

INTERNATIONAL TRADE ANALYSIS BETWEEN INDONESIA AND PHILIPPINES BEFORE AND AFTER ASEAN-CHINA FREE TRADE AGREEMENT

Harman Malau

Harmanmalau88@gmail.com

Adventist University of Indonesia-Bandung

Abstract

The research aim is to show how exchange rates and inflations predict exports and imports before and after free trade by using Indonesia-Philippines data analysis technique namely regression analysis, partial (t-test), simultaneous (F-test) and adjusted square. Sources of data are obtained from legal website of Central Bureau of Statistics of Indonesia. The data of import-export are divided into two parts, namely from 2005 to December 2009 is used to measure the performance of data before Free Trade. And from 2010 to 2014 is used to measure the performance of data after free trade.

As it is shown at export performance that linear regression had different before and after the implementation of Free Trade. It shows that the present of Free Trade had changed the predicted performance of regression results. Both inflation and exchange rate gave different contribution before and after the implementation on Free Trade. Export of Indonesia shows in the linear regression line that both before and after Free Trade moved from left to right yearly. The line tilt before Free Trade is more steeply than the line tilt after Free Trade. It means the performance of export had leaped much bigger before Free Trade yearly.

Import performance shows that if the exchange rate increased then the import would increase, but after Free Trade, if the exchange rate increase, then the import would decrease. Significant level of correlation (sig. 2 tailed) shows that the inflation rate changed from 0.858 to 0.123 and the significant level of exchange rate correlation (sig. 2 tailed) changed from 0.387 to 0.514. And both numbers are above of 0.025. The implementation of Free Trade contributed a positive impact to Indonesia.

Keywords: *Free trade, import, export, inflation, and exchange rate.*

Introduction

ACFTA is one of the International Free Trade with the acronym ACFTA stands for ASEAN-China Free Trade Area. It has been implementing since January 1, 2010 until now with seven countries of China and six out of ten ASEAN members namely Indonesia, Malaysia, Singapore, Thailand, Philippina and Brunei Darussalam with agreement through the elimination of barriers and without limitation of trade such as quota and import tariff from 5 percent to zero percent. ACFTA is the free trade which has the same policy such as free protection, quota, subsidy, tariff or import-export tax (Tarmidi, 2010; Pasha, 2010).

The implementation of ACFTA is feared that this trade swiftly brings import flow to impend uncompetitive local product and it could weaken the national economy. Some have a

positive view but some have a negative view. The general secretary of Indonesian textile association stated about his concern with the possibility of the collapse of national industry. In contrary, Indonesia commerce ministry said that ACFTA would increase export and contribute advantages including foreign investment in Indonesia (Hidayatullah, 2010).

The pro and con background of ACFTA in the matter of advantage or disadvantage, the study has been done by way of analyzing balance of trade from the different of export-import for five years before and five years after the implementation of ACFTA. What is the impact of the ASEAN-China Free Trade Area (ACFTA) agreement to Indonesia. This study analyzes the different of total import-export prices by comparing the time series performance analysis before and after the implementation of ACFTA. The problem in this research is whether or not there are differences in the trade performance before and after ACFTA 2010. Is it bring positive or negative impact to Indonesia?

Review of Literature

In an era of global competition, every company pays special attention in the seed market competition strategy in order to compete for market advantage. Economists such as David Hume (1752), Adam Smith (1776) and David Ricardo (1817) states that free markets and free trade is the key to economic prosperity and promote the efficiency of resource use. This view holds that the free trade gains due to the exchange of specialized products or services traded with each other (Langenfeld, J., and Nieberding, J. , 2005).

Economists have long understood that consumers favor free trade as it gets cheaper prices, more choice and better quality. Competition products imported spur local firms to improve quality, price reduction, efficiency and innovation. Free trade also presents an opportunity to export goods and services of other countries, stimulating local growth. Free trade would increase the national welfare, and protectionism would lessen the national welfare.

Maha et al. (2009) stated that the concept of globalization refers to the interdependence of countries because of the increased integration of trade, finance, and labor in the global market place. In this case the state increase seed production to be sold to countries that are less efficient to produce. Thus international trade is more successful in improving the standard of quality of life than did the free market trade.

Overall there are winners and losers in individual sectors. Julien, P., (1994) conducted a study on the effects of free trade globalization (Free Trade Agreement) 1988 on small and medium-sized enterprises. The study shows that there are only a few companies that have benefited from free trade NAFTA (North America Free Trade Area). Furthermore Goldstein, P. (2002) stated that America is a great country to benefit from free trade FTAA. Colitt (2002) stated that Brazil was not entirely convinced that the FTAA is an advantage for their country. Furthermore Greenbaum (2002) stated more emphatically that the FTAA was not favorably viewed by Latin America. Free trade would benefit the United States, but a threat to Latin America.

Atilgan and Kanat (2007) wrote that the rise of the trend of globalization has intensified competition for economic, technological, social and political. Some countries try to get out of danger. Hills and Doncer (2004) wrote that the current trade rules do not bring success to the world. It is true that not all local companies are rivalry with imported products. Free trade can be beneficial and can also harm certain countries.

The History of International Trade.

The theory of international trade and commercial policy is one of the oldest branches of economic thought. From the ancient Greeks to the present, government officials, intellectuals, and economists have pondered the determinants of trade between countries, have asked whether trade bring benefits or harms the nation, and, more importantly, have tried to determine what trade policy is best for any particular country.

Since the time of the ancient Greek philosophers, there has been a dual view of trade: a recognition of the benefits of international exchange combined with a concern that certain domestic industries (or laborers, or culture) would be harmed by foreign competition. Depending upon the weights put on the overall gains from trade or on the losses of those harmed by imports, different analysts have arrived at different conclusions about the desirability of having free trade (Irwin, 2011)

An economic philosophy based on the belief of *mercantilism* that (1) a nation's wealth depends on accumulated treasure, usually gold, and (2) to increase wealth, government policies should promote exports and discourage imports. Although the mercantilist era ended in the late 1700s, its arguments live on. A "favorable" trade balance still means that a nation exports more goods and services than it imports. In balance-of-payment accounting, an export

than brings dollars to the country is called *positive*, but imports that cause dollar outflow are labeled *negative* (Ball et al, 2002).

Comparative Advantage

International trade is known as the trade between the countries by the way of import-export activity. And the trade would bring the benefit when the country has special comparative advantage in product or service (Stoll and Schorkopf, 2006).

The case for free trade was reinforced by the classical economists writing in the first quarter of the nineteenth century. The theory of comparative advantage emerged during this period and strengthened our understanding of the nature of trade and its benefits. David Ricardo has received most of the credit for developing this important theory. The theory of comparative advantage suggests that a country export goods in which its relative cost advantage, and not their absolute cost advantage, is greatest in comparison to other countries. Suppose that Indonesia can produce both shirts and automobiles more efficiently than Thailand. But if it can produce shirts twice as efficiently as Thailand and can produce automobiles three times more efficiently than Thailand, Indonesia has an absolute productive advantage over Thailand in both goods but a relative advantage in producing automobiles. In this case, Indonesia might export automobiles in exchange for imports of shirts—even though it can produce shirts more efficiently than Thailand.

The practical import of the doctrine is that a country may export a good even if a foreign country could produce it more efficiently if that is where its relative advantage lies; similarly, a country may import a good even if it could produce that good more efficiently than the country from which it is importing the good. From Thailand's standpoint, it lacks an absolute productive advantage in either commodity, but has a relative advantage in producing shirts (where its relative disadvantage is least). This trade is beneficial for both the Indonesia and Thailand.

Import/Export and Balance of Trade

An import is a good brought into a jurisdiction, especially across a national border, from an external source. The party bringing in the good is called an importer (Joshi 2009; Sullivan and Sheffrin, 2003). An import in the receiving country is an export from the sending

country. Importation and exportation are the defining financial transactions of international trade.

In international trade, the importation and exportation of goods are limited by import quotas and mandates from the customs authority. The importing and exporting jurisdictions may impose a tariff (tax) on the goods. In addition, the importation and exportation of goods are subject to trade agreements between the importing and exporting jurisdictions.

Imports consist of transactions in goods and services). An import of a good occurs when there is a change of ownership from a non-resident to a resident; this does not necessarily imply that the good in question physically crosses the frontier. Imports of services consist of all services rendered by non-residents to residents. In national accounts any direct purchases by residents outside the economic territory of a country are recorded as imports of services; therefore all expenditure by tourists in the economic territory of another country are considered part of the imports of services. Also international flows of illegal services must be included (Lequiller, F. and Blades, D., 2006)

The term export means shipping the goods and services out of the port of a country. The seller of such goods and services is referred to as an "exporter" and is based in the country of export whereas the overseas based buyer is referred to as an "importer". In international trade, "exports" refers to selling goods and services produced in the home country to other markets (Joshi, R. M. 2005)

Export of commercial quantities of goods normally requires involvement of the customs authorities in both the country of export and the country of import. Methods of export include a product or good or information being mailed, hand-delivered, shipped by air, shipped by vessel, uploaded to an internet site, or downloaded from an internet site. Exports also include the distribution of information that can be sent in the form of an email, an email attachment, a fax or can be shared during a telephone conversation.

The first reasonably systematic body of thought devoted to international trade is called "mercantilism" and emerged in seventeenth and eighteenth century Europe. Mercantilist writers argued that a key objective of trade should be to promote a favorable balance of trade. A "favorable" balance of trade is one in which the value of domestic goods exported exceeds the value of foreign goods imported. Trade with a given country or region was judged profitable by the extent to which the value of exports exceeded the value of imports (www.cftech.com, 2015).

Balance of trade represents a difference in value for import and export for a country. A country has demand for an import when domestic quantity demanded exceeds domestic quantity supplied, or when the price of the good (or service) on the world market is less than the price on the domestic market. A trade deficit occurs when imports are large relative to exports. Imports are impacted principally by a country's income and its productive resources (Ball et al., 2002)

Companies import goods and services to supply to the domestic market at a cheaper price and better quality than competing goods manufactured in the domestic market. Companies import products that are not available in the local market.

Protection and Free Trade

Trade barriers are generally defined as government laws, regulations, policies, or practices that either protect domestic products from foreign competition or artificially stimulate exports of particular domestic products. While restrictive business practices sometimes have a similar effect, they are not usually regarded as trade barriers. The most common foreign trade barriers are government-imposed measures and policies that restrict, prevent, or impede the international exchange of goods and services. These include import policies such as tariff, quantitative restrictions, import licensing, and customs barriers.

A tariff is a tax placed on a specific good or set of goods exported from or imported to a country, creating an economic barrier to trade. Usually the tactic is used when a country's domestic output of the good is falling and imports from foreign competitors are rising, particularly if there exist strategic reasons for retaining a domestic production capability.

Subsidies are generally used for failing industries that need a boost in domestic spending. Subsidizing encourages greater demand for a good or service because of the slashed price. The effect of subsidies deters other countries that are able to produce a specific product or service at a faster, cheaper, and more productive rate. With the lowered price, these efficient producers cannot compete. The life of a subsidy is generally short-lived, but sometimes can be implemented on a more permanent basis (www.cftech.com, 2015)

Free trade occurs when there are no artificial barriers put in place by governments to restrict the flow of goods and services between trading nations. When trade barriers, such as tariffs and subsidies are put in place, they protect domestic producers from international competition and redirect, rather than create trade flows.

Advantages and Disadvantages of Free Trade

Two views concerning international trade present different perspectives. The first recognizes the benefits of international trade. The second concerns itself with the possibility that certain domestic industries could be harmed by foreign competition (Wikipedia, 2015).

Increase in production. Increasing productivity and contribute to higher GDP growth by allowing domestic businesses access to cheaper inputs, introducing new technologies, and fostering competition and innovation. Free trade enables countries to specialize in the production of those commodities in which they have a comparative advantage.

Increase Efficiency. With specialization countries are able to take advantage of efficiencies generated from economies of scale and increased output. Free trade improves the efficiency of resource allocation. The more efficient use of resources leads to higher productivity and increasing total domestic output of goods and services. International trade increases the size of a firm's market, resulting in lower average costs and increased productivity, ultimately leading to increased production.

Benefits to consumers. Consumers benefit in the domestic economy as they can now obtain a greater variety of goods and services. The increased competition ensures goods and services, as well as inputs, are supplied at the lowest prices

Promote Innovation. Increased competition promotes innovative production methods, the use of new technology, marketing and distribution methods.

Employment. Trade liberalization creates losers and winners as resources move to more productive areas of the economy. Employment will increase in exporting industries and workers will be displaced as import competing industries fold (close down) in the competitive environment.

Although free trade has benefits, there are a number of arguments put forward by lobby groups and protestors who oppose free trade and trade liberalization. These include: With the removal of trade barriers, structural unemployment may occur in the short term. This can impact upon large numbers of workers, their families and local economies. Often it can be difficult for these workers to find employment in growth industries and government assistance is necessary.

Developing or new industries may find it difficult to become established in a competitive environment with no short-term protection policies by governments, according to the infant industries argument. It is difficult to develop economies of scale in the face of

competition from large foreign. This can be applied to infant industries or infant economies (developing economies).

Free trade can lead to pollution and other environmental problems as companies fail to include these costs in the price of goods in trying to compete with companies operating under weaker environmental legislation in some countries (Edge, K.,1999).

ACFTA (ASEAN-China Free Trade Area)

ASEAN-China Free Trade Area (ACFTA) is the agreement between ASEAN members and China to materialize free trade area by eliminating or lowering trade barriers both tariff and non-tariff, enhancing market access of service, policy and investment provision, and enhancing aspect of economic cooperation to actuate economic relation with ACFTA party in improving the welfare of China and ASEAN community.

The establishment of ACFTA, the head of states of ASEAN and China had signed the ASEAN-China Comprehensive Economic Cooperation November 6, 2001 at Bandar Sri Begawan, Brunei Darussalam. As the initial process of ACFTA establishment the head of states of both party signed Framework Agreement on Comprehensive Economic Cooperation between the ASEAN and People's Republic of China in Phnom Penh, Cambodia, November 4, 2002. Protocol change of Framework Agreement signed on October 6, 2003, In Bali, Indonesia. The second protocol change signed on December 8, 2006. ACFTA service agreement signed at twelfth ASEAN summit meeting on January 2007 at Cebu, Philippines. Whereas investment agreement of ASEAN-China signed at fortieth meeting at ASEAN economic ministry on August 2009, Bangkok, Thailand.

Liberalization of ACFTA fully implemented 2010 for ASEAN 6 and China, and 2015 applied for Cambodia, Laos, Vietnam and Myanmar.

Three Stage of tariff reduction:

- I. Early Harvest Program (EHP) tariff reduction started January 1, 2004 became zero percent on January 1, 2006. EHP products: alive animals, dairy products, plants, vegetables and fruits. Specific agreement with China included coffee, coconut oil/CPO, chocolate, goods of rubber, and furniture.

II. Normal Track

Threshold: 40% at 0-5% in 2005; 100% at 0% in 2010 (Tariff on some products, no more than 150 tariff lines will be eliminated by 2012)

III. Sensitive Track

- Sensitive List (SL) :
 - (a) By the year of 2012 = 20%
 - (b) Reduction become 0-5% by the year of 2018.
 - (c) There are 304 products namely leather material goods, eye glasses, music instrument, dolls, exercise tools, writing tools, iron, steel, spare part; transportation; glycosides, vegetable alkaloid, organic compounds, antibiotic, glass and plastic material goods
- Highly Sensitive List (HSL)
 - (a) By the year of 2015 = 50%
 - (b) There are 47 HSL products namely agriculture products, textile products, automotive and textile and ceramic tableware.

Service agreement effectively apply since July 2007. It is expected that the service agreement would stimulate the enhancing of investment sectors such as: (a) business services such as computer related services, real estate services, market research, management consulting; (b) construction and engineering related services; (c) tourism and travel related services; (d) transport services; educational services; (e) telecommunication services; (f) health-related and social services; (g) recreational, cultural and sporting services; (h) environmental services; and (i) energy services (Ditjenkpi, 2015).

Research Methods

The method used is the method quantitative analysis of the amount in the form of import-export prices. Sources of data are obtained from legal website of Central Bureau of Statistics of Indonesia. Data analysis technique are linier regression and paired samples t-test (paired t-test).

The sample of the study include a total of data import-export prices every month starting January 2005 until December 2014. The data of import-export are divided into two parts, namely from January 2005 to December 2009 is used to measure the performance of

data import-export quantities before the implementation of the ASEAN-China Free Trade Area. Import-export data beginning from January 2010 to December 2014 is the data used to measure the performance of import-export after ASEAN-China Free Trade Area applies to:

A. Testing balance of trade before and after the implementation of ACFTA.

Data analysis was done in three stages

1. The first phase, calculation the mean before and after implementation of ACFTA.
2. Stage two, calculate the standard deviation before and after implementation of ACFTA
3. Analyzing the performance differences occurred by paired t-test with a level of significance ($\alpha = 0.05 / 2$)

Testing criteria:

- i. If the Sig t > 0.05 / 2, then Ho is accepted, it means that there is no a significant performance before and after the implementation of ACFTA
 - ii. If the Sig t < 0.05 / 2, then Ho is rejected, it means that there is a significant performance before and after the implementation of ACFTA (Santoso 2013; Syofian 2012 and Atmajaya 2009).
- B. Showing regression graph of export-import to and from Indonesia and ACFTA members before and after the implementation of ACFTA.

Regression graph was done in three stages.

1. Input data import and export for each country before and after ACFTA into coordinate of X and Y
2. Connect the meeting points of X and Y
3. Make the graph line of the regression.

Result and Discussion

Philippines – Indonesia (Export) Analysis

Table 1. Descriptive Statistics - Export

	Mean		Std. Deviation	
	Before	After	Before	After
Inflation	9.0000	6.2000	5.29150	2.04939
Exchange Rate	9.4286E3	1.0533E4	263.40330	1727.57136
Export	1.5230E8	3.0487E8	3.56252E7	2.31994E7

Based on descriptive statistics above, it shows that before free trade, the mean of export inflation rate was 9 percent. And it changed to 6 percent after the trade. It shows also that before free trade, the mean of export exchange rate had changed from 9,429 to 10,533 after the trade. Moreover, export performance decreased from 3.56252E7 to 2.31994E7. These numbers infer that the decreased of inflation rate had a positive impact to economy of the country, but the instability of rupiah currency from 9,429 to 10,533 is a negative impact to economy. These numbers show that the inflation rate decreased after the implementation of free trade. On contrary, exchange rate and export increased after Free Trade.

Table 2. Correlations - Export

		Export	
		Before	After
Inflation	Pearson Correlation	-.635	.035
	Sig. (2-tailed)	.250	.955
Exchange	Pearson Correlation	-.013	.553
	Sig. (2-tailed)	.983	.334

Pearson Correlation of inflation toward export had changed from -0.635 to 0.035 after the implementations of Free Trade, and correlation of exchange toward export had changed from -0.013 to 0.553. Both correlation of inflation and exchange rate have changed from negative become positive. Before the implementation of Free Trade, the correlation of inflation toward export was strong negatively (-0.635). But, after Free Trade the correlation of export had changed to weak positively (0.035). It was different with the change of exchange rate that change from weak negatively (-0.013) to strong positively (0.553)

Significant level of correlation (sig-two tailed) shows that inflation had changed from 0.250 to 0.955 and exchange rate had changed sharply from 0.983 to 0.334. Although both performance decreased, but it shows that the result is still above the probability significant level of 0.025. It refers that both inflation and exchange rate have no strong impact toward export before and after the implementation free trade.

Table 3. Anova – Regression Export

	F		Sig.	
	Before	After	Before	After
Regression	3.518	32.697	.221 ^a	.030 ^a

Based on analysis of variance, it is found that before free trade, H_0 is accepted (sig. $0.221 > 0.025$). And after the free trade H_0 is accepted too (sig. $0.030 > 0.025$). It could be concluded that there is no simultaneous relation of both inflation and exchange rate toward export before and after the implementation of free trade.

Table 4. Coefficients - Export

	Unstandardized Coefficients	
	B	
	Before	After
(Constant)	-8.555E8	1.706E8
Inflation Before	-7.804E6	-1.156E7
Exchange Before	114340.868	19551.518

Based on coefficients result above, linear regression equation as follows:

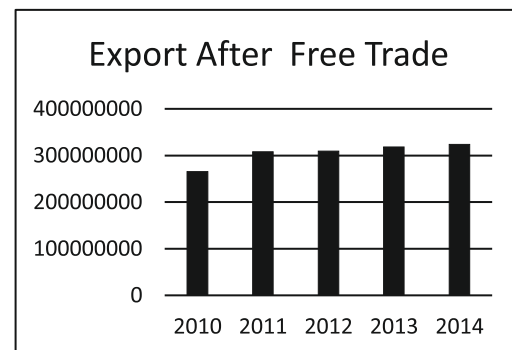
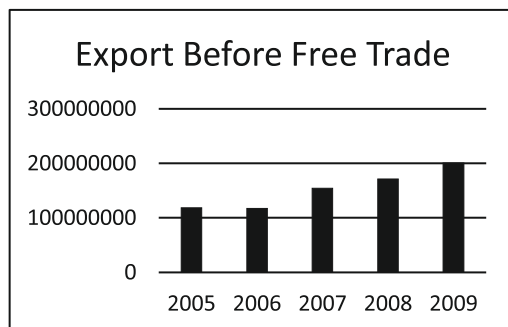
Regression analysis of straight line of ($Y' = a + bX_1 + cX_2$) predicts export before and after free trade.

Before free trade $Y = -8.555E8 - 7.804E6 \text{ Infl. Rate} + 114.340.868 \text{ Exc. Rate}$

After free trade $Y = 1.706E8 - 1.156E7 \text{ Inflation Rate} + 19551.518 \text{ Exchange Rate}$

As it is shown that linear regression had different before and after the implementation of Free Trade. It shows that the present of Free Trade had changed the predicted performance of regression results. Both inflation and exchange rate gave different contribution before and after the implementation on Free Trade.

Table 1. Export Before and After Free Trade



Export of Indonesia shows in the linear regression line that both before and after Free Trade moved from left to right yearly. Nevertheless, the tilt of both lines didn't have the same. The line tilt before Free Trade is more steeply than the line tilt after Free Trade. It means the performance of export had leaped much bigger before Free Trade yearly.

Philippines – Indonesia (Import) Analysis

Table 5. Descriptive Statistics-Import

	Mean		Std. Deviation	
	Before	After	Before	After
Inflation	9.0000	6.2000	5.29150	2.04939
Exchange Rate	9.4286E3	1.0533E4	263.40330	1727.57136
Import	3.7772E7	6.3924E7	1.63479E7	5.38136E6

Based on descriptive statistics above, it shows that before Free Trade, the mean of inflation rate is 9 percent, and it changed to 6.2 percent after Free Trade. It shows also that before Free Trade, the mean of exchange rate had changed from 9.429 to 10.533 after Free Trade. Moreover, import performance increased from 3.7772E7 to 6.3924E7. These numbers infers that the decrease of inflation rate had a positive impact to economy of the country, but the instability of rupiah currency from 9,429 to 10,533 is a negative impact to economy. These numbers show that the inflation rate decreased after the implementation of Free Trade. On contrary, exchange rate increased after the free trade.

Table 6. Correlations - Import

		Import	
		Before	After
Inflation	Pearson Correlation	-.112	-.776
	Sig. (2-tailed)	.858	.123
Exchange	Pearson Correlation	.504	-.392
	Sig. (2-tailed)	.387	.514

The Pearson correlation of inflation toward import had changed from -0.112 to -0.776 after the implementations of Free Trade. And the change of correlation also changed from positive to negative (0.504 to -0.392). The correlation of inflation had changed from a negatively weak correlation became a negatively strong correlation (from -112 to -776) after Free trade. In contrary with exchange rate had changed direction from positive to negative correlation (0.504 to -392). It means that before the Free Trade, if the exchange rate increased then the import would increase, but after Free Trade, if the exchange rate increase, then the import would decrease.

Significant level of correlation (sig. 2 tailed) shows that the inflation rate changed from 0.858 to 0.123 and the significant level of exchange rate correlation (sig. 2 tailed) changed from 0.387 to 0.514. And both numbers are above of 0.025. Therefore, the correlation of variable X toward variable Y was not significant.

Table 7. Anova-Regression (Import)

	F		Sig.	
	Before	After	Before	After
Regression	1.453	2.062	.408 ^a	.327 ^a

Based on analysis of variance, it was found that before Free Trade, Ho was accepted (sig 0.408 > 0.025). And after the free trade Ho is also accepted (sig 0.327 > 0.025). It could be concluded that there is no significant relation of simultaneous inflation and exchange rate toward import before and after the implementation of free trade.

Table 8. Coefficients - Import

	(Unstandardized Coefficients)	
	B	
	Before	After
(Constant)	-5.291E8	6.833E7
Inflation Before	-2.373E6	-2.803E6
Exchange Before	62389.823	1231.072

Based on coefficients result above, linear regression equation as follows:

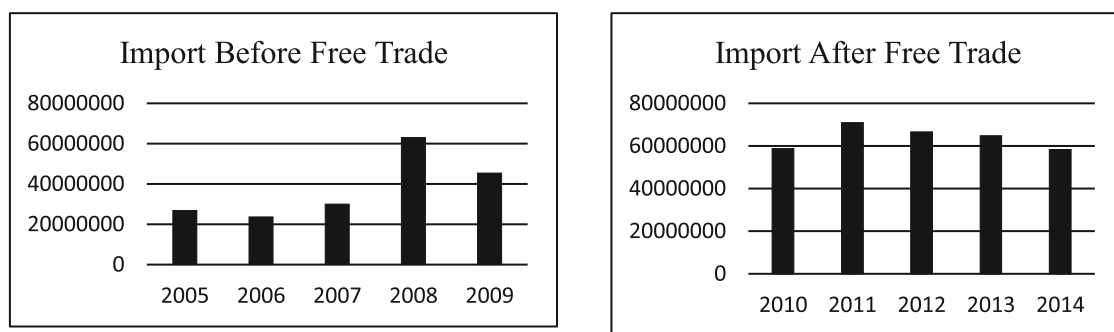
Regression analysis of straight line of ($Y' = a + bX1 + cX2$) predicts import before and after Free Trade.

Before free trade $Y = -5.291E8 - 2.373E6 \text{ Inflation rate} + 62389.823 \text{ Exchange rate}$.

After free trade $Y = 6.833E7 - 2.803E6 \text{ Inflation rate} + 1231.072 \text{ Exchange rate}$.

As it is shown that linear regression has different before and after the implementation of Free Trade. It shows that the present of Free Trade had changed the predicted performance of regression results. Both inflation and exchange rate gave different contribution before and after the implementation on Free Trade.

Figure 2. Import Before and After Free Trade



Import of Indonesia on the linear regression line shows that before Free Trade, the direction went up from left to right. Import was getting increase yearly. But after Free Trade, the direction went down from right to left. Import had decreased yearly. Therefore, the implementation of Free Trade contributed a positive impact to Indonesia.

Conclusion

Export performance was different before and after the implementation on not same with Free Trade. It shows that the present of Free Trade had changed the predicted performance of regression results. Both inflation and exchange rate gave different contribution before and after the implementation on Free Trade. Export of Indonesia shows in the linear regression line that both before and after Free Trade moved from left to right yearly. Nevertheless, the tilt of both lines didn't have the same. The line tilt before Free Trade is more steeply than the line tilt after Free Trade. It means the performance of export had leaped much bigger before Free Trade yearly.

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