syariah*
- *Bank BRI Syariah*

The sample in this study was chosen according to its characteristics using a purposive sampling method. Purposive sampling method is a method of determining the sample based on certain criteria. The criteria used in this study are: (1) Banks included in sharia commercial banks, (2) The bank operates and issues quarterly financial reports during the study period, first quarter 2013 to third quarter 2017. (3) Is a dual bank banking system*?*

The variables used for this research are divided into two, the Independent and Dependent variables. The dependent variable in this study are the financial performance of Sharia banks that is provide by return on Asset (ROA). While the independent variables in this study are macroeconomic conditions which are provide by GDP, inflation, and interest rates, and Internal conditions which are provide by FDR and OER.

Table 1

Research Variables

RESEARCH VARIABLES		
Variables	Description	Source
dependent variable		
Return on investment (ROA)	is an indicator of how profitable a company is relative to its total **assets**	Quarterly *Islamic Banking* financial statements
Independent Variables		
GrossDomesticProduct (GDP)	Percentage of cumulative growth rate of Gross Domestic Product according to business field	National Central Statistics Agency data report
Inflation	Inflation Percentage	Indonesian Monetary Policy Report - *Bank Indonesia*
Interest Rate	Presentation of the BI Rate published by *Bank Indonesia*	Indonesian Monetary Policy Report - *Bank Indonesia*
Financial to Deposit Ratio	used to assess a bank's liquidity by comparing a bank total Financing to its total deposits for the same period	Quarterly *Islamic Banking* financial statements
Operational Efficiency Ratio	ratio is typically used to analyze how well a company uses its assets and liabilities internally	Quarterly *Islamic Banking* financial statements

Linear regression is a statistical tool used to determine the effect of one or several variables on one variable. Variables that effect are often called independent variables, independent variables or explanatory variables. The variable that is affected is often called the dependent variable or dependent variable.

Multiple linear regression analysis is actually the same as simple linear regression analysis, only the independent variables are more than one. The general equation is:

$$ROA = a + b1GDP + b2\ INF + b3\ INF + b4\ INTR + b5\ FDR + b6\ OER + e$$

The use of multiple linear regression analysis method requires a classic assumption test which must be statistically fulfilled. The classic assumption that is often used is the assumption of normality, multicollinearity, autocorrelation, heteroscedasticity and linearity assumptions.

4. Results and Discussion

Correlation Analysis

Correlation analysis is a statistical method used to determine the strength or degree of linear relations between two or more variables. The more real the linear relationship (straight line), the stronger or higher the

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degree of straight line relationship between the two variables or more. At this stage the researcher tries to find the relationship between the variables GDP, Inflation, Interest Rate, FDR, and OER on the dependent variable, ROA.
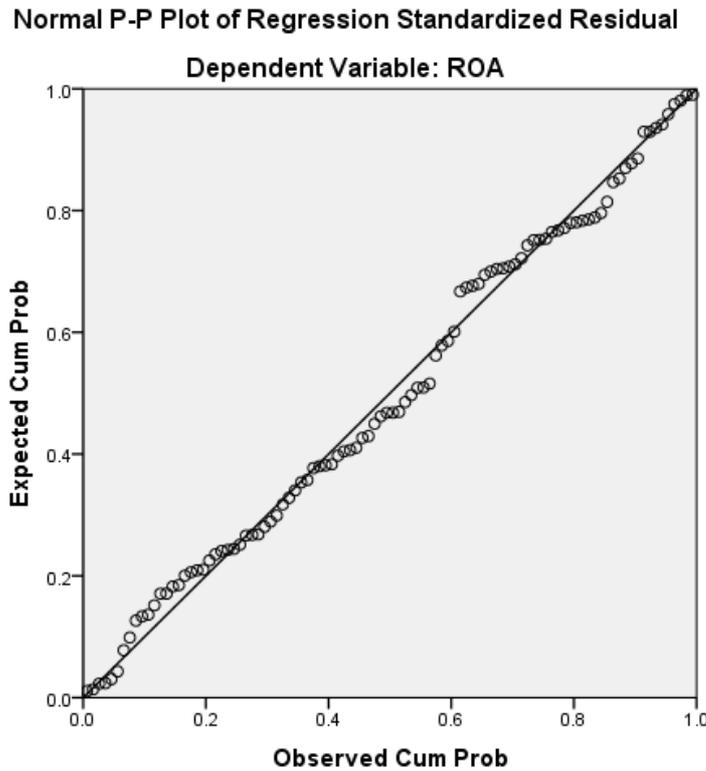

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: ROA

Figure 2. Regression Standardized

If the residual comes from a normal distribution, then the data distribution values will lie around a straight line, it can be seen that the distribution of data in the image above is spread almost all around on the normal axis, it can be said that the statement of normality can be fulfilled

Pearson correlation coefficients can be used to express the magnitude of a linear relationship between two variables when data is quantitative data (interval or ratio scale data) and both variables are bivariate which are normally distributed.

The range of correlation coefficients ranging from -1, 0 and 1 can be concluded that if the value is closer to 1 or -1 then the relationship is getting tighter, while if it gets closer to 0 then the relationship gets weaker.

Table 2

Correlations

		ROA	INFLATION	INTEREST	FDR	OER	Ln_GDP
Pearson Correlation	ROA	1.000	.148	-.099	.165	-.917	-.344
	INFLATION	.148	1.000	.618	.442	-.246	-.636
	INTEREST	-.099	.618	1.000	.394	.052	-.529
	FDR	.165	.442	.394	1.000	-.219	-.505
	OER	-.917	-.246	.052	-.219	1.000	.488
	Ln_GDP	-.344	-.636	-.529	-.505	.488	1.000
Sig. (1-tailed)	ROA	.	.070	.164	.051	.000	.000
	INFLATION	.070	.	.000	.000	.007	.000
	INTEREST	.164	.000	.	.000	.303	.000
	FDR	.051	.000	.000	.	.014	.000
	OER	.000	.007	.303	.014	.	.000

	Ln_GDP	.000	.000	.000	.000	.000	.

In the table above using the Pearson test for finding a correlation, researchers used Pearson because the data when normality test was normally distributed, the correlation test using Pearson was done to measure the correlation between the variables in this study. From the table above we can find out that the Gross domestic Product has a negative relationship r = -0.344 and sig 0.000 which shows that it has a significant relationship, Inflation has a positive relationship r = 0.148 and sig 0.070 which indicates does not have a significant relationship, variable Interest Rate has the negative relationship r = -0.099 and sig 0.164 shows that it does not have a significant relationship, Financing to Deposit Ratio has a positive relationship r = 0.165 and sig 0.051, indicating that it does not have a significant relationship, Operational Efficiency Ratio has a negative relationship r = 0.917 and sig 0,000 this shows a significant relationship with ROA.

Regression Results

This section will discuss about the regression analysis of this research. The researcher has formulated the regression which is as follow,

$$ROA_{i,t} = b_0 + b_1 GDP_{i,t} + b_2 INF_{i,t} + b_3 IR_{i,t} + b_4 FDR_{i,t} + b_5 OER_{i,t} + e$$

From the table above shows the variables included are the independent variables of GDP, Inflation, Interest Rate, FDR, OER and dependent variables namely ROA while the variables issued are not present (Removed Variables do not exist).

Table 3
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.926ᵃ	.858	.850	.19477

a. Predictors: (Constant), Ln_GDP, OER, FDR, INTEREST, INFLATION
b. Dependent Variable: ROA

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In table above, here we can obtain ROA variable. The effect is symbolized by R (correlation). As seen in the summary value model table in column R is 0.926, it means that the effect of variables GDP, Inflation, Interest Rate, FDR, OER on ROA is 92.6 (0.926 x 100%), but this value can be said to be "contaminated" by various values bullies that might cause measurement errors, for that SPSS provides an alternative value for R Square as a comparison of the accuracy of its effect. It can be seen that the R Square value is 0.858, which means 85.8% effect of independent variable as predictor on dependent variable. This value is smaller than the R value due to an adjustment, but as a note, the value is not necessarily smaller than R, but also sometimes larger. For more accurate predictions of our effect, it can also be based on the value of Adjusted R Square, which is the value of R Square, which has been more adjusted and is usually the most accurate. It can be seen that the Adjusted R Square value is 0.850 or 85%, the effect of the independent variable on the dependent variable.

The next column in the Model Summary table shows the accuracy of the regression model can be seen in the Standard Error of The Estimate column, there are numbers 0.19477. Pay attention to the statistical descriptive analysis that the standard deviation of the ROA value is 0.50319 which is much greater than the standard error, because it is smaller than the standard deviation of ROA, the regression model is quite good in acting as a predictor of the value of ROA.

Table 4
ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.501	5	4.300	113.357	.000ᵇ

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Residual	3.566	94	.038			
Total	25.067	99				

a. Dependent Variable: ROA

b. Predictors: (Constant), Ln_GDP, OER, FDR, INTEREST, INFLATION

In the Anova table shows information about whether or not the independent variables effect the dependent variable simultaneously (together). In this table there are several things that need not be discussed, first Sum of Square and second Mean Square because we do not need it to conclude whether or not the independent variable effects the dependent variable simultaneously. To take this decision can be used by looking at the value of Sig. (Significance). In the ANOVA table the value is sig. listed as 0,000 so we can easily conclude that the variables GDP, Inflation, Interest Rate, FDR, and OER have an effect on ROA together. This is by following the level of sig. 0.05 as the cut off value of the significance value. This means that if the probability value (significance) is below 0.05 then all the independent variables affect the dependent variable and vice versa.

Table 5
Coefficients

Model		Unstandardized Coefficients		Sig.
		B	Std. Error	
1	(Constant)	-6.774	6.236	.280
	INFLATION	-.011	.016	.479
	INTEREST	.023	.024	.341
	FDR	.001	.003	.640
	OER	-.092	.005	.000
	Ln_GDP	1.082	.430	.014

a. Dependent Variable: ROA

The coefficient table presents information consisting of the names of variables, the value of constant (Constant), the value of t and the value of significance. Whereas the beta value on the standardized coefficient does not need to be discussed here because the value will be useful if you do path analysis now the researcher is not analyzing the path. As researchers said before this table can be used to see the effect per variable. The researcher measures it by looking at the sig value. On each variable, if the value is sig. it is smaller than 0.05, the conclusion is the smaller the sig. then more influential.

- Seen in the GDP model Coefficients column there is a sig value of 0.014. The sig value is smaller than the probability value of 0.05, or the value of 0.014<0.05, then H1 is accepted and Ho is rejected. It can be concluded that the GDP variable contributes to ROA. A positive t value indicates that the GDP variable1 has a relationship that is in line with ROA. So it can be concluded that GDP has a significant effect on ROA.
- Seen in the Inflation Model Coefficients column that there is a sig value of 0.479. The sig value is greater than the probability value of 0.05, or the value of 0.479> 0.05, then H1 is rejected and Ho is accepted. It can be concluded that the inflation variable does not contribute to ROA. The negative t value indicates that the Inflation1 variable has a relationship that is contrary to ROA. So it can be concluded that inflation has no significant effect on ROA.
- Seen in the Interest model Coefficients column that there is a sig value of 0.341. The sig value is greater than the probability value of 0.05, or the value of 0.341> 0.05, then H1 is rejected and Ho is accepted. It can be concluded that the Interest variable does not contribute to ROA. The positive t value indicates that the Interest1 variable has a relationship with ROA. So it can be concluded that Interest Rate does not have a significant effect on ROA.

- Seen in the FDR Coefficients column there is a sig value of 0.640. The sig value is greater than the probability value of 0.05, or the value of 0.640> 0.05, then H1 is rejected and Ho is accepted. It can be concluded that the FDR variable does not contribute to ROA. The positive t value indicates that the FDR1 variable has a relationship that is in line with ROA. So it can be concluded that FDR has no significant effect on ROA.
- Seen in the OER Coefficients model column there is a value of sig 0,000. The sig value is smaller than the probability value of 0.05, or the value of 0.000 <0.05, then H1 is accepted and Ho is rejected. It can be concluded that the OER variable contributes to ROA. The negative t value indicates that the OERvariable has an opposite relationship with ROA. So it can be concluded that OER has a negative significant effect on ROA.

From the data in the table above we can make the regression formula equation as follows:

$$ROA_{i,t}=(6.774)+ 1.082\ GDP- 0,092\ OER$$

The conclusion of the regression results above are:
1. Constant, a negative constant value indicates the negative effect of an independent variable, if the independent variable increases or effects in one unit, then the ROA variable will down.
2. GDP (1.082), is a variable GDP regression value for the ROA variable, meaning that if the GDP percentage increases, ROA will increase by 1.082, the coefficient is positive, meaning the GDP percentage and ROA have a direct relationship.
3. Inflation (-0,011), is the result of the regression variable Inflation a value on the ROA variable, meaning if the percentage of inflation increases, ROA will decrease by 0.011. Coefficients are negative, meaning the percentage of inflation and ROA have an opposite relationship
4. Interest Rate (0.023), is the result of variable Interest regression value against ROA variable, meaning that if the Interest variable increases then ROA will increase by 0.023 coefficients positive value, meaning that Interest has a relationship in line with ROA.
5. FDR (0.001), is the result of the regression value of variable FDR to ROA, meaning that if the FDR variable increases then ROA will increase by 0.001, the coefficient is positively meaningful if the FDR has a relationship with ROA.
6. OER (-0,092), is the result of the OER variable regression value on the ROA variable, meaning that if the inflation percentage increases, the ROA will decrease by 0,092. Coefficients are negative, meaning the percentage of inflation and ROA have an opposite relationship

5. Conclusion

This research is focusing on the relationship between macroeconomics and internal factors to financial performance. Where financial performance will be measured by the ROA ratio in the company, Macroeconomic variables are measured using the Gross Domestic Product variable, Inflation and Interest Rate, the company's internal variables are measured by Financing to Deposit Ratio and Operational Efficiency Ratio.

The result has shown **GDP has a significant positive effect on ROA**, it is match with several previous research, because when inflation central bank will give policy to increase BI rate, and sharia bank doesn't affect with interest rate because interest is "riba" which means prohibited, so in macroeconomic the result only GDP has significant and positive effect on ROA.

The result has shown FDR has no significant effect on ROA, but has positive effect and the result match with previous research in relationship FDR and ROA, OER has negative significant effect on ROA and match with previous research (Sianturi, 2013).

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