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Monetary Policy Transmission : Does Maintain the Price and Poverty Stability is Effective?

Ade Novalina [1]✉ , Rusiadi[2]

[1]Faculty of Social Science, Universitas Pembangunan Panca Budi, Medan, Indonesia
[2]Faculty of Economics, Universitas Sumatera Utara, Medan, Indonesia

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Abstract

This study analyzes the effectiveness of monetary policy transmission of emerging market countries, both short and long-term in maintaining economic stability and reducing poverty. The main problem in this paper is that monetary transmission is incapable of controlling the economy and reducing poverty. There are five countries selected such as India, Brazil, China, Russia, and Indonesia. Long-term prediction analysis using Vector Auto Regression (VAR) model is performed to predict five emerging market countries using Regression Panel. It results suggest that monetary policy transmission affecting the number of poor people should be controlled in three stages. In the short-term, the transmission of export variables and inflation controls the number of poor people. In the medium-term, the control of the number of poor people uses variables of inflation and exports while in the long-term uses exports and Gross Domestic Product (GDP). Overall, all economic variables of emerging market countries are greatly influenced by the fluctuations of each country's exports, then by food price stability as measured by food price inflation. The result of regression panel analysis is known that the factor that most influence the poor people in emerging market country is GDP. Exports also affect poor people such as Indonesia, China, and Russia. Inflation also causes poor people like India and Brazil. The countries that have the most impact on economic fluctuations on the number of poor people are India, Indonesia, China, Brazil, and Russia.

Key words : Emerging Markets, Monetary Transmission, Food Price Stability, Poverty.

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✉ Corresponding author :
Address: Jl. Jend. Gatot Subroto Km. 4,5 Sei Sikambing 20122
Medan, Sumatera Utara
E-mail: adenovalina@gmail.com

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INTRODUCTION

Economic stability is a condition that is reflected in the improved macroeconomic fundamentals. To support optimal macroeconomic stability and to create a healthy and anticipative monetary policy framework, it is necessary to have the appropriate monetary policy in achieving long-term stability objectives. The monetary policy transmission mechanism is a process whereby a policy created can affect economic growth and inflation within a country. The monetary policy transmission channel is conducted through six channels, such as interest rates, credit, asset prices, corporate balance sheets, exchange rates and expectations (Warjiyo, 2004).

This policy is entirely run by the central bank which is the primary partner of the government in mobilizing and running various economic activities through the policies it establishes. Inflation targeting is a monetary policy framework that is an official statement from the central bank.

The ultimate goal of monetary policy is to achieve and maintain a low inflation rate and announce the inflation target to the public (Warjiyo and Solikin, 2003). The problem that often arises is the monetary transmission mechanism is not by the original purpose even cause shocks and adverse impacts to economic conditions. (Bittencourt 2016).

One of the causes of the negative impact is the lag effect in monetary policy. It encourages the need to understand the mechanism of monetary policy transmission to real economic activities that can be traversed by various channels or channels (Natsir 2011).

The phenomenon of the problem in this research is to see the response of macroeconomic variables to the effectiveness of monetary policy transmission of emerging market countries in the period of study (2000 to 2016).

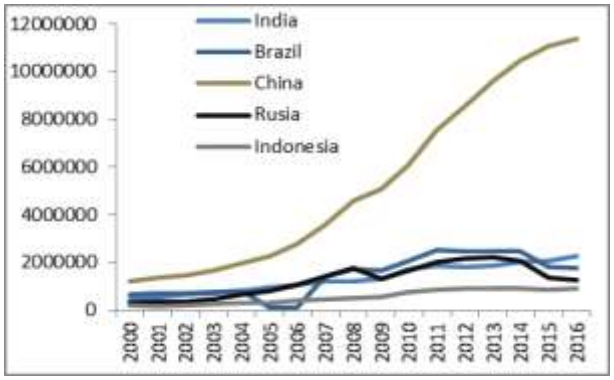

Figure 1. GDP development of emerging market countries

Source : Primary Data, Processed

Figure 1 describes the growth of GDP emerging market countries in 2009 decreased from the previous year, India decreased 6.06%, Brazil by 7.19%, China decreased -0.6%, Russia decreased 2%, and Indonesia decreased 8.27% due to global financial shocks and uncertainties. The American economic crisis is increasingly creeping into the global economic crisis because in fact the world's economy is connected to each other, events that occur somewhere will affect elsewhere.

Indonesia also felt the global economic crisis. It is a country that is still very dependent on the flow of funds from foreign investors, with this global crisis is automatically attract foreign investors from Indonesia. The value of Indonesian exports also plays a role as a savior in the global crisis of 2008.

The small proportion of exports to GDP is enough to be a savior in the face of the financial crisis in late 2008. In the Asian region alone, Indonesia is the country with the least negative

impact of the crisis compared to other countries. Some say that Indonesia's 'survival' from the onslaught of the US financial crisis is due to the lack of proportion of exports to GDP.

Countries that have high export-to-GDP ratios experience negative economic growth.

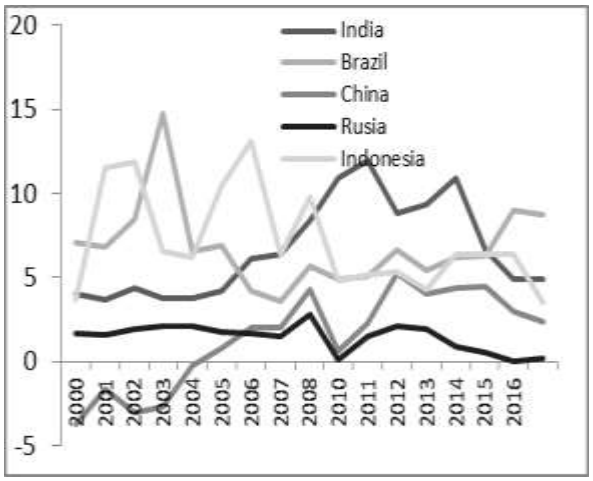

Figure 2. Inflation rate of emerging market countries from 2001 to 2014
Source: Data processed

Figure 2 illustrates the inflation rate in 2008, India rose 8.35%, Brazil rose 5.66%, China rose 6.46%, Russia rose 14.10%, Indonesia 9.77%. It is due to the impact of rising world oil prices and rising fuel due to the effects of the global economic crisis that increases the price of goods. The policy of fuel price hike as an effect of financial tightening will have an impact on overall macroeconomic stability (Senbet, 2016).

Based on the revised 2008 state budget, the assumption of oil price to be the US $ 95 per barrel. With this assumption, the fuel subsidy is calculated as Rp. 126 trillion. However, oil prices during 2008 continued to climb and in May has passed the price above the US $ 130. Without a price increase, fuel subsidies will bubble up to Rp. 190 trillion. As a result, there will be a massive budget deficit that will disrupt the realization of the 2008 State Budget. Whereas according to Law No. 16/2008 on APBN(P) 2008 approved by the House of Representatives, the maximum budget of subsidized fuel subsidy is set at Rp 135.1 trillion. Figure 3 describes the decline in the exchange rate in 2010, India decreased -14.25%, Brazil decreased -14. 97%, Russia decreased -8.68%, Indonesia decreased -4.35%, (except China rose -0.58%).

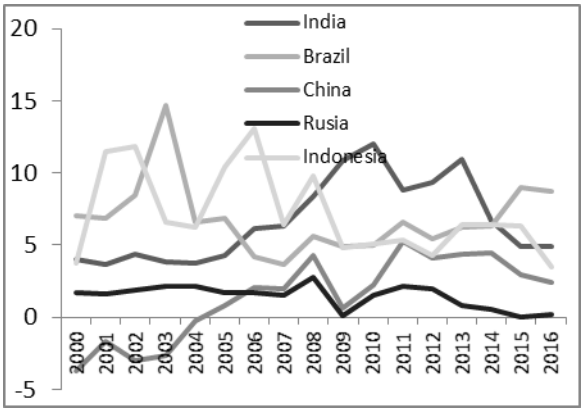

Figure 3. The development of the rupiah exchange rate to the dollar from 2000 to 2016
Source: Data processed

Figure 3 describes the decline in the exchange rate in 2010, India decreased -14.25%, Brazil decreased -14.97%, Russia decreased -8.68%, Indonesia decreased -4.35%, (except China rose -0.58%). The main task of Bank Indonesia is now becoming more focused because it has a single target.

However, in the implementation of this task is quite heavy considering Bank Indonesia cannot fully control the stability of the rupiah. It has only the ability to influence inflationary pressures from the demand side, while supply-side inflation pressure is entirely out of the question. The interest rate channel plays a vital role in the monetary policy transmission mechanism in maintaining inflation. (Wulandari 2012). Transmission problems, as well as monetary policy shocks, tend to affect

slower output for more extended periods (Hsing, 2015).

Therefore this paper reviews more how the transmission of monetary policy in emerging market countries. According to the researchers, there are problems in maintaining different economic stability in some countries especially emerging market countries where the value is not stable or still fluctuating.

The Asian economic crisis of 1997 stemming from the disruption of exchange rate stability while the global financial crisis stemmed from the asset price aspect (financial) or stock. Transmission of monetary policy in some countries has a different pattern to the price stability (inflation). The Russian state is still stable in controlling price stability through the maintenance of export stability. The Indian state is still stable in controlling price stability through the maintenance of exchange rate stability. The Chinese state is still stable in controlling price stability through the maintenance of exchange rate stability and exports. Brazil is still stable in controlling price stability through the maintenance of exchange rate stability. The Indonesian state is still stable in controlling price stability through the maintenance of export stability.

In economic control, the monetary policy framework is performed by an approach based on the price of monetary value. Monetary policy with the monetary price pricing approach can have a practical effect on inflation rate control through rate and exchange rate channel (Nguyen, 2015).

Taylor (1995) states that the monetary policy transmission mechanism is the path through which the policy can affect the ultimate goal of monetary policy, national income, and inflation. The monetary policy transmission mechanism occurs through interaction between the Central Bank, banking, and financial sectors, as well as the real sector. The mechanisms can occur through various channels, including direct monetary channels, interest rate lines, credit lines, exchange lines, asset price lines, and expected paths (Pohan, 2008). The interest rate is the key to the monetary transmission mechanism in IS, LM, AD, and AS model. The increase in money stock will lower real interest rates and capital costs as well as increase business investment.

Increased investment will increase aggregate demand. A decrease in the real interest rate will also increase spending on purchases of homes and durable goods. Therefore a decrease in the interest rate due to monetary expansion will increase spending or consumption and aggregate demand. At meager nominal interest rates, monetary expansion will increase expectations of price levels and inflation, consequently the real interest rate down. A decrease in the real interest rate will lower the cost of capital and the cost of holding money, then stimulate business and consumer spending. Increased business and consumer spending will ultimately increase aggregate demand. The flow rate transmission mechanism is shown in the following formula.

$$m \uparrow \rightarrow r \downarrow \rightarrow \pi \uparrow \rightarrow y \uparrow$$
$$m \uparrow \rightarrow p \uparrow \rightarrow r \downarrow \rightarrow \pi \uparrow \rightarrow y \uparrow$$

Where:

m	=	nominal money stock
r	=	real interest rate
p	=	price level expectations
π	=	real investment
y	=	real output of aggregate

Cagan adaptive expectation model starts from the money demand model in the form of exponential function.

$$\frac{M_t}{P_t} = e^{\alpha_0+\alpha_2 R_t} y_t^{\alpha_1} \text{ or}$$

$$\ln \frac{M_t}{P_t} = \alpha_0 + \alpha_1 \ln(y_t) + \alpha_2 R_t + \mu_t \text{ (1.1)}$$

$R_t = r_t + \pi_t$ where rt is the real interest rate, and nominal interest rate substitution [R] with r + π will change the money demand model to:

$$\ln \frac{M_t}{P_t} = \alpha_0 + \alpha_1 \ln(y_t) + \alpha_2\ r_t + \alpha_2\ \pi_t + \mu_t$$

$$\ln \frac{M_t}{P_t} = \lambda + \alpha\ \pi_t + \mu_t \text{.....(2)}$$

Where π_t = inflation expectations, $\lambda = \alpha_0 + \alpha_1 \ln(y_t) + \alpha_2\ r_t$ and $\alpha = \alpha_2$. For example, $\ln(M_t) = m_t$ and $\ln(P_t) = p_t$ equation 1changes to:

$$m_t - p_t = \lambda + \alpha\ \pi_t + \mu_t \text{.....(3)}$$

The Cagan model explains that inflation expectation is an expectation of future price level changes $\Delta p_{t+1} = p_{t+1} - p_t$. Cagan's inflation expectation model is the basis of Milton Friedman's work, and then Friedman calls it an adaptive expectation model:

$$\pi_t - \pi_{t-1} = \rho(\Delta p_t - \pi_{t-1}) \quad 0 \le \rho \le 1 \text{.....(4)}$$

Δp_t as a measure of the actual inflation rate can be smaller or greater than the value of inflation expectations of the previous period. If $\Delta p_t \prec \pi_{t-1}$ the $\pi_t \prec \pi_{t-1}$, if $\Delta p_t \succ \pi_{t-1}$ then $\pi_t \succ \pi_{t-1}$. Equation 3 changes to:

$$\pi_t = \rho\Delta p_t + (1-\rho)\pi_{t-1} \text{.....(5)}$$

$$\pi_{t-1} = \rho\Delta p_{t-1} + (1-\rho)\pi_{t-2} \text{.....(6)}$$

$$\pi_{t-2} = \rho\Delta p_{t-2} + (1-\rho)\pi_{t-3} \text{.....(7)}$$

The iterative process is to equate the second equation to the first and third equations to the second equation of (1.15), so that the actual inflation rate of period [t] is

$$\pi_t = \rho\Delta p_t + (1-\rho)\{\rho\Delta p_{t-1} + (1-\rho)[\rho\Delta p_{t-2} + \rho(1-\rho)\pi_{t-3}]\}$$

$$\pi_t = \rho\Delta p_t + (1-\rho)\rho\Delta p_{t-1} + (1-\rho)^2[\rho\Delta p_{t-2} + \rho(1-\rho)\pi_{t-3}]$$

..... (8)

If equation (1.6) is continued until infinite period then inflation value of period [t] is the weighted average of current inflation and inflation of the previous period.

$$\pi_t = \rho\ \Delta p_t + (1-\rho)\pi_{t-1} \text{.....(9)}$$

The substitution of equations (1.7) to (1.3) and the reverse substitution of a period or [t - 1] results in a money demand model for periods [t] and [t - 1].

$$m_t - p_t = \lambda + \alpha\ [\rho\Delta p_t + (1-\rho)\pi_{t-1}] + \mu_t$$

$$m_{t-1} - p_{t-1} = \lambda + \alpha\pi_{t-1} + \mu_{t-1}$$

$$\pi_{t-1} = \frac{m_{t-1} - p_{t-1} - \lambda - \mu_{t-1}}{\alpha}$$

The substitution of the equation (1.8B) to (1.8A) will result in the money demand model as follows:

$$m_t - p_t = \lambda + \alpha\left(\rho\Delta p_t + (1-\rho)\frac{m_{t-1} - p_{t-1} - \lambda - \mu_{t-1}}{\alpha}\right) + \mu_t$$

$$m_t - p_t = \lambda + \alpha\rho\ \Delta p_t + (1-\rho)m_{t-1} - (1-\rho)\,p_{t-1}$$

$$-(1-\rho)\lambda - (1-\rho)\mu_{t-1} + \mu_t$$

$$m_t - p_t = \rho\ \lambda + \alpha\rho\ \Delta p_t + (1-\rho)[m_{t-1} - p_{t-1}] + \varepsilon_t$$

whre $\varepsilon_t = -(1-\rho)\mu_{t-1} + \mu_t$

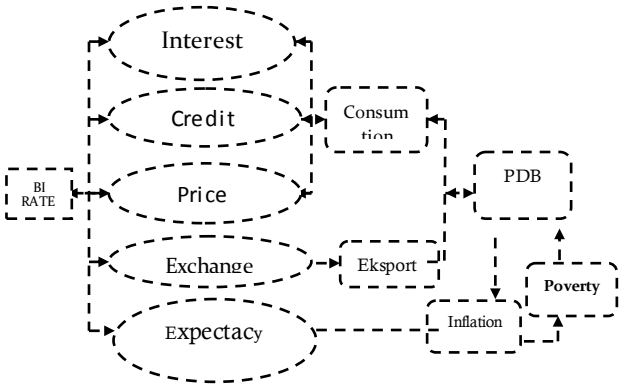

Figure 4. Framework of effectiveness of monetary policy transmission of emerging market countries
Source: Data processed

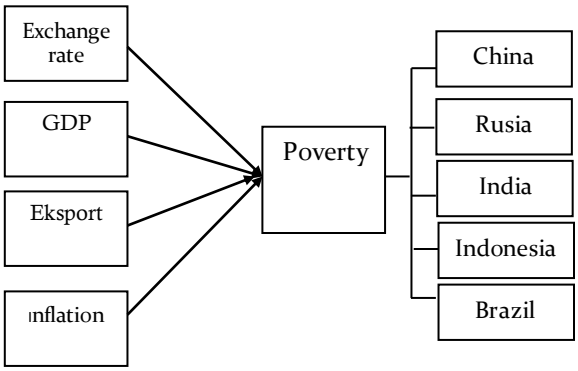

Figure 5. Framework of effectiveness of monetary policy transmission of emerging market countries model panel regression
Source: Data processed

The Cagan model in equation (1.9) can be estimated using the OLS method. If the result of the estimation yields 0 ≤ p ≤ 1 and the value α < 0, then this corresponds to the theory. The fluctuation value [mt - pt] is shown by the coefficient of regression determination of OLS equation (1.9). If the value of the coefficient of determination [R2] is high then there is a high inflation indication or high real money demand fluctuation, otherwise, if the coefficient of determination [R2] is low then there is a low inflation indication or fluctuation of low real money demand. Each variable of monetary policy is very responsive and very influential on the variables of macroeconomic stability research concept can be seen in the following figure 4 and 5.

RESEARCH METHODS

Before The Vector Auto Regression (VAR) methodology is a simultaneous equations model where we have multiple endogenous variables simultaneously. However, each endogenous variable is described by the lag, or past, of its value Other endogenous variables in the model (Gujarati, 2012). According to Rusiadi (2016) if most or all variables have long-term simultaneous relationships, then the VAR model is best used. VAR Analysis Model with the formula:

$$SBI_t = \beta_{10} SBI_{t-p} + \beta_{11} KURS_{t-p} + \beta_{12} EKS_{t-p} + \beta_{13} GDP_{t-p} + \beta_{14} INF_{t-p} + \beta_{15} JPM_{t-p} + e_{t1}$$

JPM = Number of poor people (million p people)
INF = Inflation (%)
EX = Export (million US $)
GDP = Gross Domestic Product (Million US $)
SBI = Interest rate (%)
KURS = Dollar exchange rate per rupiah (Rp / US $)
Et = Random disturbance (random disturbance)
p = length of lag

Befo Panel regression is used because there are cross-section data that is emerging market country and time series data year 2000-2016. Panel Regression is performed by the following formula.

$JPM_{it} = \alpha + \beta 1 INF_{it} + \beta 2 IKURS_{it} + \beta 3 GDP_{it} + \beta 4 EX_{it}$

JPM = The number of poor (million people)

INF = Food price stability (%) Exchange rate

Foreign exchange rate (USD

GDP = Gross domestic product (Million US $)

e = error term

β = regression coefficient

α = constants

i = number of countries (5 countries)

t = the amount of time (15 years)

RESULTS AND DISCUSSION

Data analysis before vector autoregression is to test the stationarity of data. The test results showed that all the variables studied were stationary, both in level, first difference and the second difference.

Table 1. VAR Analysis

	EKS	INF	JPM	KURS	GDP	SBI
EKS(-1)	0.254939	1.150005	-4.3300-05	-0.025151	-0.328313	4.180006
	[0.54440]	[0.11506]	**[-1.86683]**	**[-0.93726]**	[-0.23252]	[0.08683]
INF(-1)	1695.405	-0.267525	0.378842	-51.17420	860.8932	-0.077926
	[0.64760]	[-0.47962]	[**2.92094**]	[-0.34111]	[0.10906]	[-0.28948]
JPM(-1)	562.6487	-0.461955	0.531558	79.07049	4714.305	-0.304917
	[0.14601]	[-0.56265]	[2.78434]	[0.35807]	**[0.40574]**	[-0.76953]
KURS(-1)	-15.17804	0.001670	-0.000886	0.604859	12.94537	0.000929
	[-1.80546]	**[0.93234]**	[-2.12818]	[1.25557]	**[0.51072]**	**[1.07416]**
GDP(-1)	0.095653	-1.520005	4.080006	0.005126	1.081249	-7.670006
	[1.15668]	[-0.86071]	[0.99466]	**[1.08173]**	[4.33642]	**[-0.90259]**
SBI(-1)	-1335.716	-0.736376	0.166775	-19.41058	-5060.450	0.010598
	[-0.31586]	**[-0.87730]**	[0.79607]	[-0.08010]	[-0.39689]	[0.02437]
Akaike AIC	22.91682	6.008955	3.091421	17.19806	25.12412	4.551858
Schwarz SC	23.23635	6.328484	3.410949	17.51759	25.44364	4.871387

Source : Data Processes

Then cointegration testing, as well as all cointegration equations in the long run. For the next stage is the stability test lag structure and the model used already has reliable data stability. Furthermore, VAR analysis is done by lag 1, where the determination of the least lag length with the smallest AIC and SC values. Here is the result of VAR analysis on lag 1.

VAR Model - Substituted Coefficients:

EKS = 0.254938767406*EKS(-1) + 1695.40454399* INF(-1) + 562.648731696* JPM(-1) - 15.1780405738*KURS(-1) + 0.0956530384956* GDP(-1) - 1335.71640041* SBI(-1) + 30259.2152558

INF = 1.14803049603e-05* EKS(-1) – 0.267525468961* INF(-1) – 0.461955426993* JPM(-1) + 0.00166995448489* KURS(-1) - 1.51652104768e-05* GDP(-1) – 0.736376303552* SBI(-1) + 44.8333105966

JPM = - 4.33099493274e-05*EKS(-1) + 0.378841836298* INF(-1) + 0.531558285662* JPM(-1) - 0.000886345499461* KURS(-1) + 4.07500369227e-06* GDP(-1) + 0.166774788393* SBI(-1) + 16.3943131783

KURS = - 0.0251512021062* EKS(-1) – 51.1742041947* INF(-1) + 79.0704909162* JPM(-1) + 0.604859073985* KURS(-1) + 0.00512613003971* GDP(-1) - 19.4105770103* SBI(-1) - 5426.14439638

GDP = - 0.328312903846* EKS(-1) + 860.893233374*INF(-1) + 4714.30510728* JPM(-1) + 12.9453722012* KURS(-1) +

1.08124946222* GDP(-1) - 0.0009 28522080702* KURS(-1)
5060.44950864* SBI(-1) - 7.67493512542e-06* GDP(-1) +
268276.533073 0.0105984488268*SBI(-1) +
SBI = 4.18085951473e-06* EKS(-1) – 25.2426495814
0.0779261268457* INF(-1) -
0.304917498711* JPM(-1) +

Table 2. VAR Recommendation result

Policy Recommendations	EXP	INF	JPM	KURS	GDP	SBI
EXP				-1.87	-0.94	
INF				0.93		-0.88
JPM	-1.87	2.92				
CURRENCY					1.08	-0.94
GDP			0.41	0.51		
SBI				1.07	-0.90	

Source : Data Processes

The following table 2 describes the results of VAR analysis: Exports of emerging market countries are affected by the exchange rate and GDP, exchange rate and interest rate influence inflation of emerging market countries, exports and foodstuff inflation influence the number of poor people in emerging market countries as an indicator of food security, GDP and SBI influence the exchange rate of emerging market countries

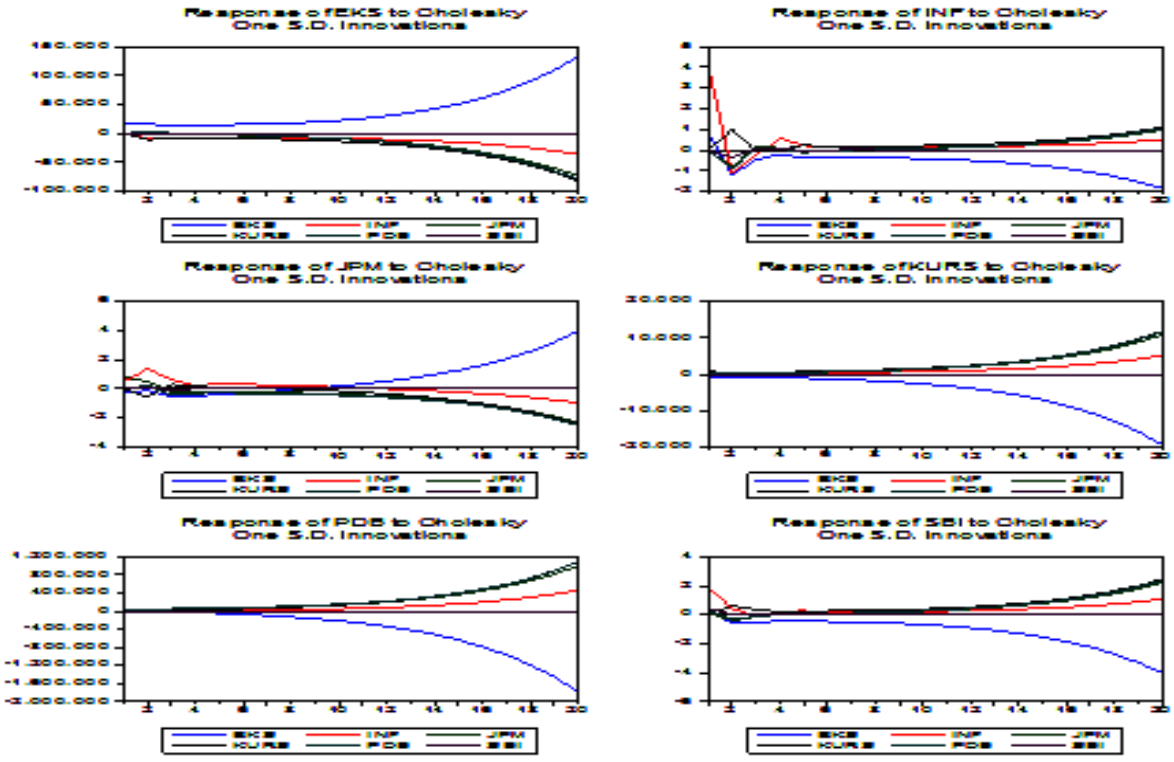

Figure 6. Impulse Response Funcion
Source : Data Processe

GDP of emerging market countries is affected by the number of poor People and the exchange rate, the exchange rate and GDP influence the interest rate of emerging market countries.

Based on the results of VAR analysis known that variables that dominate influencing economic conditions in emerging market countries are the exchange rate that can affect the export, inflation, GDP and interest rate.

Then GDP influences exports, exchange rates, and interest rates. transmission on economic conditions. Exchange rate shocks negatively impact money market Chrigui (2015).

Transmission of exchange rate channels and credit lines is crucial in determining the level of output in Nigeria (Abubabkar, 2013). IRF analysis is used to test the response of variants of each variable to other variables in the short, medium and long-term and the margin of response stability. Here's the IRF result image. The IRF results in the figure above show the surprise effect of each standard deviation of each variable. Brikut summary of response table fromIRFTable 3 shows the response of one variable change to other variables, either \positive, negative and zero or no effect and short-term (1 year), medium term (5 years) and long-term (15 years). Inflation positively responds the movement of the number of poor people within a year. Then within five years the increasing number of poor people will lower exports and GDP and increase inflation, exchange rate, and interest rate. In the long run, the increase in the number of poor will increase exports and interest rates then reduce inflation, exchange rate, and GDP. The result also mentions the monetary policy mechanism of the interest

rate impacting monetary transmission and raises the number of poor people, rising inflation in the short, medium and long-

term. Westermeier's opinion (2010) also mentions the negative impact of rising interest rates will increase prices and the economy in general. Natsir (2011) stating that interest rates function effectively as operational targets.

Maski (2005) which states the reliability of the use of interest rates in the pursuit of policy targets in the form of inflation. The tightening of the interest rate can also protect the Hussain price fluctuations (2014), Hsing (2015) and Hasibuan (2016). Monetary policy should facilitate a favorable investment climate through appropriate interest rates, exchange rate and liquidity and

Table 3. Interagency Standard Deviation Response in the IRF Model

Prediction	EKS			INF			JPM			KURS			GDP			SBI		
	1	5	15	1	5	15	1	5	15	1	5	15	1	5	15	1	5	15
EKS	+	+	+	+	-	-	-	-	+	-	-	-	+	-	-	+	-	-
INF	o	-	-	+	+	+	+	+	-	+	+	+	-	-	+	+	+	+
JPM	o	-	-	o	-	+	+	-	-	+	+	+	+	+	+	+	+	+
KURS	o	-	-	o	+	+	o	+	-	+	+	+	+	+	+	+	+	+
GDP	o	-	-	o	-	+	o	-	-	o	+	+	+	+	+	+	+	+
SBI	o	-	-	o	-	+	o	+	+	o	+	+	o	-	-	+	+	+

Source : FEVD Analysis

money market management mechanisms. (Onyeiwu, 2012). The interest rates are mostly related to price increases. These results provide evidence of the existence of functional interest rates in the economy of Zambia (Sheefeni, 2013). The conventional monetary transmission has a continuation against inflation starting from SBI (Magdalena, 2014). Analysis of Vector Error Variance Decomposition (VEVD) It is used in predicting and controlling monetary policy transmission schemes, as measured by changes in the variance of each variable as a recommendation for the control of other variables. The VEVD model is best used for policy making by the government in this case Bank Indonesia as the monetary authority. Table 5 shows that monetary policy transmission affecting the number of poor people should be controlled in three stages. wherein the short run, the number of poor people is controlled by the transmission and inflation. In the medium term the control of the number of poor people using variables of inflation and exports while in the long term using exports and GDP.

All economic variables of emerging market countries are strongly influenced by the fluctuations of each country's exports, then by food price stability as measured by food price inflation.

Table 5. Results of Vector Error Variance Decomposition

Period	EKS	INF	JPM	KURS	GDP	SBI
Variance Decomposition of EKS:						
1	100.0000	0.000000	0.000000	0.000000	0.000000	0.000000
5	70.28751	13.95834	0.417074	14.51446	0.732856	0.089762
15	54.97795	6.472434	9.783088	18.00939	10.74186	0.015275
Variance Decomposition of INF:						
1	3.913966	96.08603	0.000000	0.000000	0.000000	0.000000
5	10.44574	78.31744	2.806150	4.459615	3.463052	0.508006
15	17.60882	67.92371	3.452220	6.543436	4.035565	0.436251
Variance Decomposition of JPM:						
1	9.753960	25.06324	65.18280	0.000000	0.000000	0.000000
5	15.85968	49.17234	18.66536	8.165378	7.931008	0.206232
15	26.37336	17.63651	21.37216	11.67534	22.84921	0.093424
Variance Decomposition of KURS:						
1	23.83305	41.08948	0.142637	34.93483	0.000000	0.000000
5	51.35550	12.05436	7.556025	21.24564	7.778335	0.010136
15	48.21359	3.702289	14.03269	17.87376	16.17729	0.000381
Variance Decomposition of GDP:						
1	8.906328	20.98911	19.91901	0.110321	50.07524	0.000000
5	11.13534	5.913793	29.65986	7.089997	46.12917	0.071846
15	44.56531	2.685768	16.23547	17.12384	19.38795	0.001663
Variance Decomposition of SBI:						
1	0.865112	90.38344	0.398524	0.304092	2.996761	5.052075
5	16.14535	63.92062	3.188346	9.540399	3.874671	3.330609
15	42.17407	22.36385	8.827043	15.82704	9.836134	0.971869

Source : Output Data, 2017

The high role of export to the economy is also put forward by Agu (2014). The monetary shock will be mitigated by the role of exports in stimulating the economy of the United States Haque (2015).

Table 6. Panel Regression Analysis

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.909487	0.893107	2.138027	0.0365
KURS?	0.018865	0.020500	0.920264	0.3611
INF?	4.110005	5.020005	2.118848	0.0161
GDP?	0.515762	0.110302	4.675889	0.0000
EX?	0.022673	0.021650	1.947238	0.0391
Fixed Effects (Cross)				
_INDIA—C	1.469379			
_BRAZIL—C	0.427925			
_CHINA—C	0.478703			
_RUSIA—C	0.346471			
_INDONESIA —C	0.624420			

Source : Data Processed

Brazil, Russia, India, China and South Africa Controls About 45% of the world economy. In addition to their economy can be seen population and size of the important country. Much of the focus in these countries is based on microeconomics because most former communist countries experience closed decision-making systems (Karimiyan, 2016).

The regression panel is used to test the impact of economic variables on the number of poor emerging market nations, with pooled least square estimates with Fixed Effect Method.

The estimation results are as follows: The result of equation estimation using Fixed Effect Method shows that the number of poor people in emerging market countries is influenced by GDP, food price stability, and export. The results of the discussion in Table 7 states that the factors that most affect the poor in emerging market countries are mostly by the GDP of India, Indonesia, China, and Russia, then exports also affect emerging countries such as Indonesia, China, and Russia. Inflation also causes poor people like India and Brazil. This result is supported by (Kuncoro, 2014) and Agustina (2016) there is a solid relationship between economic growth and poverty which means that when economic growth grows, poverty decreases.

The countries with the most impact on the economic fluctuations on the number of poor people are India with a value of 1.5 coefficiet, then Indonesia with 0.62 coefficient, China with 0.48, Brazil with 0.43 and Russia with a coefficient of 0.35

Substituted Coefficients :

PM_INDIA = 0 + 2.24617170395 + 0.0123124044641*KURS_INDIA + 3.50840656224e-05* INF _INDIA + 0.472311611187*GDP_INDIA + 0.0301612237956*EX_INDIA

JPM _BRAZIL = 0 + 2.9904973937242 + 0.88938223941*KURS_BRAZIL + 0.62795803482 32* INF _BRAZIL + 0.472311611187*GDP_BRAZIL + 0.0301612237956*EX_BRAZIL

JPM _CHINA = 0 + 2.093739372 + 0.94893822453*KURS_CHINA + 0.432048300232 05* INF _CHINA + 0.37847382538 * GDP_ CHINA + 0.978379274497 66 *EX_CHINA

JPM _RUSIA = 0 + 2.24617170395 + 0.0123124044641*KURS_RUSIA + 0.2084065622405* INF _RUSIA + 0.472311611187* GDP_RUSIA + 0.9301612237956* EX_RUSIA

JPM _INDO = 0 + 2.85979583393 + 0. KURS_INDONESIA + 0.3180483927993 * INF _INDONESIA + 0.7143755447* GDP_INDONESIA + 0.9301612237956*EX_INDONESIA

Prasetyo (2010), Putra (2014) said economic growth affects the number of poor people. Hambarsari (2016) and Alfian (2011) also reinforce the assertion that economic growth and inflation are very strong in influencing the number of poor people. Then Adila (2010) and Aswani (2015) say economic growth and exports affect the poor.

CONCLUSION

There is a response from one variable change to another, both positive, negative and zero or no effect and short-term (1 year), medium-term (5 years) and long-term (15 years). Inflation responds the movement of the number of poor people within a year. Then within five years the increasing number of poor people will lower exports and GDP and increase inflation, exchange rate, and interest rate. In the long run, the increase in the number of poor will increase exports and interest rates then reduce inflation, exchange rate, and GDP. Rising interest rates have an impact on monetary transmission and lead to an increase in the number of poor people, both in the short term, medium and long-term. Transmission of monetary policy affecting the number of poor people should be controlled in three stages, wherein the short run, the number of poor people, is controlled by the transmission of variable export and inflation. In the medium term the control of the number of poor people using variables of inflation and exports while in the long term using exports and GDP. All economic variables of emerging market countries are greatly influenced by the fluctuations of each country's exports, then by food price stability as measured by food price inflation. The factors that most affect the poor in emerging market countries are mostly by the GDP of India, Indonesia, China and Russia, and exports also affect the poor as Indonesia, China, and Russia. Inflation also causes poor people like India and Brazil. The countries with the most impact on the economic fluctuations in the number of poor people are India with coefficient 1.5, Indonesia 0.62, China 0.48, Brazil 0.43 and Russia 0.35..

REFERENCES

. Abubabkar. M (2013). A Post Market Reform Analysis Of Monetary Conditions Index For Nigeria. Journal Of Economics And Sustainable Development Vol.4, No.14, 2013

Adisti, Adila (2010) The Influence Of Economic Growth And Export To Poverty In Indonesia (Year 1999-2008). Other Thesis, Faculty of Economics.

Agu. C A, Chibuike (2014). Cross-Border Transmission Of Interest Rate Shocks: A Var Analysis Of The Nigerian Economy.Journal Of Economics And Sustainable Development. Vol.5, No.7, 2014

Agustina, Ira (2016) Analysis of Transmission Mechanism of Monetary Policy Channels Keredit Against Indonesia's Economic Growth. Thesis. University of Jambi.

Alfian, Muhammad (2011) Effectiveness of Monetary Policy Transmission Mechanism on Interest Rate Path. Journal of Media Economics Vol. 19, No. 2, August 2011.

Aswani, J. (2015). Analyzing The Impact Of Global Financial Crisis On The Interconnectedness Of Asian Stock Markets Using Network Science. Indira Gandhi Instite Of Development Reseach, Mumbai. Wp-2015-020

Bittencourt, M, Mwabutwa C.N, Nicola (2016) Evolution Of Monetary Policy Transmission Mechanism In Malawi: A Tvp-Var Approach. Pakistan Economic And Social Review Volume 52, No. 1 (Summer 2014), Pp. 1-14

Chrigui. Z, Mgadmi. N (2015). Monetary Policy's Transmission Channels In Tunisia: Svar Model Validation. Journal Of Business And Management Research, 8 (2015) 189-200

Gujarati, D. N. (2012). Basic Economics. (Translation Interpretation Edition). Jakarta: Erland.

Hambarsari, Dwi Puspa, Kunto Inggit (2016) Analysis of the Influence of Economic Growth, Population Growth and Inflation on Poverty Level in East Java Year 2004-2014. Journal of Economics & Business, pp. 257-282 Volume 1, Number 2, September 2016.

Haque. Q G.M. Ziaul (2015). Cross-Border Transmission Of Interest Rate Shocks: A Var Analysis Of The Nigerian Economy. Journal Of Economics And Sustainable Development.Vol.5, No.7, 2014

Hussain. Z, Asghar .N (2014). The Lags In Effect Of Monetary Policy: A Case Study Of Pakistan Pakistan Economic And Social Review Volume 52, No. 1 (Summer 2014), Pp. 1-14

Hsin. Y (2015). Monetary Policy Transmission And Bank Lending In China And Policy Implications Journal Of Chinese Economics, 2014 Vol. 2, No. 1, Pp 1-9

Karimiyan. A Mohammad Farajnezhad, Sayyed Mahdi Ziaei, Lim Guan Choo, (2016). Credit Channel Of Monetary Policy Transmission Mechanism In Brics. Journal Of Economics And Sustainable Development. Vol.7, No.4, 2016

Kuncoro, Sri. (2014). Analysis of the Influence of Economic Growth, Unemployment and Education Rate on Poverty Level in East Java Province 2009 - 2011.Judi Ilmiah.Fe Muhamadiyah Surakarta

Magdalena. M (2016). Analysis of The Effectiveness of Double Dual Monetary Transmission In Indonesia. Journal of Economics and Finance. Vol.2n No.11)

Maski, Ghozali.I (2005). Study of Effectiveness of Monetary Policy Transmission Paths with Single Inflation Target (Var Approach). Unpublished Dissertation. Malang: Post Graduate Program Universitas Brawijaya Malang.

Natsir, M (2011). Role of Interest Rates In The Mechanism of Monetary Transmission Mechanism In Indonesia. Lecturer Fe & Postgraduate Program Unhalu Kendari. Thesis. Not Published.

Nguyen, V. H. T. And A. Boateng, (2013). "The Impact Of Excess Reserves Beyond Precautionary Levels On Bank Lending Channels In China", Journal Of International Financial Markets, Institutions And Money 26, 358-377

Prasetyo, A.A. (2010). Analysis of Factors Affecting Poverty: Case Study 35 Kabupaten / Kota In Jawa Tengah 2003 - 2007 (Analysis Of Factors Influencing Poverty Rate: Case Study, 35 Districts / Municipalities In Central Java Years 2003 - 2007). (Unpublished Thesis). Semarang: Diponegoro University.

Pohan, Aulia. (2008). Monetary Policy Framework & Its Implementation In Indonesia. Pt. Rajagrafindo Persada. Jakarta.

Son, M.M.D. (2014). Determinants of Poverty in the District of West Java in 2008 - 2012 (Determinants Of Poverty In Districts / Municipalities In West Java Years 2008-2012). (Unpublished Thesis). Depok: University of Indonesia.

Rusiadi, Et-Al. (2016). Research Methods For Management, Accounting And Economic Development, Concepts, Cases And Applications Spss, Eviews,

Amos And Lisrel. Second printing. Medan: Usu Press.

Rusiadi. (2016). Effectiveness Analysis of Inflation Targetting Framework Implementation in Maintaining Economic Stability Indonesia. Scientific Journal of Abdi Ilmu, 104-1014.

Saida Hasibuan (2016). Mechanism of Monetary Policy Transmission through Bi-Day Rate Repo Rate (Bi7drr) As Operational Targets of Monetary Policy and Indonesian Macroeconomic Variables

Senbet. D (2016). Measuring The Channels Of Monetary Policy Transmission: A Factor-Ugmented Vector Autoregressive (Favar) Approach. Journal Of Central Banking Theory And Practice, 2016, 2, Pp. 5-40

Shenglin. N Yuksel Gormez1 And Ben, (2016). Should Practice Simple Central Banking To Help Rmb Internationalizatio. Journal Of Chinese Economics, 2016 Vol. 4. No. 2. Pp. 35-46 (Online)

Sheefeni. Jp, Kalikeka. M, Peyavali. J (2013). Interest Rate Channel And Monetary Transmission In Zambia. Journal Of Emerging Issues In Economics, Finance And Banking (Jeiefb) Volume:2 No.6 December 2013

Taylor, John B. (1995). The Monetary Transmission Mechanism: An Empirical Framework. The Journal Of Economic Perspective. Vol.09, (Number 04), Pp:11-26.

Onyeiwu. C (2012). Monetary Policy And Economic Growth Of Nigeria. Journal Of Economics And Sustainable Development. Vol.3, No.7, 2012

Warjiyo, P And Solikin. (2003). Monetary Policy In Indonesia. No. Kebankscentral Series 6. Ppsk. Jakarta: Bank Indonesia.

Warjiyo, P. (2004). Mechanism of Monetary Policy Transmission in Indonesia. No. Kebankscentral Series 11. Ppsk. Jakarta: Bank Indonesia.

Westermeier. A (2010). The Cost Channel Of Monetary Policy Transmission. Journal Eichenbaum And Evans And Chowdhury, Hoffmann And Schabert.Isue 7.Vo.2.

Wulandari. D, Nora. R.R, Agustin. G (2016) External Shock Analysis Against Monetary and Macroeconomic Indicators of Indonesia

Wulandari, Ries. (2012). Do Credit Channel And Interest Rate Channel Play Important Role In Monetary Transmission Mechanism In Indonesia?: A Structural Vector Autoregression Model. Icibsos 2012. Procedia-Social And Behavioral Sciences (Number 65): 557-563.