Analysis the Effect of Dual Monetary Policy Instrument on Index Industrial Productial in Indonesia

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Abstract: This study aimed to analyse instrument of monetary policy in affecting economic growth in Indonesia that measure using Industrial Production Index (IPI). Since Indonesia has a dual finance system and this research is meant to compare the effectiveness both system as a instrument of monetary policy through interest rate channel, this research will be written in two models as in conventional model and sharia model. Using VAR research and conducted by Impulse Response Function (IRF) and Forecast Error Variance Decomposition Test. The IRF Test showed that on the conventional model, the responses of IPI to the shock of SBI and PUAB is positive and permanent, so do the response of IPI to the shock of SBIS and PUAS is positive and permanent. Fluctuation on the mechanism of sharia monetary policy subside faster than the conventional monetary. And for the result of FEVD test, conventional model give a positive contribution in the sense of raising economic growth, where in this research is measured by IPI, amounted to 37,51%, while the sharia model give a positive contribution to IPI, amounted 7.14%. Therefore, we can conclude that in Indonesia, mechanism of monetary transmission through interest rate channel using conventional model can be said better than sharia model in the term of raising economic growth.

1 INTRODUCTION

The function and role of the Bank-owned Indonesia as the central bank in support of the development of the financial markets and the economy of a country. According to Warjiyo and Solikin (2003), this is due to the policies implemented by the central bank can affect the development of interest rates, credit amount, and the amount of money in circulation, which will affect not only the development of financial markets, but also economic growth, inflation, and welfare of society as a whole. This is called policy with monetary policy. The development of the financial markets and the economy is that macroeconomic stability is among other things reflected by price stability (low inflation rate), improving the development of real output (economic growth), as well as sufficient breadth field/job opportunities available.

Periodically, every year the Government set an economic growth target and announced through the State income and Expenditure Budget (APBN). Then the target will be evaluated during the one year later along with the turn of the year in which data on the realization of economic growth that year was also presented. The Government can just change the target figures for economic growth in the middle period to take place when the economic growth target proved difficult to achieve on the State of the economy in the period of walking. This is the same as the decision changes the target figures for economic growth in the last four years. The economic growth target set by the Government for the period of 2010-2015 each year amounted to 6.3%, 6.8%, 5.5%, and 5.1% by year calculation base used is the year 2010, as can be seen on the graph 1 below.
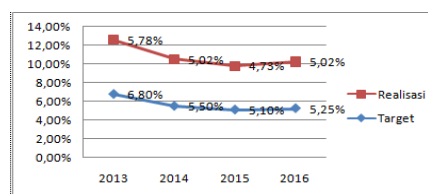
Source: Ministry of Finance.

Figure 1: Comparison of targets and the realization of economic growth (Base Year 2010).

In the year 2013 the growth economy Indonesia amounting to 5.78%. This figure is far lower than the target which was already decided after roughly 6.8%.

In later years, Indonesia's economic growth was increasingly debased i.e. 5.02% figure is treading in the year 2014 and 4.73% in 2015. Indonesia's economic growth rate by the year 2015 is the lowest figure for six years, where this is the first time for Indonesia stepped on the numbers below 5% since 2009. Later, in the year 2016 economic growth back step on number 5% i.e. 5.02%. However, this figure is still below the target of economic growth of 5.2% in 2016.

The index of industrial production or IPI number index that describes the development of the production sector of manufacturing industry in early as well as of data series that are longer and complete because its nature is designed to periodically monthly. Ordinary dipakain this index as a proxy for the activities of the economy or the national income primarily due to unavailability of real gross domestic product or gross national Product as measured by the monthly basic.

The Government is using monetary policy in controlling and influencing the development of real output (economic growth) that where data can be reflected through IPI. In this case, the tool used by the Government of one is the transmission mechanism of monetary policy and its instruments are used. The transmission of monetary policy basically shows the interaction between central banks, banking, and other financial institutions, as well as the perpetrators of real sector of economy. The interaction between the central bank and banking can be seen on the interactions in financial markets. Interaction through financial markets occurs because on the one hand the central bank conducts monetary control through financial transactions conducted with banking. On the other hand, the financial transaction banking to portfolio investment. These interactions will be influential on the development of short term interest rates as interest rates PUAB and SBI(Warjiyo, 2004:6-20).

This research concentrates the instruments of monetary policy interest rate channel. This is because the channel of interest rates further stressed the importance of this aspect of prices in financial markets against a wide range of economic activity in the real sector. The most important features in the transmission mechanism of monetary policy path of interest rates is on the emphasis of real interest rates that affect the decisions of economic actors spending (consumption and investment), so that although the nominal interest rate is from any zero monetary policy will still be used effectively through changes in the price level. In this regard, monetary policy is the central bank will have an effect on the development of a wide range of interest rates in the financial sector and will further influence on the level of real output.

As a solution of the conventional monetary system containing usury, Islam introduced Islamic monetary system, i.e. the monetary system based on Islamic sharia principles. Based on Bank Indonesia Regulation No. 10/36/PBI/2008, to achieve the final objective, Bank Indonesia can do control based on sharia principles. Sharia's own monetary policy prohibits the use of usury or interest in its execution, because in addition to indeed is haraam, monetary Islam considers interest usury or very risky against the economic crisis and prone to instability.

In principle, monetary policy and the purpose of islam is not much different from the conventional monetary, that is, to achieve full employment conditions in which all sectors of the production can be used optimally, guarantee the stability of exchange rates and prices (supervision inflation) and an instrument of redistribution of wealth where wealth synergize between monetary and real sector. In achieving the goal, economic instruments have Sharia moter monetary control is not much different from the conventional instruments of monetary control.

In addition, to link the Islamic economic and monetary policy, monetary economic system of Sharia also has an Islamic monetary policy transmission one of its channels is channel modifying interest rates interest rate pass-through use the policy rate pass-through, where interest rates used are changed using the yield level. Some short term money market instruments used were the SBIS and PUAS. SBIS is a form of modification of Bank Indonesia Certificates or SBI, SBI interest rates where replaced by the level of berakadkan yields the SBIS were. While PUAB is a form of modification of the PUAS in which the instruments used in Indonesia is the Mudharabah Interbank investment certificates (SIMA).

SBI interest rates, interest rate PUAB O/N, yields SBIS and SIMA are often used as an instrument of short-term interest rates to monetary control in achieving the target of the end of which one is economic growth (real output developments) that can Industrial production index using diliat. Here is the data rates of SBI, PUAB O/N, yields SBIS, SIMA, and the IPI 2013-2016 year.

Table 1: SBI Rate, Equivalent data Rate SBIS, PUAB O/N Rate, Equivalent Rate PUAS, and IPI 2013-2016 Period (in billion, and Percent).

Years	Position SBI	PUAB O/N Rate	Position SBIS	Eq Rate PUAS	IPI
2013	1,011,470	4.95	53,581	5.21	11489
2014	1,121,632	5,92	74,484	6.4	12036
2015	732,367	6.11	96,919	6.08	12609
2016	1,004,143	4.81	101,647	5	13114

Source: Bank Indonesia and the Central Bureau of statistics.

Table 1 above shows the trend of the fluctuation in the position of SBI, SBI's position in 2013 is Rp1,011,470 billion which then in 2014 rising to,632 billion Rp1,121. Then in the year 2015 positioning SBI decline i.e. amounting Rp732,367 billion and then menigkat again in 2015 i.e. Rp1,004 of,143 billion. While interest rates PUAB O/N tend to increase from a year 2013-2015 but later experienced a decline in the year 2016, where in the year 2013 the figure stepped on 4.95% in 2014 rising at a rate of 5.92%. In the year 2015 back rising at 6.11%, then in the year 2016 decline be 4.81%. While the rate of yield SATISFIED investment certificates represented by the Mudharabah Interbank tend to decline, where in the year 2013 yield results are in Figure 5.21% then in 2014 rising to 6.40% past year 2015 experience the decline be 6.08% and then decreased until the year 2016 to reach 5.00%. IPI number syang index data obtained from medium to large industrial production with basic year 2010 issued on a monthly basis by the Central Bureau of statistics, annual rataan peningkataan experience each year, where in the year 2013 is at number 114.89, then in 2014 has increased up to 120.36 on the numbers. And then in 2015 get back on the numbers increased to 126.09, later in the year 2016 continues to increase in numbers 131.14.

SBI, PUAB O/N, SBIS and SIMA as instruments of short-term interest rates in the monetary policy transmission mechanism is already widely used by previous studies. Such as research conducted by Aam Selamet with the result that the relationship of SBI, SBIS, PUAB, and with the banking financing PUAS is negative and the pattern of relationship banking financing and inflation also negatively. Then research other Aam Slamet with Yulizar Sanrego have results that conventional monetary instruments contribute more than the monetary instruments. Later, Irfan Ayuniyyah Qurroh research Syauqi Beik, Laily Arsyianti Dwi and have the results that total and the return of Sharia financing has a positive relationship with the IPI.

Against the background of the research above, there are any formula problem that will be raised in this research are as is how significant an influence and comparison between conventional monetary policy variables and Sharia line interest rates affect the IPI.

2 THEORICAL FRAMEWORK

The theory Keynes mentioned that, the interest rate is determined by the supply and demand for money, according to this theory there are three motifs, why would someone be willing to hold cash, i.e. transaction motives, just in case and speculation. Three motives which are the source of any such request for money that is termed Liquidity preference (Mankiw,2003), requests the money according to the theories of Keynes based on the conception that generally people want him remains illiquid for meet three of these motifs. The theory Keynes stressed the existence of a direct relationship between people's willingness to pay the price of money (interest rates) with a request for money for the purpose of speculation, in this case a huge demand when interest rate is low and small requests If the high interest.

According to Kasmir (2007:37-40) are the main factors that influence the determination of the seriousness of the great interest rates generally can be explained as follows, namely: Needs funds, profit Target is desirable, Quality Assurance, the wisdom of the Government, Period of time, the reputation of the company, the products are competitive, good relations, competitors.

2.1 Conventional Monetary Policy

Monetary policy is primarily a policy that aims to achieve internal balance (high economic growth, price stability, equitable development) and external balance (the balance of the balance of payments) as well as macroeconomic goal, namely maintaining economic stabilization can be measured by employment, price stability and a balanced international balance of payments. If stability in the troubled economy activity, then monetary policy can be used to restore the (stabilization actions). The influence of monetary policy is first felt by the banking sector, which is then transferred to the real sector.

2.2 Islamic Monetary Policy

Based on the concept of Islam, money is the property of the Community (public goods) (Arif,2010). Hoarding of money or activities that are not productive money will result in the amount of money

in circulation is reduced, so that the process of the economy will be hampered. On the other hand, stacking the money or property will push human nature of greed and lazy, and imposes against the continuity of the economy.

In addition, the money that is not utilized in the productive sector (idle assets) will be reduced due to the existence of the obligation of zakat must be issued. Therefore, the money must be spun (u.s. money flow concept) in order to give rise to the economic prosperity of the community. Like the theory of the economic system of Islam, Islamic financial instruments does not recognize interest rates and implement a system of profit and loss (profit and loss sharing). Big nothingness of customer profit Islamic banking is determined by his little big profit earned from bank financing and investment activities conducted in the real sector, so that the monetary sector has a dependency on the real sector. If investment and production in the real sector is doing well, then returns on the monetary sector will increase as well (Huda,2008)

Islamic monetary management rationale was the creation of the stability of money demand and ordered him to an important objective that is productive activities. So, every instrument that leads to instability and allocating funding sources that are not productive, would be abandoned. aim to ensure that monetary expansion, but quite able to generate adequate growth and can produce an equitable prosperity for the community. The rate of growth of the intended nature of sustainability, must be realistic and include the medium term and the long term.

2.3 Instruments of Monetary Policy

Conventional monetary policy instruments according to Bank Indonesia consists of: discount rate (Discount Rate), Compulsory Minimum Giro (Statutory Reserve Requirment), an appeal to the Moral (Moral Suasion), open market operations (Open Market Operation). In its open market operations, BI can do the buying and selling of securities that Bank Indonesia's certificate there is (SBI).

Islamic monetary policy Instrument according to Karim (2002:203-204) are: certificates of Wadiah Bank Indonesia (SWBI) or currently known as Certificate Bank Indonesia Sharia (SBIS), current Mandatory Minimum (Statutory Reserve Requirment) and mudharabah interbank investment certificates (certificate IMA) Sharia.

Based on the problem and research objectives, then the hypothesis in this study include:
1. Allegedly there is influence and significant among variables of conventional monetary policy interest rate path with IPI in Indonesia.
2. Allegedly there is influence significant between the variable and the monetary policy interest rate IPI line Sharia in Indonesia.

3 RESEARCH METHOD

To analyze and manipulate data in this study, the test will use Vector Autoregressive (VAR). VAR describes the relationship of causality between the variables in a model including intersep. This method was developed by Sims in 1980 (Sugianto, Hermain Harahap, and 2015; Ascarya 2009) that assumes that all the variables in the model are endogenous, meaning that it is specified in the model, so this method is called by the ateoritis model (unfounded theory).

VAR is a model of a-priori against economic theory, however it is very useful in determining the level of eksogenitas a variable economy in an economic system in which occurs the interdependence between variables in the economy. The VAR model is mathematically can be written (Ramadan and Beik, 2013; P, 2003) as follows:

$$Z_t = \sum_{i=1}^{k} A_i Z_{t-1} + B X_t + \varepsilon_t$$

Z_t: *vector of endogenous variables as much as t*
X_t: vector of endogenous variables as much as t
A_i dan B: matrix-matrix coefficients of
the will being estimated
εt : vector of residual-residual that is contemporary berkolerasi but not berkolerasi with the values of their own lag nor berkolerasi with the rest of the variables in the right-hand side of the above equation.

The first phase is done in process data time series is to test the stasioneritas or the unit root test. Stationary data will have a tendency to approach the average value and fluctuated around the average value or have a constant variety. If the data is stationary, then the selected methods are methods of VAR and if not stationary then the VECM using the method. (Ramadan and Beik, 2013).

VAR estimation is very sensitive to the length of the lag are used. Determination of lag (order) to be used in the VAR model can be determined based on the criteria of Akaike Information Criterion (AIC), Schwaz Information Criterion (SC), or Hannan

Quinnon (HQ). In addition the optimal lag length testing is very useful for relieving the problem of autocorrelation in the VAR system, so that the optimal lag with use expected to no longer appear problem of auto correlation (Nugroho, 2009; Hasanah 2011).

If the phenomenon of stasioneritas is at the level of the first difference, then the testing needs to be done to look at the possibility of Granger. The concept of Granger was basically to see long-term balance between variables observed. Sometimes an individual data is not stationary, but when connected in linear data becomes stationary. This is then called terkointegrasi that such data. (Rusydiana, 2009).

Forecast Error Variance Decomposition (FEVD) is another method of dynamical systems by using VAR. In response to the presence of innovation demonstrates the effect of a policy (shock) endogenous variable against other variables. Variance decomposition is used to compile an estimate of error variance of a variable, that is, how big is the difference between a variation before and after the shock, the shock that comes from either myself or the shock of the other variables to see the influence of relative variables research on other variables.

4 ANALYSIS

This research uses the Augmented Dickey-Fuller test (ADF) to test the stasioneritas of each variable. Stasioneritas ADF test results are then compared with critical values McKinon on degree of significance of 5%.

Table 2: Stationerity Test ADF Method.

Variable	Level		
	Prob. ADF	t-statistic ADF	p-value 5%
LNIPI	0.7322	-1.036381	-2.928142
LNSBI	0.2238	-2.158510	-2.926622
LNPUAB	0.5529	-1.442889	-2.928142
LNSBIS	0.7539	-0.977155	-2.925169
LNPUAS	0.1840	-2.275281	-2.926622
	1st difference		
LNIPI	0.0000	-7.902248	-2.928142
LNSBI	0.0012	-4.319495	-2.926622
LNPUAB	0.0000	-6.961848	-2.928142
LNSBIS	0.0000	-6.535199	-2.926622
LNPUAS	0.0000	-9.213325	-2.926622

Source: the Data that have been processed.

The result of the stationary test made the sixth data variables are shown from the above table that looks at the level of the level, all variables have the value of the probability of more than 0. Because of those reasons, then performed a test of integration at the level of the first difference. At the level of the first difference, it can be seen that all variables have values less than 0.05 probability of ADF so that it is said that all the variables are stationary and do not occur in the root level of the unit is the first difference.

4.1 The Optimum Lag Test

Following are the results of the test the optimum lag (lag length) Conventional Models prepared from data variables are used i.e. variable IPI, SBIS, and PUAB (conventional).

Table 3: Result the Optimum Lag of conventional Models.

Lag	LR	FPE	AIC	SC	HQ
0	NA	1.04e-07	1.300969	-7.444375*	7.521937
1	0.040451	9.45e-08*	-7.662502*	-7.171004	7.481253

Source: The Data that have been processed.

As seen from the above table, the data States that in this study, the lag criteria suggested by SC and HQ is the lag to-0. But when viewed from the criteria of LR, FPE, and AIC, the lag suggested to use is the lag. According to Sukmanada Kassim (2010), the length of the lag that is used must be long enough to limit the dynamics of the system. However, the length of the lag also should not be too long. The conventional model for this, since three of the five criteria suggested to use 1 lag, then lag lag is used to-1. Following are the results of the test the optimum lag (lag length) Model of Sharia that are processed from the data of the variables used i.e. variable IPI, SBIS, and satisfied.

Table 4: Results Lag Optimum Model of Sharia.

Lag	LR	FPE	AIC	SC	HQ
0	NA*	4.63e-08*	-8.374261*	-8.251387*	-8.328949*
1	11.5215	5.25e-08	-8.251082	-7.759584	-8.069833

Source: The Data that have been processed.

As seen from the above table, the data States that in this study, the lag criteria suggested by LR, FPE, AIC, SC, and HQ is the lag to-0. Because the five criteria suggested lag lag 0 is used, then the lag lag is used to-0. Lag 0 results obtained by these Islamic monetary instruments can happen considering transactions SBIS and PUAS is the kind of spot transactions settlement was the slowest in two days,

allowing a relationship both these variables do not have lag.

4.2 Test the Granger Johannsen

After knowing the value of optimal lag, Granger test done next to analyze long-term relationship antarvariabel. Following are the results of the test of a conventional Model Johansen Granger.

Table 5: Test Conventional Model Granger.

Hypotesis	Trace Statisitc	0.05 Critical Value	Prob.	Conclusion
None	115.1736	29.79707	0.0000	Countegrated
At most 1	61.01620	15.49471	0.0000	Countegrated
At most 2	14.52600	3.841466	0.0001	Countegrated

Source: The Data that have been processed.

Test results from the above it can be concluded that there is a Conventional Model at Granger. It can be seen from Statistics Trace values greater than the value of the 0.05 Critical Value, and is seen also from the probability value smaller than 0.05. In addition, the results of the above tests can also be inferred that there is a linear equation is long term contained in the model, including variables IPI, SBI, and PUAB. These test results also show that analysis of the Conventional Model is used for the analysis of the VECM. After learning the results of Conventional Models, Granger test next would be presented o Granger Sharia Model test data.

Table 6: Granger Test Model of Sharia.

Hypotesis	Trace Statisitc	0.05 Critical Value	Prob.	Conclusion
None	129.8704	29.79707	0.0000	Cointegrated
At most 1	75.63557	15.49471	0.0000	Cointegrated
At most 2	30.24998	3.841466	0.0000	Cointegrated

Source: The Data that have been processed.

Test results from the above it can be concluded that there exists a Granger on the Model. It can be seen from Statistics Trace values greater than the value of the 0.05 Critical Value, and is seen also from the probability value smaller than 0.05. In addition, the results of the above tests can also be inferred that there are two long-term linear equations contained in models, between variables IPI, SBIS, and satisfied. The results of this test also proves that the analysis is used to Model the sharia is the analysis of the VECM.

After the known existence of Granger's next test then the process is done using methods of error correction. If there is a difference in the degree of integration of the antarvariabel test, the testing was done simultaneously (jointly) between long term equations with equation error correction, having in mind that in a variable occurs Granger. Following are the results of the estimation of the conventional Model of the VECM.

Table 7: VECM estimation of short term and long term Conventional Model.

Variable	Coef.	t-stat
Short Term		
CointEq1	-1.758884	-7.82460
DDLNPUAB(-1)	-0.030082	-1.44460
DDLNSBI(-1)	-0.007983	-0.30626
Long Term		
DLNPUAB(-1)	-0.028445	-0.86480
DLNSBI(-1)	0.005043	0.27146

Source: The Data that have been processed.

Based on the test results of the VECM on top, on a short term analysis, both variables significantly to IPI, is it seen from the second t-statistic value of variable on smaller than -1.67943. On its influence on IPI, the existence of a mechanism of adjustment of sound long term short term indicated by error Granger is negative (CointEq1-1.758884). While in the long run, these two variables are significantly to IPI, these views of the value of the t-statistic greater than PUAB-1.67943 and t-statistics of SBI are smaller than at 1.67943. Then occurred the following is an analysis of the VECM to Islamic Model.

Table 8: VECM estimation of short term and long term Islamic Model.

Variable	Coef.	T-stat
Short Term		
CointEq1	-0.291197	-2.60881
Long Term		
LNPUAS(-1)	-0.438058	-9.24157
LNSBIS(-1)	-0.104447	-1.82001

Source: processed data.

Based on the test results of the VECM on top, both variables are PUAS or SBI has no effect against the IPI. In addition, in the long run, these two variables are not significant effect on IPI, it is seen from a t-statistic value each smaller than-1.67943. It is typical of the VECM VAR/test in which not all lag significantly in each equation.
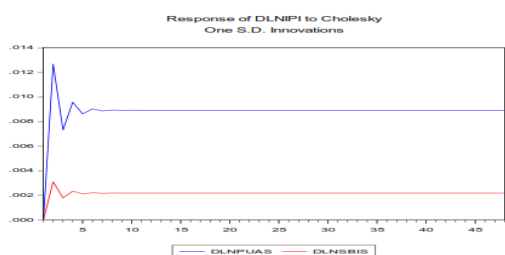
Figure 2: Impulse Response of industrial production index (IPI) Conventional Models.

From the picture above, can be parsed results IRF on variables in the Conventional Model is as follows:

1. DLNIPI response against the shock DLNPUAB fluctuate until the thirteenth month and began converging on the fourteenth period. One month lag time required for DLNIPI to respond to the shock DLNPUAB. This positive response indicates when interest rates rise, the PUAB it would be followed by a rise in the level of the IPI.
2. DLNIPI response against the shock DLNSBI fluctuate until the twelfth month and began converging on the thirteenth period. One month lag time required for DLNIPI to respond to the shock DLNSBI. This positive response indicates when the number of positions the SBI is increasing, it will be followed by a rise in the level of the IPI. Then, here are the results of the IRF on variables in the Model.
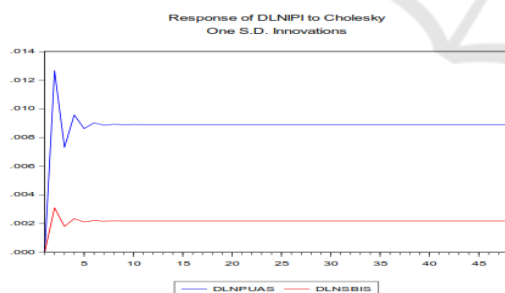

Figure 3: Impulse Response of industrial production index (IPI) Model of Sharia.

From the above image obtained results IRF on variables in the Model of Sharia is as follows:

1) Response DLNIPI DLNSBIS surprise against fluctuating funds sixth month and began converging on the seventh period. A one month grace period required for DLNIPI to respond to the shock DLNSBIS. This positive response indicates when the number of

positions the SBIS increases, it will be followed by a rise in the level of the IPI.

DLNIPI response against the shock DLNPUAS fluctuate until the fifth month and start converging on the sixth period. One month lag time required for DLNIPI to respond to the shock DLNPUAS. This positive response indicates when the yield rate increasing, it will be followed by a rise in the level of the IPI.

The picture IRF that is approaching the point of balance (equilibrium) indicates that a response is variable due to the longer shocks will progressively disappear, so the shocks are not left a permanent influence against the variable. The response variable of monetary policy interest rates to conventional line the longer this increasingly stable indicating response was the longer responya are increasingly disappearing. The following is the conclusion from the test results IRF for Conventional Models and models of Sharia.

Table 9: The response Variable Against the increase of one standard deviation of the IPI.

Shock SBI	Positif dan permanen
Shock PUAB	Positif dan permanen
Shock SBIS	Positif dan permanen
Shock PUAS	Positif dan permanen

Following are the results from the test of Variance Decomposition on a Conventional Model.

Table 10: The Test Results of The Forecast Error Variance Decomposition of Industrial Production Index (IPI) Conventional Models.

Per	S.E.	DLNIPI	DLNPUAB	DLNSBI
1	0.021415	100.0000	0.000000	0.000000
10	0.025767	87.25584	11.68735	1.056806
20	0.027099	78.98578	20.05327	0.960950
30	0.028369	72.14610	26.97186	0.882044
40	0.029585	66.40722	32.77694	0.815840
48	0.030522	62.44099	36.78892	0.770085

The table above presents the test results of Variance Decomposition, in which any variables and how big the variables affect variables industrial production Index (IPI) in the Groove of conventional monetary policy. In the first period to see that IPI could be explained by the PUAB of 0% to during the IPI could be explained PUAB of 36.79%. Next on the

first period look that IPI could be explained by the SBI of 0% to during the IPI could be explained SBI of 0.77%.

For IPI, can explain the period 100% of IPI and declining influence on late period amounted to 62.44%. So on a Conventional Model, variable IPI as an indicator of economic growth was largely influenced by the PUAB variable of 36.79%. These results indicate that the influence of a variable throughout the period PUAB and SBI against IPI will be even greater. This happens because the IPI get direct influence from all the variables such as the proposed instrument and the conventional monetary effect on the monetary transmission. In addition, test results from the FEVD known PUAB (36.74%) and SBI (0.77%) positive contributions of 37.51%. Then here is the variance decomposition test results on the Islamic Model.

Table 11: The test results of the Forecast Error Variance Decomposition Indexes of industrial production in Indonesia.

Periode	S.E.	DLNIPI	DLNPUAS	DLNSBIS
1	0.034583	100.0000	0.000000	0.000000
10	0.108560	92.99616	6.609760	0.394081
20	0.153328	92.91122	6.689921	0.398860
30	0.187706	92.88275	6.716791	0.400462
40	0.216697	92.86849	6.730243	0.401264
48	0.237353	92.86136	6.736974	0.401666

The table above presents the test results of Variance Decomposition, in which any variables and how big the variables affect variables industrial production Index (IPI) in the Groove of monetary policy. In the first period to see that IPI could be explained by PUAS amounting to 0% until the end of the period of IPI could be explained PUAS of 6.74%. Next on the first period look that IPI could be explained by the SBIS registration 0% until the end of the period of IPI could be explained SBIS of 0.40%.

The test results of both FEVD well on conventional monetary policy as well as monetary policy of Sharia can be said that conventional monetary policy path of interest rates contributed the increase in the production of industrial output bigger than monetary policy Sharia, i.e. the interest rate path of 37.51%, and Islamic monetary policy interest rates line accounts for the production of industrial output amounted to 7.14%. So it can be said that conventional monetary policy interest rate path have instruments that leih instrument than monetary policy interest in the path of Sharia influenced the production of the output of the industry.

5 RESULTS

Economic growth is one of the final target of monetary policy in Indonesia, which is one of the charge indicators will be seen using the industrial production Index (IPI). The end goal can be reached through several lines using monetary policy, one of which is the monetary policy interest rate path.

This study discusses the transmission mechanism of monetary policy conventional and syariah track interest rates in affecting economic growth reflected industrial production index (IPI). Based on the testing that has been done on conventional models by using the variable position of the SBI interest rates and PUAB, the results obtained are saying that these variables have a positive affect toward the IPI and permanent, where the increase in the number of both the variables affect the increase of IPI 37.51%.

6 CONCLUSIONS

VECM estimation of the results it can be concluded that:

a. Both in the short and long term, PUAB and SBI significant effect on IPI.
   1) In the short term, as the independent variable of the transmission mechanism of monetary policy, SBI and PUAS no effect on IPI.
   2) As for the long term, PUAS and SBIS no significant effect on IPI.
b. On the results of the test Impulse Response Function (IRF) on the transmission mechanism of monetary policy path of interest rates, showed that:
   1) The Conventional Model.
      - Shock (shock), SBI respond positively and permanently, which means that variable of SBI influenced the increase of economic growth (IPI)
      - Shock (shock) PUAB respond positively and permanently, which means the PUAB affect the increase of economic growth (IPI)
   2) The Model Syariah.
      - Shock SBIS respond positively and permanently, which means that variable of SBI decrease increase in economic

growth (IPI)

- Shock PUAS respond positively and permanently, which means that the variable PUAB influenced the increase of economic growth (IPI)

In a test of Variance Decomposition variables a transition mechanism of conventional models of monetary policy against the IPI, it can be concluded that the conventional variables include SBI (0.77%) and PUAB (36.74%) that provides a positive contribution against the IPI of 37.51%. Whereas in a test of Variance Decomposition variables transmission mechanisms of monetary policy against the Islamic model of IPI, it can be inferred that Sharia variables include SBIS (0.40%) and content (6.74%) that provides a positive contribution against the IPI of 7.14%. So it can be said, based on results of test of VECM in this study, the flow of transmission mechanism of monetary policy through interest rates to conventional models of the line better than any line of transmission mechanism of monetary policy through the tribal line model Sharia in affect IPI as one indicator of economic growth.

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