BUILDING ECONOMICS EQUILIBRIUM MODEL IN INDONESIA TOWARD MACROECONOMIC VARIABLES, *NEW CONSENSUS MACROECONOMICS* APPROACH

Marselina
Economic and Business Faculty , Lampung University
Indonesia

Abstract

Management of debt and budget deficit in Indonesia is based on ACT No 17 of 2003 and Government Regulation no 23 of 2003, in which government set maximum limit on government debt of 60 percent of GDP and maximum limit on budget deficit of 3 percent. The weaknesses of this concept is that it does not describe when government is supposed to do the policy deficit, balanced, or surplus budget, as long as GDP increases, government debt can be added, regardless of whether the economy still needs or not. Debt burden make fiscal space is limited. It is important to build a equilibrium model to control debt and budget deficit Using New Consensus Macroeconomic (MKB) school to make optimal decision through inter temporal choices using Arestis Model. By adding debt stabilizing deficit variable,model was estimated by VECM.It was found that deficit debt stabilizer for a long term, gives positive impact on output gaps, the level of prices, exchange rates, current account and primary budget deficits but it has no impact on the level of interest rates. Conversely, in a short term, debt deficit stabilizer gives positive impact toward output gap, exchange rate and the primary deficit budget but it does not significantly influence interest rates, the level of price, and current account.

Key word: fiscal rule, fiscal sustainability, debt stabilizing deficit and VECM

Introduction

Management of debt and budget deficit in Indonesia is based on ACT No 17 of 2003 and Government Regulation no 23 of 2003, in which government set maximum limit on government debt of 60 percent of GDP and maximum limit on budget deficit of 3 percent. The weaknesses of this concept is that it does not describe when it is supposed to do the policy deficit, balanced, or surplus budget. As long as GDP increases, government debt can be added, regardless of whether the economy still needs or not it is caused fiscal space limited. Yet Indonesia has experienced this kind condition in 1997, where the ratio of the government debt, was 89 percent of GDP, that restraints the economic growth to -13, 2 percent. Having those experiences, another concept of debt management is required and budget deficit able to execute the fiscal sustainability and economic stability in the long run.

One of the debt management concepts and budget deficit oriented in steady state is debt stabilizing deficit, which is the fiscal rule concept that maintaining the level of budget deficit that able to maintain the stabilization of the government debt (steady state). The concept of maintaining this stabilization of the debt is known as debt stabilizing deficit. The advantage of this concept according to Rahmani (2009) and Mitchell *et al.,* (1999) is that the fiscal can be sustained. The question is if this conceptisimplemented, how can it influences the performance of the macroeconomic in Indonesia?

Theoretically and empirically find that the budget deficit influences the macroeconomic performance. Ballassone (2005)*,* for instance finds that the elevating of budget deficit will increase the aggregate and to encourage economic growth. Sargent and Wallace state that in a long run, budget deficit will influence inflation, but not for short run.

Metin (1998) finds that in Turkey when budget deficit is increased it increases the inflation and decreases the domestic revenue. Cebula (1997) describes that in the long run, budget deficit will influence the interest rate but not in the short run. As well as Laubach (2005) finds that when the increase is 1 percent of budget deficit the interest rate will increase 25-30 point base in the long run. The connection between budget deficit and interest rate is observed by Beare (1978). He found that the increase of budget deficit through the sale of bonds will increase the interest rate in the country. Burney (1992) and Bernheim (1988) found that twin deficit, the condition of economy experiences the increasing of budget deficit which will drive the increasing of the real domestic exchange rate. It is required to conduct a research of building against the macroeconomic performance in Indonesia.

The school of thought of this study is by utilizing the idea of New Consensus Macroeconomic (NCM). NCM is the latest development of newest macroeconomic concept,thatis the convergence of New Keynesian and Business Cycle Theory. Aspects attach to the NCM relatively is in accordance with the economy in Indonesia. *First,* economic is facing imperfect market competition.*Second,* the economy in Indonesia often experience shock particularly from supply shock such as disaster, technology development, disturbance of goods distribution, demonstration of. *Third*, agent makes a inter temporal choices decision using some relevant information. *Fourth,* the economy Is facing sticky price. *Fifth,* monetary policy in Indonesia implements Taylor Rule to maintain the stabilization of price through the determination of interest rate target and inflation.

The objective of this research is, *first,* to estimate the effect of implementing the debt stabilizing deficit model against the macroeconomic indicators in Indonesia such economic output gap, level of domestic price, domestic interest rate, exchange rate, balance of current account and budget primary deficit in Indonesia; *second,* to estimate the pattern of output gap response, domestic price level, domestic interest rate, exchange rate, balance of current account and budget primary deficit when facing shock. The contribution of this research is to give the alternative model of fiscal policy to manage deficit and government debt that can actualizing the sustainability of fiscal and economic growth in the long run.

Literature Review

This study uses the thinking of New Consensus Macroeconomics (NCM) school. The terminology of NCM conceptually similar to New Neoclassical Synthesis (NNS), but the use of the terminology of NCM is used by Tcherneva(2008) and Arestis (2009), while the terminology of NNS is used by Good friend and King (2002), Zouache (2004) and Gieshe and Wagner (2007). NCM is the convergence between the New Keynesian and Real Business Cycle Theory. If the terminology of New Neoclassical Synthesis (NNS) is used, then the thinking tends to use Real Business Cycle Theory that more to use the rationality of decision of the economic and market actors in facing the shock of supply. If New Consensus Macroeconomic (NCM) is used, the thinking tends to use the New Keynesian that put the role of the government.
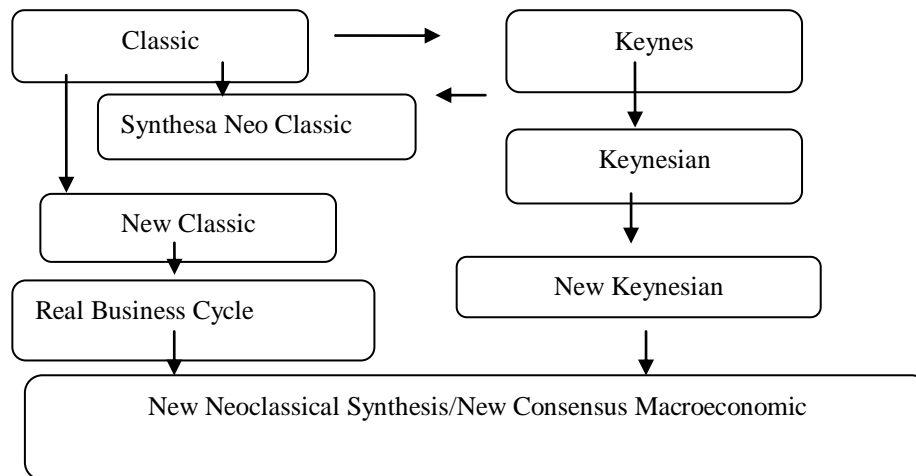
Source: Insukindro (2012)
Figure 1. New Consensus Macroeconomic Among Other Economic Thought

NNS principles are dynamic model, representative agent, general equilibrium and empiric verification. The initial NCM is developed by Giese and Wagner (2007) by building IS-LM-IA model in a closed economy in monetary policy domination. The economy is assumed of three blocks, finance block, investment block and consumption block and stock. Further model development conducted by Tcherneva (2008) by adding the government expenditures variable on IS equation. NCM thinking model continued by Arestis (2009) but by re-subtracting the role of fiscal policy. In principle, the NCM thinking contains two main elements; optimization between time and the importance of fiscal policy derives from New Keynesian thinking as well as the decision of looking forward price setting as the core of the thinking of the Business Cycle Theory. Those two elements put into a dynamic model to describe the real economic fluctuation. The economic actors counter imperfect market competition or incomplete market countering the sticky price. This sticky price indicates that the price experiences adaptation but slow.

Arestis Model.
Arestis Model (2009) develops NNS thinking but in open economy The open economy aspects is added in Arestis model. Arestis model re-negate the role of fiscal policy and fiscal policy seen in the magnitude of output gap equation. Monetary authority uses interest rate policy to control inflation and exchange rate. Arestis model consists of 6 equations reduced forms as follows:

1. $Y_{gt} = a_0 + a_1 Y_{gt-1} + a_2 E_t(Y_{gt+1}) + a_3[R_t - Et(P_{t+1})] + a_4(rer)t + s_1$
2. $P_t = b_1 Y_{gt} + b_2 P_{t-1} + b_3 E_{t(}P_{t+1}) + b_4 [E_{t(}P_{wt+1}) - E_t \Delta(er)_t] + s_2$
3. $R_t = (1 - c_3)[RR^* + Et(P_{t+1}). + c_1.Y_{gt-1} + c_2(P_{t-1} - P^*)] + c_3.R_{t-1} + s_3.$
4. $(rer_t) = d_0 + d_1 [[R_t - Et(P_{t+1})] - [(R_{wt} - E_(P_{wt+1})]] + d_2.(CA)_{t+} d_3 E(rer)_{t+1} + s_4$
5. $(CA)t = e_0 + e_1(rer)t + e_2.Y_{gt} + e_3 Y_{gwt} + s_5$
6. $er_t = rer_t + P_{wt} - P_t$

The fiscal policy only seen in the magnitude in the equation of aggregate demand. In order to focus on fiscal policy in the economy, model was modified by adding fiscal policy, debt stabilizing deficit variable, which is constructed by Favero and Monacelli (2005) as $d_t^* = -\frac{(i_t - g_t)}{(1 + g_t)} b_{t-1}$.

Fiscal Sustainability

The sustainability of fiscal according to Edwards (2003) is a condition where the government able to maintain its expenditure, tax and other fiscal policy in the long term without any doubt of any default on some of its obligations. Meanwhile according to the Department of Finance (2009:89), the sustainability of fiscal is a condition where State Budget dynamically able to conduct its function as catalyst and stabilizing of economy and able to meet various expenditure requirement or obligation safely in the long term.

Steady State for Government Debt

To set of fiscal sustainability, government debt must be maintained. According to Farmer (2002:311), if government debt will stable for every year government debt this year must equal to last year. The equation is as follows:

$$B_t = (r . B_{t-1}) + B_{t-1} + (G_t - T_t)$$
$$B_t = (1 + r)B_{t-1} + (G_t - T_t)$$

In obtaining the amount of real government debt, consequently the above equation divided with present output level as follows:

$$\frac{B_t}{Y_t} = 1 + r\left(\frac{B_{t-1}}{Y_t}\right) + \frac{G_t - T_t}{Y_t}$$

$$\frac{B_{t-1}}{Y_t} = \left(\frac{B_{t-1}}{Y_{t-1}}\right)\left(\frac{Y_{t-1}}{Y_t}\right) \text{ dan } \frac{Y_{t-1}}{Y_t} = \frac{1}{(1 + g)}$$

$$\frac{B_t}{Y_t} = \left(\frac{1 + r}{1 + g}\right)\frac{B_{t-1}}{Y_t} + \frac{G_t - T_t}{Y_t}$$

If $\frac{B_t}{Y_t}$ is b_t, $\frac{B_{t-1}}{Y_t}$ and $\frac{Y_{t-1}}{Y_t} = \frac{1}{(1+g)}$ is budget primary deficit, consequently government budget equation is: $\frac{B_t}{Y_t} = \left(\frac{1+r}{1+g}\right)\frac{B_{t-1}}{Y_t} + \frac{G_t - T_t}{Y_t}$

Government in governing debt will depend on the payment of debt interest expense, level of the economic growth as well as the consideration of the condition of budget primary deficit incurred. According to Farmer (2002:311), if or debt interest burden is higher than economic growth as the result government debt will increase, but if the debt interest expense lesser than economic growth or consequently government debt ratio will decrease.

Model and Modification

This study is deductive research. This study examines the implementation of NCM as economic thinking in a common equilibrium. Some of the modified model which conducted and using some assumption, finally the equation model in this research is as follows:

IS $y_t^d = a_0 + a_1 r_t^d + a_2 d_t^* + a_3 e_t + a_4 E[y_{t+1}^d] + \varepsilon_{1t}$

IA $p_t^d = b_1 y_t^d + b_2 d_t^* + b_3\{E[p_{t+1}^d] - E[p_{t+1}^w]\} + \varepsilon_{2t}$

MP $r_t^d = c_0 + c_1 y_t^d + c_2 E[p_{t+1}^d] + c_3 d_t^* + c_4 r^* + \varepsilon_{3t}$

Exchange Rate $e_t = f_0 + f_1[r_t^d - r_t^w] + f_2 d_t^* + f_3 CA_t + f_4 E[e_{t+1}] + \varepsilon_{4t}$

Current Account $CA_t = h_0 + h_1[y_t^d - y_t^w] + h_2 d_t^* + h_3 e_t + \varepsilon_{5t}$

Fiscal Policy $\bar{d}_t = j_0 + j_1 y_t^d + j_2 d_t^* + \varepsilon_{6t}$

Debt Stabilizing Deficit $\quad d_t^* = -\frac{(i_t - g_t)}{(1 + g_t)} b_{t-1}$

Short run model:

$\Delta_4 y_t^d = \alpha_0 + \alpha_1 \Delta_4(r_t^d) + \alpha_2 \Delta_4(d_t^*) + \alpha_3 \Delta_4(e_t) + \alpha_4 \Delta_4(E[y_{t+4}^d]) + \alpha_5 \, ect(-4)$

$\Delta_4 p_t^d = \beta_1 \Delta_4(y_t^d) + \beta_2 \Delta_4(d_t^*) + \beta_3 \Delta_4\{E[p_{t+4}^d] - E[p_{t+4}^w]\} + \beta_4 \, ect(-4)$

$\Delta_4 r_t^d = \gamma_0 + \gamma_1 \Delta_4(r_t^*) + \gamma_2 \Delta_4(y_t^d) + \gamma_3 \Delta_4(E[p_{t+4}^d]) + \gamma_4 \Delta_4(d_t^*) + \gamma_5 \, ect(-4)$

$\Delta_4 CA_t = \varphi_0 + \varphi_1 \Delta_4[y_t^d - y_t^w] + \varphi_2 \Delta_4(d_t^*) + \varphi_3 \, \Delta_4(e_t) + \varphi_4 \, ect(-4)$

$\Delta_4 \bar{d}_t = \vartheta_0 + \vartheta_1 \Delta_4(y_t^d) + \vartheta_2 \Delta_4(d_t^*) + \vartheta_3 \, ect(-4)$

Where:

y_t^d is output gap

r^d is interest rate

r^* is policy interest rate

e is rupiah exchange rate against euro

p^d is domestic price level

ca is current account

d^* is debt stabilizing deficit

$\bar{d}$ is primary budget deficit

$[r_t^d - r_t^w]$ is domestic interest rate balance with the interest rate of European Union

$[y_t^d - y_t^w]$ is domestic output gap with output average in Europe Union

$(E[y_{t+4}^d])$ is output gap expectation

$(E[e_{t+4}])$ is expectation rupiah exchange rate against euro currency

$\{E[p_{t+4}^d] - E[p_{t+4}^w]\}$ is balance between domestic price expectation with average price expectation in Europe Union

$ECT(-4)_{is}, ECT(-4)_{ia}, ECT(-4)_r, ECT(-4)_e, ECT(-4)_{ca}, ECT(-4)_{dt}$ are

Error correction term

$\alpha_0, \gamma_0, \varphi_0, \delta_0, \vartheta_0$ are constant, $i_0 > 0$

$\alpha_1, \alpha_2, \alpha_3, \alpha_4, \beta_1, \beta_2, \beta_3, \gamma_1, \gamma_2, \gamma_3 \gamma_4, \varphi_1, \varphi_2, \varphi_3, \varphi_4, \delta_1, \delta_2, \delta_3, \vartheta_1, \vartheta_2$ are coefficient elasticity independent variable independent to dependent variable

Four logic expectation variable are estimated using its Fitted Value. Unit root test is conducted using ADF test and Phillips Perron Test. The unit root test on error term is also used in this step to make sure that there are no problems in heteroskedasticity and autocorrelation (I(0). In order to examine whether there is long term relation between variables that co-integration test has to be conducted with Johansen cointegration approach. If the whole variables have already the same grade of integration, built up model by Vector Error Correction Model (VECM). VECM according to Boschi (2005); to analyze long term and short term variables behavior in dynamic equation system model. In order to process VECM this study used Two Stage Least Square (2SLS).Simulation conducted by converting debt stabilizing deficit magnitude (dt) is (+/-) 1 percent on each equation. Assumed that other variables considered constant. The simulation result on each equation its response pattern is observed.

Result

At Table 1.1. there are 13un-stationer variables. To make all variabel stasioner, we create first difference. Using ADF test and PP test result indicate that all variables stationer at I(1). This indicates that there is the probability of long term relationship between variable in the formatted model.

Table 1. Unit Root Test Approaching ADF test dan PP Test.

Variabel	Simbol	ADF Test		PP test	
		I(0)	I(1)	I(0)	I(1)
Output Gap	y_t^d	-2,9972	-3,9590*	-8,6423*	-16,2279*
Interest Rate	r_t^d	-1,3785	-2,6500*	-0,9965	-3,0101*
Debt Stabilizing Deficit	d^*	-3,9362*	-5,3187*	-5,1423*	-11,5607*
Exchange Rate	er_t	-3,2113*	-4,4016*	-3,9242*	- 7,8070*
Price domestic	p_t^d	-1,5516	-4,6102*	-2,5658	-6,7698*
Interest rate Policy	r_t^*	-1,9442	-3,4172*	-1,3490	-2,9566*
Current Account	CA_t	-2,4219	-3,7250*	-4,1901*	-9,8270*
Primary Deficit	$\overline{d_t}$	-2,3820	-4,2079*	-5,5203*	-7,5966*
Output Gap in Euro Union	$[y_t^w]$	-4,9214*	-3,6536*	-6,5088*	-17,3570*
Interest rate (Libor)	$[r_t^w]$	-1,4673	-2,2313*	-1,8254*	-5,5811*
Price in europe union expectation	$E[p_{t+1}^w]$	-0,2292	-3,2004*	-0,6562	-7,9090*
Domestic Price expectation	$E[p_{t+4}^d]$	-1,6918	-4,2580*	-2,8389	-8,2891*
Nominal Domestic Exchange Rate Expectation	$E[r_{t+4}^d]$	-3,1693	-4,3693*	-6,0497*	-8,5462*
Output Gap Expectation	$E[y_{t+4}^d]$	-2,5249	-3,2731*	-8,6562*	-8,5462*
Domestic output gap with output average in Europe Union	$[y_t^d - y_t^w]$	-3,4228*	-3,0650*	-9,3520*	-26,7115*
Domestic interest rate balance with the interest rate of European Union	$[r_t^d - r_t^w]$	-2,2793	-3,0311*	-1,9256	-4,0212*
Balance between domestic price expectation with average price expectation in Europe Union	$\{E[p_{t+4}^d] - E[p_{t+4}^w]\}$	-0,99596	-2,2528	-1,2515	-12,0963*

Table 2 indicates the result of co-integration test with Johansen Co-integration approach.

Table 2. Johansen Cointegration Test

Agregat Demand Equation (IS)

Ho	H1	Trace Statistics	5 % Critical Value	Max-Eigen Statistic	5 % Critical Value
r=0	r=1	123,8841*	88,8038	53,4055*	38,3310
r≤1	r=2	70,4785*	63,8761	29,6995	32,1183
r≤2	r=3	40,7790	42,9152	19,2245	25,8232
r≤3	r=4	21,5545	25,8721	15,2292	19,3870
r≤4	r=5	6,3252	12,5179	6,3252	12,5179

Agregat Supply Equation (IA)

Ho	H1				
r=0	r=1	120,9358*	63,8761	67,4777*	32,1183
r≤1	r=2	53,5812*	42,9152	27,7295*	25,8232
r≤2	r=3	25,7285	25,8721	20,7723*	19,3870
r≤3	r=4	4,9561	12,5179	4,9561	12,5179

Monetary Policy Equation (MP)

Ho	H1	Trace Statistics	5 % Critical Value	Max-Eigen Statistic	5 % Critical Value

r=0	r=1	148,4161*	88,8038	53,7393*	38,3310
r≤1	r=2	94,6766*	63,8761	46,8366*	32,1183
r≤2	r=3	47,8400*	42,9152	21,.4729	25,8232
r≤3	r=4	26,3671*	25,8721	17,7882	19,3870
r≤4	r=5	8,5788	12,5179	8,57887	12,5179
Exchange Rate Equation (E)					
r=0	r=1	136,4804*	76,9727	81,4144*	34,8058
r≤1	r=2	55,0659*	54,0790	29,8823*	28,5880
r≤2	r=3	25,1836	35,1927	19,7852	22,2996
r≤3	r=4	5,3984	20,2618	3,8075	15,8921
r≤3	r=4	1,5908	9,1645	1,5908	9,1645
Current Account Equation (CA)					
r=0	r=1	68,6894*	63,8761	32,4139*	32,1183
r≤1	r=2	36,.2754	42,9152	25,9973*	25,8232
r≤2	r=3	10,2781	25,8721	8,4769	19,3870
r≤3	r=4	1,8011	12,5179	1,8011	12,5179
Fiscal Policy Equation (FP)					
r=0	r=1	81,0397*	42,9152	42,4538*	25,8232
r≤1	r=2	38,5859*	25,8721	25,4541*	19,3870
r≤2	r=3	13,1317*	12,5179	13,1317*	12,5179

The result obtained that each equation in the model has at least one long term relation. Table 3. Indicates that the result of unit root test at error terms in each equation using *ADF-Test.* The result shows that *all error terms are on stationer level I*(0), it means the model are not facing heteroskedasiticity and auto-correlation problem.

Table 3. Unit Root Test at Error Term using *ADF test*

Equation	Symbol	ADF Test	
		I(0)	Prob
Output Gap	y_t^d	-5,9494	0,0000
Inflation Adjustment	p_t^d	-7,3768	0,0000
Interest Rate (monetary policy)	r_t^d	-3,3493	0,0083
Exchange Rate	er_t	-6,2113	0,0000
Current Account	CA_t	-4,1010	0,0024
Primary Budget Deficit (fiscal policy)	$\overline{d_t}$	-3,8266	0,0053

In short term model the changing of dependent variable is not only described by the changing of the independent variable but by the in-stability of the variable of the past as well. The ECT rate and its rate between 0 and negative 1. The ECT rate coefficient indicates the speed of the adjustment of a variable is returning to its stability when countering shock. This condition indicates that the prediction that resulted from the equation system is valid, because there are between 0 and 1. The result of estimation short and long terms is on Table 4.

Table 4.The Estimation of Short Run and Long Run

Equation	Variabel	ECM		Long Run
		Coefficient	T Statistic	Coefficient
Output Gap (dyd)	Drd	0.0002	0.9670	0.0003
	Dds	0.0097*	-1.2762	0.0041*
	Dle	0.6041	4.4168	-1.1110*

	dydf	0.0008*	6.3763	0.0012*
	ect_is(-4)	**-0.6318***		
Inflation Adjustment (dpd)	Dyd	-0.5608	-0.3109	-7.7164
	Dds	0.0006	0.4835	0.1678
	dpgapf	1.3509*	10.5770	1.1698
	ect_ia(-4)	**-0.7992***		
Interest rate (drd)	Dyd	-117.5666*	-2.6573	-6.0861
	dpdf	-0.5148	-0.2522	0.7876*
	Dds	-0.0247	-0.7773	-0.1012*
	Drs	0.6943*	8.7726	0.8749*
	ect_r(-4)	**-1.2187***		
Exchange Rate (dle)	drgap	0.0040	1.8204	-0.0101
	Dds	0.0021**	8.2592	-0.0002
	Dca	-0.0145**	-2.5519	-0.0115
	Dlef	1.0716*	1.1109	1.0107
	ect_e(-4)	**-0.4390****		
Current Account(dca)	dygap	26.7827	0.7047	-4.5221
	Dds	-0.0026**	-0.0448	-0.0826
	Dle	-12.7432**	-2.5116	0.3230
	ect_ca(-4)	**-0.4852***		
Primary Deficit (ddt)	Dyd	-131.461**	-0.7444	42.0545
	Dds	0.4003*	3.2838	0,0041
	ect_kf(-4)	**-0.5405***		
*significant at α=1%, ** significant at α=5%,*** significant at α=10%,				

In the long term,if the interest rate increases this will encourage the decrease of the national output because the capital cost is increased. The decrease of the national output will encourage the GDP approaching the potential GDP, resulting the decrease of the output gap. As well as when the debt stabilizing deficit is implemented in the economy, this fiscal policy will increase the output gap. This condition occurs as well as in the short term. Exchange rate has negative relationship with the output gap which means that if the rupiah exchange rate against the foreign currency is experiencing appreciation, this condition will resulting the output gap decreased. The appreciation of exchange rate in the long term significantly will increase the production cost, particularly manufactured production industry in Indonesia that still using imported raw material. If in the long term the production cost is increased, the national production level will reduced. This condition resulting the output gap decreased. The expectation toward the output gap increases 1 percent, this will encourage the increase of the actual output gap 1.11 billion IDR and on the other hand the expectation toward the output gap decreases then the actual output gap will decrease.

In the long term, it indicates that when the output gap is increasing or national output is increased exceeding the potential output in the economy. The increased of the output will decrease the level of domestic price. Yet, in the short term behavior of price equation model, the output gap has no influence on the formulation of domestic price. This finding indicates the occureness of sticky price in the economy in Indonesia, in the short term. The implementation of fiscal policy on debt stabilizing deficit has no influence on domestic price. This finding is understandable, because one of the weaknesses of the fiscal policy in terms of the aspect of the institutions. The effectiveness of the fiscal policy is less if it is related to the time lag.

The expectation on the domestic goods price encourages positively the increase of the domestic interest rate. When the expectation is too high, this expectation tends to

encourage the economic actors to purchase goods real time that may triggers the increase of the goods price. The increase of the goods price will encourage BI to play its role in stabilizing the price through interest rate policy that the market interest rate will increase. When the price increases as the result of the price expectation is increasing that the actual price tends to exceed the inflation target, central bank will make some effort to hold the increase of this goods price by influencing that the interest rate decreases until the aggregate offering shifted to the right. Coefficient rate in the interest rate equation statistically significant at the rate 1.2187. This ECT rate indicates that the equation of interest rate is forward looking and the period of the adjustment of the interest rate equation returns to the stability is shaped as the result of the influence of the changing of the interest rate policy.

Theoretically when the interest rate gap enlarges as the result of the interest rate is increased continually compared to the average interest rate in the European Union countries, the capital will flow into the country that in the long term will strengthened the rupiah rate (appreciation), yet from the result of the research indicates the other way around. Floating exchange rate system used Indonesia is very much influenced by the world condition. For the investors, other than the consideration to obtain yield from the long term investment in a country, foreign investors will consider the external factors in a country as well. External factors mentioned such as security and convenience in doing business, legal certainty, facility and infrastructure licensing. As long as those factors are not fulfilled no capital flows into the country.   The implication of the debt stabilizing deficit has influence on rupiah exchange rate. When the government must pay its debt obligation, the government will purchase more foreign currencies. The demand on the foreign currencies not only encouraged by the government's purchase but by the speculators. The increase of foreign currency demand. Current account have negative and significant relationship with rupiah exchange rate and this finding is in accordance with the theory and the assumption of the research.   The expectation of the exchange rate has positive influence and significant on rupiah exchange rate on euro currency. The increase of the exchange rate expectation will encourage the actual exchange rate to follow the same direction of its expectation.In the long term there is negative relationship between domestic output gap and average output level in the European Union countries toward the current account in Indonesia. When the output gap is getting bigger and away from the potential output, the goods price tends to be even bigger. As the recovery economic crisis influence is not complete that spread in some parts of developed country and Indonesia, this resulting the domestic demand on imported goods is not automatically significant.

The debt stabilizing deficit variable both in the long term and short term has negative relationship and significant with the current account. When the policy of budget deficit is implemented, this will encourage the increase of the interest rate as well as the entering of the foreign capital into the country and encourages the appreciation of rupiah exchange rate. The appreciation of rupiah exchange rate resulting the net export performance decreases. The decrease of the foreign trade will penetrate the current account deficit. The appreciation of rupiah has no influence automatically on the trade performance. The demand on imported goods is not automatically increase because the economy is not recover totally from the crisis. Yet, in the short term it is the opposite. In the long term, debt stabilizing deficit has positive influence on budget primary, output gap has relationship with budget primary deficit. In the short term when the output gap increases 1 trillion IDR this will resulting the increase of demand, which primary deficit will increase the deficit by 131

percent. This condition indicates how important is the fiscal policy to address the requirement of financing because of the increase of demand.

The simulation result indicates that when the shock occurs in the form of adding and subtracting of the magnitude of 1 percent of debt stabilizing deficit from data base line debt stabilizing deficit, response pattern of output gap equation, price, interest rate, exchange rate, current account and budget primary deficit have the same pattern with response pattern before simulation is conducted which is return to the equilibrium. If debt stabilizing deficit is added 1 percent, those 5 equations indicate the curve position is below the curve before simulation is conducted, on the other hand when the magnitude of debt stabilizing deficit subtracted 1 percent from base line, curve position is above the curve position before simulation is conducted where the its coefficient higher compared to simulation earlier for all equations.

Conclusion

First*,* debt stabilizing deficit in Indonesia, in the long term has positive influence on output gap*,* price level, current account and budget primary deficit, yet has not influence on interest rate level, on the contrary, debt stabilizing deficit has positive influence on output gap, price level, current account and budget primary deficit, yet has not significant influence on interest rate, price level and current account; second, using ect rate coefficient (-4) the result obtained is that the inflation adjustment equation is the fastest in adjusting the new equilibrium compared to the other 6 equations, whilst fiscal policy, current account, output gap are the slowest to adjust the new equilibrium, third, both in the short term and in the long term all expectation variable has positive influence and significant on each represented variables such as actual price level, actual exchange rate, output gap and in Europe Union countries; this expectation variable has the same represented expectation*,* fourth*,* simulation on the magnitude of debt stabilizing deficit indicated the response pattern which is not different than when the simulation has not been conducted. Yet the increase of debt stabilizing deficit causing the economy variables performance lower than before the simulation is conducted, on the contrary debt stabilizing deficit, economy variables performance higher than before the simulation is conducted.

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About the authors

Marselina is lecturer at Lampung University, Economic Faculty and Business . She received her PhD from GadjahMada University, Yogyakarta, Indonesia. She graduated from Public Policy and Management , Carnegie Mellon University, Pittsburgh USA. Her research interests in fiscal and public policy field. She always work for The Minister of Finance of Republic Indonesia as Regional Economic. She published some reference book based on

her research in public policy and budgeting .Her contact number and email 062816400664/ marselina.djs@gmail.com