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Analysis of the Influence of BOPO, NIM and Inflation on the Profitability of Bank BRI Syariah in 2013-2020

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ABSTRACT

This study analyzes factors affecting BRI Syariah Bank's profitability in Indonesia. This study sampled BRI Syariah Bank's 2013-2020 yearly financial statements that fit the study's requirements. Data for Bopo, Nim, Inflation, and Roa come from the official BRI Syariah bank and Bank Indonesia (BI) websites for 2013 – 2020. This study uses the ROA ratio as a metric of BRI Syariah Bank's profitability and BOPO, NIM, and Inflation as independent variables. This study uses the Ordinary Least Square (OLS) data analysis method to obtain a thorough picture of the relationship between variables using Eviews10 software. According to study, BOPO negatively affects ROA (Return on Assets). Operating Costs and Operating Income (BOPO) are less significant than required. The study shows that BOPO has a detrimental impact on ROA (Return on Assets). NIM and inflation study results had little impact on BRI Syariah Bank's ROA. This study reveals that Islamic banks are resilient to inflation and don't rely on profit margins. This study suggests Islamic banks reduce operating costs to boost profitability.

Kata Kunci:
Biaya Operasional dengan Pendapatan Operasional (BOPO), Net Interest Margin (NIM), Inflasi, Return On Asset (ROA), Ordinary Least Square (OLS)

ABSTRAK

Analisis Pengaruh Bopo, Nim Dan Inflasi Terhadap Profitabilitas Bank Bri Syariah Tahun 2013-2020. *Penelitian ini bertujuan untuk mengetahui dan menganalisis faktor-faktor yang mempengaruhi profitabilitas Bank BRI Syariah di Indonesia. Sampel diambil dari laporan keuangan tahunan Bank BRI Syariah tahun 2013-2020. Data Bopo, Nim, Inflasi dan Roa bersumber dari website resmi bank BRI Syariah dan situs resmi Bank Indonesia (BI) selama tahun 2013 – 2020 yang mencakup data time series. Variabel yang digunakan dalam penelitian ini adalah rasio ROA (Return on Assets) sebagai ukuran profitabilitas Bank BRI Syariah serta variabel BOPO, NIM serta Inflasi sebagai variabel bebas. Jenis penelitian yang digunakan dalam penelitian ini adalah penelitian kuantitatif dengan menggunakan metode analisis data Ordinary Least Square (OLS) yang bertujuan untuk memperoleh gambaran yang menyeluruh mengenai hubungan antara varaiabel dengan menggunakan bantuan software Eviews10. Berdasarkan hasil penelitian BOPO berpengaruh negatif signifikan terhadap ROA hal imi dibuktikan dengan pentingnya BOPO lebih rendah dari persyaratan signifikansi maksimal yang diperlukan. Secara parsial hasil penelitian menunjukkan bahwa BOPO berpengaruh negatif signifikan terhadap ROA, sedangkan hasil penelitian NIM dan Inflasi tidak berpengaruh signifikan terhadap ROA Bank BRI Syariah. Penelitian ini menunjukkan bahwa Bank Syariah cukup memiliki ketahanan dampak dari inflasi dan tidak bergantung pada keuntungan margin pembiayaan. Penelitian ini merekomendasikan Bank Syariah untuk lebih efisien dalam menekan biaya operasional sehingga meningkatkan profitabilitas.*

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INTRODUCTION

A bank is one of the financial business entities that collect funds from the community in the form of deposits and distribute them to the community in credit or other documents to improve the standard of living of many people (Darmawi, 2012). Funds owned by banks come from the bank's funds, funds from the community, and funds derived from loans. Law No. 10 of 1998 on banking defines banks as business entities that collect funds from the community in the form of deposits and distribute them to the community in the form of credit and other forms to improve the people's standard of living. In terms of rewards and services for funds, deposits, or loans, banks are divided into conventional and Islamic banks. Conventional banks are banks that, in their activities, both in the collection of funds and the distribution of funds, provide rewards in the form of interest or a certain amount of dividends. Islamic bank is a bank that, in its activities, both the collection of funds and in the framework of the distribution of funds gives and imposes rewards referring to Islamic law. Every Islamic bank whose activities do not charge interest or do not pay interest to customers. The rewards received by Islamic banks or paid to customers are determined by the agreement and agreement between the customer and the bank (Ismail, 2014). Based on the status of the establishment of the sharia system, Islamic banks are distinguished from Sharia Commercial Banks (BUS) and Sharia Business Units (UUS). The BUS is independent and sheltered under the conventional banking system. At the same time, UUS status is not independent and still sheltered under the rules of conventional banking management. Lately, people's interest in the Islamic economy has been growing rapidly. This is characterized by the emergence of institutions and based on Islamic law. One of the evidence institutions of the rapid development of the Islamic economy is the Islamic Bank. Factors that support the growth and development of Islamic banks in the country are the majority of Indonesian Muslim people. The emergence of an awareness of Indonesian people in carrying out religious principles, especially in the economic field.

Table 1: Development of Islamic Banking in Indonesia 2013-2020

	2013	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
Number of BUSES	11	12	12	13	13	14	14	14
Number of UUS	23	22	22	21	21	20	20	20
Number of BPRS	163	163	163	166	167	167	164	163
Total ASSETS OF BUS and UUS (Trillions)	242.276	272.343	296.262	356.504	424.181	477.327	524.564	593.948
Total BPRS Assets (Trillions)	5,83	6,57	7,74	9,16	10,84	12,36	13,76	14,95

Source: Islamic Banking Statistics (OJK), 2020.

According to table 1, in 2013, Islamic banking had 11 Sharia Commercial Banks (BUS), 23 Sharia Business Units (UUS), and 163 BPRS. The total assets of BUS and UUS are around Rp. Two hundred forty-eight thousand one hundred six trillion (BUS and UUS Rp.242,276 trillion and BPRS 5.83 trillion). Continuing to grow every year until December 2020, the Islamic banking industry has a network of 14 Sharia Commercial Banks (BUS), 20 Sharia Business Units (UUS), and 163 BPRS. Indonesia's total Islamic financial assets in December 2020 have reached Rp 593,962.95 trillion (BUS and UUS Rp.593,948 trillion and BPRS Rp. 14.95 trillion) or increased from the previous year's position.

In 2019 itself, Indonesia's total Islamic financial assets reached Rp.524,577.76 trillion (BUS and UUS Rp. 524.564 trillion and BPRS 13.76 trillion). The Islamic banking industry is able to show its development every year 2013 - 2020.

Article 1 paragraph (1) of Law No. 21 of 2008 on Islamic banking states that Islamic Banking is everything that concerns the Islamic Bank and sharia business unit, covering institutions, business activities, as well as ways and processes in carrying out its business activities. Encourage people to find solutions in meeting the needs both in terms of investment or fulfillment of capital halal or free from riba. In other words, the existence of Islamic banks in Indonesia can be one of the alternative solutions to the problem of riba that is prohibited in Islam. Avoidance of interest that is considered riba is one of the challenges faced. Lately, Muslim economists have devoted great attention to finding ways to replace the interest system in banking and financial transactions that are more in accordance with Islamic ethics (Wilardjo, 2019).

The reason researchers choose Bank BRI Syariah is because Bank BRI Syariah is a Sharia Bank that operates Sharia with criteria that until now do financing that continues to run in accordance with the concept of Sharia. Bank BRI Syariah is the third largest Islamic bank based on assets owned.

The advantage of the bank itself is the profit sharing of the benefits of managing the source of money invested by the bank in economic activities and using a transparent system that users can know the various economic developments carried out by the bank BRI Syariah. Bank BRI Syariah implements a revenue-sharing scheme or ratio.

Given the rapid growth and tight competition of Islamic banking in Indonesia, Islamic banks need to improve performance in order to attract investors and customers and create banking with sound and efficient Islamic principles. An assessment of the financial performance of a bank can be done by analyzing the financial statements of the bank concerned. From the financial statements can be obtained information about the financial position, cash flow, and other information related to the performance of the bank. Based on the report can be calculated a number of financial ratios that are commonly used as a basis for assessing the level of bank performance.

Financial Ratio is an index that connects two accounting numbers and is obtained by dividing one number by another (Kasmir, 2016).. Financial ratios are used to evaluate the financial condition and performance of the company (Kasmir, 2016). The benefits of financial ratios are financial ratio analysis as a tool to assess the performance of a company's achievements.

The importance of financial ratios is one type of measuring tool that companies use to analyze financial statements. By using financial ratios, we can analyze the good or bad of the state or financial position of a company from one period to the next.

Why the importance of conducting a study of profitability because profitability as one of the references in measuring the amount of profit becomes so important to know whether the company has run its business efficiently. The efficiency of a new business can be known after comparing the profit earned with the assets or capital that generates the profit. So for every company must do the study in order to know about the profitability of the company.

One indicator to assess a bank's financial performance is to look at its level of profitability. This is related to the extent to which the bank can run its business efficiently. The level of efficiency is measured by comparing the profit earned with the assets or capital that generates profits. ROA is used to measure the effectiveness of a company in making profits by utilizing its assets (Almadany, 2012). Measures of profitability used are *Return of Equity* (ROE) for companies in general and *Return of Asset* (ROA) in the banking industry. ROA is the ratio used to regulate the ability of bank management to obtain profits. The greater the ROA of a bank, the greater the level of profit achieved by the bank.

Table 2: Persentation of NIM, BOPO, INFASI, ROA on (%)

Indicators	2013	2014	2015	2016	2017	2018	2019	2020
BOPO	90,42	99,47	93,79	91,33	95,34	95,32	96,80	91,01
NIM	6,27	6,04	6,38	6,37	5,84	5,36	5,72	5,89
INFLATION	8,38	8,36	3,35	3,02	3,61	3,13	2,72	1,68
ROA	1,15	0,08	0,77	0,95	0,51	0,43	0,31	0.81

Source: Financial Statements of Bank BRI Syariah and BI Data

From table 2, it can be concluded that there was a lack of stability BOPO (operating expenses operating income) from 2013 to 2014 experienced a very significant increase to 99.47%. Then in 2015, the decline was still the same as the previous year. In 2016 experienced a decrease of 91.33%.

In 2017 there was an increase of 95.34%, in 2018, there was a decrease of 95.32%, then the following year 2019 experienced an increase of 96.80%, and in 2020 there was a decrease of about 91.01%.

NIM *(Net Interest Margin)* in annually from 2013 and then in 2014 decreased by 6.04%. In 2015, it increased to 6.37%. Tahun 2017 decreased to 5.84%, then in the following year experienced a decrease in 2018 of 5.36%. Tahun 2019 experienced an increase of 5.72% and in 2020 experienced a significant increase to 5.89%.

Inflation in 2013 and 2014 decreased by 8.36%. Tahun 2015 to 2016 decreased once to about 3.02%. In 2017 inflation increased to 3.61%, the next Tahun 2018 decreased to 3.13%, Tahun 2019 decreased by 2.72% until 2020 inflation decreased greatly to 1.68%.

Roa (*Return on Assets*) showed a less stable percentage in 2013 and in 2014 by 0.08%. From 2015 to 2016, there was an increase of 0.95%. Tahun 2017 to 2018 decreased by about 0.43%. In 2019 and 2020, there was an increase to 0.88%.

Profitability (ROA) can be measured by several financial ratios, such as the Ratio of Operating Expenses to Operating Income (BOPO), *Net Interest Margin* (NIM), and inflation. The Operating Expenses to Operating Income Ratio (BOPO) is a comparative ratio between operating expenses and operating income. The higher the BOPO ratio, the more inefficient the bank's operating costs. Some theories explain that there is an inverse relationship between BOPO and ROA. If the BOPO rate increases, then the bank is inefficient in running its operations, so the ROA rate will decrease due to high operating costs. Return on asset reflects how much return is generated on each rupiah of money invested in the form of assets. The higher the ROA hopes it will be better (Murhadi, 2015).

Inflation is an event that shows a general increase in the price level and continues (Pure, 2013). If inflation is increasing, the prices of goods needed by the community will also increase and will decrease the level of public consumption. Declining public consumption will make investors unwilling to invest in the real sector. Most investment funds for the real sector are financed by banks. This makes it difficult for banks to channel funds and bear the costs of existing capital. And in the end, it will have an impact on the declining profitability of banks.

NIM is the next variable used to calculate ROA. Net Interest Margin (NIM) is a ratio that compares net interest income to average earnings. This ratio reflects the bank's ability to generate net interest income through the placement of productive assets. The higher this ratio, the better the bank's performance in terms of generating interest income. However, assuming interest income must be re-invested to strengthen the bank's capital, it must be ensured that this is not due to high intermediation costs. Many studies have been conducted on the factors that influence the profitability of Islamic banks. Several studies still conclude different things, and the purpose of this research includes re-investigating the effect of operating costs, profit margins, and macro variables in the form of inflation on the profitability of an Islamic bank.

LITERATURE REVIEW

Profitability

Profitability is the end result of a number of policies and decisions made by the company. One of the ratios used to measure profitability is *Return On Assets* (Widiastuty, 2017). *Return on Assets* (ROA) is a ratio that describes a bank's ability to manage funds invested in overall profit-generating assets (Anwar &Miqdad, 2017). The profitability ratio is a ratio used to measure a company's ability to generate profits from normal business activities. This ratio is also known as the rentability ratio. Profitability ratios or rentability can be used to measure the level of effectiveness of management performance. Good performance will be shown through the success of management in generating maximum profit for the company (Cashmere, 2016). The high level of profitability reflected in the value of ROA makes the bank gain the trust of the public, which allows the bank to raise more capital so that the bank gets the opportunity to expand credit more broadly. Measurement of health level there is a difference between ROA theoretically and ROA, which is taken into account based on the provisions of Bank Indonesia (Anwar & Miqdad, 2017).

According to Cashmere Ratio (2016), the purpose of using profitability for the company as well as for outsiders of the company is to assess the development of profit over time, To measure how much net profit will be generated from each rupiah of funds embedded in total assets, To measure the margin of gross profit on net sales. It is known that the bank's good performance then the level of public confidence in the bank will increase, and conversely, if the bank's performance decreases, then the level of public trust in the bank will also be reduced.

Factors that affect bank profitability include capital, liquidity, asset quality, operational efficiency, and corporate governance (Suwarno & Muthohar, 2018). The profitability ratio that the focus of this research is *Return on Assets* (ROA). In addition to internal factors, banking profitability is also influenced by various external factors. External factors are factors that come from outside banking and are beyond the control of banking management. One of the external factors affecting banking ROA is the inflation rate. Inflation is defined as a condition in which there is a general price increase that occurs continuously within a certain time.

Return on Assets (ROA) is used to measure bank profitability because Bank Indonesia as a builder and banking supervisor, prioritizes the profitability value of a bank as measured by assets whose funds are mostly from public deposit funds. The greater the ROA of a bank, the greater the level of profit achieved by the bank, and the better the position of the bank in terms of asset use (Kasmir, 2016).

Islamic Banking

Islamic banking is everything that concerns the Islamic Bank and the Sharia Business Unit, covering the institutions, business activities, as well as the ways and processes in carrying out their business activities. Banks are financial institutions whose business activities are to raise community funds and channel them back to the community and provide other bank services (Ifham, 2015). Bank Syariah, as a financial institution yang carrying out sharia principles, pada Islamic banking products have the goal of prioritizing the welfare of the community and helping the economic standard of living of the community (Gunanto et al., 2018)

According to Law No. 10 of 2008, the type of Islamic bank is divided into Sharia Commercial Bank and Sharia People's Financing Bank. Then Sharia Bank is divided into Sharia Commercial Bank (BUS), Sharia People's Financing Bank (BPRS), and Sharia Business Unit (UUS) (Dahlan, 2012).

Bank Umum Syariah (BUS) is an Islamic bank that provides payment traffic services as part of its operations. While the Islamic People's Financing Bank (BPRS) is an Islamic bank, its activities are limited to storing funds and do not include paid traffic.

Sharia Business Unit (UUS) is a work unit in the head office of a Conventional Commercial Bank that serves as the parent office of an office or unit that carries out business activities based on sharia principles, or a work unit in the branch office of a bank domiciled abroad that carries out the activities of 16 conventional businesses and/or Sharia units.(Asriningrum, 2019).

Operating Expenses of Operating Income (BOPO)

The BOPO ratio is often called the efficiency ratio because it is used to measure management's ability to control operating expenses to operating income (Suwarno & Muthohar, 2018). BOPO is the ratio of comparison between Operating Expenses and Operating Income. The lower the BOPO ratio level means, the better the management performance of the bank because it is more efficient in using existing resources in the company. Operating Expenses (BOPO) is used to measure the ability of bank management in controlling operating expenses against operating income. A healthy bank has a BOPO ratio of less than one, whereas a less healthy bank has a BOPO ratio of more than 1 (Wibowo &Syaichu, 2013).

According to Bank Indonesia Regulation No. 9/1/PBI/2007 dated January 24, 2007, on The Health Level Assessment System of Commercial Banks Based on Sharia Principles, which is further explained through Bank Indonesia Circular Letter No.9/24/DPbS mentioned, operating efficiency is measured against comparing total operating costs against total operating income often called BOPO. Banks that have a high BOPO ratio indicate that the bank does not operate efficiently because the high value of this ratio shows the amount of operating costs that must be incurred by the bank to obtain operating income. In addition, the large number of operating costs will reduce the amount of profit that will be obtained due to costs or operating expenses (Yusuf, 2017)

NIM (*Net Interest Margin*)

According to Pandia (2012) that *Net Interest Margin* (NIM) is a ratio used to measure a bank's management ability to manage its productive assets to generate net interest income. Net interest income is earned from interest income minus interest expense. The greater this ratio, the increase in interest income on productive assets managed by the bank so that the possibility of a bank is strong. The term NIM in Islamic banks uses NOM (*Net Operating Margin*), which is one way to show the bank's ability to manage the distribution of financing to customers and operational costs so that the quality of productive assets is maintained and able to make increased revenues (Kiswanto & Purwanti, 2016).

In order to carry out their operations, Islamic banks do not use an interest system. Instead, they use net operating margin (NOM) ratio analysis, which compares net operating income to the average productive asset. The higher the bank's NOM / NIM, the higher its revenue, and thus its ROA. OJK's standardization for the NIM ratio is 6% and higher.

According to Darmawi (2012), there are three most widely used measures for *Net Interest Margin* (NIM), namely:

1. *The net interest margin* in rupiah is the difference between all interest receipts and all interest expenses expressed in rupiah.
2. *Net interest margin* in percentage is the total *Net Interest Margin* (NIM) in rupiah divided by total earnings assets.
3. *Interest spread* is the difference in interest receipts with interest expenditures.

To be able to increase the acquisition of *Net Interest Margin* (NIM), it is necessary to reduce the cost of funds. The cost of funds is the interest paid by the bank to each source of funds of the bank concerned. Overall, the costs to be incurred by the bank will determine what percentage of the bank must set the interest rate on credit given to its customers to obtain the bank's net income.

Inflation

Inflation is one of the economic problems that get a lot of attention from economic thinkers. Inflation is the tendency of prices to rise in general and continuously. The price increase of one or two items alone is not called inflation. The condition of the continuous upward trend also needs to be remembered because price increases due to seasonality, ahead of big days or that often occur once, and do not have a continued influence are not called inflation (Ridwan et al., 2013)

However, when the cost of production to produce commodities is higher, which causes the selling price to also become relatively high while, on the other hand, the income level of the community is relatively fixed, then this inflation becomes something "harmful" especially if it lasts for a relatively long time with the portion inversely proportional between the inflation rate to the income level (Putong, 2013).

BOPO's Relationship to Profitability of Islamic Banks (ROA)

Effect of Operating Expenses of Operating Income *on Return on Asset.* According to Fahmi (2012), The Effect of Operating Expenses (BOPO) on ROA is "That the bank can improve the ratio of operating expenses to its revenue by reducing costs that will actually increase profits in the future ."Considering the main activities of the bank in principle are to act as an intermediary, namely collecting and distributing public funds, the bank's operating costs and income are animated by interest and interest costs (Tejaningrum, 2019).

Operating Income Operating Expenses (BOPO) is used to measure the ability of bank management to control operating expenses against operational income (Hery, 2017). That operating expenses to BOPO's operating income negatively affect ROA. Achieving a high level of efficiency is the expectation of each bank because achieving efficiency means that management has successfully used the resources owned efficiently. The high ratio of BOPO indicates that using resources owned or not able to carry out their operational activities efficiently will result in a decrease in profitability.

The smaller the bopo, the more efficient the bank's business operations are. A healthy bank has a BOPO ratio that is less than one, while a less healthy bank has a BOPO ratio that is greater than one. The higher the bank's revenue costs, the more inefficient its operational activities become, and thus its revenue decreases (Wibowo & Syaichu, 2013). As a result, as operating expenses of operating income (BOPO) rise, so does bank return on assets (ROA).

NIM's Relationship to Profitability of Islamic Banks (ROA)

Net Interest Margin (NIM) on *Return On Assets* (ROA) According to Pandia (2012) that NIM is a ratio used to measure a bank's management ability to manage its productive assets to generate net interest income. Net interest income is derived from interest income minus interest expense (Usman, 2016). NIM is a ratio that shows the ability *to earn Assets* in generating net interest income (Aziz, 2016). Nim ratio indicates the bank's ability to generate revenue from (margin, profit sharing) to look at the bank's performance in channeling financing/credit.

The NIM/NOM ratio indicates the bank's ability to generate net interest income with the placement of productive assets. Islamic banks, in carrying out the bank's operations, do not use an interest system, then in Islamic banks use *net operating margin* (NOM) ratio analysis which is net operating income to the average productive asset. The greater this ratio, the higher the interest income on productive assets managed by the bank, so the possibility of the bank in a troubled condition is less (Riyadi, 2014). The higher the NIM indicates, the more effective the bank is in placing productive assets in the form of credit. The greater the NIM obtained by the bank, the bank's revenue will increase so that ROA will also increase.

Inflation Relationship to Profitability of Islamic Banks (ROA)

Inflation is one of the macroeconomic indicators that affect a company's financial performance (Sahara, 2013). For companies, inflation causes rising production and operational costs to ultimately hurt the bank itself. Inflation has the potential to increase credit interest. The increase in credit interest will certainly hamper the growth of the credit itself. Revenue from the credit sector will be small. Inflation has a positive effect on the *Return on Assets* (ROA) of Islamic Banks, which means the higher the inflation rate, the greater the (ROA) of Islamic Banks. The increase in inflation will be followed by an increase in assets and Third Party Funds (DPK) of Islamic Banks, which will increase the profitability of Islamic Banks in terms of *Return on Assets* (ROA).

Previous Research

Wibowo & Syaichu (2013) analyzed the Effect of Interest Rates, Inflation, CAR, BOPO, and NPF on Profitability of Islamic Banks. This study used multiple linear regression analysis techniques. The results of the study found that the variable interest rate has no effect on ROA, inflation has no effect on ROA, CAR has no effect on ROA, and NPF also does not. At the same time, the BOPO variable has a significant effect with a negative direction.

Sudarmawanti & Pramono (2017) investigated the Influence of CAR, NPL, BOPO, NIM, and LDR on ROA. This research method uses *ordinary least square* (OLS) multiple linear regression analysis methods. The results *of the study were a CAR, NPL, BOPO, NIM, and LDR partial car, and NIM did not significantly affect ROA, while NPL, BOPO, and LDR had a significant effect on ROA. Simultaneously the five variables affect roa.*

Maulana (2015) resolved the Effect of Inflation, *Capital Adequacy Ratio*, Operating Expenses, and Operating Income on Profitability in the Islamic Banking Period 2010-2014. This research method uses multiple linear regression analysis methods. The results of this study show that there is a simultaneous influence on inflation, exchange rate, car (*capital adequacy ratio*), and BOPO variables on *return on asset*. The results of this study also showed that exchange rate variables and BOPO had a partially significant effect on return on assets, while inflation and CAR (*capital adequacy ratio*) had no partial effect on return on assets. Adjusted R square results found that the effect of Inflation, Exchange Rate, CAR, and BOPO on return on assets can be explained by 92%, while the remaining 8% is influenced by other variables and is not included in this regression analysis.

Amelia (2015) figured out the Financial Ratio and Its Effect on Profitability sharia. The data analysis method used in this study is multiple regression analysis. The results of this study show from the results of statistical tests F showed that *Capital Adequacy Ratio* (CAR), *Non-Performing Financing* (NPF), *Financing to Deposit Ratio* (FDR), and Operating Income Operating Expenses (BOPO) simultaneously affect Return *on Asset* (ROA). Based on the results of the statistical test, it was concluded that *the Capital Adequacy Ratio* (CAR), *Non-Performing Financing* (NPF), and Financing to *Deposit Ratio* (FDR) partially had no significant effect on *Return on Asset* (ROA) while Operating Expenses (BOPO) partially had a significant effect *on Return on Asset* (ROA).

Fitriyani, Setyowati, & Muhtarom (2016) in their research on The Analysis of Factors Affecting Profitability in Islamic General Banking in Indonesia Period 2010-2013. The analysis technique used is a multiple regression model. The results of this study showed that DPK has a negative and significant influence on the Profitability of Islamic Banks, NPF has a negative and significant influence on the Profitability of Islamic Banks while Mudharabah, Murabahah, and Musyarakah have a positive and equally significant effect on Profitability in Islamic Banking in Indonesia in the period 2010-2013.

Siwu, Murni, & Tulung (2018) analyzed the Influence of CAR, NPL, LDR, NIM, and BOPO on ROA in the Banking Industry Entered into the LQ-45 Period in August 2015 - January 2018. The data analysis technique used is multiple linear regression analysis. The results showed that partially CAR and NIM had a positive but not significant effect on ROA as well as NPL, LDR, and BOPO negative and insignificant effects on ROA. From the results of regression analysis, it is also known that together independent variables, namely CAR, NPL, LDR, NIM, and BOPO, have a significant effect on dependent variables, namely ROA.

Munir (2018), conducted research on the impact of CAR, NPF, FDR, and Inflation on The Profitability of Islamic Banking in Indonesia. The data analysis technique used is multiple linear regression analysis. The results showed that based on the F test obtained a statistical f-value of 0.000085 below 0.05 (five percent). In other words, independent variables that include CAR, NPF, FDR, and inflation simultaneously have a significant effect on ROA dependent variables. While formally, based on the test of variables, NPF has a positive and significant effect on ROA. In comparison, the variables CAR, FDR, and inflation have no effect on ROA.

Ali and Maamor et al. (2018) studied the effect of macroeconomic variables on the profitability of Islamic banks. The data analysis technique used is a regression analysis of panel data. The results showed that findings revealed that GDP growth rates, inflation, exchange rates, oil prices, and money supply had a significant positive impact on profitability. Further findings reveal that oil prices, GDP, and inflation are the most significant, and exchange rates and money supply are the least significant determinants of profitability.

Medyawati & Yunanto (2018), conducted study on the Influence of FDR, BOPO, and Profit-Sharing on the profitability of Islamic Commercial Banks in Indonesia. The data analysis technique used is a regression analysis of panel data. The results showed that the influence of

Non-Performing Financing (NPF), *Financing to Deposit Ratio* (FDR), Operating Expenses of Operating Income (BOPO), and Revenue Share on profitability banks as measured by Return on Asset (ROA) in Indonesia in the period 2010 - 2016. The profitability of an Islamic Bank is influenced by CAR (*Capital Adequacy Ratio)*, operating expenses of operating income, and profit-sharing.

Suminar & Setyowati (2019), examined The Influence of Inflation, Rupiah Exchange Rate, Operating Costs of Operational Income (BOPO) and Gross Domestic Income (GDP) on the profitability of Islamic Commercial Banks in Indonesia from 2013 to 2017. The data analysis technique used is a regression analysis of panel data. The results showed that the results of the panel's estimated data cross-section, variable exchange rate (exchange rate), Operating Income, and Gross Domestic Income (GDP) had a significant influence on the *return on assets* (ROA) of Islamic commercial banks in Indonesia in 2013-2017.

Hardiyanti, Utomo, & Rosyadi (2019), investigated the Influence of Inflation, Bi Rate, Car, NPF, and Bopo on the profitability of Islamic People's Financing Bank in Indonesia from 2013 to 2017. The data analysis technique used is multiple linear regression analysis. The results of this study can be concluded that in the short term, *non-performing financing* (NPF) variables have a significant effect on bprs profitability, but inflation variables, BI Rate, Capital Adequacy Ratio (CAR), and Operating Expenses against Operating Income (BOPO) do not have a significant effect on the profitability of Sharia People's Financing Bank. While in the long term, inflation variables, BI Rate, Capital Adequacy Ratio (CAR), Non-Performing Financing (NPF), and Operating Expenses against Operating Income (BOPO) have a significant effect on bprs profitability in Indonesia.

Ningtyas (2019) examined the Influence Analysis of DPK, Nim, Bopo, and Car on Profitability Ratio (ROA) at Sharia Commercial Banks That Go Public. The data analysis technique used is multiple linear regression analysis. The results of this study can be concluded that the Third Party Fund (DPK) and *Capital Adequacy Ratio* (CAR) had an effect on profitability (ROA) in Islamic Banks in the period 2014-2017. In comparison, *Net interest Margin* and BOPO have no effect on profitability (ROA). In Islamic banks in the period 2014-2017.

Tumewang & Isnaini et al. (2019) found that the inflation rate had no effect on bank earnings. Interest rates affect bank management in determining margin levels and profit-sharing in order for partners to keep using Islamic bank products. In addition, the exchange rate has no significant effect on the income of Islamic banks.Tho'in (2019) showed that the tests that have been done show that the NPF ratio has a significant effect on the RATIO OF ROA. The NPF ratio has a significant effect on the CAR ratio. CAR ratio is able to mediate the indirect influence of NPF ratio to ROA ratio

Kusumastuti & Alam (2019) in their research on The Analysis of the Influence of CAR, NPF, BOPO on the Profitability of Islamic Commercial Banks (Years 2015-2017), the data analysis technique used is multiple linear regression analysis. The results of this study show that bopo variables have a significant effect on ROA. Car and NPF variables have no significant effect on ROA.

In their study on Factors Affecting Return on Assets (ROA) in Corporate Banking Listed on the Indonesia Stock Exchange (IDX) from 2015 to 2018, Yuliana and Pratiwi (2020) found that the data analysis technique used is multiple linear regression analysis. The results showed that partially CAR, NPL, Inflation, and BI Rate had no significant effect on the ROA of banking companies registered with the IDX, while LDR, NIM, and BOPO had a significant effect on ROA in banking companies listed on the IDX.

Pratama, Setyowati, and Harun (2020) conducted research on Mudharabah Revenue Sharing Financing Analysis, FDR, NPF, and Against Roa Profitability at Bank Mandiri Syariah from 2015 to 2018. The data analysis technique used is a regression analysis of panel data. The results showed mudharabah and murabahah had no effect on ROA with probability values of 0.6945 and 0.9397 but had a unidirectional relationship.

METHODOLOGY

In this study, the type of data used is quantitative data in the form of secondary data in the form of time series in 2013-2020. The object in this study is Bank BRI Syariah which is a Private Commercial Bank in Indonesia. Secondary data sources were used in the form of annual published financial statements published by the Keuagan Services Authority (OJK) during the period 2013 to 2020. Bopo, Nim, Inflation, and Roa data are sourced from the official website of BANK BRI Syariah (www.ir-bankbsi.com) and the official website of Bank Indonesia (BI). The study used *the Ordinary Least Square* (OLS) analysis, model. This research will look at the effect of BOPO, NIM, and Inflation on the profitability of Bank BRI Syariah in 2013-2020.

This study uses data from one of the Islamic banks, namely BRI Syariah which has now merged with several other Islamic banks to become Bank Syariah Indonesia. Research using this data is still interesting because the annual times series data is quite complete when using sharia BRI data. The research is expected to be one of the references or comparisons to research studies that have similarities.

To analyze the factors that affect profitability at Bank BRI Syariah, namely Operating Expenses against Operating Income (BOPO), *Net Interest Margin* (NIM), and Inflation against *Return On Assets* (ROA) by conducting a regression analysis of time series data processed through a computer program that is *Eviews* and using the formulation of the modified econometric model from (Mokoagow, 2015) as follows:

$$ROAt = \beta 0 + \beta_1 BOPOt + \beta_2\, NIMt + \beta_3\, INFT + et$$

Where:

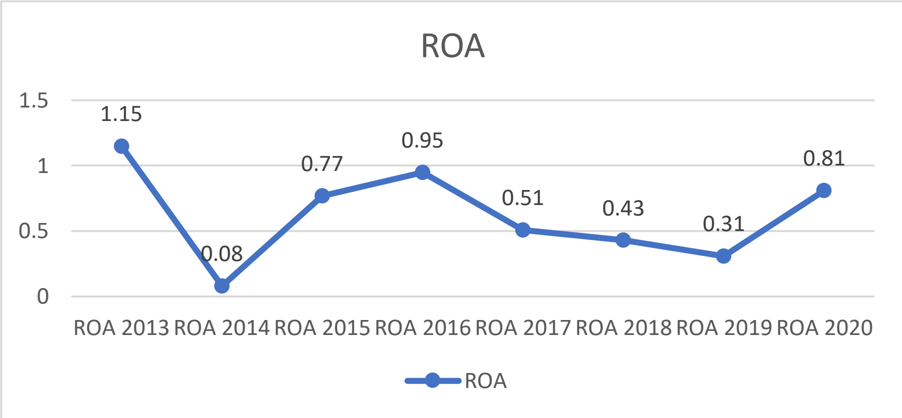
ROAt	= *Return On Assets*
BOPOt	= Operating Expenses on Operating Income
NIMt	= *Net Interest Margin*
INFt	= Inflation
$\beta 0$	= Constant
$\beta_1\ \beta_2\ \beta_3$	= Independent variable regression coefficient
e	= *error term* (error factor)
t	= year to t

RESULT AND DISCUSSION

Development of ROA (*Return on Asset)* Bank BRI Syariah

Return on Asset (ROA) is a ratio that describes a bank's ability to manage funds invested in overall profit-generating assets. ROA describes the productivity of banks in managing funds so as to generate profits (Mohammed, 2014). *Return on Assets* (ROA) is used to measure bank profitability because Bank Indonesia as a builder and banking supervisor, prioritizes the profitability value of a bank as measured by assets whose funds are mostly from public deposit funds. The greater the ROA of a bank, the greater the level of profit achieved by the bank, and the better the position of the bank in terms of asset use (Cashmere, 2016).

Figure 1: Roa (*Return On Asset)* Development Graph
of Bank BRI Syariah Year 2013-2020 (%)



Source: Financial Statements of Bank BRI Syariah, data in units of percent

Based on figure 1, the development of ROA *(Return on Assets)* of Bank BRI Syariah during 2013-2020 annually experienced an increase and decrease. ROA (*Return on Assets*) showed a less stable percentage in 2013 and in 2014 at 0.08%. From 2015 to 2016, there was an increase of 0.95%. Tahun 2017 to 2018 decreased by about 0.43%. In 2019 and 2020, there was an increase to 0.81%. The highest ROA in 2013 reached 1.15%, and then for the lowest ROA itself in 2014 at 0.08%. While the average ROA (*Return on Assets*) in 2013 - 2020 amounted to 0.63%.

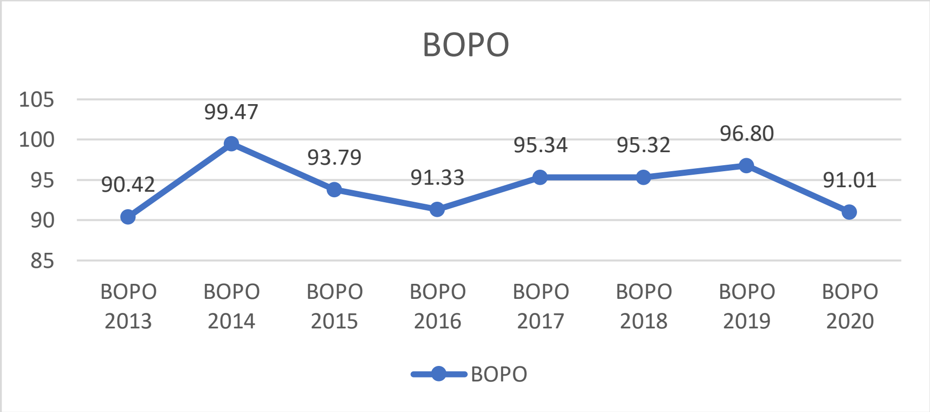
Development of BOPO (Operating Expenses to Operating Income)

BOPO is the ratio of comparison between Operating Expenses and Operating Income. The lower the BOPO ratio level means, the better the bank's management performance because it is more efficient in using existing resources in the company (Putri & Lautania, 2016). BOPO (Operating Expenses to Operating Income) is a ratio that describes the efficiency of banking in carrying out its activities (Muhamad, 2014).

Operating Expenses (BOPO) is used to measure the ability of bank management in controlling operating expenses against operating income. If the bank's operational performance can be more efficient, then the bank will get a greater profit. Therefore it is very necessary to pay attention to the BOPO ratio can achieve maximum efficiency.

Bank Indonesia set the best figure for the BOPO ratio is below 83%, which means the ability of rentability is very high to anticipate potential losses and increase capital. If the BOPO ratio exceeds 89%, then the bank can categorize very low rentability capabilities to anticipate potential losses and increase capital.

Figure 2: Bopo Bank BRI Syariah Development Graph 2013 – 2020 (%)



Source: Financial Statements of Bank Bri Syariah, data in percentage units

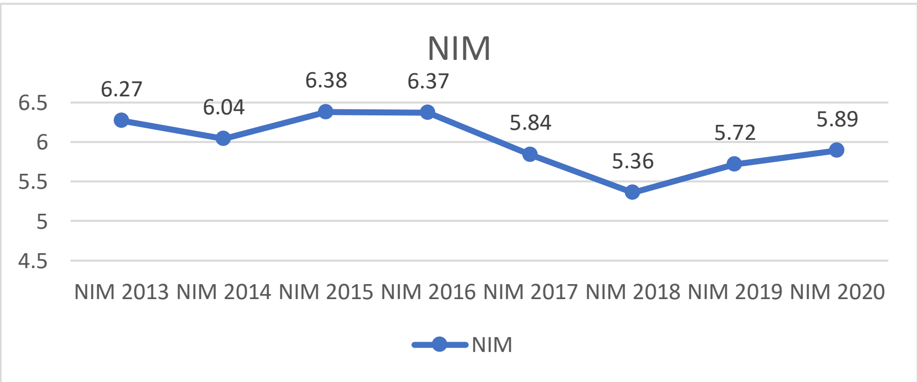
Figure 2 shows that there was a lack of stability in bopo (operating costs operating income) from 2013 to 2020 on a yearly basis. In 2013 to 2014, experienced a very significant increase to 99.47%. Then in 2015, the decline was still the same as the previous year. In 2016 experienced a decrease of 91.33%. In 2017 there was an increase of 95.34%, in 2018, there was a decrease of 95.32%, then the following year 2019 experienced an increase of 96.80%, and in 2020 there was a decrease of about 91.01%. The highest BOPO in 2014 reached 99.47%. Bopo was the lowest in 2013 at 90.42%. While the average BOPO in 2013 - 2020 is 94%.

NIM (*Net Interest Margin)*

Net Interest Margin (NIM) is a ratio used to measure a bank's management ability to manage its productive assets to generate net interest income. Nim ratio shows the bank's ability to generate revenue from the margin profit sharing to see the bank's performance in channeling financing/credit (Yusuf, 2017). The term NIM in Islamic banks uses NOM (*Net Operating Margin*), which is one way to show the bank's ability to manage the distribution of financing to customers and operational costs so that the quality of productive assets is maintained and able to make increased revenues (Kiswanto & Purwanti, 2016).

Islamic banks, in carrying out the bank's operations, do not use an interest system, then in Islamic banks use *net operating margin* (NOM) ratio analysis which is net operating income to the average productive asset. The standardization set by OJK for the NIM ratio is 6% and above.

Figure 3: NIM of Bank BRI Syariah Development in 2013–2020 (%)



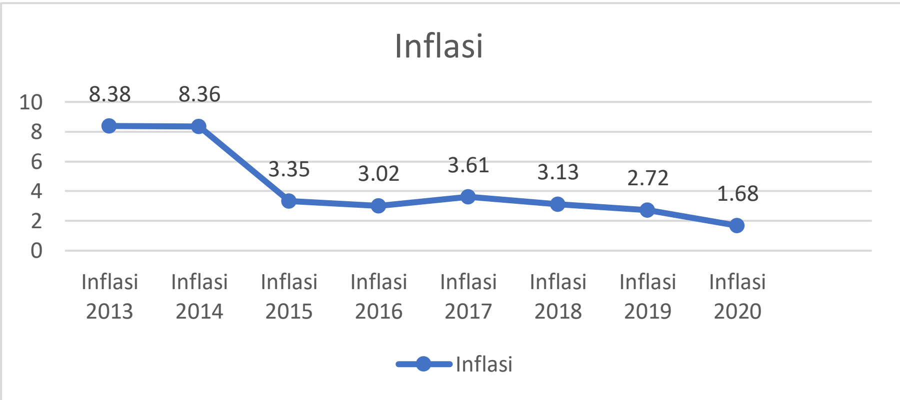
Source: Financial Statements of Bank Bri Syariah, data in percentage units

Figure 3 shows that NIM *(Net Interest Margin)* fluctuates from year to year. In 2013, 2014, it decreased by 6.04%. In 2015, it increased to 6.37%. In 2017 it fell to 5.84%, then in the following year, it decreased by 5.36%. In 2019 there was an increase of 5.72%, and in 2020, there was a significant increase to 5.89%. The highest NIM was in 2015 at about 6.38%. The lowest NIM was in 2018 at around 5.36%. While the average NIM *(Net Interest Margin)* for the period 2013 - 2020 is about 5.98%.

Development of Inflation

Inflation is the tendency of prices to rise continuously. Furthermore, according to Murni (2013) states that inflation is an event that shows a general increase in price levels, and continuously the inflation rate can be estimated by measuring the percentage of changes in the consumer price index that indicate the price of a large number of consumer products such as daily necessities products. The increase in the price of goods in inflation occurs in all goods that have been determined, not only in one or two goods. So, if the increase only occurs in one or two goods, then it is not called inflation (Sukirno, 2012). The impact of inflation is not only on the real sector but also on the financial sector.

Figure 4: Inflation Development in Indonesia 2013 - 2020 (%)



Source: Bank Indonesia, data in units of percent

Figure 4 shows the annual evolution of inflation, which varies from year to year. Inflation in 2013 and 2014 decreased by 8.36%. From 2015 to 2016, it declined once to about 3.02%. In 2017 inflation increased to 3.61%, the following year, 2018, decreased to 3.13%. In 2019 decreased by 2.72% until 2020 inflation decreased greatly to 1.68%. The highest inflation was in 2013 at around 8.38%. The lowest inflation is in 2020 at around 1.68%. While the average inflation in the period 2013 - 2020 is around 4.28%.

Estimated Results

In this study, the impact of Bopo, Nim, and Inflation on the profitability of Bank BRI Syariah from 2013 to 2020 was examined using OLS (Ordinary Least Square) multiple regression analysis techniques and the following econometric model:

$$ROAt = \beta 0 + \beta_1 BOPOt + \beta_2\, NIMt + \beta_3\, INFt + et$$

Where:
ROAt = *Return On Assets*
BOPOt = Operasional Load on Operasional Pendapatan
NIMt = *Net Interest Margin*
INFt = Inflation
β0 = Constant
β_1 β_2 β_3 = Independent variable regression coefficient
t = year to
e = *error term*

The results of the above econometric model estimates, along with the softening test, are summarized in table 3.

Table 3: Results of Econometric Model Estimates

ROA_t= 0.094381+ -0.103932BOPOt + 0.153301NIMt + 0.013947INFt
(0,0020)* (0,0005)* (0,1755) (0,3046)

R2 = 0.9774; DW-Stat. = 2.158291; F-Stat = 57.82117; Prob. F-Stat = 0.000945

Diagnosis Test
(1) Multicollinearity (VIF test)
BOPO = 1.449004; *NIM* = 1.534812; *INF* = 1.322052
(2) Normality (Jarque Bera Test)
JB = 1.131852; Prob. (JB) = 0.567834
(3) Autocorrelation (Breusch Godfrey Test)
$\chi^2(2)$ = 3.587961; Prob. (χ^2) = 0.1663
(4) Heteroskedasticity (White Test)
$\chi^2(3)$ = 0.253147; Prob. (χ^2) = 0.9686
(5) Linearity (Ramsey Reset Test)
F(1.3) = 1.996228; Prob. (F) = 0.2526

Source**:** Appendix I. Description:*Significant at = 0.01; α**Significant at = 0.05; αSignificant at = 0.10α. Numbers in parentheses are empirical probabilities (*p values*) t-statistics.

Classic Assumption Test

The data used in this study is time-series data, so as presented in Tabel 3, the classic assumption test will include multicollinearity test, residual normality test, autocorrelation test, heteroskedasticity test, and model specification or linearity test.

Multicollinearity Test

The multicollinearity test used is the VIF test. The multicollinearity VIF test occurs when the VIF value for an independent variable is > 10. As presented in Table 4.

Table 4: VIF Test Results

Variable	VIF	Criterion	Conclusion
BOPO	1,449004	<10	Does not cause multicollinearity
NIM	1,534812	<10	Does not cause multicollinearity
INF	1,322052	<10	Does not cause multicollinearity

Source: Tabel 3

Residual Normality Test

The residual normality test in the study was tested using Jarque Bera (JB). Ho JB test is a normal residual distribution, and the HA of residual distribution is not normal. Ho is accepted if the value p (p-value), probability, or empirical significance of JB statistics > α; Ho is rejected if the value p (p-value), probability, or empirical significance of JB statistics ≤ α.

From Table 4, jarque bera's statistical value of p, probability, or empirical significance is 0.567834 (> 0.10), so Ho is accepted, meaning normal residual distribution.

Autocorrelation Test

Breusch Godfrey will be used to test the correlation (BG). The BG test is distinguished by the absence of an Autocar in the HA model. The model contains autocorrelation. Ho is accepted if the statistical significance χ^{is} two> α, and Ho is rejected if the statistical significance $\chi^{is\ 2}$≤ α.

From Table 4, see the statistical value of p, probability, or empirical significance $^{of\ 2}$ BG Tests of 0.1663 > 0.10; So Ho was accepted. There is no autocorrelation problem in the model.

Heteroskedasticity Test

The Heteroskedasticity test in this study used the *White* Test, where Ho; there is no problem of heteroskedasticity in the model and HA; there is a problem of heteroskedasticity in the model. Ho is accepted if the statistical significance of χ^2> α, and Ho is rejected if the statistic $\chi^2 \leq$ α.

It can be seen from Table 4 probability *of Chi-square* or significance $^{of\ 2}$ White Test of 0.9686 (> 0.10), so Ho accepted the conclusion there is no problem of heteroscedasticity in the model.

Test Model Specifications

Test Specification of the model used in this study is the Ramsey Reset Test. The Ramsey Reset test has a Ho specification of the model precise or linear. In contrast, the HO specifications of the model are not precise or not linear. Ho is accepted when the statistical, empirical probability or significance of F ≥ α and Ho is rejected if the statistical, empirical probability or significance of F ≤ α.

From Table 4, knowing the probability value or empirical significance of the statistical F Ramsey reset test of 0.2526 (> 0.10), then Ho accepted, which means the model was used linearly (correct model specification).

Model Goodness Test

Existence of Model (Test F)

The Model's Test of Existence uses Test F, where $_{H0}$: $\beta_1 = \beta_2 ... = \beta_n = 0$, the model used does not exist and HA: $\beta_1 \neq 0 \mid \beta_2 \neq 0 \mid ... \mid \beta_n \neq 0$, the model used exists. H0 is accepted when the statistical significance of F > α and H0 is rejected when the statistical significance of F ≤ α. This F test uses probability (Statistical F) compared to α. If α > prob (F Statistics), then the entire independent variable affects the dependent variable.

From Table 4, the statistical, empirical value of F is 0.000945 (< 0.10); so Ho is rejected, the conclusion of the model used exists, and the whole/simultaneously independent variable affects the dependent variable.

Interpretation Test (R2)

The coefficient of determination (^{R2}) indicates the forecasting power of the estimated model. From Table 4, the value (R2) of 0.9774 is seen, meaning that 97.74% of the variation in ROA variables in Bank BRI Syariah can be explained by variations in BOPO, NIM, and Inflation variables. The remaining 2.26% was affected by variables or other factors not included in the model.

Influence Validity Test

The Influence Validity Test tests the significance of the influence of independent variables on its own. The effect validity test used in this study is the t. $_{H0}$ test t is $\alpha_i = 0$, where the independent variable to i in the estimated model has no significant effect; and $_{HA}$ on the validity test $\alpha i \neq 0$, the independent variable to *i* in the estimated model has a significant effect. H0 will be accepted when the value p (*p-value*), probability or empirical significance of the statistic *t* > α, while H0 will be rejected if the value p (*p-value*), probability or statistical significance $t \leq \alpha$.

The results of the influence validity test or t-test for all independent variables in the optimized model are summarized in Table 5 below:

Table 5: Independent Variable Influence Validity Test Results

Variable	Prob-t	Criterion	Information
BOPO	0,0005	< 0.01	Significant at α 0.01
NIM	0,1755	> 0.10	Insignificant
INF	0,3046	> 0.10	Not significant

Source: Table 4

Interpretation of Independent Variable Influence

Based on table 5, independent variables that have a significant positive influence on ROA in Bank BRI Syariah are BOPO variables, while NIM and Inflation variables do not have a significant influence on ROA in Bank BRI Syariah.

The BOPO variable has a regression coefficient of -0.103932, which has a significant negative influence, with a probability value of t of 0.0005 < α (0.01), then the BOPO variable affects the ROA in Islamic Banks. The pattern of roa variable relationship in Bank BRI Shari'ah with BOPO variable is linear, meaning that if BOPO rises one percent, then the ROA in Bank

BRI Shari'ah will decrease by 0.103932 percent. Conversely, if BOPO drops one percent, then the ROA in Bank BRI Syariah will rise by 0.103932 percent.

Interpretation of Economics

Based on the results of the above research, stated that the factors that affect profitability are influenced by several variables, including BOPO, NIM, and Inflation variables. The following economic interpretations in this study are as follows:

Bopo's Influence on ROA Bank BRI Syariah

Based on the results of research on ROA at Bank BRI Shari'ah in 2013-2020, it turns out that BOPO had a negative and significant effect on ROA in Bank BRI Shari'ah in 2013-2020. BOPO is a ratio that describes the efficiency of banking in carrying out its activities (Muhamad, 2014). The results of this study are in accordance with the results of previous research conducted by Kusumastuti and Alam (2019), which showed that BOPO has a negative and significant relationship to ROA in Sharia Commercial Banks. If the bank runs its operations efficiently, it will reduce the ratio of Operating Expenses and Operating Income (BOPO), then the revenue obtained by the bank will increase and also offset increased profitability. Another study found that Operating Expenses and Operating Income (BOPO) negatively and significantly affect profitability. This is evidenced by the importance of Operating Expenses and Operating Income (BOPO) being lower than the maximum significance requirement required.

The results of this study are in accordance with previous research conducted by Maulana (2015) and demonstrated that Operating Expenses to Operating Income (BOPO) negatively and significantly affect Return on Asset (ROA). This means that operating expenses and operating income have a partially significant *effect on return on assets.* BOPO's negative value implies that the smaller the value, the more efficient the bank is in carrying out its business activities. A low BOPO means that the bank's operating costs are less than its operating income, indicating that the bank's management is very efficient in carrying out its operations.

The results of this study are in accordance with the results of research by Wibowo and Syaichu (2013), who shows that BOPO has a significant influence on ROA in a negative direction. This shows that the higher the level of bank financing burden, the smaller the profit earned by the bank. The high cost of operating expenses of banks that are dependent on banks will generally be charged on income obtained from financing allocations. The higher credit burden or cost will reduce capital and profits owned by the bank.

Influence of NIM on ROA Bank BRI Syariah

Based on the results of research on ROA at Bank BRI Syariah in 2013-2020, it turns out that NIM had no significant effect on ROA in Bank BRI Syariah in 2013-2020. NIM is a ratio that shows the ability to earn Assets in generating net interest income (Aziz, 2016). The results of this study are in accordance with previous research conducted by Natalia et al. (2018), which shows where NIM showed positive but insignificant results against ROA in the Banking Industry. NIM shows the bank's ability to generate income from interest by looking at the bank's performance in channeling credit, considering that the bank's operating income is highly dependent on the interest difference from the credit channeled. Income earned from interest received from the loan given is deducted by the interest expense from the source of the funds collected. To be able to increase the acquisition of NIM, it is necessary to reduce the cost of funds. The cost of funds is the interest paid by the bank to each source of funds of the bank concerned. NIM increases every year, which means profitable for banks because the profit generated by banks increases every year.

The findings of this study are consistent with prior research conducted by Sudarmawanti and Pramono (2015), who discovered that NIM had favorable but not statistically significant results against ROA. Net Interest Margin (NIM) is one of the profitability ratios that demonstrates a bank's capacity to manage its productive assets in order to create net interest revenue. NIM demonstrates the bank's ability to create interest income by examining the bank's performance in channeling credit, given that the bank's operational revenue is heavily reliant on the interest difference from the credit funneled. The interest expenditure from the source of the funds collected is deducted from the income earned from the loan granted.

The results of this study are in accordance with previous research conducted by Ningtyas (2019), which found that Net Interest Margin (NIM) had no significant effect on Islamic banks in the period 2014-2017. NIM has no effect because banks are unable to obtain total credit, so interest income is low.

Effect of Inflation against ROA Bank BRI Syariah

The inflation rate had no significant effect on ROA in Bank BRI Syariah in 2013-2020. Inflation is a situation in which the prices of an item increase over a certain period of time in an economic area (Sumarlin, 2016). The increase in prices in inflation occurs from period to period, and the rate of increase varies from region to region. For companies, inflation causes rising production and operational costs to ultimately hurt the bank itself. Inflation has the potential to increase credit interest. The increase in credit interest will certainly hamper the growth of the credit itself. Revenue from the credit sector will be small. Inflation has a positive effect on the *Return on Assets* (ROA) of Islamic Banks, which means the higher the inflation rate, the greater the (ROA) of Islamic Banks.

The findings of this study support prior research by Munir (2018), which found that inflation had no effect on the degree of profitability of Islamic banking (ROA) in Indonesia throughout the study period. This demonstrates that, despite growing inflation, Islamic banking maintains its profitability. Inflation, for example, did not appear to be the source of increased Islamic banking profitability in Indonesia over the research period.

The findings of this study are consistent with recent research by Maulana (2015), which found that inflation has little influence on asset returns. This demonstrates that, despite rising inflation, Islamic banks' profits have not reduced much, and vice versa. The rationale for these conditions is that high inflation represents a growth in goods, which causes the value of money circulation to be lowered due to rising prices. This demonstrates that inflation does not diminish deposits or savings in Islamic banks. This finding demonstrates that Islamic banks have limited resilience to inflation.

This study's findings are consistent with prior research by Wibowo and Syaichu (2013), which found that inflation had no influence on the profitability of Islamic banks. In the Indonesian economy, inflation has become an important macroeconomic indicator. Inflation greatly affects the activities of economic actors both in the real sector and in the financial sector, such as the banking sector and in the monetary sector. Inflation actually has a positive effect, although not significant to the roa Bank Syariah Mandiri, because rising inflation shows poor economic conditions, so uncertainty is increasing. This causes conventional bank interest rates to also increase so that people will turn to the use of Islamic banking services, including Bank Syariah Mandiri. As a result, Islamic financing at this bank again increased, resulting in an increase in the profitability of the company. However, the increase that occurred is still relatively small because, on the other hand, the bank also has to bear considerable costs due to the increase in the company's operating costs.

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CONCLUSION

This research concluded that Operating Expenses and Operating Income (BOPO) had a significant negative effect on ROA (*Return On Asset*). At the same time, the results of nim and inflation research did not have a significant effect on ROA (*Return on Asset).* The model employed in this study passes the classical assumption test, indicating that the residual distribution is normal, there is no multicollinearity problem, no autocorrelation problem, no heteroskedasticity problem, and the model is used linearly (linear model specification). Based on the results of the influence validity test (Test t), variables that have a significant influence on ROA in Bank BRI Syariah is BOPO, while NIM and Inflation do not have a significant influence. Bopo variables have a negative influence on ROA in Bank BRI Syariah, meaning that if BOPO is subjected, it will decrease roa in Bank BRI Shari'ah. Conversely, if BOPO decreases, it increases ROA in Bank BRI Syariah. This study demonstrates that Islamic banks are resilient to the effects of inflation and do not rely on financing profit margins. According to the findings of this study, Islamic banks should be more efficient in reducing operational costs in order to boost profitability. This study demonstrates that Islamic banks are resilient to the effects of inflation and do not rely on financing profit margins. According to the findings of this study, Islamic banks should be more efficient in reducing operational costs in order to boost profitability.

REFERENCES

Ali, Q., Maamor, S., Yaacob, H., & Tariq Gill, M. U. (2018). Impact of Macroeconomic Variables on Islamic Banks Profitability. *Journal of Accounting and Applied Business Research*, *1*(2), 20–35. https://doi.org/10.51325/ijbeg.v1i2.14

Almadany, K. (2012). Pengaruh Loan To Deposit Ratio, Biaya Operasional Per Pendapatan Operasional Dan Net Interest Margin Terhadap Profitabilitas Perusahaan Perbankan Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Riset Akuntansi Dan Bisnis*, *12*(2), 165–183. Retrieved from https://core.ac.uk/download/pdf/290032926.pdf

Amelia, E. (2015). Financial Ratio and Its Influence To Profitability in Islamic Banks. *Al-Iqtishad: Jurnal Ilmu Ekonomi Syariah*, *7*(2), 229–240. https://doi.org/10.15408/aiq.v7i2.1700

Anwar, C., & Miqdad, M. (2017). Pengaruh Dana Pihak Ketiga (DPK), Capital Adequacy Ratio (CAR), Return On Asset (ROA) Terhadap Pembiayaan Mudharabah Pada Bank Umum Syariah Tahun 2008 - 2012. *Jurnal Riset Dan Jurnal Akuntansi*, *1*(1), 42–47. https://doi.org/doi.org/10.33395/owner

Asriningrum, C. (2019). *Analisis Pengaruh NPF, DPK, Dan Roa Terhadap Market Share Bank Syariah Di Indonesia (Studi Kasus Pada Bank Umum Syariah Periode 2014-2018)* (IAIN Purwokerto). IAIN Purwokerto. Retrieved from http://repository.iainpurwokerto.ac.id

Aziz, S. A. (2016). *Pengaruh Corporate Governance Terhadap Nilai Perusahaan Dengan Kinerja Keuangan Sebagai Variabel Intervening Pada Perusahaan Manufaktur Yang*

Terdaftar di Bursa Efek Indonesia Tahun 2010-2014 (UIN Alauddin Makassar). UIN Alauddin Makassar. Retrieved from http://repositori.uin-alauddin.ac.id/id/eprint/821

Dahlan, A. (2012). *Bank Syariah: Teoritik, Praktik, Kritik*. Yogyakarta: Teras.

Darmawi, H. (2012). *Manajemen Perbankan*. Jakarta: Bumi Aksara.

Fahmi, I. (2012). *Analisis Kinerja Keuangan*. Bandung: Alfabeta.

Fitriyani, E., Setyowati, E., & Muhtarom, M. (2016). *Analisis faktor-Faktor Yang Mempengaruhi Profitabilitas Pada Perbankan Umum Syariah Di Indonesia Periode 2010-2013* (Universitas Muhammadiyah Surakarta). Universitas Muhammadiyah Surakarta. Retrieved from http://eprints.ums.ac.id/id/eprint/43661

Gunanteo, D. S. G., Suprihati, & Aristi, F. W. (2018). Pengaruh Financing To Deposit Ratio (FDR), Dana Pihak Ketiga (DPK) Dan Return On Asset (ROA) Terhadap Pembiayaan Musyarakah. *Jurnal Edunomika*, *2*(2). https://doi.org/http://dx.doi.org/10.29040/jie.v2i02.316

Hardiyanti, W., Utomo, Y. P., & Rosyadi, I. (2019). *Analisis Pengaruh Inflasi, Bi Rate, Car, Npf, Dan Bopo Terhadap Profitabilitas Bank Pembiayaan Rakyat Syariah Di Indonesia Tahun 2013-2017*. (Universitas Muhammadiyah Surakarta). Universitas Muhammadiyah Surakarta. Retrieved from http://eprints.ums.ac.id/id/eprint/76511

Hery. (2017). *Auditing dan Asuransi*. Jakarta: Grasindo.

Ifham, A. (2015). *Ini Lho Bank Syariah Memahami Bank Syariah Dengan Mudah*. Jakarta: PT Gramedia Pustaka Utama.

Ismail. (2014). *Perbankan Syariah*. Jakarta: Kencana Prenada Media Group.

Kasmir. (2016). *Analisis Laporan Keuangan*. Jakarta: PT Rajagrafindo Persada.

Kiswanto, K., & Purwanti, A. (2016). Pengaruh Tingkat Kesehatan Bank Menurut Risk Based Bank Rating Terhadap Kinerja Keuangan Dengan Good Corporate Governance Sebagai Variabel Pemoderasi Pada Bank Umum Syariah Dan Unit Usaha Syariah Di Indonesia. *Jurnal Akuntansi Indonesia*, *5*(1), 15. https://doi.org/10.30659/jai.5.1.15-36

Kusumastuti, W. I., & Alam, A. (2019). Analysis of Impact of CAR, NPF, BOPO on Profitability of Islamic Banks (the Year 2015-2017). *Journal of Islamic Economic Laws*, *2*(1), 30–59. https://doi.org/10.23917/jisel.v2i1.6370

Maulana, M. R. (2015). *Analisis Pengaruh Inflasi, Capital Adequacy Ratio, Biaya Operasional Dan Pendapatan Operasional Terhadap Profitabilitas Pada Perbankan Syariah Periode 2010 -2014* (UIN Syarif Hidayatullah Jakarta). UIN Syarif Hidayatullah Jakarta. Retrieved from http://repository.uinjkt.ac.id/dspace/handle/123456789/30522

Medyawati, H., & Yunanto, M. (2018). The Effects of FDR, BOPO, and Profit-Sharing on The Profitability of Islamic Banks in Indonesia. *International Journal of Economics,* *Commerce and Management*, *VI*(5), 811–825. Retrieved from http://ijecm.co.uk/wp-content/uploads/2018/05/6551.pdf

Mokoagow, S. W. & M. F. (2015). Faktor-Faktor yang Mempengaruhi Profitabilitas Bank Umum Syariah di Indonesia. *Jurnal EBBANK*, *6*(1), 33–62. https://doi.org/10.53088/jadfi.v1i1.7

Muhamad. (2014). *Manajemen Dana Bank Syariah*. Jakarta: PT Raja Grafindo Persada.

Munir, M. (2018). Analisis Pengaruh CAR, NPF, FDR dan Inflasi terhadap Profitabilitas Perbankan Syariah di Indonesia. *Ihtifaz: Journal of Islamic Economics, Finance, and Banking*, *1*(1), 89. https://doi.org/10.12928/ijiefb.v1i1.285

Murhadi, W. R. (2015). *Analisis Laporan Keuangan, Proyeksi dan Valuasi Saham*. Jakarta: Salemba Empat.

Murni, A. (2013). *Ekonomika Makro*. Bandung: PT Refika Aditama.

Ningtyas, E. T. (2019). *Analisis Pengaruh Dpk, Nim, Bopo, Car Terhadap Rasio Profitabilitas (Roa) Pada Bank Umum Syariah Yang Go Public* (STIE Perbanas Surabaya). STIE Perbanas Surabaya. Retrieved from http://eprints.perbanas.ac.id/id/eprint/5731

Pandia, F. (2012). *Manajemen Dana dan Kesehatan Bank*. Jakarta: Rineka Cipta.

Pratama, I., Setyowati, E., & Harun. (2020). *Analisis Pembiayaan Bagi Hasil Mudharabah,FDR,NPF,Terhadap Profitabilitas Roa Pada Bank Mandiri Syariah Tahun 2015-2018* (Universitas Muhammadiyah Surakarta). Universitas Muhammadiyah Surakarta. Retrieved from http://eprints.ums.ac.id/86671/13/Naskah Publikasi new.pdf

Putong, I. (2013). *Economics Pengantar Mikro dan Makro*. Jakarta: Mitra Wacana Media.

Putri, C. L. &, & Lautania, M. F. (2016). Pengaruh Capital Intensity Ratio, Inventory Intensity Ratio, Ownership Structure dan Profitability Terhadap Effective Tax Rate (ETR) (Studi Pada Perusahaan Manufaktur Yang Terdaftar di Bursa Efek Indonesia Tahun2011- 2014). *Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi (JIMEKA)*, *1*(1), 101–119. Retrieved from http://jim.unsyiah.ac.id/EKA/article/view/759

Ridwan, M. M., Werdaningtyas, H., & Grace, M. V. (2013). *Dinamika dan Heterogenitas Inflasi di Indonesia* (No. No.Wp/06/2013).

Riyadi, A. D. (2014). Pengertian Laporan Keuangan.

Sahara, A. Y. (2013). Analisis Pengaruh Inflasi, Suku Bunga BI, dan Produk Domestik Bruto Terhadap Return on Asset Bank Syariah di Indonesia (Universitas Negeri Surabaya; Vol. 1). Universitas Negeri Surabaya. Retrieved from https://jurnalmahasiswa.unesa.ac.id/index.php/jim/article/view/1502

Siwu, N. G., Murni, S., & Tulung, J. E. (2018). *Pengaruh CAR, NPL, LDR, NIM Dan BOPO Terhadap ROA Pada Industri Perbankan Yang Masuk Dalam LQ-45 Periode Agustus 2015 – Januari 2018*. *6*(3), 325–334. Retrieved from https://ejournal.unsrat.ac.id/index.php/jrbm/article/view/20148

Sudarmawanti, E., & Pramono, J. (2017). Pengaruh CAR, NPL, BOPO, NIM Dan LDR Terhadap ROA (Studi Kasus Pada Bank Perkreditan Rakyat di Salatiga Yang Terdaftar di Otoritas Jasa Keuangan Tahun 2011 -2015). *Journal of Economic and Business*, *10*(1). https://doi.org/http://dx.doi.org/10.52353/ama.v10i1.143

Sukirno, S. (2012). *Makroekonomi Teori Pengantar* (Ketiga). Jakarta: Rajawali Pers.

Sumarlin. (2016). Analisis Pengaruh Inflasi, CAR, FDR, BOPO, Dan NPF Terhadap Profitabilitas Perbankan Syariah. *Jurnal Ekonomi, Manajemen & Akuntansi*, *6*(2), 296–313. https://doi.org/https://doi.org/10.24252/.v6i2.2910

Suminar, Y. P., & Setyowati, E. (2019). *Analisis Pengaruh Inflasi, Nilai Tukar Rupiah, Biaya Operasional Pendapatan Operasional (BOPO) dan Pendapatan Domestik Bruto (PDB) Terhadap Profitabilitas Bank Umum Syariah di Indonesia Tahun 2013-2017* (Universitas Muhammadiyah Surakarta). Universitas Muhammadiyah Surakarta. Retrieved from http://eprints.ums.ac.id/id/eprint/76183

Suwarno, R. C. &, & Muthohar, A. M. (2018). Analisis Pengaruh NPF, FDR, BOPO, CAR, dan GCG Terhadap Kinerja Keuangan Bank Umum Syariah di Indonesia Periode 2013-2017. *Jurnal Bisnis Dan Manajemen Islam*, *6*(1), 94. https://doi.org/10.21043/bisnis.v6i1.3699

Tejaningrum, M. (2019). *Analisis Pengaruh CAR, FDR, NPF, dan BOPO Terhadap Profitabilitas (Return On Assets) Pada Bank Tabungan Pensiunan Nasional Syariah Tahun 2015-2018* (IAIN Purwokerto). IAIN Purwokerto. Retrieved from http://repository.iainpurwokerto.ac.id/5887/

Tho'in, M. (2019). Profitability of Islamic Commercial Banks In Indonesia. *IQTISHADIA: Jurnal Ekonomi & Perbankan Syariah*, *6*(2), 89. https://doi.org/10.19105/iqtishadia.v6i2.2429

Tumewang, Y. K., Isnaini, R. N., & Musta'in, J. L. (2019). The Impact Of Macro Economy Toward Profitability Of Islamic Bank. *Asian Journal of Islamic Management (AJIM)*, *1*(2), 101–108. https://doi.org/10.20885/ajim.vol1.iss2.art4

Usman, H. (2016). Pengaruh Ratio-Ratio Keuangan CAR, LDR, NIM, BOPO, NPL Terhadap ROA. *Jurnal Riset Bisnis Dan Manajemen*, *4*(1), 67–82. Retrieved from https://ejournal.unsrat.ac.id/index.php/jrbm/article/view/12352

Wibowo, E. S., & Syaichu, M. (2013). Analisis Pengaruh Suku Bunga, Inflasi, CAR, BOPO, NPF Terhadap Profitabilitas Bank Syariah. *Jurnal Manajemen Diponegoro*, *2*(2), 1–10. Retrieved from https://ejournal3.undip.ac.id/index.php/djom/article/view/2651

Widiastuty, T. (2017). Faktor-Faktor Yang Mempengaruhi Volume Pembiayaan Berbasis Bagi Hasil Pada Perbankan Syariah di Indonesia. *Jurnal Manajemen*, *21*(1), 90–103. https://doi.org/10.34208/jba.v19i1.60

Wilardjo, S. B. (2019). Peranan Dan Perkembangan Bank Syariah Di Indonesia. *Jurnal Unimus*, *53*(9), 1689–1699.

Yuliana, & Pratiwi, C. W. (2020). Factors Affecting Return on Assets (ROA) in Banking Companies Listed in Indonesia Stock Exchange (IDX) Period 2015-2018. *Asian Journal of Social Science and Management Technology*, *2*(1). Retrieved from http://www.ajssmt.com/Papers/213950.pdf

Yusuf, A. M. (2017). *Metode Penelitian: Kuantitatif, Kualitatif, Dan Penelitian Gabungan*. Jakarta: Kencana.