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Inflation Through the Transmission Of Islamic And Conventional Monetary Policy In Indonesia

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Abstract
This study aims to identify the transmission of Islamic and conventional monetary policy through the interest rate channel, credit channel, and exchange rate channel to inflation in Indonesia using the Vector Error Correction Model (VECM). VECM estimates show that all variables in the short term have no effect on inflation. The results of the Impulse-Response Function (IRF) show that all variables in the model are able to stabilize the inflation rate within three to seven months, while stabilizing real sector growth takes four to eight months. The results of the Forecast Error Variance Decomposition (FEVD) show that Total Conventional Banking Credit (CRED) has the most influence on inflation, while Bank Indonesia Certificate (SBI) is the variable that has the most influence on the real sector. Sharia monetary instruments play a big role in controlling inflation, but the effect is not as big as conventional monetary instruments. So that the relevant authorities are expected to develop more sharia monetary instruments based on the real sector based on underlying assets in order to be able to strengthen their influence on inflation.

Keywords: *Monetary Policy Transmission; Dual Monetary System; Interest Rate Channel; Credit Channel; Exchange Rate Channel.*

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1. Introduction

Inflation is still considered a problem, especially for developing countries (Bank Indonesia, 2019). Although it can spur output growth, uncontrolled inflation can trigger various social problems, especially when the inflation rate is more than 10 percent per year. The social problems in question include declining community welfare, worsening income distribution in the community, and disruption of economic stability (Rahardja & Manurung, 2008).

Al-Maqrizi stated that inflation is a natural phenomenon that has befallen the lives of all people throughout the world since ancient times until now. According to him, inflation occurs because prices generally increase and take place continuously. At this time, the supply of goods and services is

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experiencing scarcity and consumers, because they really need it they (consumers) have to spend more money for the same amount of goods and services (Euis Amalia, 2005).

Al-Maqrizi revealed that true inflation does not occur due to natural factors alone but due to human errors. So based on the causative factors Al-Maqrizi emphasized that inflation is divided into (two), namely (1) natural factors (Natural inflation) and inflation due to human error (Human Error Inflation).Inflation is a condition where there is an increase in prices in general. Friedman said "Inflation is always and everywhere a monetary phenomenon".

Nonetheless, the global economy has recorded remarkable achievements in its efforts to reduce inflation. Worldwide inflation based on the average annual Consumer Price Index (CPI) was 17 percent in 1974, then gradually declined to 2.6 percent. The lowest inflation in 50 years occurred in 2015 at 1.7 percent. Developing countries or better known as Emerging Markets and Developing Economies (EMDEs) have also recorded remarkable achievements related to inflation. The inflation rate in the EMDEs decreased from an initial 17.3 percent in 1974 to 3.5 percent in 2017 (Ha, Kose, & Ohnsorge, 2019).

According to various studies, low inflation can be achieved thanks to well-synchronized economic conditions and as a result of the implications of economic policies (Ha, Kose, & Ohnsorge, 2019). Economic policies related to inflation in Indonesia are under the command of Bank Indonesia, namely the central bank as the monetary authority (Putra, 2015). The importance of controlling the inflation rate prompted Bank Indonesia to implement the Inflation Targeting Framework (ITF) policy in accordance with the mandate of Act Number 23 of 1999 concerning Bank Indonesia (Hakim, 2016).

Inflation targeting is part of the monetary policy strategy to achieve price stability (Mishkin, 2008). The inflation target or target is an inflation condition at a certain level that must be achieved by Bank Indonesia and other government authorities. Based on the Minister of Finance Regulation Number 124/PMK.010/2017, the 2019 inflation target is 3.5 percent with a deviation of approximately one percent. As for the comparison of inflation targeted by Bank Indonesia and inflation on the ground (Bank Indonesia, 2019) can be seen in Table 1.

***Table* 1**
Comparison of Target and Actualization of Inflation in Indonesia

Year	***Inflation Target***	***Actual Inflation (%, yoy)***
2001	*4% - 6%*	*12,55*
2002	*9% - 10%*	*10.03*
2003	*9,0 ± 1%*	*5,06*
2004	*5,5 ± 1%*	*6,40*
2005	*6,0 ± 1%*	*17,11*
2006	*8,0 ± 1%*	*6,60*
2007	*6,0 ± 1%*	*6,59*
2008	*5,0 ± 1%*	*11,06*
2009	*4,5 ± 1%*	*2,78*
2010	*5,0 ± 1%*	*6,69*
2011	*5,0 ± 1%*	*3,79*

Year	*Inflation Target*	*Actual Inflation (%, yoy)*
2012	*4,5 ± 1%*	*4,30*
2013	*4,5 ± 1%*	*8,38*
2014	*4,5 ± 1%*	*8,36*
2015	*4,0 ± 1%*	*3,35*
2016	*4,0 ± 1%*	*3,02*
2017	*4,0 ± 1%*	*3,61*
2018	*3,5 ± 1%*	*3,13*
2019	*3,5 ± 1%*	*2,72*
2020	*3,0 ± 1%*	*1,68*
2021	*3,0 ± 1%*	*Not yet actualized*

Source: Bank Indonesia (2021)

The actualization of a low and stable inflation rate is a prerequisite for the realization of public welfare (Ferdinand, 2017). To ensure the actualization of inflation according to the target, Bank Indonesia formed the Regional Inflation Control Team (TPID) as an extension of the Inflation Monitoring and Control Team (TPI) at the central level (Bank Indonesia, 2019).

TPIDs are deployed to various corners of the country to ensure adequate supplies of community needs. Guaranteeing the availability of goods needed by the community is the focus of TPID's activities, considering that inflation in Indonesia is generally influenced by the supply side, which originates from movements in two prices, namely the price of food and strategic commodity prices (administered prices). Stability in food prices can be achieved by ensuring proper production and even distribution throughout the country. Meanwhile, strategic commodity prices, such as the Basic Electricity Tariff (TDL), the price of fuel oil (BBM), and the price of Liquified Petroleum Gas (LPG), are regulated through the granting and withdrawal of subsidies taking into account the deficit of the State Revenue and Expenditure Budget (APBN) so that they remain under control.

In Islam, monetary policy must essentially be free from interest, ensuring that additional money can meet transaction needs and not cause inflation. Sources of monetary expansion in Islamic monetary policy are as follows.

1. Budget deficit,
2. Commercial bank loans,
3. The balance of payments surplus.

Inflation in Indonesia is calculated based on the Consumer Price Index (CPI), which is announced periodically by Bank Indonesia. Uncontrolled inflation can trigger problems in the economy. The main objective of implementing monetary policy is price stability. While other goals include the availability of broad employment (high employment), increasing economic growth (economic growth), stability of financial markets (stability of financial markets), stability of interest rates (interest-rate stability), and stability in the foreign exchange market (stability in foreign exchange market). Determining price stability as the main objective of implementing monetary policy is in line with and consistent with other objectives in the long term. Meanwhile, in the short term, the

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central bank needs to pay attention to output fluctuations because increased output fluctuations can cause inflation (Mishkin, 2008).

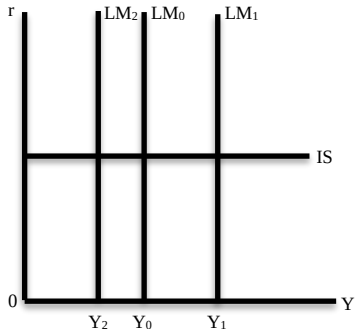
2. Literature Review

2.1.Monetary Policy

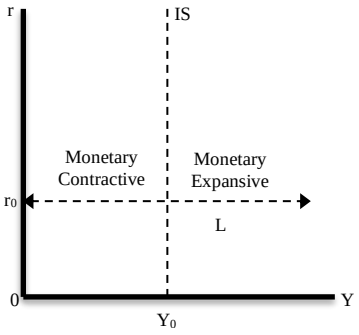
Monetary policy is a conscious effort made by the relevant authorities to control the macro economy to the desired condition through the arrangement of the money supply (Karya & Syamsuddin, 2016). The main objective of implementing monetary policy is price stability. Other objectives include the availability of High employment, increasing economic growth, stability of financial market, interest-rate stability, and stability in foreign exchange market. The determination of price stability as a primary goal of implementing monetary policy is in line and consistent with other purposes in the long term. As for the short term, central banks need to pay attention to the fluctuations in output due to increased fluoration of output can lead to inflation (Mishkin, 2008).

Monetary policy is implemented in accordance with economic conditions and the solutions needed. The application of monetary policy in relation to the cycle of economic activity (business cycle) is adjusted to developments in the economic cycle. If the economy is experiencing rapid development (boom), a contractionary monetary policy is applied which focuses on reducing the money supply. Contractionary monetary policy is believed to be able to restrain the rate of inflation which usually occurs when the economy is growing rapidly. Conversely, if the economy is sluggish or in a slowing development (depression or slump), expansionary monetary policy is applied which focuses on increasing the money supply. Expansionary monetary policy is believed to be able to boost the country's economy which is in a prolonged recession (Warjiyo & Solikin, 2003).

Evaluation of the application of monetary policy can be carried out by analyzing the IS-LM approach, among others by shifting the LM curve graphically. The several possible results of monetary policy can be described (Rahardja & Manurung, 2008) as follows



(a)



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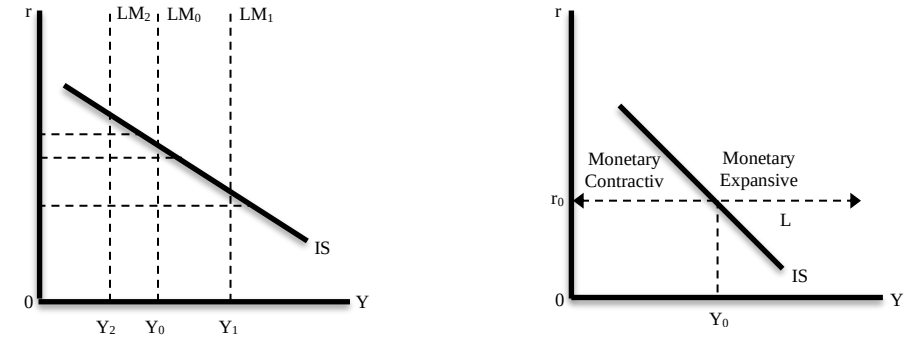

Figure 1.
Monetary Policy Effectiveness IS-LM Approach

Monetary policy is said to succeed when it has reached certain targets that are the benchmark of monetary stability. The benchmark indicators of monetary stability are among others a money supply (JUB) with a good arrangement, low inflation rate and restrained, reasonable interest, realistic and stability Indonesian rupiah, and bring about expectation.As for Islam, monetary policy in fact must be free from interest, ensuring that the increase in money can be adequate for the transaction and does not cause inflation. Source of monetary expansion in Islamic monetary policy.

2.2.Monetary Policy Transmission

Monetary policy transmission is the ways taken by the government or monetary authority so that the monetary policy that has been made can influence the economy in order to achieve the goals set previously (Warjiyo, 2004). The purpose of Bank Indonesia as the monetary authority in Indonesia is contained in Law Number 3 of 2004 concerning Amendments to Law of the Republic of Indonesia Number 23 of 1999 concerning Bank Indonesia Article 7 Paragraph (1) namely achieving and maintaining stability in the value of the rupiah.

Monetary policy transmission in its implementation requires a mechanism. The monetary policy transmission mechanism implemented in a country is usually closely related to the confidence of the country's central bank in a process that can affect economic growth and inflation. Initially, the description of the monetary policy transmission mechanism emerged from the Quantity Theory of Money which was able to explain the role of money in the economy. The theory coined by Irving Fisher is also called The Equilibrium of Exchange or The Equation of Exchange.

2.3. Inflation

Inflation is the increased price of goods and services in general and continuously (Suseno & Aisyah, 2009). Inflation occurs only when it meets three components, namely the increase in price, is general, and lasts continuously (Rahardja & Manurung, 2008) . High or low inflation is expressed as a percentage number of changes in the index number periodically. The index figures account for the large number of commodities consumed by the Community (Suseno & Aisyah, 2009). Index figures and indicators commonly used to calculate the magnitude of inflation are the Producer Price Index (PPI), Wholesale Price Index/Large Trade Price Index (IHPB), Consumer Price Index (CPI), Gross Domestic Product Deflator (GDP Deflator), and Asset Price Index (HA). But the most widely used is CPI/CPI (Utari, Cristina, & Pambudi, 2016).

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Inflation is not only an economic phenomenon but also related to sosial-politis factors. For example, in 1966 Indonesia experienced hyperinflation with an inflation rate of 635% due to the cost of government political projects. Nevertheless, economist formulates the theory of inflation by focusing on economic-objective factors. It aims to keep the theory relevant and generally applicable to all countries with different sosial-politis states. In The conventional economy, the most exciting theory of inflation Is the quantity theory, Keynes's theory, and the theory of the Structuralis's (Suseno & Aisyah, 2009).

Unlike the conventional economy, the Islamic economy did not initially recognize inflation. This is because Islam makes a stable element to be a currency. The element is the gold contained in the dinars and the silver contained in the Dirham. Inflation emerged in the midst of Islamic civilization as a result of the printing and circulation of the dinar currency and the unspoilt dirham (fulus). Whereas the sect scholars, Imam Shafi'i, have banned the government to print the unspoilt dirham because it could damage the value of the currency, it can increase the price to harm others, and cause damage . This is in line with the theory of Ibn Taymiyah about the good quality of money that is poor in circulation. Meaning that if it continues to be printed and circulated, fals can remove dinars and dirhams from circulation (Rozalinda, 2014). The new Western world recognizes this concept in 1858 in Gresham's law that reads "Bad money drives out good". Islamic inflation theory was submitted by Taqiyuddin Ahmad ibn Al-Maqrizi, disciple of Ibn Khaldun. Al-Maqrizi divides inflation based on the cause of the second occurrence of nattural inflation and human error inflation.

3. Methodology

This study uses a descriptive method with a quantitative approach and describes a causal relationship. The apparent causality relationship was later developed into a comparative causality method, which describes the comparison between the conventional monetary transmission mechanism and the sharia monetary transmission mechanism in growing real sector activity and success in inflation in Indonesia.

The number of samples observed in this study was 93, namely monthly data on monetary variables in the period January 2014 to September 2021 or as many as 93 samples. Data collection techniques are efforts to collect the data needed to answer the questions contained in the research problem formulation (Noor, 2012).

The analytical tool used in this research is the Vector Autoregression/Vector Error Correction Model (VAR/VECM). VAR analysis is used if the observed data is stationary but there is no cointegration (Mukhtarov, Mammadov, & Ahmadov, 2019). However, if it is known that the observed data is stationary and there is cointegration, then the analytical tool used is VECM (Awawin, 2014). Data processing and analysis was carried out electronically using the EViews 9 software. Research data processing was carried out through a process as shown in Figure 6.

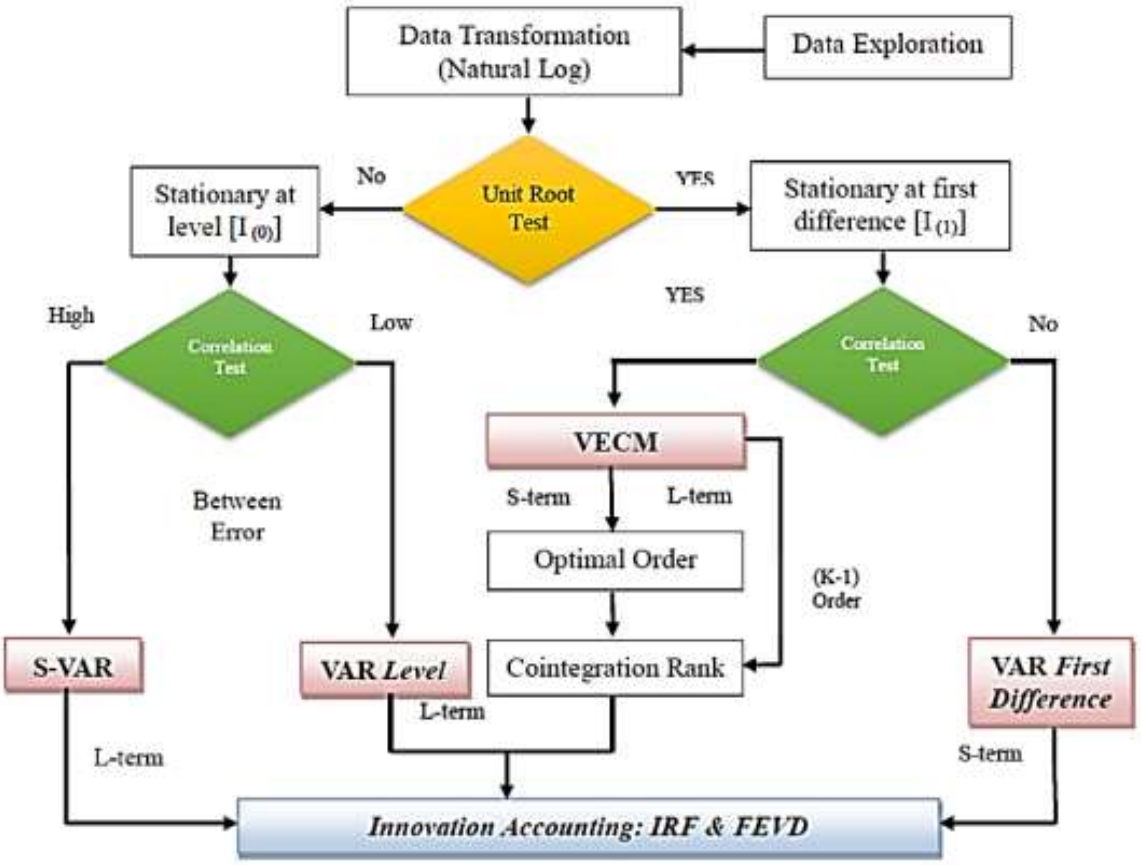

Figure 2
Data Analysis Stages

The details of the stages of data analysis using the VAR/VECM method are as follows.

1. Time Series Data Stationarity Test
   The assumption of data stationarity in time series analysis is very important. Stationary data can predict future statistical properties by observing historical data in the past (Rosadi, 2012).
2. VAR Stability Test
   The stability test of the VAR model is carried out to ensure that the constructed VAR estimate is stable. This test is carried out by examining the roots of characteristic polynomial. The VAR model is said to be stable if the modulus of all roots in the model is less than one (Gujarati, 2006).
3. Optimum Lag Test
   Testing and determining the optimum lag is aimed at eliminating autocorrelation problems in VAR systems. The next stage of data analysis requires the input of the optimum lag value so that the autocorrelation problem does not reappear (Bayuni & Ascarya, 2010).
4. Cointegration Test
   The cointegration test is carried out to determine whether or not there is an error correction model that represents a long-term balance relationship (Septindo, Novianti, & Lubis, 2016).
5. Granger Causality Test
   Granger causality analysis in the VECM model is carried out at the difference level. This test shows causality by considering corrections, data adjustments to long-term trends, and cointegration with other variables (Rosadi, 2012).
6. Vector Error Correction Model (VECM) test
   The Vector Error Correction Model (VECM) is a development of the VAR model which was formed to analyze in more depth on data that is not stationary. VECM analysis is used to analyze

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corrections in the dependent variable by considering data fluctuations around long-term trends (Rosadi, 2012).

7. Impulse-Response Function (IRF) Test
   Impulse-Response Function (IRF) analysis was carried out to find out that the sequence of process variables determined according to theory and previous research can be proven from the VECM estimation. In VECM, impulses produce responses and not impacts. Response is a combination of the impact of several variables that occur in a certain period of time (Rosadi, 2012).
8. Forecast Error Variance Decomposition (FEVD) Test
   Forecast Error Variance Decomposition (FEVD) analysis was conducted to determine the effect of random shocks from certain variables on endogenous variables. Thus, it can be seen the advantages of certain variables in influencing other variables in the long run (Juanda & Junaidi, 2012).

4. Results And Discussion

4.1. Augmented Dickey-Fuller Stationarity Test (ADF)

Research generally performs a stationarity test using the Augmented Dickey-Fuller (ADF) method. The research data is said to be stationary if the ADF Test Statistics value is less than the MacKinnon Critical Value. The research error tolerance is determined at five percent (α = 5%), so the data can also be said to be stationary if the probability or significance value (P-Value) is less than 0.05. The following is an overview of the results of the ADF stationarity test.

Table 2
Stationarity Test at Level

Variabel	ADF *Test Statistics*	MacKinnon Critical Value 5%	*P-Value*	Description
Inflation	-0.065038	-2.893230	-0.065038	Not Stationary
rSBI	-0.007106	-2.893589	0.8966	Not Stationary
rSBIS	0.011916	-2.893230	0.9927	Not Stationary
rPUAB	-0.485006	-2.893956	0.8939	Not Stationary
rPUAS	-0.103921	-2.893956	0.5346	Not Stationary
CRED	-0.001719	-2.893230	0.9410	Not Stationary
FINC	-0.035606	-2.893230	0.6634	Not Stationary
REER	-0.140197	-2.893956	0.1786	Not Stationary

Based on Table 2, it is known that at the level level there are no stationary variables of the eight variables studied. Thus, it is necessary to test the degree of integration on the first derivative (first difference). The following is an overview of the stationarity test results at the first difference level.

4.2. Stability Test

The ideal research model is a stable model. The stability of the model is important to ensure that the resulting projections are accurate and close to the actual situation. A stable VAR model is one that has a modulus value of less than one(Gujarati, 2006). The summary of the stability test results in this study is as follows.

Table 3
Model Stability Test Results

Root	Modulus
0.976594 - 0.005589i	0.976610
0.976594 + 0.005589i	0.976610
0.925751 - 0.176417i	0.942410
0.925751 + 0.176417i	0.942410
0.893207	0.893207
0.170791 - 0.825273i	0.842760
0.170791 + 0.825273i	0.842760
0.387964 + 0.745507i	0.840414
0.387964 - 0.745507i	0.840414
0.777401 - 0.312742i	0.837950
0.777401 + 0.312742i	0.837950
0.546701 - 0.534868i	0.764831
0.546701 + 0.534868i	0.764831
0.567036 + 0.467301i	0.734779
0.567036 - 0.467301i	0.734779
-0.479979 + 0.553021i	0.732265
-0.479979 - 0.553021i	0.732265
-0.276342 - 0.656163i	0.711980
-0.276342 + 0.656163i	0.711980
-0.696329 + 0.022185i	0.696682
-0.696329 - 0.022185i	0.696682
-0.308619 + 0.611855i	0.685283
-0.308619 - 0.611855i	0.685283
-0.553883 - 0.367364i	0.664637
-0.553883 + 0.367364i	0.664637
-0.121960 + 0.613871i	0.625869
-0.121960 - 0.613871i	0.625869
0.292425 + 0.535344i	0.610005
0.292425 - 0.535344i	0.610005
0.570706	0.570706
-0.224691 - 0.406090i	0.464107
-0.224691 + 0.406090i	0.464107

Based on Table 3, it can be seen that the modulus value in the model stability test ranges from 0.464107 to 0.976610, in other words, there is no modulus value that exceeds one. Thus, it can be concluded that the model is stable.

4.3.Optimum Lag Test

VAR/VECM research is useful for eliminating autocorrelation problems in models (Sugianto, Harmain, & Harahap, 2015). Based on the results of the stability test, it is known that the research model is at a lag length of two. Thus, the input lag specification in the optimum lag test is two. An overview of the optimum lag test results can be seen in Table 4.

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Table 4
Model I . Optimum Lag Test Results

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-526.0217	NA	2.25e-05	12.00049	12.22419	12.09065
1	69.24089	1070.135	1.48e-10	0.062003	2.075281*	0.873497*
2	135.0424	**106.4653***	**1.47e-10***	**0.021520***	3.824380	1.554343

Based on Table 4, it is known that the lag value with an asterisk (*) is the lowest value among the values in similar tests. Therefore, the value with an asterisk (*) indicates the optimum lag. Three out of five asterisks (*) are found in lag two. Thus, the optimum lag of the model is two.

4.4. Cointegration Test

Cointegration test was conducted to determine the long-term balance and the relationship between the variables in the study. The following is an overview of the cointegration test. Based on Table 5, it can be seen that in some variables the Trace Statistics and Max Eigen Statistics values are more than 0.05 critical values. Thus, the variables SBI, SBIS, PUAB, PUAS, CRED, FINC, and REER have a long-term relationship and stability of movement. The existence of cointegration requires research to use Vector Error Correction Model (VECM) analysis.

Table 5
Model Cointegration Test Results

Hypothesized No. of CE(s)	*Trace Statistic*	*0.05 Critical Value*	*Max Eigen Statistic*	*0.05 Critical Value*
None *	215.6278	143.6691	71.59438	48.87720
At most 1 *	144.0334	111.7805	48.46476	42.77219
At most 2	95.56864	83.93712	38.27803	36.63019
At most 3	57.29061	60.06141	25.08957	30.43961
At most 4	32.20104	40.17493	16.11728	24.15921
At most 5	16.08376	24.27596	8.685801	17.79730
At most 6	7.397957	12.32090	6.248310	11.22480
At most 7	1.149647	4.129906	1.149647	4.129906

4.5.Engel Granger Causality Test

The causality test with the Engel-Granger Causality Test was conducted to determine the effect of monetary policy variables on inflation and the real sector. Here is an overview of causality testing.

Table 6
Model 1 . Causality Test Results

Null Hypothesis	*F-Statistic*	Probability	Causality
Inflation influenced by SBI	4.15926	0.0444	Significant
SBI influences by inflation	1.18189	0.2799	Not significantt

Null Hypothesis	*F-Statistic*	Probability	Causality
Inflation influenced by SBIS	3.50235	0.0472	Significant
SBIS influenced by inflation	1.36580	0.2457	Not significantt
Inflation influenced by PUAB	10.1145	0.0020	Significant
PUAB influenced by inflation	1.29113	0.2589	Not significantt
Inflation influenced by PUAS	14.7664	0.0002	Significant
PUAS influenced by inflation	1.04468	0.3095	Not significant
Inflation influenced by CRED	0.78750	0.3772	Not significantt
CRED influenced by inflation	2.80915	0.0972	Not significantt
Inflation influenced by FINC	1.50950	0.2225	Not significantt
FINC influenced by inflation	92	5.38706	Significant
Inflation influenced by REER	0.33314	0.5653	Not significantt
REER influenced by inflation	0.22968	0.6329	Not significantt

Based on Table 6, it can be seen that the inflation variable is significantly influenced by four variables in the model, namely SBI, SBIS, PUAB, and PUAS. The relationship is unidirectional so that the SBI variable is not influenced by inflation, and so on.

4.6.Vector Error Correction Model (VECM)

The value of t-statistics is needed to determine the effect of the independent variable on the dependent variable in the model. The value of t-statistics is known from the t distribution table by first calculating the value of the degree of freedom (df), which is formulated (Gujarati, 2006) as follows.

$$df = n - k$$

where:

- df = *degree of freedom*
- n = number of observation
- k = sum of all variables in the model

The study included 92 observations with seven independent variables, and one dependent variable. So that the value of degrees of freedom is 84. While the significance level is determined at five percent ($\alpha = 5\%$) in the two-tailed test (two tailed). Then the value of t-statistic is ±1.988609667. The variable is said to have a significant effect if the t-statistic is more than 1.988609667 and/or less

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than -1.988609667. The following is an overview of the VECM test results using the EViews 9 application.

Tabel 7
VECM Model Test Results

Long- Term			
Variable	**Coefficient**	**T-Statistic**	**Conclussion**
Infltion	1.000000	-	-
SBI	-0.845918	4.31039	Significant
SBIS	3.805349	10,7203	Significant
PUAB	-3.214104	-7.63151	Significant
PUAS	0.017943	0.05594	Not significantt
CRED	-3.677608	-3.52564	Not significantt
FINC	5.422176	5.24216	Significant
REER	-0.164456	-2.52835	Signifikan
C	-110.6891	-	-
Short - Term			
Variable	**Koefisien**	**T-Statistic**	**Conclussion**
Inflation	-0.047359	-0.28880	Not significantt
SBI	-6,721849	-1,32673	Not significantt
SBIS	1.586627	2.20228	Not significantt
PUAB	-0.152444	-0.56800	Not significantt
PUAS	-0.018583	-0.17915	Not significantt
CRED	-4.789008	-1.45967	Not significantt
FINC	-1.782444	-1.20106	Not significantt
REER	-0.026305	-0.55645	Not significantt
C	0.089836	0.73770	Not significantt

Based on Table 7, it is known that the long-term inflation model is significantly influenced by almost all the variables included in the model, namely SBI, SBIS, PUAB, CRED, REER and FINC. PUAS is the only variable in the model that does not significantly affect inflation. Judging from the direction of the relationship, the PUAB, CRED and REER variables have a negative effect on inflation. Meanwhile, SBI, SBIS, PUAS and FINC have a positive effect on inflation. Meanwhile, in the short term, inflation is only influenced by SBIS while other variables do not significantly affect it.

The value of R-squared (R2) in the model is known to be 0.526362, meaning that the inflation for the 2014-2021 period can be explained by the variables of SBI, SBIS, PUAB, PUAS, CRED, FINC, and REER of 53 percent. While the remaining 47 percent is explained in other variables outside the model.

The adjusted R-squared value (0.363484. Through the VECM test, the equation of the Dual Monetary Policy Transmission model on Inflation in the long term is obtained, which is as follows:

. $D_{Inflation} = -110.6891 - 0.845918_{SBI} + 3.805349_{SBIS} - 3.214104_{PUAB} + 0.017943_{PUAS} - 3.677608_{CRED} + 5.422176_{FINC} - 0.164456_{REER}$

The equation of the long-term model above has the following meanings.

1. An increase in the SBI interest rate by one percent will reduce the inflation rate by 0.845918 points.
2. An increase in the SBIS profit sharing rate by one percent will increase Inflation by 3.805349 points.
3. An increase in the interbank money market interest rate by one percent will reduce the inflation rate by 3,214104 points.
4. An increase in the PUAS profit sharing rate by one percent will increase Inflation by 0.017943 points.
5. An increase in CRED of one billion rupiah will reduce inflation by 3.677608 points.
6. An increase in FINC of one billion rupiah will increase Inflation by 5,422176 points.
7. A one point increase in REER will reduce Inflation by 0.164456 points

4.7. Results Impulse- Response Function (IRF)

Impulse-Response Function (IRF) analysis is an analysis carried out to find out that the sequence of variable processes determined according to theory and previous research can be proven from VECM estimates (Rosadi, 2012). The following are the results of IRF testing on all variables of the Inflation model (Model I) using the EViews 9 application.

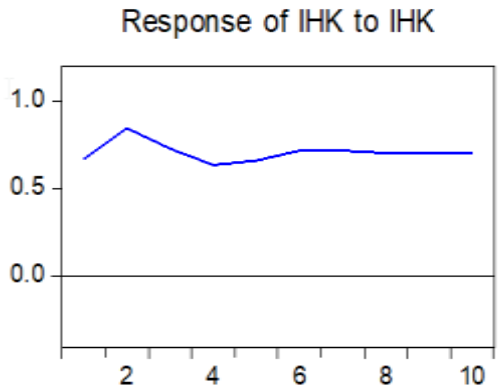

Figure 3
IRF Inflation Results with Previous Period Inflation

Based on Figure 3, it can be seen that the Inflation shock of one standard deviation in the 1st period reached a response of around 0.56 percent of the inflation rate, then increased in the 2nd period to 0.69 percent and decreased again in the 3rd period. and 4th to 0.46 percent and 0.38 percent, respectively. Inflation then continued to decline from the 5th to the 7th period to 0.29 percent. After that, inflation fluctuated slightly but tended to stabilize until it finally reached the level of 0.38 percent. Thus, it can be concluded that inflation can recover from the inflation shock itself after passing through six periods or six months.

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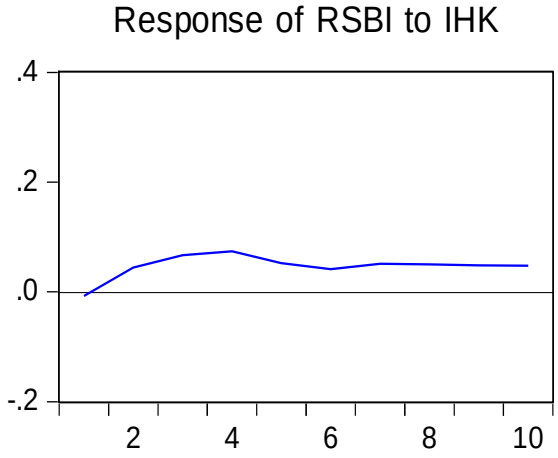

Figure 4
IRF SBI Results on Inflation

The response of SBI to inflation can be seen in Figure 4. The shock of the SBI interest rate of one standard deviation in the first period has not been responded to by inflation. In the second period, inflation showed a positive response, increasing to 0.04 percent. In the 3rd period, the trend of inflation tends to decrease and then stabilize in the 7th period until the end of the period at 0.04 percent. Thus, it can be concluded that inflation can recover from the shock of the SBI interest rate after passing through seven periods or seven months.

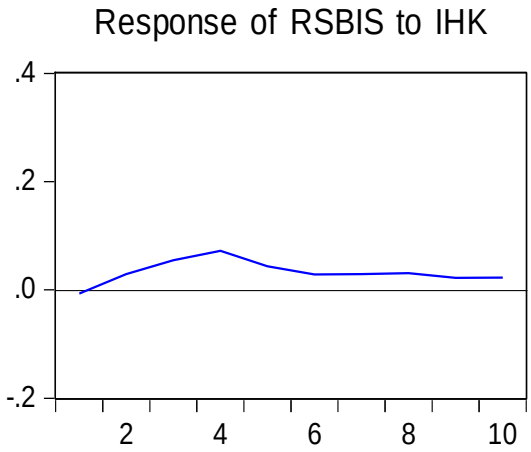

Figure 5
SBIS IRF Results on Inflation

SBIS response to inflation can be seen in Figure 5. The shock of the SBIS profit sharing rate of one standard deviation in the first period has not been responded to by inflation. In the 2nd and 3rd periods, inflation responded positively, increasing to 0.02 percent and 0.05 percent, respectively. Inflation began to stabilize in the 6th period with an increasing trend until the end of the period by 0.02 percent. Thus, it can be concluded that inflation can recover from the shock of the SBIS profit sharing rate after passing through five periods or five months.

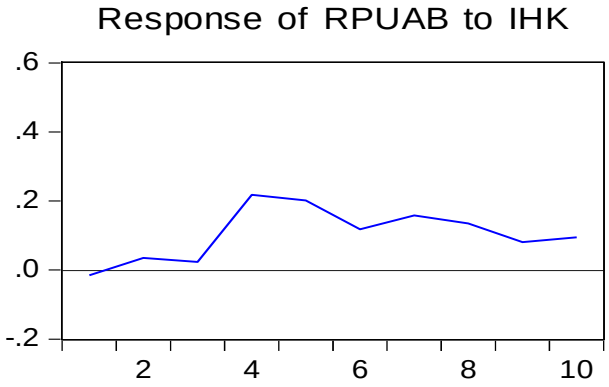

Figure 6
PUAB IRF Results on Inflation

PUAB's response to inflation can be seen in Figure 6. Inflation has not responded to the shock of the PUAB interest rate of one standard deviation in the first period. In the second period, inflation responded positively, increasing to 0.03 percent. Past inflation still responded positively so that it declined in the 3rd period to 0.02 percent. Starting in the 4th period Inflation began to increase and stabilized until the 5th period at 0.20 percent. In the next period, inflation fluctuated and was stable at the end of the period. Thus, it can be concluded that inflation can recover from the shock of the interbank rate after passing through nine periods or nine months.

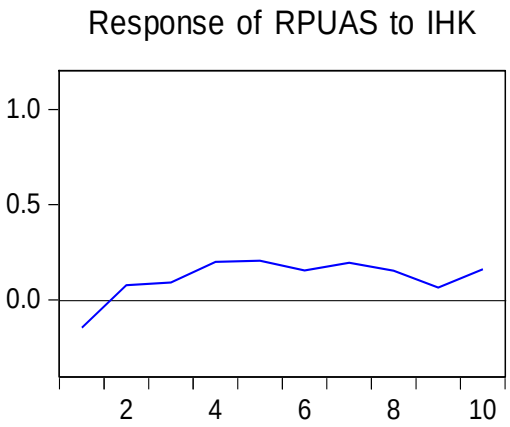

Figure 7
IRF PUAS Results on Inflation

The PUAS response to inflation can be seen in Figure 7. The shock of the PUAS profit sharing rate of one standard deviation in the first period has not been responded to by inflation. In the second period, inflation continued to respond positively until the fifth period to 0.20 percent. Starting from the 6th period, inflation began to stabilize until the end of the period at 0.11 percent. Thus, it can be concluded that inflation can recover from the shock of the PUAS profit sharing rate after passing through six periods or six months.

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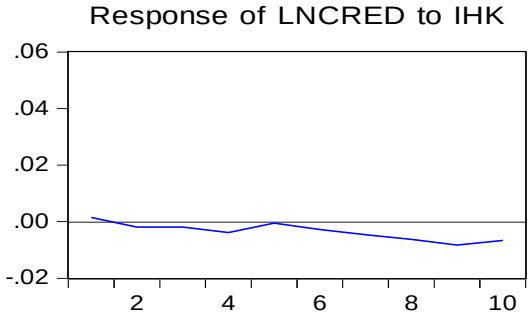

Figure 8
IRF CRED Results on Inflation

CRED's response to inflation can be seen in Figure 8. The CRED shock of one standard deviation in the first period has not yet been responded to by inflation. In the 2nd and 3rd periods Inflation responded negatively so it decreased to -0.001. Starting from the 4th period, an increasing trend emerged so that in the 6th period inflation rose to -0.027 percent. Inflation then tends to be stable from the 7th period to the end of the period at -0.06 percent. Thus, it can be concluded that Inflation can recover from the CRED shock after passing through seven periods or seven months.

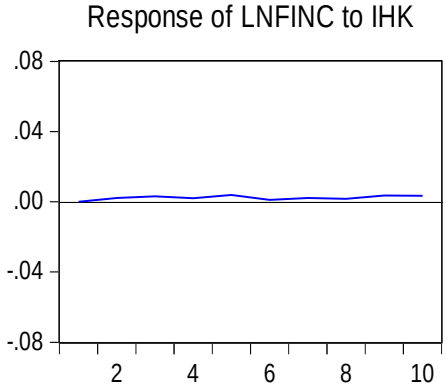

Figure 9
IRF FINC Results on Inflation

FINC's response to inflation can be seen in Figure 13. Inflation has not responded to the FINC shock of one standard deviation in the first period. Starting from the second period, an increasing trend of inflation began to be seen, which tended to be stable until the end of the period by 0.10 percent. Thus, it can be concluded that Inflation can recover from the FINC shock after passing through two periods or two months.

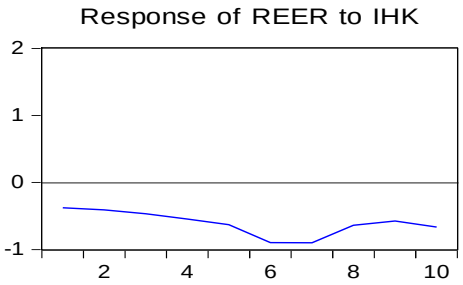

Figure 10
IRF REER Results on Inflation

The REER response to inflation can be seen in Figure 14. The REER shock of one standard deviation in the first period has not been responded to by inflation. Starting from the 2nd period, a downward trend in inflation began to be seen, which tended to be stable until the 6th period of -0.89 percent. Then it increased again in the 8th period and tended to be stable until the end of the period. Thus, it can be concluded that Inflation can recover from the REER shock after passing through eight periods or eight months.

4.8.Forecast Error Variance Decomposition (FEVD) Results

Forecast Error Variance Decomposition (FEVD) analysis is an analysis conducted to determine the magnitude of the effect of random shocks (shock) of certain variables on endogenous variables. Thus, it can be seen the advantages of certain variables in influencing other variables in the long term (Juanda & Junaidi, 2012). The following are the FEVD results for all variables in the Inflation model using the EViews 9 application (Juanda & Junaidi, 2012). The following are the FEVD results for all variables in the Inflation model using the EViews 9 application.

Table 8
FEVD Model Results

Period (months)	IHK	RSBI	RSBIS	RPUAB	RPUAS	LNCRED	LNFINC	REER
1	7.261733	6.999056	6.999784	5.960807	5.986931	15.035146	12.113108	88.541142
2	7.278691	6.939231	6.861536	5.891048	5.839176	15.050367	12.109608	87.266487
3	7.254585	6.907555	6.827852	5.821743	5.950722	15.060149	12.126745	86.952971
4	7.190065	6.891122	6.823781	5.849752	5.927413	15.067820	12.138312	87.474256
5	7.124691	6.853989	6.779561	5.802041	5.804385	15.080646	12.148979	87.804643
6	7.053905	6.808112	6.721696	5.747494	5.791827	15.093586	12.155009	87.623802
7	6.978139	6.770517	6.670469	5.732316	5.753222	15.105903	12.161959	87.482015
8	6.909743	6.733657	6.628923	5.708304	5.687752	15.117460	12.171267	87.570501
9	6.848388	6.691865	6.582245	5.663250	5.614650	15.129320	12.180701	87.667706
10	6.784508	6.650700	6.532332	5.625462	5.579450	15.141443	12.189562	87.666929
15	6.650217	6.574073	6.438467	5.564448	5.479947	15.165262	12.206537	87.685740
20	6.318437	6.375160	6.200944	5.395041	5.220349	15.225156	12.250471	87.797369
25	5.986495	6.176764	5.963337	5.226385	4.962814	15.285002	12.294277	87.899911
30	5.654608	5.978484	5.725836	5.058067	4.705130	15.344839	12.338084	88.003408
35	5.322742	5.780204	5.488337	4.889737	4.447340	15.404677	12.381894	88.107186
40	4.990877	5.581922	5.250837	4.721399	4.189548	15.464513	12.425703	88.210966
45	4.659013	5.383640	5.013337	4.553061	3.931760	15.524351	12.469513	88.314738
50	4.327148	5.185358	4.775837	4.384722	3.673972	15.584188	12.513323	88.418510
55	3.995286	4.987075	4.538338	4.216384	3.416183	15.644025	12.557132	88.522281
60	3.663418	4.788793	4.300839	4.048046	3.158395	15.703862	12.600942	88.626055
65	3.331553	4.590511	4.063339	3.879708	2.900604	15.763700	12.644751	88.729827
70	2.999688	4.392229	3.825838	3.711370	2.642818	15.823537	12.688561	88.833599
75	2.667823	4.193946	3.588332	3.543032	2.385029	15.883374	12.732371	88.937373
80	2.335959	3.995664	3.350839	3.374694	2.127241	15.943211	12.776180	89.041144
85	2.004094	3.797382	3.113339	3.206351	1.869452	16.003048	12.819990	89.144916
90	1.672229	3.599100	2.875839	3.038017	1.611664	16.062886	12.863799	89.248688
94	1.406737	3.440474	2.685839	2.903347	1.405433	16.110755	12.898847	89.331706

Based on Table 8, it can be seen that in the first period the variability and fluctuations in the value of the inflation variable can be explained entirely by the value of the variable itself. In the second period, the influence of other variables began to appear, thereby reducing the effect of inflation itself. In a period of 60 months or five years, inflation is most influenced by its own variables. Meanwhile, the order of the most influential variables, respectively, is CRED (6.76%), SBIS (6.71%), PUAS (1.93%), FINA (1.42%), SBI (1.11%) , PUAB (0.15%), and REER (0.44%).

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Based on the results of the study, it can be concluded that the variables in the model related to the Monetary Policy Transmission Mechanism (MTKM) do not affect Inflation and the Real Sector in the short term. As for the long term, the influence of the research variables are as follows.

The interest rate for Bank Indonesia Certificates (SBI) has a negative effect on inflation. Meanwhile, the profit sharing of Bank Indonesia Syariah Certificates (SBIS) has a positive effect. Thus, in the long term, an increase in the SBI interest rate could lead to a decrease in the inflation rate, while an increase in the SBIS profit sharing could encourage an increase in the inflation rate.

The interbank money market (PUAB) interest rate has a negative effect on inflation. The profit sharing of the Islamic Interbank Money Market (PUAS) has a positive effect. Thus, in the long term, an increase in the PUAB interest rate in the long term can lead to a decrease in the inflation rate, while an increase in the PUAS profit sharing can encourage an increase in the inflation rate.

Total Conventional Banking Credit (CRED) has a positive effect on Inflation. The Total Islamic Banking Financing (FINC) has no effect. Thus, in the long term, an increase in CRED can encourage an increase in the inflation rate, while an increase in FINC in the short and long term does not affect the inflation rate. The Real Effective Exchange Rate (REER) has a negative effect on inflation. Thus, an increase in REER in the long run can lead to a decrease in the rate of inflation.

5. Conclusion

The application of dual monetary policy in a dual monetary system which includes conventional monetary policy and sharia monetary policy in the long term has contributed to changes in the inflation rate in Indonesia. In the short term, all variables in the model, namely SBI, SBIS, PUAB, PUAS, CRED, FINC, and REER have no effect on inflation. Variables that can drive inflation down are SBI, PUAB, and REER. Based on the results of this study, the government as a monetary authority can apply a combination of appropriate monetary policy instruments according to the monetary targets to be achieved. The SBI, PUAB and REER instruments can be increased to reduce inflation, while the SBI, PUAB, FINC and REER instruments can be increased to encourage the growth of the Real Sector.

Author contribution statement

Authors 1 and 2 develop theoretical formalism, perform analytical calculations and perform numerical simulations. Neither 1.2 authors contributed to the final version of the manuscript.

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References

Awawin, M. (2014). *Analisis Pengaruh Instrumen Moneter Syariah dan Konvensional terhadap Penyaluran Dana ke Sektor Properti di Indonesia.* Bogor: Departemen Ilmu Ekonomi FEM IPB.

Amalia, E. (2005). Sejarah Pemikiran Ekonomi Islam: dari masa klasik hingga kontemporer. Pustaka Asatruss.

Bank Indonesia. (2019, April 10). *Inflasi: Penetapan Target Inflasi*. Diambil kembali dari Bank Indonesia: https://www.bi.go.id/id/moneter/inflasi/bi-dan-inflasi/Contents/Penetapan.aspx

Bank Indonesia. (2019, April 10). *Moneter: Koordinasi Pengendalian Inflasi*. Diambil kembali dari Bank Indonesia: https://www.bi.go.id/id/moneter/koordinasi-pengendalian-inflasi/Contents/Default.aspxBank

Bayuni, E. M., & Ascarya. (2010). Analisis Pengaruh Instrumen Moneter terhadap Stabilitas Besaran Moneter dalam Sistem Moneter Ganda di Indonesia. *Islamic Finance & Business Review TAZKIA, Vol. 5, No. 1*, 76-100.

Ferdinand. (2017, November 23). *Menjaga Inflasi, Membangun Optimisme Ekonomi*. Diambil kembali dari Media Indonesia: https://mediaindonesia.com

Gujarati, D. N. (2006). *Dasar-Dasar Ekonometrika.* Jakarta: Erlangga.

Ha, J., Kose, M. A., & Ohnsorge, F. (2019). *Inflation in Emerging and Developing Economies: Evolution, Drivers, and Policies.* Washington DC: World Bank Group.

Ha, J., Kose, M., & Ohnsorge, F. (2019). Understanding Inflation in Emerging and Developing Economies. *Policy Research Working Paper 8761*, 1-31.

Hakim, R. (2016). Meninjau Kembali Seberapa Penting Target Inflasi Bank Indonesia dalam Mengontrol Laju Inflasi. *Jurnal Ekonomi dan Keuangan, Vol. 20, No. 1*, 53-71.

Juanda, B., & Junaidi. (2012). *Ekonometrika Deret Waktu: Teori dan Aplikasi.* Bogor: IPB Press.

Karya, D., & Syamsuddin, S. (2016). *Ekonomi Makro: Pengantar untuk Manajemen.* Jakarta: Rajawali Pers.

Mishkin, F. S. (2008). *Ekonomi Uang, Perbankan, dan Pasar Keuangan: Buku 2 Edisi 8.* Jakarta: Salemba Empat.

Mukhtarov, S., Mammadov, J., & Ahmadov, F. (2019). The Impact of Oil Prices on Inflation: The Case of Azerbaijan. *International Journal of Energy Economics and Policy*, 97-102.

Noor, J. (2012). *Metodologi Penelitian: Skripsi, Tesis, Disertasi dan Karya Ilmiah.* Jakarta: Kencana.

Putra, M. M. (2015). Peran dan Kebijakan Moneter terhadap Perekonomian Sumatera Utara. *Jurnal Wira Ekonomi Mikroskil, Vol. 5, No.1*, 41-49.

Rahardja, P., & Manurung, M. (2008). *Pengantar Ilmu Ekonomi (Mikroekonomi & Makroekonomi), Edisi Ketiga.* Jakarta: Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.

Rosadi, D. (2012). *Ekonometrika & Analisis Runtun Waktu Terapan dengan EViews.* Yogyakarta: Penerbit ANDI.

ISSN: 2540-8402 (online), 2540-8399 (print)
DOI: https://doi.org/10.29313/amwaluna.v6i2.11214

Rozalinda. (2014). *Ekonomi Islam: Teori dan Aplikasinya pada Aktivitas Ekonomi.* Jakarta: Rajawali Pers.

Rusdiyana, A., & Devi, A. (2013). *Analytical Network Process Pendekatan Teoritis dan Praktis.* Bogor: Smart Publishing.

Schein, V. E., Marsella, A. J., Wiesenfeld, E., Sanchez, E., Berry, M. O., & Reichman, W. (2011). Women in Self – Organized Group at Work : do They Promote Agency and Reduce Poverty? *Journal of Managerial Psychology*.

Sen, A. (1999). *Poverty and Famines An Essay on Entitlement and Deprivation.* New York: Oxford University Press.

Septindo, D., Novianti, T., & Lubis, D. (2016). Analisis Pengaruh Instrumen Moneter Syariah dan Konvensional terhadap Penyaluran Dana ke Sektor Pertanian di Indonesia. *Jurnal Al-Muzara'ah, Vol 4, No. 1*, 1-18.

Siringi, E. (2011). Women's small and medium enterprises for poverty alleviation in Sub-Saharan Africa Lessons from Kenya. *Management Research Review, Vol. 34 No. 2*, 186-206. DOI 10.1108/01409171111102803.

Sudarsono, H. (2021). Empowering The Head of Poor Women's Family in Efforts to Improve Welfare (Case Study for Empowering The Head of Poor Women's Family in Sidoarjo District. *Enrichment : Journal of Management*, 315-319.

Sugianto, Harmain, H., & Harahap, N. (2015). Mekanisme Transmisi Kebijakan Moneter di Indonesia. *Human Falah, Vol. 2, No. 1*, 50-74.

Sukidjo, T. S., & Mustofa. (2014). Pemberdayaan Kelompok Perempuan dalam Pengentasan Kemiskinan Berbasis Pengembangan Usaha Mikro. *Jurnal Economica, Volume 10, No. 1*.

Sumual, D. (2018, Agustus 3). *Sektor Riil Banyak Hambatan*. Diambil kembali dari Kontan.co.id: https://kontan.co.id/news/sektor-riil-banyak-hambatan

Supranto, J. (2008). *Statistik: Teori dan Aplikasi, Jilid I, Edisi Ketujuh.* Jakarta: Erlangga.

Suprayitno, B. (2009). Komunikasi sebagai Salah Satu Kunci Keberhasilan Inflation Targeting. *Jurnal Ekonomi & Pendidikan, Vol. 6, No. 1*, 53-72.

Suseno, & Aisyah, S. (2009). *Inflasi, Seri Kebanksentralan No. 22.* Jakarta: PPSK Bank Indonesia.

Tran, N. (2018). The long-run analysis of monetary policy transmission channels on inflation: a VECM approach. *JOURNAL OF THE ASIA PACIFIC ECONOMY, VOL. 23, NO. 1*, 17-30.

Utari, G. D., Cristina, R., & Pambudi, S. (2016). *Inflasi di Indonesia: Karakteristik dan Pengendaliannya.* Jakarta: Bank Indonesia Institute.

Warjiyo, P. (2004). *Mekanisme Transmisi Kebijakan Moneter di Indonesia.* Jakarta: PPSK Bank Indonesia.

Warjiyo, P., & Solikin. (2003). *Kebijakan Moneter di Indonesia.* Jakarta: PPSK Bank Indonesia.

White, S. (2010). Domains of Contestation: Women's Empowerment and Islam in Bangladesh . *Women's Studies International Forum, 33(4)*, http://doi.org/10.1016/j.wsif.2010.02.007.

Yuniati, E., Pratikto, H., & Sopiah. (2021). Motivation of Women's Entrepreneurship As Agent of Change of Society : In Literature Review . *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 1190-1202.

Yunus, M. (2008). *Menciptakan Dunia Tanpa Kemiskinan, Bagaimana Bisnis Sosial Mengubah Kehidupan Kita. Terjemahan Rani R. Moedirta. Cetakan Pertama.* Jakarta: PT. Gramedia Pustaka Utama.

Yunus, M., & Jollis, A. (2007). *Bank Untuk Kaum Miskin. Terjemahan Irfan Nasution. Cetakan Pertama.* Jakarta: PT. Buku Kita.

Zulkhibri, M. M. (2019). *Islamic Monetary Economics and Institutions.* Springer.

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Appendix 1. Research Data

Period	IHK	rSBI	rSBIS	rPUAB	rPUAS	FINC	CRED	REER
	(%)	(%)	(%)	(%)	(%)	(Billion Rupiahs)		
Nov-21	1,75	3,50	2,75	2,83	1,34	-	-	90,2
Okt-21	1,66	3,50	2,75	2,83	1,34	-	-	90,4
Sep-21	1,60	3,50	2,75	2,84	1,72	401.977	9.755.519	89,7
Agu-21	1,59	3,50	2,75	2,86	1,24	396.810	9.537.635	89,4
Jul-21	1,52	3,50	2,75	2,93	1,50	394.097	9.427.147	88,6
Jun-21	1,33	3,50	2,75	2,85	2,30	394.096	9.439.644	88,5
Mei-21	1,68	3,50	2,75	2,94	0,93	390.252	9.274.089	88,9
Apr-21	1,42	3,50	3,12	2,80	2,54	388.698	9.203.792	88,1
Mar-21	1,37	3,50	3,34	2,85	2,00	385.681	9.279.980	88,8
Feb-21	1,38	3,50	3,12	2,95	1,08	382.113	9.102.217	89,8
Jan-21	1,55	3,75	3,65	3,07	3,05	382.761	8.971.759	89,8
Des-20	1,68	3,75	3,67	3,26	2,68	383.944	9.098.135	89,7
Nov-20	1,59	3,75	3,92	2,16	2,63	381.430	9.018.532	90,4
Okt-20	1,44	4,00	3,95	3,39	2,21	377.334	9.004.638	87,9
Sep-20	1,42	4,00	3,95	3,30	0,48	374.051	9.019.441	87,7
Agu-20	1,32	4,00	3,45	3,40	2,63	368.460	8.832.313	89,0
Jul-20	1,54	4,00	3,89	3,53	1,84	368.888	8.654.597	91,4
Jun-20	1,96	4,25	4,34	4,17	2,45	367.022	8.601.600	94,6
Mei-20	2,19	4,50	4,65	4,38	3,07	363.445	8.504.636	91,7
Apr-20	2,67	4,50	4,56	4,42	4,39	360.026	8.525.493	86,2
Mar-20	2,96	4,50	4,57	4,38	1,78	361.852	8.665.823	88,0
Feb-20	2,98	4,75	5,04	4,61	1,54	355.298	8.407.521	95,8

Period	IHK	rSBI	rSBIS	rPUAB	rPUAS	FINC	CRED	REER
	(%)	(%)	(%)	(%)	(%)	(Billion Rupiahs)		
Jan -20	2,68	5,00	5,15	4,82	2,22	353.375	8.269.379	94,9
Des-19	2,72	5,00	5,19	4,95	3,56	355.182	8.280.812	93,2
Nov-19	3,00	5,00	5,21	4,89	3,06	384.876	8.193.227	92,9
Okt-19	3,13	5,00	5,50	4,86	4,82	345.284	8.123.959	92,9
Sep-19	3,39	5,25	5,37	5,19	1,46	343.864	8.103.006	92,9
Agu-19	3,49	5,50	5,68	5,34	1,75	213.118	8.019.769	93,6
Jul-19	3,32	5,75	5,90	5,65	5,54	212.302	8.023.640	93,0
Jun-19	3,28	6,00	6,14	5,87	5,92	212.560	8.012.270	93,2
Mei-19	3,32	6,00	6,38	6,12	5,95	210.514	7.840.316	90,8
Apr-19	2,83	6,00	6,63	5,95	5,96	207.233	7.877.510	91,1
Mar-19	2,48	6,00	6,77	6,06	6,04	205.920	7.900.413	90,3
Feb-19	2,57	6,00	6,77	5,79	5,83	201.548	7.729.341	91,2
Jan-19	2,82	6,97	6,89	6,12	5,94	317.439	5.186.616	91,15
Des-18	3,13	6,94	6,88	6,09	5,89	320.193	5.294.882	89,58
Nov-18	3,23	6,93	6,87	6,11	5,92	312.551	5.160.155	88,39
Okt-18	3,16	6,70	6,87	5,96	5,91	312.879	5.168.778	84,80
Sep-18	2,88	6,66	6,61	5,88	5,70	310.519	5.120.099	85,88
Agu-18	3,20	6,45	6,35	5,56	5,40	303.512	5.032.495	87,94
Jul-18	3,18	6,17	6,04	5,40	4,98	297.423	4.975.952	88,54
Jun-18	3,12	5,84	5,84	5,01	4,91	295.021	4.974.113	89,25
Mei-18	3,23	5,32	5,32	4,68	4,43	291.756	4.879.299	87,82
Apr-18	3,41	5,18	5,18	4,34	4,01	287.755	4.778.165	87,66
Mar-18	3,40	5,19	5,19	4,38	4,45	286.621	4.743.237	87,72
Feb-18	3,18	5,18	5,18	4,09	3,85	282.096	4.662.341	88,52
Jan-18	3,25	5,19	5,19	4,06	4,27	280.631	4.632.308	91,26
Des-17	3,61	5,20	5,20	4,41	4,31	285.695	4.737.972	91,40
Nov-17	3,30	5,21	5,21	4,10	3,98	276.507	4.605.079	91,67
Okt-17	3,58	5,22	5,22	4,17	3,87	274.205	4.560.166	91,79
Sep-17	3,72	5,20	5,20	4,20	4,00	271.576	4.543.588	92,52
Agu-17	3,82	5,50	5,50	4,25	3,33	267.201	4.488.642	93,03

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Period	IHK	rSBI	rSBIS	rPUAB	rPUAS	FINC	CRED	REER
	(%)	(%)	(%)	(%)	(%)	(Billion Rupiahs)		
Jul-17	3,88	5,93	5,93	4,51	4,33	264.201	4.469.282	94,52
Jun-17	4,37	5,97	5,97	5,44	5,37	264.335	4.491.186	95,05
Mei-17	4,33	5,97	5,97	4,73	4,69	256.832	4.425.154	95,03
Apr-17	4,17	5,97	5,97	4,74	3,48	252.290	4.386.031	95,15
Mar-17	3,61	5,94	5,94	4,80	4,83	250.536	4.369.967	95,57
Feb-17	3,83	5,90	5,90	4,55	1,47	245.815	4.308.081	95,79
Jan-17	3,49	5,90	5,90	4,64	1,08	244.466	4.312.991	96,55
Des-16	3,02	6,00	5,90	5,92	6,08	248.007	4.377.195	96,01
Nov-16	3,58	6,00	5,90	4,52	4,68	240.381	4.284.941	94,29
Okt-16	3,31	6,00	5,90	4,43	4,83	237.024	4.215.516	94,25
Sep-16	3,07	6,25	6,15	5,46	4,66	235.005	4.212.377	92,63
Agu-16	2,79	6,50	6,40	5,14	4,67	220.452	4.146.287	91,94
Jul-16	3,21	6,50	6,40	5,00	4,82	220.143	4.130.440	93,28
Jun-16	3,45	6,50	6,40	5,85	5,53	222.175	4.168.308	91,00
Mei-16	3,33	6,75	6,60	5,16	4,93	217.858	4.070.454	90,13
Apr-16	3,60	6,75	6,60	5,18	4,67	213.482	4.006.707	90,98
Mar-16	4,45	6,75	6,60	5,22	4,82	213.482	4.000.448	92,87
Feb-16	4,42	6,65	6,55	5,31	5,20	211.571	3.967.908	91,73
Jan-16	4,14	6,70	6,65	5,66	5,13	211.221	3.983.035	90,89
Des-15	3,35	7,15	7,10	7,96	6,73	212.996	4.057.904	89,49
Nov-15	4,89	7,15	7,10	6,28	6,05	209.124	3.950.612	89,67
Okt-15	6,25	7,15	7,10	6,25	5,84	207.768	3.923.437	87,62
Sep-15	6,83	7,15	7,10	7,23	6,95	208.143	3.956.483	84,41
Agu-15	7,18	6,80	6,75	5,91	5,73	205.874	3.881.294	87,84
Jul-15	7,26	6,68	6,68	5,76	5,87	204.843	3.833.745	88,85
Jun-15	7,26	6,66	6,66	5,76	5,21	206.056	3.828.045	87,77
Mei-15	7,15	6,66	6,66	5,75	5,77	203.894	3.757.133	87,76
Apr-15	6,79	6,65	6,65	5,89	5,84	201.526	3.711.569	89,18
Mar-15	6,38	6,65	6,65	6,84	6,89	200.712	3.679.871	88,79
Feb-15	6,29	6,67	6,67	5,75	5,88	197.543	3.665.686	89,68
Jan-15	6,96	6,93	6,93	5,75	5,88	197.279	3.634.620	91,16
Des-14	8,36	6,90	6,90	6,16	6,30	199.330	3.674.308	91,06
Nov-14	6,23	6,86	6,86	5,84	5,19	198.376	3.596.614	89,48
Okt-14	4,83	6,84	6,84	5,84	6,17	196.491	3.558.069	86,56

Period	IHK	rSBI	rSBIS	rPUAB	rPUAS	FINC	CRED	REER
	(%)	(%)	(%)	(%)	(%)	(Billion Rupiahs)		
Sep-14	4,53	6,88	6,88	5,90	6,36	196.563	3.561.294	87,03
Agu-14	3,99	6,97	6,97	5,94	6,73	193.983	3.498.363	87,23
Jul-14	4,53	7,09	7,09	6,76	7,30	194.079	3.495.030	86,98
Jun-14	6,70	7,13	7,13	6,07	6,35	193.136	3.468.162	84,76
Mei-14	7,32	7,14	7,14	5,87	6,57	189.690	3.403.148	87,01
Apr-14	7,25	7,13	7,13	6,10	6,47	188.063	3.361.348	87,92
Mar-14	7,32	7,12	7,12	6,02	6,62	184.964	3.306.898	88,56
Feb-14	7,75	7,17	7,17	6,15	6,31	181.772	3.267.820	84,91
Jan-14	8,22	7,23	7,23	6,11	6,48	181.398	3.258.420	83,80

Appendix 1 Research Data Transformed into Natural Logarithms

Period	IHK	rSBI	rSBIS	rPUAB	rPUAS	LnFINC	LnCRED	REER
		(%)	(%)	(%)	(%)	(Billion Rupiahs)		
Nov-21	1,75	3,50	2,75	2,83	1,34	12,9042	16,0933	90,2
Okt-21	1,66	3,50	2,75	2,83	1,34	12,8912	16,0708	90,4
Sep-21	1,60	3,50	2,75	2,84	1,72	12,8844	16,0591	89,7
Agu-21	1,59	3,50	2,75	2,86	1,24	12,8843	16,0604	89,4
Jul-21	1,52	3,50	2,75	2,93	1,50	12,8745	16,0427	88,6
Jun-21	1,33	3,50	2,75	2,85	2,30	12,8706	16,0351	88,5
Mei-21	1,68	3,50	2,75	2,94	0,93	12,8628	16,0434	88,9
Apr-21	1,42	3,50	3,12	2,80	2,54	12,8535	16,0240	88,1
Mar-21	1,37	3,50	3,34	2,85	2,00	12,8552	16,0096	88,8
Feb-21	1,38	3,50	3,12	2,95	1,08	12,8583	16,0236	89,8
Jan-21	1,55	3,75	3,65	3,07	3,05	12,8517	16,0148	89,8
Des-20	1,68	3,75	3,67	3,26	2,68	12,8409	16,0133	89,7
Nov-20	1,59	3,75	3,92	2,16	2,63	12,8321	16,0149	90,4
Okt-20	1,44	4,00	3,95	3,39	2,21	12,8171	15,9939	87,9

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Period	IHK	rSBI	rSBIS	rPUAB	rPUAS	LnFINC	LnCRED	REER
		(%)	(%)	(%)	(%)	(Billion Rupiahs)		
Sep-20	1,42	4,00	3,95	3,30	0,48	12,8182	15,9736	87,7
Agu-20	1,32	4,00	3,45	3,40	2,63	12,8132	15,9675	89,0
Jul-20	1,54	4,00	3,89	3,53	1,84	12,8034	15,9561	91,4
Jun-20	1,96	4,25	4,34	4,17	2,45	12,7939	15,9586	94,6
Mei-20	2,19	4,50	4,65	4,38	3,07	12,7990	15,9749	91,7
Apr-20	2,67	4,50	4,56	4,42	4,39	12,7807	15,9446	86,2
Mar-20	2,96	4,50	4,57	4,38	1,78	12,7753	15,9281	88,0
Feb-20	2,98	4,75	5,04	4,61	1,54	12,7804	15,9295	95,8
Jan -20	2,68	5,00	5,15	4,82	2,22	12,8607	15,9188	94,9
Des-19	2,72	5,00	5,19	4,95	3,56	12,7521	15,9103	93,2
Nov-19	3,00	5,00	5,21	4,89	3,06	12,7480	15,9077	92,9
Okt-19	3,13	5,00	5,50	4,86	4,82	12,2696	15,8974	92,9
Sep-19	3,39	5,25	5,37	5,19	1,46	12,2658	15,8979	92,9
Agu-19	3,49	5,50	5,68	5,34	1,75	12,2670	15,8965	93,6
Jul-19	3,32	5,75	5,90	5,65	5,54	12,2573	15,8748	93,0
Jun-19	3,28	6,00	6,14	5,87	5,92	12,2416	15,8795	93,2
Mei-19	3,32	6,00	6,38	6,12	5,95	12,2352	15,8824	90,8
Apr-19	2,83	6,00	6,63	5,95	5,96	12,2138	15,8605	91,1
Mar-19	2,48	6,00	6,77	6,06	6,04	12,6680	15,4616	90,3
Feb-19	2,57	6,00	6,77	5,79	5,83	12,6767	15,4823	91,2
Jan-19	2,82	6,97	6,89	6,12	5,94	12,6525	15,4565	91,15
Des-18	3,13	6,94	6,88	6,09	5,89	12,6536	15,4581	89,58
Nov-18	3,23	6,93	6,87	6,11	5,92	12,6460	15,4487	88,39
Okt-18	3,16	6,70	6,87	5,96	5,91	12,6232	15,4314	84,80
Sep-18	2,88	6,66	6,61	5,88	5,70	12,6029	15,4201	85,88

Period	IHK	rSBI	rSBIS	rPUAB	rPUAS	LnFINC	LnCRED	REER
		(%)	(%)	(%)	(%)	(Billion Rupiahs)		
Agu-18	3,20	6,45	6,35	5,56	5,40	12,5948	15,4198	87,94
Jul-18	3,18	6,17	6,04	5,40	4,98	12,5837	15,4005	88,54
Jun-18	3,12	5,84	5,84	5,01	4,91	12,5699	15,3796	89,25
Mei-18	3,23	5,32	5,32	4,68	4,43	12,5659	15,3722	87,82
Apr-18	3,41	5,18	5,18	4,34	4,01	12,5500	15,3550	87,66
Mar-18	3,40	5,19	5,19	4,38	4,45	12,5448	15,3486	87,72
Feb-18	3,18	5,18	5,18	4,09	3,85	12,5627	15,3711	88,52
Jan-18	3,25	5,19	5,19	4,06	4,27	12,5300	15,3427	91,26
Des-17	3,61	5,20	5,20	4,41	4,31	12,5216	15,3329	91,40
Nov-17	3,30	5,21	5,21	4,10	3,98	12,5120	15,3292	91,67
Okt-17	3,58	5,22	5,22	4,17	3,87	12,4958	15,3171	91,79
Sep-17	3,72	5,20	5,20	4,20	4,00	12,4845	15,3127	92,52
Agu-17	3,82	5,50	5,50	4,25	3,33	12,4850	15,3176	93,03
Jul-17	3,88	5,93	5,93	4,51	4,33	12,4562	15,3028	94,52
Jun-17	4,37	5,97	5,97	5,44	5,37	12,4383	15,2939	95,05
Mei-17	4,33	5,97	5,97	4,73	4,69	12,4314	15,2903	95,03
Apr-17	4,17	5,97	5,97	4,74	3,48	12,4123	15,2760	95,15
Mar-17	3,61	5,94	5,94	4,80	4,83	12,4068	15,2771	95,57
Feb-17	3,83	5,90	5,90	4,55	1,47	12,4212	15,2919	95,79
Jan-17	3,49	5,90	5,90	4,64	1,08	12,3900	15,2706	96,55
Des-16	3,02	6,00	5,90	5,92	6,08	12,3759	15,2543	96,01
Nov-16	3,58	6,00	5,90	4,52	4,68	12,3674	15,2535	94,29
Okt-16	3,31	6,00	5,90	4,43	4,83	12,3034	15,2377	94,25
Sep-16	3,07	6,25	6,15	5,46	4,66	12,3020	15,2339	92,63
Agu-16	2,79	6,50	6,40	5,14	4,67	12,3112	15,2430	91,94
Jul-16	3,21	6,50	6,40	5,00	4,82	12,2916	15,2193	93,28

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Period	IHK	rSBI	rSBIS	rPUAB	rPUAS	LnFINC	LnCRED	REER
		(%)	(%)	(%)	(%)	(Billion Rupiahs)		
Jun-16	3,45	6,50	6,40	5,85	5,53	12,2713	15,2035	91,00
Mei-16	3,33	6,75	6,60	5,16	4,93	12,2713	15,2019	90,13
Apr-16	3,60	6,75	6,60	5,18	4,67	12,2623	15,1937	90,98
Mar-16	4,45	6,75	6,60	5,22	4,82	12,2607	15,1976	92,87
Feb-16	4,42	6,65	6,55	5,31	5,20	12,2690	15,2162	91,73
Jan-16	4,14	6,70	6,65	5,66	5,13	12,2507	15,1894	90,89
Des-15	3,35	7,15	7,10	7,96	6,73	12,2442	15,1825	89,49
Nov-15	4,89	7,15	7,10	6,28	6,05	12,2460	15,1909	89,67
Okt-15	6,25	7,15	7,10	6,25	5,84	12,2350	15,1717	87,62
Sep-15	6,83	7,15	7,10	7,23	6,95	12,2300	15,1594	84,41
Agu-15	7,18	6,80	6,75	5,91	5,73	12,2359	15,1579	87,84
Jul-15	7,26	6,68	6,68	5,76	5,87	12,2254	15,1392	88,85
Jun-15	7,26	6,66	6,66	5,76	5,21	12,2137	15,1270	87,77
Mei-15	7,15	6,66	6,66	5,75	5,77	12,2096	15,1184	87,76
Apr-15	6,79	6,65	6,65	5,89	5,84	12,1937	15,1145	89,18
Mar-15	6,38	6,65	6,65	6,84	6,89	12,1924	15,1060	88,79
Feb-15	6,29	6,67	6,67	5,75	5,88	12,2027	15,1169	89,68
Jan-15	6,96	6,93	6,93	5,75	5,88	12,1979	15,0955	91,16
Des-14	8,36	6,90	6,90	6,16	6,30	12,1884	15,0847	91,06
Nov-14	6,23	6,86	6,86	5,84	5,19	12,1887	15,0856	89,48
Okt-14	4,83	6,84	6,84	5,84	6,17	12,1755	15,0678	86,56
Sep-14	4,53	6,88	6,88	5,90	6,36	12,1760	15,0669	87,03
Agu-14	3,99	6,97	6,97	5,94	6,73	12,1711	15,0591	87,23
Jul-14	4,53	7,09	7,09	6,76	7,30	12,1531	15,0402	86,98
Jun-14	6,70	7,13	7,13	6,07	6,35	12,1445	15,0279	84,76

Period	IHK	rSBI	rSBIS	rPUAB	rPUAS	LnFINC	LnCRED	REER
		(%)	(%)	(%)	(%)	(Billion Rupiahs)		
Mei-14	7,32	7,14	7,14	5,87	6,57	12,1279	15,0115	87,01
Apr-14	7,25	7,13	7,13	6,10	6,47	12,1105	14,9996	87,92
Mar-14	7,32	7,12	7,12	6,02	6,62	12,1084	14,9968	88,56
Feb-14	7,75	7,17	7,17	6,15	6,31	12,9042	16,0933	84,91
Jan-14	8,22	7,23	7,23	6,11	6,48	12,8912	16,0708	83,80