Relationship Between Monetary Policy, Fiscal, Country Risk and Macroeconomic Variable in Indonesia

Article *in* International Journal of Economic Research · February 2019

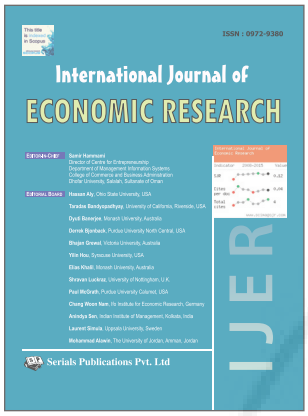
CITATIONS
0

READS
793

4 authors, including:

Ahmad Albar Tanjung
State University of Medan
23 PUBLICATIONS **36** CITATIONS

SEE PROFILE



International Journal of Economic Research

ISSN : 0972-9380

available at http: www.serialsjournals.com

Volume 14 • Number 15 (Part 4) • 2017

Relationship Between Monetary Policy, Fiscal, Country Risk and Macroeconomic Variable in Indonesia

Ahmad Albar Tanjung[1], Saad Afifuddin[2], Murni Daulay[3] and Dede Ruslan[4]

[1]*Corresponding author, Faculty of Economy and Business, Universitas Sumatera Utara, Jl. Prof. Hanafiah, Padang Bulan, Medan Baru, Medan, North Sumatera 20155, Indonesia. Email: albar@unimed.ac.id*

[2,3]*Faculty of Economy and Business, Universitas Sumatera Utara, Jl. Prof. Hanafiah, Padang Bulan, Medan Baru, Medan, North Sumatera 20155, Indonesia*

[4]*Faculty of Economy State University of Medan, Jalan Willem Iskandar, Pasar V Medan Estate Kotak Pos 1589 Medan 2022, Indonesia, North Sumatera*

ABSTRACT

This study is to analyze the relationship of monetary policy, fiscal and country risk on macroeconomic variable in Indonesia. The data used are secondary data from World Bank, BPS, and Indonesia Bank from 1980 to 2014. The estimation method used is error correction model. The study shows that monetary policy which is proxied with the amount of money supply has positive and significant impact on economic growth, while fiscal policy has insignificant impact on inflation, and country risk has significant impact on interest rate and then on inflation.

Keyword: Monetary, Fiscal, Country risk, economic growth.

1. INTRODUCTION

The major goal of economic development in Indonesia is a social welfare for all Indonesian people. This can be attained by a high and continuous economic development and price stability which is indicated by low inflation and sufficient labor supply (M, Widodo, & R, 2008). Some factors that influence economic growth are capital supply, skilled-labor supply, and technology usage (Shaheen, 2013). The government uses fiscal policy to stimulate a high and continuous economic growth by using some instruments such as tax, budget and subsidy that will influence government income and expense to reach the goal of economic growth (Falade & Folorunso, 2015). On the other hand, to attain a low and stable inflation rate Bank of Indonesia as the monetary autority is using the monetary policy in maintaining the inflation. The scope of

monetary policy is all monetary authority activities in increasing and decreasing the money supply (Yunanto & Medyawati, 2015). Considering that the ability of monetary authority is becoming so weak in controlling the amount of money supply, the monetary authority is using monetary instruments, i.e. interest rate to influence the target: price stability (Julaihah & Insukindro, 2004).

The dinamic development of world economy today certainlay creates an interdependent connection between a country and another including Indonesia. An interactive economic activity of Indonesia with other countries brings about goods and service outflow, investment and labors from Indonesia to other countries and vice versa. This will lead to positive impact on world economy. Indonesia's open economy, however, has negative impact: complexity, fluctuation, and high world risk of economy and finance will highly have impact on Indonesia.

Many facts show that during economic crisis in Asia, which started from Thailand, now is quickly on the go to Indonesa. Monetary crisis in Indonesia in the beginning of July 1997 internally led to several things: economic paralysis due to many company shutdowns and increasing number of unemployment. The global financial crisis 2008, which started in America in 2007 named *"suprime crisis"* and spread all over the world including Indonesia, resulted in Indonesia crisis in 2008. To control macro policy direction as well as monetary and fiscal in the future, it is necessary to summarize and analyze the good conduction of one country macro economic policy to other countries by using Mundell-Fleming model (Cui, Fang, & Wang, 2010).

Mundell-Fleming model create an important and extreme assumption; this model assumes that the being-studied model now is a small open economy with a perfect capital flow (Mankiw, 2010). This model shows that countries with open economic system will try hard to adjust their domestic interest rate with the world interest rate so that the capital mobility will run well. However, the interest rate of each country is different from one to another. Consequently, it's better for Mundell-Fleming model to add the level of country risk (Hanif, 2015). Thus, the aim of this paper is to examine fiscal, monetary policy and country risk relationship on economics variable in case of small open economy.

2. REVIEW OF LITERATURE

Monetary policy is all Central Bank efforts or actions in influencing the development of monetary variables (money supply, interest rate, credit and exchange rate) to reach particular economic purpose (Maryatmo, 2004). Fiscal policy is all the actions taken by the government, aiming to influence the course of the economy by increasing government purchases or by cutting taxes (Mankiw, 2010). Jawaid, Ali, & Qadri, (2011) tested the relationship between monetary policy, fiscal, trade and economic growth in Pakistan using annual data from 1981 to 2009 and using the variable of money supply as the proxy of monetary policy, government expense as the proxy of fiscal poligy, and export import compared to GDP as the proxy of open trading. The model used is co-integration and error correction model. The result shows that monetary policy is more effective than fiscal policy. On the other hand, trade policy has no impact on economic growth either in short or long run. Konuki (2000) analyzed the impact of fiscal policy and monetary in short run on aggregate demand using IS-LM model BOP and ECM analysis.

Mundell-Fleming Model is IS-LM model with open economic version by inputting the capital flow as the major component. This model is designed to analyze macroeconomic policy in open economy

(Huh, 1999). The theory clarifies that monetary policy expansion will bring about the increase of country's economic growth.

Country risk is the risk caused by economic and political changes in a country which has impact on and connection with other countries. According to Mankiw (2010) country risk is the risk that the country's borrowers will default on their loan repayments because of political or economic turmoil.

3. METHODS

3.1. Data

The data in this study are annual data from 1980 to 2014 in the form of time series data. Annual data are based on constant values with base year in 2000, except for the data in the form of index values and percentages. The data come from Financial Statistics (IFS) published by Bank Indonesia, Central Bureau of Statistics (BPS). Other data sourced are from International Monetary Fund and World Bank. The data are tested through unit root test and co-integration test, while the methods for estimating equations are using the Two-Step Error Correction Model (ECM) in short run and Ordinary Least Square (OLS) in long run.

The research's operational variable is defined as follows:

1. BI rate (**SBIRI**) is the interest rate of loan given by Bank Indonesia to general banks that have fund problems;
2. Broto Domestic Product (**PDBRI**) which is proxied by Output, is Bruto Domestic Product based on annual constant price;
3. Foreign Commercial Interest Rate (**IRF**), is the data of US loan interest rate;
4. Domestic Save Interest Rate (**RRRPL**), is the data of Indonesia deposit interest rate;
5. Rupiah Exchange Rate (EXR), is the exchange rate of rupiah to dollar;
6. Export (EXPRI), is the data of all Indonesia exports both gas and non gas;
7. Import (IMPRI), is the data of all gas and non gas import;
8. Human capital (HCRI) is all people of 15 years old above who work in a week and graduate from diploma, S1, S2 and S3;
9. Balance Of Payment (BOPRI)**,** the balance of trade transaction payment between Indonesia and other countries proxied from nett export or the deficit of export and import.
10. Inflation rate (**INFRI**), is the data of national inflation rate;
11. Government Expenses (**GE**), is all expenses done by the central government or fund transfer to local governments;
12. Country Risk Rate (**RN**), is the loan risk rate of a country counted by the deficit of Indonesia loan interest rate and the US loan interest rate;
13. Inflation Expectation (**EXINFRI**), is the data of national inflation rate of the previous year;
14. Foreign Economic Growth (**GWJPG**), is the export destination growth of Indonesia, i.e. Japan.

3.2. The Model

This research model is adopted from (Dharmadasa, 2015; Hanif, 2015):

Growth Equation IS:

$$\text{LR: } \log PDBRI_t = \alpha_0 + \alpha_{11}\log(GE_t) + \alpha_{12}\log(HCRI_t) + \alpha_{13}\log(JUBRI_t) + \alpha_{14}\log(EXR_t) + \alpha_{15}BOPRI_t + ECM\_PDBRI_t \quad (1)$$

Government Expense Equation:

$$\log(GE) = \propto_1 \log(PDBRI_t) + \propto_2 \log(JUBRI_t) + \propto_3 \log(EXR_t) + \propto_4 INFRI + ECM_{GE_t} \quad (2)$$

Inflation Equation:

$$INFRI_t = \alpha_1 EXINFRI_t + \alpha_2 \log(JUBRI)_t + \alpha_3 \log(GE)_t + \alpha_4 \log(EXR_t) + \alpha_5 RRRPL_t + ECM\_INFRI_t \quad (3)$$

Money Supply Equation:

$$\log(JUBRI_t) = \alpha_0 + \alpha_1 \log(PDBRI_t) + \alpha_2 \log(GE_t) + \alpha_3 \log(EXR_t) + \alpha_4 INFRI_t + \alpha_5 RRRPL_t + ECM\_JUBRI_t \quad (4)$$

Interest Rate Equation:

$$RRRPL_t = \alpha_0 + \alpha_1 SBIRI_t + \alpha_2 RN_t + ECM\_RRRPL_t \quad (5)$$

Exchange Rate Equation:

$$\log(EXR_t) = \alpha_0 + \alpha_1 \log PDBRI_{t-2} + \alpha_2 INFRI_t + \alpha_3 RRRPL_t + \alpha_4 IRF_t + \alpha_5 \log(IMPRI_t) + ECM\_EXR_t \quad (6)$$

Balance of Payment Equation:

$$\text{LR: } BOPRI_t = \alpha_0 + \alpha_1 \log(EXR_t) + \alpha_2 (\log GE_t) + \alpha_3 GWJPG_t + \alpha_4 SBIRI_t + ECM\_BOPRI_t \quad (7)$$

4. RESULT

The stationary test can be performed by radical unit which is developed by Dickey Fuller. The alternative of Dickey Fuller test is Augmented Dickey Fuller (ADF) which tries to minimize autocorrelation. This test is the regression of first differential of data across legged difference terms, constant, and variable trend. The test result of stationary time series data for all variables can be seen on estimation result as displayed on table.

Table 1
Stationary Test Results

S.No.	*Variable*	*ADF Value*	*Critical Value*)*	*Probability*	*Stationary*
1	SBIRI	–6,446153	–3,646342	0,0000 < 0,01	1st Difference
2	PDBRI	–7,335074	–4,273277	0,0000 < 0,01	2nd Difference
3	IRF	–3,859152	3,661661	0,0061 < 0,01	1st Difference
4	RRRPL	–6,087553	–3,653730	0,0000 < 0,01	1st Difference
5	EXR	–5,017438	–3,646342	0,0003 < 0,01	1st Difference

(*Contd...*)

S.No.	*Variable*	*ADF Value*	*Critical Value*)*	*Probability*	*Stationary*
6	EXPRI	–6,514717	–4,374307	0,0001 < 0,01	1st Difference
7	IMPRI	–5.813516	–3,646342	0,0000 < 0,01	1st Difference
8	HCRI	–4,801618	–6,518845	0,0000 < 0,01	1st Difference*
9	BOPRI	–11,44678	–3,670170	0,0000 < 0,01	2nd Difference
10	INFRI	–4,902452	–3,639407	0,0003 < 0,01	Level
11	GE	–7,612954	–4,356068	0,0000 < 0,01	2nd Difference
12	RN	–6,710979	–3,653730	0,0000 < 0,01	1st Difference
13	EXINFRI	–4,822842	–3,639407	0,0004 < 0,01	Level
14	GWJPG	–8,734947	–3,646342	0,0000 < 0,01	Level

* trend

Source: Authors' estimation using e-views 4.1

From Table 1, it can be shown that there are three stationary data variables on the level: INFRI, EXINFRI and GWJPG, because the value of Augmented Dickey fuller is bigger than Mc Kinnon critical value on the trust value 1 percent. Other variables, however, are not stationary on the level because the statistic value of Augmented Dickey Fuller is smaller than Mc. Kinnon critical value, such as the variables of PDBRI, JUBRI, IRF, EXR, EXPRI, IMPRI, HCRI, GE, RN and SBIRI. The solution to solve the problem of this non-stationary is by performing the test on the level of first difference, and then performing the test of ADF again. Based on the table 5.1 above, it can be seen that the variable of SBIRI, IRF, RRRPL, EXR, EXPRI, IMPRI, HCRI, and RN is stationary on the level first difference because the value of Augmented Dickey Fuller is bigger than the Mc Kinnon critical value at the trust value 1 percent. Meanwhile, the variables of PDBRI, GE, and BOPRI are stationary at 2nd Difference.

5.2.2. Co-integration Test

The co-integration test is aimed at testing whether the resulted residual regression is stationary or not, and to find out whether in the long run there is a connection between the independent and dependent variables (by using Engle-Granger test). The co-integration test can be done as the follow up of unstationary data on the level stage. The result of co-integration test with the tool e-views 4.1 is displayed in Table 2.

Tabel 2
Co-integration test results

No	*Equationi*	*ADF Test*	*Probability*
1	Log(PDBRI)	–5,480484	0,0001*
2	Log(GE)	–5,455882	0,0001*
3	INFRI	–4.742376	0,0005*
4	Log(JUBRI)	–4,688261	0,0007*
5	RRRPL	–4,399683	0,0014*
6	Log(EXR)	–3,893654	0,0055*
7	BOPRI	–3,803348	0,0066*

*meaningful at $\alpha = 1\%$

**meaningful at $\alpha = 5\%$

Source: Authors' estimations using e-views 4.1

Based on Table 2 above, it can be seen that all behavior equations in the research is statistically proven by ADF test approach: cointegrated at 1 percent risk. By this co-integration test result, it can be concluded that the long run equation or ECM is valid to be applied.

5.2.3. Autocorrelation Test

The result of autocorrelation detection by Breusch-Godfrey Serial Correlation LM Test with e-views 4.1 tool is displayed in Table 3.

Table 3
Autocorrelation test results

S.No.	*Equation*	*Probability*	*Conclusion*
1	Log(PDBRI)	0,8952 > 0,01	No autocorrelation
2	Log(GE)	0,9726 > 0,01	No autocorrelation
3	INFRI	0,0354 > 0,01	No autocorrelation
4	Log(JUBRI)	0,0162 > 0,01	No autocorrelation
5	RRRPL	0,2321 > 0,01	No autocorrelation
6	Log(EXR)	0,0867 > 0,01	No autocorrelation
7	BOPRI	0,1088 > 0,01	No autocorrelation

Source: Authors' estimation using e-views Least Square Method, LM test.

Based on Table 3 for serial correlation test, it can be known the value of Obs*R-squared for variable log (PDBRI), log (GE), INFRI, log (JUBRI), RRRPL, log (EXR), BOPRI, and has the probability value bigger than significance level 1% (Prob > 0,01), so it leads to decision to accept H_0. This means that in this model there is no autocorrelation.

Table 4
Results of Long Run and Short Run Model

Dependent Variable	*Independent Variable*	*Long Run*	*Short Run*
Log(PDBRI)	Constant	7,894865*	
	Log(GE)	0,028405***	0,022254***
	Log(HCRI)	0,415211*	0,309322*
	Log(JUBRI)	0,122930*	0,119322*
	Log(EXR)	–0,202201*	–0,093390*
	BOPRI	–2,60E-07***	3,82E-07***
	ECM_PDBRI		–1,028027*
Log(GE)	Constant		
	Log(PDBRI)	0,050032***	2,716534*
	Log(JUBRI)	1,057160*	0,276219***
	Log(EXR)	–0,089133***	0,013867***
	INFRI	–0,005252***	0,015806*
	ECM_GE		–1,012157*

(*Contd...*)

Dependent Variable	*Independent Variable*	*Long Run*	*Short Run*
INFRI	Constant	–198,9129	
	EXINFRI	0,252502***	0,081018***
	Log(JUBRI)	14,47259***	4,900732***
	Log(GE)	10,39017***	2,336967***
	Log(EXR)	–4,358922***	–5,752001***
	RRRPL	1,111660*	1,385366*
	ECM_INFRI		–0,615790*
Log(JUBRI)	Constant	–21,94372	
	Log(PDBRI)	2,009171*	1,868608*
	Log(GE)	0,120200*	0,065106***
	Log(EXR)	0,445501*	0,354316*
	INFRI	0,021397*	0,015516*
	RRRPL	–0,029353*	–0,021916*
	ECM_JUBRI		–0,587267*
(RRRPL)	Constant	–4,598150**	
	(SBIRI)	64,59030*	32,97268**
	RN	0,831097*	1,459605*
	ECM_RRRPL		–0,751673*
log(EXR)	Constant	–2,243998**	
	Log(PDBRI(–2))	3,264394*	0,979123**
	INFRI	0,016985***	0,007890***
	RRRPL	–0,028624**	–0,002826***
	IRF	0,019085***	–0,037293***
	Log(IMPRI)	–0,786777*	–0,189294***
	ECM_EXR		–0,541909*
(BOPRI)	Constant	–13430,62***	
	Log(EXR)	23676,12*	4930,959***
	Log(GE)	–12970,36*	–4040,783***
	GWJPG	224,0008***	–198,7861***
	SBIRI	–107277,9**	–67408,78***
	ECM_BOPRI		–0,592430*

Source: Authors' Estimation using Eviews 4.1

5. DISCUSSION

5.1. Equation of Economic Growth (IS)

Variable of Government Expenses in Indonesia is positively but not significantly influencing Indonesian Economic Growth during the period of research; this is in line with the theory of Mundell-Fleming concept. When the government increase the expenses and decreased the tax, the IS curve moved up (to the right). This IS curve movement would increase Y (PDBRI) and domestic interest rate higher than overseas interest rate. This is in line with a research (Junaidi, 2010) statement that the role of government expenses is still

dominant influencing Indonesia's economy but relatively smaller than other countries. This is also in line with the findings of Attari & Javed (2013), Jiranyakul & Brahmasrene (2007), and Surjaningsih, Utari, & Trisnanto (2012) that the increase of government expenses is positively influencing the Gross Domestic Product (PDB). On the other hand, this test is in contrast with the findings of Devarajan, Swaroop, & Zou (1993) that there is a negative relationship between government expenses and output.

The variable of Human Capital (HCRI) in Indonesia is positively and significantly influencing the economic growth in Indonesia. This test is in line with the theory of Human Capital by Mankiew, Romer, and Weil that one of the factors that influences the output is Human Capital (Romer, 1996). This test is also in line with the findings of Hanushek (2013) that many motivations for human capital policy will be the potential factor for developing countries to increase the economic growth in the future.

The variable of money supply (JUBRI) is significantly influencing Indonesia economic growth. This is in line with the theory in Mundell-Fleming concept (Mankiw, 2010) that explains that if the amount of money supply is increasing the curve of LM will move to the right and lead to smaller domestic interest rate than the world's interest rate, and then the increase of output. This is also in line with the theory of monetarism group, that the revision of real money supply will lead to a more real change of national income. This is in line with the findings of Huh (1999) that if there is an incrase of money supply it will increase the output temporarily. But this finding is in contrast with a research result of Insukrindo & Julaihah (2004) that economic growth doesn't respond the shock of a deviation standard of money supply, which means that monetary expansion by means of the money supply doesn't influence the economic growth.

The variable of the increase of Rupiah exchange rate (EXR) is negatively and significantly influencing Indonesia economic growth. This is in line with the theory in Mundell-Fleming concept that explains that the higher the foreign exchange the less the output. This test result is in line with the findings of Khondker, Bidisha, & Razzaque (2012) that in the long run 10 percents of exchange depreciation will have impact on the 3,2 percents increase of output. In the short run, however, 10 percents of exchange depreciation will have impact of 0,5 percents decrease of GDP.

In the long run the variable of Balance of payment (BOPRI) in negatively but not significantly influencing the economic growth. On the other hand, in the short run the Balance of Payment (BOPRI) is positively but not significantly influencing the economic growth.

5.2. Equation of Government Expenses (GE)

In the long run, the Variable of Economic Growth is positively but not significantly influencing the government expenses, but in the short run the Economic Growth is positively and significantly influencing the government expenses. This is in line with the theory in Mundell-Fleming concept by Mankiw (2010), the findings of Dharmadasa (2015), and the findings of Loizides & Vamvoukas (2005) that the higher the output the higher the government expenses will be.

The variable of the money supply has positive and significant correlation with the government expenses. This is in line with the theory in Mundell-Fleming concept that the more the amount of money supply the higher the government expenses will be. This is in line with the findings of Dharmadasa (2015) that the amount of money supply has positive correlation with and encourage the government expenses.

The variable of exchange rate shows the appreciation of government expenses. This is not in line with the findings of Dharmadasa (2015) that the exchange rate shows the depreciation impact on government expenses.

Variable of inflation has negative but significant correlation with government expenses, but in the short run high inflation will lead to government expenses increase. This is in line with the theory of high government expenses despite the high inflation in the short run is the employee expenses.

5.3. Equation of Inflation (INFRI)

The variable of inflation expectation in both short and long run is positively but not significantly influencing the inflation increase. This is in line with the inflation theory on Phillips curve (Mankiw N.G., 2010) that inflation expectation is one factor that influences parallel inflation. This test is in line with the findings of Fuest & Schmidt (2017) that inflation expectation has positive correlation with the inflation rate. Natsir (2011) also states that inflation expectation by the society will influence the aggregate demand because the impact of real interest rate becomes the consideration of economic factors in determining the demand of consumption and investment; while the impact on aggregate takes place by means of the formation pattern of product price by corporation. If the increase of aggregate demand is not followed by aggregate demand it will encourage the formation of output gap which in turn has impact on the increase of general price (inflation).

The variable of money supply in both short and long run is positively but not significantly influencing the inflation. This test result is in line with the findings of Likukela (2007) and Sutawijaya & Zulfahmi (2012) that in both short and long run the money supply will not be used to control inflation; this is because the correlation between the money supply and inflation is insignificant.

The variable of government expenses has positive and significant correlation with the long run inflation, but in the short run the government expenses cannot be used to control inflation because the correlation between the government expenses and inflation is insignificant.

The increase of exchange rate/depreciation will lead to the decrease of inflation value in the long run but the influence is insignificant. However, the increase of exchange rate/depreciation in the short run will lead to the decrease of inflation value significantly. This test result is in line with the findings of Sutawijaya & Zulfahmi (2012) that if the exchange rate is appreciated Rp. 1 it will increase the inflation variable 0,00427% by assuming that other factors are constant.

The variable of interest rate in the short and long run has positive and significant correlation with inflation. This is in line with Fisher's effect theory, that there is a correlation between inflation and exchange rate, and this has been proven in US economy for the last forty years, which shows that when the inflation is high the interest rate is also high, and when the inflation is low the interest rate is also low (Mankiw N.G., 2010). But this test result is in contrast with the findings of Julaihah & Insukrindo (2004) that the revision of exchage rate is negatively responded by inflation.

5.4. Equation of the Money Supply Amount (JUBRI)

Output variable is positively and significantly influencing the amount of money supply both in short and long run.

The variable of government expenses is positively and significantly influencing the amount of money supply. In the short run, however, government expenses can't be used to control the amount of money supply due to insignificant correlation between government expenses and the amount of money supply.

The increase of exchange value/depreciation will significantly lead to the increase of the money supply both in short and long run.

The variable of inflation is positively and significantly influencing the money supply both in short and long run.

The variable of inflation is positively and significantly influencing the amount of money supply both in short and long run.

The variable of interest rate is negatively and significantly influencing the money supply both in short and long run.

5.5. Equation of Interest Rate (RRRPL)

The variable of Indonesia Bank interest rate (SBRI) positively and significantly has correlation with domestic savings interest rate in long run. In the short run, however, Indonesia Bank interest rate can't be used to control domestic savings interest rate due to the insignificant correlation between Bank Indonesia interest rate and domestic savings interest rate. According to Natsir (2011), the direct impact of BI rate revision is on savings interest rate and bank credit interest rate. This monetary policy started from monetary instrument revision, i.e. BI rate, that will have impact on the progress of PUAB interest rate, savings interest rate and credit interest rate. The process of transmission needs particular time lag. This is also in line with Julaihah & Insukindro (2004) that stated that the monetary contraction through the increase of BI interest rate (SBIRI) will be positively responded by short term interest rate in stock exchange. Bank should immediately response the increase of SBI rate which offers higher interest rate and has risk guarantee.

The variable of country risk has positive and significant correlation with domestic savings interest rate both in short and long run. This is in line with Mundell-Fleming model and theory by Mankiw (2010) and the findings of Ortiz & Rodriguez (2002) i.e. the escalation of a country risk will lead to the increase of interest rate.

5.6. Equation of Exchange Rate (EXR)

The output variable is positively and significantly influencing the increase of exchange rate/depreciation.

The variable of inflation is positively but not significantly influencing the increase of exchage rate/depreciation, but it can't control the exchange rate due to insignificant correlation between inflation and exchange rate. This is in line with the findings of Muchlas & Alamsyah (2015) that the influence of inflation and the fluctuation of rupiah exchange with U.S. dollars is negative. The influence of rupiah exchange fluctuation with U.S. dollars is because of sudden increase and this will allow the reduction of particular country's export ability, and in turn, will reduce the supply of national foreign exchange.

The variable of domestic interest rate is negatively influencing the increase of exchange rate/appreciatioin. This is in line with Natsir (2011) that the interest rate revision will also influence the exchange rate. The increase of domestic will lead to the increase of the interest rate deviation in Indonesia and overseas,

so it will encourage the investors to invest in Indonesia financial instruments like Bank Indonesia Certificate (SBI). If there is foreign investment (capital flow) rupiah will have appreciation. Findings of Maryatmo (2004) stated that in both short and long run the domestic interest rate negatively correlates with foreign exchange rate. If domestic interest rate increases there will be short term funds from overseas; rupiah will much be sold, foreign currency decreases and domestic currency increases.

The variable of foreign interest rate is positively influencing the exchange rate/depreciation. Foreign interest rate can't control the exchange rate due to insignificant correlation between foreign exchange rate and domestic. If foreign exchange rate increases, people will tend to save their money in foreign currency and get higher rate of return, the foreign currency purchase increases and the domestic currency decreases (Maryatmo, 2004).

The variable of import is negatively influencing the increase of exchange rate/appreciatioin. In the short run, however, import can't control the increase of exchange rate/appreciation due to insignificant correlation between import and exchange rate.

5.7. Equation of Balance of Payment (BOP)

The increase of exchange rate/depreciation positively has correlation with Balance of Payment in the long run. In the short run, however, the increase of exchange rate/depreciation can't control Balance of Payment due to insignificant correlation between the exchange rate and Balance of Payment.

In the long run, the variable of government expenses has negative and significant correlation with Balance of Payment. The increase of government expenses in the short run, however, can't control Balance of Payment due to insignificant correlation between government expenses and Balance of Payment.

The variable of Japanese economic growth has positive correlation with balance of payment. In both short and long run, however, this growth can't control balance of payment due to insignificant correlation between Japanese economic growth with balance of payment.

The variable of BI interest rate has negative and significant correlation with balance of payment in the long run. In the short run, however, BI interest rate can't control balance of payment due to insignificant correlation between them.

6. CONCLUSION

This research is empirically testing the impact of monetary and fical policy, and country risk on macro variables of Indonesia economy using annual data of 1981-2014. The money supply and interest rate are used as the proxy of monetary policy; government expenses is used as the proxy of fiscal policy. The result shows that monetary policy is positively and significantly influencing the economic growth, and fiscal policy is positively but not significantly influencing the economic growth. The interest rate is positively and significantly influencing the inflation, and government expense is positively but not significantly influencing the inflation. Country risk is positively and significantly influencing the interest rate. In line with mentioned findings above, it is suggested to policy makers to focus on applying policies to secure economic growth and stability. It is also recommended to include the variable of tax, as well as non-economic variables such as political stability and corruption, to see the country risk impact on a country's economy.

References

Attari, M. I. J., & Javed, A. Y. (2013). Inflation, Economic Growth and Goverment expenditure of Pakistan:1980-2010. *Procedia Economics and Finance*, *5*(13), 58–67. https://doi.org/10.1016/S2212-5671(13)00010-5

Cui, R., Fang, W., & Wang, W. (2010). Analysis of the Coordination of International Policies Based on the Mundell-Fleming Model. *International Journal of Business and Management*, *5*(9), 188–195.

Devarajan, S., Swaroop, V., & Zou, H. (1993). What Do Governments Buy ? The Composition of Public Spending and Economic Performance. *Public Economics World Bank*, (WPS 1082), 40.

Dharmadasa, p. D. C. S. (2015). *An Empirical and Quantitative Analysis on Monetary and Fiscal Policy Interaction in a Developing Country : the Case of Sri Lanka*. Saga university.

Falade, O. E., & Folorunso, B. A. (2015). Fiscal and Monetary Policy Instruments and Economic Growth Sustainability in Nigeria. *American Journal of Economics*, *5*(6), 587–594. https://doi.org/10.5923/j.economics.20150506.04

Hanif, M. (2015). Model Mundell-Fleming Dalam Sistem Perekonomian Kecil dan Terbuka (Sebuah Tinjauan Teoritis) Working Paper In Economics. Retrieved February 20, 2015, from http://id.scribd.com/doc/102960740/Model-Mundell-Fleming-dalam-Sistem-Perekonomian-Kecil-dan-Terbuka#scribd

Huh, H. (1999). 19_mundell fleming australia.pdf. *Applied Economics*, (31), 397–407.

Jawaid, S. T., Ali, N., & Qadri, F. S. (2011). Monetary-fiscal-trade policy and economic growth in Pakistan: Time series empirical investigation. *International Journal of Economics and Financial Issues*, *1*(3), 133–138.

Jiranyakul, K., & Brahmasrene, T. (2007). the Relationship Between Government Expenditures and Economic Growth in Thailand. *Journal of Economics and Economic Education Research*, *8*(1), 93–103. Retrieved from http://search.proquest.com/docview/215469553?accountid=12528%5Cnhttp://monash-dc05.hosted.exlibrisgroup.com/openurl/MUA/MUL_SERVICES_PAGE?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&genre=article&sid=ProQ:ProQ:abiglobal&atitle=THE+RELATIO

Julaihah, U., & Insukindro. (2004). Analisis Dampak Kebijakan Moneter terhadap Variabel Makroekonomi di Indonesia. *Buletin Moneter Ekonomi Dan Perbankan*, 323–341.

Khondker, B. H., Bidisha, S. H., & Razzaque, M. A. (2012). The Exchange Rate and Growth: An empirical Assessment on Bangladesh. *Working Paper International Growth Centre (IGC)*, (October), 51.

Konuki, T. (2000). The effects of Monetary and Fiscal Policy on Aggregate Demand in a Small Open economy: An Application of the structural error Correction Model. *IMF Working Paper*, 24.

Likukela, M. (2007). *An Econometrics Analysis of the Determinants of Inflation in Namibia*. The University of Namibia. https://doi.org/10.11648/j.jwer.20140306.12

Loizides, J., & Vamvoukas, G. (2005). Goverment Expenditure And Economic Growth: Evidence From Trivariate Causality Testing. *Journal of Applied Economics*, *VIII*(1), 125–152.

M, A. K., Widodo, p. R., & R, G. S. (2008). *dalam Kerangka Inflation Targeting di Indonesia*. Jakarta: Pusat Pendidikan dan Studi Kebanksentralan (PPSK) Bank Indonesia.

Mankiw, N. G. (2010). *Macroeconomics* (Seventh ed). United States of America: Worth Publishers.

Maryatmo, R. (2004). Dampak Moneter Kebijakan Defisit Anggaran Pemerintah Dan Peranan Asa Nalar Dalam Simulasi Model Makro-Ekonomi Indonesia. *Buletin Ekonomi Moneter Dan Perbankan*, 297–322.

Shaheen, R. (2013). *An empirical evaluation of monetary and fiscal policy in Pakistan*. Loughborough University.

Surjaningsih, N., Utari, G. A. D., & Trisnanto, B. (2012). Dampak kebijakan fiskal terhadap output dan inflasi. *Buletin Ekonomi Moneter Dan Perbankan*, 389–420.

Sutawijaya, A., & Zulfahmi. (2012). Pengaruh Faktor-Faktor Ekonomi Terhadap Inflasi di Indonesia. *Jurnal Organisasi Dan Manajemen*, *8*(2), 85–101.

Yunanto, M., & Medyawati, H. (2015). Fiscal Policy and Monetary Policy : Sensitivity Analysis, *6*(2), 79–84. https://doi.org/10.7763/IJTEF.2015.V6.447