

Analysis of ASEAN Economy Community Implementation in Indonesia International Trade to ASEAN Countries

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Abstract: ASEAN Economy Community (AEC) which was implemented in early 2016, has made free international trade possible in the ASEAN region. One of the main focuses of AEC is to increase trade between ASEAN countries. Therefore, AEC hopefully can give significant impact on Indonesia trade after its implementation. This research discusses whether the value of Indonesia's exports and imports to ASEAN countries is significantly different or equal by comparing before and after AEC implementation, using a non-parametric statistical approach. The data of Indonesia's exports and imports to ASEAN countries are from Badan Pusat Statistik (BPS-Statistics Indonesia) that has been processed by Ministry of Trade, Indonesia. The value of Indonesia's exports and imports to ASEAN countries in 2015 is classified as before the AEC implementation and that data in 2016 is classified as after AEC implementation. The statistical method used in data analysis is the Wilcoxon Test. With 95% confidence level, the researcher confirms that the value of Indonesia's exports and imports of trade to ASEAN countries is significantly equal before and after the implementation of AEC. Because of it, the implementation of the AEC is considered to be less than optimal to increase trade between ASEAN countries.

1 INTRODUCTION

ASEAN Economic Community (AEC) is a realization of a major economic region. AEC views ASEAN as a single market and production in a competitive region with globalization. When AEC is realized, the characterization of ASEAN will turn into free trade, products, and investments. With harmonious trade and investment laws, ASEAN, as a regulatory organization will be strengthened and become more attractive as a single investment destination.

The idea of forming an actual ASEAN Community has been proposed since 2002 finally realized. ASEAN Community can not stand alone, supported by three main pillars, namely ASEAN Socio-Cultural Community, ASEAN Political-Security Community, and ASEAN Economic Community. In addition to the more excited, AFTA, AEC, is also a response from the efforts of ASEAN countries in order to avoid the economic work that happened in 1997-1998.

Moreover, AEC, is to accommodate the economic goals of each country in order to increase endurance with a practical East Asian economy fast. The goal of AEC itself in the blueprint is the establishment of a

single ASEAN market based on the liberalization of goods, investment, capital, and skilled labor. In addition, there are three other objectives, namely (1) increasing regional competitive power, (2) generalizing economic development, and (3) economic integration to global level. Without the loss of AFTA, AEC is a platform for all kinds of economic cooperation that has been established by intra-ASEAN. "AEC provides a comprehensive framework for building existing ASEAN integration programs, such as AFTA, AFAS and AIA".

Liberation and economic integration have a level of urgency if ASEAN wants to exist and is oriented to the success of the European Union. Therefore, AEC, which was originally implemented in 2020 in accordance with ASEAN Vision 2020, but in 2007 - at the 12th ASEAN Summit in Cebu - it was agreed that the target of implementing AEC would be accelerated to 2015. This acceleration clearly led to the controversy the optimist and the pessimist.

Thus, the research of AEC has been interesting topic for researchers around the world. "The exchange rate and inflation are of particular concern after the implementation of free trade" (Malauw, 2016, PP 45). This is evidence of increasingly intense trade competition between countries that bring its

own impact, especially on developing countries like in ASEAN. Such competitiveness is called "the competitiveness of the WEF version, which is the competitiveness of each country, not the product" (Apriliana, 2016, PP 3). Grossman and Helpman (1991) prove that the opening of trade will be followed by the transmission of knowledge so that in general will increase economic growth. This means that a country will experience an increase in economic growth.

However, researchers found that "Referring to the Global Competitiveness Report 2012-2013, Indonesia ranks 46th out of 144 countries surveyed by the World Economic Forum (WEF). The rating of Indonesia is well below the position of Singapore which is almost every year ranked second (2) world and first (1) ASEAN" (Apriliana, 2016, PP.3). This is not separated from the global market structure of export-import which is an external factor that affects competitiveness. Meanwhile, according to data from Asean Sekretariat shows the gap of export-import influence on GDP in Asean countries. Indonesia itself lags far behind its neighbors Brunei Darussalam, Malaysia and Singapore. Recorded in the data, the ratio of the effect of exports to GDP Indonesia reached 27.7 percent, while Brunei, Malaysia, Singapore, respectively are 65.8, 100.2, and 250.3. Similarly, the ratio of imports to Indonesia's GDB is well below the percentage of two countries: Indonesia 16.8, Malaysia 81.8, Singapore 180.3 per cent, but slightly above Brunei reaching 12.9 per cent. Really a considerable ratio interval considering the proximity to these countries in one region.

With regard to trade between countries, according to (Chia, 2013, PP.4), "Asean Economic Community itself originated from the establishment of Afta (Asean Free Trade Area) in 1992 which is a serious effort of Asean in this regard". Initial barriers include the expansion of substitution of imported industrialization policy, the smallness of intra-ASEAN trade, and wide differences in economic size, level of development, and industry competence that lead to very different perceptions of the benefits and costs of integration. The shift to external development strategies and external pressure (such as the establishment of the EU Single Market and the North American Free Trade Area) suppresses ASEAN to form a free trade zone, Afta. The challenges of globalization, the slow recovery from the Asian financial crisis, and the economic revival of the People's Republic of China and India further suppressed ASEAN into deep integration in 2003 with the establishment of the ASEAN Economic Community (AEC). Research about AEC is also

conducted by other authors [3,5,6,7,9,10,11,12,13,15] and [16].

In relation to the above matters, the authors want to conduct research related to AEC which came into effect in early 2016, especially the impact of AEC on Indonesia's international trade sector to Southeast Asian countries. The purpose of this study is to evaluate the impact of export and import value of Indonesia to ASEAN countries before and after the implementation of the AEC.

2 METHODS

To evaluate the impact before and after the implementation of AEC on the value of Indonesia's exports and imports to ASEAN countries, the authors conducted an analysis with the approach of Public Policy Evaluation Theory by Finsterbusch and Motz (1980), ie single program in before and after type. Thus, the authors evaluate the data of export value and import value in 2015 as the data of export value and import value of Indonesia to ASEAN countries before the implementation of AEC, then the data of export value and import value in 2016 as data of export value and import value to country - ASEAN countries after the implementation of the AEC. The null hypothesis used is the value of Indonesia's export and import value to ASEAN countries before and after the implementation of AEC is the same.

In this study, the authors conducted the wilcoxon test of two dependent samples. Daniel (1989) explained that the wilcoxon test of two dependent samples is a test used for the case of two dependent samples when the measuring scale allows to determine the relative magnitude of differences or differences that occur, not just different observations.

The data used in this study is secondary data derived from the Central Bureau of Statistics processed by the Ministry of Trade of the Republic of Indonesia. This data is the data of the value of the realization of Indonesia's exports and imports to ASEAN countries for oil and gas and non-oil and gas sectors in 2015 and 2016. Then, analyzing with the data using Wilcoxon Test in a 95% confidence level. The purpose of data analysis with Wilcoxon Test is to know the value of Indonesia's exports and imports to ASEAN countries significantly different or not in before or after the implementation of AEC.

3 RESULTS

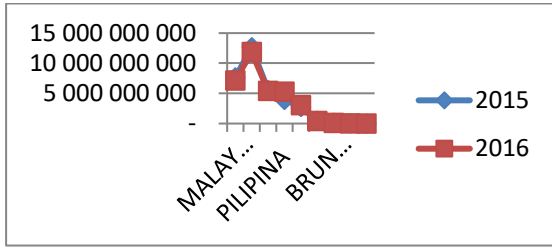


Figure 1: Realization of export value of Indonesia to ASEAN countries.

The total value of the realization value of Indonesian exports to ASEAN countries in 2015 amounted to 32,961,904,063 US \$. The total export value has increased in 2016 amounting to 33,215,242,469 US \$. However, the increase is considered relatively small despite the implementation of the AEC has come into effect in early 2016. The gap in the value of Indonesia's exports to ASEAN countries in 2016 decreased amounted to 4,110,372,776 US \$, when compared with the year 2015 amounted to 4,337,389,815 US \$. However, the value of the gap is still considered large because it exceeds the average value of Indonesian exports to ASEAN countries in 2016 amounted to 3,690,582,497 US \$ and in 2015 amounted to 3,662,433,785 US \$. Therefore, this shows that the value of exports with destination countries in the ASEAN region is still dominated by several countries only.

In addition, the value of Indonesia's exports to countries in the largest ASEAN region in 2015 and 2016 is with the destination country of Singapore. Thus, Singapore became the export destination country with the highest export realization value compared to other countries in the ASEAN region, which amounted to 12,632,634,285 US \$ in 2015 and 11,860,980,459 US \$ in 2016. On the contrary, Myanmar became export destination country with the lowest export realization value compared to other countries in the ASEAN region, which amounted to 615,670 US \$ in 2015 and 615,684 US \$ in 2016.

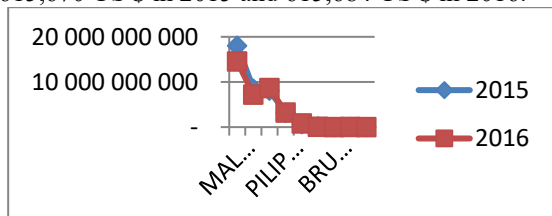


Figure 2: Realization of Import Value of Indonesia to ASEAN countries.

The total value of the realization of Indonesia's import value to ASEAN countries in 2015 amounted to 38,634,670,496 US \$. The total value of imports decreased in the year 2016 amounted to 34,583,740,133 US \$. However, Indonesia's import value gap in ASEAN countries in 2016 decreased by 5,206,196,392 US \$, compared to 2015 which amounted to 6,200,343,539 US \$. However, the value of the gap is still considered great because it exceeds the average value of imports of Indonesia to ASEAN countries in 2016 amounted to 3,842,637,793 US \$ and in 2015 amounted to 4,292,741,166 US \$. Because of it, it shows that the import value with destination country in ASEAN region is still dominated by several countries only.

In addition, the value of Indonesia's imports to the countries in the largest ASEAN region in 2015 and 2016 is with Malaysian destinations. Thus, Malaysia became the import destination country with the highest import realization value compared to other countries in the ASEAN region, which amounted to 18,022,485,606 US \$ in 2015 and 14,548,298,535 US \$ in 2016. On the contrary, Myanmar became the import destination country with the lowest import realization value compared to other countries in the ASEAN region, which amounted to 160,418 US \$ in 2015 and 113,340 US \$ in 2016.

Meanwhile, when comparing the value of the realization of exports and imports for Indonesia's oil and gas and non-oil sectors to ASEAN countries, there is a deficit as both the value of oil and gas and non-oil / gas exports in 2015 and 2016 that are less than the realization value of imports by 2015 and 2016. This means that the presence or absence of AEC does not affect Indonesia's international trade rate with ASEAN countries.

Table 1: Wilcoxon Test Result.

Trade	N	Z	Pvalue
Export	9	-0,770*	0,441
Import	9	-0,059*	0,953

* $\alpha=0,05$

Table 1 shows the test results of realization data of export and import values before and after the implementation of AEC statistically using Wilcoxon Test with a value of $\alpha = 0.05$ or a confidence level of 95%. In the test of the realization of export value, the null hypothesis used is the median value of Indonesian exports to ASEAN countries before and after the implementation of AEC is the same. The statistical test results show that Pvalue (0.441) > α (0.05), thus failing to reject the null hypothesis. This means that the export median value of Indonesia to ASEAN countries before and after the

implementation of AEC is the same. Therefore, AEC has no effect on the value of Indonesia's exports to ASEAN countries.

In addition, table 1 also shows the results of statistical tests of realization of import value of Indonesia to ASEAN countries. The null hypothesis used is the median value of Indonesian imports to ASEAN countries before and after the implementation of AEC is the same. The statistical test results show that $P\text{value} (0.953) > \alpha (0.05)$, thus failing to reject the null hypothesis. This means that the median value of Indonesian imports to ASEAN countries before and after the implementation of the AEC is the same. Therefore, AEC has no effect on the value of Indonesian imports to ASEAN countries.

4 DISCUSSION

Based on the results of data analysis conducted with Wilcoxon Test using 95% confidence level, it can be seen that the value of the realization of Indonesia's exports and imports did not experience significant differences before or after the implementation of AEC. This means that the AEC has no impact on Indonesia's international trade. This is certainly unfortunate because one of the main objectives of the AEC to mobilize and improve the trade sector among countries in the ASEAN region, is not achieved optimally.

Indonesia's trade balance is likely to deficit due to the total value of import realization which is greater than the total value of export realization, especially for oil and gas and non-oil sectors to destination countries in ASEAN region. Indonesia's trade deficit to ASEAN countries already occurred before the AEC came into force. According to the Central Bureau of Statistics (BPS) in the history of the last 15 years (2000-2015), Indonesia once reached a trade surplus in 2011. After that, trade balance deficits tend to widen from year to year. In addition, although AEC comes into effect in early 2016, trade balance deficits continue to occur in 2016. Therefore, AEC is expected as a trading area capable of driving the economic sector for its member countries is not running optimally. The decline of the global economy continues to affect each country in implementing international trade.

The condition of the deficit trade balance is certainly not profitable for Indonesia. Although the largest population in comparison to other countries in the ASEAN region, Indonesia is still unable to maximize the value of export realization, so that Indonesia is only a target market rather than being a

superior market player in the ASEAN region. Because of it, in order to optimize international trade transactions in the AEC, the Government of Indonesia needs to evaluate the causes of the annual trade deficit, so it is hoped that after knowing the main problem causing trade deficit, the international trade in AEC can run optimally.

Indonesia's trade deficit in ASEAN is also reviewed by Syadullah (2017), which explains that one of the causes of Indonesia's trade balance deficit with countries in the ASEAN region is low foreign power, especially manufactured products. Based on the results of studies conducted Syadullah, the Government can focus on improving product competitiveness for business actors so that the product is superior and able to compete in the ASEAN free market.

Although Indonesia is experiencing a deficit for the total realization of export and import value to ASEAN countries, but there are several ASEAN member states that show the surplus conditions in the trade balance, such as Singapore, Vietnam, Cambodia, Brunei Darussalam and Myanmar. This can be an opportunity for Indonesia to increase trade to these countries, through establishing good inter-country trade cooperation relationships.

On the other hand, the Government of Indonesia needs to focus also on countries in ASEAN that are less than optimal trade so that the trade balance becomes a deficit, such as Malaysia, Thailand and Laos. There needs to be an approach through bilateral trade with these countries to increase trade transactions, so that the demand for Indonesian products to be shipped abroad is increasing. Therefore, the deficit trade balance condition is expected to turn into a surplus.

5 CONCLUSIONS

Implementation of the AEC policy came into force in early 2016 in all ASEAN member countries. However, to know whether before and after the implementation of the AEC affects international trade in ASEAN, especially in the international trade of Indonesia for the oil and gas and non oil and gas sectors, a statistical test of total data on the realization of exports and imports of Indonesian trade to countries in the ASEAN region when before and after the AEC was enacted using the Wilcoxon Test. Using a 95% confidence level, the results of the study indicate that the total value of Indonesia's exports and imports of oil and gas and non-oil and gas sectors to ASEAN countries before and after the AEC is the

same or there is no statistically significant difference. Thus, the AEC has no effect on Indonesia's international trade to ASEAN countries. Although the results of this data analysis are said to be valid because using statistical methods, further research needs to be done to develop the results of existing research, especially to further examine the factors causing international trade in Indonesia in AEC is not optimal.

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