

New Kid on the Block: The China, Japan, and South Korea FTA
(An Analysis of Regional Economic Integration in Asia)

By

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July 2012

(Extremely preliminary, please do not quote without authorization)

Abstract: Asia has lagged in the development of economic integration agreements. Recent murmurings concerning a Free Trade Agreement (FTA) between the People's Republic of China, South Korea, and Japan have brought Asian regional integration agreements to the forefront. This paper investigates what such an agreement would entail and then uses an augmented gravity model to estimate the trade effects. Using data from 1980-2010, an FTA between these three countries is estimated to have significant trade creation effects of 1.5-3 times current trade levels. Scenarios of less than full FTA are also examined; these still lead to increased trade for the region. (100 words)

Consequences for European trade patterns are then examined.

Keywords: Economic Integration, Free Trade Agreements, Trade Creation, Asia Region, (Japan, China, South Korea)

JEL Codes: F1, F13, C33

New Kid on the Block: The China, Japan, and South Korea FTA
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In May 2012, it was once again announced that China, Japan and South Korea were to meet in a summit to launch negotiations for a three-way free trade pact.¹ These three northeastern Asian countries make up nearly 20% of global GDP and accounted for close to 19% of total exports in 2010 – almost as much as NAFTA. They have spoken repeatedly over the years about an FTA, but it has never entered into a serious phase of negotiations.

This time may be different. Chinese premier Wen JiaBiao indicated in May that the slow economic recovery coupled with increasing global trade protectionism has lead many countries to seek to strengthen regional economic integration in order to contribute to expanded market share and increased competitiveness². In Wu (2005), I argued that one main reason for countries to seek to join a regional integration agreement centered on self-protection. The argument by Premier Wen fits that theory and therefore, these indications of an FTA between China, Japan and S. Korea may be very different than in the past. A Baldwin domino effect for Asian regionalism would then emerge. But how might be such an FTA affect regional and world trade?

The literature on Regional Trade Agreements (RTA) generally asks if these agreements make multilateral liberalization more or less likely? If RTAs successfully interact in the multilateral regime of trade negotiation, do they serve as building blocks, i.e., stepping stones or stumbling blocks to free trade? This essential question, whose

¹ Financial Times, 13 May 2012 accessed online at FT.com.

² Ibid.

terminology was first introduced by Bhagwati (1991), has continued to be a spectra over research concerning regional trade liberalization. Bhagwati first coined the term in an article examining whether membership expansion of RTAs should be as a test of whether they serve as "building blocks" for the freeing of worldwide trade. If joining a RTA triggers multilateral negotiations then RTAs may indeed be seen as "building blocks". As such, they would be encouraged as a medium to reach multilateral free trade. However, he argued, it is more likely that RTA formation hinders the advancement of multilateral free trade due to the adverse affect of RTA formation on countries' incentives to continue multilateral negotiations.

Several theoretical models expand on the questions raised by Bhagwati. Ethier (1998) argued that regionalism promotes the successful entry of 'reforming' countries into the multilateral system in a way that multilateralism cannot do alone. Thus, in effect, RTAs are "stepping stones" to multilateral trade liberalization. Ethier's argument applied to the 'new regionalism' where developing countries form RTAs with developed countries. It does not, however, apply to the previous waves of regionalism in the 1960s and 1970s. Lawrence (1995) suggests that increased regional integration does not necessarily undermine the World Trade Organization (WTO) and extra-regional linkages are of great importance. If RTAs can be constructed in such a way as to provide credibility and reinforcement of market forces, then a more integrated economy can result.

There are also informal arguments presented to support the "stepping stones" hypothesis – the idea that multilateralism results from regional agreements. Summers (1991) has suggested that multilateral negotiations will move more quickly when the number of negotiators is reduced to three via trade block formation. Bergsten (1994)

argues that the threat of block formation aids multilateral negotiations. Panagariya (1998) suggests that RTAs can unify protectionist lobbies and turn them into more effective obstacles to trade liberalization. This is because many RTAs are between developed and developing countries and are associated with a perceived loss of wages in developed countries. Multilateral negotiations draw less attention from protectionist lobbies and are thus easier to achieve in democratic countries.

Mansfield, et. al. (2002) have a similar argument. In their political economy model, international agreements are shown to serve a domestic purpose by providing credibility to the executive. Empirically, they find that democracies, allied countries, and GATT/WTO members have a greater likelihood of signing a RTA. While the three countries in question are all members of the WTO, they are not all democracies and one could hardly qualify them as *allies*:

Traditionally the overall effects of customs unions are measured through the use of trade diversion and trade creation, concepts first introduced by Viner (1950). Viner pointed out in his original analysis that the RTA improves economic efficiency for its members only if the RTA partner is a low-cost producer of the imported good. If instead, the RTA partner is not the world low-cost producer, or close to it, then the increased imports from the new partner country would not have been the best option.

The gravity model, the preferred empirical method for assessing the importance of RTA formation on trade volumes and thus trade creation or trade diversion, predicts that the volume of trade between two countries should increase with their size and decrease with transaction costs. This model thus estimates bilateral trade between countries as a function of the distance (transactions costs proxy) between them, their real GDP (proxy for size), populations and other physical factors such as shared borders. Dummy

variables capture whether a country belongs to a particular RTA and whether more (or less) trade is occurring, i.e. whether trade creation or diversion occurs.

Previous studies using the gravity model have found ambiguous results: general trade creation for Europe but conflicting results for other types of RTAs.³ Frankel, Stein, and Wei (1995) investigated 7 RTAs for the period 1989-1999 and found that the “dummy variable for intra-regional trade is highly significant statistically.” They also found that free trade agreements significantly enhanced world trade while customs unions did not. Soloaga and Winters (1999) examined 9 PTAs in the period 1980-1996, comparing patterns of trade before and after the second wave of regionalism, and found no indication that “new regionalism” boosted intra-bloc trade. Ghosh and Yamarik (2003) look at 12 RTAs for 6 annual observations and find that RTAs create inter-bloc trade regardless of their type.

This paper therefore has two purposes. First, I examine the motivation for a Regional Trade Agreement between China, Japan and South Korea and evaluate whether it would be trade creating. I then examine whether smaller iterations of this idea would be preferred. Section III describes the gravity model used. Section IV describes the data and their sources. Section V reports results and Section VI concludes.

Motivation for China, Japan, S. Korea FTA

The motivations for a new trade agreement in Asia have already been alluded to in the introduction. This paper will take the position that an exogenous event results in

³ See summaries of these studies in Srinivasan, Whalley, and Wooton (1993) or Frankel (1997).

self-protection strategies for the three countries involved which will lead to a domino effect in the region.

Risks that are associated with an uncertain trading world have been dealt with using two different techniques in the literature: defensive, or insurance approaches, and preventive, or self-protection approaches. Much of the earlier work centered on security issues but with the end of the Cold War attention turned toward preventive approaches. Wu (2005) argues that the incentive for loss prevention leads to some form of cooperative regional integration. By examining the risks associated with an uncertain trading world and including the resulting uncertainty, the optimal level of integration, political or economic, is found. She finds that multilateralism and regionalism are complements.

Baldwin (1993) showed that the trade-diversion effects of a customs union formation would induce nations that had previously been against membership to change their minds and advocate joining. The incentive of non-included nations increases with expanding customs union membership. This results in a domino-like chain reaction of membership where each new member triggers another. The catalyst for the first new member or set of members which then causes the domino reaction is considered to be some exogenous event, i.e., financial crisis, security crisis, increased democratic participation, etc.

Empirical Strategy

The gravity model represents a conventional device used to estimate the effects of income, population and distance of trading partners on volumes of international trade. It is a successful model in that the traditional gravity effects, i.e., distance and output are reasonably estimated and most of the variation in international trade is able to be

explained.³ The left hand side variable is the average value of real bilateral trade between two countries in a given year. The model has been consistently reliable and fits reasonably well.

In order to examine the effect of an FTA between China, Japan and South Korea, the gravity model is extended in the following way:

$$\ln X_{ijt} = \beta_0 + \beta_1 D_{ij} + \beta_2 (Y_i Y_j)_t + \beta_3 \ln \{ (Y_i Y_j) / (\text{Pop}_i \text{Pop}_j) \}_t + \beta_4 \text{Language}_{ij} + \beta_5 \text{Border}_{ij} + \beta_6 \text{Land}_{ij} + \beta_7 \text{Island}_{ij} + \beta_8 \ln(\text{Area}_i \text{Area}_j) + \beta_9 \text{CommonColonizer}_{ij} + \beta_{10} \text{CurrentColony}_{ijt} + \beta_{11} \text{Colony}_{ij} + \beta_{12} \text{SameNation}_{ij} + \beta_{13} \text{CurrencyUnion}_{ijt} + \beta_{14} \text{WTO}_{ijt} + \gamma_1 \text{CJSK_FTA}_{ijt} + \sum_t \varphi_t T_t + \varepsilon_{ijt}$$

where i and j denote trading partners, t denotes time and the variables are defined in Table 1 in the appendix.

We are interested in the γ coefficient. If membership in the China, Japan, South Korea FTA has a significant trade creation effect, then we expect those members to have a higher trade with each other than with outsiders. Thus, the coefficient of CJSK_FTA, γ_1 should reflect the trade creation effect and be positive. If, on the other hand, there is trade diversion, γ_1 would then be negative.

The gravity model is estimated using ordinary least squares, computing standard errors that are robust to clustering by country-pairs. To control for factors such as the global business cycle, dollar fluctuations, etc., year-specific fixed effects are included. In order to check for robustness, both random and fixed effects models are also estimated although the results are not reported in the tables at this time.

³For more on the gravity model see Deardorff, Feenstra, or Rose.

Data

The first dataset was generously supplied by Andrew Rose⁴ and are described in his paper "The Olympic Effect" (2011) The trade data covers bilateral merchandise trade between 196 IMF trading entities for the period 1950-2006. Bilateral trade is the average value of trade between a pair of countries (exports from i to j, imports into j from i, etc.) Population and real GDP (in constant US dollars) come from the standard sources: the PWT, the World Bank WDI, and the IFS. The trading entities included are listed in Appendix 2. Rose's dataset includes a calculated distance variable and a dummy for participation in a regional trade agreement.

I use a second dataset to check these results with respect to other trade agreements. This dataset was generously supplied by Chris Magee as part of a project on trade diversion.⁴ His bilateral dataset goes from 1980-2010 and includes approximately 200 countries. Bilateral trade is again taken from the IMF trading entities. Population and real GDP (in constant 2000 US dollars) come from World Development Indicators from the World Bank. The dataset also includes a dummy variable for the event that a country has a trading partner who belongs to a number of RTAs.

I augment the Rose and the Magee datasets with several variables (CJSKFTA, JSKFTA, CJFTA, and SCKFTA) to capture the effect of a trade agreement between China, Japan and South Korea as well as to investigate the possibility of bi-lateral agreements between these three countries instead. Descriptive statistics are shown in

⁴ The data set has been graciously made available by Andrew Rose (<http://haas.berkeley.edu/~arose>)

⁴ Graciously made available by Chris Magee and downloaded from <http://www.facstaff.bucknell.edu/cmagee/>.

Table 1 and **Table 2** in the Appendix for each dataset. These show that the key variables of RTA membership are not highly correlated with most of the gravity variables.

Results

Using STATA, I calculated some robust OLS regressions using both datasets, controlling for the maximum other factors affecting bilateral trade including population, GDP, neighboring countries, borders, language, colonizers, etc. The results clearly show evidence of trade diversion in a tripartite RTA between China, Japan and South Korea to the order of approximately 55% for the Magee dataset and a trade creation effect of 20% for the Rose dataset. Neither result for the full FTA was significant. These results are shown in Tables 3-5.

When the possible scenarios for an RTA are dissected into bilateral agreements, the results are again in agreement. An FTA between China and South Korea would be trade creating at an increase greater than 150%. China and South Korea will hold their second round of talks concerning this bi-lateral FTA shortly (in July of this year).

An FTA between China and Japan would also be a trade creating scenario. The estimated gain to trade would be around 80% for this scenario. This FTA would be more difficult to form given the difference in political stance between China and Japan. However, the theoretical results show that this would be the main scenario including the self-protection argument. The recent earthquake in Japan has not only disrupted their supply chain network but put into doubt their ability to supply a stable food and energy supply. An FTA would successfully combat these recent issues.

However, the scenario of an FTA between Japan and South Korea would be trade diverting on the order of 30-90%. This seems to be what drives a trade diverting result for the tripartite scenario. This may be because both Japan and South Korea are higher cost producers than China. In order to further examine this result, it is necessary to examine the trade component data. I leave this to future work.

Conclusion

The recent discussions between China, Japan, and South Korea concerning a Free Trade Agreement leads to questions concerning motivation and consequences of such an FTA. I have argued that the reasons for an FTA between these three countries are two-fold. First there is a self-protection incentive to form the FTA now. The trading environment has changed such that an FTA is in the political and economic interest of all three countries. Furthermore, the recent natural events in the region have increased the payoff from such a regional trade agreement.

Second, the environmental change leading to a self-protection incentive provides the catalyst for a domino effect. These three countries will constitute a large RTA and would potentially complete the third world 'block' à la Krugman. This may lead to further scenarios of FTA formation in the region.

I use a simple gravity model to examine what would be the trade creation and diversion effects of an FTA of this nature. I find that for the full tripartite FTA, the scenario is essentially one of trade diversion although this is not statistically significant. However, when the FTA scenario is examined along bilateral trade agreements, I find that an FTA between China and South Korea or between China and Japan would be trade

creating. However, the bilateral FTA between Japan and South Korea would be trade diverting. All results are statistically significant. It is this bilateral result which drives the results for the tripartite FTA.

An FTA between China, Japan and South Korea would constitute nearly 20% of world trade and would form a large hegemonic agreement in the Asian region. The talks have reached the preliminary negotiation phase. If this FTA actually comes to fruition, it would have large consequences for world and regional trade. Further research should investigate the effects on the regional and world trade.

Bibliography

- Baldwin, Richard, (1993). A Domino Theory of Regionalism, *NBER Working Papers* 4465, National Bureau of Economic Research, Inc.
- Bergsten, Fred, (1994). Sunrise in Seattle. *International Economic Insights* 5(1), January/February.
- Bhagwati, Jagdish. (1993). Regionalism and Multilateralism : An Overview, in de Melo and Panagariya (eds) *New Dimensions in Regional Integration*, Cambridge, Great Britain: Cambridge University Press.
- Financial Times, "China, Japan and S Korea in free trade talks", 13 May 2012 7:24 am, accessed at FT.com.
- Krishna, Pravin, (1998). Regionalism and Multilateralism: A Political Economy Approach. *Quarterly Journal of Economics*
- Lawrence, Robert Z. (1991) *Emerging Regional Arrangements: Building Blocks or Stumbling Blocks?* *Finance and the International Economy* 5(22-235), Oxford University Press.
- Levy, Phillip. (1997). A Political Economic Analysis of Free Trade Agreements. *American Economic Review* 87(4) September
- Mansfield, Edward, Helen V. Milner, and B. Peter Rosendorff (2002). Why Democracies Cooperate More: Electoral Control and International Trade Agreements. *International Organization* 56(3): 477-513.
- Panagariya Arvind (1998). The Regionalism Debate: An Overview. *World Economy*, June 1999, 477-511
- Neumayer, Plumper, Magee, Project on trade diversion [Bilateral trade and gravity data, 1980-2010](http://www.facstaff.bucknell.edu/cmagee/), downloaded from <http://www.facstaff.bucknell.edu/cmagee/>
- Rose, Andrew K. (2005). "Does the WTO Make Trade More Stable?" *Open Economies Review*, 16(1): 7-22.
- Rose, Andrew K. and Mark M. Spiegel (2011) The Olympic Effect: The Economic Journal, *Royal Economic Society* 121(533): 652-677.
- Summers, Lawrence (1991). Regionalism and the World Trading System, Symposium sponsored by the Kansas City Federal Reserve Bank, Policy Implications of Trade and Currency Zones.

Viner, Jacob (1950). The Customs Union Issues. Carnegie Endowment for International Peace.

Wu, Jennifer Pédussel (2005) “Trade Agreements as Self Protection, Review of International Economics”, 13 (3): 472-484

Appendix 1: Variables in the Model

Variable	Description	Source
X_{ijt}	The average value of real bilateral trade between countries i and j at time t	Rose / Magee
D	Distance between capital cities of i and j	Rose
Y	Real Gross Domestic Product	Rose
Population	Total population of country i or j	Rose
Language	1 if i and j have a common language; 0 otherwise	Rose
Border	1 if i and j share a land border; 0 otherwise	Rose
Landlocked	The number of landlocked countries in the country pair (0, 1, or 2)	Rose
Island	The number of island nations in the pair (0, 1, or 2)	Rose
Area	Area of the country in square kilometers	Rose
Common Colonizer	1 if i and j were ever colonies, after 1945, with the same (common) colonizer; 0 otherwise	Rose
Colony	1 if i and j were ever in a colonial relationship, 0 otherwise	Rose
Current Colony	1 if i and j are colonies at time t , 0 otherwise	Rose
Same Nation	1 if i and j remained part of the same nation, 0 otherwise	Rose
Currency Union	1 if i and j use the same currency at time t , 0 otherwise	Rose
T_d	1 if $RTA_{ij}=0$ & country i has RTA with at least one other country	Magee
T_{d2}	0 if $RTA_{ij}=1$, =number of i 's RTA partners if $rta_{ij}=0$	
RTA	If country i and j are in the same FTA.	Cepii/Rose
China, Japan, S. Korea FTA	1 if i and j both belong to this FTA, 0 otherwise	Self
China, Japan FTA	1 if i and j both belong to this FTA, 0 otherwise	Self
China, S. Korea FTA	1 if i and j both belong to this FTA, 0 otherwise	Self
Japan, S. Korea FTA	1 if i and j both belong to this FTA, 0 otherwise	Self
T_t	A comprehensive set of time "fixed effects",	
ε_{ijt}	The omitted other influences on bilateral trade, assumed to be well behaved	

Appendix 2: Trading Entities in Sample

Afghanistan	Cote d'Ivoire	Iran
Albania	Croatia	Iraq
Algeria	Cuba	Ireland
American Samoa	Cyprus	Isle Of Man (a)
Andorra (a)	Czech Republic	Israel
Antigua and Barbuda	Czechoslovakia (b)	Italy
Argentina	Denmark	Jamaica
Armenia	Djibouti	Japan
Aruba	Dominica	Jordan
Australia	Dominican Republic	Kazakhstan
Austria	Ecuador	Kenya
Azerbaijan	Egypt	Kiribati
Bahamas	El Salvador	Korea, South (Rep.)
Bahrain	Equatorial Guinea	Korea North
Bangladesh	Eritrea	Kuwait
Barbados	Estonia	Kyrgyzstan
Belarus	Ethiopia	Laos
Belgium	Faeroe Islands	Latvia
Belize	Falk Is (b)	Lebanon
Benin	Fiji	Lesotho
Bermuda	Finland	Liberia
Bhutan	France	Libya
Bolivia	Fr Guiana (b)	Liechtenstein (a)
Bosnia & Herzegovina	Fr-Polynesia (b)	Lithuania
Botswana	Gabon	Luxembourg
Brazil	Gambia	Macedonia (FYR)
Brunei	Georgia	Macau
Bulgaria	Germany	Madagascar
Burkina Faso	Ghana	Malawi
Burma (Myanmar)	Gibraltar (b)	Malaysia
Burundi	Greece	Maldives
Cambodia	Greenland	Mali
Cameroon	Grenada	Malta
Canada	Guatemala	Mariana Isl. (a)
Cape Verde	Guadalupe (b)	Marshall Islands (a)
Cayman Islands(a)	Guam	Martinique (b)
Central African Rep.	Guinea	Mauritania
Chad	Guinea-Bissau	Mauritius
Channel Islands (a)	Guyana	Mayotte (a)
Chile	Haiti	Mexico
China	Honduras	Micronesia. (a)
Colombia	Hong Kong	Moldova
Comoros	Hungary	Monaco (a)
Congo, Dem. Rep.	Iceland	Mongolia
Congo, Rep.	India	Montenegro (b)
Costa Rica	Indonesia	Morocco

Mozambique	Sao Tome & Principe	Timor-Leste
Namibia	Saudi Arabia	Togo
Nauru (b)	Senegal	Tonga
Nepal	Seychelles	Trinidad & Tobago
Netherlands	Sierra Leone	Tunisia
Netherlands Antilles	Singapore	Turkey
New Caledonia	Slovak Republic	Turkmenistan
New Zealand	Slovenia	Tuvalu
Nicaragua	Solomon Islands	Uganda
Niger	Somalia	Ukraine
Nigeria	South Africa	United Arab Emirates
Norway	Spain	United Kingdom
Oman	Sri Lanka	United States
Palau St. Pierre & Miquelon (b)	St. Helena (b)	Uruguay
Pakistan	St. Kitts & Nevis	Uzbekistan
Panama	St. Lucia	Vanuatu
Papua New Guinea	St. Vincent & Grenadines	Venezuela
Paraguay	San Marino (a)	Vietnam
Peru	Serbia	Virgin Isl. (U.S.) (a)
Puerto Rico (a)	Slovakia	West Bank & Gaza
Philippines	Sudan	Western Samoa
Poland	Suriname	Yemen
Portugal	Swaziland	Yemen N (b)
Qatar	Sweden	Yemen S (b)
Reunion	Switzerland	Yugoslavia, Socialist Fed. Rep.
Romania	Syria	Zambia
Russia	Taiwan (a)	Zimbabwe
Rwanda	Tajikistan	
Samoa	Tanzania	
	Thailand	

Note: (a) means aggregate data only; (b) means bilateral data only

Table 1: Descriptive Statistics – Magee data

	Mean	Standard Deviation	Correlation CJSK	Correlation CH-SK	Correlation CH-J	Correlation J-SK
ln_trade	6.720	2.485	0.048	0.023	0.030	0.029
ln_dist	8.790	0.750	-0.029	-0.018	-0.013	-0.020
lpop1	1.560	2.089	0.023	0.014	0.016	0.010
lpop2	1.560	2.089	0.023	0.014	0.016	0.010
ln_gdp1	9.333	2.375	0.025	0.013	0.016	0.015
ln_gdp2	9.333	2.375	0.025	0.013	0.016	0.015
Td	0.647	0.478	-0.006	-0.004	-0.005	-0.000
td2	14.704	17.807	-0.002	-0.001	-0.005	-0.001
Comcur	0.010	0.098	-0.001	-0.001	-0.001	-0.001
rta_cepil	0.034	0.181	-0.002	-0.002	-0.002	-0.002
Tdiff	4.748	3.415	-0.016	-0.009	-0.009	-0.011
heg1	0.006	0.075	0.029	0.001	0.001	0.051
heg2	0.006	0.075	0.029	0.001	0.001	0.051
Contig	0.016	0.125	-0.002	-0.001	-0.001	-0.001

Table 2: Descriptive Statistics – Rose data

	Mean	Standard Deviation	Correlation CJSK	Correlation CH-SK	Correlation CH-J	Correlation J-SK
ln_trade	9.941	3.575	0.017	0.0256	0.025	0.039
ldist	8.127	0.831	-0.026	-0.008	-0.008	-0.026
lpop1	8.978	1.915	0.027	0.013	0.020	0.014
lpop2	9.002	1.920	0.029	0.012	0.024	0.013
lrgdppc1	8.656	1.128	0.003	0.001	0.001	0.004
lrgdppc2	8.605	1.133	-0.001	0.002	-0.007	0.004
custrict	0.014	0.116	-0.002	-0.001	-0.001	-0.002
comlang	0.200	0.400	-0.009	-0.003	-0.006	-0.006
rta	0.180	0.384	0.013	0.014	-0.002	0.013
border	0.029	0.168	-0.003	-0.001	-0.002	-0.002
island	0.339	0.540	0.017	-0.004	0.014	0.015
lareap	23.745	3.546	0.014	0.007	0.016	0.002
comcol	0.088	0.283	-0.006	-0.002	-0.003	-0.004
curcol	0.003	0.056	-0.001	-0.000	-0.001	-0.001
colony	0.020	0.139	-0.003	-0.001	-0.002	-0.002
cometry	0.002	0.040	-0.001	-0.000	-0.000	-0.001

Table 3: Gravity Estimates China, Japan, South Korea FTA (Magee Data)

	Exports (Base)	Imports	Total Trade (Full Model)
ln_dist	-1.432*** (0.016)	-1.392*** (0.015)	-2.559*** (0.046)
lpop1	-0.124 *** (0.009)	-0.044*** (0.009)	-0.166*** (0.016)
lpop2	-0.020** (0.009)	-0.105*** (0.009)	-0.111*** (0.016)
ln_gdp1	1.208*** (0.007)	0.931*** (0.008)	2.058*** (0.015)
ln_gdp2	0.880*** (0.008)	1.179*** (0.007)	1.968*** (0.015)
cjsk	-0.308 (0.208)	-0.308 (0.0.223)	-0.810 (0.954)
td			-0.513*** (0.052)
td2			0.007*** (0.001)
comcur			1.864*** (0.203)
rta_cepil			1.363*** (0.098)
tdiff			0.087*** (0.010)
heg1			3.176*** (0.200)
heg2			3.168*** (0.218)
contig			1.531*** (0.147)
_cons	5.657*** (0.186)	5.226*** (0.184)	10.334*** (0.455)

Table 4: Total Trade by Partner Countries (Magee Data)

	CJSK Total Trade (Full Model)	CH-SK Total Trade (Full Model)	CH-J Total Trade (Full Model)	J-SK Total Trade (Full Model)
ln_dist	-2.559*** (0.046)	-2.557*** (0.046)	-2.557*** (0.046)	-2.561*** (0.046)
lpop1	-0.166*** (0.016)	-0.167*** (0.016)	-0.167*** (0.016)	-0.167*** (0.016)
lpop2	-0.111*** (0.016)	0.112*** (0.016)	-0.112*** (0.016)	-0.111*** (0.016)
ln_gdp1	2.058*** (0.015)	2.058*** (0.015)	2.058*** (0.015)	2.059*** (0.015)
ln_gdp2	1.968*** (0.015)	1.968*** (0.015)	1.968*** (0.015)	1.968*** (0.015)
FTA Scenario	-0.810 (0.954)	1.353*** (0.085)	0.717*** (0.129)	-3.707*** (0.213)
td	-0.513*** (0.052)	-0.513*** (0.052)	-0.513*** (0.052)	-0.513*** (0.052)
td2	0.007*** (0.001)	0.007*** (0.001)	0.007*** (0.001)	0.007*** (0.001)
comcur	1.864*** (0.203)	1.865*** (0.203)	1.864*** (0.203)	1.864*** (0.203)
rta_cepil	1.363*** (0.098)	1.367*** (0.098)	1.366*** (0.098)	1.361*** (0.098)
tdiff	0.087*** (0.010)	0.087*** (0.010)	0.087*** (0.010)	0.087*** (0.010)
heg1	3.176*** (0.200)	3.172*** (0.201)	3.172*** (0.201)	3.193*** (0.200)
heg2	3.168*** (0.218)	3.164*** (0.218)	3.164*** (0.218)	3.184*** (0.218)
contig	1.531*** (0.147)	1.535*** (0.147)	1.534*** (0.147)	1.528*** (0.147)
_cons	10.334*** (0.455)	10.334*** (0.455)	10.337*** (0.455)	10.356*** (0.455)

Table 5: Bilateral Trade (Rose Data)

	CJSK-full	CH-SK	CH-J	J-SK
ldist	-1.101*** (0.017)	-1.101*** (0.017)	-1.100*** (0.017)	-1.101*** (0.017)
CJSK FTA scenario	0.189 (0.266)	0.972*** (0.072)	0.633*** (0.056)	-0.414*** (0.164)
lpop1	0.958*** (0.009)	0.958*** (0.009)	0.958*** (0.009)	0.958*** (0.009)
lpop2	1.052*** (0.009)	1.052*** (0.009)	1.052*** (0.009)	1.053*** (0.009)
lrgdppc1	1.268*** (0.011)	1.268*** (0.011)	1.268*** (0.011)	1.268*** (0.011)
lrgdppc2	1.530*** (0.011)	1.530*** (0.011)	1.530*** (0.011)	1.530*** (0.011)
custrict	0.971*** (0.102)	0.971*** (0.102)	0.971*** (0.102)	0.970*** (0.102)
comlang	0.501*** (0.034)	0.501*** (0.034)	0.501*** (0.034)	0.501*** (0.034)
rta	0.269*** (0.027)	0.269*** (0.027)	0.269*** (0.027)	0.269*** (0.027)
border	0.577*** (0.085)	0.577*** (0.085)	0.577*** (0.085)	0.576*** (0.085)
island	0.241*** (0.029)	0.241*** (0.029)	0.241*** (0.029)	0.242*** (0.029)
lareap	-0.061*** (0.006)	-0.061*** (0.006)	-0.061*** (0.006)	-0.061*** (0.006)
comcol	0.556*** (0.054)	0.555*** (0.054)	0.556*** (0.054)	0.555*** (0.054)
curcol	0.664*** (0.228)	0.664*** (0.228)	0.664*** (0.228)	0.664*** (0.228)
colony	1.423*** (0.094)	1.422*** (0.094)	1.423*** (0.094)	1.422*** (0.094)
comctry	-0.101 (0.600)	-0.101 (0.600)	-0.102 (0.600)	-0.101 (0.601)
_cons	-22.516*** (0.244)	-22.516*** (0.244)	-22.515*** (0.244)	-22.516 (0.244)