The Assessment on Free Trade Agreements in the Asia-Pacific Area

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ABSTRACT

These past few months, there has been a lot of debate on Free Trade Agreements (FTA). As much as it seems that the debate has just begun, it turns out that debate over FTAs has existed for a long time, especially in politics. This might be the case as for some countries, international trade holds a significant part of its contribution to GDP and economic growth. Thus, understanding how FTAs has an impact on a country's trade is becoming increasingly crucial. This paper is intended to look at such issue and to project how FTAs are going to impact us in the future. Using the gravity model, it is evident to see how FTA changes the bilateral trade volumes between two countries. Then, I looked at the different products that are being traded and how it changes after the FTA is in effect to determine a country's comparative advantage.
The result from most of the countries on my analysis lean in to the fact that FTA increases trade volume between two countries or on some, did not give any significant boosts. However, it is rarely the case that FTA decreases trade volume.

Keywords: FTA, gravity model, comparative advantage, tariff

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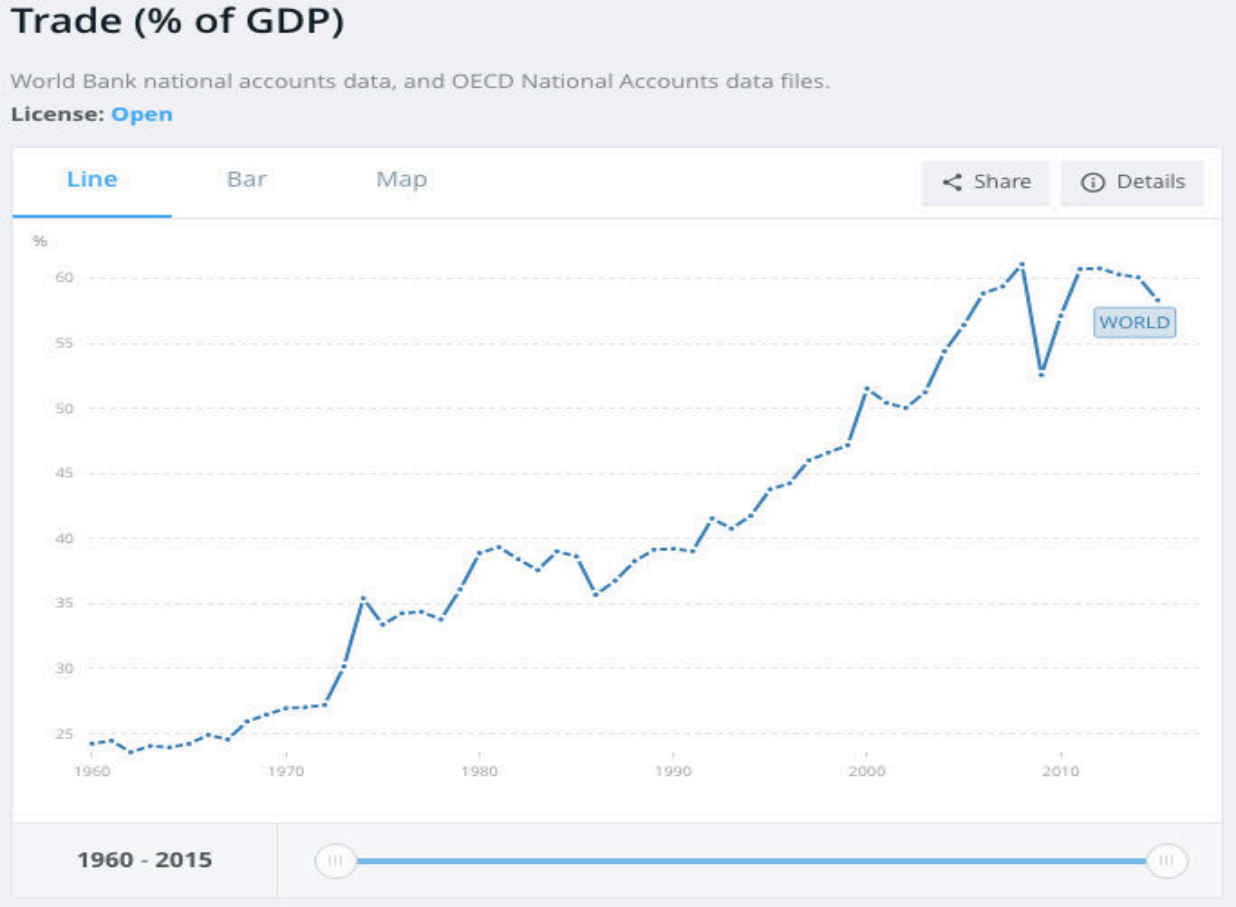
1. Introduction

1.1 History and Background of FTA

As globalization is becoming more of a worldwide phenomenon, international economics; both trade and finance, has been increasingly vital in a country's economy (Wood, "Introduction to International Trade"). Figure 1 below shows that for several decades, world trade (which is measured by the sum of exports and imports of goods and services as a share of GDP) has had a relatively strong increasing trend which leads to a global scale economic integration.

Figure 1

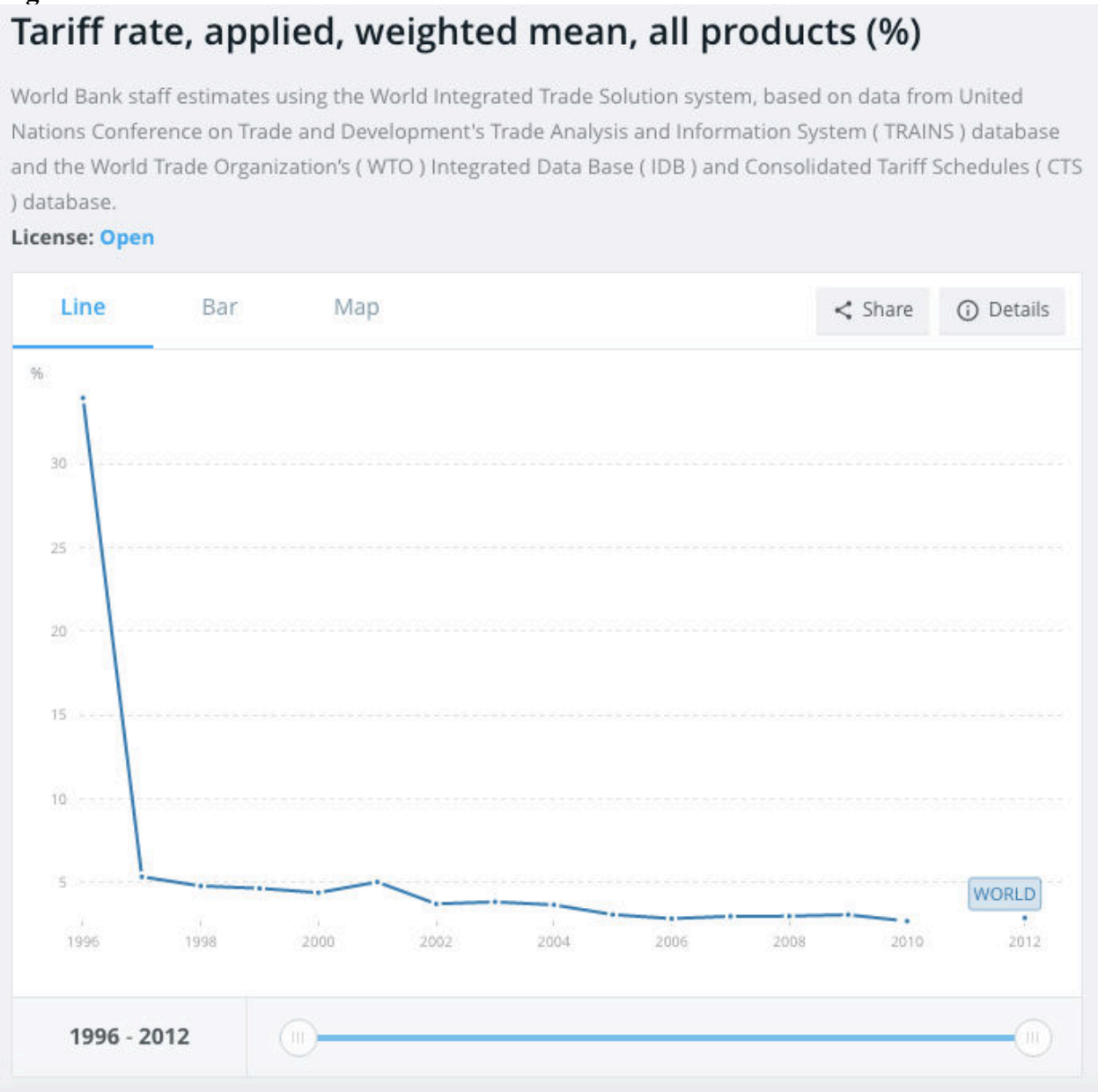


Source: The World Bank

"The Concise Encyclopedia of Economics" define free trade as "the absence of tariffs, quotas, or other governmental impediments to International Trade, allows each country to specialize in the goods it can produce cheaply and efficiently relative to other countries" (Irwin,

"International Trade Agreements"). This kind of specialization is what most people believe is allowing for higher GDP. Over these past few decades, tariff rate has indeed fallen as illustrated in Figure 2.

Figure 2



Source: The World Bank

The policy to reduce tariff internationally dated back to the 1930s which happened after the Smoot-Hawley Act to raise tariff rates had been passed. The reduction of tariff rates will not

proceed as long as there are no clear advantages to the reduction. Bilateral tariff negotiations are initiated which then evolved to become multilateral tariff negotiations. (Wood, "International Trade Agreements"). 23 countries started negotiating trade under a provisional set of rules named the General Agreement on Tariffs and Trade (GAAT) which continued for almost half a century with more than 100 countries until the WTO was established in 1995. In the years following its formation, the GATT trade rounds have focused primarily on reducing tariffs. It then started to evolve with the Kennedy Round (the 1960s) as it brought up the Anti-Dumping Agreement and a development section. ("The GAAT Years: from Havana to Marrakesh") The Tokyo Round, which was completed in 1979 was "the first major attempt" to address trade barriers that were not in the form of tariffs (Wood, "International Trade Agreements"). The last round, which is the Uruguay Round (completed in 1994) led to the creation of the World Trade Organization (WTO) ("The GAAT Years: from Havana to Marrakesh").

Since the GATT was first signed (until 1995), average tariffs on industrial goods decreased from 40% to 4% ("From Uruguay to Doha: Agricultural Trade Negotiations"). This is presumably the primary reason that international trade's volume keeps increasing as trade cost is now noticeably lower. Free trade advocates viewed the situation as being positive as it increases economic efficiency (by increasing economic welfare) as well as productivity (by incentivizing local businesses to compete).

In recent years, several Asian countries have been in the spotlight for their exceptional growth in trade. Thus in this paper, I focused my research on looking at the trade between several Asia-Pacific countries. However, it is important to note that the volatility in trade volume could also be caused by the economic condition of a country and that sometimes the effect of FTA could be overwhelmed by these economic conditions/factors.

"The Economist" stated that international trade in the past five years is in a grim state. Trade volume that was once growing at twice the rate of world GDP might have now become history. The WTO forecasted that trade in goods' growth rate in 2016 is 1.7% (much lower than the previous prediction of 2.8%). This also implies that trade grew slower than GDP for the first time in 15 years. There might be some explanation behind this reason. Trade depends on supply and demand mix, protectionism policy, as well as economic conditions. Moreover, trade also depends on 'less-obvious' factors such as the rapid growth of the 1990s and early 2000s. Lower across borders business cost also adds to the factors (K., "Why Is World Trade Growth Slowing?").

1.2 Existing Literature Review

Just like most political issues, the Free Trade Agreements (FTAs) always have controversies. There are always two sides of the coin, and each decision has its pros and cons. To fully understand them, it is useful to understand the different opinions given by some economists.

Since the establishment of NAFTA in the 1990s, the debate for and against free trade then sparked. It did create numerous opportunities and confidence between the three economies but at the cost of workers' anxiety about job loss. After a thorough cost-benefit analysis, it seems that the advantages caused by free trade are more significant. The costs of free trade, although real, are exaggerated ("NAFTA 20 Years Later").

According to the publications *"NAFTA 20 years later"*, the three economies which are the members of NAFTA, namely United States, Canada, and Mexico, benefits from a larger market and common supply chain thus giving the consumer some gains. Before the financial crisis, US unemployment rates were lower in the years following NAFTA enactment than before. Job losses are inevitable but it is only in a tiny fraction and thus not a significant cause to wage or employment conditions.

A slightly different view was shared by Professor Harley Shaiken of University of California, Berkeley. He wrote regarding how NAFTA, since its start in 1994, has managed to expand cross-border trade as over the two decades (1993 – 2013), total goods traded between the US and Mexico increased almost six-fold ($80 billion – nearly $460 billion). Unfortunately, his research found that over the twenty years since NAFTA has started, the trade between US and Mexico has given disappointing results for the bigger goals such as new jobs development as well as income and economic development stimulation.

According to Professor Shaiken on *"The Impact of International Free-Trade Agreements on Job Growth and Prosperity"*, some economists have predicted a trade surplus for the US in its relation to Mexico due to NAFTA. However, the prediction was not realized. US trade with Mexico did experience a slight surplus in 1994. However, in 2013, a $100 billion trade deficit hit the US. Instead of new jobs created, 700,000 US workers is estimated to be displaced. For Mexico, their opening up to trade with the US has stimulated manufacturing technologies to advance which led to jobs creation in the manufacturing sector. However, even as Mexico's trade surplus with the US has increased, their trade deficit with China has risen steeply.

In the decades following NAFTA creation, it seems that productivity has risen while wages have stagnated or slightly declined. By 2011, the US productivity had increased to more than 150% of what it was before NAFTA was created. Real wages for workers, however, did not rise as much with only about 16% increase over the same period. In Mexico, by the time NAFTA was in effect, manufacturing wages had been declining up to 30% below what it was in 1980 ("The Impact of International Free-Trade Agreements on Job Growth and Prosperity").

According to an April report by the Congressional Research Service published in the NY times, between 1990 and 2014, manufacturing jobs fell by 34 percent, 31 percent, and 25 percent in Japan,

US, and Germany, respectively. It is believed by many economists that this job loss has to do with automation of labor (The Editorial Board, "The Rage Against Trade").

This paper is intended to weigh the two different sides and draw conclusions based on the empirical evidence. We would look at whether trade agreement affect trade volume between the member countries as well as how it affects GDP. Then, we want to understand more about comparative advantage and how it changes after engaging in a trade agreement.

2. Gravity Model

2.1 Theory and Model Description

The gravity model is considered as one of the most empirically successful and stable models in economics (Anderson 170, Salvatici 3). It is proposed by Tinbergen (1962) and developed by Anderson (1979) and focuses on looking at the intensity of trade between two economies using a formula that has some similarities to Newton's gravity law with 'mass' replaced by 'GDP' (Anderson 170, Squartini and Garlaschelli 1-2). In short, it is saying that there is a strong positive correlation between the bilateral trade volumes of any two countries and the size of the countries' economies and a strong negative correlation between the bilateral trade volume of such countries and the distance of those two countries (Wood, "World Trade and The Gravity Model").

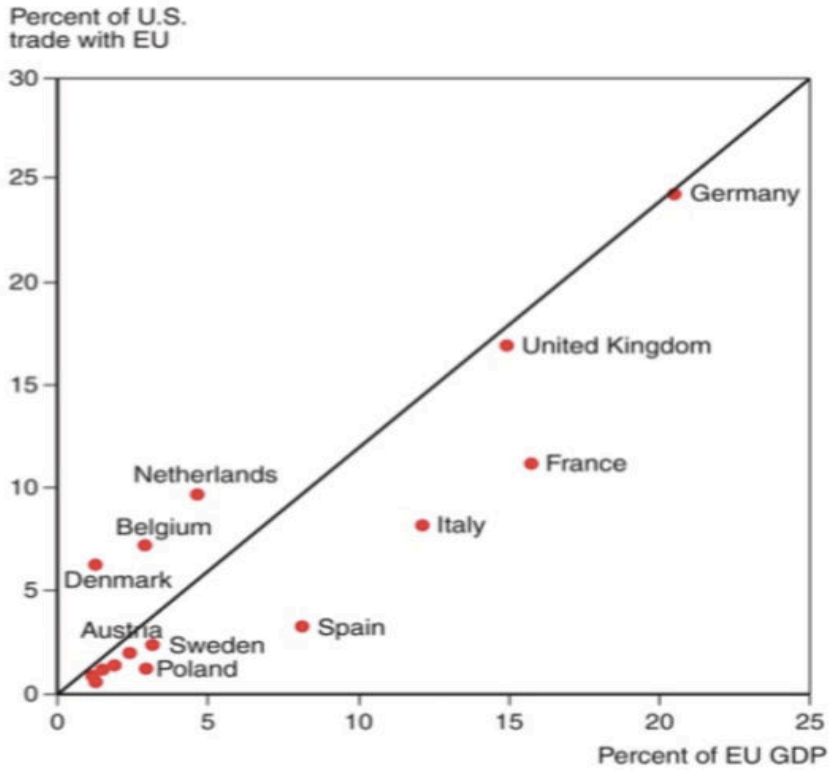
Based on Newton's Law, the trade volume T_{ij} from origin i to destination j is

$$T_{ij} = A\frac{Y_i Y_j}{D_{ij}} \quad (1)$$

where A is a constant, Y_i and Y_j is the real GDP of country i and j, respectively, and D_{ij} is the distance between the two nations. The empirical evidence suggesting the occurrence of 'gravity' in international trade is pretty convincing. The role of distance as well as real GDP are stable across different countries and over time, using different econometric methods (Distance elasticity of trade remained stable at around -1 over an extended period of time and over different countries).

It is intuitive how real GDP can affect trade flows; the higher the real GDP, the more goods and services produced for exports and the more purchasing power generated to spent on imports (more demand) (Wood, "World Trade and The Gravity Model"). To illustrate, 3 out of the top 10 US trading partners in 2012 were three European countries with the highest GDP which is Germany, the UK, and France. The gravity model has a relatively high correlation, although not perfect, and the anomalies can be explained by other factors such as culture (language) as well as location. (Krugman et al.; ch, 2)

Figure 3



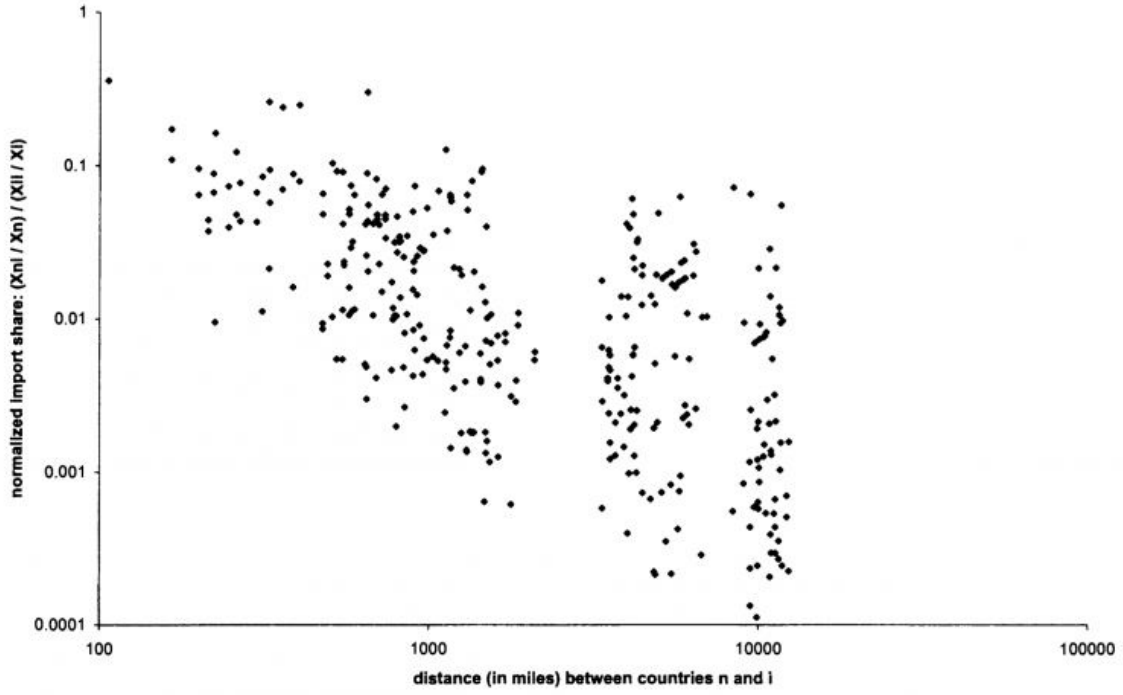
Source: U.S. Department of Commerce, European Commission.

With distance, although several theoretical models can explain why distance impacts trade flows, they cannot precisely describe the role of distance. For example, Krugman's (1980) model explains how trade flows impact country size and inversely affected by trade barriers. To the extent that

trade barriers are proxies by distance, while it helps to explain why distance is adversely impacting trade flows, it still cannot precisely describe the role played by distance (Chaney 3).

Besides as a proxy for trade barriers, distance also increases transportation costs. It enhances the risk of damage, loss, or spoiling during shipment. Some other costs, such as synchronization, communications, and transactions costs could also be affected by distance.

Figure 4



Import Share vs Distance, Country Pairs for a Set of 19 OECD Countries, 1990 – Figure 1 in Eaton and Kortum (2002)

Source: ourworldindata.org

Some people tried to discredit the gravity models by emphasizing two critical points. First, gravity model is said to be an association and not a causal relationship. The relationships between GDP and trade volume could also suffer from endogeneity, reverse causal bias, and/or simultaneity bias. However, this attempt to discredit the model seems to be out of place. A paper published by the Harvard University, using an instrumental variable (population) to correct for endogeneity,

measured the gravity effect and found the effect still hold. Second, some said that geography and distance do not matter as much as it was. Developing countries (such as China) started to outgrow the developed countries thus they thought that this increase would override the distance effects. The technology has also made it easier to deliver trade in intangible services (such as website designer) costlessly. Even though geography may matter less now than then, size alone will not make a country further away to be suddenly attractive in a significant amount ("Down to Earth").

2.2 Data

In this section, I looked at the bilateral trade agreement between Japan and Indonesia which has been signed and started to be in effect by July 1st, 2008 comparing it with China-Indonesia trade flows. The graph below (Figure 5) is depicting the 'A' or the constant term in the equation. It makes sense that the graph has a decreasing trend that is going to be asymptotical as GDP will continue to rise, which would make trade volume explode if the constant term increases over the years.

Rearranging equation (1),

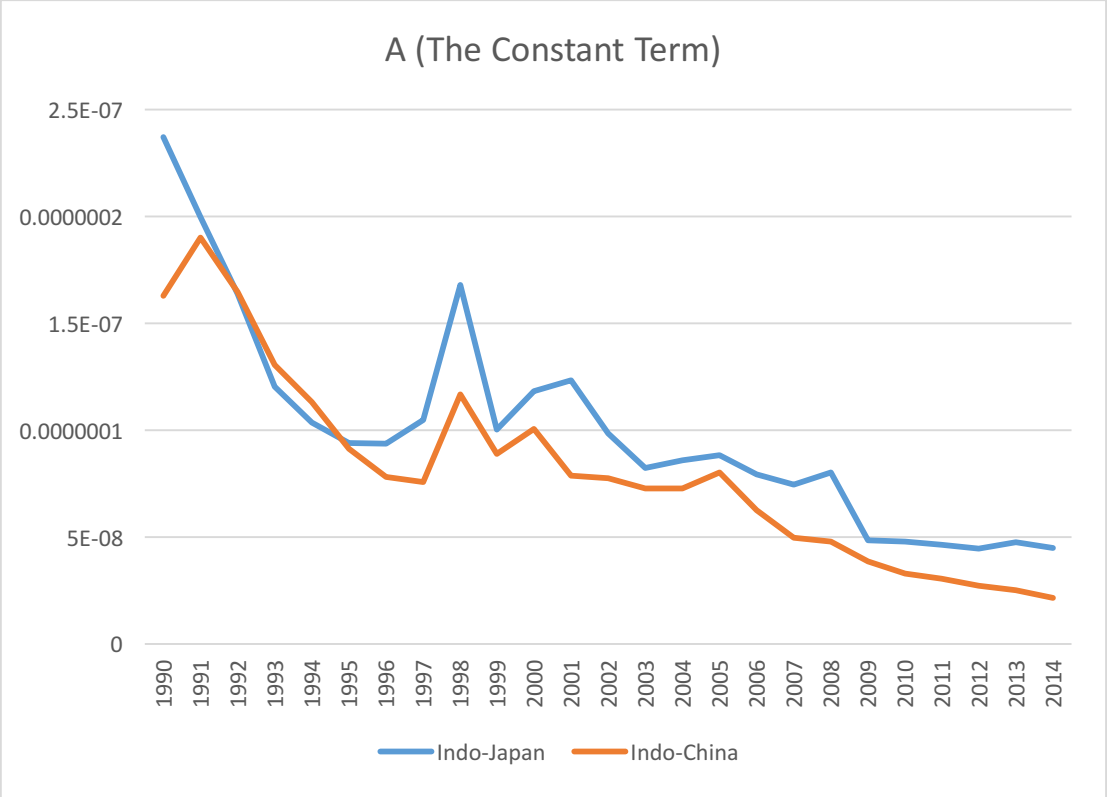
$$A = \frac{T_{ij}D_{ij}}{Y_i Y_j} \quad (2)$$

- If T_{ij} or trade volume between the two countries increases more than the increase in GDP of both countries, then A will increase.
- If Y_i and Y_j decreases more than the decline in trade volume, then A will increase.

About two decades ago, began the Asian financial crisis of 1997-1998 that is rooted on the speculative attack towards Thailand's baht. Such condition is in line with what is being depicted in the line graph below. In Indo-Japan trade, 'A' rose steeply as GDP in both Indonesia and Japan declined. Trade volume also declined, although not as steep. In the year of 2007 – 2008, as an anticipation of the FTA, trade volume between the two countries increased more than the increase

in the GDP of each of the two countries leading to a slight increase in 'A' (while the same thing did not happen for China). In 2008 – 2009, possibly due to the global financial crisis, trade volume for Indo-Japan and Indo-China declined thus explain the drop in 'A.'

Figure 5



One of the reasons for this trend (re: trade volume decline more sharply than GDP during the economic downturn while it increases more steeply than GDP in the upturn) is the rise of globalization and the global supply chains as now, intermediate goods cross the border many more times than they did before ("GDP and Trade Growth").

Figure 6

Source: OECD

2.3 Model Specifications & Analysis

The simpler version of the gravity model specification that I'm using for this paper is as follow:

$$\ln(trade_{AB})_t = \beta_0 + \beta_1 \ln(Dis)_{AB} + \beta_3 \ln(GDP_A GDP_B)_t + \beta_4 ln(GPC_A GPC_B)_t + \alpha_1 FTA_{ABt} + \alpha_2 FTAASEAN_{ABt} + \cdots + \epsilon_{ABt} \quad (3)$$

- A and B are the two countries that are involved in trade with each other
- t denotes the time (in this case, year)

In this equation (equation 3), the α will help us to see whether a trade agreement is indeed generating more trade.

Table 1

Name	Description
Year	from 1990 to 2014
Code	the numerical code for the two countries doing trade
lntrade	ln of the value of bilateral trade (export+import)
lnDis	ln of the distance between the two countries
lnG12 $[\ln(GDP_A GDP_B)_t]$	ln of the product of each countries' nominal GDP at time t
lnGPC12 $[ln(GPC_A GPC_B)_t]$	ln of the product of each countries' GDP per Capita at time t
FTAIndoJapan	Binary variable; 1 if both countries are a member of such FTA at time t, 0 otherwise
FTAJapanAsean	
FTAChinaAsean	
FTASingaporeAustralia	
FTAASEANAustralia	
FTAASEAN	
FTAThailandJapan	
FTAAustraliaNZ	
FTAMalayIndia	
FTAIndiaASEAN	
FTAChinaThai	

Here is the date in which the FTAs are signed and in effect =

FTA Australia-New Zealand = 1983-03-28

FTA ASEAN = 1993-01-01

FTA Singapore-Australia = 2003-07-28

FTA China-Thailand = 2003-10

FTA China-ASEAN = 2005-07-01

FTA Thailand-Japan = 2007-11-01

FTA Indonesia-Japan = 2008-07-01

FTA Japan-ASEAN = 2008-12-01

FTA ASEAN-Australia = 2010-01-01

FTA ASEAN-India = 2010-01-01

FTA Malaysia-India = 2011-07-01

Table 2
STATA Output (The complete STATA Output can be found in Table 4 of the Appendix)

Method	FE
Dependent Variable	lntrade
lnDis	-0.655 (0.199)
lnG12	0.633 (0.033)
lnGPC12	0.232 (0.026)
FTAIndoJapan	-0.141 (0.144)
FTAJapanAsean	-0.033 (0.073)
FTAChinaAsean	0.006 (0.146)
FTASingaporeAustralia	-0.022 (0.160)
FTAASEANAustralia	-0.205 (0.091)
FTAASEAN	0.461 (0.120)
FTAThailandJapan	0.439 (0.136)
FTAAustraliaNZ	0.234 (0.122)
FTAMalayIndia	0.265 (0.039)
FTAIndiaASEAN	-0.105 (0.167)
FTAChinaThai	0.316 (0.095)
Intercept	-9.410 (1.203)
State Dummies?	No
Year Dummies?	Yes
R-squared	0.9467
N	292
Standard Errors	Cluster

- FE = Fixed Effect; It controls for omitted variables in which they vary across time but constant over entities (usually in panel data).
- The numbers in parentheses correspond to the standard error (robust) of the coefficient.

Based on the regression, the coefficient on $\ln(Dis)_{AB}$, $\ln(GDP_A GDP_B)_t$, and $ln(GPC_A GPC_B)_t$ aside from being statistically significant, also seems to be in line with what the gravity theory told us. The negative coefficient on distance means that the further the two countries are, the less bilateral trade volume they are going to have with each other. The positive coefficient on GDP and GDP per Capita are telling us what we already know, that the GDP acts as the 'mass' in Newton's gravity law; the higher the GDP of a country, generally, the more trade the country is going to have.

The coefficient of most of the FTAs are also positive and statistically significant, although there are some that are insignificant and one that is negative and significant. The coefficient on ASEAN FTA, for example, is significant at 1%. This might be so as the ASEAN FTA is one of the biggest trade agreements in the international trade history. What is surprising is actually the trade agreement between ASEAN and Australia as they have a significant negative coefficient. There might be a couple of reasons that could explain this result. First, it could be a short-run phenomenon. The FTA between ASEAN and Australia is established in 2010 and some FTAs are often phased in for a couple of years (they decrease progressively). FTA might also not change the relative prices in the short run thus making it seems like there are no boost in the volume of trade. Business production also takes a while to expand, and it is especially true for developing countries in which most ASEAN countries are considered as. Lastly, it is also possible that the tariff is not that much different or already relatively low to begin with.

The effect on FTA might also be overshadowed by another event that might have happened during that year such as financial crisis, etc. However, we tried to include that in our equation by adding the time fixed effect (FE) to control for the omitted unobserved variables that are common to all entities at a given point in time. For example, 1997 is a period of time when the Asian

Financial Crisis occurred. Thus we would expect trade volume to decrease. The crisis is indeed captured in the fixed effect as the coefficient on "1997" is negative and also statistically significant at 10%.

3. GDP

3.1 FTAs impact on GDP and welfare (what it is supposed to be)

According to an economic impacts assessment of FTAs relating to Japan, the member(s) of a Free Trade Agreement, in this case, Japan and its FTA partners, tend to gain in GDP while most of the other countries that are not a partner lose. This might be the result of a trade diversion, where the non-member will have the other countries, which are part of the trade agreement, import fewer products from them (less demand from the member of the FTA). Thus they will produce less of the goods with their comparative advantage. For the countries that are a member of the FTA, they will also experience trade diversion. However, more often than not, the trade creation effect outweighs the trade diversion which explains the GDP gains (Abe 11).

3.2 Data & Analysis

From the data that I've gathered, it seems that the impact of Indo-Japan bilateral trade agreement on GDP is not as strong as what we've seen in another trade agreement in the early years of international trade. This might be so as the tariff before and after the bilateral trade agreement between the two countries is not that different due to some other trade agreement that has been placed such as the ASEAN – Japan trade agreement. The GDP of the non-member country (China in this example) also was not affected by the trade agreement either because the tariff difference before and after the FTA is not as great and/or simply because the Chinese goods are still more attractive to Indonesian customers.

Figure 7

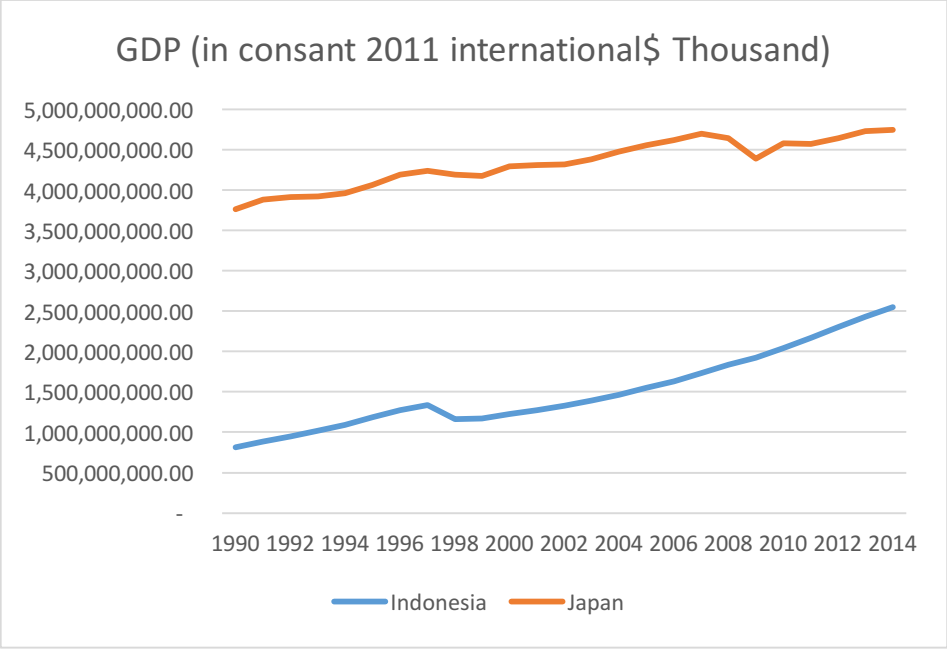


Figure 8

4. Comparative Advantage

4.1 The Theory of Comparative Advantage and Revealed Comparative Advantage

Investopedia defines comparative advantage as "an economic law referring to the ability of any given economic actor to produce goods and services at a lower opportunity cost than other economic actors." A country is said to have a comparative advantage in a good when the relative cost of such good is lower when compared to other countries. The term comparative advantage was popularized by David Ricardo when he used the term it in his book "*Principles of Political Economy and Taxation*" in 1817 ("Comparative Advantage"). In practice, unlike the theory of absolute advantage, every country will have a comparative advantage in something. This is so because comparative advantage involves a double comparison, one across goods and the other across countries (Deardorff 6).

The concept of comparative advantage comes from the field of 'normative' economics which implies what countries should do (instead of what countries will do as in 'positive' economics). It states that a country will gain if it specializes in the production of goods in which they have a comparative advantage/lower opportunity costs in producing (Gallardo, "Comparative Advantage, Economic Growth and Free Trade").

The revealed comparative advantage index, as explained by the World Bank's Trade Indicators Module, is an indicator of whether a country is in the process of expanding the products with trade potential. The index could tell us about the potential prospects for trade with new partners. The measures of revealed comparative advantage have also been used time and time again to help see the potential of a country's export. Unless intra-industry trade is involved, it is unlikely for

countries with similar comparative advantage to have high bilateral trade intensities ("Trade Indicators").

The revealed comparative advantage index of country i for product j (RCA_{ij}) is measured by the share of the product in the country's export in relation to its share in world trade:

$$RCA_{ij} = \frac{\frac{X_{ij}}{X_{it}}}{\frac{X_{wj}}{X_{wt}}} \quad (4)$$

X_{ij} = the values of country i's export of product j

X_{wj}= world exports of product j

X_{it} = the country's total exports

X_{wt}= the world total exports

A value < 1 means that a country has a revealed comparative disadvantage in the product and a value > 1 means that a country has a revealed comparative advantage in the product.

4.2 Data & Analysis

In this part, I compared the comparative advantage, first by looking at the change in a product's export as a share of total export and second, by looking at the revealed comparative advantage of the trade between Indonesia and Japan.

Based on examining the change in each of the products' export to Japan as a share of total export to Japan, the products that have a positive change after the Free Trade Agreement was in effect in 2008 are vegetable, food product, minerals, plastic or rubber, hides and skins, textile and clothing, metals, mach and elec., transportation, miscellaneous, agricultural raw materials, ores and metals, machinery and transport equipment, raw materials, intermediate goods, and capital goods. This means that after the trade agreement was in place, Indonesia exported more proportion of such products, compared to another export goods from Indonesia to Japan.

When looking at the change in the revealed comparative advantage (RCA), most of the results are in line with what we found in the previous paragraph. If the change between the RCA before and after the FTA is positive, it will most likely result in a positive change in such products' export to Japan as a share of total export to Japan and so is the contrary. However, animals, metals and intermediate goods produce distinct results. For these specific goods, the results are opposite whereby the RCA showed a positive change and the products' export (table 6, table 18, and table 27) showed a negative change, or vice versa. This could be due to the noises in the data or some factors that might have overwhelmed the results.

Below (Table 3) is the RCA table and we want to focus on the goods that have an RCA above 1, which suggests comparative advantage. In this case, only raw materials, minerals, and plastic or rubber satisfy this condition. This means that Indonesia exported raw materials, minerals, and plastic or rubber at a greater proportion of the total export to Japan after than before the trade agreement. This is saying that after the trade agreement, Indonesia is specializing even more in raw materials, minerals, and plastic or rubber in which it has a comparative advantage in.

Table 3

Reporter Name	Partner Name	Trade Flow	Product Group	Average (2006-2007)	Average (2009-2010)	Change
Indonesia	Japan	Export	All Products	1	1	0
Indonesia	Japan	Export	Capital goods	0.28	0.325	0.045
Indonesia	Japan	Export	Consumer goods	1.33	1.155	-0.175
Indonesia	Japan	Export	Intermediate goods	1.285	1.035	-0.25
Indonesia	Japan	Export	Raw materials	1.145	1.375	0.23
Indonesia	Japan	Export	Animal	0.69	0.735	0.045
Indonesia	Japan	Export	Chemicals	0.245	0.18	-0.065
Indonesia	Japan	Export	Food Products	0.27	0.275	0.005
Indonesia	Japan	Export	Footwear	0.57	0.525	-0.045
Indonesia	Japan	Export	Fuels	1.755	1.685	-0.07
Indonesia	Japan	Export	Hides and Skins	0.105	0.12	0.015
Indonesia	Japan	Export	Mach and Elec	0.365	0.385	0.02
Indonesia	Japan	Export	Metals	1.84	1.58	-0.26
Indonesia	Japan	Export	Minerals	2.455	3.155	0.7
Indonesia	Japan	Export	Miscellaneous	0.225	0.295	0.07
Indonesia	Japan	Export	Plastic or Rubber	2.385	2.41	0.025
Indonesia	Japan	Export	Stone and Glass	0.255	0.25	-0.005
Indonesia	Japan	Export	Textiles and Clothing	0.415	0.445	0.03
Indonesia	Japan	Export	Transportation	0.25	0.44	0.19
Indonesia	Japan	Export	Vegetable	0.22	0.27	0.05
Indonesia	Japan	Export	Wood	2.135	2.085	-0.05

5. Conclusion

In the past election of 2016, international trade seems to be in the hot seat of topics being debated. The debate over FTAs, however, have existed for decades starting with the formation of the huge Free Trade Agreement such as NAFTA. The economists have conflicting views regarding international trade with some saying that it raises output and welfare and the others saying the opposite.

Based on this paper assessment on Free Trade Agreements in the Asia-Pacific Area, it is evident that most of the Free Trade Agreements are either positive and statistically significant or gave no significant boost to the trade volume. However, it is unlikely that it leads to a decrease in the trade volume between member countries (although in a rare case, it is). If it is, it might also not be the evidence for an unsuccessful Free Trade Agreement as it might be influenced by a short-run phenomenon or that the tariff difference is not as significant.

On how trade impacts GDP, it also seems that the impact of the more current trade agreement on GDP is not as strong as what we saw in the early and bigger trade agreements. Lastly, if a country has a comparative advantage in a good, then after engaging in a trade agreement, such country should have an increase in the volume of trade in the goods in which they have a comparative advantage on.

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7. Appendix

Table 4
STATA Output

Linear regression — Number of obs = 292; F(10, 11) = .; Prob > F = .; R-squared = 0.9467; Root MSE = .27015

(Std. Err. adjusted for 12 clusters in Code)

lntrade	Coef.	Robust Std. Err.	t	P>|t|	[95% Conf.	Interval]
lnDis	-.6551506	.199093	-3.29	0.007	-1.093351	-.21695
lnG12	.6325725	.0331287	19.09	0.000	.5596567	.7054883
lnGPC12	.2316429	.0256749	9.02	0.000	.1751328	.288153
FTAIndoJapan	-.1414433	.1436476	-0.98	0.346	-.4576095	.1747229
FTAJapanAsean	-.0331504	.0728278	-0.46	0.658	-.1934433	.1271426
FTAChinaAsean	.0060553	.1461723	0.04	0.968	-.3156677	.3277784
FTASingaporeAustralia	-.0220329	.1598981	-0.14	0.893	-.3739663	.3299004
FTAASEANAustralia	-.2050221	.0909832	-2.25	0.046	-.4052749	-.0047694
FTAASEAN	.4612818	.1097098	4.20	0.001	.2198121	.7027514
FTAThailandJapan	.4389698	.1357735	3.23	0.008	.1401344	.7378051
FTAAustraliaNZ	.2339866	.1221142	1.92	0.082	-.0347849	.5027581
FTAMalayIndia	.264564	.0386678	6.84	0.000	.1794566	.3496713
FTAIndiaASEAN	-.1047388	.1665144	-0.63	0.542	-.4712345	.2617569
FTAChinaThai	.3157548	.0954456	3.31	0.007	.1056803	.5258292

Year						
1991	-.000627	.0434185	-0.01	0.989	-.0961904	.0949365
1992	-.1098994	.0831398	-1.32	0.213	-.2928889	.0730902
1993	-.3308415	.1239891	-2.67	0.022	-.6037397	-.0579433
1994	-.3330047	.1390509	-2.39	0.036	-.6390537	-.0269557
1995	-.350843	.1602544	-2.19	0.051	-.7035606	.0018746
1996	-.4217514	.170103	-2.48	0.031	-.7961457	-.0473572
1997	-.3315157	.1512127	-2.19	0.051	-.6643326	.0013012
1998	-.0392765	.1347456	-0.29	0.776	-.3358496	.2572966
1999	-.1678852	.1558325	-1.08	0.304	-.5108703	.1750999
2000	-.0370826	.1456218	-0.25	0.804	-.3575941	.2834288
2001	-.0447813	.1458598	-0.31	0.765	-.3658165	.2762539
2002	-.1091165	.1516171	-0.72	0.487	-.4428235	.2245905
2003	-.1220119	.1795782	-0.68	0.511	-.5172609	.2732371
2004	-.1263225	.1837999	-0.69	0.506	-.5308634	.2782184
2005	-.1412606	.1843419	-0.77	0.460	-.5469944	.2644731
2006	-.2039014	.2044884	-1.00	0.340	-.6539773	.2461745
2007	-.3570999	.239488	-1.49	0.164	-.8842094	.1700096
2008	-.2990138	.239229	-1.25	0.237	-.8255533	.2275256
2009	-.473943	.2648125	-1.79	0.101	-1.056791	.1089053
2010	-.4924044	.2996526	-1.64	0.129	-1.151935	.1671266
2011	-.5488506	.3135052	-1.75	0.108	-1.238871	.1411698
2012	-.615946	.3079617	-2.00	0.071	-1.293765	.0618731
2013	-.7091684	.3062238	-2.32	0.041	-1.383162	-.0351743
2014	-.7493084	.2901562	-2.58	0.025	-1.387938	-.1106788
_cons	-9.410109	1.202795	-7.82	0.000	-12.05744	-6.762774

Table 5
Revealed Comparative Advantage

Reporter Name	Partner Name	Trade Flow	Product Group	2006	2007	2008	2009	2010	Average
Indonesia	Japan	Export	All Products	1	1	1	1	1	1
Indonesia	Japan	Export	Capital goods	0.28	0.28	0.31	0.32	0.33	0.304
Indonesia	Japan	Export	Consumer goods	1.38	1.28	1.44	1.16	1.15	1.282
Indonesia	Japan	Export	Intermediate goods	1.22	1.35	0.96	1.05	1.02	1.12
Indonesia	Japan	Export	Raw materials	1.14	1.15	1.09	1.37	1.38	1.226
Indonesia	Japan	Export	Animal	0.7	0.68	0.63	0.76	0.71	0.696
Indonesia	Japan	Export	Chemicals	0.25	0.24	0.2	0.18	0.18	0.21
Indonesia	Japan	Export	Food Products	0.27	0.27	0.28	0.29	0.26	0.274
Indonesia	Japan	Export	Footwear	0.64	0.5	0.52	0.51	0.54	0.542
Indonesia	Japan	Export	Fuels	1.79	1.72	1.7	1.75	1.62	1.716
Indonesia	Japan	Export	Hides and Skins	0.1	0.11	0.11	0.12	0.12	0.112
Indonesia	Japan	Export	Mach and Elec	0.37	0.36	0.38	0.39	0.38	0.376
Indonesia	Japan	Export	Metals	1.61	2.07	1.36	1.61	1.55	1.64
Indonesia	Japan	Export	Minerals	2.57	2.34	1.54	3.42	2.89	2.552
Indonesia	Japan	Export	Miscellaneous	0.22	0.23	0.24	0.29	0.3	0.256
Indonesia	Japan	Export	Plastic or Rubber	2.4	2.37	2.51	2.22	2.6	2.42
Indonesia	Japan	Export	Stone and Glass	0.26	0.25	0.21	0.26	0.24	0.244
Indonesia	Japan	Export	Textiles and Clothing	0.42	0.41	0.42	0.41	0.48	0.428
Indonesia	Japan	Export	Transportation	0.25	0.25	0.38	0.41	0.47	0.352
Indonesia	Japan	Export	Vegetable	0.22	0.22	0.22	0.26	0.28	0.24
Indonesia	Japan	Export	Wood	2.28	1.99	1.85	2.14	2.03	2.058

Table 6

Animal

	Total Export (US$ Thousand)		Animal Export (US$ Thousand)		A Export to J as a Share of Total Export to W	% change	A Export to J as a Share of Total Export to J	% change	A Export to J as a Share of Total A Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	581,967.14	1,814,917.89	0.58%		2.68%		32.07%	
2007	23,632,789.88	114,100,872.80	523,613.27	1,932,694.71	0.46%		2.22%		27.09%	
2008	27,743,856.15	137,020,424.40	530,064.26	2,343,347.15	0.39%	-0.21%	1.91%	-0.46%	22.62%	-7.70%
2009	18,574,730.42	116,509,991.78	520,297.76	1,997,534.41	0.45%		2.80%		26.05%	
2010	25,781,813.65	157,779,103.47	572,614.24	2,350,413.59	0.36%		2.22%		24.36%	

Table 7

Vegetable

	Total Export (US$ Thousand)		Vegetable Export (US$ Thousand)		V Export to J as a Share of Total Export to W	% Change	V Export to J as a Share of Total Export to J	% Change	V Export to J as a Share of Total V Export to W	% Change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	159,751.08	7,894,903.23	0.16%		0.74%		2.02%	
2007	23,632,789.88	114,100,872.80	169,253.13	12,462,641.54	0.15%		0.72%		1.36%	
2008	27,743,856.15	137,020,424.40	215,796.26	18,609,947.90	0.16%	-0.02%	0.78%	0.14%	1.16%	-0.86%
2009	18,574,730.42	116,509,991.78	179,672.57	14,707,499.48	0.15%		0.97%		1.22%	
2010	25,781,813.65	157,779,103.47	225,944.57	19,467,609.01	0.14%		0.88%		1.16%	

Table 8

Food Products

	Total Export (US$ Thousand)		FP Export (US$ Thousand)		FP Export to J as a Share of Total Export to W	% Change	FP Export to J as a Share of Total Export to J	% Change	FP Export to J as a Share of Total FP Export to W	% Change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	100,314.02	2,316,490.33	0.10%		0.46%		4.33%	
2007	23,632,789.88	114,100,872.80	120,957.05	2,693,855.42	0.11%		0.51%		4.49%	
2008	27,743,856.15	137,020,424.40	149,803.96	3,703,995.95	0.11%	0.01%	0.54%	0.23%	4.04%	-0.31%
2009	18,574,730.42	116,509,991.78	157,920.47	3,734,511.48	0.14%		0.85%		4.23%	
2010	25,781,813.65	157,779,103.47	179,476.80	4,463,095.01	0.11%		0.70%		4.02%	

Table 9

Minerals

	Total Export (US$ Thousand)		M Export (US$ Thousand)		M Export to J as a Share of Total Export to W	% change	M Export to J as a Share of Total Export to J	% change	M Export to J as a Share of Total M Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	2,025,424.38	5,319,369.99	2.01%		9.32%		38.08%	
2007	23,632,789.88	114,100,872.80	1,546,354.47	5,395,196.88	1.36%		6.54%		28.66%	
2008	27,743,856.15	137,020,424.40	1,734,117.34	4,581,531.29	1.27%	-0.12%	6.25%	2.27%	37.85%	-2.13%
2009	18,574,730.42	116,509,991.78	2,155,890.11	6,029,303.30	1.85%		11.61%		35.76%	
2010	25,781,813.65	157,779,103.47	2,988,038.27	8,313,159.76	1.89%		11.59%		35.94%	

Table 10

Fuels

	Total Export (US$ Thousand)		F Export (US$ Thousand)		F Export to J as a Share of Total Export to W	% change	F Export to J as a Share of Total Export to J	% change	F Export to J as a Share of Total F Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	10,893,749.49	27,619,520.09	10.81%		50.13%		39.44%	
2007	23,632,789.88	114,100,872.80	11,871,321.26	29,211,100.80	10.40%		50.23%		40.64%	
2008	27,743,856.15	137,020,424.40	16,033,773.51	39,782,511.66	11.70%	-3.15%	57.79%	-3.24%	40.30%	-13.60%
2009	18,574,730.42	116,509,991.78	8,788,993.62	32,952,279.51	7.54%		47.32%		26.67%	
2010	25,781,813.65	157,779,103.47	12,087,309.86	46,765,269.73	7.66%		46.88%		25.85%	

Table 11

Chemicals

	Total Export (US$ Thousand)		C Export (US$ Thousand)		C Export to J as a Share of Total Export to W	% change	C Export to J as a Share of Total Export to J	% change	C Export to J as a Share of Total C Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	303,401.98	3,682,495.36	0.30%		1.40%		8.24%	
2007	23,632,789.88	114,100,872.80	318,523.94	4,783,962.87	0.28%		1.35%		6.66%	
2008	27,743,856.15	137,020,424.40	357,412.97	5,008,538.40	0.26%	-0.08%	1.29%	-0.07%	7.14%	-2.71%
2009	18,574,730.42	116,509,991.78	249,946.77	4,286,192.08	0.21%		1.35%		5.83%	
2010	25,781,813.65	157,779,103.47	341,496.43	6,172,105.47	0.22%		1.32%		5.53%	

Table 12
Plastic or Rubber

	Total Export (US$ Thousand)		P/R Export (US$ Thousand)		P/R Export to J as a Share of Total Export to W	% change	P/R Export to J as a Share of Total Export to J	% change	P/R Export to J as a Share of Total P/R Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	1,264,167.29	7,267,170.54	1.25%		5.82%		17.40%	
2007	23,632,789.88	114,100,872.80	1,399,881.56	8,155,186.74	1.23%		5.92%		17.17%	
2008	27,743,856.15	137,020,424.40	1,714,287.73	9,769,643.83	1.25%	-0.22%	6.18%	0.50%	17.55%	-3.28%
2009	18,574,730.42	116,509,991.78	1,059,476.63	6,685,040.64	0.91%		5.70%		15.85%	
2010	25,781,813.65	157,779,103.47	1,627,369.91	11,525,612.36	1.03%		6.31%		14.12%	

Table 13
Hides and Skins

	Total Export (US$ Thousand)		H&S Export (US$ Thousand)		H&S Export to J as a Share of Total Export to W	% change	H&S Export to J as a Share of Total Export to J	% change	H&S Export to J as a Share of Total H&S Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	16,475.88	302,834.94	0.02%		0.08%		5.44%	
2007	23,632,789.88	114,100,872.80	20,069.90	364,913.63	0.02%		0.08%		5.50%	
2008	27,743,856.15	137,020,424.40	18,975.26	356,606.88	0.01%	-0.001%	0.07%	0.02%	5.32%	0.96%
2009	18,574,730.42	116,509,991.78	18,719.74	300,643.07	0.02%		0.10%		6.23%	
2010	25,781,813.65	157,779,103.47	23,763.51	371,439.80	0.02%		0.09%		6.40%	

Table 14

Wood

	Total Export (US$ Thousand)		W Export (US$ Thousand)		Wood Export to J as a Share of Total Export to W	% change	Wood Export to J as a Share of Total Export to J	% change	Wood Export to J as a Share of Total Wood Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	1,412,079.33	7,409,328.51	1.40%		6.50%		19.06%	
2007	23,632,789.88	114,100,872.80	1,171,777.51	7,634,590.19	1.03%		4.96%		15.35%	
2008	27,743,856.15	137,020,424.40	1,153,888.27	8,156,188.99	0.84%	-0.59%	4.16%	-1.54%	14.15%	-4.34%
2009	18,574,730.42	116,509,991.78	1,034,203.37	6,654,894.68	0.89%		5.57%		15.54%	
2010	25,781,813.65	157,779,103.47	1,278,707.63	8,688,021.19	0.81%		4.96%		14.72%	

Table 15

Textile and Clothing

	Total Export (US$ Thousand)		T&C Export (US$ Thousand)		T&C Export to J as a Share of Total Export to W	% change	T&C Export to J as a Share of Total Export to J	% change	T&C Export to J as a Share of Total T&C Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	506428.01	9746304.45	0.50%		2.33%		5.20%	
2007	23,632,789.88	114,100,872.80	515215.12	10142521.35	0.45%		2.18%		5.08%	
2008	27,743,856.15	137,020,424.40	558999.85	10496689.18	0.41%	-0.10%	2.01%	0.16%	5.33%	0.32%
2009	18,574,730.42	116,509,991.78	486532.49	9595298.77	0.42%		2.62%		5.07%	
2010	25,781,813.65	157,779,103.47	642077.17	11631236.69	0.41%		2.49%		5.52%	

Table 16

Footwear

	Total Export (US$ Thousand)		F Export (US$ Thousand)		F Export to J as a Share of Total Export to W	% change	F Export to J as a Share of Total Export to J	% change	F Export to J as a Share of Total F Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	100,526.67	1,732,726.99	0.10%		0.46%		5.80%	
2007	23,632,789.88	114,100,872.80	87,333.02	1,802,048.42	0.08%		0.37%		4.85%	
2008	27,743,856.15	137,020,424.40	95,030.24	2,048,132.05	0.07%	-0.03%	0.34%	-0.04%	4.64%	-1.85%
2009	18,574,730.42	116,509,991.78	79,624.31	1,913,963.59	0.07%		0.43%		4.16%	
2010	25,781,813.65	157,779,103.47	108,193.41	2,736,878.21	0.07%		0.42%		3.95%	

Table 17

Stone and Glass

	Total Export (US$ Thousand)		S&G Export (US$ Thousand)		S&G Export to J as a Share of Total Export to W	% change	S&G to Export to J as a Share of Total Export to J	% change	S&G Export to J as a Share of Total S&G Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	108,878.45	1,494,144.37	0.11%		0.50%		7.29%	
2007	23,632,789.88	114,100,872.80	127,585.68	1,759,848.50	0.11%		0.54%		7.25%	
2008	27,743,856.15	137,020,424.40	115,187.36	1,939,635.54	0.08%	-0.04%	0.42%	-0.10%	5.94%	-2.88%
2009	18,574,730.42	116,509,991.78	96,542.90	1,929,719.65	0.08%		0.52%		5.00%	
2010	25,781,813.65	157,779,103.47	104,330.05	2,367,376.85	0.07%		0.40%		4.41%	

Table 18

Metals

	Total Export (US$ Thousand)		M Export (US$ Thousand)		M Export to J as a Share of Total Export to W	% change	M Export to J as a Share of Total Export to J	% change	M Export to J as a Share of Total M Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	2,140,733.63	7,262,348.39	2.12%		9.85%		29.48%	
2007	23,632,789.88	114,100,872.80	3,416,462.29	9,470,740.38	2.99%		14.46%		36.07%	
2008	27,743,856.15	137,020,424.40	2,333,332.78	9,856,772.89	1.70%	-0.23%	8.41%	1.74%	23.67%	-0.02%
2009	18,574,730.42	116,509,991.78	1,620,211.67	6,977,363.46	1.39%		8.72%		23.22%	
2010	25,781,813.65	157,779,103.47	2,986,984.73	10,139,557.68	1.89%		11.59%		29.46%	

Table 19

Mach and Elec

	Total Export (US$ Thousand)		M&E Export (US$ Thousand)		M&E Export to J as a Share of Total Export to W	% change	M&E Export to J as a Share of Total Export to J	% change	M&E Export to J as a Share of Total M&E Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	1,530,736.23	11,653,755.90	1.52%		7.04%		13.14%	
2007	23,632,789.88	114,100,872.80	1,718,100.90	12,266,425.86	1.51%		7.27%		14.01%	
2008	27,743,856.15	137,020,424.40	1,980,504.42	13,477,420.68	1.45%	-0.36%	7.14%	0.02%	14.69%	-1.28%
2009	18,574,730.42	116,509,991.78	1,480,086.97	12,857,368.54	1.27%		7.97%		11.51%	
2010	25,781,813.65	157,779,103.47	1,821,403.97	15,357,807.72	1.15%		7.06%		11.86%	

Table 20

Transportation

	Total Export (US$ Thousand)		T Export (US$ Thousand)		T Export to J as a Share of Total Export to W	% change	T Export to J as a Share of Total Export to J	% change	T Export to J as a Share of Total T Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	253,437.77	2,431,728.60	0.25%		1.17%		10.42%	
2007	23,632,789.88	114,100,872.80	279,721.70	2,997,218.41	0.25%		1.18%		9.33%	
2008	27,743,856.15	137,020,424.40	385,374.60	3,767,409.64	0.28%	-0.01%	1.39%	0.33%	10.23%	-1.20%
2009	18,574,730.42	116,509,991.78	267,016.04	3,150,143.57	0.23%		1.44%		8.48%	
2010	25,781,813.65	157,779,103.47	384,990.85	4,176,862.83	0.24%		1.49%		9.22%	

Table 21

Miscellaneous

	Total Export (US$ Thousand)		M Export (US$ Thousand)		M Export to J as a Share of Total Export to W	% change	M Export to J as a Share of Total Export to J	% change	M Export to J as a Share of Total M Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	346,295.84	3,150,592.74	0.34%		1.59%		10.99%	
2007	23,632,789.88	114,100,872.80	358,841.42	3,360,250.72	0.31%		1.52%		10.68%	
2008	27,743,856.15	137,020,424.40	379,354.76	3,473,860.17	0.28%	-0.07%	1.37%	0.06%	10.92%	0.65%
2009	18,574,730.42	116,509,991.78	392,059.05	3,069,553.05	0.34%		2.11%		12.77%	
2010	25,781,813.65	157,779,103.47	426,167.96	3,659,856.26	0.27%		1.65%		11.64%	

Table 22

Agricultural Raw Materials

	Total Export (US$ Thousand)		ARM Export (US$ Thousand)		ARM Export to J as a Share of Total Export to W	% change	ARM Export to J as a Share of Total Export to J	% change	ARM Export to J as a Share of Total ARM Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	843,936.60	6,453,669.51	0.84%		3.88%		13.08%	
2007	23,632,789.88	114,100,872.80	967,367.64	7,124,085.87	0.85%		4.09%		13.58%	
2008	27,743,856.15	137,020,424.40	1,249,990.29	8,767,757.25	0.91%	-0.10%	4.51%	0.61%	14.26%	-1.85%
2009	18,574,730.42	116,509,991.78	588,250.41	5,266,374.70	0.50%		3.17%		11.17%	
2010	25,781,813.65	157,779,103.47	1,157,703.57	10,307,753.59	0.73%		4.49%		11.23%	

Table 23

Manufactures

	Total Export (US$ Thousand)		M Export (US$ Thousand)		M Export to J as a Share of Total Export to W	% change	M Export to J as a Share of Total Export to J	% change	ARM Export to J as a Share of Total ARM Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	5,198,737.23	44,453,548.28	5.16%		23.92%		11.69%	
2007	23,632,789.88	114,100,872.80	5,279,082.10	48,227,360.54	4.63%		22.34%		10.95%	
2008	27,743,856.15	137,020,424.40	5,822,349.03	52,690,196.08	4.25%	-1.43%	20.99%	-1.14%	11.05%	-1.64%
2009	18,574,730.42	116,509,991.78	4,788,589.22	46,768,008.03	4.11%		25.78%		10.24%	
2010	25,781,813.65	157,779,103.47	5,874,504.86	58,439,145.73	3.72%		22.79%		10.05%	

Table 24

Ores and Metals

	Total Export (US$ Thousand)		O&M Export (US$ Thousand)		O&M Export to J as a Share of Total Export to W	% change	O&M Export to J as a Share of Total Export to J	% change	O&M Export to J as a Share of Total O&M Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	3,990,110.90	9,992,754.96	3.96%		18.36%		39.93%	
2007	23,632,789.88	114,100,872.80	4,730,792.34	12,153,778.50	4.15%		20.02%		38.92%	
2008	27,743,856.15	137,020,424.40	3,786,574.42	10,842,271.66	2.76%	-0.34%	13.65%	3.80%	34.92%	-2.95%
2009	18,574,730.42	116,509,991.78	3,578,925.55	10,596,118.62	3.07%		19.27%		33.78%	
2010	25,781,813.65	157,779,103.47	5,713,602.60	15,450,930.70	3.62%		22.16%		36.98%	

Table 25

Machinery and Transport Equipment

	Total Export (US$ Thousand)		M&TE Export (US$ Thousand)		M&TE Export to J as a Share of Total Export to W	% change	M&TE Export to J as a Share of Total Export to J	% change	M&TE Export to J as a Share of Total M&TE Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	1,791,987.23	464,850.95	1.78%		8.25%		385.50%	
2007	23,632,789.88	114,100,872.80	2,013,084.86	567,384.73	1.76%		8.52%		354.80%	
2008	27,743,856.15	137,020,424.40	2,385,171.61	570,851.73	1.74%	-0.36%	8.60%	0.42%	417.83%	-22.24%
2009	18,574,730.42	116,509,991.78	1,783,709.14	735,484.99	1.53%		9.60%		242.52%	
2010	25,781,813.65	157,779,103.47	2,235,075.24	615,285.03	1.42%		8.67%		363.26%	

Table 26

Raw Materials

	Total Export (US$ Thousand)		RM Export (US$ Thousand)		RM Export to J as a Share of Total Export to W	% change	RM Export to J as a Share of Total Export to J	% change	RM Export to J as a Share of Total RM Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	7,338,884.91	27,424,886.77	7.28%		33.77%		26.76%	
2007	23,632,789.88	114,100,872.80	7,633,544.81	30,106,224.71	6.69%		32.30%		25.36%	
2008	27,743,856.15	137,020,424.40	9,682,470.96	38,302,651.95	7.07%	-0.91%	34.90%	5.23%	25.28%	-6.63%
2009	18,574,730.42	116,509,991.78	6,804,432.93	35,459,552.60	5.84%		36.63%		19.19%	
2010	25,781,813.65	157,779,103.47	10,054,888.73	49,948,530.45	6.37%		39.00%		20.13%	

Table 27

Intermediate Goods

	Total Export (US$ Thousand)		IG Export (US$ Thousand)		IG Export to J as a Share of Total Export to W	% change	IG Export to J as a Share of Total Export to J	% change	IG Export to J as a Share of Total IG Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	4,371,503.07	26,493,545.18	4.34%		20.12%		16.50%	
2007	23,632,789.88	114,100,872.80	6,104,360.77	34,366,825.00	5.35%		25.83%		17.76%	
2008	27,743,856.15	137,020,424.40	5,999,457.36	40,776,696.80	4.38%	-0.63%	21.62%	2.57%	14.71%	-3.15%
2009	18,574,730.42	116,509,991.78	3,820,781.26	31,742,662.83	3.28%		20.57%		12.04%	
2010	25,781,813.65	157,779,103.47	5,848,204.24	43,796,642.39	3.71%		22.68%		13.35%	

Table 28
Consumer Goods

	Total Export (US$ Thousand)		CG Export (US$ Thousand)		CG Export to J as a Share of Total Export to W	% change	CG Export to J as a Share of Total Export to J	% change	CG Export to J as a Share of Total CG Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	8,706,500.43	34,616,969.11	8.64%		40.06%		25.15%	
2007	23,632,789.88	114,100,872.80	8,329,135.68	36,865,578.79	7.30%		35.24%		22.59%	
2008	27,743,856.15	137,020,424.40	10,282,618.18	43,465,293.64	7.50%	-3.39%	37.06%	-7.95%	23.66%	-7.69%
2009	18,574,730.42	116,509,991.78	6,635,705.64	34,994,624.76	5.70%		35.72%		18.96%	
2010	25,781,813.65	157,779,103.47	8,279,195.16	47,420,482.66	5.25%		32.11%		17.46%	

Table 29
Capital Goods

	Total Export (US$ Thousand)		CG Export (US$ Thousand)		CG Export to J as a Share of Total Export to W	% change	CG Export to J as a Share of Total Export to J	% change	CG Export to J as a Share of Total CG Export to W	% change
	Japan	World	Japan	World						
2006	21,732,122.93	100,798,615.67	1,243,127.09	11,409,323.79	1.23%		5.72%		10.90%	
2007	23,632,789.88	114,100,872.80	1,509,130.65	12,121,943.86	1.32%		6.39%		12.45%	
2008	27,743,856.15	137,020,424.40	1,668,831.86	13,634,808.61	1.22%	-0.29%	6.02%	0.06%	12.24%	-0.87%
2009	18,574,730.42	116,509,991.78	1,252,411.04	13,452,217.42	1.07%		6.74%		9.31%	
2010	25,781,813.65	157,779,103.47	1,489,755.30	14,864,293.92	0.94%		5.78%		10.02%	