Exchange Rate, Inflation And Export-Import Indonesia And China (Comparative Analysis Before And After Free Trade)

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Abstract

International traders need the relevant information when they make import or export decision. The change of international price, exchange rate and inflation are the things considered in international market. Since the elimination trade barriers, it is very clear that the implementation ASEAN-China Free Trade has changed the international price of products and services. How could it be for a country? How exchange rates, inflation and free trade give impact toward export and import of Indonesia and China?

The research aim is to show how exchange rates and inflations predict exports and imports before and after free trade by using Indonesia-China 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

The results of study shows the inflation rate decreases after free trade. On contrary, exchange rate increases after the free trade. Exchange rate has preponderant influence than inflation before and after free trade. Both inflation and exchange rate have no strong impact toward import before and after the implementation free trade. It could be concluded that there is no significant relation of simultaneous inflation and exchange rate toward import before the implementation of free trade. In contrary, inflation and exchange rate has strong relation toward import after the implementation of free trade. Import linear regression has different before and after the implementation of free trade.

Export increases after the implementation of free trade. Both correlation of inflation and exchange rate have changed from negative become positive. Inflation rate has more preponderant influence than exchange rate before free trade. In contrary, exchange rate has more preponderant influence than inflation rate after free trade. It refers that both inflation and exchange rate have no strong impact toward export before and after the implementation free trade. Analysis of variance shows that there is no simultaneous relation of both inflation and exchange rate toward export before and after the implementation of free trade. Export linear regressions shows that trend line is different before and after free trade. And exports were much bigger from Indonesia to China after the implementation of free trade.

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

Introduction

Both importers and exporters need the relevant information when they come to international trade decision. The change of international price, exchange rate and inflation are the things considered by traders that may impact market positively or negatively. Eiteman, et.al. (2010) stated that a country's import and export goods and services is affected by changes in exchange rates. Since the elimination trade barriers, it is very clear that the implementation ASEAN-China Free Trade has changed products and services in international market. What kind of impact could exist? Could it be tread or benefit for a country? The research shows how exchange rates, inflation and free trade give impact toward export and import of Indonesia and China, and how it predicts exports and imports before and after free trade by using statistical analysis in Indonesia-China.

Conceptual Model / Review of Literature Exchange Rates

An exchange rate is simply the price of one country’s currency expressed in terms of another country’s currency (Ross et. al, 2013) Meanwhile, according to Gitman (2009) the exchange rate is the value of the two currencies which are compared with one another. Bodie (2009) suggests the exchange rate is a value at which the dosmetic currency may be a foreign currency.

The exchange rate plays an important role in the framework of monetary creation and to support the national economy. A stable exchange rate required for the creation of a favorable economic climate for the business sector. Exchange rate movements affect the competitiveness of companies that affect the company's cash flow and the value of its shares. While rising stock markets will attract capital flows that would increase the demand for domestic currency so that it will occur on the currency appreciation. Appreciation that occurred in the rupiah against the US dollar will increase the competitiveness of the reign of the burden of debt denominated in US dollars and more cheap raw materials with a high import content. By operating on the domestic market will increase the probability of the company and then raise the price of its shares on the stock exchange.

Each country’s currency is valued in terms of other currencies through the use of exchange rates, so that currencies can be exchanged to facilitate international transaction. The values of most currencies can fluctuate over time because of market and government forces. If a country’s currency begins to rise in value against other countries, its current account balance should decrease, other things being equal. As the currency strengthens, goods exported by that country will become more expensive to the importing countries. As a consequence, the demand for such goods will decrease (Jeff Madura, 2008)

The many different types of participants in the foreign exchange market include following:

1. Importers who pay for goods using foreign currencies.
2. Exporters who receive foreign currency and may want to convert the domestic currency.
3. Portfolio managers who buy or sell foreign stocks and bonds.
4. Foreign exchange brokers who match buy and sell orders.
5. Traders who “make a market” in foreign currencies.
6. Speculators who try to profit from changes in exchange rates.

Inflation

Ball, et.all (2004) stated that inflation affects international business internationally, with the complication that inflation rates differ in different countries. Higher inflation rates causes the prices of the goods and services produced or offered by country to rise, and thus the goods and services become less competitive. The company’s affiliate in that country finds it more difficult to sell its products in export, as do all other producer there. Such conditions tend to cause balance of payment deficits, and management must be alert to changes in government policies to attempt to correct these deficits. Such changes could include more restrictive fiscal or monetary policies, currency controls, export incentives, and import obstacles *Impact of Inflation.* If a country inflation rate increases relative to the countries with which it trades, its current account will be expected to decrease, other things being equal. Consumers and corporation of goods. A percentage of that increase in consumption will most likely reflect an increase demand for foreign goods.

Import have the potential to lower a country’s inflation rate. In particular, imports of lower priced goods and services places a limit on that domestic competitors charge for comparable goods and services. Thus, foreign competition substitutes for domestic competition to maintain a lower rate of inflation than might have been the case without imports. On the other hand, to the extent that lower-priced imports substitute for domestic production and employment, gross domestic product will be lower and the balance on current account will be more negative (Eiteman, et.al, 2010).

Inflation is rising prices of goods and public services which goods and services are basic needs of society or a decline in purchasing power of a country's currency (quoted from www.bps.go.id) Bodie (2009) argued that inflation is a general level where prices increase. Inflation is one of the economies that is often used to describe the condition of the national economy. Inflation can be caused by two things:

1. Demand pull inflation: Inflation caused by demand-pull inflation occurs when the corporate sector is not able to serve the demand of society resulting in a shortage of goods and services.The excess demand will push up the price of goods and services.

2. Cost push inflation: inflation caused by the insistence of charge. Inflation arising from increased production costs resulting price of the products produced go up. The increase in the production cost can be caused by rising raw material prices, rising labor, and the increase in corporate profit margins.

Inflation led to an increase in prices of goods and services. The rise in the selling price of these products could increase the company's revenue, but inflation can also lead to increased capital costs, labor costs and raw material costs. If the increases these costs cannot be absorbed by the selling price to consumers, the company's profitability will decline, but on the contrary if the increase in the price enjoyed by the company is higher than the increase in production costs for the impact it will buy the company.

Export

A country’s import and export goods and services is affected by changes in exchange. Changes in exchange rates change relative prices of imports and exports, and changing prices in turn result changes in quantities demanded through the price elasticity of demand (Eiteman, et.all, 2010).

With all the problems of doing business overseas, why do companies become involved in exporting instead of staying in home country? There are a number of reasons, all of which are linked to the desire to (1) increase profits and sales or (2) protect them from being eroded. Any of the following reasons for exporting, depending on the firm’s situation, may achieve either goal.

- To serve markets where (1) the firm has no production facilities or (2) the local plant does not produce the firm’s complete product mix – Many large multinationals, like DuPont, supply numerous foreign markets by exporting because no firm, no matter how large, can afford to manufacture in every country where its goods are sold. Markets without factories are supplied from exports either from the home country or from a foreign affiliate. In market or sufficient size to justify the production of some but not all of the product mix, the affiliate will supplement sales of local production with imports. A car plant in a developing nation may produce the least expensive cars and import luxury models if the law permits.
- To satisfy a host government’s requirement that the local subsidiary export – Developing governments often require the local affiliate to export, and some require that it earn sufficient foreign exchange to cover the cost of its imports. This is why Ford located a radio plant in Brazil that exports to Ford’s European assembly plants.
- To remain competitive in the home market – Many firms import laborintensive components produced in their foreign affiliates or export components for assembly in countries where labor is less expensive and import the finished product.
- To test foreign markets and foreign competition inexpensively – This is a common strategy used by firms that want to test a product’s acceptance before investing in local production facilities. Exports also enable firms to

test market strategies and make adjustments with less risk in a smaller market. If the strategy or product fails, the firm can withdraw without having a costly and sometimes damaging failure to the entire firm. There is, nonetheless, a downside to this strategy. Whatever the firm does in the foreign market may be seen by a competitor. This is especially true for a large global firm whose competition is in most markets.

- To meet actual or prospective customers' requests for the firm to export – This type of *accidental exporting* is fairly common. A foreign buyer often will search for something it cannot find locally by consulting the *Thomas Register*, a publication listing American producers for hundreds of products. Every American chamber of commerce (French-American, Mexican-American, and so forth) has copy.

Import.

Import are goods brought into a jurisdiction, especially across national boundaries, from an outside source. People who enter the goods is called importer. Imports in the recipient country is the export of the sending country. (Wikipedia, 2015; 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.

Imports consist of transactions in goods and services). An import of a good occurs when there is a change of ownership from a nonresident 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)

All countries need – or choose – to import goods and services by the following reasons: goods or services that are (a) essential for economic purposes or (b) very attractive for consumers but not available in the domestic market, and goods or services that satisfy the needs or domestic demand could be produced more cheaply or more efficiently by other countries so that it can be sold at a lower price. (The Levin Institute, 2015)

Free Trade.

Free trade can be defined as the absence of artificial barriers (barriers applied by the government) in trade between individuals and corporations residing in different countries. (Ekosuwono, 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 Free trade is the rule followed by most of the international markets where the government of a country does not suppress the import or export to other countries. (Wikipedia, 2015)

Actual free trade can be seen from an environment where trade barriers or government intervention that hinder international trade, so the cost of the products being traded is not raised by the obstacles placed on the market. (Riad A. Ajami; G. Jason Goddard, 2014)

Although some countries have become members of the WTO (World Trade Organization), some of which still apply tariffs or subsidies that are intended to support local producers.

The characteristics of free trade are as follows:

1. Trade in goods/services without any tax/duty /other barriers,
2. Free access to markets and market information,
3. Inability of the company to penetrate the power monopoly/oligopoly local government,
4. The trade agreements that favor free trade.

Trade barrier is a prohibition that made by government on international trade.

here are various types of trade barriers, such as:

1. Rates
2. Import/Export License
3. Import Quota

4. Subsidies
5. Embargo

Trade barrier mostly works the same way, which is of positioning a kind of trade costs that make the price of products traded higher than it should be. Trade barrier can reduce overall economic efficiency. Free trade makes these obstacles disappear – except that affect the national safety or healthy of a country– at least theoretically. Practically, countries that approved the free trade instead apply the subsidies in certain industries such as agriculture and steel products (Wikipedia, 2015). 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

Advantages and Disadvantages of Free Trade

1. Advantages of Free Trade.

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.

Economic growth. The countries involved in free trade experience rising living standards, increased real incomes and higher rates of economic growth. This is created by more competitive industries, increased productivity, efficiency and production levels.

2. Disadvantages of free trade

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.

Increased domestic economic instability from international trade cycles, as economies become dependent on global markets. This means that businesses, employees and consumers are more vulnerable to downturns in the economies of our trading partners.

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 (Ken Edge, 1999).

ASEAN-China Free Trade Area (AFCTA)

1. AFCTA History 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.

2. Agreement of Product Trade.

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.

3. Agreement of Service Trade

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 exchange rates, inflation rate and importexport prices. Sources of data are obtained from website of Central Bureau of Statistics of Indonesia. Data analysis technique are regression analysis, partial (t-test),
simultaneous (F-test) and adjusted Square (R^2)

The sample of the study include a total of data of exchange rates, inflation rate and importexport prices from 2004-2015. 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. Both performance are compared and analyzed.

Results and Discussion A. Import Before and After Free Trade 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	7.2650E8	2.2750E9	3.15261E8	3.49520E8

Based on descriptive statistics above, it shows that before free trade, the mean of inflation rate is 9 percent. And it changes become 6 percent after the trade. It shows also that before free trade, the mean of exchange rate has changed from 9,429 to 10,533 after the trade. Moreover, import performance increases from 3.15261E8 to 3.49520E8. These numbers infer that the decrease of inflation rate has 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 decrease after the implementation of free trade. On contrary, exchange rate and import increase after the free trade

Correlations - Import

		Import	
		Before	After
Inflation	Pearson Correlation	.038	.084
	Sig. (2-tailed)	.952	.894
Exchange	Pearson Correlation	.315	.732
	Sig. (2-tailed)	.606	.160

The correlation of import and inflation has changed from 0.038 to 0.084 after the implementations of free trade. And the change correlation also happen in exchange rate from 0.315 to 0.732. Both correlation of inflation and exchange rate are stronger after the implementation of free trade. It shows that before and after free trade, the magnitude of exchange rate is bigger than inflation (0.315 and 0.038 before free trade) and (0.732 and 0.084 after free trade). It could be interpreted that exchange rate has preponderant influence than inflation before and after free trade.

Significant level of correlation shows that inflation decrease from 0952 to 0.894 and exchange rate also decrease sharply from 0.606 to 0.160. Although both performance decrease, but it shows that the result is still above probability significant level of 0.025. It refers that both inflation and exchange rate have no strong impact toward import before and after the implementation free trade.

Model Summary - Import

	R Square Change	
	Before	After
Import	.148	.992

Inflation and exchange rate have effected import 14.8 percent before free trade. And it changed dramatically becoming 99.2 percent after the free trade. It mean that inflation and exchange rate have great impact on import after the implementation of free trade.

ANOVA - Import

	F		Sig.	
	Before	After	Before	After
Regression	.174	121.511	.852[a]	.008[a]

Based on analysis of variance, it is found that before free trade, Ho is accepted (sig 0.852 > 0.025). In contrary, after the free trade Ho is rejected (sig 0.008 < 0.025). It could be concluded that there is no significant relation of simultaneous inflation and exchange rate toward import before the implementation of free trade. In contrary, free inflation and exchange rate has strong relation toward import after the implementation of free trade.

Coefficients - Import

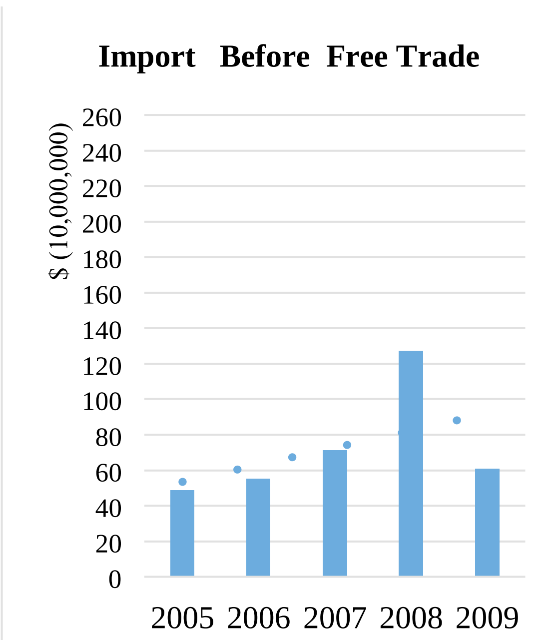
	(Unstandardized Coefficients)	
	B	
	Before	After
(Constant)	-4.820E9	2.014E8
Inflation Before	-1.741E7	-1.704E8
Exchange Before	604865.956	297171.289

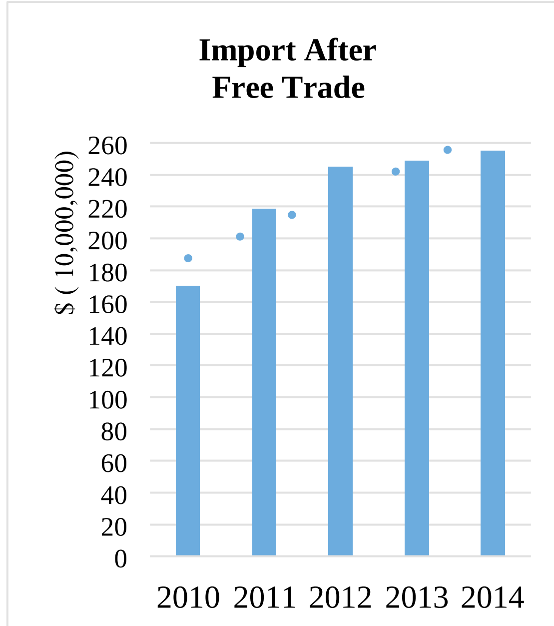
Based on coefficients result above, Linear Regression equation as follows:

Before free trade Y= -4.820E9-1.741E7 Inflation rate + 604,865. 956 Exchange rate.

After free trade Y = 2.014E8 1.704E8 Inflation rate + 297,171.289
Exchange rate.

As it is shown that linear regression has different before and after the implementation of free trade.





Import of Indonesia sown in the linear regression line that both before and after free trade moves from left to right yearly. Nevertheless, the line goes up more steeply after the implementation free trade. It means that import was much bigger after free trade. Regression analysis before ACFTA shows that straight line of ($Y' = a + bX + cX$) predicts import before and after free trade. Based on coefficients result, linear regression equation as follows:

Before free trade Y= -3.296E9-3.641E7 Inflation Rate + 468815.382 Exchange Rate
After free trade Y= -5.507E9-5.516E8 Inflation Rate + 925848.262 Exchange Rate

It shows that the present of free trade make different regression. In this case, free trade push more import from China to Indonesia. Both inflation and exchange rate give different contribution before and after the implementation on free trade.

B. Export Before and After Free Trade

Descriptive Statistics - Export

	Mean		Std. Deviation	
	Before	After	Before	After
Inflati	9.0000	6.2000	5.2915	2.04939
on			0	

Exchange Rate	9.4286E3	1.0533E4	263.40330	1727.57136
Export	7.9695E8	8.2539E8	1.76591E8	1.38639E9

Based on descriptive statistics above, it shows that before free trade, the mean of inflation rate is 9 percent. And it changes become 6 percent after the trade. It shows also that before free trade, the mean of exchange rate has changed from 9,429 to 10,533 after the trade. Moreover, export performance increases from 1.76591E8 to 13.86390E8. These numbers infer that the decrease of inflation rate has 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 decrease after the implementation of free trade. On contrary, exchange rate and export increase after the free trade.

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**

The correlation of inflation toward export has changed from -0.635 to 0.035 after the implementations of free trade, and the change correlation also happen in exchange rate from -0.013 to 0.553. Both correlation of inflation and exchange rate have changed from negative become positive.

It shows that before free trade, the magnitude of inflation is farther than exchange rate (0.013 and -0.635 before free trade) and after free trade, the magnitude of exchange rate is bigger than inflation (0.553 and 0.035 after free trade). It could be interpreted that inflation rate has preponderant influence than exchange rate before free trade. In contrary, exchange rate has preponderant influence than inflation rate.

Significant level of correlation shows that inflation increases from 0.250 to 0.955 and exchange rate decrease sharply from 0.983 to 0.334. Although both performance decrease, but it shows that the result is still above 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.

Model Summary - Export

	R Square Change	
	Before	After
Export	.683	.609

Inflation and exchange rate have effected export 68.3 percent before free trade. And it has already changed to 61 percent after the free trade. It means that before and after free trade, the impact of inflation and exchange rate have no significant different on export.

ANOVA - Export

	F		Sig.	
	Before	After	Before	After
Regression	2.157	1.556	.317[a]	.391[a]

Based on analysis of variance, it is found that before free trade, Ho is accepted (sig 0.317 > 0.025). And after the free trade Ho is accepted too (sig. 0.391 > 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.

Coefficients - Export

	Unstandardized Coefficients	
	B	
	Before	After
(Constant)	-3.296E9	-5.507E9
Inflation Before	-3.641E7	-5.516E8

Exchange Before	468815.382	925848.262

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

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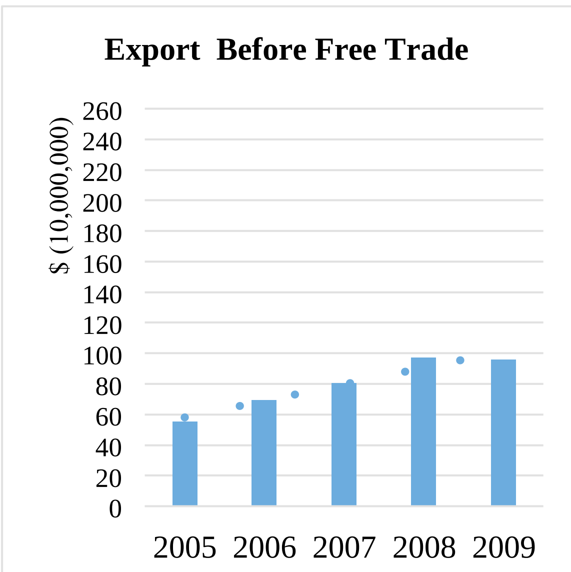

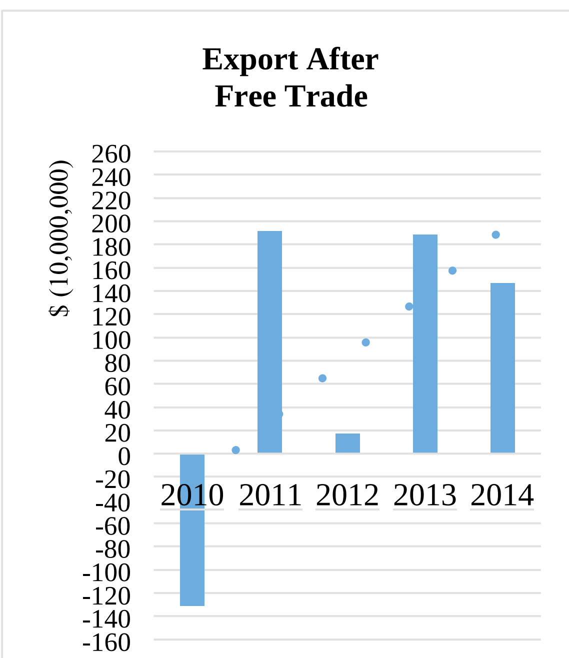

Export of Indonesia shown in the linear regression line that both before and after free trade moves from left to right yearly. Nevertheless, the line goes up more steeply after the implementation free trade. It means that import is much bigger after free trade.

Regression analysis before free trade shows that straight line of ($Y' = a + bX + cX$) predicts export before and after free trade.
Before free trade Y= -3.296E9-3.641E7 Inflation Rate + 468815.382 Exchange Rate After free trade Y= -5.507E9-5.516E8 Inflation Rate + 925848.262 Exchange Rate It shows that the present of free trade make different regression. In this case, exports were much bigger from Indonesia to China after the implementation of free trade. Both inflation and exchange rate give different contribution before and after the implementation on free trade.

Conclusion

A.Import

The results of study shows the inflation rate decrease after the implementation of free trade. On contrary, exchange rate and import increase after the free tradeThe correlation of import and inflation has changed from 0.038 to 0.084 after the implementations of free trade. And the change correlation also happen in exchange rate from 0.315 to 0.732. It shows that before and after free trade, the magnitude of exchange rate is bigger than inflation (0.315 and 0.038 before free trade) and (0.732 and 0.084 after free trade). It could be interpreted that exchange rate has preponderant influence than inflation before and after free trade.

Significant level of correlation shows that inflation decrease from 0952 to 0.894 and exchange rate also decrease sharply from 0.606 to 0.160. Although both performance decrease, it shows that the result is still above probability significant level of 0.025. It refers that both inflation and exchange rate have no strong impact toward import before and after the implementation free trade. Inflation and exchange rate have effected import 14.8 percent before free trade. And it changed dramatically becoming 99.2 percent after the free trade. It mean that inflation and exchange rate have great impact on import after the implementation of free trade.

Analysis of variance results shows that before free trade, Ho is accepted (sig 0.852 > 0.025). In contrary, after the free trade Ho is rejected (sig 0.008 < 0.025). It could be concluded that there is no significant relation of simultaneous inflation and exchange rate toward import before the implementation of free trade. In contrary, free inflation and exchange rate has strong relation toward import after the implementation of free trade.

Linear Regression equation as follows:

Before free trade Y= -4.820E9-1.741E7 Inflation rate + 604,865. 956 Exchange rate.

After free trade Y = 2.014E8 1.704E8 Inflation rate + 297,171.289
Exchange rate.

As it is shown that linear regression has different before and after the implementation of free trade

B. Export

Export increases from 1.76591E8 to 13.86390E8. These numbers infer that the decrease of inflation rate has 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 decrease after the implementation of free trade. On contrary, exchange rate and export increase after the free trade. The correlation of inflation toward export has changed from -0.635 to 0.035 after the implementations of free trade, and the change correlation also happen in exchange rate from -0.013 to 0.553. Both correlation of inflation and exchange rate have changed from negative become positive.

It shows that before free trade, the magnitude of inflation is farther than exchange rate (0.013 and -0.635 before free trade) and after free trade, the magnitude of exchange rate is bigger than inflation (0.553 and 0.035 after free trade). It could be interpreted that inflation rate has preponderant influence than exchange rate before free trade. In contrary, exchange rate has preponderant influence than inflation rate. Significant level of correlation shows that inflation increases from 0.250 to
0.955 and exchange rate decrease sharply from 0.983 to 0.334. Although both performance decrease, but it shows that the result is still above 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.

Inflation and exchange rate have effected export 68.3 percent before free trade. And it has already changed to 61 percent after the free trade. It means that before and after free trade, the impact of inflation and exchange rate have no significant different on export. Analysis of variance shows that before free trade, Ho is accepted (sig 0.317 > 0.025). And after the free trade Ho is accepted too (sig. 0.391 > 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

Export linear regression equation as follows:

Before free trade Y= -3.296E9-3.641E7 Inflation Rate + 468815.382 Exchange Rate

After free trade Y= -5.507E9-5.516E8 Inflation Rate + 925848.262 Exchange Rate

The linear regressions has different performance before and after the implementation of free trade It shows that the present of free trade make different regression. In this case, exports were much bigger from Indonesia to China after the implementation of free trade.

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