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**TRANSFORMATION AND STRATEGY FOR ECONOMIC, BUSINESS AND ENVIRONMENT TO ACHIEVE SUSTAINABLE DEVELOPMENT IN NEW NORMAL ERA**

**TRANSFORMATION AND STRATEGY FOR ECONOMIC, BUSINESS AND ENVIRONMENT TO ACHIEVE SUSTAINABLE DEVELOPMENT IN NEW NORMAL ERA**

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## **Preface**

The First Joint International Conference “Business, Economic and Sustainability Science (BESS) 2021” takes theme of “Transformation and Strategy for Economic, Business and Environment to Achieve Sustainable Development in New Normal Era”. The Covid-19 pandemic has changed the international development landscape as it transformed the economic, business, and environmental sectors. This could potentially increase poverty, inequality, inequality, and global unemployment in the medium and long term. The study conducted by United Nations Development Program and the University of Denver (2020) find that 44 million people are expected to be pushed into extreme poverty by 2030 due to COVID-19. In extreme scenario, where the recovery is protracted and economic growth is lower than current projections, more than 1 billion people across the globe could be living in extreme poverty by 2030.

To increase the stakeholder’s awareness regarding the importance of ambition and urgency to achieve sustainable development in the new normal era, Universitas Negeri Malang, Universiti Malaysia Terengganu, and Ural Federal University organize a joint international conference to find out how the transformation and strategies in the fields of economy, business and environment in attaining sustainable development. Problems created by the pandemic emphasize the indivisible character of the 2030 Agenda for Sustainable Development. Multidisciplinary systems-thinking is needed for exploring interconnections between environment, business, and economics.

We expect this proceeding to provide relevant theoretical frameworks, emerging trends and strategies regarding the challenges and opportunities created by Covid- 19. It is expected that business practitioners, scholars and policy researchers will find this proceeding useful to suggest ways to thrive in this era of uncertainty. The proceeding brings together leading researchers and scientists in the domain of economic, business, and environmental science from around the world in formulating the green outline to recover from the crisis. The combination of public and business policies with technological innovation could be scenario to mitigate the negative impact of economic activities on sustainable development.

We are deeply grateful for each author of the chapters for their scholarly contributions. We also thank the publishers for their support in this whole process.

Editor in chief

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# Analysis of the monetary policy transmission through credit, interest rates, and risk line on the profitability of Islamic banks

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**Abstract.** *Monetary Policy has a target on how banks behave in their role as financial intermediaries. This policy is implemented through different policy transmission lines in the conventional banking sector. Thus, this study was structured with the aim of examining the long-term and short-term effects of monetary policy transmission on credit lines, interest rates, and risk on the profitability of the Islamic banking sector. This study was structured using the VECM method in accordance with the objectives of this study. The findings of this study indicate that all variables are not related to each other. In addition, the results of the study also do not indicate the influence of the transmission of credit channel policies, interest rates, and risks in the short term on the profitability of Islamic banks. The monetary policy in this study only has a long-term effect on the profitability of Islamic banks. This indicates that the Islamic banking sector is sluggish in responding to the dynamics of change from the conventional financial sector which in other words the monetary policy time lag is much larger and has a significant impact on the profitability of the Islamic banking sector.*

**Keywords:** Monetary policy transmission, Islamic banking, profitability, credit, interest rate, risk

## Introduction

Monetary policy is one of the keys to economic stability in a country. This is because monetary policy is the policy of the central bank or monetary authority in maintaining the magnitude of the monetary component to achieve the desired development of economic indicators (Juhro, 2020). This monetary policy has been based on the economic dynamics that occur, both can be either a decrease (burst) or increase (boom) in accordance with less cycles that are always changing (Mukhlis, 2015). In its application, this monetary policy has several instruments that serve as a transmission for the implementation of the policy. Some of them are the line of credit, the interest rate line and the risk channel.

These three pathways used to influence the amount of money in circulation and applies also to how the financial instrument market dynamics influencing the behavior of the owners of capital or surplus units in allocating wealth assets (Juhro, 2020). Policy that is implemented will affect how the financial sector or banking behavior in maintaining the stability of the business carried on. The behavior of the banking sector will be influenced by various monetary policies set by the central bank. In case of tightening the money supply (monetary policy is contractionary) the banks will adjust the instrument what is applied by the central bank to achieve the goal of tightening the money.

However, Indonesia has a sharia financial system that accompanies the prevailing conventional financial system. Islamic banking cannot use certain instruments, such as interest rates, in implementing the monetary policy will be conducted (Juhro, 2020). In many other Islamic countries, for example in Malaysia, the study also shows how tight monetary policy conditions have a low impact significance on Islamic banks than on conventional banks (Rashid et al., 2020; Lee et al., 2022). Thus, this study seeks to identify whether prevailing conventional monetary policy will have the same effect on the performance of Islamic banks? What is the effect in the long and short term of the monetary policy transmission variable on the profitability of Islamic banks?

Of the various issues to be raised, in general, the writing of this article has the objective to discuss the measurement of the effect caused by the transmission of monetary policy on Islamic banking. This is due to the growth of the financial sector and Islamic banking in Indonesia over the last few years (Suhendro, 2018). In addition, some Islamic financial variables also proved to affect the economic growth in Indonesia (Santoso & Nurzaman, 2020). This shows how important the banking sector and Islamic finance are to the economy in Indonesia. This study will use statistical hypothesis testing through the analysis tool vector error correction model (VECM).

This research is compiled on the basis of the assumption that in the years of research that the economy is experiencing different conditions in times before and during the pandemic progresses. This leads to the need for monetary policy is able to improve the condition of the national economy, especially the condition of the financial markets (Hertinawati, 2021). The theory used in this research includes theories about how the implementation of monetary policy in the financial sector. Thus, the title of this research is “The effect of monetary policy transmission on the credit, interest rates, and risks line on the profitability of Islamic banks”

## **Literature review**

### ***Monetary policy***

Monetary policy is the policy of the central bank to maintain the monetary magnitude that affects economic stability in accordance with the objectives of the national economy. This policy is implemented by adjusting the cycle of the national economy to keep it in line and not contradictory (Juhro, 2020). Monetary policy has 3 main instruments, namely open market operations, discount rates, and reserve requirements. These three policies are selected and implemented according to the current conditions of the national economy (Mukhlis, 2015). In several previous studies, monetary policy needs to develop and change according to current economic conditions.

Research from Turkey says that the framework of a new and adaptive monetary policy is able to solve problems and provide benefits for the Central Bank to control the troubled economy (Kara & Afsal, 2018). The monetary policy that is applied is often related to how the fiscal policy of a country is. This linkage is mainly in how the state debt management is carried out by the central bank as an implementation of its role as state cashier (Auclert, 2017). Basically, monetary policy directly affects the velocity of money in the economy, which is measured by the rate of development of the money supply, interest rates, credit and currency exchange rates, as well as several other macroeconomic variables within a certain period of time (Warjiyo, 2004).

Conventional monetary policy is also accompanied by a new policy, namely on monetary policy that is sharia in nature. This is due to the development of Islamic banks in society that require a separate policy from conventional banking. However, several studies indicate that the Islamic banking sector in Indonesia, in its policy transmission, still follows conventional banking system (Sudarsono, 2017). This shows the low influence of sharia monetary policy in the Islamic banking sector even though the country already implemented the double monetary system.

### ***Sharia banking***

Sharia banking is a form of implementation of Islamic or Islamic values in the banking sector. This banking concept prioritizes the balance between the financial sector and the real sector. This is to prevent speculation about public involvement in the financial sector (Juhro, 2020). Islamic banks also have a role and function not only as a commercial bank but also have a social responsibility in society

in the form of social capital (Sukma et al., 2019). The business model of Islamic banking is proven to provide support for the implementation of a sustainable business concept which encourages stability and low-risk governance (Raouf & Ahmed, 2021).

Islamic banking in Indonesia has become the latest trend in public interest and has continued to develop since the 1998 Monetary Crisis. This is marked by the emergence of several Islamic banks in Indonesia which were initiated by Bank Muallamat in 1992. Post the Monetary Crisis, the development of Islamic banks has become rapid until now it is in demand by the public (Bangsawan, 2017).

### ***Financial sustainability***

The concept of sustainable finance has a fairly broad scope of understanding. based on the findings of several previous studies, sustainable finance has a two-way effect on how affordability of financial access by the public (Ponce et al., 2021). Within the scope of the economy, sustainable finance coupled with good institutional quality has a major influence on the implementation of green economy growth over a long period of time (Ahmed et al., 2021). However, sustainable finance, which in this case is measured by the short-term performance of a company, is not able to have a significant effect on business sustainability (Lo & Liao, 2021).

This shows that the stability of the implementation of sustainable finance has a fairly broad and long scope and time indicator. Another discussion touched on how the concept of financial sustainability relates to financial inclusion and financial efficiency. The research shows the fact that financial inclusion has a positive effect on financial sustainability and has a negative effect on financial efficiency (Le et al., 2019). This shows that there are costs that must be paid in the form of efficiency so that financial inclusion arises in the community which has a long-term influence on financial sustainability.

### ***Previous research***

Several previous studies have provided a study of the influence of how credit, interest rates, and risks affect the profitability of Islamic banks and how the banking performance can affect the financial sustainability. Several previous studies form the basis of the development of research that is currently compiled. There are various findings that differ from previous studies regarding the variables selected in this study. The interest rate variable, through the BI Rate indicator, does not show a significant effect on the profitability of Islamic banks. This is due to the existence of Islamic banking management which is not based on conventional interest rates.

The banking sector itself determines the profit-sharing ratio that adjusts the conventional bank interest rates. Thus, there is no significant effect is reflected (Hidayati, 2014). Other studies have shown conflicting results. One of them is the finding in Indonesia that the interest rate variable has a significant effect on the return on assets of Islamic banks (Sukmaningrum et al., 2020). This shows that the macroeconomic variables cannot be separated in giving a significant effect on Islamic banks even though Islamic banks do not refer to the interest rates determined by the central bank. This study is in line with the findings of other studies examining international macroeconomic variables.

This is indicated by the significant direct influence of interest rates on how Islamic banks get their business profitability, more precisely, it affects how banks determine the returns that will be obtained from each financing made (Tumewang et al., 2019) (Alharbi, 2017). This research also shows that the effect of interest rates is negative or opposite so that Islamic banks need to strengthen how business management should be applied. In addition, other findings also state that Islamic banks face the risk of changes in interest rates and yields given according to the analysis of the indication of the duration of the policy gap found (Khaliq et al., 2017).

Other research discusses how credit lines can affect the profitability of Islamic banks. One of his findings states that Islamic banks do not depend on credit as the main thing to make a profit (Alharbi, 2017). Other findings also support the fact that Islamic banks tend to get profit from activities that require fees (fees) rather than profits from lending activities (loans) so the effect of credit policies is not too significant on how the profitability of Islamic banks is (Azad et al., 2020). Research in Pakistan also

provides similar results where monetary policy through the credit channel has less influence than conventional banks and this study also state that Islamic banking tends to be slow in responding to credit policies provided by the central bank (Rashid et al., 2019).

Another variable that is currently being studied is the risk variable. Previous research has shown that the risk variable as measured by non-performing loans (NPL) or non-performing financing (NPF) shows that NPL / NPF has a significant negative effect on the profitability of Islamic banks (Mujaddid & Wulandari, 2017) (Almunawwaroh & Marlina, 2018). More to a general level, the credit risk variable also has the same effect as the NPL / NPF (Supriyadi et al., 2018). For the aspect of bank stability, previous research states that credit risk does not have a significant effect on the stability of the banking business (Ali & Puah, 2019).

Other research shows that high participation from *Mudharabah* and *Musharakah* financing will encourage an increase in credit risk, which directly affects the profitability of Islamic banking (Belkhaoui et al., 2020). Other research shows the fact that financing by Islamic banking tends to be more stable than risk. In a period of crisis, the findings indicate the fact that credit risk has a negative impact on the performance of Islamic banking, and the period after the crisis, it shows a negative effect of credit risk in Islamic banking and conventional banking (Hassan et al., 2019).

In the scope of sustainable finance, research shows that the Risk Governance Index of Islamic Banks has a lower level than conventional banks. However, this finding is also accompanied by the fact that existing risk governance has a negative influence on stability indicators (Raouf & Ahmed, 2021). To deal with the stability problem, it is necessary to follow up on the handling of the Triple Bottom Line and Corporate Governance to improve the stability and performance indicators of Islamic banks. This handling can be in the form of how summarizing and improving the framework of Islamic Banks Governance (Jan et al., 2021).

### ***Hypothesis formulation***

From several previous studies that have become the reference literature, several hypotheses can be drawn which include also (see Figure 1 to analyze the research framework):

- H1: Monetary Policy Transmission has a significant effect in the long-run and short-run on the profitability of Islamic banks in Indonesia
- H2: Monetary Policy Transmission in the Interest Rate Channel has a positive and significant effect in the long-run on the profitability of Islamic banks in Indonesia
- H3: Monetary Policy Transmission to the Credit Allocation Channel has a positive and significant effect in the long-run on the profitability of Islamic banks in Indonesia
- H4: Monetary Policy Transmission in the Risk Channel has a negative and significant effect in the long-run on the profitability of Islamic banks in Indonesia

### **Methodology**

The approach used in this research is a quantitative method approach, namely an approach that uses mathematical and statistical analysis to test a hypothesis from theory development to obtain the desired information (Walliman, 2011). This study uses data in the form of time-series secondary data sourced from Bank Indonesia which includes data on Sharia Bank Return on Assets, Percentage of Total Non-Performing Loans, BI 7-days repo rate, and Proportion of Loans that have been granted. The research years used as the sample include 2018 to 2020.

The method of analysis used in this research is the Vector Error Correction Model (VECM) method. This method was chosen because it is in accordance with the objectives of this study, namely to examine the relationship between variable transmission of monetary policy through credit lines, interest rates, risks, and the profitability of Islamic banks in the long and short term (Desvina & Lubis, 2019). The steps in carrying out a VECM analysis include unit root test, optimum lag determination, stability model test, cointegration test, vector error correction models, granger causality test, impulse response function, and variance decompositions.

At unit root test will be tested on how the availability of unit roots in the data used. It also aims to determine the stationary condition of the data so that there is no spurious regression in the study

(Gujarati & Porter, 2008). Then another test used is Optimum Lag Determination. Optimal lag is the length of the obstacle (lag) in giving a significant effect. This is important because to know how the VAR/VECM model captures the effect of each variable being tested on other variables (Palupy & Basuki, 2019). After optimum lag determination, stability model test will be carried out. This test used for determine the stability of the model when it gets a shock.

This test is useful for strengthening the analysis results from the Variance Decompositions and Impulse Response Function stages (Santoso & Nurzaman, 2020). After that, cointegration test are carried out. This test aims to eliminate spurious regression on non-stationary data. This is useful if the data is not stationary but there is an indication of cointegration, then the linear combination between variables will be stationary (Palupy & Basuki, 2019). For the output of the research, vector error correction model must be determined. VECM is used if the variable is stationary at the difference level and is cointegrated so that it can be known for the equation in the long run (Palupy & Basuki, 2019).

After that granger causality will be defined. This test aims to see the direction of the relationship between variables where the influence of the relationship can be explained or not with historical values or the effect of adding lag (Desvina & Lubis, 2019). Another output of the VECM models is the impulse response function. This function Describes how the estimated impact of the shock that occurs in one variable on these and other variables. Thus, it can be seen how the influence and which variables provide the greatest response (Palupy & Basuki, 2019). The last test used in this model is variance decomposition.

In VECM, this analysis is useful to strengthen the previous explanation and is used to predict component part for analysis along with the Impulse Response Function (Desvina & Lubis, 2019). The form of the regression equation used in this study is described as follows

$$Y = C + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Which,

- Y : Return on Asset Sharia Bank in Indonesia
- $\beta_1 X_1$  : Percentage of Total Non-Performing Loans
- $\beta_2 X_2$  : BI 7-days repo rate
- $\beta_3 X_3$  : Proportion of Loans
- C : Constanta
- $\varepsilon$  : Residual value

## Results and discussions

Stationarity test was carried out using the Unit Root Test using the Augmented Dickey-Fuller Test value. Thus, if the ADF t-statistic is greater than the McKinnon critical value (1%, 5% or 10%), it can be said that the data is not stationary. Stationarity test results are summarized in the following table

**Table 1. Stationery test result**

Variable	Level		1 <sup>st</sup> Difference	
	Adj t-Statistic	Critical Value (5%)	Adj t-Statistic	Critical Value (5%)
Y	-4.827201	-2.948404	-4.996980	-2.951125
X1	-1.246320	-2.948404	-7.414444	-2.951125
X2	-0.128905	-2.948404	-3.278870	-2.951125
X3	1.136161	-2.948404	-4.453716	-2.951125

These findings indicate that at the level, the only stationary data are data from Return on Assets, while other data are not stationary. Then the test is carried out at the 1st Difference level where all data are stationary. This is because all stationary data have an ADF value that is smaller than the McKinnon Critical Value so that the data can be tested at a lag optimum test. At this stage it will be tested how much lag is needed to estimate the VECM model. In this study, to perform a lag test, it is necessary to involve up to 4 lags from the Akaike Information Criterion value at the 4th lag.

**Table 2. Lag optimum length test result**

Lag	AIC Value
0	-1.986692
1	-1.947973
2	-1.354677
3	-1.508958
4	-2.549094*

Source: Author's own research.

Another test that carried out is model stability test. The results of this stability test reinforce previous findings that the data tend to be stationary and have stability. The results of the test are described in Table 3.

**Table 3. Model stability result**

Roots	Modulus
0.112085 - 0.907090i	0.913989
0.112085 + 0.907090i	0.913989
-0.902418	0.902418
-0.462564 - 0.736915i	0.870063
-0.462564 + 0.736915i	0.870063
-0.687020 - 0.476204i	0.835923
-0.687020 + 0.476204i	0.835923
-0.239010 - 0.798893i	0.833880
-0.239010 + 0.798893i	0.833880
0.433691 - 0.691771i	0.816478
0.433691 + 0.691771i	0.816478
0.737651 - 0.345832i	0.814696
0.737651 + 0.345832i	0.814696
0.628557 - 0.088481i	0.634754
0.628557 + 0.088481i	0.634754
0.266639	0.266639

From the results written in the table above, it shows that the data is quite stable with no modulus that exceeds 1. Thus, the data can be processed further at the next stage. The next stage is the cointegration test stage. This stage aims to find out whether there are indications of integration between two or more existing variables. In addition, cointegration is also a stage to find information about whether there is a relationship between existing variables. The cointegration relationship is also useful as a basis for determining whether it is more suitable to use the VECM or VAR model.

**Table 4. Johansen cointegration test result**

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value
None*	0.844171	97.30183	47.85613
At most 1*	0.610842	41.53202	29.79707
At most 2	<b>0.259433</b>	13.21893	15.49471
At most 3*	<b>0.130896</b>	4.208770	3.841466

Based on the test results, there are findings of 3 cointegration relationships in a series of variables and the system through the existence of trace statistics whose value is greater than the critical value of 0.05. The next stage is vector error, correction models. At this test stage, estimation and modeling are carried out to measure the effect of the independent variable on the dependent variable.

The variable is said to affect if it exceeds the t-table value of 1.703 which represents a probability of 0.05.

**Table 5. Short-run vector error correction model result**

Variable	Coefficient	T-statistic
D(X2(-1))	0.295955	1.50877
D(X2(-2))	-0.247371	-1.00693
D(X2(-3))	0.199217	1.28112
D(X2(-4))	-0.256568	-1.55575
D(X1(-1))	-0.093503	-0.10119
D(X1(-2))	0.421546	0.55097
D(X1(-3))	-0.553631	-0.97002
D(X1(-4))	0.074338	0.16156
D(X3(-1))	0.005090	0.13090
D(X3(-2))	-0.003145	-0.09678
D(X3(-3))	0.022178	0.46514
D(X3(-4))	-0.013910	-0.43406
D(Y)	-0.145263	-0.47344
D(X2)	-1.005912	-2.17256
D(X1)	-0.347621	-0.88144
D(X3)	-3.880553	-2.35160
<b>R-Square</b>		0.654452
<b>Adj R-Square</b>		0.202581
<b>F-Statistic</b>		1.448317

These findings indicate that there is no indication that the independent variable has a significant effect in a short period of time. The results of long-term testing are described in the following table

**Table 6. Long-run vector error correction model result**

Variable	Coefficient	T - statistic	Description
D(X2(-1))	0.410823	12.2093	Significant
D(X1(-1))	3.669323	10.7089	Significant
D(X3(-1))	0.111667	4.15367	Significant

The long-term VECM analysis, with an f table of 2.96, it shows that there is a relationship and influence caused by all independent variables on the dependent variable. From these significant indications, it can be analyzed the structure of the influence caused by the variables in Granger causality. Granger causality test was conducted to find out how the variables studied affect each other. The results of the Granger causality test are described in the following table.

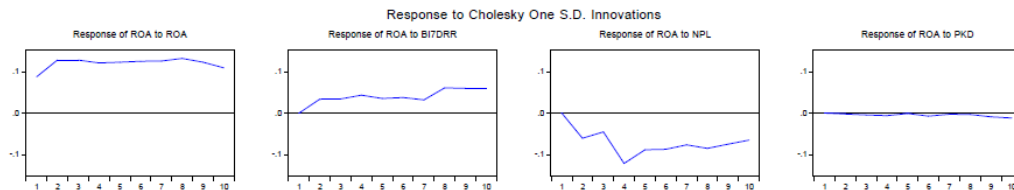
**Table 7. Granger causality test result**

Null Hypothesis	Obs	F-statistic	Prob
X1 does not Granger Cause X2	32	1.63148	0.2003
X2 does not Granger Cause X1		2.52950	0.0682
X3 does not Granger Cause X2	32	1.74467	0.1746
X2 does not Granger Cause X3		0.76944	0.5561
Y does not Granger Cause X2	32	5.52730	0.0029*
X2 does not Granger Cause Y		1.05652	0.4003
X3 does not Granger Cause X1	32	0.34658	0.8436

X1 does not Granger Cause X3		2.66512	0.0582
Y does not Granger Cause X1	32	2.03503	0.1229
X1 does not Granger Cause Y		3.87113	0.0151*
Y does not Granger Cause X3	32	1.03986	0.4082
X3 does not Granger Cause Y		0.61184	0.6583

From the Granger causality test, it is shown that there are 2 variables that affect the other 2 variables, namely the X1 variable on the Y variable and the Y variable on the X2 variable. Thus, the ROA of Islamic Banks is significantly affected by Non-Performing Loans. On the other hand, the ROA of Islamic Banks is proven to affect the BI 7 Day Repo Rate variable. This finding reinforces the fact that there is no indication of a two-way influence between variables so that the existing variables indicate that there is only a condition where only one variable affects or no variables influence each other. The next stage is Impulse Responses. This stage is carried out with the aim of testing the response given to certain variables by other variables in the system.

In this test, lines will be shown that show what happens to the variables being tested after being shocked by other variables. At this stage, it shows the dynamics of each variable in response to the shock given by other variables. Seen in the ROA variable when given a shock by the ROA variable itself, it actually increased and was stable above until at the end of the period it decreased. Meanwhile, when given a shock by the BI7DRR variable, it experienced a gradual increasing trend during the period. On the other hand, when the NPL variable shocks the ROA, it has a negative and fluctuating impact. Finally, the shock from the credit variable does not have a major influence on the ROA variable.



**Figure 2. Impulse responses test result**

The final stages of statistical analysis carried out are Variance Decomposition. At this stage, it will be known how much influence the independent variable has on the dependent variable in the future period. At this stage, predictions or forecasts will be carried out for the next 10 periods from the time of this test.

**Table 8. Variance decomposition**

Period	S.E.	Y	X1	X2	X3
1	0.087530	100.0000	0.000000	0.000000	0.000000
2	0.169786	83.25566	12.83099	3.899082	0.014269
3	0.219908	83.36589	11.87633	4.711511	0.046266
4	0.282023	69.08387	25.65278	5.188724	0.074625
5	0.321869	67.54709	27.21131	5.183011	0.058596
6	0.358094	66.69552	27.93176	5.283075	0.089643
7	0.388299	67.13982	27.61728	5.160305	0.082589
8	0.423150	66.22136	27.30241	6.399301	0.076933
9	0.450864	65.69533	26.82180	7.373452	0.109416
10	0.472271	65.17751	26.34580	8.316090	0.160597

From these results, it shows that in the first period, the ROA variable of Islamic banks is influenced by the variable itself. Then in the next period the NPL variable has a large enough influence, namely 12.83099, followed by the BI 7DRR variable with an effect of 3.899082. The variable



proportion of total credit allocation is predicted not to have a significant effect over time. This proportion also describes how the contribution of each independent variable to the shock received by the dependent variable. From some of the findings in the Vector Error Correction Model statistical test, there are several things that become the main discussion regarding the independent variables, which include the Non-Performing Loans variable, the BI 7 Days Repo Rate, and the Proportion of Total Loan Allocation Disbursed, proven to have no effect in the period of time short on Return on Assets of Islamic Banks. This shows that all the hypotheses that have been formulated are rejected. This finding contradicts some previous studies that underlie the formulation of the hypothesis.

Macroeconomic variables such as the reference interest rate and credit allocation are proven to have no short-term effect. Financial variables such as Non-Performing Loans also show similar results. On the other hand, if we study further the effect of the independent variable on the ROA of Islamic banks, it shows that there is a significant effect. This shows the role of policy lag on how the profitability of Islamic banks. Although the findings from previous studies that serve as references indicate an effect on ROA, it is not explained how the time dimension of this influence is. In addition, the Granger causality test shows how the influence between variables also does not indicate a two-way effect. This indicates that there is no reciprocal effect of conventional monetary policy on the profitability of Islamic banks. Conventional monetary policy tends to influence and be influenced in one direction and is limited according to the findings of this study.

## Conclusion

Monetary policy has a purpose according to how the central bank, which here is Bank Indonesia, adjusts the macroeconomic objectives that have been agreed with the government. Monetary policy is also implemented through the financial sector in general and the banking sector in particular. Monetary policy is taken in accordance with macroeconomic and macroprudential financial conditions. This is due to maintaining economic stability as well as macroprudential stability which is the responsibility of Bank Indonesia. This policy is implemented using the policy transmission line instrument. From these several lines, there are credit lines, interest rate lines, and risk lines. These three paths are discussed in this study. On the other hand, in Indonesia, the Islamic finance sector has begun to develop and has now become one of the financial prima donnas. This is due to the large number of Muslim residents who need access to Islamic finance. Based on these conditions, this study discusses the effect of conventional monetary policy on the Islamic finance sector. Several previous studies examine how this monetary policy affects Islamic banks.

As is known, Islamic banks do not apply interest as a reference in transactions, both lending and raising funds. Islamic banks prefer to use the yield reference in every financial transaction and make that reference in taking advantage of the transaction. The results of this study indicate that there is no indication of the effect caused by the transmission of conventional monetary policy on the performance or profitability of Islamic banks in the short term. However, this study also finds indications of the effect of conventional monetary policy on the profitability of Islamic banks in the long term.

Thus, it can be concluded that the lag of conventional monetary policy has a role in how the Islamic finance sector responds to the policies and behavior of the Islamic banking sector. Through the findings in this study, it is shown that monetary policy that is able to affect the profitability of Islamic banks needs to be adjusted in order to maintain a more consistent Islamic financial development and sustainability. Policies that prioritize how sharia monetary stability will be an important point and a small part that is missing and needs to be researched and developed. This research was compiled with reference to the data provided by Bank Indonesia so that it has limitations on consumer behavior and how the role of the transmission of other policies implemented by Bank Indonesia. Another limitation in this case is how the findings from sustainable governance need to be reviewed, both in the form of the framework to be developed and the existing framework. This limitation is expected by the author to be considered in further research.

This paper aims to examines the long-term and short-term effects of monetary policy transmission on credit lines, interest rates, and risk on the profitability of the Islamic banking sector. The authors have provided several policy recommendations from the findings obtained. I found this

article well-written, and I enjoyed reading the paper. Just a slight comment on the writing style for methodology and results as I informed in the text, it would be more presentable if the authors do not use numbering style to explain the methodology and outcome, but rather explain it in a structured paragraph.

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