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Monetary Policy and Trade: An Engine for Economic Growth

Samsul Arifin[1]✉

[1]Economics and Business Faculty, Sultan Ageng Tirtayasa University, Indonesia

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Abstract

Amidst on the debate of the trade openness (TO) importance in influencing an economic growth (EG) and the central bank policy rate (CBPR), it is necessary to analyze the long-term relationship by using ARDL. This paper aims to analyze the CBPR and TO influence on EG in ASEAN -3. This study examines the EG model which focuses on the effect of CBPR and the ratio of exports in which plus imports divided by GDP as a measure of TO in ASEAN-3. The Data was collected from IFS for Indonesia, Philippines and Thailand for the period 2007q1-2022q2. The ARDL test method is used to determine the long-term relationship among the EG, TO and CBPR variables with different degrees of the integration. The FMOLS, DOLS, and CCR testing is for check robustness. The study show that CBPR has a positive effect on the EG in ASEAN-3, although it is only in Indonesia, and in Philippines which is statistically significant. The TO positive effect on the EG in Indonesia and in Thailand, but it is not significant and it has a TO statistically significant negative effect on EG in Philippines. The importance of this research given the recent interest in globalization activities, so the role of TO has become very important. A better TO understanding whether import dominance or vice versa helps in understanding the impact of globalization on the country economy. This finding emphasizes on the export importance over the imports in the economy. However, there is not an academic research looks at the long-term relationship between monetary policy and trade openness on the economic growth with the various econometric models.

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✉ Corresponding author :
Address: Economics and Business Faculty, Sultan Ageng Tirtayasa University
E-mail: samsularifin@untirta.ac.id

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INTRODUCTION

In the international macroeconomic basic theory, monetary policy has an important role in stabilizing the prices and the economic growth (EG). Adam Smith's absolute superiority theory in 1776 dand David Ricardo's comparative superiority theory in 1817 on the open economy convey that price stabilization is highly related to the exchange rate stabilization which is as the one exports and imports determinant in which both of them are as economic growth determinant (Salvatore, 2013). The exports and imports quantity in many literatures become a trade openness (TO) indicator. The ASEAN trade share data reached to 37% in 2022 which was from Indonesia, Philippines and Thailand (International Monetary Fund, 2023c) Some of the research results related to the exports and imports development among them are namely that ASEAN totally shows an increase in both of the value and the global share up to 2020 (Pratiwi & Wulansari, 2022), share exports and imports to GDP of the 3 countries which are Indonesia, Philippines and superiority theory of Thailand are relatively similar Thailand (Astuti & Udjianto, 2020), the 64 countries, which were affected by COVID-19 pandemic, exports and imports performance reflects to the among countries interaction in which the distance is as the determinant factor (Arifin & Sayifullah, 2021). In this context, The three countries have relatively similar econimic structure such as commerce structure, financial industry, to fiscal and it is in the category of middle-income countries referring to the world bank classification. The following chart describes the related of economic growth dynamics in ASEAN-3 countries at the last 15 years :

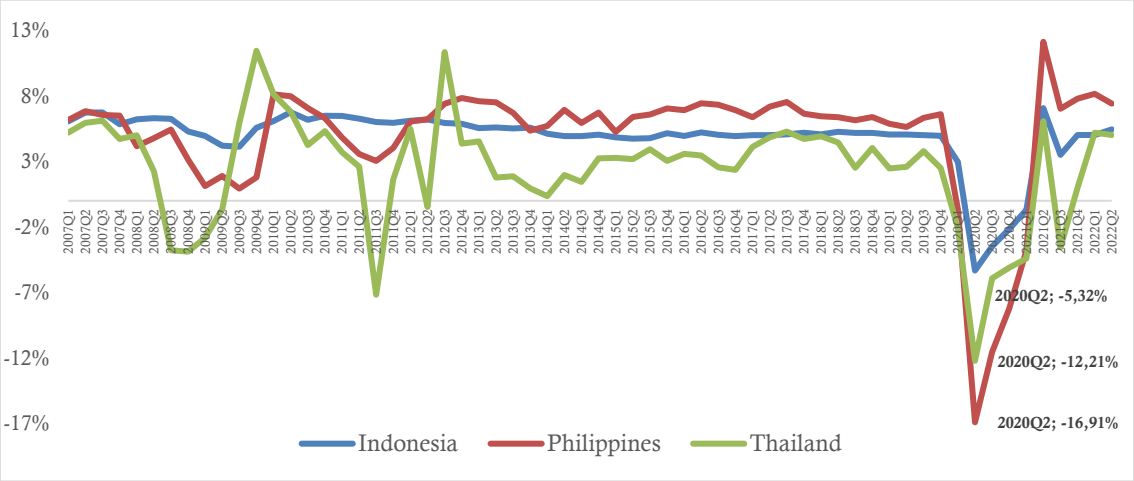

Figure 1. Economic Growth in ASEAN-3 Countries
Source: Data Processed, 2023

It is discovered from the chart that economic growth condition in ASEAN-3 countries experienced a dynamic increase and decrease proportionally in 15 years. The fluctuations that occur in economic growth include 2 years reductions are 2007q3-2009q2 period, then it experienced an increase in 2009q3-2009q4, accompanied by a drastic decline in 2010q1-2011q4 which returned to increase in 2012q1, it looked that there was a higher increase than the previous period in 2010q1-2011q4 period, except in Indonesia. The economic growth movement of those three countries showed the same pattern since 2013q1 to 2019q4 in which Thailand experienced a higher fluctuation. The same pattern returned to be showed by those three countries economic growth during COVID-19 pandemic, which was 2020q1-2022q2 period in which the biggest fluctuations happened in Philippines. The Finance Crisis (GFC) Global impact in 2008 caused the economic growth ASEAN-3 reduction which happened in Thailand, the most snappy it caused by the prolonged political crisis

related to the coup that is started on September 2006. The economic growth reduction in 2011q3 in Thailand reached minus number in 7.17 % that was caused from big flood disaster.

Besides it is affected by both political and financial crises, the natural disasters affect the economic growth. Some of the following literatures show that the macro policies have a significant role in the economic growth. The Monetarists believe that the money supply and the economic growth are positively related, because the output will increase due to the increase of money supply and monetary policy in which it has more significant role than its fiscal policy (Tomsik, 2012). Monetary policy through the central bank policy rate (CBPR) has a positive relation to economic growth in Nigeria (Ufoeze et al., 2018). However, it was too many findings which are not paralell to this theory. The CBPR influence is a negative, and it is statically significant to the economic growth in Lao PDR (Srithilat et al., 2022), in Sri Lanka (Perera, 2016), but it is not a significant in Kenya (Kamaan, 2014). The similar findings were obtained in ASEAN for Malaysia, Singapore and Thailand (Tan et al., 2020). Based on the Indonesia, Malaysia, Philippines dan Thailand data panel, it is described that increasing the interest rates will reduce the consumption, and preferring to save, in which causes the economic growth decline (Astuti & Udjianto, 2020). The following chart describes the related of economic growth dynamics in ASEAN-3 countries at the last 15 years:

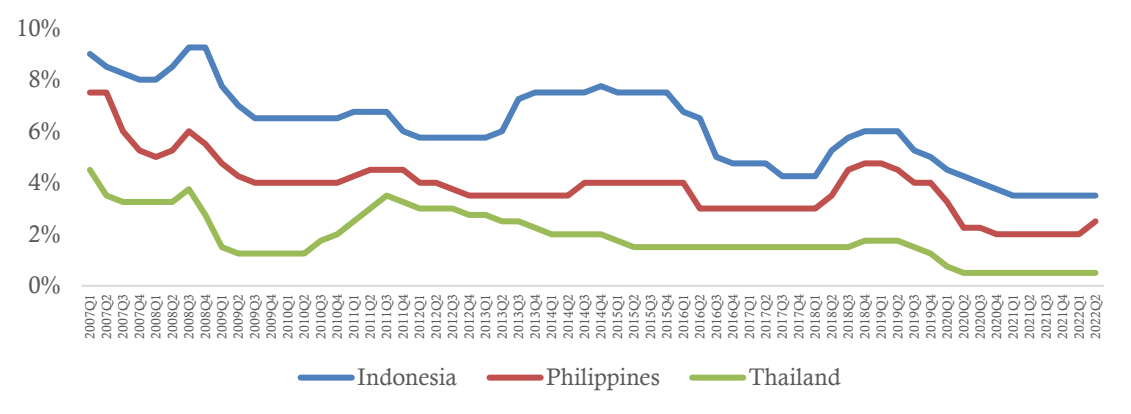

Figure 2. Central Bank Policy Rate in ASEAN-3 Countries
Source: Data Processed, 2023

Indonesia central bank rate policy has the interest highest level and it is the lowest in Thailand on relatively the same pattern in ASEAN-3 countries at the last 15 year. The interest highest level 2008q3 period in which it reaches 9.25% in Indonesia, it is as much as 6 % in Philippines, also it is as much as 3.75% in Thailand. The interest lowest level happened in COVID-19 pandemic period which is 2020q1-2020q2 period in which it is as much as 3.5% in Indonesia, it is as much as 2% in Philippines, and it is as much as 0.5% in Thailand. The fluctuations occurrence over the past 7 years, namely at the 2011q2-2018q2 period, were relatively stable in which Thailand interest rate tended to decrease, it tended to be stagnant in Philippines, while it was more various in Indonesia in which the 2011q3-2013q2 period was at 5.75% stably then in the 2013q3-2015q4 period was at 7.5% stably, next it was accompanied by the drastic decline in the 2016q1-2018q1 then it returned to increase in 2018q2-2019q2.

An open economy Consequence is that the countries participate in the internasional commerce activities. A commerce is as an important domestic needs fullfilment and as an effort to increase the economic growth which creates the countries coorporation (Blanchard, 2016). In the empirical literature, the economists use the different proxies to measure the trade openness. The trade openness condition based on

the Word Development Indicators data, Indonesia was in the lowest level in ASEAN when the COVID-19 pandemic happened as similar to the previous condition. In the 2021 Indonesia trade openness was 40.42%. It indicated the constantly low of economy openness level which was not paralell to its economy growth (World Bank, 2023). If it refers to the Word Bank of presented in word development indicators (Romer, 2019) and Trade openness can be measured in the export ratio plus the import on the PDB, so it is the following chart of the trade openness:

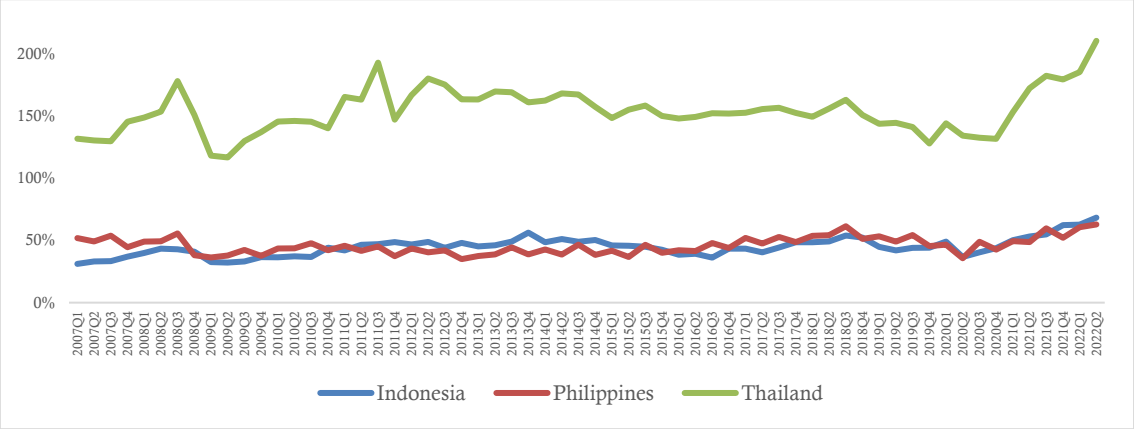

Figure 3. Trade Openness in ASEAN-3 Countries
Source: Data Processed, 2023

As it is understood that the Indonesia and Philippines trade openness index did not have a significant changes of value beneath away from Thailand in the last one decade. The 2008 GFC had a significant impact on the decline of trade openness in the ASEAN-3 countries, especially in Thailand. Nevertheless, Thailand had the consistently significant changes when there was an improvement in trade openness for the three countries in COVID-19 pandemic.

There is a controversy related to the important of the trade openness on the empirical level, as it is conveyed by (Yanikkaya, 2003) which explains that the trade openness is able to create the positive output for the developed countries, while the developing countries is generally having a role as the importers so that, economic growth is influenced by the preponderant import impact of export (Rasoanomenjanahary et al., 2022), the trade openness is having a positif effect on the economic growth in the oil-producing African state (Mullings & Mahabir, 2018), the trade openness positive effect on the economic growth happens only on the long-term in Tunis (Belloumi, 2014). There are so many researches which are not paralell with the previous proposed theory, in which the trade openness indicator that is export plus import divided by GDP have a negative effect on the economic growth, which is as the (Githanga, 2015) research in Kenya, for case of Indonesia as (Asbiantari et al., 2018) dan (Ichvani & Sasana, 2019) research.

There are differences in research results related to the monetary policy and the trade openness on the economic growth which tend to be inconsistent now and then as well as the facts in Figure 1-3 regarding to the differences in dynamic movements with a tendency towards convergent points for the data of the three variables, so it is necessary to study the influence of monetary policy and trade openness on economic growth in the long term and short term simultaneously by using the ARDL approach.

RESEARCH METHODS

This research utilizes the quarterly frequency Indonesia, Philippines dan Thailand data on the 2007q1-2022q2 period. It uses monetary policy, trade openness dan economic growth Variable. The secondary data related research variable is obtained from (International

Monetary Fund, 2023c, 2023b, 2023a). The economic growth (in Percent) variable data is obtained from the growth calculation of the Gross Domestic Product, Real, Undjusted, Domestic Currency (yoy), and the monetary policy variable of Central Bank Policy Rate (Percent per Annum) indicator, and the trade openness variable which are the rasio Goods, Value of Exports data plus the Goods, Value of Imports, CIF divided by the Gross Domestic Product (Percent).

This article uses the ARDL model to estimate the monetary policy dan trade openness relation on the economic growth. The main reason of applying the ARDL is that allows it to be applied when the variables studied have different levels of stationarity, while the ECM model can not be applied as bearing in mind the data requirements are not stationary at the "level" but must be stationary at the same level of the data differentiation, and there is a cointegration among the inspected variable. ARDL Method is used at once to overcome the sekaligus untuk mengatasi adanya spurious regression which generally happens in using the frequently unstationary time series data (Pesaran, 1995).

In assessing the monetary policy dan trade openness effect on the economic growth, the general model is determined as follow:

$$EG = f(CBPR, TO) \quad \text{.....(1)}$$

The equation establishes that the economic growth is the function of the central bank policy rate (CBPR) dan trade openness (TO). (1) economic growth (EGt), is used to capture the economic activity; (2) central bank policy rate (CBPRt), is used to capture the stance monetary policy dan (3) trade openness (TO), is used to capture the internasional commerce. ARDL Model of 1 equation can be written as follow:

$$\Delta EG_t = \beta_0 + \beta_1 CBPR_{t-1} + \beta_2 TO_{t-1} + \sum_{t=1}^{n} \gamma_{1i} \Delta EG_{t-i} + \sum_{i=0}^{n} \gamma_{2i}\ \Delta CBPR_{t-i} + \sum_{i=0}^{n} \gamma_{3i}\, \Delta TO_{t-i} + u_t^{EG} \quad (2)$$

In which Δ refers to the first difference operator; n refers to the on model used optimal lag length.

The important things on the assessing the ARDL model are data stationarity test, lag length determination test, and cointegration test. The stationarity test of Phillips-Perron test (PP) is used to avoid the problems on the election of the lag number and also to adopt the significant data structure changes permanently on the data series such as struktual break, either due to internal or external shock (Enders, 2014). The cointegration cointegration test method of Bounds Testing is to determine whether there is cointegration in a model or not, so that it can determine the long-term relationship among the variables in an equation. In which there is an asymptotic critical limit value in cointegration testing when the independent variables are integrated I(d) and ($0 \geq d \leq 1$). The upper critical bound assumes an integrated regressor on the I(1) dan lower crtitical bound assumes an integrated regressor on the I(0) which are refer to (Pesaran, 1995) and (Pesaran et al., 2001). The null hypothesis is rejected if the F-statistic is greater than the upper limit. This concludes that all variables are cointegrated in the long-term. Meanwhile, the conclusion can be concluded if the F-statistic is among the lower and upper bounds.

The short-term and the long-term dynamic relation can be estimated after the ARDL approach is adopted. Therefore, the (2) equation can be rewritten by inserting the error correction terms, as the following description:

$$\Delta EG_t = \beta_0 + + \sum_{t=1}^{n} \gamma_{1i} \Delta CBPR_{t-i} + \sum_{i=0}^{n} \gamma_{2i}\, \Delta TO_{t-i} + \emptyset ECT_{t-1} + v_t^{EG} \quad \text{..... (3)}$$

In which ECT_{t-1} is an error-corrected model term that represents the speed of adjustment to the long-term equilibrium after the short-term shocks. It has to be statistically significant and negative to indicate that the variables are converted to the long-term equilibrium .

This research hypothesis test is that the CBPR and the TO positively influence the EG in Indonesia, Philippines, and Thailand by proceeding the long term balance in the behaviour.

RESULTS AND DISCUSSION

The PP test results is described on Tabel 1-3, at the 95% significance level, it describes that on the 3 countries form of levels are only the EG variable which is stationary while the CBPR and TO variables are non-stationary, but the TO is stationary in Philippines. Meanwhile, in first difference form, the test result reject the null hypothesis in which about the unit root in all variables existence, so that all variables are stationary or degree of integration 1. This indicates that the ARDL is an appropriate estimation method for testing the long-term relationship among the variables.

Table 1. Result of Unit Root Phillips-Perron Test in Indonesia

Variable	(Intercept)		(Trend and Intercept)	
	Level	First difference	Level	First difference
EG	-3.168287 (2) **	-8.362434 (2) ***	-3.604283 (2) **	-8.304899 (2) ***
CBPR	-1.392719 (1)	-4.963674 (7) ***	-2.298880 (1)	-4.909463 (7) ***
TO	-1.239765 (1)	-8.672596 (2) ***	-2.131739 (0)	-8.654821 (2) ***

Source: Data Processed, 2023

Note: ( ) Bandwidth (Newey-West automatic) using Bartlett kernel

*, ** and *** Express rejection of unit root at the 10%, 5% and 1% significance levels, respectively

Table 2. Result of Unit Root Phillips-Perron Test in Philippines

Variable	(Intercept)		(Trend and Intercept)	
	Level	First difference	Level	First difference
EG	-3.302123 (1) **	-7.069130 (1) ***	-3.289597 (1) *	-7.016654 (1) ***
CBPR	-3.058163 (1) **	-5.131697 (3) ***	-3.293315 (1) *	-5.317774 (2) ***
TO	-3.550500 (3) ***	-15.74096 (5) ***	-4.378945 (3) ***	--17.88048 (8) ***

Source: Data Processed, 2023

Note: ( ) Bandwidth (Newey-West automatic) using Bartlett kernel

*, ** and *** Express rejection of unit root at the 10%, 5% and 1% significance levels, respectively

Table 3. Result of Unit Root Phillips-Perron Test in Thailand

Variable	(Intercept)		(Trend and Intercept)	
	Level	First difference	Level	First difference
EG	-4.452730 (3) ***	-10.34878 (0) ***	-4.532876 (3) ***	-10.28585 (0) ***
CBPR	-2.475231 (3)	-5.727096 (2) ***	-3.037011 (3)	-5.634594 (2) ***
TO	-2.223128 (3)	-8.663853 (9) ***	-2.505412 (2)	-8.703314 (10) ***

Source: Data Processed, 2023

Note: ( ) Bandwidth (Newey-West automatic) using Bartlett kernel

*, ** and *** Express rejection of unit root at the 10%, 5% and 1% significance levels, respectively

The Bounds Testing Cointegration method test result on the Table 4 indicates that there is a long-term relation of CBR and TO with the on the 5% level at the 3 countries. The F-statistic value is (3.837071) in Indonesia, it is (11.40699) in Philippines, it is (7.345704) in Thailand which is higher than upper limit value (4.07).

The Tabel 5 indicates the equality estimation result (2). The parenthesis after the ARDL model indicates the total of the lag. The result of each country has been reported in three column which consists of the long-run coefficients Estimation and Error correction term in which to be informed that the enormity of the parameter value and the t-statistik value are discribed by the parentheses.

Table 4. Cointegration Test in Indonesia, Philippines, Thailand

	Indonesia	**Philippines**	**Thailand**
Model specification	F-statistic (k)	F-statistic (k)	F-statistic (k)
GE=f (CBPR, TO)	3.837071 (2) *	11.40699 (2) ***	7.345704 (2) **

Source: Data Processed, 2023

Notes: * crtical value I(0) = 2.738 and I(1) = 3.465; ** crticial value I(0) = 3.288and I(1) = 4.07 and *** crticial value I(0) = 4.558 and I(1) = 5.59 Express rejection of no levels relationship at the 10%, 5% and 1% significance levels, respectively

Table 5. Long-run Coefficients for Indonesia, Philippines, and Thailand

Variable	**Indonesia ARDL (4, 0, 1) [a]**	**Philippines ARDL (4, 4, 4) [b]**	**Thailand ARDL (4, 2, 4) [c]**
Dependent variabel EG			
Long-run coefficients Estimation			
CBPR	0.796319	2.290901	0.155363
	(2.986822) ***	(2.961355) ***	(0.223312)
TO	0.009861	-0.240047	0.050995
	(0.152751)	(-2.220300) **	(1.089174)
C	- 0.005745	0.072413	-0.048533
	(-0.152964)	(1.224297)	(-0.715301)
Error correction term			
ECT (-1)	-0.507957	-0.708701	-0.864748
	(-4.033507) ***	(-6.986509) ***	(-5.598363) ***

Source: Data Processed, 2023

Note: a, b and c Refer to the ARDL selected based on the Akaike Information Criterion. The figures in parenthesis are t–statistics. *, ** and *** Denote significance at the 10%, 5% and 1% levels, respectively.

The central bank policy rate (CBPR) coefficient is a positive and statistically significant on the economic growth (EG) in Indonesia and Philippines, but it is not in Thailand. The coefficient indicates that a one percent increase in the interest rate will lead to an increase in EG by 0.79%, 2.29%, and 0.15%, in each Indonesia, Philippines and Thailand. It is explained in in the monetary policy transmission mechanism of the interest rate channel that the transmission of interest rates from the financial sector to the real sector depends on its influence on the consumption and investment demand. The increase in the benchmark interest rate still has a positive impact on the increasing of consumption through a larger income effect than the substitution effect. An increase in deposit rates is a component of public income (income effect), while an increase in lending rates is as a consumption financing (substitution effect). It is paralell to the study findings of (Ufoeze, L.O., Odimgbe, S.O., Ezeabalisi, V.N. and Alajekwu, 2018).

On the other hand, the TO coefficient is positive but it is not significant for EG in Indonesia and Thailand, while for the Philippines TO is negative, and it is statistically significant. The results of the positive effect of the

TO on the EG are confirmed by the findings of (Widyawati, 2017), (Purnomo, 2020) and (Pratiwi & Wulansari, 2022).

The coefficients show that the one percent increase of the TO will cause an increase in the EG by 0.009%, and 0.05%, that is in each Indonesia and Thailand, while the EG decreased by 0.24% in Philippines.

Overall, Philippines is the country that shows the biggest role of CBPR and TO on the EG, although the more open trade has an effect on reducing the EG. It is only CBPR which is significant on the EG in Indonesia and Thailand.

The ECTt−1 value is negative, and it is statistically significant as the theory expects it. It explains that the dynamic movement of EG and TO will reach a convergence point occasionally through the adjustments in the short term. In the empirical model, in Table 5 the ECT values indicates an improvement of short term to long term imbalance of 0.508 percent per year in Indonesia, it is 0.708 in Philippines, and it is 0.865 in Thailand.

The results of data analysis which is obtained from the ARDL model provide a strong support for the explanation of graphs 1-3 in the introduction section on how the relation among the EG movements with the CBPR and the TO in each. The case of CBPR positive significant effect on the EG in Indonesia and Philippines is paralell to the condition of the CBPR movement and the EG consistently, but it is not in Thailand. This proves that the significant positive impact of CBPR on the EG supports the opinion of the monetarists as it is stated by Tomsik (2012). An another result is discribed by the TO role, but it is generally still can be concluded that the relation of the TO and the EG is positive, eventhough it is not significant in all countries. The TO positive role on the EG in Indonesia dan Thailand are on all the model, while the ARDL is negative but the other models are posititive in Philippines. The negative result of TO significant role on the EG in Philippines is paralell to the year-round performance of increased trade openness which is caused by the deficit commerce, in which it means that Trade openness in Philippiness discribes more import dominance in the establishment of the indicators so as to cause a negative impact on the economic growth.

The dynamics of a harmonious increase and decrease during 15 years of economic growth in ASEAN-3 countries with the fluctuations that occur are closely related to the impact of the GFC in which it is the most prominent in Thailand and Thailand was most sharply exacerbated by a protracted political crisis and massive floods, while the impact of the COVID-19 pandemic in which the fluctuations occurred in Philippines were the greatest. A similar pattern is discribed by the monetary policy in terms of responding the GFC and the COVID-19 pandemic. Indonesia central bank policy rate has the highest interest rate and it is the lowest in Thailand. The interest rate was relatively high during the GFC, and it is relatively low during the COVID-19 pandemic. During the last 15 years interest rate tends to decline in Thailand, it tends to be stagnant in Philippines, but it is more various in Indonesia. The trade openness condition in the last one decades does not have a significant changes in Indonesia dan Philippines in which the value is under away from Thailand. However, the TO conditions in Thailand were very responsive when the 2008 GFC and the COVID-19 pandemic occurred.

This study also utilizes the fully modified the least squares method (FMOLS), dynamic ordinary least squares method (DOLS) dan Canonical Cointegrating Regresion (CCR) sebagai Robustness Checking. This is to reconfirm the results that is obtained in the ARDL model.

One of the advantages of the FMOLS estimator from Phillips and Hansen (1990) is that it provides parameter consistency even in small sample sizes. (Tan et al., 2020). The DOLS estimator from Stock & Watson (1993) is able to overcome the problem of entering lead and lag models to face the simultaneous bias and small sample bias. (Kurozumi & Hayakawa, 2009). The DOLS estimator is asymptotically efficient and unbiased. Park (1992) introduces another method named CCR to estimate the cointegration vector in a model that focuses on transforming data and maintaining efficiency

(Adom et al., 2015). This proves that the significant positive impact of CBPR on EG supports the view of monetarists as stated by Tomsik (2012)

The long-term estimation results of FMOLS, DOLS and CCR with ARDL which are discribed in Table 6-8 generally give very similar results of both in sign and magnitude and significance.

Table 6. ARDL, Panel ARDL, FMOLS, DOLS on EG in Indonesia

Variable	ARDL	FMOLS	DOLS	CCR
CBPR	0.796319	0.898898	0.969834	0.891056
	(2.986822) ***	(3.192744) ***	(2.501610) **	(3.128171) ***
TO	0.009861	0.068382	0.082039	0.061299
	(0.152751)	(1.145511)	(0.825257)	(0.912565)
C	- 0.005745	-0.037896	-0.049350	-0.034438
	(-0.152964)	(-1.000796)	(-0.791415)	(-0.828138)
ECT (-1)	-0.507957	-	-	-
	(-4.033507) ***			

Source: Data Processed, 2023

Note: Figures in parenthesis are t-statistic. *, ** and *** Denote the significance at the 10%, 5% and 1% levels, respectively

Table 7. ARDL, Panel ARDL, FMOLS, DOLS on EG in Philipines

Variable	ARDL	FMOLS	DOLS	CCR
CBPR	2.290901	1.312596	1.779096	1.240155
	(2.961355) ***	(1.671114)	(1.671298)	(1.771079) *
TO	-0.240047	0.070378	0.078117	0.022888
	(-2.220300) **	(0.560070)	(0.456233)	(0.155440)
C	0.072413	-0.029999	-0.051476	-0.005702
	(1.224297)	(-0.439786)	(-0.560710)	(-0.077687)
ECT (-1)	-0.708701			
	(-6.986509) ***			

Source: Data Processed, 2023

Note: Figures in parenthesis are t-statistic. *, ** and *** Denote the significance at the 10%, 5% and 1% levels, respectively

Table 8. ARDL, Panel ARDL, FMOLS, DOLS on EG in Thailand

Variable	ARDL	FMOLS	DOLS	CCR
CBPR	0.155363	1.078700	0.959212	0.996247
	(0.223312)	(1.332181)	(1.027953)	(1.322688)
TO	0.050995	0.002704	-0.002504	0.003769
	(1.089174)	(0.064123)	(-0.038647)	(0.077982)
C	-0.048533	0.002613	0.011133	0.002215
	(-0.715301)	(0.039827)	(0.113336)	(0.029835)
ECT (-1)	-0.864748			
	(-5.598363) ***			

Source: Data Processed, 2023

Note: Figures in parenthesis are t-statistic. *, ** and *** Denote the significance at the 10%, 5% and 1% levels, respectively

The results of the ARDL model and the other three techniques do not show a good difference in the sign of magnitude and significance in Indonesia. While, there is a sign and magnitude and significance distinction of the TO variable result between the ARDL model and the other three techniques in Philippines. As well as in Thailand, there is a distinction of the TO result, eventhough it is only between the ARDL model with the DOLS which is related to the parameter sign. The three techniques test is to strengthen the results of the ARDL model and the data behavior, the relationship between EG and CBPR or EG and TO variables.

CONCLUSION

There was a trade openness improvemnet in the last 15 years which is caused by the commerce performance in Indonesia dan Thailand, in which it is performed by a surplus, although it was a deficit on 2012-2014, but there was a deficit throughout the year in Philippines. The trade openness more discribes the import dominant in the indicators establishment that influences the negative economic growth in Philippiness. It is relevant the result of the previous study which conveys that developing country generally have a role as an importer, so the economic growth is influenced by the impact of imports that is greater than the exports (Rasoanomenjanahary et al., 2022).

The trade openness improvement is caused by the import improvement which will give a positive impact on the economic growth constantly if it is supported by the import in which whether it is related to the raw materials and auxiliary materials or the economic growth. as it happened was more due to the significant increase in domestic consumption. The improvement of the investment has an impact on the import improvement, in which the export-oriented investment will certainly be positive for the economic growth. Monetary policy and trade openness test will be more complete if the investment and the domestic consumption are added, it will give the impact on the economic growth.

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