



Economic Liberalization Impact, Fiscal Conditions, and Tax Ratio to Welfare

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Abstract

Global economy has currently integrated and has been interdependent between the developing and developed countries. The improved integration and interdependence level is expected to improve citizens' welfare. This study aims at testing the correlation between fiscal and trade policies and welfare in ASEAN countries + 3 countries (Singapore, Malaysia, Indonesia, Thailand, Philippines, Brunei Darussalam, Cambodia, Vietnam, Myanmar, Laos + Japan, China, and Korea). It used the secondary data from World Bank, Asian Development Bank (ADB) and Economist Intelligence Unit from 1990 to 2015. The analysis uses the POLS-ECM (Panel Ordinary Least Square-Eagle Granger Error Correction Model). The results of analysis show that economic growth, infrastructure capital expenditure, economic openness, and tax ratio had a significant effect on welfare ASEAN + 3 countries.

Key words : Economic liberalization, Fiscal Condition, Tax ratio, Budget Spillover, Welfare.

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INTRODUCTION

The increased bilateral and multilateral cooperation aims at supporting the improvement of economic performance the countries. The increased cooperation is a necessity integration and interdependence of global economy is increasing. The increased integration and interdependence affects any country either positively or negatively. This condition encourages global economic conditions to be highly dynamic, impacting the dynamic economy of countries and regional economy, especially when the dynamics of economy comes from developed countries such as the USA, Japan, China and the European Union (Boubaker et al 2014).

The dynamics of global economy affect the dynamic economy of a country that leads to welfare improvement. The improvement of community's welfare is the national development goal to be achieved by every country including ASEAN countries. This requires the supports of all economic actors from both domestic and foreign countries. Dima et al (2014) suggest that mobilization of factors of production between countries is important in improving regional economic welfare, provided that there is no asymmetric information.

The achievement of national development goal in domestic side can be obtained by an increase in state revenues from taxes. Clist et al (2008) conclude that the increase in tax revenues both in developed and developing countries are determined more by the fiscal management ability. The better fiscal management ability of a country is, the greater the country's tax revenues will be. Great tax revenues will boost economic

growth and increase national income per capita (Scully et al (1991). Scully et al (1991) also point out that institutional differences factors also determine different tax revenues of a country.

Hakim et al (2011) suggest that tax revenue is determined by various taxes (income, profit and capital gains, goods and services taxes, as well as tariffs in international trade). In other words, tax policies significantly determine tax revenues of a country. Proper tax policies, which significantly affect a country's revenues, will encourage the fiscal authority flexibility to manage them well in order to improve the welfare of government, companies and households. The payment transfer policy is adopted in return for the economic entity commitment to meet its obligation to the country.

The welfare, according to Simorangkir et al (2006), is determined by the openness of the economy that is measured by the openness of trade and finance. Trade openness is measured by using an indicator of total exports and imports divided by the Gross Domestic Product (GDP). Financial openness is measured by using an indicator of the total foreign direct investment added by incoming investment portfolio divided by the GDP.

This claim is supported by Acharya and Cohen (2008), who conclude that the liberalization of trade through the increase of exports and imports boost a great growth, although the pattern of the increase of exports and imports tends to stagnate. Acharya and Cohen (2008) note that the exchange rate regime factors greatly affect the percentage of export and import transactions, where the appreciation of the exchange rate will lower the value of comparative advantages in international trades. Economic liberalization also influences the

increase in labor wages and the even distribution of company profits between countries involved in multilateral trades, provided that there is no asymmetric information (Egger and Etzel, 2012). Furthermore, Kim and Kose (2014), who conducted a research in developing countries by examining the effect of neutral trade liberalization and fiscal reform program on the welfare advantages show that trade liberalization affect the welfare significantly. Welfare changes are determined by the changes in tariffs and taxes, and that the countries which are more open in trade liberalization and fiscal reforms have greater impacts on the welfare advantages.

Empirical researches are conducted in the regions of ASEAN, ASEAN-5, ASEAN + 3 and the EU investigating the determinants of regional economic performance. Angresano (2004) concludes that the success of the integration of ASEAN + 3 with the goal of increasing regional economic stability is determined by the political will, security and economic performances. In addition, the high economic integration in ASEAN + 3 economic zones will encourage the regional economic defense (Rana et al, 2012). Mohan and Nandwa (2009) who conducted a research in ASEAN-5, China and India attempt to test the integration of financial market instruments such as interest rate. They found that the co-integration of interest rate movements in the ASEAN-5 is determined by the Chinese dominant influences and by the Indian fewer influences.

Integration of financial markets is also the object of the research conducted by Lim (2009) who concluded that integration and interdependence occur in financial market,

especially in ASEAN-5. It was supported by the result of research of Ariyasajakorn et al (2009) who found that the differences in trade liberalization lead to different incomes between developed and developing countries. The different incomes cause different welfares between the developed and developing countries. On the other hand, the effectiveness of fiscal policy affects the government spending and the tax rate, and both of the variables affect the economic growth (Tang et al, 2013).

Based on previous researchs, its different factors determine the welfare state in countries. This study aims at examining the determinant factors to welfare state in ASEAN+3 countries, especially consideration that economic liberalization are different in ASEAN countries because they are different in level of openness and economic performance such as level of income per capita, and economic growth. The implications in ASEAN countries are countries with criteria as a low, middle and high income country. Furthermore, fiscal conditions in ASEAN countries are also different. For example, Singapore is an ASEAN country with good fiscal conditions compared to other ASEAN countries. It means that Singapore has a more fiscal space or fiscal sustainability. Its conditions encourage other ASEAN countries to follow the Singapore policy pattern. Other fact that determines the welfare state is differences of tax ratio. Its differences support other ASEAN countries who have lower tax ratio to adjust or increase.

However, differences in determinant of welfare state in ASEAN countries become the urgent and important problem to solve in these countries. ASEAN Countries are gradual to implements of ASEAN Economic Community (AEC) to achieve welfare with fairness and honesty. This study contribute such as: *first*,

explaining the determinant of welfare state in economic regional with macroeconomic different characteristic in ASEAN countries; *second*, this study provides descriptions of building relationships among the ASEAN countries with high income countries such as Japan, China and South Korea to increase welfare state in their countries.

Egger et al, 2004, in their study, explain that the knowledge of a country's knowledge, capital mobility and multinational activities significantly affect the welfare of OECD countries with a multilateral investment agreement. These conditions lead to the convergence of income per capita among the OECD countries. Molana and Montagna (2007) in their study suggest that increases in economic scale, social spending policies, and international affect the improvement of economic performances and boost welfare improvement. The researches of Egger et al 2004, Molana and Montagna (2007), and Acharya and Cohen (2008) assert that economic performance (income per capita improvement), which is a macro-level measurement of citizens' welfare, is determined by economic liberalization (goods and services mobility, capital mobility, and multinational activities) and the country's knowledge level. Acharya and Cohen (2008) notes the importance of exchange rate regime (exchange) adopted by the country. Apart from this perspective of a country's welfare, Egger and Etzel (2012) find that free trades with symmetric information between trading partners increase labor wages so as to improve the welfare. For companies, free trades with symmetric information make the distribution of companies' profits between countries become more even. Furthermore Kim and Kose (2014), who conducted a research in developing

countries, examined the effect of neutral trade liberalization and fiscal reform program on welfare. The results of their research show that trade liberalization gives a significant impact on welfare.

Welfare changes are determined by changes in tariffs and taxes, and in a more open country, trade liberalization and fiscal reforms have a greater effect on welfare advantages. The research of Dima et al (2014) confirms that the mobilization of production factors between countries is a significant factor in improving regional economic welfare, provided that there is no asymmetric information. In fiscal perspectives, according to Hakim et al (2011), tax revenues are determined more by the number of various taxes (income tax, profits and capital gains, goods and services taxes, and tariffs in international trade).

The significant increase in tax revenues are expected to provide enough fiscal space to adopt policy that is pro welfare for government, business environment, and households. The effectiveness of fiscal policy through the instruments of government spending and the tax rate affect the economic growth empirically (Tang et al 2013). In their research, Tang et al (2013) show that proper fiscal policy instruments give positive effects on economic performances both in macro and micro.s.

RESEARCH METHOD

Research on impact of trade liberalization by Falvey et al (2012) uses General Method of Moment (GMM). Falvey et al (2012) regression model is:

$$\Delta \ln y_{i,t} = \beta_1 \ln Y_{i,60} + \beta_2 SYRY_{i,60} + \beta_3 \Delta \ln POP_{i,60} + \beta_4 \Delta \ln TTI_{i,t} + \beta_5 \left(\frac{INV}{GDP} \right)_{i,t} + \eta_t + \varepsilon_{i,t}$$

Where: i denotes country, t is time, $y_{i,t}$: GDP per capita, $y_{i,60}$: GDP per capita in year 1960

(baseline), $SYR_{i,60}$: Average of population of junior high school in 1960, TTI : term of trade index, POP: sum of population, INV/GDP: ratio of gross human capital/GDP, LIB: dummy variable.

It is based on Falvey et al (2012) model to analyze of relationship between economic liberalization, fiscal conditions, and tax ratio toward welfare in ASEAN+3 countries. Based on this model, we develop with dynamics model by Eangle Granger - Error Correction Model (EG-ECM) approach used to explain interaction variables in this research. EG-ECM Approach require variables stasioner in level 1 and co-integrated or long run relationships. The objects of this study were ASEAN + 3 countries including Singapore, Malaysia, Thailand, Indonesia, Philippines, Myanmar, Laos, Vietnam, Cambodia and Brunei Darussalam as well as the three countries with very high income, namely : China, Japan and South of Korea. The data consists of the secondary and time series ones from 1990 - 2015. They are annual data.

The data is collected from a secondary data from outside the government authorities in the ASEAN + 3 those are the World Bank and Asian Development Bank Statistics. The equation describing the interaction between the dependent and independent variables is as follows:

$$\Delta IPC_t = \beta_0 + \beta_1 \Delta GovE_t + \beta_2 \Delta EG_t + \beta_3 \Delta TAX_t + \beta_4 \Delta BS_t + \beta_5 \Delta INTT_t + \beta_6 \Delta INF_t + \beta_7 ECT_t + \varepsilon_t$$

Where:

IPC_t : Income per capita at t time
 GovE_t : Government expenditure for infrastructure development at t time
 TAX_t : Tax ratio is the ratio of total tax to the GDP at t time

EG_t : Economic growth (changes in the real (GDP) at t time
 BS_t : Budget spillover (the ratio of government expenditure of the domestic country to the government expenditure of foreign countries) at t time
 INTT_t : Trade liberalization which is measured by the volume of exports and imports of goods of the GDP of the domestic country toward the foreign countries at time
 INF_t : Inflation at t time
 ECT_t : Error Correction Term (ECT) at t time
 ε_t : Error Term (residual) at t time

RESULTS AND DISCUSSION

This research is designed by testing the two proposed models. The testing on the first model is focused on the agregate testing of macroeconomic variables of 10 ASEAN countries. The testing on the second model is focused on the corporate perspectives of 10 ASEAN countries. The testing on the third model is focused on the micro level testing, namely: household. The results of the testing are expected to strengthen or to confirm the results of testing between the micro-level (aggregate at state level) and the micro-level (aggregate at the industrial and household level). The results presented in the progress resport of this research are those of the first model as shown in the following table. Table 1 shows that the average score of the variable of Income per capita of ASEAN countries is with the logarithm of 8.8286, the minimum score is with the logarithm of 6.1114, and the maximum one is with the logarithm of 11.3454 with the standard deviation of logarithm of 1.3294 or 28,86 percent.

Table 1. Descriptive Statistics

Data	Mean	Max	Min	Std Dev	N
LIPC	8.828638	11.34545	6.111467	1.329488	236
LGOVE	1.414843	4.071724	-2.733368	1.898382	236
LRGDP	3.786587	6.525326	-2.733368	-0.665620	236
BS	74.83160	290.7300	0.00000	0.000000	236
INTT	117.8210	400.2960	0.529000	0.529000	236
INF	7.272827	82.70000	-2.315000	-2.315000	236

Source: Data processed by researchers (2016)

The score indicates that the gap between the income per capita in the ASEAN regions is still 1.329 per cent of the total average value of the income per capita of the ASEAN countries, which is indicated in US\$. The average score of the variable of government expenditure for provision of infrastructures in the countries of ASEAN is with the logarithm of 1.4148. The minimum score is with the logarithm of 4.0717, and the minimum score is with the logarithm of -2.733, and the score of the standard deviation is with the logarithm of 1.898 or 41,21 per cent. The score indicates that there was an incredibly large gap among the ASEAN countries, namely: 41,21 per cent of the average score related to the budgeting of provision of the public infrastructures. Meanwhile, in term of the variable of economic growth, the average score of economic growth value (LRGDP) of countries

in the ASEAN region is 3.78 percent, the minimum value is 0.065 percent, the maximum value is 6.52 percent with a standard deviation value of -0.66 percent (economic growth a slowdown in ASEAN Countries).

Furthermore, tax ratio (TAX) means the ratio of tax revenue to GDP averages score 17.78 percent, the minimum value is 1.10 percent, the maximum value is 66.55 percent and the standard deviation of the tax ratio reaches 11.73 percent. It means that the tax revenue between ASEAN countries do not have the gap or equal relatively. The variable of international trade average value (INTT) between ASEAN countries is 117.82 percent, with a minimum value of 0.53 percent, the maximum value reaches 400.30 percent, with a standard deviation value of 0.53 percent. Thus the level of difference in state trade liberalization in the ASEAN Region is relatively small at 0.53 percent of the average level of trade liberalization.

Table 2. Research Variable Unit Root Test

Data	t-stat	Sig	Information
LIPC	-3,56407	0,0002	Stasioner
LGOVE	-3,457390	0,0003	Stasioner
LRGDP	-4,11766	0,0000	Stasioner
TAX	-2,30898	0,0105	Stasioner
BS	0,14475	0,5575	Nonstasioner
INTT	-5,18921	0,0000	Stasioner
INF	-9,40871	0,0000	Stasioner

Sources: Data proceed authors (2016)

The last of macroeconomic variables that are suspected of determining the welfare level of countries in the ASEAN Region are inflation. The average inflation value (INF) is 7.27 percent, the minimum value is -2.31 percent (deflation) and the maximum value is 82.70 percent, with a standard deviation value of 1.04 percent. This means that the inflation rate of countries in the ASEAN region is still relatively low with an average of 7.27 percent, with the level of difference in inflation between countries in the regions a 1.04 per cent. This indicates that the ASEAN countries were good trade partners for strengthening the economic zone particularly to encourage the improvement of welfare of the ASEAN community. The initial stage to test the

hypothesis in this study is to do a unit root test (root test) to determine the stationarity of the research variable. The results of the unit root test (root test) are:

Based on the results of the unit root test in table 2, it shows that all research variables consist of LIPC, LGOVE, LRGDP, TAX, INTT and stationary INF at the first differences level with a significance level of 1 percent, except BS variable, at level 1 (first differences) also not stationary. Therefore the BS variable is then removed from the model. The unit root test results explain that in the long term the variance of the research variable (LIPC, LGOVE, LRGDP, TAX, INTT and INF) is constant, so that it can be used to predict validly.

Tabel 3. Result of Granger Causality Test

Null Hypothesis:	Obs	F-Stat.	Prob.	Conclusion
LGOVE does not Granger Cause LIPC	217	0.59121	0.6214	Nothing effect LGOVE-LIPC, and on the contrary
LIPC does not Granger Cause LGOVE		1.53856	0.2056	
LRGDP does not Granger Cause LIPC	227	0.58831	0.6233	There is effect LIPC - LRGDP
LIPC does not Granger Cause LRGDP		5.25334	0.0016	
INTT does not Granger Cause LIPC	219	1.96183	0.1208	There is effect LIPC - INTT
LIPC does not Granger Cause INTT		5.22185	0.0017	
INF does not Granger Cause LIPC	212	0.02818	0.9936	There is effect LIPC - INF
LIPC does not Granger Cause INF		3.33145	0.0205	
TAX does not Granger Cause LIPC	207	0.5269	0.6643	Nothing effect TAX-LIPC, and on the contrary
LIPC does not Granger Cause TAX		1.85526	0.1384	

Souces: Data proceed authors (2016)

The second step is to test the causality of granger to find out whether there are causality between the research variables, for example whether changes in the LIPC variable can cause

changes in the LGOVE variable or vice versa. If there are changes to the two variables causing changes to the same two variables, then the relationship between the two variables is two-

way. The results of the granger causality test between the variables of this study the explain in table 3.

The results of the granger causality test indicate that changes to the LGOVE variable do not cause changes to LIPC variables, and vice versa. Changes in the LRGDP variable have no effect on changes in LIPC variables, but changes in LIPC have an impact on changes in the value of LRGDP. The next variable is INTT, where changes to the INTT variable cannot affect changes in LIPC variables, but changes in LIPC variables can cause changes to INTT variables.

LIPC variable affects the change in INF variables, but not vice versa. Meanwhile changes in BS variables can influence changes in LIPC variables and vice versa, and. The last variable, namely the TAX variable, indicates that changes in the TAX variable have no effect on LIPC and vice versa. The results of the granger causality test indicate the importance of government expenditure allocation for infrastructure development (BS) because it can influence changes in a country's per capita income (LIPC).

The next step is to do the cointegration test. Cointegration test aims at determining the existence of long-term relationships between research variables. The technique used is the Johansen Fisher Panel Cointegrations Test method. Table 4. The results of the Johansen Fisher Cointegrations Panel show that all research variables (LIPC, LGOVE, LRGDP, INTT, TAX and INF) have long-term relationships. Fisher Stat results (trace test = 334.2) are greater than Fisher stat (max-eigen test = 192.7), so it can be concluded that all variables have long-term relationships. With the results of the cointegration test, the Panel - Ordinary Least Square (POLS) test can be carried out to analyze the relationship between research variables in the long run.

Table 5 shows that the determinants of the welfare at the country level is determined by the variables of economic growth, economic openness level (economic liberalization of a country), fiscal conditions and capabilities of countries in the ASEAN region to increase tax revenues, so that the called tax ratio gives impact on both in the short and long run.

Table 4. Result of Johansen Fisher Panel Cointegrations Test

Hypothesized	Fisher Stat.*	Prob.	Fisher Stat.*	Prob.
None	334.2	0.0000	192.7	0.0000
At most 1	169.5	0.0000	82.41	0.0000
At most 2	97.07	0.0000	48.68	0.0000
At most 3	57.04	0.0000	32.09	0.0039
At most 4	35.94	0.0011	24.05	0.0451
At most 5	24.41	0.0409	24.41	0.0409

Source : Data Processed

Based on table 5, it can be explained first that in the short and long term the rate of economic growth has a significant positive effect on the improvement of the welfare of

countries in ASEAN. This finding indicates that economic growth in ASEAN countries driven by sectoral economic growth is significantly able to increase per capita income.

Table 5. Panel-Ordinary Least Square (POLS) Test Results (Short and Long Term)

Variabel	POLS-ECM	POLS-ECM
	Short Run	Long Run
C	-0.003011 (-1.324570)	4.936221 -77.42403
LGOVE		0.017866 -0.823408
Δ LGOVE	0.015642 -1.048914	
LRGDP		1.006120*** -41.82533
Δ LRGDP	1.058887*** -26.44533	
INTT		8.88E-05 -0.568746
Δ INTT	0.000310** -2.034224	
INF		0.000234 -0.549123
Δ INF	0.00015 -1.164064	
TAX		0.001687*** -2.874503
Δ TAX	0.000354 -1.194238	
ECT	-0.065290*** (-2.852876)	
Adj R Squared	0.851788	0.99846
S.E. of Regression	0.016718	0.05192
Sum Squared Resid	0.058131	0.595753
F. Statistik	94.10569***	10887.22***

Source: Data processed (Researchers), 2016

Noted: The number in parentheses is the t value of statistics; ***, **, and * show the level of significance at the level of 1%, 5% and 10%.

This also shows that the stance of economic development in ASEAN countries is the creation of broad employment opportunities with a commitment to increase

income more acceleratively compared to the level of growth of the workforce specifically and overall population growth. In other words, the level of labor productivity in producing economic output in ASEAN countries is still in line with the expectations of economic actors.

The measure of a country's welfare is measured by several measures, one of which is measured by the increasing level of labor income, the proportion of spending on health towards GDP is increasing, the proportion of government expenditure on education to GDP also increases. Based on these measurements, it can be explained that government spending on health has a significant positive impact on economic growth (Beraldo et al, 2009).

This means that better quality of public health has a significant positive impact on economic growth because of increased productivity. The government's commitment to continuously improve the quality of public health needs to be encouraged and enhanced. Meanwhile, if the level of welfare is measured by an increase in labor income, then the increase in economic performance as measured by the level of economic growth has a significant positive impact on community welfare or an increase in labor income (Guisian and Frias, 1997). Second, the variable tax ratio (ratio between total tax revenue to GDP) in the long run has a significant positive effect on the level of community welfare in ASEAN. But it is expected that the effect of tax ratios on improving the welfare of the ASEAN community is not short-lived. These short-term findings explain the phenomenon of the inaction of the influence of tax ratio variables in influencing the level of welfare of the people in ASEAN. This is confirmed because it is expected to have a significant positive effect on the variable. This finding implies that to encourage

increased welfare it is necessary to increase the role of taxes proportionally by adjusting to the economic development. This means that tax instruments set by governments in ASEAN countries do not become a disincentive for economic actors if the determination of taxes is in line with the improvement of the economy in the country and in aggregate still provides benefits for economic actors, including increasing income for workers who work sectorally in the economy. These findings are relevant to the research conducted by Scully et al (1991) and Clist et al (2008) which explain that tax revenue is largely determined by good fiscal management ability and encourages an increase in per capita income. This means that efforts to increase tax revenues to GDP should ideally be balanced with optimal fiscal management capabilities. Thus referring to the argument of Scully et al (1991) and Clist et al (2008), it can be assumed that fiscal management in ASEAN countries is good and able to adjust to the size of its economic performance.

Third, the influence of economic liberalization variables proxied by trade liberalization has a significant positive effect in the short term. This means that the increase in export and import transactions carried out among countries in ASEAN has an impact on improving people's welfare. This finding is in accordance with the argument that international trade determines the rate of economic growth (Simorangkir et al., 2006), the mobility of goods and services, capital mobility and multinational activities determine the increase in per capita income of a country (Acharya and Cohen, 2008). Micro findings also confirmed that the degree of free trade determines the wage level of

labor, assuming that there is symmetrical information between international trade partner countries (Egger and Etzel, 2012) and a decrease in tariffs on output produced by the manufacturing sector has an impact on increasing labor wages in sector in Thailand (Jayathankumaran et al, 2013). Thus liberalization of trade between countries in ASEAN is one of the short-term solutions to improve the welfare of ASEAN people. Whereas in the long run, trade liberalization does not have a significant effect in determining the level of welfare of ASEAN people.

The four contingency effect variable variables of government spending in developed countries as a benchmark for developing countries in the ASEAN region have no significant effect on the level of welfare in countries in the ASEAN Region. The hypothesis that an increase in government spending by developed countries will be responded to with an increase in spending for developing countries is not proven.

This shows that fiscal policy carried out by developed countries in one economic zone is not necessarily referred to and applied by developing countries in the economic region, both in the short term and in the long term. This means that in the short term and long term changes in government spending in developing countries in response to changes in expenditure in developed countries have not yet determined changes in the level of prosperity of developing countries in the ASEAN region.

The value of Error Correction Term in the short-term test is 0.06529 or 6.53 percent. The negative ECT value shows that 9 ASEAN countries have a welfare level below Singapore. Thus Singapore's determination as a benchmark for benchmarking the level of prosperity in the ASEAN region is appropriate. This means that

when economic integration in the ASEAN region is reached where the standard measure of prosperity is the state of Singapore, then it takes approximately 15 years for the standard of prosperity experienced by Singapore today. The findings of economic integration provide a positive signal that there is convergence in welfare in ASEAN countries. The finding of the speed of convergence is not much different from the findings of Herz and Roger (1995) which explains that the value of the speed of convergence is 4 percent per year and it takes 16 years to achieve a steady state balance from the actual income condition.

How is the condition of the level of welfare of the people in the ASEAN region, if we consider the economic performance of countries such as Japan, China and South Korea? Japan has begun in 1990 to build strategic cooperation with countries in ASEAN. The strategic collaboration is concentrated on trade, investment and government development assistance.

The target of such cooperation is the achievement of cost leadership and product differentiation. Cost leadership characterized by ASEAN countries having the lowest competitive advantage in industrial operations, which has an impact on increasing company efficiency, company size, scale and scope and experience. Product differentiation is characterized by each ASEAN country having unique and attractive products to be able to compete with competitors, especially between and among markets in the ASEAN region. This concept is believed by Japan to be able to improve economic integration and welfare of countries in the ASEAN region. Meanwhile, China is interested in building strategic bilateral

relations with ASEAN countries in the form of free trade agreements.

The free agreement is expected to have an impact on increasing net trade profits between China and countries in ASEAN. Trade creation is a consequence because China's economic growth is strong and requires production input factors from ASEAN countries. The implications of free trade between China and ASEAN are expected to increase prosperity between countries. Thus, strategic cooperation in free trade between China and ASEAN countries is to increase prosperity and achieve stabilization and strong economic growth.

Meanwhile for South Korea, it has a cooperation with ASEAN countries through the ASEAN-Korea Free Trade Area (AKFTA). This comprehensive economic cooperation includes trade in goods, services, investments and dispute resolution mechanisms. The aim of this collaboration is to encourage economic growth and development by increasing people's living standards in ASEAN and South Korea, as well as creating ASEAN economic integration and bridges to reduce the gap between the two economic regions. This means that both ASEAN countries and South Korea are building cooperation in order to improve the welfare of their people. Based on the essence of cooperation between ASEAN countries with Japan, China and South Korea is to improve the welfare of its people, through increasing economic growth, economic integration, development and stabilization between the regions. It is based on the results of the analysis proven that the collaboration between ASEAN countries with Japan, China and Korea has a significant impact on improving the welfare of the community, both in the short and long term. The test results shown in table 6 show that taking into account

the role of Japan, China and South Korea, explaining the variables of economic growth and capital expenditure, especially for infrastructure development, have a significant positive effect on improving welfare in the ASEAN region.

This means that to encourage an increase in the welfare of the people in ASEAN, cooperation with Japan, China and Korea is the right choice if, with such cooperation, the economic growth in ASEAN countries tends to increase, if the growth of Japan, China and Japan needs to be increased rapidly revaluation of cooperation agreements with the three developed countries. This finding is in line with the results of research conducted by Andreano et al (2013), which explains that the degree of economic openness, government intervention and government expenditure is an important control variable in achieving per capita GDP convergence in MENA countries.

The second uses of expansive fiscal policy through increased capital expenditure, especially for infrastructure development, have apparently been able to improve the welfare of the ASEAN community in the long run. These findings provide direction for Governments in ASEAN countries that to encourage accelerated economic development individually and in economic regions, the prerequisites for good quality infrastructure among countries in ASEAN must be fulfilled.

Thus the policy of increasing the number and quality of infrastructure in ASEAN countries needs to be accelerated so that the welfare of the people and intra economic stability of ASEAN countries and other regions (Japan, China and South Korea). Furthermore, the tax ratio variable has a

significant negative effect on public welfare in the long run. This shows that when governments in ASEAN countries choose expansive fiscal policies through increasing various tax instruments, it will have an impact on reducing the level of welfare of the ASEAN community in the long run. These results are relevant to Parreto's (2006) study, which explains that increasing community welfare can be achieved through corporate tax deductions or income taxes, reducing labor income taxes or taxes for consumers.

Third, how the influence of economic liberalization after ASEAN countries built cooperation with Japan, China and South Korea is. The results of the analysis show that the influence of economic liberalization variables with the proxy of trade liberalization in the short term has a significant positive effect on the welfare of the people in the ASEAN region. This finding shows that cooperation between ASEAN countries and the three developed countries, especially in terms of increasing trade profits through removing trade barriers with a policy of reducing export and import tariffs and encouraging leadership costs and product differentiation can have an impact on improving the welfare of the country in ASEAN. This finding reinforces the view of Acharya and Cohen (2008) which explains that the mobility of goods and services, capital mobility and multinational activities determines the increase in per capita income of a country.

The four error correction term (ect) values amounted to 0.0426 or 4.26 percent in tests involving the role of Japan, China and South Korea in determining the level of welfare in ASEAN countries. The value of ED (4.26 percent) is lower than the testing of the level of welfare in ASEAN countries without involving China, Japan and South Korea, which is 6.53 percent.

Table 6. Panel-Ordinary Least Square (POLS) Test Results (The Role of the State of Japan, China and South Korea)

Variabel	POLS-ECM Short Run	POLS-ECM Long Run
C	0.003542*	4.239467***
LGOVE	-1.769637	-40.57418
ΔLGOVE	0.001336	0.047558*
LRGDP	-0.109386	-1.701041
ΔLRGDP	1.009882***	0.990200***
INTT	-29.08632	-32.42947
ΔINTT	0.000307**	-0.000372 (-2.064325)
INF	-2.17453	0.000372
ΔINF	9.13E-05	-0.703092
TAX	-0.812442	-0.000582***
ΔTAX	0.000124	(-0.839584)
ECT	-0.5009	
	-0.042659***	
	(-3.033884)	
Adj R Squared	0.907006	0.997714
S.E. of Regression	0.013364	0.061451
Sum Squared Resid	0.045723	1.023341
F. Statistik	70.20281***	3253.675***

Source: Data processed (Researchers), 2016

Noted: The number in parentheses is the t value of statistics; ***, **, and * show the level of significance at the level of 1%, 5% and 10%.

This shows the role of the three countries through various cooperation,

especially free trade cooperation, which has an impact on the slowing down of the welfare level of ASEAN countries compared to ASEAN countries through inter-ASEAN free trade with Singapore as a reference for welfare. This means that by including the role of the State of Japan, China and South Korea to pursue the level of community welfare in ASEAN with a reference to the State of Singapore, it takes 23.5 years. Whereas if it does not involve the role of the three countries, the ability of countries in ASEAN to achieve convergence towards welfare in Singapore is only 15 years. Thus the role of the State of Japan, China and South Korea, which is a country with a relatively high level of per capita income, actually has the effect of slowing down the efforts of ASEAN countries to prosper. This phenomenon explains that the benefits of international trade tend to be enjoyed more by these countries compared to ASEAN countries.

CONCLUSION

The results of analysis show that the first increase in international economic activity through economic liberalization in carrying out international trade activities, namely export and import activities among countries in the ASEAN region has an impact on the improvement of the welfare of the ASEAN community. Economic liberalization has a positive impact both in the short and long term. Therefore, international trade policies that are appropriate both inter and intra ASEAN countries through policies to reduce or eliminate barriers to entry, followed by a strategy of "cost leadership" and "product differentiation" are one of the prerequisites for increasing growth and sustainable economic development. With growth and sustainable economic development, it is expected to be able to improve welfare in ASEAN countries.

Second, improving the welfare of ASEAN countries can be encouraged by carrying out expansionary fiscal policies both in terms of revenue and the expenditure side. Expansive fiscal policy in terms of revenue is carried out by increasing tax revenues so that the tax ratio of countries in ASEAN increases to support sustainable economic development. The expenditure side is carried out by increasing government spending to support productive activities, one of which is to increase infrastructure in ASEAN countries. Improving infrastructure and good quality, and connecting inter and intra in ASEAN countries in the long term is expected to have an impact on increasing the acceleration of economic growth which in turn has an impact on improving people's welfare in the country. The revenue side is done by increasing the tax ratio. This means that governments in ASEAN countries actively encourage significant tax revenues to move the economy. With the convergence of infrastructure and the inter and intra tax ratio of ASEAN countries, the level of welfare of the country is also expected to achieve convergence in economic performance or the smaller performance gap between the inter and intra economic countries of ASEAN countries. Thus, economic integration and stability in ASEAN countries can be achieved both in the short and long term. The establishment of the ASEAN Region through MEA is an appropriate policy, statistically showing the existence of a convergence phenomenon. The speed of adjustment of countries in the ASEAN Region to achieve Singapore's state welfare standard is 6.53 percent. With reference to Singapore's welfare standards, it will take approximately

15 years for other ASEAN countries to reach the welfare standard.

This means that inter-ASEAN economic liberalization can improve the welfare of these countries. But to improve the welfare of people in ASEAN countries, these countries should build cooperation between countries in ASEAN and developed countries with high levels of income per capita such as Japan, China and South Korea, so the impact will actually slow the increase in people's welfare in the country. This means that increased cooperation with Japan, China and South Korea is expected to accelerate welfare convergence in ASEAN countries, quite the opposite. The time needed by ASEAN countries to achieve welfare convergence in ASEAN countries when increasing cooperation with Japan, China and South Korea is longer, which is around 23.5 years.

The policy implication of this finding is that the government and other policy authorities in ASEAN countries need to encourage economic liberalization among ASEAN countries through policies to reduce or eliminate barriers to entry among ASEAN countries, followed by expansionary prudent fiscal policies (greater tax revenues compared to government spending). While economic cooperation with developed countries or high-income countries needs to be evaluated so that ASEAN countries can also accelerate the level of welfare of their people. Economic cooperation between ASEAN countries and developed countries (Japan, China and South Korea) can be encouraged if the form of strategic cooperation is needed by ASEAN countries for example encouraging ASEAN countries to produce semi-finished production inputs for export to developed countries. Thus the added value of input factors produced by ASEAN countries is better.

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