IMPACT OF IMPLEMENTATION OF THE ASEAN ECONOMIC COMMUNITY ON ITS MACROECONOMIC PERFORMANCE

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ABSTRACT

The main objectives of this study is to analyze the impact of imlementation of Asean Economic Community on macroeconomic performance of the ASEAN Counries. This research use a computable General Equilibrium Model and GTAP has been employed as the main tool of analysis. The results shhow that: (1) the implementation of the AEC has an impact on economic performance, especially GDP Nominal GDP, GDP Deflator, and Real GDP, (2) each country experiences different impacts from the implementation of the AEC, (3) countries that first existed, such as ASEAN5, had a more tangible positive impact compared to countries whose contribution to the ASEAN economy was relatively small, (4) The impact on countries that have been AEC's main partner countries outside ASEAN5 is negative, although most of the impacts are relatively small, (5). The enactment of AEC has led to Trade Creation and Trade Diversion for member countries.

Keywords: Computable General Eqilibrium Model, GTAP Model, AEC, Macroeconomics Performance

INTRODUCTION

Historically, trade cooperation between regional areas has experienced rapid development. In 1980, there were only 11 trade agreements between regions in the world, then developed to 92 in 1990, then 2006 in 2010. In 2020, the number of trade agreements between regions had reached 287 trade agreements (WTO, 2020).

Many factors led to the establishment of international economic cooperation organizations. The proximity of territories is one of the main reasons for the growth of trade agreements between regions. This reason is also reinforced by findings made by several researchers, including: Kusuma and Firdaus (2015), Leatao (2010), and Haryadi and Hodijah (2019). All these researchers prove that there is a negative correlation between distance and trading activity. This means that the smaller or closer the distance, the higher the trading activity between countries. On the other hand, the greater or farther the distance between one country and another, the relatively small the trading activity between countries will be. In essence, a country will prioritize trading with neighboring countries rather than countries that are far away.

The development of trade agreements between regions, one of which occurs in ASEAN countries. Since trade agreements between member countries were made, trade transactions between ASEAN countries have tended to increase. This success then encouraged ASEAN to collaborate with other countries. In 2010, ASEAN established free trade cooperation with Japan (ASEAN-Japan), ASEAN-China, ASEAN-Korea, ASEAN-India, ASEAN-Australia and New Zealand (ASEAN-ANZ) and others (Haryadi, 2009, 2010, 2012, 2013, and 2017, 2018, 2019).

The enthusiasm of ASEAN member countries to make this region a strong economic region has encouraged member countries to further enhance the status of ASEAN. Continuing this desire, On January 13, 2007 at the 12th ASEAN Summit, ASEAN leaders strengthened their desire to accelerate the formation of the ASEAN Community. The organization is known as the ASEAN Economic Community (AEC) or in foreign terms known as the ASEAN Economic Community (AEC).

However, until now the MEA has not succeeded in hosting (particularly in the trade sector) in its own region. The percentage of intra-ASEAN trade is only around 22 percent, while the rest occurs with countries outside ASEAN.

Theoretically and logically thinking, the flow of trade between member countries will increase along with the formation of the AEC. However, the facts show that the value of intra-ASEAN trade transactions (as a percentage) is still much smaller than the value of extra ASEAN trade transactions. In addition, the facts also show that after 4 (four) years of the implementation of the AEC, the value of these trade transactions has actually shown a decline (Asean Secretariat, 2020). In 2018, trade among ASEAN members was only 22.9 percent. This figure is even lower than the value of intra-ASEAN trade transactions in 2016 and 2017, which were 23.6 percent and 23.1 percent, respectively (AseanStat, 2020).

Besides that, from the Top 10 of trade between ASEAN countries and countries around the world, none of them are in the top 4 (four) in ASEAN. China, America, Japan and the Republic of Korea are 4 (four) countries with the largest trade transactions in the ASEAN market. Indonesia, which potentially has the largest market potential, is only in 10th place (AseanStat, 2020). The main objective of this paper is to analyze the impact of the AEC implementation on macroeconomic performance and intra ASEAN trade.

LITERATURE REVIEW

Theoryy and Distortion on International Trade

The approach in analyzing international trade can be done using two approaches, namely: (1) partial balance approach, (2) general balance approach. The first approach analyzes all forms of trade policies that distort a particular market and ignore the impacts that occur on other markets. The opposite condition occurs in the second approach, analyzing the market through a general equilibrium approach. This approach sees the market as a system.

In the general equilibrium approach, changes in one market will have an impact on other markets. For example, when the government of country A imposes a tariff policy on product X1, the relative price of that product in the domestic market will increase. This increase in relative prices encourages domestic producers to increase production of X1 and reduce production of

X2. At the same time, production factors such as labor will move to the industry that produces X1. In partial equilibrium these impacts are not analyzed and tend to be invisible. The advantage of the general equilibrium model is that the information on production, consumption and trade between the two countries becomes one complete diagram. Production blocks from countries 1 and 2 are combined in one centralized place at point E *.

Graphically, the process of trade between two countries can be explained in Figure 1. This model summarizes all information regarding production, consumption and trade between the two countries in equilibrium conditions into one complete diagram. Production blocks from countries 1 and 2 are combined in one centralized place at point E *. To simplify the analysis, the assumptions used in this discussion are: (1) there are only two countries in the world, namely country A and country B or a combination of other countries (rest of world or ROW), (2) there are only two products in trade, (3) the market is in a condition of perfect competition, and (4) the economy is in a condition of full employment or no one is unemployed (full employment).
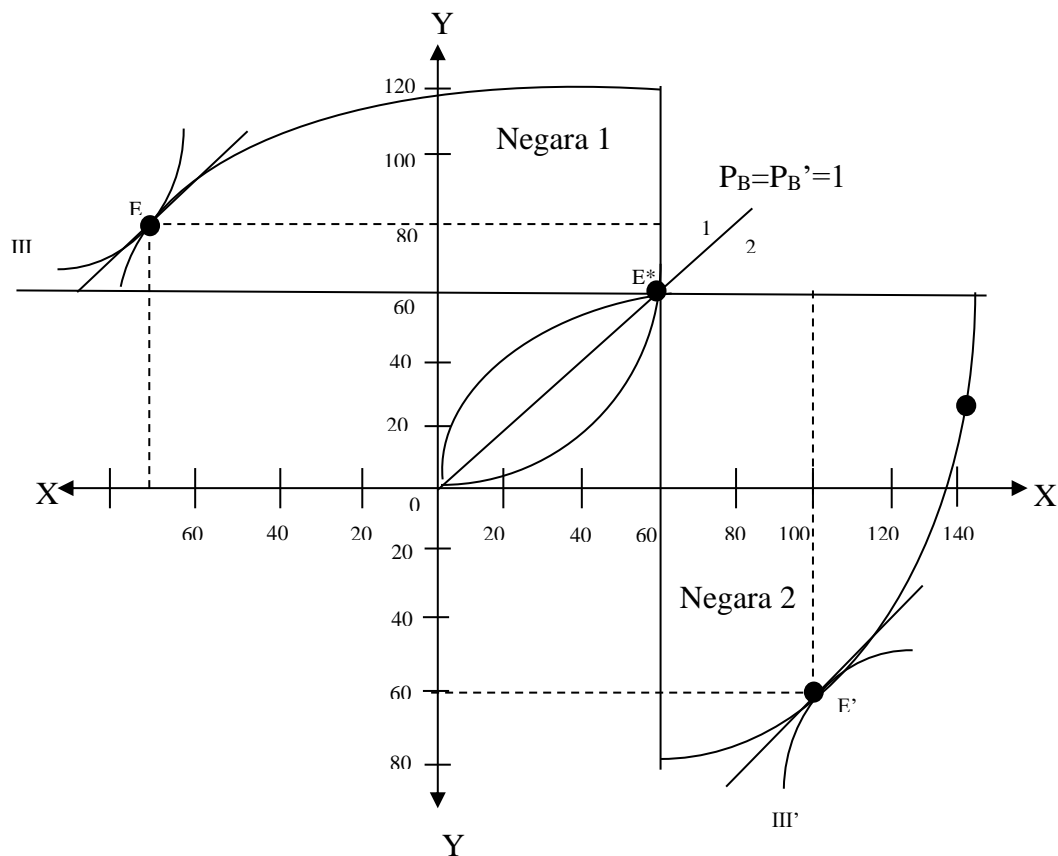

Figure 1. The process of trade between countries
Source: Salvatore (2000)

After the trade, country 1 will produce 130X and 20Y (point E which is identical to point E *). The country will consume Figure 2. The process of trade between countries Figure 3. The process of trade between countries Source: Salvatore (2000) 70X and 80Y (also indicated by the same point E but drawn from the center of the axis or 0), while the remaining 60X and 60Y will be traded with country 2. Meanwhile country 2 produces 40X and 120Y (point E 'which is also identical to point E *). Country 2 consumes 100X and 60Y (also symbolized by the same point E 'but refers to the axis center or 0), while the remainder will trade with country 1.

Theoretically, as thought by both classical and neo-classical, a system of free trade between countries will be able to create maximum benefits. However, market mechanisms do not always work perfectly. The fact shows that there is often government intervention (intervention) which results in market distortions. Some forms of intervention that are often found include the imposition of import tariffs, provision of export subsidies, and various other forms of domestic support. All these forms of intervention have an impact on the emergence of market distortions. The following will explain about the implementation of interventions that distort the market.

Enforcement of Import Tariffs Although it is still a matter of debate among economic experts, namely between implementing free trade or protection, tariffs are still widely applied by countries in the world (often Tariffs are taxes or duties imposed on a product that enters or leaves a country. which is imposed on imported products is called import tariffs, while the tariff imposed on exported products is called export tariffs. Theoretically, taxes originating from tariffs provide income for the government. newly grown.

Economic Integration Theory

By definition, economic integration is one form of economic cooperation between several countries. This integration can be carried out by two or more countries (Haryadi, 2013). The emergence of this cooperation is due to the desire of each member country to remove trade barriers that tend to hamper their economic growth. Some of the restricting regulations are mainly related to trade, such as import policies.

Economic integration is generally regional in nature. Because based on geographic proximity, it is easier for one country to cooperate with other countries in one region. Thus, the geographic location factor is one of the determining elements for the birth of an integration. For example, the cooperation of the ASEAN Free Trade Aree (AFTA), North American Free Trade Area (NAFTA), European Single Market (ESM) which in Indonesia is better known as the European Single Market "(PTE) and has now become the European Economic Community, as well as many other regional collaborations based on geographic location. Another factor that can encourage the formation of economic cooperation is the difference in the products produced by each country.

Each country should have advantages in several sectors, so that each country will benefit from economic cooperation. If a country does not have a superior sector at all, it will be difficult for that country to compete with other member countries. Therefore, economic cooperation is mostly carried out by countries that feel they have superior sectors, even though some other commodities are weak. Because the advantages in some commodities and weaknesses in competing in other commodities will cause each member country to feel the need for each other.

The forms of regional economic integrations that exist vary widely, ranging from the very simple to the very complex. The simplest form of integration is integration which is still at an early stage of formation. At this stage, a number of countries entered into mutual agreements to increase trade between them (preferential trading arrangement: PTA). Such organizations are generally non-binding or voluntary. An example of an organization like this is APEC (Asia Pacific Economic Co-operation) (Haryadi, 2013).

Benefits of Regional Trade Integration

1. Trade Creation (TC)

Each member country can specialize in products based on the factors of excellence it has. If this principle is carried out by all member countries and all existing production resources are used in full employment (the production process reaches an optimal point or economies of scale), then trade will be created in the area. Because a member country will import a product from another member country that is cheaper than homemade products, there will be a shift in demand from expensive domestic products to relatively cheap products made by other member countries.
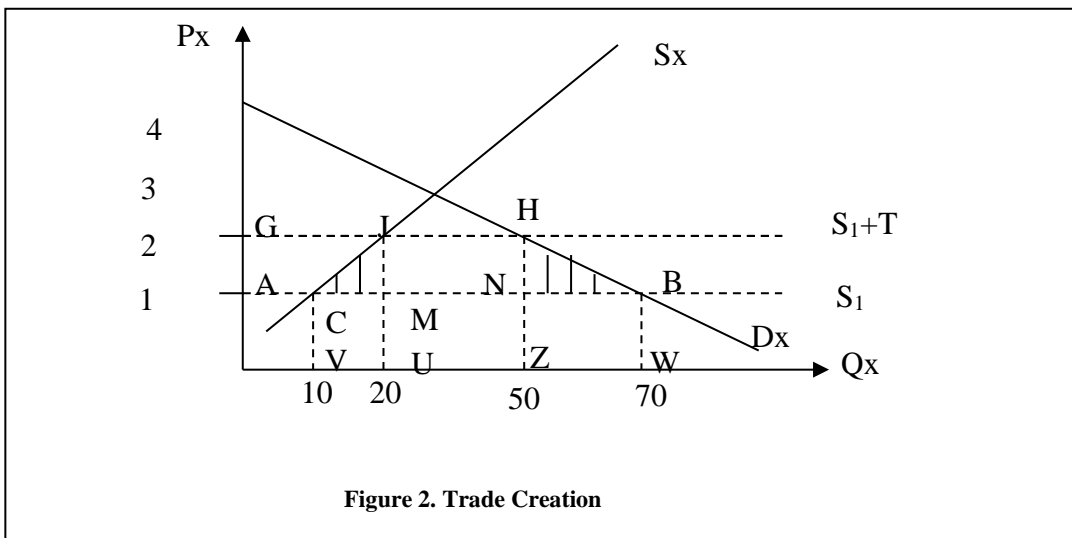

Figure 2. Trade Creation

Source: Krugman dan dan Obstfeld, 2000

This shift produces a production effect and a consumption effect. The production effect is the saving created by moving production resources from high-cost sectors (relative to other member countries). Meanwhile, the consumption effect is an advantage for consumers (increased consumer surplus) from the substitution of cheaper imported products for more expensive domestic products (Jose Dan Sinead (2015).

According to Salvatore (2000), Trade Creation in a region due to the implementation of FTA not only benefits member countries, but actually can also benefit countries outside the region through external imports: increased production specialization within the region also encourages an increase import of certain inputs that are only available or cheaper in non-member countries.

The positive effect of this trade creation does not only apply to member countries, but also to other countries that are not members because of an increase in production specialization which encourages increased imports from other countries (rest of the world). The occurrence of trade creation can be illustrated in Figure 1. Haryadi (2013) explains that Dx and Sx are respectively domestic demand and supply curves for goods X from country II, while curve S1 is a perfectly elastic supply curve in free trade conditions for goods X from country I ($ 1).

Imposing a 100% import duty rate, country II imports 30 units of goods X or JH from country I, so that the import price becomes $ 2 or curve S1 + T. Country II's domestic production is 20 units of goods X or AM, while the total consumption in country II as many as 50 units of goods X or GH. Then country I and country II formed regional economic integration in the form of an FTA. After forming the FTA, country II imports 60 units of goods X or CB from the country without import duty at a price of $ 1 (curve S1). Country I domestic product decreases to 10 units of good X or CM and total consumption increases to 70 units of good X or AB. With the formation of the FTA, then: Import duty receipts for country II will be lost, domestic consumers will receive transfers from domestic producers in the amount of the AGJC area which is an increase in consumer surplus, Other benefits obtained by country II are equivalent to CJM area + BHN area, or equivalent to $ 15 (See Fig. 1).

2. Trade Diversion or Trade Shifts

The dreaded negative impact of the emergence of regional trading blocs is the occurrence of TDs from non-member countries. This effect was first demonstrated by Viner ini 1950 (Haryadi, 2019), who showed that trade liberalization between two (or more) countries, while the two countries retained import duties on imports from the rest of the world would be detrimental to both countries. Because they will trade with each other for goods that are more expensive than the same goods made by the rest of the world and will potentially harm both and the rest of the world. This negative effect on world efficiency is called "trade divertion" by Viner.

Some observers report that the rapid trade growth in the EU since the integration has resulted in a significant TD. If all regional trading blocs generate large TDs, this can make the patterns of specialization in production or trade not optimal, as can be cited in the statement of Clarete et al (in Salvatore, 2004) as follows. These policy-diverted trade flows may lead to nonoptimal patterns of specialization if the distribution of resources across members is not representative of the distribution of resources in the world. In addition, the large number of regional trading blocs created overlapping regulations on regional trade and global trade which hampered the progress of the process towards world trade liberalization.

TD due to the formation of an FTA can also be explained by using Figure 2. For example, before the formation of AFTA, Indonesia imported MP and Australia because although it was subject to an import tariff of $ 30, it was still cheaper than those made in Indonesia or made in Malaysia. After the formation of AFTA, there was a shift in imports from MPs made in Australia to MPs from Malaysia, because import tariffs on MPs made in Malaysia were temporarily abolished against Australia, which were open to ASEAN members.

This is of course detrimental not only to Australia because its exports to Indonesia are reduced, but also to consumers in Indonesia because the actual price of MP is higher ($ 80> $ 60), or judging from the free market price, Indonesian consumer surplus has decreased by $ 20 ($ 80 - $ 60).) per unit. This example shows that the PTA given to fellow member countries in an economic integration has resulted in a shift in production from a more efficient (non-member) country to a less efficient (member) country. This shift reduces the benefits that should be obtained from specialization of production and international trade based on the advantages that each country has according to the principles of free trade.

Dx and Sx are curves of domestic demand and supply for goods X from country II, while curves S1 and S3 are perfectly elastic supply curves in free trade conditions for goods X from country I ($ 1) and country III ($ 1.5). By imposing 100 percent import duty rate, country II imports 30 units of goods X or JH from country I so that the import price becomes $ 2 or curve S1 + T. then country II formed regional economic integration in the form of an FTA with country III.

RESEARCH METHODS

Types and Sources of Data

The data used in this research is secondary data. Almost all data used comes from the Global Trade Alayisis Project (GTAP) database version 10 published in September 2019. This data can be obtained from Purdue University. It is the only university in the world to publish a data model for general equilibrium analysis. GTAP version 10 is the latest GTAP program that contains data, including: input-output tables, added value of the production sector, primary and intermediate input values, bilateral trade, transportation, protection levels, taxes, and subsidies from regions and sectors that Previous GTAP (140 regions and 57 sectors).

Given the large number of regions or countries and the number of sectors contained in GTAP 10. The aim is to facilitate analysis. For the purposes of this research, an aggregation of regions and sectors is carried out. The total regional aggregation is determined by considering the position of ASEAN member countries. With these considerations, Indonesia, Malaysia and Thailand, the Philippines, and Singapore were determined to be independent while other ASEAN countries were aggregated into other ASEAN groups or in this study, they were coded Xse.

Other countries are grouped based on their proximity, namely East Asia, the European Union, and others. Meanwhile, sectors / product groups are disaggregated by group of goods. Considering that this research focuses on the macroeconomic and sectoral performance of the AEC, the sectors that are specifically aggregated are related to GDP, TOT, Trade Balance and others.

Data analysis method

In this study, data were analyzed both qualitatively and quantitatively. Qualitative analysis is intended to see the development and trade flows of each country / region. This analysis is needed to determine the contribution of AEC member countries in intra-ASEAN trade. From this we will know the direction and can also identify opportunities that can be exploited by Indonesia and member countries. Quantitative analysis is carried out to measure the impact of the AEC implementation in the ASEAN environment.

Aggregation and Disaggregation Determination Process

Considering the need for data to see the impact of the implementation of the AEC which was launched by the ASEAN Community on 31 December 2015 and was effective on 1 January 2016, the next step is to group and separate countries / regions and sectors. This stage is important to make it easier to analyze. When all regions and sectors are left to stand alone as they are, it is believed that interpretation will be quite difficult. Besides that, the number of regions and sectors is so large that it is not possible to display in one table at once.

Table 1 presents the results of country aggregation based on the GTAP 10 database. From the analysis results and through a consideration as previously mentioned, countries / regions are aggregated into 13 (dubelas) regions. Of these, the five ASEAN countries namely Indonesia, Malaysia, Thailand, the Philippines and Singapore (ASEAN 5) are aggregated separately.

Apart from these groups of countries, there are also groups of countries from East Asia, South Asia, North America, Latin America, the European Union, East and North Central Africa, and the rest are aggregated into other groups of countries in the world. These countries are not made to stand alone with the consideration that these countries are not the main exporting countries of world palm oil.

Table 1. Countries based on GTAP data base. 10

No	New Code	region Description	Comprising old regions
1	Idn		Indonesia.
2	Mys		Malaysia.
3	Tha		Thailand.
4	Phil		Philipina
5	Sing		Singapore
6	REA	East Asia	China; Hong Kong; Japan; Korea; Mongolia; Taiwan; Rest of East Asia; Brunei Darassalam.
7	SEA	Southeast Asia	Cambodia; Lao People's Democratic Republ; Viet Nam; Rest of Southeast Asia.
8	SA	South Asia	Bangladesh; India; Nepal; Pakistan; Sri Lanka; Rest of South Asia.
9	CUMX	North America	Canada; United States of America; Mexico; Rest of North America.
10	LA	Latin America	Argentina; Bolivia; Chile; Paraguay; Peru; Uruguay; Venezuela; Rest of South America; Costa Rica; Guatemala; Nicaragua; Panama; El Salvador; Rest of Central America; Dominican Republic; Jamaica; Puerto Rico; Trinidad and Tobago; Caribbean.
11	EU_28	European Union 25	Austria; Belgium; Cyprus; Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Ireland; Italy; Latvia; Lithuania; Luxembourg; Malta; Netherlands; Poland; Portugal; Slovakia; Slovenia; Spain; Sweden; United Kingdom; Bulgaria; Croatia; Romania.
12	MENA	Middle East and North Africa	Bahrain; Iran Islamic Republic of; Israel; Jordhan; Kuwait; Oman; Qatar; Saudi Arabia; Turkey; United Arab Emirates; Rest of Western Asia; Egypt; Morocco; Tunisia; Rest of North Africa; Nigeria.
13	Row	Rest of World	Australia; New Zealand; Rest of Oceania; Brazil; Ecuador; Honduras; Switzerland; Norway; Rest of EFTA; Albania; Belarus; Russian Federation; Ukraine; Rest of Eastern Europe; Rest of Europe; Kazakhstan; Kyrgyztan; Rest of Former Soviet Union; Armenia; Azerbaijan; Georgia; Benin; Burkina Faso; Cameroon; Cote d'Ivoire; Ghana; Guinea; Senegal; Togo; Rest of Western Africa; Central Africa; South Central Africa; Ethiopia; Kenya; Madagascar; Malawi; Mauritius; Mozambique; Rwanda; Tanzania; Uganda; Zambia; Zimbabwe; Rest of Eastern Africa; Botswana;Columbia Namibia; South Africa; Rest of South African Customs ; Rest of the World.

Sumber: Database GTP 10 (data diolah)

Table 2. shows the results of sector aggregation based on the GTAP 10 baseline data. The number of sectors is aggregated into 12 (twelve). Sector selection is carried out through two stages of selection. The first stage is to select sectors that are strategic sectors and are available in the GTAP database.

These sectors are made independent (not grouped with other sectors). The second stage is to select sectors that are considered strategic but not in the GTAP database. For this sector, aggregation is used so that the position and impact of tariff setting, export subsidies, and domestic support can be identified.

Tabel 2. Sectors based on GTAP data base. 10

No.	New Code	sector Description	Comprising old sectors
1	Mswt		Oil seeds; Vegetable oils and fats.
2	FSwt		Processed rice; Food products nec.
3	Grains Crops	Grains and Crops	Paddy rice; Wheat; Cereal grains nec; Vegetables, fruit, nuts; Sugar cane, sugar beet; Plant-based fibers; Crops nec.
4	Meat Lstk	Livestock and Meat Products	Cattle,sheep,goats,horses; Animal products nec; Raw milk; Wool, silk-worm cocoons; Meat: cattle,sheep,goats,horse; Meat products nec.
5	Extraction	Mining and Extraction	Forestry; Fishing; Coal; Oil; Gas; Minerals nec.
6	ProcFood	Processed Food	Dairy products; Sugar; Beverages and tobacco products.
7	TextWapp	Textiles and Clothing	Textiles; Wearing apparel.
8	LightMnfc	Light Manufacturing	Leather products; Wood products; Paper products, publishing; Metal products; Motor vehicles and parts; Transport equipment nec; Manufactures nec.
9	HeavyMnfc	Heavy Manufacturing	Petroleum, coal products; Chemical,rubber,plastic prods; Mineral products nec; Ferrous metals; Metals nec; Electronic equipment; Machinery and equipment nec.
10	Util_Cons	Utilities and Construction	Electricity; Gas manufacture, distribution; Water; Construction.
11	Trans Comm	Transport and Communication	Trade; Transport nec; Sea transport; Air transport; Communication.
12	OthServices	Other Services	Financial services nec; Insurance; Business services nec; Recreation and other services; PubAdmin/Defence/Health/Educat; Dwellings.

Data Processing Methods

The GTAP model was processed using RunGTAP software. The stages of data processing can be explained in Figure 3. The aggregation process of sectors and countries / regions is carried out using GTAPAgg. Data processing with RunGTAP will be carried out using closure adjustments and shocks in accordance with the research objectives. This data will be processed menghasilkan keluaran *(out)* seperti *solution, volume changes, dan decomposition*.
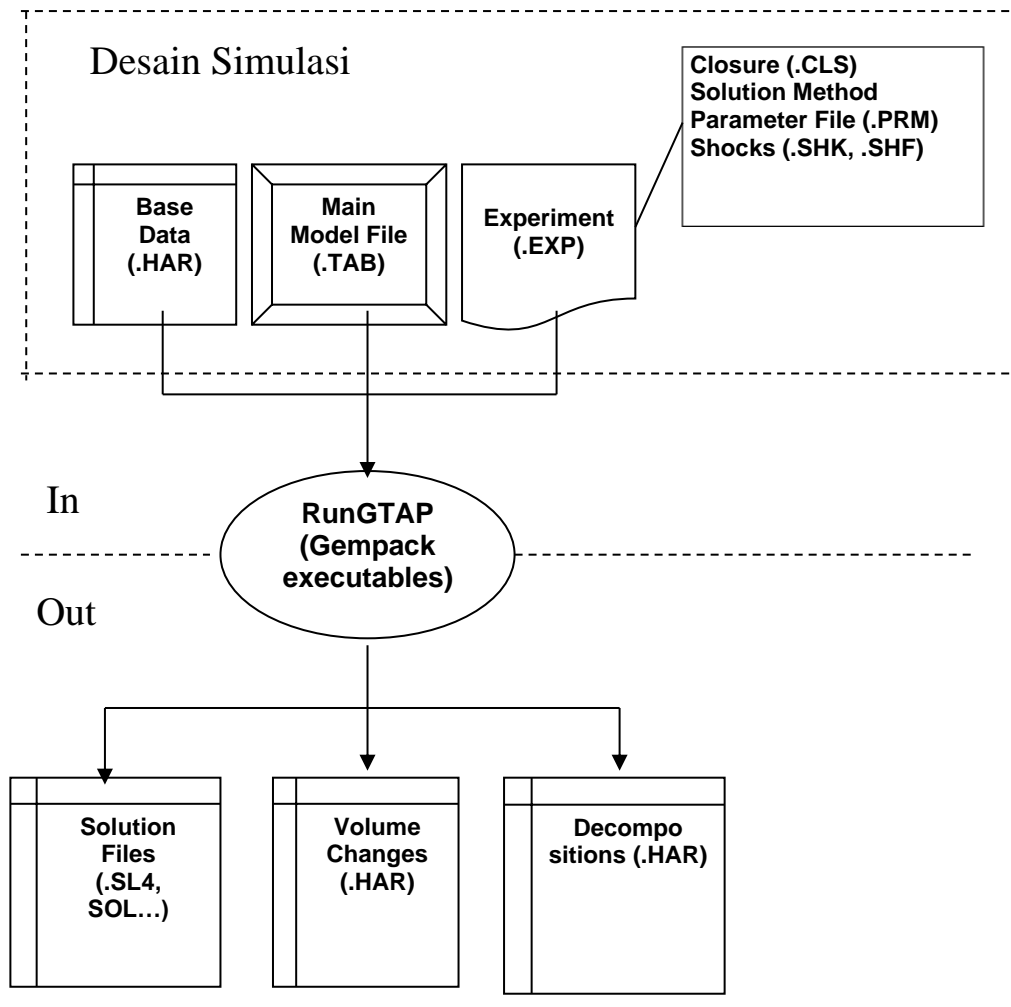
Figure 3. Utilization of the General Trade Analysis Project with the RunGTAP Tool

RESULT AND DISCUSSIONS

The results of this simulation answer question about the impact of AEC implementation on Macroeconomic performance in ASEAN member countries. The implementation of the AEC is based on a policy of eliminating tariffs to zero percent. Macroeconomic performance refers to nominal GDP, deflator GDP, and real GDP

Impact of AEC Implementation on Nominal GDP

The simulation results show that all ASEAN 5 countries have experienced an increase in Nominal GDP since the implementation of AEC. Based on Table 3. The nominal GDP of the five countries increased in the range of 1.02 percent to 1.32 percent. The largest increase was obtained by Singapore, while the smallest increase was obtained by the Philippines, but the magnitudes were not much different from one another.

Other ASEAN countries consisting of Camboja, Laos, Myan Mar, Brunei and Vietnam, although showing an increase in nominal GDP, the increase was relatively smaller than that experienced by ASEAN 5 countries.These countries experienced an increase in nominal GDP with figures the average magnitude is 0.53 percent.

Meanwhile, countries other than ASEAN experienced a decrease in nominal GDP on average. These countries include, among others, in the region of countries in the eastern and central African region, South Asian countries, the European Union25 and other countries that are located in other countries or ROW.

The simulation results show that there are also other countries that have experienced an increase in nominal GDP. These countries are a group of countries in the North America region and countries in the Latin America region. Judging from the magnitude of the increase in nominal GDP, it turns out that countries in the North American region consisting of the United States, Canada and Mexico experienced the largest increase in nominal GDP outside ASEAN 5.Based on the simulation results with the application of zero tariffs, these countries can enjoy increase in GDP by 0.11 percent. Countries in Latin America, although also experiencing an increase in nominal GDP, the figure is much smaller, namely 0.02 percent.

The results of this simulation show that the countries experiencing an increase in nominal GDP are countries that (1) already exist in the ASEAN region, plus other countries that have been intensively becoming ASEAN's main trading partner countries. (2) ASEAN countries that have been quite intense in trading activities with ASEAN.

For other countries outside ASEAN, countries that have experienced an increase in nominal GDP are countries that have been intensively trading or become ASEAN's main partner countries such as the United States and the European Union, while other countries that have not been partner countries so far. The main thing that ASEAN did not experience an increase in Nominal GDP was even a decrease in the nominal GDP of these countries.

Table 3. The Impact of the Elimination of Trade Barriers on Nominal GDP by Country / Region (% change)

No	country	Nominal GDP
1	Indonesia	1,21
2	Malaysia	1,23
3	Philipines	1,02
4	Thailand	1,27
5	Singapura	1,32
6	Other South East Asia	0,53
7	East Asia	-0,02
8	South Asia	-1,51
9	North America	0,11
10	Latin America	0,02
11	European Union 25	-0,36
12	Middle East and North Africa	-0,95
13	Rest of World	-0,11

Simulation Results using GTAP 10

The Impact of AEC Implementation on the GDP Deflator

The simulation results show that all ASEAN 5 countries have experienced an increase in Nominal GDP since the implementation of AEC. Based on Table4. The nominal GDP of the five countries increased in the range of 1.32 percent to 1.39 percent. The largest increase was obtained by Singapore, while the smallest increase was obtained by the Philippines, but the magnitudes were not much different from one another.

Other ASEAN countries consisting of Camboja, Laos, Myan Mar, Brunei and Vietnam also experienced an increase in nominal GDP, but the increase was relatively smaller than that experienced by ASEAN 5 countries.These countries experienced an increase in nominal GDP with figures the average magnitude is 0.35 percent.

Meanwhile, countries other than ASEAN experienced a decrease in nominal GDP on average. These countries, among others, are located in the North America region, countries in the East and Central Africa region, Latin America, and other countries that are located in other countries that are aggravated into other countries or ROW.

Tabel 4. The Impact of Eliminating Trade Barriers to the GDP Deflator of Each

Number	Country	Deflator GDP
1	Indonesia	1,33
2	Malaysia	1,43
3	Philipines	1,02
4	Thailand	1,26
5	Singapura	1,39
6	Other South East Asia	0,35
7	East Asia	-0,32
8	South Asia	-1,22
9	Notth America	0,67
10	Lain America	0,08
11	European Union 25	-0,37
12	Middle East and North Africa	-0,04
13	Rest of World	-0,17

Simulatioon results using GTAP 10.

The simulation results also show that there are also other countries that have experienced an increase in nominal GDP. These countries are a group of countries in the North America region and countries in the Latin America region. Judging from the magnitude of the increase in nominal GDP, it turns out that countries in the North American region consisting of the United States, Canada and Mexico experienced the largest increase in nominal GDP outside ASEAN 5.Based on the simulation results with the

application of zero tariffs, these countries can enjoy an increase in GDP by 0.67 percent. Countries in Latin America, although also experiencing an increase in nominal GDP, will but the figure is much smaller, namely 0.08 percent.

The simulation results also show that the countries that have experienced an increase in nominal GDP are countries that (1) already exist in the ASEAN region, plus other countries that have been intensively becoming ASEAN's main trading partner countries. (2) ASEAN countries that have been quite intense in conducting trade activities with ASEAN. For other countries outside ASEAN, countries that have experienced an increase in nominal GDP are countries that are currently intensively trading or have become ASEAN's main partner countries such as the United States and the European Union, while other countries that have not been spoiled so far are partner countries. The main thing that ASEAN did not experience an increase in Nominal GDP was a decrease in the nominal GDP of these countries.

The Impact of AEC Implementation on Real GDP

The simulation results do not appear to be much different from the impact simulation on the normal and deflator GDP. All ASEAN 5 countries have experienced an increase in Nominal GDP since the AEC was implemented. Based on Table 5. The nominal GDP of the five countries has increased in the range between 0.02 percent to 0.92 percent. The largest increase was obtained by Singapore, while the smallest increase was obtained by the Philippines, but the magnitudes were not much different from one another.

Other ASEAN countries consisting of Camboja, Laos, Myan Mar, Brunei and Vietnam, although showing an increase in nominal GDP, the increase was relatively smaller than that experienced by ASEAN 5 countries.These countries experienced an increase in nominal GDP with figures the mean magnitude is 0.05. Meanwhile, countries other than ASEAN experienced a decrease in nominal GDP on average. These countries, among others, are located in the North America region, South SEIA North America, countries in the East and Central African region, Latin America, and other countries which are located in other countries or ROW.

Tabel 5. The Impact of Eliminating Trade Barriers to the GDP Deflator of Each Country (% change)

Number	Country	RIIL GDP
1	Indonesia	0,33
2	Malaysia	0,37
3	Philipines	0,02
4	Thailand	0,27
5	Singapura	0,92
6	Other South East Asia	0,05
7	East Asia	-0,02
8	South Asia	-1,01
9	Notth America	0,31
10	Lain America	0,02
11	European Union 25	-0,24
12	Middle East and North Africa	-0,35
13	Rest of World	-0,06

Simulation results using GTAP 10.

The simulation results also show that there are also other countries that have experienced an increase in nominal GDP. These countries are a group of countries in the North America region and countries in the Latin America region. Judging from the magnitude of the increase in nominal GDP, it turns out that countries in the North American region consisting of the United States, Canada and Mexico experienced the largest increase in nominal GDP outside ASEAN 5.Based on the simulation results with the application of zero tariffs, these countries can enjoy an increase in GDP by 0.31 percent. Countries in Latin America, although also experiencing an increase in nominal GDP, but the figure is much smaller, namely 0.02 percent.

The results of this simulation show that it does not seem that much different from the impact of AEC on Nominal and real GDP, that countries experiencing an increase in nominal GDP are countries that (1) already exist in the ASEAN region, plus other countries that have also been this is intense to be ASEAN's main trading partner country. (2) ASEAN countries that have been quite intense in trading activities with ASEAN.

For other countries outside ASEAN, countries that have experienced an increase in nominal GDP are countries that are currently intensively trading or have become ASEAN's main partner countries such as the United States and the European Union, while other countries that have not been spoiled so far are partner countries. The main thing that ASEAN did not experience an increase in Real GDP was a decrease in the nominal GDP of these countries.

CONCLUSION

1. The implementation of the ASEAN free trade area has an impact on the macroeconomic conditions of member countries as seen from changes in real GDP, Nominal GDP, GDP Deflator.
2. The impact of this policy is mostly enjoyed by the five ASEAN countries (Indonesia, Malaysia, Thailand, the Philippines, and Singapore) all of which are the founders of ASEAN and have relatively more developed economies than other resilient regions. The enactment of AEC has led to Trade Creation and Trade Diversion for member countries.

3. Other ASEAN member countries such as Myanmar, Bruney Darussalam, Laos, Cambodia, and Vietnam still need time to carry out ASEAN free trade at this time, which is indicated by the increase in their imports by a larger percentage than their exports.
4. The impact on countries that have been AEC's main partner countries outside ASEAN5 is negative, although most of the impacts are relatively small.

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