

# New regionalism: overlapping free trade areas

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## Abstract

One of the distinguishing feature of recent regional trade agreements is a predominance of free trade areas in the WTO. To explain this we adopt a simple product endowment, partial equilibrium model and show that a country has a stronger incentive to become a hub of overlapping free trade areas than to be in a customs union or in a global free trade regime. Furthermore we provide two statistical facts to support the results: First, the probability of a country being a hub of overlapping free trade agreements is positive. Second, the probability is even higher if the country had been an FTA-hub previously at least once.

**Keywords:** free trade area, customs union, hub and spoke

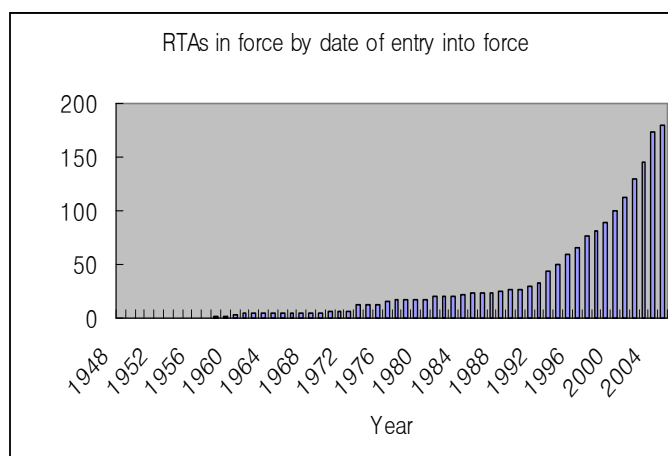
**J.E.L Classification:** F13, F15, K33

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# 1 Introduction

Many economists have feared the proliferation of regional trade agreements (RTAs) since they believe that the regional agreements allow for discriminatory trade policies and thus may restrict further trade liberalization.<sup>1</sup> Figure 1 shows the cumulative numbers of notified RTAs to the GATT/WTO (1948-2006) by entry into force (source: [www.wto.org](http://www.wto.org)).



[Figure 1: Notified RTAs to the GATT/WTO by entry into force]

In fact, the fundamental rule of the GATT/WTO in multilateral tariff negotiation is the *non-discrimination* principle, whereby countries in the GATT/WTO must apply equal tariffs on all other GATT/WTO-member countries. In Article I of the GATT/WTO, it is coined as ‘Most Favored Nation’ (MFN) clause. However, the GATT/WTO has three sets of rules that give countries exceptions to the non-discrimination principle. First, Article XXIV of the GATT/WTO allows for regional free trade integrations such as free trade areas (FTAs) and customs unions (CUs) as long as they facilitate world trade and do not raise barriers to trade with the rest of the world. FTAs and CUs differ in that CU member countries are allowed to coordinate their external trade policies. Second, the Enabling Clause provides similar exceptions that apply to agreements amongst developing

<sup>1</sup>In fact, stumbling block effects of regional trade agreements are identified by some interesting theoretical works. See Grossman and Helpman (1995) and Levy (1997) for example.

countries. In addition, it allows a partial free trade across a subset of goods. Lastly, Article V of GATS provides preferential exceptions that apply to trade in service sectors.

According to the information from the website of the WTO ([www.wto.org](http://www.wto.org)), as of 1 March 2006, 193 regional trade agreements (RTAs) have been notified to the GATT/WTO. Table 1 shows the types of the notified RTAs as of 1 March 2006 since 1 January 1948.<sup>2</sup>

	Numbers
Free Trade Areas (Under GATT Article XXIV or Enabling Clause)	127
Customs Unions (Under GATT Article XXIV or Enabling Clause)	10
Preferential Agreements (Under Enabling Clause)	20
GATS Article V (Under GATS Article V)	36
Total	193

Source: Author's own calculation from RTAs data ([www.wto.org](http://www.wto.org))

[Table 1: Notifications of RTAs in force to GATT/WTO]

A striking feature of RTAs shown in the table is *the predominance of FTAs*. The FTAs takes about 66 percent of all types of RTAs currently. If we ignore the 36 service agreements and the 20 partial agreements, about 93 percent are FTAs.<sup>3</sup>

Why do FTAs dominate other forms of free trade agreements in the world? This is somewhat counterfactual to Krueger (1997), who argues that on welfare grounds a customs union is always Pareto-superior to an FTA, and casts a doubt on pursuing FTA-paths towards global free trade due to political difficulties. Our paper aims to provide a theoretical explanation why countries prefer FTAs to other forms of RTAs. We show that there is an incentive for

<sup>2</sup>Note that according to the counting method of the WTO, sometimes a new RTA is double-counted as one under GATT Article XXIV, the Enabling Clause or GATS (General Agreement on Trade in Services) Article V. For example, the FTA between Japan and Singapore reported as of 14 November 2002 is captured as a new RTA under GATS Article V as well. Another example is the FTA between India and Sri Lanka notified to WTO as of 22 June 2002 (date of entry into force as of 15 December 2001), which is categorized as a new RTA under the Enabling Clause.

<sup>3</sup>According to Crawford and Fiorentino (2005)'s WTO working paper, if the RTAs currently being negotiated, at a proposal stage and those signed but not yet in force are implemented by 2008, the number of RTAs in force will be close to 300, the majority of which are in the form of FTAs.

a country to extend its FTA network in order to become a hub of its overlapping FTAs. Becoming a hub of FTAs is beneficial because the country can have advantages in the markets of spoke countries. It may be true that an isolated (or non-linked) FTA is a worse form of RTAs; however it is not so if a country or a group of countries become a hub of overlapping FTAs. So the current increasing trending of FTAs can be theoretically understood as countries' rational choice of being a regional hub with many spoke countries. Furthermore we investigate data of RTAs reported to GATT/WTO and construct a new binary data set for 211 countries; one if a country is a hub of FTAs in a given year during the time period between 1958 and 2005, zero otherwise. We conduct a simple statistical exercise and find a supportive result on our theoretical finding.

The idea of hub-and-spoke regional trade agreements is not a new one at all. Wonnacott (1975), Kowalczyk and Wonnacott (1992) and Puga and Venables (1997) are the excellent works on the effect of hub-and-spoke system. Of particular interest to our work is Mukunoki and Tachi (forthcoming). They analyze how the expansion of RTAs through hub-and-spoke system of overlapping FTAs can achieve multilateral free trade. Their main focus is on dynamic equilibrium paths towards global free trade,<sup>4</sup> while we are silent about it. Nonetheless, we hope that our paper contributes to the literature by investigating the reason for predominance of FTAs over other forms of free trade agreements and providing some empirical support on the findings.

The paper is organized as follows. Section 2 presents the static model and compares different trade regimes in terms of welfare. Section 3 provides some statistical evidence to support the theoretical results. Section 4 concludes the paper.

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<sup>4</sup>In the existing literature, researchers support or criticize the role of regional trade agreements in multilateral trade liberalization for a variety of reasons. Here are some examples. Papers that identify beneficial (tariff liberalization) aspects of FTAs include Richardson (1995) and Bagwell and Staiger (1999). Papers that identify beneficial (tariff liberalization) aspects of CUs include Bagwell and Staiger (1999) and Bond, Syropoulos and Winters (2001). On the other hand, Bond and Syropoulos (1996) identifies detrimental (world welfare reducing) aspects of CUs. Papers that yield mixed results are Bagwell and Staiger (1997a) for FTAs and Bagwell and Staiger (1997b) for CUs.

## 2 The Static Model

In this section, we use the product endowment model (slightly modified from Bagwell and Staiger (1999)) to see if there is any static incentive for a country to become a member of an FTA instead of a CU or a multilateral free trade agreement.

Consider three countries denoted by  $i \in \{A, B, C\}$ . We assume that country  $i$  has a representative, identical consumer who consumes three goods denoted by  $x_j^i$  with  $j \in \{a, b, c\}$  and a numeraire product denoted by  $Z^i$ . The utility function of each consumer takes a standard quadratic function which is separable among the four goods.

$$U^i = Z^i + \sum_{j=a,b,c} \left[ x_j^i - \frac{1}{2}(x_j^i)^2 \right] \text{ for } i \in \{A, B, C\}. \quad (1)$$

$Z^i$  is a traded numeraire good and the marginal utility of its consumption is one. This enables us to focus on the partial equilibrium model for the three non-numeraire sectors,  $a$ ,  $b$ , and  $c$ , in which the demand functions are linear. The inverse demand function of the consumer for each non-numeraire product can be driven as the following equation: For  $i \in \{A, B, C\}$  and  $j \in \{a, b, c\}$ ,

$$p_j^i = 1 - x_j^i. \quad (2)$$

In supply side, for sectors  $a$ ,  $b$ , and  $c$ , we assume that country  $A$  is endowed with zero unit of  $a$  and one unit of  $b$  and  $c$ ; country  $B$  with zero unit of  $b$  and one unit of  $a$  and  $c$ ; and country  $C$  with zero unit of  $c$  and one unit of  $b$  and  $a$ . So, a country must import the goods that are not owned.

Will a country import from other two countries or only one of them? In our model, it imports from other two countries since we will assume a no-price arbitrage opportunity amongst the three countries. More specifically, if country  $A$  imports from, say, country  $B$  only, a price arbitrage opportunity will occur to the suppliers in country  $C$ . The suppliers will offer a lower price to country  $A$  and country  $A$  will switch to country  $C$ . Then country  $B$  will offer even a lower price again. So, eventually the price of a product will be equalized in all three countries until there is no-price arbitrage opportunity.

Hence, a country will import from the other two countries in the three-country model.

In this three-country trading model, we compare five different trade regimes: (i) no trade agreement, (ii) a free trade area (FTA) between country  $A$  and  $B$ , (iii) overlapping FTAs between  $A$  and  $B$ , and between  $A$  and  $C$ , (iv) a customs union (CU) between  $A$  and  $B$ , and (v) an extended CU among  $A$ ,  $B$  and  $C$  (or equivalently, a global free trade).

A free trade area (FTA) or a customs union (CU) are different. A country in an FTA sets zero tariffs on imports from countries inside the FTA and *independently* selects external tariffs on goods from countries outside the FTA. In a CU, however, a country sets zero tariffs on imports from other countries inside the CU and *jointly* selects external tariffs on goods from countries outside the CU. In our model, when two FTAs are overlapped, one country that is at the center of the two FTAs becomes an FTA-hub, while the other two countries that are at the corner of the FTAs become FTA-spoke countries. In case of the CU, it can be extended by admitting a new membership to the CU.<sup>5</sup>

We will see the welfare consequences of no trade agreement and move on to the other four different trade regimes.

**(i) No Trade Agreement** Each country will charge a specific tariff on imports. So a local market price per import is an export price plus the tariff rate. Let us denote the tariff rate by  ${}_{-i}\tau_j^i$ , which reads "a tariff rate  $\tau$  imposed by country  $i$  against product  $j$  from country  $-i$ " where  $-i$  is defined as a country other than  $i$ .

We assume that throughout the paper the world markets are perfectly competitive in a sense that each market is free from price arbitrage. This will give us the following conditions for the price systems:

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<sup>5</sup>First, note that this extended CU becomes a global free trade regime since we have only three countries in our model. Second, the CU can be extended by having an FTA with a new country. However, since we have only three countries in the model, there is no difference between the extended CU and the CU plus an FTA.

$$p_a^A = p_a^B +_B \tau_a^A = p_a^C +_C \tau_a^A, \quad (3)$$

$$p_b^B = p_b^A +_A \tau_b^B = p_b^C +_C \tau_b^B, \quad (4)$$

$$p_c^C = p_c^A +_A \tau_c^C = p_c^B +_B \tau_c^C. \quad (5)$$

This condition implies that world endowments are equalized with world demand. So, the international market clearing conditions are as follows:

$$x_a^A(p_a^A) + x_a^B(p_a^B) + x_a^C(p_a^C) = 2, \quad (6)$$

$$x_b^A(p_b^A) + x_b^B(p_b^B) + x_b^C(p_b^C) = 2, \quad (7)$$

$$x_c^A(p_c^A) + x_c^B(p_c^B) + x_c^C(p_c^C) = 2. \quad (8)$$

Using all these conditions, we can easily determine nine equilibrium prices in the trading markets. This price system will determine all other variables such as imports, exports, domestic consumptions. For instance, country  $A$ 's imports are  $M_a^A = x_a^A(p_a^A)$  and the exports are  $E_b^A = 1 - x_b^A(p_b^A)$  to country  $B$  and  $E_c^A = 1 - x_c^A(p_c^A)$  to country  $C$ . The similar remarks apply for the other two countries. Note that, to have non-prohibitive tariff rates, the sum of the tariffs imposed on other exporting countries should not exceed two. For instance, country  $A$  imports  $x_a^A(p_a^A)$  which is equal to  $1 - p_a^A$  (see (2)). So, from the solutions of equilibrium prices (i.e.  $p_a^A = \frac{1+_B\tau_a^A+_C\tau_a^A}{3}$ ), it is now easy to see  $_B\tau_a^A +_C\tau_a^A \leq 2$ . The same applies for the other two countries.

We assume that throughout the paper each country's government tries to maximize the national welfare, which is defined as a sum of the consumer's surplus, economic rents from its endowments, and tariff revenues. The consumer's surplus is the sum of the consumer's marginal utility from consumption. The choice of consumption will be determined by the equilibrium market price. The national endowments can be evaluated by the market value of the total product endowments. People who own the products will enjoy the market values. Tariff revenues are the earnings from tariff charges on imports.

Given all the solutions from the model, for instance, we can express the welfare function of country  $A$  as:

$$W^A = \left( \begin{array}{l} \frac{1}{2} \left( 1 - \left( \frac{1+B\tau_a^A+C\tau_a^A}{3} \right) \right)^2 + \frac{1}{2} \left( 1 - \left( \frac{1+C\tau_b^B-2A\tau_b^B}{3} \right) \right)^2 \\ + \frac{1}{2} \left( 1 - \left( \frac{1+B\tau_c^C-2A\tau_c^C}{3} \right) \right)^2 + \left( \frac{1+C\tau_b^B-2A\tau_b^B}{3} \right) + \left( \frac{1+B\tau_c^C-2A\tau_c^C}{3} \right) \\ + {}_B\tau_a^A \left( \frac{1+C\tau_a^A-2B\tau_a^A}{3} \right) + {}_C\tau_a^A \left( \frac{1+B\tau_a^A-2C\tau_a^A}{3} \right) \end{array} \right). \quad (9)$$

To maximize the value of national welfare in (9), the government chooses the tariff rates for each importing sector. The first order conditions for the welfare maximization problems are:

$${}_B\tau_a^A = \frac{1}{11} + \frac{7}{11} {}_C\tau_a^A, \quad (10)$$

$${}_C\tau_a^A = \frac{1}{11} + \frac{7}{11} {}_B\tau_a^A. \quad (11)$$

Hence, the national optimal tariff rates are  ${}_B\tau_a^A = {}_C\tau_a^A = \frac{1}{4}$ . Due to the symmetry of the model, the optimal tariff rates for other countries are the same. That is,  ${}_A\tau_b^B = {}_C\tau_b^B = \frac{1}{4}$  by country  $B$  and  ${}_A\tau_c^C = {}_B\tau_c^C = \frac{1}{4}$  by country  $C$ . With the level of optimal tariff rates, the value of the total exports and national welfare for each country can be calculated easily. Let us denote the total exports and welfare level under no-FTA system as  $E^N$  and  $W^N$  respectively and they are:

$$E^N = 0.5; W^N = 1.3125. \quad (12)$$

The exports and welfare level are obtained by a county when each economic agent behaves optimally in international trading markets. In particular, the government chooses tariff policies to maximize its national welfare. However, there are many other cases where governments may end up with some agreements with each other for the purpose of achieving higher national welfare. For instance, a free trade area (FTA) or a customs union (CU) formation is a very typical type of agreement that one can observe in the real world. Also the overlapped FTAs are more often observed. We will compare the economic consequences of the different trade regime in order.



**(ii) An FTA between country A and B** Here we assume that the countries  $A$  and  $B$  formed an FTA and set their internal tariffs as follows:

$$\text{FTA: } {}_B\tau_a^A = {}_A\tau_b^B = 0. \quad (13)$$

We assume that the FTA is sustainable in the long run and no countries will deviate the FTA agreement. The restriction in (13) is imposed on country  $A$ 's welfare in (9), and country  $A$  will be choosing an optimal tariff  ${}_C\tau_a^A$  against non-FTA member country  $C$ . Country  $B$  which is a mirror image of country  $A$  will be choosing the same tariff rate  ${}_C\tau_b^B$  against country  $C$ . Country  $C$  which is the non-FTA member country will set the same rate as before, which is  $\tau^N = \frac{1}{4}$ . The results for the optimal tariff rates, the total exports and the national welfare for all countries will be:

$${}_B\tau_a^A = 0, \quad ({}_C\tau_a^A)_{FTA} = \frac{1}{11}; \quad (14)$$

$${}_A\tau_b^B = 0, \quad ({}_C\tau_b^B)_{FTA} = \frac{1}{11}; \quad (15)$$

$$({}_A\tau_c^C)_{Non-FTA} = \frac{1}{4}, \quad ({}_B\tau_c^C)_{Non-FTA} = \frac{1}{4}; \quad (16)$$

$$E^{FTA} = 0.6136; \quad W^{FTA} = 1.3246; \quad (17)$$

$$E^{FTA} = 0.6136; \quad W^{FTA} = 1.3246; \quad (18)$$

$$E^{Non-FTA} = 0.5455; \quad W^{Non-FTA} = 1.3244. \quad (19)$$

where  $FTA$  stands for the two countries ( $A$  and  $B$ ) of the FTA and  $Non - FTA$  indicates country  $C$  outside the FTA.

**(iii) Overlapping FTAs** We assume that country  $A$  formed an FTA with country  $B$  and an another FTA with country  $C$ . Their internal tariffs are as follows:

$$\text{FTA (A and B): } {}_B\tau_a^A = {}_A\tau_b^B = 0, \quad (20)$$

$$\text{FTA (A and C): } {}_C\tau_a^A = {}_A\tau_c^C = 0. \quad (21)$$

We assume that the two FTAs are sustainable in the long run and no countries will deviate their FTA agreements. The results for the optimal tariff rates, the total exports and the national welfare for all countries will be:

$${}_B\tau_a^A = 0, {}_C\tau_a^A = 0; \quad (22)$$

$${}_A\tau_b^B = 0, ({}_C\tau_b^B)_{FTA-S} = \frac{1}{11}; \quad (23)$$

$${}_A\tau_c^C = 0, ({}_B\tau_c^C)_{FTA-S} = \frac{1}{11}; \quad (24)$$

$$E^{FTA-H} = 0.7273; W^{FTA-H} = 1.3545; \quad (25)$$

$$E^{FTA-S} = 0.6061; W^{FTA-S} = 1.3200; \quad (26)$$

$$E^{FTA-S} = 0.6061; W^{FTA-S} = 1.3200. \quad (27)$$

where  $FTA - H$  means the hub country of the two FTAs and  $FTA - S$  means the spoke country of the two FTAs network.

**(iv) A CU between country A and B** Next consider a CU between countries  $A$  and  $B$ . The CU adds one more restriction on tariff rates to the national welfare maximization problem: The member countries of a CU *jointly* choose their external tariff rates against the non-CU-member country. This restricts the set of tariffs as follows.

$$\text{CU: } {}_B\tau_a^A = {}_A\tau_b^B = 0 \text{ and } {}_C\tau_a^A = {}_C\tau_b^B. \quad (28)$$

We assume that the CU is sustainable in the long run and no countries will deviate the CU agreement. The restriction in (28) will give us the following results for the optimal tariffs, the total exports and welfare levels:

$${}_B\tau_a^A = 0, ({}_C\tau_a^A)_{CU} = \frac{1}{5}; \quad (29)$$

$${}_A\tau_b^B = 0, ({}_C\tau_b^B)_{CU} = \frac{1}{5}; \quad (30)$$

$$({}_A\tau_c^C)_{Non-CU} = \frac{1}{4}, ({}_B\tau_c^C)_{Non-CU} = \frac{1}{4}; \quad (31)$$

$$E^{CU} = 0.65; W^{CU} = 1.3313; \quad (32)$$

$$E^{CU} = 0.65; W^{CU} = 1.3313; \quad (33)$$

$$E^{Non-CU} = 0.4; W^{Non-CU} = 1.2900. \quad (34)$$

where  $CU$  stands for the two countries ( $A$  and  $B$ ) of the CU and  $Non - CU$  indicates country  $C$  outside the CU.

**(v) An extended CU (or global free trade)** Suppose that the CU is extended to country  $C$ . It can be done by admitting a new member of country  $C$  to the CU or having an FTA with country  $C$ . In our model, they are the same since there are only three countries. Furthermore this is equivalent to the world free trade system in the three-country model. Under the extended CU, the internal optimal tariffs are all zero:

$$\text{Extended CU : } {}_B\tau_a^A = {}_C\tau_a^A = {}_A\tau_b^B = {}_C\tau_b^B = {}_A\tau_c^C = {}_B\tau_c^C = 0. \quad (35)$$

The total exports and welfare levels for the CU members are identical:

$$E^{CU-E} = 0.6667; W^{CU-E} = 1.3333. \quad (36)$$

where  $CU - E$  stands for the countries in the extended CU or in the global free trade.

From all these results of the static model, we can come up with a proposition for the ranking of the optimal tariffs, the total exports and national welfare levels.

**Proposition 1** *In a simple product endowment partial equilibrium model, the national optimal external tariff rates, the total exports and welfare levels are ranked under the different trading regimes as follows:*

- (i)  $\tau^N = \tau_{Non-FTA} = \tau_{Non-CU} > \tau_{CU} > \tau_{FTA} = \tau_{FTA-S} > 0$ ,
- (ii)  $E^{Non-CU} < E^N < E^{Non-FTA} < E^{FTA-S} < E^{FTA} < E^{CU} < E^{CU-E} < E^{FTA-H}$ ,
- (iii)  $W^{Non-CU} < W^N < W^{FTA-S} < W^{Non-FTA} < W^{FTA} < W^{CU} < W^{CU-E} < W^{FTA-H}$ .

About the tariff rankings, first, it is interesting to note that the optimal external tariff by a member of either an FTA or a CU against a non-member country is smaller than the optimal tariff rates without the preferential agreements. That is, when a country removes a tariff to another country as a result of the formation of a free trade agreement, the country tends to reduce a tariff rate for a non-member country as well. This so-called "complementarity" effect has been well documented in the literature of preferential free trade analysis. For instance, see Bond, Riezman and Syropoulos (2004). The reason is that, as a result of free trade agreements, the market prices in the importing sectors approach the world price, which will increase the consumers' surplus. The increase in consumers' surplus in the importing sectors contributes to the national welfare level more than the governmental earnings from tariff protection does. Hence, the government is willing to give up some part of tariff revenues by reducing tariffs even to non-member countries. But, this does not necessarily mean that the country completely removes tariffs to non-member countries. The importing country will stop reducing the rate at a point where the loss of tariff revenues does not hurt the increase in the consumer's surplus and thus the national welfare. Second, the tariff complementarity effects of an FTA is stronger than that of a CU. This is because, by definition, the members of the CU cooperatively choose their external tariffs, while the FTA members do not.

About the ranking of the total exports, first, it is interesting to note that the total exports becomes the highest level for the hub country (country A) of the overlapping FTAs. This level is even higher than the level under the global free trade system. This can be understood by noticing that the hub country has a price advantage in the two spoke countries. That is, the two spoke countries have a positive tariff against each other, while the hub country receives a free access to the export markets. Second, comparing the two isolated RTAs, FTA versus CU, the amounts of exports of a member of CU is higher than that of a member of FTA. This is because the CU members are protecting its common market against the non-CU country with a higher tariff, that is,  $\tau_{CU} > \tau_{FTA}$ . This enables the members of CU to trade more than in the case of FTA. However, none of these forms of RTAs could perform better than the global free trade system in export markets.

About the ranking of welfare levels for FTAs and CUs, several interesting patterns are noteworthy. First, a country's most preferred type of RTAs is a hub of overlapping FTAs. As we explain as above, this is because the positive tariff barriers between the two FTA-spoke countries give the hub country an advantage in their markets. Second, when an FTA and a CU are compared, a country prefers the CU rather than the FTA. This is because the CU member will charge a higher external tariff than the FTA member. This reflects the argument of Krueger (1997) about the Pareto-superiority of a CU over an FTA. A CU is better than an FTA in terms of a welfare gain to the members. However, as we have just mentioned, the hub of FTAs is even better form of RTA than the pure CU. This may also explain the predominance of FTAs over CUs mentioned in Introduction. Third, comparing pure RTAs and the global free trade (in our model, it is the extended CU), a country prefers the world free trade system to any pure type of a regional trade agreement. The welfare level under the extended CU will be higher for each country than under either an FTA or a CU. This is mainly because the global free trade can expand the total trades between countries more than any other pure type of RTAs. Lastly, no country would want to be a non-CU-member since the welfare will be even smaller than the level without any type of preferential agreements. However, it would be okay to be a non-FTA-member because the FTA members end up imposing a lower external tariff to the non-FTA-member country and thus the welfare of non-members will be improved.

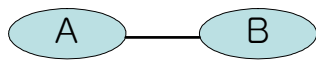
### 3 The Empirical Analysis (in progress)

In this section, we attempt to provide an statistical evidence of countries' hubbing overlapping FTAs. To do this, we first define so-called 'hub' variable,  $H_t^i$  as follows:

$$H_t^i = \begin{cases} 1 & \text{if country } i \text{ forms a new trade agreement} \\ & \text{and thus become the hub at time } t. \\ 0 & \text{otherwise} \end{cases}$$

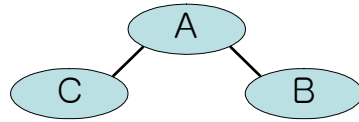
To understand better the variable,  $H_t^i$  defined above, we provide four distinct examples with Figure 2-5. Figure 2 shows a bilateral free trade

agreement between country  $A$  and  $B$  at  $t = 1$  and no countries become a hub. This is because there is no overlapping FTAs. Figure 3 shows a simple overlapping FTAs and country  $A$  becomes a hub of the two FTAs at  $t = 2$ . So  $H_2^A = 1$ . Note that to have the variable,  $H_t^i$  equal to one, a country should form a new free trade agreement at  $t$  and as a result of the new agreement it must become a hub of the overlapping FTAs. In Figure 4, country  $B$  forms a new FTA with country  $D$  and it becomes a hub of the two FTAs; one with country  $A$  and the other with country  $D$ . So  $H_3^B = 1$ . Note that  $H_3^A = 0$  since country  $A$  does not form a new FTA at  $t = 3$ , although it is still a hub of the two FTAs with country  $B$  and  $C$ . Figure 5 is the case when country  $E$  has a full access to the region of country  $A$ . We can imagine country  $A$  as a free trade region such as European Community. At  $t = 4$ , as a new member of the free trade region, country  $E$  obtains the equal status to the existing member country. So it will also become a hub of the two existing FTAs with country  $B$  and  $C$ . So,  $H_4^E = 1$ . Note that  $H_4^A = 0$  since this is not the case of country  $A$  being a hub as a result of country  $E$ 's accession.



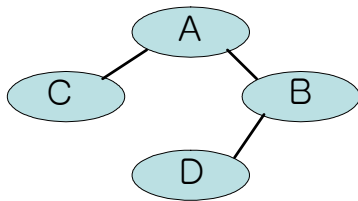
$$H_1^A = 0; H_1^B = 0$$

**Figure 2: FTA between A and B at t=1**



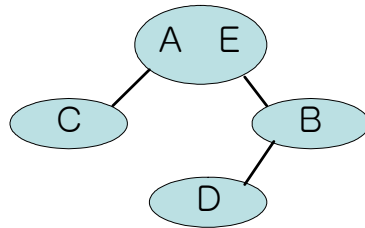
$$H_2^A = 1; H_2^B = 0; H_2^C = 0$$

**Figure 3: FTA between A and C at t=2**



$$H_3^A = 0; H_3^B = 1; H_3^C = 0; H_3^D = 0$$

**Figure 4: FTA between B and D at t=3**



$$H_4^A = 0; H_4^B = 0; H_4^C = 0; H_4^D = 0; H_4^E = 1$$

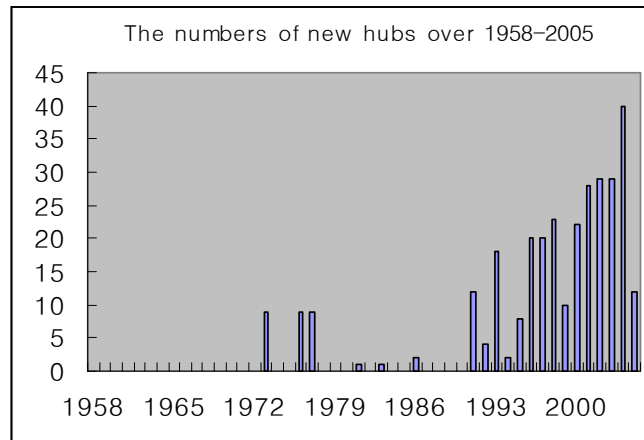
**Figure 5: E's accession to A at t=4**

### 3.1 Creating Data for $H_t^i$

Using this definition of ‘hub’, we set up a panel data from the table of *Regional Trade Agreements Notified to the GATT/WTO and in Force By date of entry into force (as of 1 March 2006)*, provided by WTO website. The table presents 193 historical records on regional trade agreements from 1 January, 1958 to 1 March, 2006. It consists of the name of agreements, date of entry into force, date of GATT/WTO notification, related GATT/WTO provisions, type of agreement, GATT/WTO document series and status of examination process. Based on the date of entry into force and the type of agreement, we set up a panel data for 211 countries (including Palestinian Authority, Macao and Hong Kong) over 1958-2005 (Data for 2006 are not fully listed in the table.). Among the 193 incidences of regional trade agreements, we remove seven cases to have the data up to 2005 only. It reduces the sample size to 186 cases. We further remove 54 cases; They are either service agreements (34 cases), preferential agreements (18 cases) or some exceptions (2 cases). The 34 service agreements, formed under the GATS article V, are companions of free trade agreements or customs unions. We believe that service trade agreements should be treated differently from ‘good’ trade agreements. Our model can not capture the nature of service trade agreements. So, we ignore them in setting up our panel data. The 18 preferential agreements, formed under Enabling Clause, are removed from our data since they are not completely in the form of free trade areas or customs unions as specified by the GATT article 24. There are 2 exceptions that we removed in the data set. They are Commonwealth of Independent States (CIS) and Accession of Romania to Central European Free Trade Agreement (CEFTA). CIS was formed among twelve countries (Azerbaijan, Armenia, Belarus, Georgia, Moldova, Kazakhstan, Russian Federation, Ukraine, Uzbekistan, Tajikistan, Kyrgyz Republic) in 1994. However, CIS has not seemed binding agreements since the member countries formed bilateral free trade agreements each other afterwards till now. So we ignore CIS in the sample but include all successive bilateral agreements among themselves. CEFTA was firstly established by Romania, Bulgaria and Croatia in 1993. However, the three countries had their individual accesses to the CEFTA afterwards. The first accession to

the CEFTA was made by Romania in 1997; the second accession by Bulgaria in 1999 and the last by Croatia in 2003. So we ignore the CEFTA accession by Romania in the sample, while the other two countries' accessions are counted. We provide the full lists of the tables for the 132 agreements in Table 2 in Appendix.

The following Figure 6 shows the numbers of new hubs ( $H_t^i$ ) of overlapping free trade agreements over 1958-2005.



[Figure 6: The numbers of new hubs (1958-2005)]

The first hub countries in the world are appeared in 1973 when Denmark, Ireland, and United Kingdom had their full accesses to the European Community (EC) in which there were six original member countries (Belgium, France, Germany, Italy, Luxembourg, Netherlands). The nine EC countries in 1973 are linked to two overlapping FTAs: one with the four members of European Free Trade Agreement (EFTA); Iceland, Liechtenstein, Norway and Switzerland and the other with Overseas Countries and Territories (OCT; eight countries and fourteen territories). Note that the nine countries are the member of customs unions. As a member of a free trade area, the first hub country in the world appeared in 1983 was Australia, which had two overlapping FTAs; one with Papua New Guinea (by Agreement on Trade and Commercial Relations between the Government of Australia and the Government of Papua New Guinea, PATCRA in 1977) and the other with New Zealand (by Closer Trade Relations Trade Agreement, CER in 1983). The increasing trend of being ‘hub’ (as defined in this paper) appeared in 1993



onwards and the peak period is 2004 when forty countries made new free trade agreements and thus became hubs of their overlapping FTAs network.

In the following Table 3, we rank 211 countries based on the frequency of  $H_t^i$  for 211 countries over 48 years (1958-2005).

Ranking	Country (Number of countries)	$\sum_{t=1958}^{2005} H_t^i$
1	Belgium, Denmark, France, Germany, Ireland, Italy, Luxembourg, Netherlands, United Kingdom (9)	13
2	Greece, Portugal, Spain (3)	11
3	Austria, Finland, Sweden, Switzerland (4)	9
4	Iceland, Liechtenstein, Norway (3)	8
5	Romania, Turkey (2)	6
6	Bulgaria, Israel, Mexico (3)	5
7	Armenia, Croatia, Georgia, Kyrgyz Republic, Macedonia, United States (6)	4
8	Australia, Chile, Moldova, Russian Federation, Singapore (5)	3
9	Albania, Bosnia and Herzegovina, Canada, El Salvador, Kazakhstan, New Zealand, Ukraine (7)	2
10	China, Costa Rica, Cyprus, Czech Republic, Estonia, Hungary, Japan, Jordan, Latvia, Lithuania, Malta, Nicaragua, Palestinian Authority, Poland, Slovak Republic, Slovenia, South Africa, Tunisia (18)	1
11	Rest of the world (151)	0

[Table 3: The frequency of  $H_t^i$  for 211 countries (1958-2005)]

Countries with the highest frequency of being hubs of FTAs (13 times) are the nine core member countries in the European Community. Six more countries such as Greece, Portugal, Spain, Austria, Finland and Sweden, who had been 11 times of having been FTA hubs are also the members of European Community. The above 15 countries in the EC are the major leading countries who has attempting to be the hub of overlapping FTAs. (Recently the ten countries in the region join in the EC.) The second leading group is the EFTA member countries such as Switzerland, Iceland, Liechtenstein and Norway. So the world trend of being hubs of FTA is mainly led by the EC and EFTA in Europe. Also many eastern European countries such as Romania, Turkey, Bulgaria, etc., also recently formed FTAs in the region and became hubs of overlapping FTAs many times.

In the America, Mexico is the country that has become hubs of overlapping FTAs most frequently (5 times). US is the next country (4 times). In the region of Asia and Pacific, Australia (3 times), Singapore (3 times), New Zealand (2 times), China (1 time) and Japan (1 time) are the major country currently leading the race of being hubs of overlapping countries in the region.

### 3.2 Some Results

Since we have 211 countries over 48 years, the total number of the observations for  $H_t^i$  is 10,128. Using the panel data, we show our first result in the following table. Table 4 shows a probability of being a hub conditional on the historical experience of having been a hub.

$P(H_t^i   \sum_{j=1}^{t-1958} H_{t-j}^i)$	$H_t^i = 0$	$H_t^i = 1$	Total
$\sum_{j=1}^{t-1958} H_{t-j}^i = 0$	99.37% (9,431)	0.63% (60)	100% (9,491)
$\sum_{j=1}^{t-1958} H_{t-j}^i \geq 1$	61.07% (389)	38.93% (248)	100% (637)
Total	96.96% (9,820)	3.04% (308)	100% (10,128)

[Table 4: Conditional probability of being a new hub]

First, the probability of a randomly chosen country,  $i$  being a hub at a randomly chosen time  $t$  is 0.63% if the country has never been a hub previously. However, it is increased to 38.93% if the country has been a hub at least one time or more in the previous years. This implies that there is a strong relationship between its historical experience of being a hub and its choice of being a hub at a time when it forms a new free trade agreement. To see the statistical correlation, we calculate a Pearson Chi-square statistics, which is equal to 3,000. This implies a strong correlation between  $\sum H_{t-j}^i \geq 1$  and  $H_t^i = 1$ , although it does not necessarily mean a causal effect.

We can also conduct similar experiments by choosing a particular year or a country. For example, suppose that the current year is 2000. Then the

total observation is the total number of countries, i.e. 211. The probability of a randomly chosen country,  $i$  being a hub at year of 2000 is 1.14% if the country has never been a hub previously. However, the probability of a randomly chosen country,  $i$  being a hub at the same year is 57.14% if the country has been a hub at least one time or more in the previous years. The Pearson Chi-square is 98.05. Of course, we can observe many other years when no countries in the world formed a trade agreement at all and became a hub. (See Figure 6.) In this case both conditional probabilities are zero.

For an another example, suppose that the country of interest is France. Then total observation will be the total number of years, i.e. 48. The probability of France being a hub is 6.25% if France has never been a hub previously. However, the probability of France being a new hub is 37.50% if France has been a hub at least one time or more in the previous years. The Pearson Chi-square is 5.27. Of course, many other countries as shown in Table 3 have never been a hub at all in between 1958 and 2005. The number of such countries are 152 out of 211 as of the end of 2005.

### 3.3 An Augmented Gravity Equation with Panel Data

Although the above statistical results shows an evidence of tendency of countries' being a hub of overlapping FTAs, it is not clear whether being a hub of FTAs increases the countries' trade volumes and thus become a potential factor for a higher national welfare and economic growth. Here we will focus on the effects of overlapping FTAs on trade.

Feenstra (2004) shows that exports from country  $i$  to country  $j$  at time  $t$  ( $EXPORT_{ijt}$ ) are given by;

$$EXPORT_{ijt} = \frac{GDP_{it} \times GDP_{jt}}{GDP_{Wt}}$$

The variable  $GDP_{it}$  ( $GDP_{jt}$ ) is the gross domestic product of country  $i$  ( $j$ ) at time  $t$  and  $GDP_{Wt}$  is the world gross domestic product at time  $t$ . By taking the logarithm in RHS and LHS, we suggest the following testable regression equation:

$$\begin{aligned} \ln EXPORT_{ijt} = & \alpha + \beta_1 \ln GDP_{Wt} + \beta_2 \ln GDP_{it} + \beta_3 \ln GDP_{jt} \\ & + \beta_4 X^{ij} + \beta_4 H_t^i + \beta_5 FTA_t^{ij} + \varepsilon_{ijt} \end{aligned}$$

First, the variable  $X^{ij}$  is a time-invariant country-specific variables such as a distance, languages, colonizers, etc. Second, we add the following two dummy variables;  $H_t^i$  and  $FTA_t^{ij}$  to see the effects of overlapping FTAs on trade.  $H_t^i$  is one if the country  $i$  is a hub of FTAs at time  $t$ , and zero otherwise.  $FTA_t^{ij}$  is one if the country  $i$  forms with its trading partner country  $j$  at time  $t$ , and zero otherwise. Our main focus is on the estimate of  $H_t^i$ .

We can obtain the bilateral trade data from the International Monetary Fund's *Direction of Trade Statistics*. GDP data are available from the World Bank's *World Development Indicator*. The country-specific variables can be obtained from *CIA Factbook*. For the  $H_t^i$  and  $FTA_t^{ij}$ , we can construct from the WTO's *Regional Trade Agreements Notified to the GATT/WTO and in Force By date of entry into force (as of 1 March 2006)*.

We will estimate the augmented gravity equation using the panel data with fixed effects or random effects. We will first-difference the data in order to avoid the effects of country-specific variables. We will also report results of ordinary least square estimation.

[in progress]

## 4 Concluding Remarks

In this paper, we introduced a recent trend of regionalism, so-called overlapping FTAs. This is evident by the fact of predominance of FTAs over other types of regional free trade agreement. We provided a simple product endowment model to show that countries have incentive to become a hub of FTA-networks. This finding is supported by a simple statistical calculation about the conditional probability of a country being a hub. We used the RTAs formation data supplied by the WTO. Indeed the probability of a country being a hub is higher when it has formed one or more FTAs in previous years than when it has not. We further plan to conduct an empirical analysis with a gravity equation using panel data.

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## Regional Trade Agreements Notified to the GATT/WTO and in Force By date of entry into force (As of 1 March 2006)

Source: www.wto.org

Agreement	Date of entry into force	GATT/WTO notification				Examination process	
		Date	Related provisions	Type of agreement	Document series	Status	Ref.
EC (Treaty of Rome)	1-Jan-58	24-Apr-57	GATT Art. XXIV	Customs union	L/626	Report adopted	6S/70 & 109 29.11.57
<a href="#">EFTA (Stockholm Convention)</a>	3-May-60	14-Nov-59	GATT Art. XXIV	Free trade agreement	WT/REG85	Report adopted	9S/70 04.06.60
<a href="#">CACM</a>	12-Oct-61	24-Feb-61	GATT Art. XXIV	Customs union	WT/REG93	Report adopted	10S/98 23.11.61
EFTA accession of Iceland	1-Mar-70	30-Jan-70	GATT Art. XXIV	Accession to free trade agreement	L/3328 L/3328/Add.1	Report adopted	18S/174 29.09.70
EC — OCTs	1-Jan-71	14-Dec-70	GATT Art. XXIV	Free trade agreement	WT/REG106	Report adopted	18S/143 09.11.71
<a href="#">EC — Switzerland and Liechtenstein</a>	1-Jan-73	27-Oct-72	GATT Art. XXIV	Free trade agreement	WT/REG94	Report adopted	20S/196 19.10.73
EC accession of Denmark, Ireland and United Kingdom	1-Jan-73	7-Mar-72	GATT Art. XXIV	Accession to customs union	L/3677	Report adopted	C/M/107 11.07.75
<a href="#">EC — Iceland</a>	1-Apr-73	24-Nov-72	GATT Art. XXIV	Free trade agreement	WT/REG95	Report adopted	20S/158 19.10.73
<a href="#">EC — Norway</a>	1-Jul-73	13-Jul-73	GATT Art. XXIV	Free trade agreement	WT/REG137	Report adopted	21S/83 28.03.74
<a href="#">CARICOM</a>	1-Aug-73	14-Oct-74	GATT Art. XXIV	Customs union	WT/REG92	Report adopted	24S/68 02.03.77
<a href="#">EC — Algeria</a>	1-Jul-76	28-Jul-76	GATT Art. XXIV	Free trade agreement	WT/REG105	Report adopted	24S/80 11.11.77
PATCRA	1-Feb-77	20-Dec-76	GATT Art. XXIV	Free trade agreement	L/4451 L/4451/Add.1	Report adopted	24S/63 11.11.77
<a href="#">EC — Syria</a>	1-Jul-77	15-Jul-77	GATT Art. XXIV	Free trade agreement	WT/REG104	Report adopted	25S/123 17.05.78
EC accession of Greece	1-Jan-81	24-Oct-79	GATT Art. XXIV	Accession to customs union	L4845	Report adopted	30S/168 09.03.83
<a href="#">CER</a>	1-Jan-83	14-Apr-83	GATT Art. XXIV	Free trade agreement	WT/REG111	Report adopted	31S/170 02.10.84
<a href="#">United States — Israel</a>	19-Aug-85	13-Sep-85	GATT Art. XXIV	Free trade agreement	L/5862 L/5862/Add.1	Report adopted	34S/58 14.05.87
EC accession of Portugal and Spain	1-Jan-86	11-Dec-85	GATT Art. XXIV	Accession to customs union	L/5936	Report adopted	35S/293 19.10.88
EC — Andorra	1-Jul-91	9-Mar-98	GATT Art. XXIV	Customs union	WT/REG53	Factual examination concluded	...
<a href="#">MERCOSUR</a>	29-Nov-91	5-Mar-92	Enabling Clause	Customs union	WT/COMTD/1	Under factual examination	...
<a href="#">EFTA — Turkey</a>	1-Apr-92	6-Mar-92	GATT Art. XXIV	Free trade agreement	WT/REG86	Report adopted	40S/48 17.12.93
<a href="#">EFTA — Israel</a>	1-Jan-93	1-Dec-92	GATT Art. XXIV	Free trade agreement	WT/REG14	Factual examination concluded	...
Armenia - Russian Federation	25-Mar-93	27-Jul-04	GATT Art. XXIV	Free trade agreement	WT/REG174	Factual examination not started	...
Kyrgyz Republic — Russian Federation	24-Apr-93	15-Jun-99	GATT Art. XXIV	Free trade agreement	WT/REG73	Under factual examination	...
<a href="#">EC — Romania</a>	1-May-93	23-Dec-94	GATT Art. XXIV	Free trade agreement	WT/REG2	Factual examination concluded	...
<a href="#">EFTA — Romania</a>	1-May-93	24-May-93	GATT Art. XXIV	Free trade agreement	WT/REG16	Factual examination concluded	...
Faroe Islands — Norway	1-Jul-93	13-Mar-96	GATT Art. XXIV	Free trade agreement	WT/REG25	Factual examination concluded	...
Faroe Islands — Iceland	1-Jul-93	23-Jan-96	GATT Art. XXIV	Free trade agreement	WT/REG23	Factual examination concluded	...

<a href="#">EFTA — Bulgaria</a>	1-Jul-93	7-Jul-93	GATT Art. XXIV	Free trade agreement	WT/REG12	Factual examination concluded	...
<a href="#">EC — Bulgaria</a>	31-Dec-93	23-Dec-94	GATT Art. XXIV	Free trade agreement	WT/REG1	Factual examination concluded	...
<a href="#">NAFTA</a>	1-Jan-94	1-Feb-93	GATT Art. XXIV	Free trade agreement	WT/REG4	Consultations on draft report	...
Georgia — Russian Federation	10-May-94	21-Feb-01	GATT Art. XXIV	Free trade agreement	WT/REG118	Under factual examination	...
Romania — Moldova	1-Jan-95	24-Sep-97	GATT Art. XXIV	Free trade agreement	WT/REG44	Under factual examination	...
EC accession of Austria, Finland and Sweden	1-Jan-95	20-Jan-95	GATT Art. XXIV	Accession to customs union	WT/REG3 L/7614/Add.1	Consultations on draft report	...
Faroe Islands — Switzerland	1-Mar-95	8-Mar-96	GATT Art. XXIV	Free trade agreement	WT/REG24	Factual examination concluded	...
Kyrgyz Republic — Armenia	27-Oct-95	4-Jan-01	GATT Art. XXIV	Free trade agreement	WT/REG114	Under factual examination	...
Kyrgyz Republic — Kazakhstan	11-Nov-95	29-Sep-99	GATT Art. XXIV	Free trade agreement	WT/REG81	Under factual examination	...
Armenia - Moldova	21-Dec-95	27-Jul-04	GATT Art. XXIV	Free trade agreement	WT/REG173	Factual examination not started	...
EC — Turkey	1-Jan-96	22-Dec-95	GATT Art. XXIV	Customs union	WT/REG22	Under factual examination	...
Georgia — Ukraine	4-Jun-96	21-Feb-01	GATT Art. XXIV	Free trade agreement	WT/REG121	Under factual examination	...
Armenia - Turkmenistan	7-Jul-96	27-Jul-04	GATT Art. XXIV	Free trade agreement	WT/REG175	Factual examination not started	...
Georgia — Azerbaijan	10-Jul-96	21-Feb-01	GATT Art. XXIV	Free trade agreement	WT/REG120	Under factual examination	...
Kyrgyz Republic — Moldova	21-Nov-96	15-Jun-99	GATT Art. XXIV	Free trade agreement	WT/REG76	Factual examination concluded	...
Armenia - Ukraine	18-Dec-96	27-Jul-04	GATT Art. XXIV	Free trade agreement	WT/REG171	Factual examination not started	...
EC — Faroe Islands	1-Jan-97	19-Feb-97	GATT Art. XXIV	Free trade agreement	WT/REG21	Under factual examination	...
<a href="#">Canada — Israel</a>	1-Jan-97	23-Jan-97	GATT Art. XXIV	Free trade agreement	WT/REG31	Factual examination concluded	...
<a href="#">Turkey - Israel</a>	1-May-97	18-May-98	GATT Art. XXIV	Free trade agreement	WT/REG60	Factual examination concluded	...
<a href="#">EC — Palestinian Authority</a>	1-Jul-97	30-Jun-97	GATT Art. XXIV	Free trade agreement	WT/REG43	Factual examination not started	...
<a href="#">Canada — Chile</a>	5-Jul-97	26-Aug-97	GATT Art. XXIV	Free trade agreement	WT/REG38	Factual examination concluded	...
EAEC	8-Oct-97	21-Apr-99	GATT Art. XXIV	Customs union	WT/REG71	Under factual examination	...
Croatia - FYROM	30-Oct-97	1-Apr-05	GATT Art. XXIV	Free trade agreement	WT/REG197	Factual examination not started	...
Kyrgyz Republic — Ukraine	19-Jan-98	15-Jun-99	GATT Art. XXIV	Free trade agreement	WT/REG74	Under factual examination	...
<a href="#">Romania — Turkey</a>	1-Feb-98	18-May-98	GATT Art. XXIV	Free trade agreement	WT/REG59	Factual examination concluded	...
<a href="#">EC — Tunisia</a>	1-Mar-98	23-Mar-99	GATT Art. XXIV	Free trade agreement	WT/REG69	Factual examination concluded	...
Kyrgyz Republic — Uzbekistan	20-Mar-98	15-Jun-99	GATT Art. XXIV	Free trade agreement	WT/REG75	Under factual examination	...
<a href="#">Mexico - Nicaragua</a>	1-Jul-98	2-Nov-05	GATT Art. XXIV	Free trade agreement	WT/REG206	Examination not requested	...
Georgia — Armenia	11-Nov-98	21-Feb-01	GATT Art. XXIV	Free trade agreement	WT/REG119	Under factual examination	...



Bulgaria — Turkey	1-Jan-99	4-May-99	GATT Art. XXIV	Free trade agreement	WT/REG72	Factual examination concluded	...
CEFTA accession of Bulgaria	1-Jan-99	24-Mar-99	GATT Art. XXIV	Accession to free trade agreement	WT/REG11	Consultations on draft report	...
<a href="#">EFTA — Palestinian Authority</a>	1-Jul-99	21-Sep-99	GATT Art. XXIV	Free trade agreement	WT/REG79	Factual examination not started	...
Georgia — Kazakhstan	16-Jul-99	21-Feb-01	GATT Art. XXIV	Free trade agreement	WT/REG123	Under factual examination	...
<a href="#">Chile — Mexico</a>	1-Aug-99	8-Mar-01	GATT Art. XXIV	Free trade agreement	WT/REG125	Factual examination concluded	...
<a href="#">EFTA — Morocco</a>	1-Dec-99	18-Feb-00	GATT Art. XXIV	Free trade agreement	WT/REG91	Factual examination concluded	...
Georgia — Turkmenistan	1-Jan-00	21-Feb-01	GATT Art. XXIV	Free trade agreement	WT/REG122	Under factual examination	...
<a href="#">EC — South Africa</a>	1-Jan-00	21-Nov-00	GATT Art. XXIV	Free trade agreement	WT/REG113	Factual examination not started	...
Bulgaria — Former Yugoslav Republic of Macedonia	1-Jan-00	18-Feb-00	GATT Art. XXIV	Free trade agreement	WT/REG90	Factual examination concluded	...
<a href="#">EC — Morocco</a>	1-Mar-00	8-Nov-00	GATT Art. XXIV	Free trade agreement	WT/REG112	Factual examination concluded	...
<a href="#">EC — Israel</a>	1-Jun-00	7-Nov-00	GATT Art. XXIV	Free trade agreement	WT/REG110	Factual examination concluded	...
<a href="#">Israel - Mexico</a>	1-Jul-00	8-Mar-01	GATT Art. XXIV	Free trade agreement	WT/REG124	Factual examination concluded	...
<a href="#">EC — Mexico</a>	1-Jul-00	1-Aug-00	GATT Art. XXIV	Free trade agreement	WT/REG109	Factual examination concluded	...
<a href="#">SADC</a>	1-Sep-00	9-Aug-04	GATT Art. XXIV	Free trade agreement	WT/REG176	Factual examination not started	...
Turkey — Former Yugoslav Republic of Macedonia	1-Sep-00	22-Jan-01	GATT Art. XXIV	Free trade agreement	WT/REG115	Factual examination concluded	...
Croatia - Bosnia and Herzegovina	1-Jan-01	6-Oct-03	GATT Art. XXIV	Free trade agreement	WT/REG159	Factual examination not started	...
<a href="#">New Zealand - Singapore</a>	1-Jan-01	19-Sep-01	GATT Art. XXIV	Free trade agreement	WT/REG127	Factual examination concluded	...
<a href="#">EFTA — Former Yugoslav Republic of Macedonia</a>	1-Jan-01	31-Jan-01	GATT Art. XXIV	Free trade agreement	WT/REG117	Factual examination concluded	...
<a href="#">EC — FYROM</a>	1-Jun-01	21-Nov-01	GATT Art. XXIV	Free trade agreement	WT/REG129	Factual examination concluded	...
Romania - Israel	1-Jul-01	25-Apr-05	GATT Art. XXIV	Free trade agreement	WT/REG199	Factual examination not started	...
<a href="#">EFTA - Mexico</a>	1-Jul-01	22-Aug-01	GATT Art. XXIV	Free trade agreement	WT/REG126	Factual examination concluded	...
India — Sri Lanka	15-Dec-01	27-Jun-02	Enabling Clause	Free trade agreement	WT/COMTD/N/16	Examination not requested	...
<a href="#">United States — Jordan</a>	17-Dec-01	5-Mar-02	GATT Art. XXIV	Free trade agreement	WT/REG134	Factual examination concluded	...
Armenia - Kazakhstan	25-Dec-01	27-Jul-04	GATT Art. XXIV	Free trade agreement	WT/REG172	Factual examination not started	...
Bulgaria - Israel	1-Jan-02	14-Apr-03	GATT Art. XXIV	Free trade agreement	WT/REG150	Factual examination not started	...
<a href="#">EFTA — Jordan</a>	1-Jan-02	22-Jan-02	GATT Art. XXIV	Free trade agreement	WT/REG133	Factual examination concluded	...
<a href="#">EFTA — Croatia</a>	1-Jan-02	22-Jan-02	GATT Art. XXIV	Free trade agreement	WT/REG132	Factual examination concluded	...
<a href="#">Chile — Costa Rica</a>	15-Feb-02	14-May-02	GATT Art. XXIV	Free trade agreement	WT/REG136	Factual examination concluded	...
<a href="#">EC — Croatia</a>	1-Mar-02	20-Dec-02	GATT Art. XXIV	Free trade agreement	WT/REG142	Factual examination concluded	...

<a href="#">EC — Jordan</a>	1-May-02	20-Dec-02	GATT Art. XXIV	Free trade agreement	WT/REG141	Factual examination concluded	...
<a href="#">Chile - El Salvador</a>	1-Jun-02	16-Feb-04	GATT Art. XXIV	Free trade agreement	WT/REG165	Factual examination concluded	...
Albania - FYROM	1-Jul-02	14-Dec-04	GATT Art. XXIV	Free trade agreement	WT/REG182	Factual examination not started	...
FYROM - Bosnia and Herzegovina	15-Jul-02	11-May-05	GATT Art. XXIV	Free trade agreement	WT/REG200	Factual examination not started	...
<a href="#">Canada — Costa Rica</a>	1-Nov-02	17-Jan-03	GATT Art. XXIV	Free trade agreement	WT/REG147	Factual examination concluded	...
<a href="#">Japan - Singapore</a>	30-Nov-02	14-Nov-02	GATT Art. XXIV	Free trade agreement	WT/REG140	Factual examination concluded	...
<a href="#">EFTA - Singapore</a>	1-Jan-03	24-Jan-03	GATT Art. XXIV	Free trade agreement	WT/REG148	Under factual examination	...
<a href="#">EC - Chile</a>	1-Feb-03	18-Feb-04	GATT Art. XXIV	Free trade agreement	WT/REG164	Under factual examination	...
CEFTA accession of Croatia	1-Mar-03	3-Mar-04	GATT Art. XXIV	Accession to free trade agreement	WT/REG11	Factual examination not started	...
<a href="#">EC - Lebanon</a>	1-Mar-03	4-Jun-03	GATT Art. XXIV	Free trade agreement	WT/REG153	Factual examination not started	...
Panama - El Salvador	11-Apr-03	18-Mar-05	GATT Art. XXIV	Free trade agreement	WT/REG196	Factual examination not started	...
Croatia - Albania	1-Jun-03	31-Mar-04	GATT Art. XXIV	Free trade agreement	WT/REG166	Factual examination not started	...
<a href="#">Turkey - Bosnia and Herzegovina</a>	1-Jul-03	8-Sep-03	GATT Art. XXIV	Free trade agreement	WT/REG157	Factual examination not started	...
<a href="#">Turkey - Croatia</a>	1-Jul-03	8-Sep-03	GATT Art. XXIV	Free trade agreement	WT/REG156	Under factual examination	...
<a href="#">Singapore - Australia</a>	28-Jul-03	1-Oct-03	GATT Art. XXIV	Free trade agreement	WT/REG158	Factual examination concluded	...
Albania - Bulgaria	1-Sep-03	31-Mar-04	GATT Art. XXIV	Free trade agreement	WT/REG167	Factual examination not started	...
Albania - UNMIK (Kosovo)	1-Oct-03	8-Apr-04	GATT Art. XXIV	Free trade agreement	WT/REG168	Factual examination not started	...
Romania - Bosnia and Herzegovina	24-Oct-03	14-Feb-05	GATT Art. XXIV	Free trade agreement	WT/REG191	Factual examination not started	...
Romania - FYROM	1-Jan-04	14-Feb-05	GATT Art. XXIV	Free trade agreement	WT/REG193	Factual examination not started	...
Albania - Romania	1-Jan-04	14-Dec-04	GATT Art. XXIV	Free trade agreement	WT/REG180	Factual examination not started	...
<a href="#">China - Macao, China</a>	1-Jan-04	12-Jan-04	GATT Art. XXIV	Free trade agreement	WT/REG163	Under factual examination	...
<a href="#">China - Hong Kong, China</a>	1-Jan-04	12-Jan-04	GATT Art. XXIV	Free trade agreement	WT/REG162	Under factual examination	...
<a href="#">United States - Singapore</a>	1-Jan-04	19-Dec-03	GATT Art. XXIV	Free trade agreement	WT/REG161	Factual examination concluded	...
<a href="#">United States — Chile</a>	1-Jan-04	19-Dec-03	GATT Art. XXIV	Free trade agreement	WT/REG160	Under factual examination	...
<a href="#">Republic of Korea - Chile</a>	1-Apr-04	19-Apr-04	GATT Art. XXIV	Free trade agreement	WT/REG169	Under factual examination	...
Moldova - Bosnia and Herzegovina	1-May-04	28-Jan-05	GATT Art. XXIV	Free trade agreement	WT/REG187	Factual examination not started	...
<a href="#">EU Enlargement</a>	1-May-04	30-Apr-04	GATT Art. XXIV	Accession to customs union	WT/REG170	Under factual examination	...
Bulgaria - Serbia and Montenegro	1-Jun-04	11-Mar-05	GATT Art. XXIV	Free trade agreement	WT/REG195	Factual examination not started	...
<a href="#">EC - Egypt</a>	1-Jun-04	4-Oct-04	GATT Art. XXIV	Free trade agreement	WT/REG177	Factual examination not started	...

Croatia - Serbia and Montenegro	1-Jul-04	22-Sep-05	GATT Art. XXIV	Free trade agreement	WT/REG205	Factual examination not started	...
Romania - Serbia and Montenegro	1-Jul-04	14-Feb-05	GATT Art. XXIV	Free trade agreement	WT/REG192	Factual examination not started	...
Moldova - Serbia and Montenegro	1-Sep-04	28-Jan-05	GATT Art. XXIV	Free trade agreement	WT/REG190	Factual examination not started	...
Albania - Serbia Montenegro	1-Sep-04	19-Oct-04	GATT Art. XXIV	Free trade agreement	WT/REG178	Factual examination not started	...
Moldova - Croatia	1-Oct-04	31-Jan-05	GATT Art. XXIV	Free trade agreement	WT/REG189	Factual examination not started	...
Albania - Moldova	1-Nov-04	20-Dec-04	GATT Art. XXIV	Free trade agreement	WT/REG183	Factual examination not started	...
Bulgaria - Bosnia and Herzegovina	1-Dec-04	11-Mar-05	GATT Art. XXIV	Free trade agreement	WT/REG194	Factual examination not started	...
Moldova - FYROM	1-Dec-04	31-Jan-05	GATT Art. XXIV	Free trade agreement	WT/REG188	Factual examination not started	...
Moldova - Bulgaria	1-Dec-04	28-Jan-05	GATT Art. XXIV	Free trade agreement	WT/REG186	Factual examination not started	...
Albania - Bosnia and Herzegovina	1-Dec-04	14-Dec-04	GATT Art. XXIV	Free trade agreement	WT/REG181	Factual examination not started	...
<a href="#">EFTA - Chile</a>	1-Dec-04	10-Dec-04	GATT Art. XXIV	Free trade agreement	WT/REG179	Factual examination not started	...
<a href="#">Thailand - Australia</a>	1-Jan-05	5-Jan-05	GATT Art. XXIV	Free trade agreement	WT/REG185	Factual examination not started	...
<a href="#">US - Australia</a>	1-Jan-05	23-Dec-04	GATT Art. XXIV	Free trade agreement	WT/REG184	Factual examination not started	...
Japan - Mexico	1-Apr-05	22-Apr-05	GATT Art. XXIV	Free trade agreement	WT/REG198	Factual examination not started	...
<a href="#">Turkey - PLO</a>	1-Jun-05	15-Sep-05	GATT Art. XXIV	Free trade agreement	WT/REG204	Factual examination not started	...
<a href="#">EFTA - Tunisia</a>	1-Jun-05	7-Jun-05	GATT Art. XXIV	Free trade agreement	WT/REG201	Factual examination not started	...
<a href="#">Thailand - New Zealand</a>	1-Jul-05	2-Dec-05	GATT Art. XXIV	Free trade agreement	WT/REG207	Examination not requested	...
<a href="#">Turkey - Tunisia</a>	1-Jul-05	15-Sep-05	GATT Art. XXIV	Free trade agreement	WT/REG203	Factual examination not started	...