Analysis of The Impact Conventional Monetary Economic Systems For Profit Sharing Shariah Banking In Indonesia

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ABSTRACT: This study aims to analyze the relationship of inflation causality, BI rate, money supply to sharia bank profit sharing through the VAR (Vector Autoregressive) and VECM (Vector) Error Correction Models), and test Decomposition Variance on the model to see the largest contribution of conventional monetary economic variables . The population in this study is macroeconomic data and profit sharing for the period January 2005 to December 2015. The data analysis technique of this study uses the VAR Model, which is a non-structural model because it is atheistic. The VAR model has a simpler model structure with a minimal number of variables where all the variables are endogenous variables with the independent variable is lag. The VAR model is designed for stationary variables that do not contain trends. Stochastic trends in the data indicate that there are long-run (short-term) and short-run (short-term) components in time series data. Based on testing, estimation and testing of models, VECM (1) is obtained as the best model to explain inflation causality, BI rate, and money supply, while VAR (2) is the best model to explain the causal relationship of sharia bank profit sharing, inflation, BI rate, and money supply. The model results explain that there is a long-term causality relationship between variables, while the short-term causality relationship in VECM (1) through the Granger causality test shows that the granger variable causes inflation to increase the BI rate, while in VAR (2)) the causality between Sharia Bank Profit Sharing and other macroeconomic variables

KEYWORDS: BI Rate[1], Inflation[2], Money Supply[3] and, Profit Sharing[4]

I. INTRODUCTION

Islamic banking shows rapid growth from year to year, both in terms of assets, number of banks, deposits (Third Party Funds) and PYD (Financed Financing). Islamic banks are one of the economic sectors which are indicators of GDP, namely the financial services sector. If the financial services sector increases, GDP will also increase. In terms of Islamic bank financing has shown its existence as one of the variables that influence economic growth, this can be seen in the increase in financing channeled by Islamic banks from year to year. During the period of the economic and monetary crisis that occurred in 1997-1998, Sharia Commercial Banks (BUS) can still show relatively better performance compared to conventional financial institutions, this was proven by Bank Muamalat. When all banks experience a crash and need an injection of funds, Bank Muamalat actually still operates without financial assistance from the government. Therefore there is enough reason to see Sharia banking as an alternative financial institution.

Conventional banks, the return system is the interest system, namely the percentage of funds that are saved or loaned and determined at the beginning of the transaction so that the nominal value of the rupiah will be known and when it will be obtained can be ascertained without seeing the profit and loss that will occur later. The Islamic bank return system is a profit sharing system, namely the ratio (percentage of profit sharing), the amount of which is set at the beginning of a fixed transaction, but the nominal value of the rupiah cannot be known with certainty but sees the profit and loss that will occur later. In conventional economics, usury systems, fiat money, fractional reserve systems in banking, and permissibility of speculation lead to money creation (currency and demand) and the siphoning of money in the monetary sector to seek profit without risk. As a result, money or investments that should be channeled to the real sector for productive purposes mostly run into the monetary sector and hamper growth and even shrink the real sector. Money creation without any added value will cause inflation. In the end, the goal of economic growth will be hampered.

Meanwhile, with the zakat system, profit sharing, and the prohibition of speculation in the Islamic economy, will encourage an investment climate that will be channeled smoothly to the real sector for fully productive purposes. This will guarantee the distribution of wealth and income and grow the real

sector. With increasing productivity and employment opportunities and endeavor, in the end economic growth is encouraged, and in the end will be achieved by the welfare of the community.

It must be proven empirically that in the absence of interest rate instruments in the Islamic financial system which is replaced with the concept of profit sharing it can support a dual financial system (Islamic economic system and conventional economy) as a whole, especially in the study of money demand and monetary stability in the dual banking system . Based on the facts described above, it is necessary to know in addition to being able to survive the crisis whether Islamic banks are also able to provide welfare in the long term through the distribution of funding. In this case, welfare is not only judged by GDP growth, but also by the development of inflation. And we need to know how the ability of Islamic banks with profit sharing systems compared to conventional banks with interest systems provides welfare in the long run. Following are the Financing data from 2007-2015:

Table 1. Data PDB

Years	PYD Bank Syariah (Milyar Rupiah)	PYD Bank Syariah (%)
2007	1.004,178	34,20
2008	1.313,873	38,00
2009	1.446,808	47,00
2010	1.783,601	68,00
2015	2.223,685	92,65

Sumber : www.bi.go.id

From the data above, it can be seen that Islamic Bank PYD from year to year indicates that there has been an increase in sharia transactions in Indonesia. Likewise, Islamic bank financing has also increased quite rapidly from year to year. This increase can of course affect sharia revenue sharing. On the introduction and presentation above, a main problem can be drawn, namely whether there is a balance relationship between macroeconomic variables using the vector auto regression method, and see whether the macroeconomic variables are cointegrated and have a modality using cointegration and causality between variables.

II. LITERATURE REVIEW

2.1. Conventional Monetary System

According to Zainul (2009), monetary policy in general is a government policy to improve the state of the economy through regulating the money supply, which in macroeconomic analysis has an important influence on the level of economic output as well as the stability of prices, increasing employment opportunities and balance of payments. Regulating the amount of money circulating in the community is regulated by increasing or decreasing the amount of money in circulation. Monetary policy can be classified into 2, namely:

1) Monetary Expansive Policy is a policy in order to increase the amount of money in circulation. This policy theory can also be called the loose money policy. The aim is to encourage the level of economic growth and expand employment opportunities. This action can have an unfavorable impact on price stability and balance of payments balance because increasing money supply will cause inflation. Increasing money supply also makes interest rates decline, so that it will cause capital flight, which in turn will harm the balance of payments.
2) Monetary Contractive Policy is a policy in order to reduce the amount of money in circulation. Also called tight money policy. This policy can support the achievement of price stability and balance of payments balance, but on the other hand it will result in a decline in the rate of economic growth and in turn can increase the unemployment rate.
3) The implementation of the two forms of monetary policy is inseparable from the existence of monetary instruments themselves. The sector that has the most role in monetary policy is the banking sector. It is through the regulation of the banking sector that the government implements monetary policies using monetary instruments or tools.

2.2 Islamic Monetary System (Money Suply Shariah)

The monetary system is closely related to monetary instruments, one of which is money, so before understanding this, we need to understand the concept of money in Islam. According to Ibn Taimiyah, money is a standard of value (mi'yar al-amwal) and is a medium of exchange, besides that money is never intended for consumption. The money is used to get other goods (medium of exchange) and not

to be traded. He argued that the concept of money volume must be proportional to the volume of transactions where the price level is determined, and this concept in conventional theory is called the quantity theory of money (Karim, 2008).

After we know the concept of money in Islam, we need to know the concept of the central bank and monetary policy based on sharia principles. The objective of monetary policy in Islam is the achievement of Full Employment conditions where all production factors can be optimized for use, guarantee the stability of currency values and price stability (controlling inflation) and tools of wealth redistribution where assets are synergized between the financial sector and real sector (Adiwarman Karim, 2007). Meanwhile the central bank's function is to regulate the circulation of money and control the money supply, as a regulator of the financial market and guarantee the honesty of reports on the profits and losses of the banking sector and carry out regular audits. In addition, central bank functions can be carried out through monetary instruments such as changing high powered money (base money), through reserve ratios, liquidity ratios, sales and purchases of Central Deposit Certificates and other securities, changing profit-sharing ratios, establishing qard hassan ratio and controlling currency exchange rates.

The function of demand for money in Islam, following the Keynesian approach to the model of demand for money in Islamic economics as follows (Veithzal, 2010):

$$M_d = f(Y_s, S, \pi)$$

Where, Y_s = goods and services related to fulfilling productive needs and investments that are in accordance with Islamic values, S = all moral, social and institutional values (including zakat) that affect resource allocation and distribution and can help minimize M_d , not only for excessive consumption and unproductive investment, but also for the purpose of precaution and speculation, and π = profit sharing in the system that does not allow the use of interest rates for financial intermediation. This model has never been used for empirical studies, possibly because the characterization of Y_s is normative and does not reflect the existing reality, and S values are complex and may not be practiced. In this case, the demand for Islamic money is also reviewed in terms of financing channeled by Islamic banks (PYDS). Financing or financing is funding provided by a party to another party to support planned investment both individually and in an institution. In other words, financing is funding issued to support planned investments

There are three fundamental differences in the Islamic monetary system with the conventional monetary system (Ascarya, 2007). The first difference on the conventional side is that Money in Islam is money (gold and silver) which has an intrinsic value equal to its nominal value or a number with gold reserves held by the issuing party. Because there is no new purchasing power created (no seigniorage), so it does not contain elements of usury. Because Indonesia still uses a dual monetary and banking system, the main difference between Islamic and conventional monetary systems is the concept of profit sharing in Islam which negates interest.

The second difference is that the Islamic economic system has a hundred percent reserve banking system, where this system does not provide an opportunity for banks to create new money, because all reserves must be deposited with the central bank. The maximum bank can only channel financing up to the initial deposit. This causes no new purchasing power to be created (no seigniorage), then it does not contain elements of usury and no party is harmed.

The last and most fundamental difference is in the Islamic economy, the banking sector knows no interest rate instruments. The Islamic trading system applies a system of sharing profits and losses, not to the interest rate that has set the level of profit upfront. The size of the profit sharing obtained by Islamic bank customers is determined by the size of the profit sharing obtained by the bank from investment and financing activities carried out by banks in the real sector. The results of investment and bank financing in the real sector determine the size of the profit sharing in the monetary sector, so it can be concluded that the condition of the monetary sector is a reflection of the conditions of the real sector.

The Islamic monetary system is actually a complement to the economic system based on the fields of production and trade. Activities in the real sector will increase the amount of money in circulation, while a sluggish economy will result in a decrease in the amount of money in circulation. Then the absence of interest rates and the obligation to pay zakat, will minimize speculative demand for money, so that it will provide greater stability to the demand for money.

It can be seen that in Islamic economics, the demand for funds for investment oriented to self-capital is part of total transaction demand and depends on economic conditions and the expected rate of profit. Given the expectation of profits not to fluctuate, aggregate demand for transaction needs will

tend to be stable. Stability in the demand for money for transaction purposes will tend to encourage greater stability for the speed of money circulation in a business cycle phase in an Islamic economy. Therefore monetary policy is to use the money reserve variable and not the interest rate. the central bank must use its monetary policy to produce a growth in the circulation of money that is sufficient to finance potential growth within a stable price framework. The goal is to ensure the right monetary expansion, enough to produce equitable welfare for the community.

2.3 Inflation

Inflation is the average increase in all price levels. Sometimes the increase is continuous and prolonged. Inflation can occur due to factors that come from the supply side (cost-push inflation) and because of factors from the demand side (demand-pull inflation). Supply-side inflation occurs when there is a decrease in supply of goods and services due to an increase in production costs (cost push inflation). The increase in production costs can occur because of the desire for an increase in wages for workers and an increase in fuel prices for the industrial sector. This increase in production costs will make producers to reduce their production levels below the optimal level of production (full employment) so that prices will increase. Meanwhile, demand-pull inflation occurs when an aggregate increase in demand for goods and services causes a shift in the demand curve. This condition can directly lead to inflation because it causes an increase in output prices (Berument, 2013).

2.4. The concept of interest rates

The BI Rate is a policy interest rate that reflects the attitude of monetary policy determined by Bank Indonesia and announced to the public. The BI Rate is announced by the Bank Indonesia Board of Governors at each monthly Board of Governors Meeting and implemented in monetary operations conducted by Bank Indonesia through liquidity management in the money market to achieve the operational objectives of monetary policy.

Bank interest can be interpreted as reciprocal services provided by banks based on conventional principles to customers who buy or sell their products. Interest can also be interpreted as the price to be paid to customers (who have deposits) and what must be paid by customers to banks (customers who get loans) (Kasmir, 2003).

In banking activities there are two types of interest given to customers, namely (Karim, 2008):

1. Interest on deposits, interest given as a reward or remuneration for customers who save their money in the bank.
2. Interest on loans, interest given to borrowers or the price to be paid by the borrowing customer to the bank.

The operational targets of monetary policy are reflected in the development of Overnight Interbank Money Market (PUAB O / N) interest rates. The movement in the interbank rates is expected to be followed by developments in deposit rates, and in turn bank lending rates. By considering other factors in the economy, Bank Indonesia will generally raise the BI Rate if future inflation is expected to exceed the set target, whereas Bank Indonesia will reduce the BI Rate if future inflation is expected to be below the target set.

2.4 Concept of Profit Sharing

Profit sharing is a form of return (acquisition of business activity) from investment contracts from time to time, uncertain and not fixed on Islamic banks. The size of the acquisition depends on the results of the business that is truly obtained by Islamic banks (Veithzal, 2010).

The size of the customer's income in an Islamic bank depends on bank income, the profit sharing ratio between the customer and the bank, the nominal customer deposit, the average deposit for the same period of time at the bank and the term of the deposit. Pricing given in product liability should pay attention to things such as; profit sharing ratio, weight, income and average balance of certain products (Muhammad, 2002). Thus profit sharing remains profitable and provides fair benefits to all parties involved, namely customers (debtors and customers) and banks (shareholders). The profits obtained are not based on interest calculated on the savings / deposit / balance, but percent of the real income of customers, debtors and banks.

III. RESEARCH METHODS

Research Data

The variables in this study are Bi Rate, Inflation, Sharia Money Supply and Sharia Profit Sharing from January 2006 to December 2015. Data before being analyzed is processed first by the author. The following is an explanation of the variables used in the study along with their operational definitions:

1. Islamic money supply is the sum of all Third Party Funds held in Islamic banking institutions in Billion rupiahs from 2006-2015.
2. Inflation rate (INF) is the inflation rate
3. Interest rate (RATE) is the Bank Indonesia benchmark interest rate (BI rate) from 2005-2015.
4. Profit Sharing (PROFIT) is the level of profit sharing from savings in Islamic banking institutions from 2006-2015

Research methods

Library Study Method

This method is carried out by reading the literature that is pleasing to the topic of this research, in the form of data data and research research concerning conventional economic analysis conducted in Indonesia. The data and literature used are originated and based on the internet and materials from the library. The reference literature is not only printed media in the form of books but also electronic media, and soft copy of research.

Analysis Techniques

Data is processed using statistical assisted software, which can process data with ECM and VECM models. After the results are obtained, it will be concluded on this research. The research is in the form of causal, regarding the dimensions of research time is from 2006 to 2015.

Unit Root Tests

A series is said to be stationary, if all the moments of the series (average, variance and covariance) are constant over time. The Phillips-Perron test (PP Test) is a standard procedure.

Johansen Cointergration Test

The combination of the two series that is not stationary, will move towards the same to the long-run equilibrium and the differentiation between the two series will be constant. If this is the case, this series is said to be mutually cointegated between capital market development and economic growth based on Johansen's vector autoregressions (VAR) approach. If there is no cointegration relationship, the unrestricted VAR model can be applied. However, if there is a cointegration relationship between series, the Vector Error Correction (VECM) model is used.

Granger Causality

Granger Causality is intended to see the effect of each variable on other variables one by one. Based on the Granger causality hypothesis.

Empirical Model of VAR

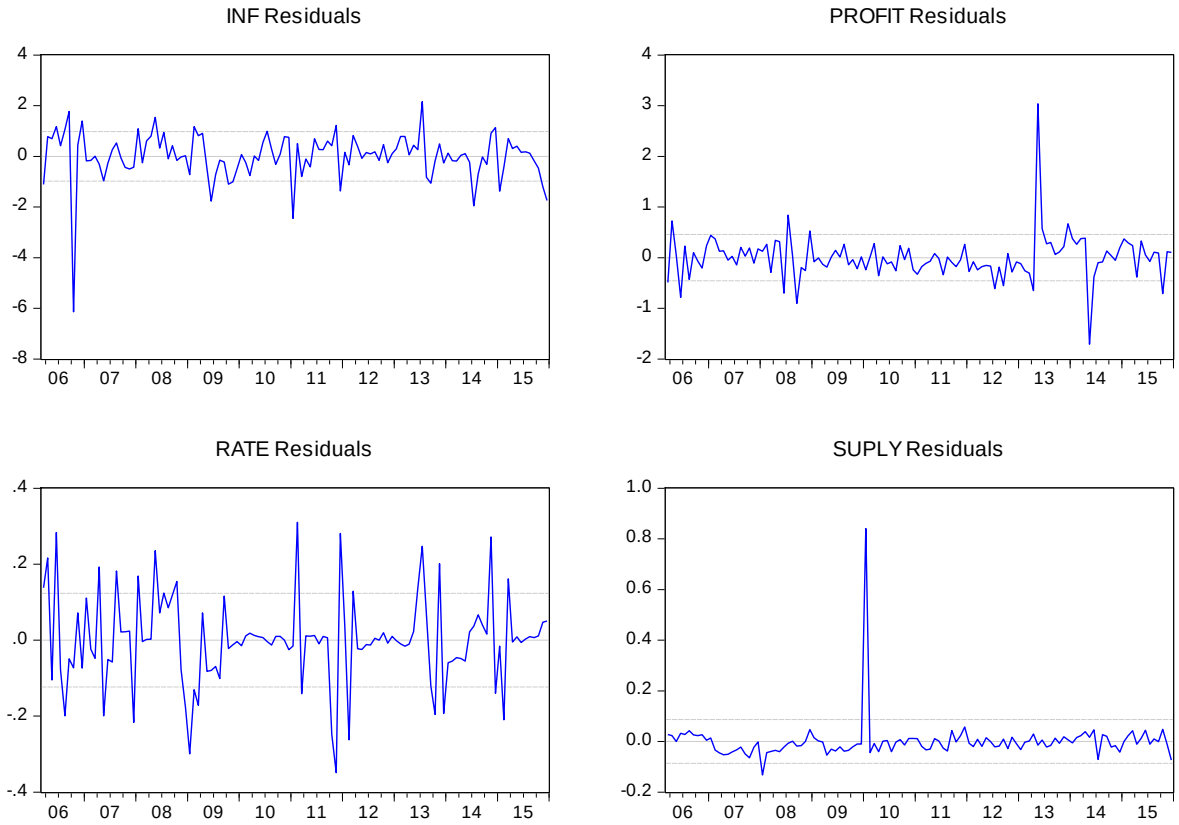
The existence of this problem encourages other alternatives which are often called non-structural models. This approach seeks relationships between the various variables desired. The model is often called VAR and ECM and VECM which are generally used for forecasting the relationship of data sequences of time. The VAR model follows as done by Lee (1992), Mougoué and Bond (1991), Ajay and Mougoué (1996), Hermanto (1998), and Ansari and Gang (1999). The ECM model is stated as follows, while the VECM model is a development of the ECM model:

VAR with P lag length, then:

$$X_t = A_tX_t\text{-}1 + A2\ Xt\text{-}2 + \ldots + ApXt\text{-}p + \beta Yt + \varepsilon_t$$

IV. RESULTS & DISCUSSION

1. Variable Data Movement Results



The picture above shows that the inflation variable (INF) has a fluctuating data distribution every period indicating the direction of movement of the statistics. Profit Sharing Variables (PROFIT) also have fluctuating data distribution each period indicating the direction of movement of the statistic. The BI Rate (RATE) variable also has a more volatile data distribution each period indicating the direction of movement of the statistician. Variable Sharia money supply (SUPLY) has a fluctuating data distribution every period indicating the direction of movement of the statistician.

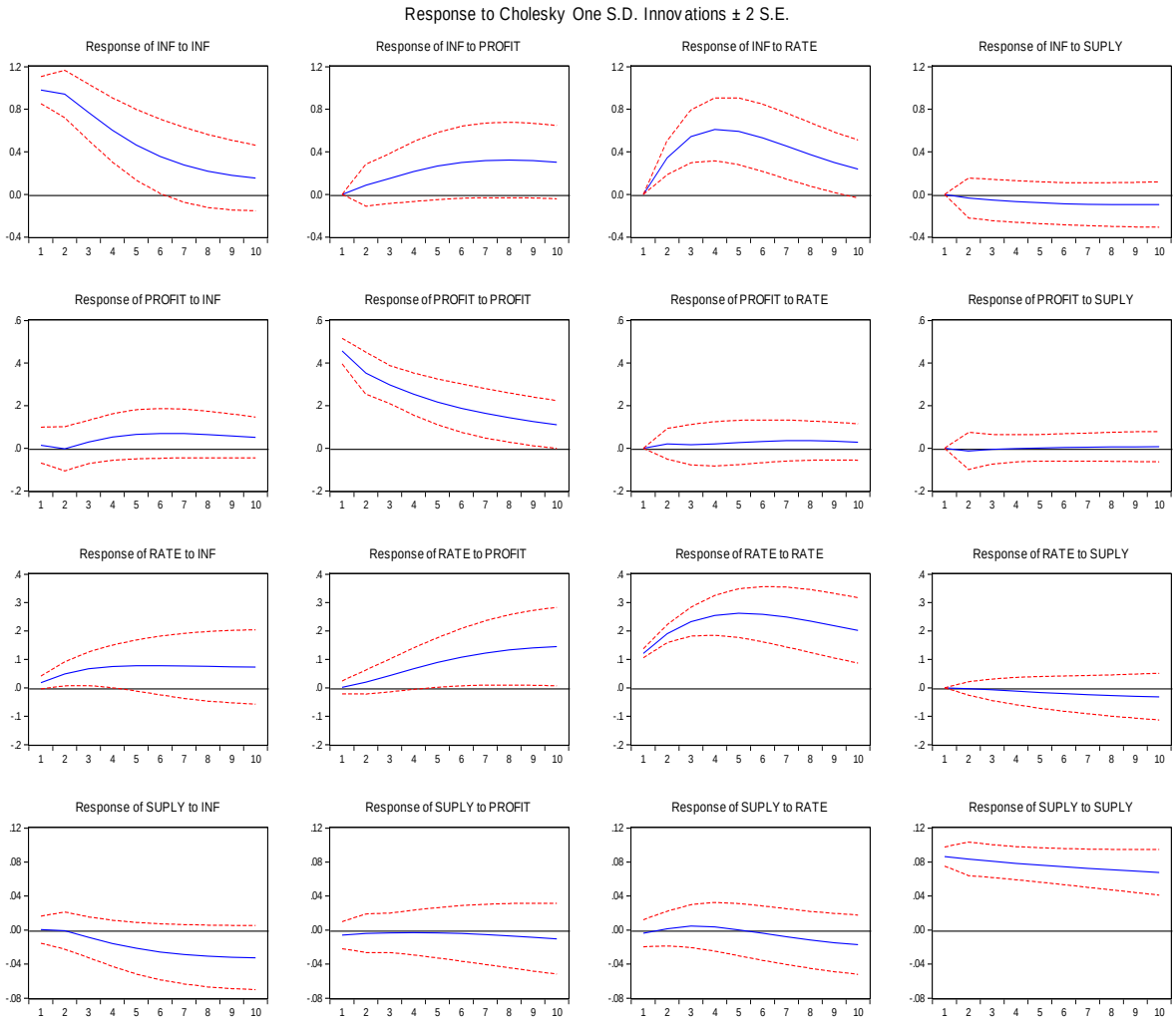
2. Stasioner Test

Data stationarity can be observed with the Augmented Dickey Fuller (ADF) method with the decision criteria at the significance level $(1-\alpha)$ 100%, $H0$ rejected if the ADF statistic is smaller than the critical value at α, or p value is smaller than the significance value α or in other words if H0 is rejected then the data is stationary. Basically a corelogram is a technique for identifying the date series data regeneration through the Autocorrelation (ACF) function. This function is useful for explaining a stochastic process, and will provide information on how the correlation between data (Yt) is adjacent.

Tabel 2. Unit Root Test

Variabel	ADF	Tingkat sig. (α=5%)
BI Rate (RATE)	-3.396964	0,0130
inflasi (INF)	-3.746358	0,0003
uang beredar Syariah (SUPLY)	-1.084759	0,71203
Bagi Hasil (PROFIT)	-3.062410	0,0322

The results showed that the original data showed stationary, because the ADF test value was smaller than the significant value (sig. 0.032 <0.05), so it can be ascertained that the data contained the unit root (stationerity). Only the Sharia money supply variable (SUPLY) does not contain stationarity



We can see in the graph that the data is stationary or not, so that the requirements of a stationary data are fulfilled, the relationship between stationary data and the next test step is to ensure and conclude that the data is stationary and later if the cointegration test is done, the data we test can be cointegrated in the long run.

Cointegration Test Results

Sometimes two random variables are found, each of which is a random walk (not stationary), but linear combinations between two or more variables are stationary time series. If Stationary Ut, then it can be ascertained that it is cointegrated. A condition in which Ut is stationary and cointegrated, in econometrics variable variables that are mutually integrated are said to be in long-term equilibrium conditions or commonly called long run equilibrium.

Tabel 3. Cointegration Test

Variabel	ADF	Tingkat sig. (α=5%)
Bagi Hasil (PROFIT) dan BI Rate (RATE)	0.123509	0.1337
Bagi Hasil (PROFIT) dan inflasi (INF)	0.065125	0.2322
Bagi Hasil (PROFIT) dan uang beredar Syariah (SUPLY)	0.025173	0.0868

We can see from the results of the co-integration test that produces sig> 0.05, which means Ut is stationary and there is no cointegration between variables, because if a data analyzed is stationary and mutually integrated means that there is a long-term relationship or balance between the two / more variables . In the short term there is a possibility of an imbalance called disequilibrium. Because of this imbalance, correction is needed with the error model (ECM Error Corection Model). So in the data there is a long-term balance. Let's look at the results of the output below. This is the result of the correlation between the variables tested.

Furthermore, Johansen tests are carried out for cointegrated variables. At this stage, how many rank cointegration equations can be formed. With H0: rank r = 3 versus H1: rank r = 4, the results of Johansen's test statistics are obtained as follows:

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.240154	57.42027	47.85613	0.0049
At most 1	0.123509	25.83669	29.79707	0.1337
At most 2	0.065125	10.67637	15.49471	0.2322
At most 3	0.025173	2.932003	3.841466	0.0868

From Johansen's statistical output, it can be seen that:

1. H0: Rank None is rejected because the trace statistic value (57.42027) is smaller than the critical value at the significance level α = 5% (47.85613) with sig. 0.0049 <0.05
2. H0: At most 1 rank is not rejected because the trace statistic value (25.83669) is smaller than the critical value at the significance level α = 5% (29.79707) with sig. 0.1337> 0.05.
3. H0: rank At most 2 is not rejected because the trace statistic value (2.932003) is smaller than the critical value at the significance level α = 5% (15.49471) with sig. 0.1337> 0.05.
4. H0: rank At most 3 is not rejected because the trace statistic value (10.67637) is smaller than the critical value at the significance level α = 5% (3.841466) with sig. 0.1337> 0.05.

Model Estimation and Examination

At this stage VECM model estimation and optimum lag selection in the VECM model will be carried out using criteria information, namely Akaike Information Criteria (AIC) and Schwarz Criteria (SC). The following is a summary of AIC and SC for the VECM (p) model:

Tabel 4. Summary of the Values of AIC and SC for VECM (p)

Description	p = 1	p = 2	p = 3	p = 4
AIC	2.869727	1.342996	-1.280606	-1.980926
SC	3.081050	1.554320	-1.069283	-1.769603

From table 4, it can be seen that order p = 4 gives a minimum AIC and SC value, so it is the optimal order for the VECM model for data.

Causality Analysis

At this stage, a short-term causality analysis will be carried out using the Granger causality test on variables that have root and cointegrated units. Following is the Granger causality test output:

Pairwise Granger Causality Tests
Date: 04/28/19 Time: 20:36
Sample: 2006M01 2015M12
Lags: 5

Null Hypothesis:	Obs	F-Statistic	Prob.
PROFIT does not Granger Cause INF	115	3.34163	0.0077
INF does not Granger Cause PROFIT		0.46046	0.8048
RATE does not Granger Cause INF	115	4.10168	0.0019
INF does not Granger Cause RATE		2.09942	0.0713
SUPLY does not Granger Cause INF	115	0.37362	0.8658
INF does not Granger Cause SUPLY		1.25918	0.2872
RATE does not Granger Cause PROFIT	115	0.24032	0.9437
PROFIT does not Granger Cause RATE		2.29021	0.0510
SUPLY does not Granger Cause PROFIT	115	0.42407	0.8310
PROFIT does not Granger Cause SUPLY		0.17754	0.9705
SUPLY does not Granger Cause RATE	115	0.16541	0.9747
RATE does not Granger Cause SUPLY		0.81751	0.5399

From the output above, it can be seen that the not granger cause inflation (INF) PROFIT hypothesis is accepted, while the Profit Sharing Notification (INF) hypothesis (PROFIT) is rejected. In other words, there is only a short-term relationship or one-way granger causality between profit sharing (PROFIT) and Inflation (INF).

The BI Rate (RATE) not granger cause inflation (INF) hypothesis is accepted, while the BI Rate (RATE) Inflation (INF) hypothesis is rejected. In other words, there is only a short-term relationship or one-way granger causality between the BI Rate (RATE) and Inflation (INF).

The hypothesis of SUPLY not granger cause Inflation (INF) was rejected, while the Inflation (INF) not granger hypothesis caused Sharia Circulating Money (SUPLY) was also rejected. In other words, there is no short-term relationship or one-way granger causality between Sharia (SUPLY) and Inflation (INF) Money.

The BI Rate (RATE) hypothesis of the profit sharing cause granger (PROFIT) is rejected, while the BI Rate (RATE) not granger cause profit sharing hypothesis (PROFIT) is also rejected. In other words, there is no short-term relationship or one-way granger causality between the BI Rate (RATE) and profit sharing (PROFIT).

Hypothesis of Sharia Currency (SUPLY) profit sharing cause (PROFIT) not rejected, while profit sharing hypothesis (PROFIT) not granger causes Sharia Circulating Money (SUPLY) is also rejected. In other words, there is no short-term relationship or one-way granger causality between Sharia Circulation (SUPLY) and profit sharing (PROFIT).

The hypothesis of the Sharia Money Supply (SUPLY) not granger cause the BI Rate (RATE) was rejected, while the BI Rate (RATE) not granger hypothesis caused Sharia Circulating Money (SUPLY) was also rejected. In other words, there is no short-term relationship or one-way granger causality between Sharia Money Supply (SUPLY) and the BI Rate (RATE).

Forecasting and Structural Analysis on the VAR Model

In general, the time series econometric model is a structural model because it is based on existing economic theory. In 1980 Christopher A. Sims introduced the VAR model as an alternative in macroeconomic analysis. The VAR model is a non-structural model because it is atheistic. The VAR model has a simpler model structure with a minimal number of variables where all the variables are endogenous variables with the independent variable is lag. The VAR model is designed for stationary variables that do not contain trends. Stochastic trends in the data indicate that there are long-run (short-term) and short-run (short-term) components in time series data. The following are the results of the VAR analysis

Vector Autoregression Estimates
Date: 04/28/19 Time: 19:45
Sample (adjusted): 2006M03 2015M12
Included observations: 118 after adjustments
Standard errors in ( ) & t-statistics in [ ]

	INF	PROFIT	RATE	SUPLY
INF(-1)	0.906543	-0.016826	0.020163	-0.001998
	(0.09350)	(0.04358)	(0.01174)	(0.00827)
	[9.69541]	[-0.38609]	[1.71780]	[-0.24159]
INF(-2)	-0.178195	0.042922	-0.018068	-0.007565
	(0.09293)	(0.04332)	(0.01167)	(0.00822)
	[-1.91747]	[0.99093]	[-1.54871]	[-0.92039]
PROFIT(-1)	0.172995	0.770072	0.038152	0.004338
	(0.20452)	(0.09533)	(0.02567)	(0.01809)
	[0.84585]	[8.07824]	[1.48596]	[0.23982]
PROFIT(-2)	-0.088475	0.056376	-0.004781	-0.003757
	(0.20589)	(0.09596)	(0.02585)	(0.01821)
	[-0.42972]	[0.58748]	[-0.18498]	[-0.20629]
RATE(-1)	2.811590	0.161689	1.566437	0.043597
	(0.62871)	(0.29304)	(0.07892)	(0.05561)
	[4.47203]	[0.55177]	[19.8472]	[0.78401]

RATE(-2)	-2.501430	-0.191253	-0.602616	-0.038442
	(0.58110)	(0.27085)	(0.07295)	(0.05140)
	[-4.30463]	[-0.70612]	[-8.26079]	[-0.74793]
SUPLY(-1)	-0.387486	-0.150028	-0.031170	0.968029
	(1.08131)	(0.50399)	(0.13574)	(0.09564)
	[-0.35835]	[-0.29768]	[-0.22963]	[10.1215]
SUPLY(-2)	0.229001	0.199858	0.009307	0.000639
	(1.07137)	(0.49936)	(0.13450)	(0.09476)
	[0.21375]	[0.40023]	[0.06920]	[0.00674]
C	0.043281	0.383159	0.245028	0.200186
	(1.56631)	(0.73005)	(0.19663)	(0.13854)
	[0.02763]	[0.52484]	[1.24616]	[1.44498]
R-squared	0.901163	0.733962	0.994615	0.983732
Adj. R-squared	0.893909	0.714436	0.994220	0.982538
Sum sq. resids	104.5841	22.72036	1.648159	0.818190
S.E. equation	0.979534	0.456556	0.122966	0.086639
F-statistic	124.2287	37.58949	2516.738	823.8932
Log likelihood	-160.3139	-70.23677	84.55576	125.8747
Akaike AIC	2.869727	1.342996	-1.280606	-1.980926
Schwarz SC	3.081050	1.554320	-1.069283	-1.769603
Mean dependent	6.770593	3.369576	7.578390	5.126525
S.D. dependent	3.007329	0.854364	1.617446	0.655636

Determinant resid covariance (dof adj.)	2.20E-05
Determinant resid covariance	1.60E-05
Log likelihood	-18.32040
Akaike information criterion	0.920685
Schwarz criterion	1.765978

Estimation Proc:
==========
LS 1 2 INF PROFIT RATE SUPLY @ C

VAR Model:
==========
INF = C(1,1)*INF(-1) + C(1,2)*INF(-2) + C(1,3)*PROFIT(-1) + C(1,4)*PROFIT(-2) + C(1,5)*RATE(-1) + C(1,6)*RATE(-2) + C(1,7)*SUPLY(-1) + C(1,8)*SUPLY(-2) + C(1,9)

PROFIT = C(2,1)*INF(-1) + C(2,2)*INF(-2) + C(2,3)*PROFIT(-1) + C(2,4)*PROFIT(-2) + C(2,5)*RATE(-1) + C(2,6)*RATE(-2) + C(2,7)*SUPLY(-1) + C(2,8)*SUPLY(-2) + C(2,9)

RATE = C(3,1)*INF(-1) + C(3,2)*INF(-2) + C(3,3)*PROFIT(-1) + C(3,4)*PROFIT(-2) + C(3,5)*RATE(-1) + C(3,6)*RATE(-2) + C(3,7)*SUPLY(-1) + C(3,8)*SUPLY(-2) + C(3,9)

SUPLY = C(4,1)*INF(-1) + C(4,2)*INF(-2) + C(4,3)*PROFIT(-1) + C(4,4)*PROFIT(-2) + C(4,5)*RATE(-1) + C(4,6)*RATE(-2) + C(4,7)*SUPLY(-1) + C(4,8)*SUPLY(-2) + C(4,9)

VAR Model - Substituted Coefficients:
==========
INF = 0.906543258591*INF(-1) - 0.178194797656*INF(-2) + 0.172995193966*PROFIT(-1) - 0.0884747227676*PROFIT(-2) + 2.81159049235*RATE(-1) - 2.50142964633*RATE(-2) - 0.387485812388*SUPLY(-1) + 0.229000740059*SUPLY(-2) + 0.0432812563932

PROFIT = - 0.0168260939178*INF(-1) + 0.0429222712547*INF(-2) + 0.770072329361*PROFIT(-1) + 0.0563764901412*PROFIT(-2) + 0.161689249794*RATE(-1) - 0.191252959702*RATE(-2) - 0.150028453466*SUPLY(-1) + 0.199857842382*SUPLY(-2) + 0.383158816725

RATE = 0.0201632618877*INF(-1) - 0.0180677964052*INF(-2) + 0.038151764968*PROFIT(-1) - 0.00478107637748*PROFIT(-2) + 1.56643692758*RATE(-1) - 0.602615915307*RATE(-2) - 0.031169996533*SUPLY(-1) + 0.00930685806519*SUPLY(-2) + 0.245028379473

SUPLY = - 0.00199797724321*INF(-1) - 0.00756538520332*INF(-2) + 0.00433824435021*PROFIT(-1) - 0.00375672824083*PROFIT(-2) + 0.0435974861328*RATE(-1) - 0.0384422819288*RATE(-2) + 0.968028718713*SUPLY(-1) + 0.000639031845636*SUPLY(-2) + 0.200185942307

Based on the VAR analysis output, it can be seen the highest values of each period as follows:

Variabel	Biggest contribution 1	Biggest contribution 2
INF	RATE (2.811590)	SUPLY(0.229001)
PROFIT	INF (0.770072)	0.056376
RATE	PROFIT (0.038152)	RATE (1.566437)
SUPLY	SUPLY(0.968029)	RATE (0.043597)

1. VAR Analysis of Inflation (INF)
   The biggest contribution to inflation movements is the bi Rate (RATE) of this period and followed by the previous period's Sharia Money Supply (SUPLY).
2. VAR Analysis of Profit sharing (PROFIT)
   The biggest contribution to Profit Sharing (PROFIT) is the previous period's Inflation (INF) and followed by the previous period's Sharia Money Supply (SUPLY)
3. VAR Analysis of BI Rate (RATE)
   The biggest contribution to the movement of the BI Rate (RATE) is the profit sharing (PROFIT) of the current period and followed by the BI Rate (RATE) of the previous period.
4. VAR Analysis of Money Supply (SUPLY)
   The biggest contribution to the movement of Sharia Circulated Money (SUPY) is the demand for Sharia Circulating Money (SUPY) itself at the current period and followed by the previous period's BI Rate (RATE).

V. DISCUSSION

The results of this study indicate:

1. The inflation variable (INF) has a fluctuating data distribution every period indicating the direction of movement of the statistician. Profit Sharing Variables (PROFIT) also have fluctuating data distribution each period indicating the direction of movement of the statistic. The BI Rate (RATE) variable also has a more volatile data distribution each period indicating the direction of movement of the statistician. Variable Sharia money supply (SUPLY) has a fluctuating data distribution every period indicating the direction of movement of the statistician.
2. The results of the study indicate that the original data shows stationary, because the ADF test value is smaller than the significant value (sig. 0.032 <0.05), so it can be ascertained that the data contains the unit root (stationerity). Only the Sharia money supply variable (SUPLY) does not contain stationarity.
3. Co-integration test results that produce sig values> 0.05, which means Ut is stationary and there is no cointegration between variables, because if a data analyzed stationary and mutually integrated means that there is a long-term relationship or balance between the two / more variables. In the short term there is a possibility of an imbalance called disequilibrium. Because of this imbalance, correction is needed with the error model (ECM Error Corection Model). So in the data there is a long-term balance. Let's look at the results of the output below. This is the result of the correlation between the variables tested. Furthermore, Johansen tests are carried out for cointegrated variables. Pada tahapan ini akan dicari berapa jumlah *rank* persamaan kointegrasi yang dapat dibentuk
   a. H0: rank None is rejected because the trace statistic value (57.42027) is smaller than the critical value at the significance level α = 5% (47.85613) with sig. 0.0049 <0.05
   b. H0: At most 1 rank is not rejected because the trace statistic value (25.83669) is smaller than the critical value at the significance level α = 5% (29.79707) with sig. 0.1337> 0.05.
   c. H0: rank At most 2 is not rejected because the trace statistic value (2.932003) is smaller than the critical value at the significance level α = 5% (15.49471) with sig. 0.1337> 0.05.
   d. H0: rank At most 3 is not rejected because the trace statistic value (10.67637) is smaller than the critical value at the significance level α = 5% (3.841466) with sig. 0,1337 > 0,05
4. Results of causality:
   a. The BI Rate (RATE) not granger cause inflation (INF) hypothesis is accepted, while the BI Rate (RATE) Inflation (INF) hypothesis is rejected. In other words, there is only a short-

term relationship or one-way granger causality between the BI Rate (RATE) and Inflation (INF).

b. The hypothesis of SUPLY not granger cause Inflation (INF) was rejected, while the Inflation (INF) not granger hypothesis caused Sharia Circulating Money (SUPLY) was also rejected. In other words, there is no short-term relationship or one-way granger causality between Sharia (SUPLY) and Inflation (INF) Money.

c. The BI Rate (RATE) hypothesis of the profit sharing cause granger (PROFIT) is rejected, while the BI Rate (RATE) not granger cause profit sharing hypothesis (PROFIT) is also rejected. In other words, there is no short-term relationship or one-way granger causality between the BI Rate (RATE) and profit sharing (PROFIT).

d. Hypothesis of Sharia Money Supply (SUPLY) profit sharing cause (PROFIT) not rejected, while profit sharing hypothesis (PROFIT) not granger causes Sharia Circulating Money (SUPLY) is also rejected. In other words, there is no short-term relationship or one-way granger causality between Sharia Circulation (SUPLY) and profit sharing (PROFIT).

e. The hypothesis of the Sharia Money Supply (SUPLY) not granger cause the BI Rate (RATE) was rejected, while the BI Rate (RATE) not granger hypothesis caused Sharia Circulating Money (SUPLY) was also rejected. In other words, there is no short-term relationship or one-way granger causality between Sharia Money Supply (SUPLY) and the BI Rate (RATE).

5. VAR Analysis:

a. Inflation VAR Analysis (INF)
The biggest contribution to inflation movements is the bi Rate (RATE) of this period and followed by the previous period's Sharia Money Supply (SUPLY). The movement of inflation can be caused by the low benchmark interest rate which causes high money supply in the community so that it can trigger inflation to rise.

b. VAR Analysis of Profit Sharing (PROFIT)
The biggest contribution to Profit Sharing (PROFIT) is the previous period's Inflation (INF) and followed by the previous period's Money Supply (SUPLY). Profit Sharing (PROFIT) can be caused by the high and low inflation index of the current period, the higher the inflation index of course can reduce Profit Sharing (PROFIT)

c. VAR Analysis of the BI Rate (RATE)
The biggest contribution to the movement of the BI Rate (RATE) is the profit sharing (PROFIT) of the current period and followed by the BI Rate (RATE) of the previous period. The BI Rate is a reference for banks in setting profit sharing (PROFIT), the higher the BI Rate, the higher the results shared.

d. VAR Analysis of Sharia Circulating Money (SUPY)
The biggest contribution to the movement of Sharia Circulating Money (SUPY) is the demand for Sharia Circulation (SUPY) itself at the current period and followed by the previous period's BI Rate (RATE). The higher the number of requests for Sharia Circular Money (SUPY), the higher the Islamic money supply.

VI. CONCLUSION & SUGGESTION

Inflation VAR Analysis (INF)

The biggest contribution to inflation movements is the bi Rate (RATE) of this period and followed by the previous period's Sharia Money Supply (SUPLY). The movement of inflation can be caused by the low benchmark interest rate which causes high money supply in the community so that it can trigger inflation to rise. The BI rate is a dominant variable contributing to fluctuations in inflation compared to the value of sharia money supply. This can be used as reference material by the monetary authorities and existing policy makers as instruments of inflation stability.

VAR Analysis of Profit Sharing (PROFIT)

The biggest contribution to Profit Sharing (PROFIT) is the previous period's Inflation (INF) and followed by the previous period's Money Supply (SUPLY). Profit Sharing (PROFIT) can be caused by the high and low inflation index of the current period, the higher the inflation index of course can reduce Profit Sharing (PROFIT)

VAR Analysis of the BI Rate (RATE)

The biggest contribution to the movement of the BI Rate (RATE) is the profit sharing (PROFIT) of the current period and followed by the BI Rate (RATE) of the previous period. The BI Rate is a reference for banks in setting profit sharing (PROFIT), the higher the BI Rate, the higher the results shared.

VAR Analysis of Sharia Circulating Money (SUPY)

The biggest contribution to the movement of Sharia Circulating Money (SUPY) is the demand for Sharia Circulation (SUPY) itself at the current period and followed by the previous period's BI Rate (RATE). The higher the number of requests for Sharia Circular Money (SUPY), the higher the Islamic money supply.

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