



Profitability Determinants and Its Implications on Company Value on Sharia Commercial Banks in Indonesia

Sugianto Sugianto^a, Ghulam Fathul Amri^b, Hari Priyadi^c, ^aLecturer at Sahid University, Jakarta, Indonesia, ^bSahid University Postgraduate Student, Jakarta, Indonesia, ^cResearch Center For Geospasial (PRG) National Research and Innovation Agency (BRIN), Email: sugi4nto@gmail.com, ghulamzuhri@gmail.com, hari.priyadi@brin.go.id

The purpose of the study was to determine the effect of economic growth (GDP), inflation, and the money supply (M2), both directly on firm value (PBV) and through profitability mediation (ROA) at Islamic commercial banks in Indonesia for the period 2018 to 2020. The research method used is time series data regression and Sobel test, to determine the direct effect of independent variables including indirect effects through intervening variables. Secondary data is obtained from financial reports published by each Islamic commercial bank in 2018 to 2020, data from Bank Indonesia and the Central Statistics Agency (BPS) and the Indonesia Stock Exchange (IDX). This study shows the results that directly economic growth (GDP) and inflation have no effect on profitability (ROA), while the money supply (M2) has a positive and significant effect on the profitability (ROA) variable of Islamic commercial banks. Inflation and money supply (M2) have no direct effect on firm value (PBV), while economic growth (GDP) has a negative effect on firm value (PBV) of Islamic commercial banks in Indonesia. Inflation has a positive effect on firm value (PBV) by mediating profitability (ROA), the money supply (M2) has a negative effect on firm value (PBV) by mediating profitability (ROA) variables, while economic growth (GDP) has no effect on firm value (PBV) by mediating the profitability (ROA) of Islamic commercial banks in Indonesia. Through this research, practitioners of Islamic commercial banks can consider their policies in dealing with external factors that are beyond the control of management, because in general, external factors will only affect the firm value (PBV) of Islamic commercial banks through profitability (ROA).



Keywords: *economic growth, GDP, inflation, money supply, profitability, ROA, firm value, PBV, Islamic Commercial Banks*

Introduction

According to Sofyan (2019), the financial system plays a significant role in the country's economy. Both Islamic and conventional financial institutions can help the progress of the country and the prosperity of society (Rahman and Safitrie, 2018) (Putri and Afriyeni, 2019). In addition, banks strive to encourage economic growth, maintain national stability, and achieve equal development (Mansur, 2015).

The rapid progress of Islamic banking in Indonesia began in 1991 (Widiyanti et al., 2015). As a financial institution with an intermediary function, banks have a role in collecting donations from the public and channeling them back to those who need funding. (Romdhoni and Chateradi, 2018). In other words, banks collect funds through deposit products and channel them through financing products. Islamic Financial Institutions are different from conventional commercial banks because they follow Islamic principles (Yusuf and Mahriana, 2016). Despite experiencing serious financial problems in 1997, Islamic financial institutions in Indonesia were able to continue (Rukmana, 2014). The existence of Islamic banks in Indonesia also has a major influence on economic growth because they focus more on financing the real sector (Romdhoni & Chateradi, 2018).

Increased public understanding of the prohibition of usury is one of the factors that supports the development of Islamic commercial banks (J. A. Putri, 2017). In addition, public understanding of certain investment prohibitions also plays a role in increasing demand for Islamic commercial bank services (Febrian and Mardian, 2017). Along with this understanding, the demand for Islamic commercial bank services is also increasing.

Law Number 21 of 2008 establishes the legal foundation for general Islamic Financial Institutions in Indonesia (Taufik et al., 2015). The number of Islamic commercial bank units (BUS), Islamic Business Units (UUS), and Islamic People's Financing Banks (BPRS) that grew from 2016 to 2020 shows an increase in the number of units (BUS) in Indonesia, as shown below:

Tabel 1. Perbankan Syariah di Indonesia Tahun 2016 - 2020

Jenis Lembaga Keuangan	Tahun 2016	Tahun 2017	Tahun 2018	Tahun 2019	Tahun 2020
Bank Umum Syariah	13	13	14	14	14
Unit Usaha Syariah	21	21	20	20	20
Bank Pembiayaan Syariah	166	167	167	164	163

Sumber : (OJK, 2020)

Globally, there has been a significant increase in asset data for the Islamic finance industry over time. Even in 2023, it is estimated that the assets of the Islamic financial industry will increase to reach USD 3.472 billion.

Islamic banking holds a large portion of the assets of the Islamic financial industry globally, accounting for 71% of total assets. Islamic banking continues to be a highly trusted financial tool in the Islamic finance industry worldwide. Meanwhile, based on total Islamic financial assets worldwide, Indonesia is in seventh position, below Malaysia and only below Malaysia. Only about 6% of general banking assets in Indonesia are controlled by Islamic banks. Because a bank's market share increases with profit potential, this market share is considered an important factor in determining its profitability (Anto & Wibowo, 2012).

With the market share of Islamic commercial banks that is still small, this requires serious attention from practitioners of Islamic commercial banks. They need to dig deeper into the potential of Islamic commercial banks, especially considering that the majority of Indonesia's population is Muslim, thereby opening up great opportunities for Islamic commercial banks to make a significant contribution, both nationally and internationally.

Increasing business performance is a very vital aspect for Islamic Financial Institutions to strengthen their role in maintaining banking system stability and facing competition, both from the domestic and international banking sector. This competition includes not only traditional financial institutions, but also other Islamic financial institutions. .

Customer trust in Islamic commercial banks can be maintained if the bank's growth shows good performance (Nurmalitasari, 2017). Banks that operate in a healthy condition can be considered a good bank, and a healthy financial condition for commercial banks is able to create profits. Therefore, good financial conditions and the continued ability of banks to generate profits are very significant aspects, because profits are the end result of all a series of business activities carried



out by banks. (Fernos, 2017). To assess the performance of a bank, its financial reports are an important reference (Rachmat and Komariah, 2017). In addition, to ensure that banks remain in good condition and do not cause harm to the community, regulations regarding bank health also serve as guidelines for the banking industry in maintaining their performance (Syakhrun et al., 2019).

One way to increase banking profitability is to optimize the intermediation function (Kurniawansyah and Agustia, 2016). This means that banks must be better at collecting and channeling funds so that banking performance increases (Suhendar and Tanuatmodjo, 2014). Banking profitability studies are used to assess banking performance (Hendrawan and Lestari, 2016). The purpose of this evaluation is to improve banking performance, assess operations, and determine management plans to face a competitive market. The study of Islamic banking profitability is very important because it can help improve the economy and its growth. Islamic commercial banks can gain greater trust from the public by increasing their profitability. This will enable them to make a greater contribution to the Indonesian economy.

Internal and external factors affect bank profitability. Internal factors come from policies and management decisions and affect bank profitability and operations (Suteja and Ginting, 2014). Expenditure management, liquidity, bank size, capital adequacy and credit risk are some of the internal components that influence management decisions and policies. On the other hand, external factors are components that are not under the control of bank management, including regulation, inflation, economic growth and money circulation. These factors are interconnected and affect the performance of banks, especially banks that are members of the Indonesian stock exchange, which seek to generate profits and increase company value. Therefore, it is the responsibility of financial managers to understand the components that have an impact on firm value. (Rudangga and Sudiarta, 2014).

One way to measure a bank's internal profitability is to look at the ratio of profit after tax to total bank assets (Dayanti and Indrarini, 2019). The ROA ratio shows how well bank management can use its assets to increase income (Nurchahya, 2014) and how well they can help

In addition, there is a relationship between inflation and the amount of money circulating in the economy. To avoid excessive inflation, controlling the money supply is very important (Riyanto and Asakdiyah, 2016). Indonesia's financial crisis in 1998 is a clear example. Financing and investment needs can increase when interest rates decrease. The study conducted by Hartaroe et al. (2020) on Islamic commercial banks in Indonesia between 2014 and 2018 show that the money supply has a negative impact on the profitability (ROA) of Islamic commercial banks, although this impact is not significant (Swandayani and Kusumaningias, 2012).



According to previous studies, inflation, economic growth, and the overall money supply affect profitability (ROA). However, Ayuningrum and Saputra's research (2017) found that profitability (ROA) acts as an intervening variable in the relationship between these external factors and company value. Other findings also show that profitability (ROA) acts as a mediator in the relationship between company management and these external factors.

Literature Review

Based on the description of the theory and previous studies that have been carried out, a framework for this study was developed. The thinking framework is defined as a systematic framework that is used to carry out research (Nurdin and Hartati, 2019). The framework of thought was prepared based on a theoretical study of each variable, both the independent variable, the dependent variable, and the moderating variable (Syafitri, 2020). A good frame of mind will explain theoretically the rules between independent and dependent variables (Mustika, 2019). The purpose of using a frame of mind is to find out an overview of the overall research content, so the researcher describes the research framework in the form of a simple schematic drawing (Hanifah, 2019).

This research was conducted to determine the effect of external factors on Islamic commercial banks such as economic growth (GDP), inflation and money supply (M2), on firm value (PBV) of Islamic commercial banks in Indonesia with profitability (ROA) as the intervening variable.

According to research conducted by Irsyad, Kosim, and Hakim (2019) on eight Islamic financial institutions, economic growth—measured by Gross Domestic Product (GDP)—is an important component and has a positive impact on profitability (ROA). However, as shown by Sekar Cahyani Arumdal (2018) in their research, economic growth has no effect. The results of the second study form the following hypothesis:

H1: Profitability (ROA) in Islamic commercial banks in Indonesia is positively and significantly influenced by economic growth (GDP).

Based on research conducted by Riyanto and Asakdiyah (2016) and Yanuardi et al. (2014), an increase in the inflation rate in the 2010–2012 period was found to be a trigger for reduced business profitability, including in the Indonesian banking sector. However, the findings shown by Syah (2018) indicate that the effect of inflation on profitability (ROA) is not significant. A number of results of this study led to the following hypotheses:

H2: The variable profitability (ROA) in Islamic commercial banks in Indonesia is not affected by the inflation rate.



A study by Riyanto and Asakdiyah (2016) found that the abundance of money in circulation plays an important role in supporting people's economic activities. The potential for increased income and savings in Islamic banks is in line with the increase in people's economic activity. In the end, this has an impact on the profitability (ROA) of Islamic commercial banks. However, according to research conducted by Arifudin et al. (2020), the impact of the money supply on the profitability of Islamic commercial banks is not significant. The results show that the research hypothesis is as follows:

H3: The variable money supply (M2) in Islamic commercial banks in Indonesia has a positive and significant impact on the variable profitability (ROA).

Study by Pasaribu et al. (2019) found that economic growth (GDP) does not affect firm value. The results show the research hypothesis as follows:

H4: The firm value variable (PBV) in Islamic commercial banks in Indonesia has no relationship with economic growth (GDP).

When the inflation rate experiences a significant increase, the consequences can include a spike in consumption, which in turn impacts saving and financing patterns. This kind of situation has the potential to result in greater losses for the bank. As a result, the performance of Islamic banks may be negatively affected (Rizal, 2018). In this context, this condition also has the potential to affect the overall value of the company. Nonetheless, according to Pasaribu et al. (2019), inflation can also provide benefits to company value. Thus, based on this situation, the research hypothesis can be formulated as follows:

H5: Firm value in Islamic commercial banks in Indonesia has a positive and significant relationship with the inflation variable.

Ariefudin et al. (2020) found that, although not significant, the amount of money in circulation affects the profitability (ROA) of Islamic commercial banks. However, no research has investigated how the money supply affects firm value. As a result of this situation, the research hypothesis can be structured as follows:

H6: The firm value variable (PBV) in Islamic commercial banks in Indonesia has no influence on the money supply variable (M2).

Based on the results of research conducted by Suyitno (2017) on public banks listed on the Indonesia Stock Exchange (IDX), it was found that profitability (ROA) has a significant effect on firm value (PBV). Thus, the hypothesis of this study can be formulated as follows:

H7: The firm value variable (PBV) in Islamic commercial banks in Indonesia has a strong relationship with the profitability variable (ROA)



Research conducted by Dayanti and Indrarini (2019) found that economic growth (GDP) did not affect the profitability of Islamic commercial banks in Indonesia from 2013 to 2017. Another study that investigated the relationship between economic growth and firm value also found that GDP did not affect firm value (U. R. Pasaribu et al., 2019). The results show the following research hypothesis:

H8: Firm value (PBV) in Islamic commercial banks in Indonesia is not affected by economic growth (GDP), with the variable profitability (ROA) functioning as a mediator.

Based on the results of research conducted by Munir (2018) and Arumdalu (2018), there are indications of a positive relationship between inflation and profitability (ROA). In addition, research conducted by Pasaribu et al. (2019) found that inflation has a positive and significant contribution to firm value. These findings provide a basis for the formulation of the research hypothesis as follows:

H9: The variable firm value (PBV) in Islamic commercial banks in Indonesia is affected by inflation, with the variable profitability (ROA) functioning as a mediator.

Hartaroe et al. (2020) investigated Islamic commercial banks in Indonesia from 2014 to 2018, and found that the money supply affects profitability (ROA). A previous study by Swandayani and Kusumaningias (2012), which looked at the period 2005 to 2009, also found that the money supply affects the profitability (ROA) of Islamic commercial banks. The results show the research hypothesis as follows:

H10: In Indonesian Islamic commercial banks, the firm value variable (PBV) tends to have a negative relationship with the money supply (M2), while the profitability variable (ROA) acts as a mediator in this relationship.

Methodology

The five main variables in this study are three independent variables, one dependent variable, and one intervening variable. Economic growth (GDP), inflation rate, money supply (M2), firm value (PBV), and profitability (ROA) are some of these components. Operationalization of variables is very important to facilitate the analysis of relationships between variables because variables are still at the conceptual level. Researchers will find it difficult to find the right metrics to relate variables if they cannot utilize them (Hermawan & Amirullah, 2016).

This study looks at 14 Islamic commercial banks operating in Indonesia in 2019. However, due to the limited amount of data, this research only selects three Islamic public banks listed on the Indonesia Stock Exchange (IDX) in 2019: PT Bank BRI Syariah Tbk (BRIS), PT. Bank BTPN Syariah (BTPNS), and PT Bank Panin Dubai Syariah Tbk (BPDS).



Digdowiseiso (2017) says that a number of elements or individuals in the population to be studied or observed can represent the general conditions or characteristics of the population. In this research, purposive sampling method was used. This shows that the sample was chosen carefully (Susanti, 2016; Radjab & Jam'an, 2017). This method makes research easier.

Not all data from Islamic commercial banks can be used as a sample due to the limited availability of research data. Islamic commercial banks that will be selected as samples must meet the following requirements:

1. transactions that occur on the Indonesia Stock Exchange (IDX).
2. access financial reports through the official website of Islamic Commercial Banks.
3. The analysis focuses on the financial reports of Islamic Commercial Banks from May 2018 to September 2020.

The research variables are expressed in symbols, X1 is GDP, X2 is inflation, X3 is the money supply (M2), Y is profitability (ROA) and Z is firm value (PBV). Path coefficients are stated to determine the direct effect of exogenous variables on endogenous variables, path coefficients are denoted by p_{ij} , endogenous variables are symbolized i which represent effects, while exogenous variables are symbolized j which represent causes (Sinaga, 2019). In this case the variables X1, X2, X3 influence the variable Y, so the notation is p_{Y1} which is interpreted as the effect of the variable X1 on the variable Y, then p_{Y2} is interpreted as the effect of the variable X2 on the variable Y, then p_{Y3} is interpreted as the effect of the variable X3 on the variable Y, and finally p_{ZY} is interpreted as the effect of variable Y on variable Z. The path coefficient is equivalent to the regression coefficient which is used as an estimator of the beta β coefficient, thus to estimate the path coefficient of exogenous variables on endogenous variables it can be estimated with a simple correlation, namely $p_{Y1} = \beta \times X1 \times Y$, $p_{Y2} = \beta \times X2 \times Y$, $p_{Y3} = \beta \times X3 \times Y$, and $p_{ZY} = \beta \times Y \times Z$, so that the structural equation can be formulated as follows:

$$Y = p_{y1}X_1 + p_{y2}X_2 + p_{y3}X_3 + \varepsilon_1$$

$$Z = p_{y1}X_1 + p_{y2}X_2 + p_{y3}X_3 + p_{zy}Y + \varepsilon_2$$

The Sobel test is carried out by testing the strength of the indirect influence of the exogenous variable (X) on the endogenous variable (Y) through the intervening variable (M) (Julianti, 2015). The Sobel test was carried out to see whether the intervening variable could mediate the relationship between the dependent variable and the independent variable (Siddik & Chabachib, 2017). The mediation test is carried out by looking at the t-count obtained from multiplying the coefficients of each variable from the two equations ($a \times b$) then dividing by the formula $Sab = \sqrt{(b^2) [(Sa)^2 + a^2 (Sb)^2 + (Sa)^2 (Sb)^2]}$, so that the complete t-count formula is obtained (Nabila, 2019):

$$t_{hitung} = \frac{a \times b}{S_{ab}}$$

If the calculated t value is greater than t table then the intervening variable is able to mediate the independent variables and the dependent variable, and vice versa, if the t calculated value is less than t table then the intervening variable is unable to mediate the two variables (Hanifah, 2019).

Results and Discussion

The data used is shown in table 2, a total of 29 items, the results of the descriptive statistics show the following:

Table 2. Descriptive Analysis

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
Inflasi	29	1.32	3.49	2.80	0.59
PDB	29	1,223,793	1,357,909	1,291,583.35	42,966.69
M2	29	5,435,083	6,748,574	5,975,521.62	373,845.96
ROA	29	0.51	6.41	3.36	1.81
PBV	29	1.30	2.67	2.06	0.33

Source: *Processed Data, 2023 (IBM SPSS.25)*

1. The lowest inflation of 1.32% occurred in August 2020, this inflation occurred when the whole world experienced a very sharp decline in trade as a result of the corona virus pandemic, so that the prices of goods did not experience a significant increase, on the contrary, the highest inflation was 3.49% occurred in the previous year 2019 in August, this inflation started from May 2019 which was the month of fasting for Muslims, but in the following months the impact still occurred until the peak was August, so it took 6-7 months for inflation to return to normal. below 3% which occurred in December 2019. However, Indonesia's average inflation in the study period was still below 3%.
2. The lowest GDP is Rp. 1,223,793 billion in May 2020, this month is the continued economic impact of large-scale social restrictions (PSBB) that must be carried out by DKI Jakarta as Indonesia's economic center in April 2019, in the face of the corona virus, while the highest GDP is Rp. 1,357,909 billion occurred in August which was followed by a decrease in the peak of inflation in 2019.
3. The lowest amount of money in circulation is Rp. 5,435,083 billion occurred in May 2018 according to initial research data, then M2 continues to increase as it should, so that the money supply is the highest in September 2020.
4. The lowest Sharia banking ROA of 0.51% occurred in January 2019, the three Sharia banks experienced the lowest ROA below 1%, whereas in the previous month December 2018 the

average ROA of Sharia banking reached 5%, the largest contribution was made by BTPN Syariah with a December 2018 ROA of 8%, this shows that Islamic banks did not maintain their performance at the beginning of the year, this is even stronger when you look at the highest ROA of the three Islamic banks achieved in December 2019. However, the average ROA of the three Islamic banks in the study period was still good enough that is above 3%.

5. The lowest PBV was in March 2020, the average of the three Islamic banks was 1.3, still said to have a fairly good value above 1, while the highest PBV occurred in August 2020, this shows that the company value of Islamic banks actually managed to increase at a time when the economy Indonesia must face the impact of the presence of the corona virus, the average PBV in the study period is also still above 1, namely 2.05.

Classic assumption test

Normality test

Normality test to find out the dependent variable and independent variable regression models both have a normal distribution or not. The test uses the Kolomogrov-Smirnov test (K-S test).

Table 3. K-S Test Before Transform Lag

		<i>Unstandardized Residual</i>
<i>N</i>		29
<i>Normal Parameters^{a,b}</i>	<i>Mean</i>	0.000
	<i>Std. Deviation</i>	0.210
<i>Most Extreme Differences</i>	<i>Absolute</i>	0.133
	<i>Positive</i>	0.088
	<i>Negative</i>	-0.133
<i>Test Statistic</i>		0.133
<i>Asymp. Sig. (2-tailed)</i>		.200 ^{c,d}

Source: Processed Data, 2023 (IBM SPSS.25)

The table above shows that the data is normally distributed with a value of asymp.sig.(2-tailed) 0.200, this value is greater than the significance value that should be > 0.05 , the same result also occurs after the lag transformation, the value of asymp.sig .(2-tailed) 0.088 thus the data can be continued by conducting the next classical assumption test.

Table 4. K-S Test After Transform Lag

		<i>Unstandardized Residual</i>
<i>N</i>		28
<i>Normal Parameters^{a,b}</i>	<i>Mean</i>	0.000
	<i>Std. Deviation</i>	0.220
<i>Most Extreme Differences</i>	<i>Absolute</i>	0.154
	<i>Positive</i>	0.149
	<i>Negative</i>	-0.154
<i>Test Statistic</i>		0.154
<i>Asymp. Sig. (2-tailed)</i>		.088 ^c

Source: Processed Data, 2023 (IBM SPSS.25)

Multicollinearity Test

Table 5. Coefficient of Multicollinearity Test Before Transform Lag

<i>Coefficients^a</i>			
<i>Model</i>		<i>Collinearity Statistics</i>	
		<i>Tolerance</i>	<i>VIF</i>
1	<i>(Constant)</i>		
	<i>Inflasi</i>	0.309	3.233
	<i>PDB</i>	0.633	1.579
	<i>M2</i>	0.339	2.951
	<i>ROA</i>	0.750	1.333

Source: Processed Data, 2023 (IBM SPSS.25)

The coefficient table above shows that the tolerance values for all variables are above > 0.10, as well as for VIF values which are below the limit <10. The same results also occur after the transform lag is performed, thus the data can be continued by conducting the next classical assumption test.

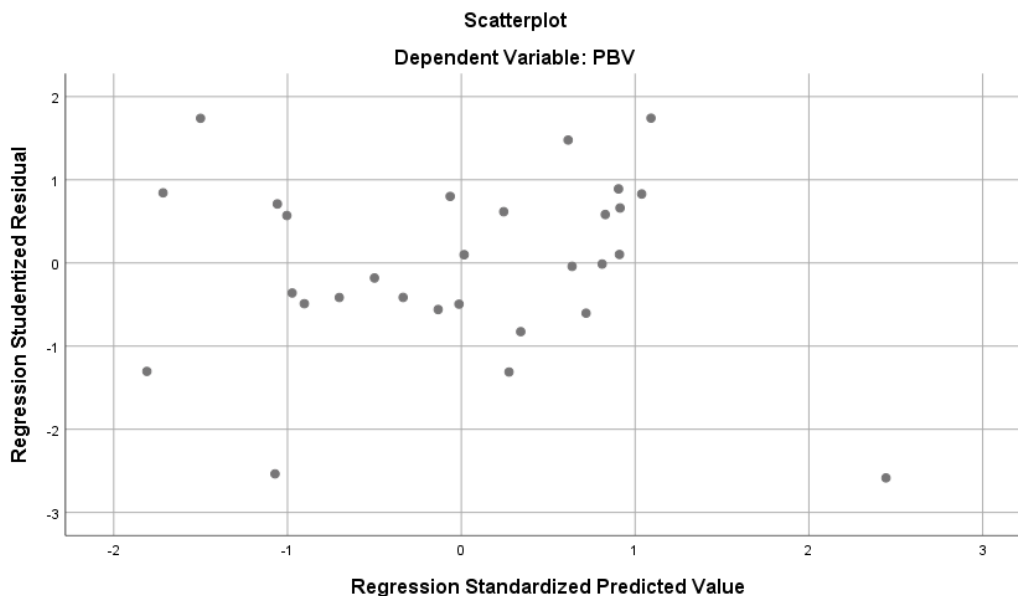
Table 6. Coefficient of Multicollinearity Test After Transform Lag

<i>Model</i>		<i>Collinearity Statistics</i>	
		<i>Tolerance</i>	<i>VIF</i>
<i>1</i>	<i>(Constant)</i>		
	<i>Transform_X1</i>	0.920	1.087
	<i>Transform_X2</i>	0.900	1.111
	<i>Transform_X3</i>	0.812	1.232
	<i>Transform_Y</i>	0.809	1.236

Source: Processed Data, 2023 (IBM SPSS.25)

Heteroscedasticity Test

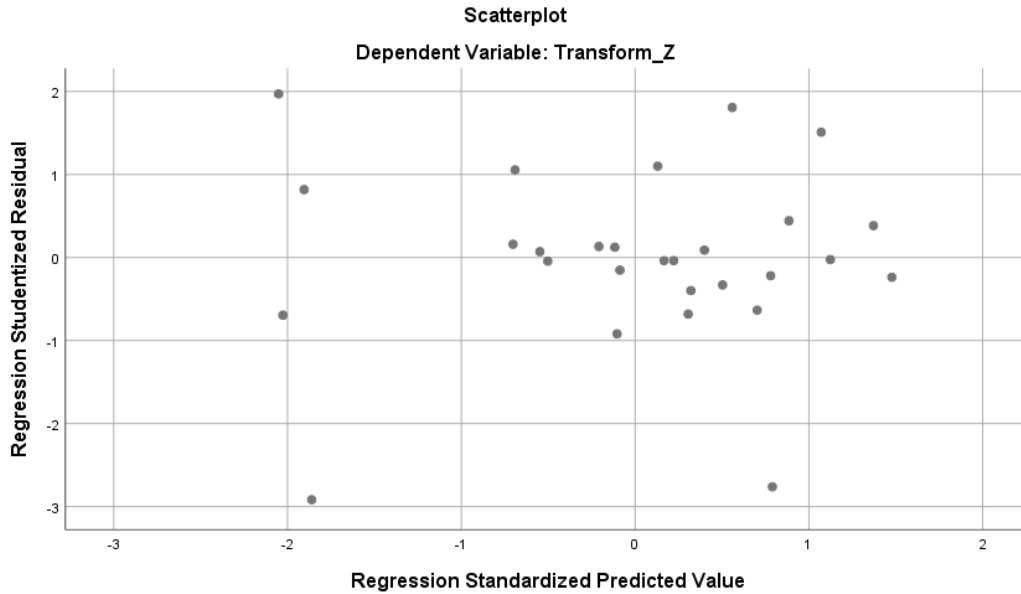
Figure 1. Scatterplot of Heteroscedasticity Test Before Transform Lag



Source: Processed Data, 2023 (IBM SPSS.25)

The scatterplot image above shows that the dots do not converge in one area, this indicates that there is no heteroscedasticity problem, the same results also occur after carrying out the lag transformation, thus the data can be continued by carrying out the next classical assumption test.

Figure 2. Scatterplot of Heteroscedasticity Test After Transform Lag



Source: Processed Data, 2023 (IBM SPSS.25)

Autocorrelation Test

Table 7. Durbin-Watson Table Before Transform Lag

<i>Model Summary^b</i>					
<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Durbin-Watson</i>
1	.773 ^a	0.598	0.531	0.22675	1.259

Source: Processed Data, 2023 (IBM SPSS.25)

Looking at the table above shows a DW value of 1.259, when looking at the DW table, with a number of independent variables 4 and a number of samples 29, the DL value is 1.1241 and the DU value is 1.7426, the DW value is in between which means there is no definite conclusion the presence or absence of autocorrelation. After the lag transformation is performed, the DW value becomes as follows:

Tabel 8. Tabel Durbin-Watson Sebelum Transform Lag

<i>Model Summary^b</i>					
<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Durbin-Watson</i>
1	.517 ^a	0.267	0.139	0.23824	1.676

The table above shows a DW value of 0.676, when looking at the DW table, with 4 independent variables and 28 samples, the DL value is 1.1044 and the DU value is 1.7473, this means that there is autocorrelation in the data, but then it is checked again using run test, the results obtained are:

Tabel 9. Run Test Setelah Transform Lag

	<i>Unstandardized Residual</i>
<i>Test Value^a</i>	-0.006
<i>Cases < Test Value</i>	14
<i>Cases ≥ Test Value</i>	14
<i>Total Cases</i>	28
<i>Number of Runs</i>	15
<i>Z</i>	0.000
<i>Asymp. Sig. (2-tailed)</i>	1.000

Source: Processed Data, 2023 (IBM SPSS.25)

The table shows the Asymp value. Sig.(2-tailed) is 1,000, this value is above the significance value of the run test of 0.05, which means that there is no autocorrelation in the data, thus all the classical assumption tests have been fulfilled with the lag transformation data.

Statistic test
t test

Table 10. Test Results t

<i>Coefficients^a</i>						
<i>Model</i>		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
<i>1</i>	<i>(Constant)</i>	-0.018	0.052		-0.350	0.729
	<i>Transform_X1</i>	-0.503	0.201	-0.465	-2.500	0.020
	<i>Transform_X2</i>	3.421E-06	0.000	0.285	1.515	0.143
	<i>Transform_X3</i>	-4.743E-07	0.000	-0.206	-1.038	0.310
	<i>Transform_Y</i>	-0.009	0.032	-0.054	-0.272	0.788

Source: Processed Data, 2023 (IBM SPSS.25)

The t-test results table shows that only the variable economic growth or GDP (X1) has an individual effect on the firm value variable or PBV (Z), this can be seen from the significance value of the GDP variable (X1) which is below 0.05, while the variable Inflation (X2), money supply or M2 (X3), and profitability or ROA (Y) have no individual effect on the PBV variable, the significance value of the inflation, M2 and ROA variables is above 0.05.

Test f

Table 11. Test Results f

<i>ANOVA^a</i>						
<i>Model</i>		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
<i>1</i>	<i>Regression</i>	0.475	4	0.119	2.092	.115 ^b
	<i>Residual</i>	1.305	23	0.057		
	<i>Total</i>	1.780	27			

Source: Processed Data, 2023 (IBM SPSS.25)

The f test results table shows a calculated f value of 2,092 with a significance of 0.115, with a total of 4 variables so that the df1 value is 3 (k-1) and the number of samples is 28 so that the df2 value is 25 (n-k), then by looking at the f table, the value f is 1.70814, then the calculated f value is greater than f table with a significance value below 0.05, which means that simultaneously the independent variables affect the company value variable or PBV.

Test R² Coefficient of Determination

Table of R² results shows a correlation coefficient (R) of 0.517, a value close to 1, which means that there is a strong relationship between the independent variables GDP (X1), Inflation (X2), M2 (X3), and ROA (Y) with the dependent variable PBV (Z), while the coefficient of determination R² shows a value of 0.267, which means that the contribution of the independent variables only explains the dependent variable of 26.7%, while the remaining 73.3% is explained or influenced by other variables outside the model.

Table 12. Results of R2 Coefficient of Determination

<i>Model Summary^b</i>				
<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
1	.517 ^a	0.267	0.139	0.23824

Hypothesis testing

Path Analysis

Path analysis is carried out through two stages of the equation model regression, the following are the regression results of the two equation models:

Table 13. First Equation Regression

<i>Model</i>		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
1	<i>(Constant)</i>	-0.222	0.325		-0.684	0.500
	<i>Transform_X1</i>	0.944	1.260	0.142	0.749	0.461
	<i>Transform_X2</i>	5.090E-06	0.000	0.069	0.357	0.724
	<i>Transform_X3</i>	5.535E-06	0.000	0.390	2.078	0.049

Source: Processed Data, 2023 (IBM SPSS.25)

Table 13 above shows the following results:

1. The beta coefficient of economic growth or GDP (X1) is 0.142 with a significance value above 0.05, namely 0.461, so the GDP variable has no effect on the profitability or ROA variable (Y).

2. The inflation beta coefficient (X2) is 0.069 with a significance value above 0.05 which is 0.724, so the inflation variable has no effect on the profitability variable or ROA (Y).
3. The beta coefficient of the money supply or M2 (X3) is 0.390 with a significance value below 0.05, which is 0.049, so the M2 variable affects the ROA (Y) variable.

Tabel 14. Regresi Persamaan Kedua

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	-0.018	0.052		-0.350	0.729
	Transform_X1	-0.503	0.201	-0.465	-2.500	0.020
	Transform_X2	3.421E-06	0.000	0.285	1.515	0.143
	Transform_X3	-4.743E-07	0.000	-0.206	-1.038	0.310
	Transform_Y	-0.009	0.032	-0.054	-0.272	0.788

Source: Processed Data, 2023 (IBM SPSS.25)

Table 14 above shows the following results:

1. The beta coefficient of economic growth or GDP (X1) is -0.465 with a significance value below 0.05, namely 0.020, so the GDP variable affects the firm value variable or PBV (Z), but has a negative effect.
2. The inflation beta coefficient (X2) is 0.285 with a significance value above 0.05, which is 0.143, so the inflation variable has no effect on the firm value variable or PBV (Z).
3. The beta coefficient for the money supply or M2 (X3) is -0.206 with a significance value above 0.05, which is 0.310, so the M2 variable has no effect on the PBV (Z) variable.
4. The profitability beta coefficient or ROA (Y) is -0.054 with a significance value above 0.05, which is 0.788, so the ROA (Y) variable has no effect on the PBV (Z) variable.

Both equation one and equation two have an error with the symbol epsilon or e, to calculate the errors for the two equations, it can be seen from the value R², then use the formula $\sqrt{(1-R^2)}$, so the error values for the two equations are as follows:

Table 15. R² First Equation

<i>Model Summary^b</i>				
<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
<i>1</i>	<i>.437^a</i>	<i>0.191</i>	<i>0.090</i>	<i>1.5092</i>

Source: Processed Data, 2023 (IBM SPSS.25)

$$e1 = \sqrt{1 - R^2}$$

$$e1 = \sqrt{1 - 0.191}$$

$$e1 = 0.899$$

Then the error value of equation one is 0.8995

Table 16. R² Second Equation

<i>Model Summary^b</i>				
<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
<i>1</i>	<i>.517^a</i>	<i>0.267</i>	<i>0.139</i>	<i>0.23824</i>

Source: Processed Data, 2023 (IBM SPSS.25)

$$e1 = \sqrt{1 - R^2}$$

$$e1 = \sqrt{1 - 0.267}$$

$$e1 = 0.856$$

Then the error value of the second equation is 0.8563

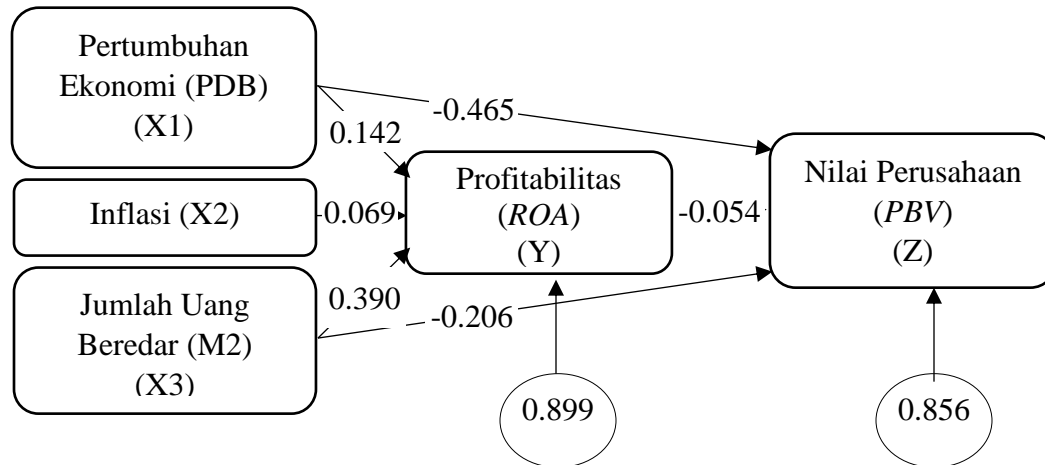
By knowing the error and the coefficient value of each independent variable on the dependent variable from the two equations, the regression equation can be formulated as follows:

$$Y = 0.142\text{GDP} + 0.069\text{Inflation} + 0.390\text{M2} + 0.899$$

$$Z = -0.465 \text{ GDP} + 0.285\text{Inflation} - 0.206\text{M2} - 0.054\text{ROA} + 0.856$$

From these two equations, the path analysis equation model can be described as follows:

Figure 3. Path Analysis Model



Sobel test

The Sobel test was carried out on three independent variables to determine the mediating effect of the intervening variable profitability or ROA on PBV firm value, symbol a is a direct effect on the intervening variable, symbol b is a direct effect on the dependent variable, symbol sa is the standard error direct effect on the intervening variable, the sb symbol is the standard error for the direct effect on the dependent variable, so that the t-count can be obtained as follows:

1. The indirect effect of the GDP variable (X1) on the PBV variable (Z) through the ROA variable (Y)

$$a = 0.142 \quad a^2 = 0.020$$

$$b = -0.465 \quad b^2 = 0.217$$

$$sa = 1.260 \quad sa^2 = 1.588$$

$$sb = 0.201 \quad sb^2 = 0.041$$

$$Sab = \sqrt{((0.217 \times 1.588) + (0.020 \times 0.041) + (1.588 \times 0.041))}$$

$$Sab = 0.640$$

$$t - count = \frac{0.142 \times -0.465}{0.640}$$

$$t - count = -0,103$$

With a total of 4 variables and 28 samples, the DF value is 3 (k-1) to 25 (n-k), looking at the t-table with a significance level of 0.05 the t-table value is 1.70814, the t-count value is more smaller than the t-table value means that the GDP variable (X1) has no effect on the PBV variable (Z) and the ROA variable (Y) is unable to mediate the relationship between the two.

2. The indirect effect of the inflation variable (X2) on the PBV variable (Z) through the ROA variable (Y)

$$a = 0.069 \quad a^2 = 0.005$$

$$b = 0.285 \quad b^2 = 0.081$$

$$sa = 0.000 \quad sa^2 = 0.000$$

$$sb = 0.000 \quad sb^2 = 0.000$$

$$Sab = \sqrt{((0.081 \times 0.000) + (0.005 \times 0.000) + (0.000 \times 0.000))}$$

$$Sab = 0.000$$

$$t - \text{count} = \frac{0.069 \times 0.285}{0.000}$$

$$t - \text{count} = 4822.094$$

By looking at the t-table of 1.70814, the t-count value is greater than the t-table value, which means that the inflation variable (X2) has an effect on the PBV variable (Z) and the ROA variable (Y) is able to mediate the relationship between the two.

3. The indirect effect of the variable M2 (X3) on the PBV variable (Z) through the ROA variable (Y)

$$a = 0.390 \quad a^2 = 0.152$$

$$b = -0.206 \quad b^2 = 0.042$$

$$sa = 0.000 \quad sa^2 = 0.000$$

$$sb = 0.000 \quad sb^2 = 0.000$$

$$Sab = \sqrt{((0.042 \times 0.000) + (0.152 \times 0.000) + (0.000 \times 0.000))}$$

$$Sab = 0.000$$

$$t - \text{count} = \frac{0.390 \times -0.206}{0.000}$$

$$t - \text{count} = -139218.957$$

By looking at the t-table with a significance level of 0.05 of 1.70814, the t-count value is greater than the t-table value, meaning that the FDR variable (X3) has a negative effect on the PBV variable (Z) and the ROA variable (Y) is able to mediate the relationship between the two .

Test Sobel Online

The online Sobel test is carried out by entering a value, b value, sa value, and sb value, so that the following results are obtained:

Table 17. Sobel Online Test Results

Variabel	<i>t-statistic</i>	<i>p value</i>	Keterangan
X1→Y→Z	-0.113	0.910	<i>p value</i> >0,05 not significant
X2→Y→Z	4832.251	0.000	<i>p value</i> <0,05 significant
X3→Y→Z	-139269.110	0.000	<i>p value</i> <0,05 significant

Conclusion

Based on the research results, it can be concluded several things as follows:

1. Hypothesis one is rejected, because based on the results of the study, it turns out that economic growth (GDP) has no effect on the profitability (ROA) of Islamic commercial banks in Indonesia, in the period from 2018 to 2020.
2. The second hypothesis is not rejected, because based on research results, inflation does not affect the profitability (ROA) of Islamic commercial banks in Indonesia, in the period from 2018 to 2020.
3. The third hypothesis is not rejected, because based on the research results, the money supply (M2) has a positive and significant effect on the profitability variable (ROA) of Islamic commercial banks in Indonesia, in the period 2018 to 2020.
4. The fourth hypothesis is rejected, because based on the results of the study, it turns out that economic growth (GDP) has a negative effect on the firm value (PBV) of Islamic commercial banks in Indonesia, in the 2018-2020 period.
5. The fifth hypothesis is rejected, because based on research results, inflation does not affect the company value (PBV) of Islamic commercial banks in Indonesia, in the period from 2018 to 2020.
6. The sixth hypothesis is not rejected, because based on research results, the money supply (M2) has no effect on the company value variable (PBV) of Islamic commercial banks in Indonesia, in the 2018 - 2020 period.
7. The seventh hypothesis is rejected, because based on the results of the study, it turns out that profitability (ROA) has no effect on the firm value variable (PBV) of Islamic commercial banks in Indonesia, in the 2018 - 2020 period.
8. The eighth hypothesis is not rejected, because based on research results, economic growth (GDP) has no effect on firm value (PBV) mediated by profitability (ROA) of Islamic commercial banks in Indonesia, in the period 2018 to 2020.
9. The hypothesis is not rejected, because based on research results, inflation has a positive effect on firm value (PBV) mediated profitability (ROA) of Islamic commercial banks in Indonesia, in the period 2018 to 2020.
10. The hypothesis is not rejected, because based on research results the money supply (M2) has a negative effect on firm value (PBV) mediated by the variable profitability (ROA) of Islamic commercial banks in Indonesia, in the period 2018 to 2020.



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