

Fitting Asia-Pacific Agreements into the WTO System

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Introduction and Overview

It is commonplace to note the proliferation of customs unions (CUs), free trade agreements (FTAs) and kindred arrangements, often collectively called preferential trade agreements (PTAs). In fact, the number of agreements concluded between 2000 and 2007 (185) is just under half the number of agreements concluded during the twentieth century (374).¹ These figures can be found in table 1. In addition to a chronological summary, table 1 provides a breakdown of PTAs by region. Countries in Europe (not including the Former Soviet Union) have concluded the most agreements (232) to date. Countries in the Americas have concluded the second most agreements (166). If we consider the Asia-Pacific region (Americas, East and South Asia, and Oceania) as a unit, the total number of concluded agreements (234) matches that of Europe.

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¹ See table 1. This figure of 374 PTAs includes agreements that either have lapsed or have been superseded. Moreover the figure includes agreements that both have and have not been notified to the World Trade Organization. Much of our analysis here focuses on agreements that have been (or presumably will be if enacted) notified to the WTO.

Figure 1 shows the web of PTAs in force and proposed in the Asia-Pacific region. The figure distinguishes between agreements that are already in place (solid lines) or under consideration (dashed lines), and names the member countries in each arrangement. As figure 1 illustrates, many of the existing and proposed agreements overlap. In the extreme case, the United States and other members of the Asia Pacific Economic Cooperation (APEC) forum have vetted a Free Trade Area of the Asia Pacific or FTAAP that would cover all APEC members but not South Asian countries (notably India, Pakistan, Bangladesh, and Sri Lanka).

To keep the picture manageable, figure 1 omits relatively small regional agreements in the Asia-Pacific region, such as the Melanesian Spearhead Group (MSG) and the Pacific Islands Countries Trade Agreement (PICTA). Moreover, the size of each “box” has nothing to do with the collective commercial importance of the countries. For example, NAFTA is the largest existing Asia-Pacific arrangement in terms of trade volume and GDP, but it is represented by a small box in figure 1.

The following sections examine the extent of trade and investment under PTAs for selected countries and regions within the Asia-Pacific region.² The data underlying this discussion are provided in appendix tables A.1 and A.2.³ For easy reading, tables 2 and 3 summarize the appendix tables. We conclude this overview with a summary of APEC initiatives on FTAs.

The US Hub

NAFTA, which entered into force in 1994, is by far the largest free trade agreement in the Asia-Pacific region. In 2005, NAFTA covered about 30 percent of total US merchandise trade

² A detailed gravity model analysis of the effects of FTAs on trade and investment in the Asia-Pacific region is provided later in this paper.

³ These tables do not include smaller FTAs (e.g., the agreement between China and Macao). Also, to organize our discussion of trade agreements in the Asia-Pacific area, we distinguish between larger countries -- which we label “dominant partners,” with apologies to the ode of political correctness -- and their trade agreement partners. Our tables enumerate six dominant countries: the United States, China, Japan, ASEAN, Korea, and India. For this purpose, ASEAN is treated as if it were a single country; thus trade between ASEAN member states is ignored. In addition, the FTAs between dominant partners are covered in the entries for both dominant partners in appendix table A.1.

(imports plus exports) and about 70 percent of total Canadian and Mexican merchandise trade. About 14 percent of inward and outward US FDI stocks are covered by NAFTA and over 60 percent of FDI stocks based in Canada and Mexico. To this day, NAFTA serves as the reference point and basic template for US free trade agreements.

Stimulated by NAFTA, leaders throughout the Western Hemisphere met in Miami in December 2004 to launch work on a Free Trade Area of the Americas (FTAA). They promised to complete FTAA negotiations by 2005, but that date has come and gone. The FTAA fell victim both to the widespread backlash against globalization and fundamentally different perspectives in Brazil and the United States.

Meanwhile, the United States has pursued other dimensions of its free trade strategy. In 1993, President Clinton convened the 13 APEC leaders to Blake Island, Seattle for the first APEC Economic Leaders Meeting. This summit elevated the priority of US economic relations in the Asia-Pacific region. Since then, the United States has advanced various plans for promoting Asia-Pacific trade liberalization.

In 2002, the Bush administration narrowly secured Congressional approval of “fast track” negotiating authority, renamed Trade Promotion Authority (TPA).⁴ Using TPA, the Bush administration signed free trade agreements with Chile (in force in 2004), Singapore (in force in 2004), Australia (in force in 2005), five Central American countries and the Dominican Republic (CAFTA-DR, in force with El Salvador, Honduras, Nicaragua, Guatemala, and the Dominican Republic in 2006, and ratified by Costa Rica in October 2007), Morocco (in force in 2006), Bahrain (in force in 2006) and Oman (approved by the Congress in 2006, but not yet in force) and with Colombia, Peru, Panama and Korea (all awaiting ratification). Considering each partner among these agreements, only the US-Korea FTA and the US-Singapore FTA individually cover more than 1 percent of US merchandise trade. Only the US-Singapore FTA and the US-Australia

⁴ Fast track negotiating authority gives the President of the United States power to negotiate agreements that the Congress can only vote up or down without amendment. Fast track provisions were included in the Trade Act of 1974 and subsequent legislation from 1975 to 1994, and was restored in 2002 by the Trade Act of 2002. The authority expired in June 2007.

FTA cover more than 1 percent of total US FDI stocks. As a share of trade and investment, the agreements are of course far more important to the partner countries.

The central purpose of TPA was to conclude the Doha Round under the auspices of the World Trade Organization (WTO). However, the Doha talks have marked time with little progress despite six years of negotiation. Meanwhile, the Bush Administration views bilateral and regional FTAs as a part of a “competitive liberalization” strategy -- pushing reluctant countries either to join their own bilateral free trade arrangements or commit to liberalization in the Doha Round.

The United States is the country most interested in advancing the Free Trade Area of the Asia-Pacific region (FTAAP). Within the United States, Peterson Institute Director C. Fred Bergsten is the most vocal proponent. Given the prospect for shallow WTO results, or a complete breakdown of WTO negotiations, Bergsten has argued that the world needs a “plan B” to revive the liberal trade agenda and considers the FTAAP the best available alternative for this purpose (Bergsten 2007). If created, the FTAAP would become the world’s largest free trade area -- covering about 60 percent of US two-way trade (table 2) and roughly 30 percent of total US FDI stocks (table 3).

The China Hub

Since its WTO accession in 2001, China has concluded bilateral trade agreements with countries around the world. However, China sees these agreements more as a tool for building diplomatic relations than as a means of boosting commerce. This explains why Chinese FTAs are much less comprehensive than US FTAs and often exclude provisions on intellectual property, services, investment and social issues (labor and environment).

China initially pursued FTAs with territories and countries that have strong political and geographical ties, namely Hong Kong, Macao and ASEAN; China then expanded its list of potential partners to strengthen relations with natural resource suppliers (like Chile) and to enhance its position in world affairs. China’s potential FTA partners include: New Zealand, Australia, Singapore, Japan, Korea, India, Mexico and Peru. China is considering the FTAAP though not with the same level of interest as the United States. Not shown in appendix table A.1,

China also has FTAs either under negotiation or under consideration with the Gulf Cooperation Council (GCC), Iceland and South Africa, mainly to advance its goal of security of access to energy and natural resources.

The FTAAP would cover about 63 percent of Chinese two-way trade and about 74 percent of Chinese FDI stocks. With the exception of the Hong Kong agreement, other Chinese agreements cover no more than 10 percent of its trade or investment. The agreement with Hong Kong covers roughly 10 percent of China's two-way merchandise trade and roughly 46 percent of its FDI stocks. The agreements, in percentage terms, are more important for China's partners, with a qualified exception for Hong Kong. While the agreement is more important to Hong Kong than to China for merchandise trade, it covers roughly half of China's FDI stocks but only about a quarter of Hong Kong's.

China's surge has increased competition both within East Asia and across the Asia-Pacific region. Other countries have altered their FTA policies accordingly. If the last decade was an era of proliferation of FTAs within the Asia-Pacific region, the next decade could become an era of triangular consolidation of spheres of influence, colored by competition between the three major powers, the United States, China and Japan.

The Japan Hub

Until very recently, the sole focus of Japan's external economic policy was the multilateral trading system, under the auspices of GATT and the WTO. The Asian financial crisis and the global proliferation of FTAs prompted Japan to alter its historic opposition to preferential trade agreements. Even so, Japan is joining the FTA race late, compared to the European Union and the United States.⁵ The Abe cabinet pushed regional integration and the Economy and Fiscal Council launched a project team to accelerate the conclusion of FTAs. It remains to be seen whether Prime Minister Fukuda continues these initiatives.

Japan has tilted its FTA policy by pursuing a high level of market opening in manufacturing,

⁵ Japan's first FTA, with Singapore in 2002, preceded China's first FTA, with Hong Kong in 2004. Since then, however, China has embraced a more active FTA policy than Japan.

services and investment, while resisting liberalization of agriculture or fisheries. The balance between bilateral and multilateral negotiations continues to influence the timing and speed of Japan's FTA negotiations: Japan is anxious that FTA negotiations not undercut the Doha Round.

Japan has four FTAs in force with Singapore, Mexico, Malaysia and Chile. Collectively they cover about 6 percent of Japan's total two-way trade and about 5 percent of its total FDI stocks. Japan has signed FTAs with Thailand (scheduled to take effect in November 2007), Indonesia and Brunei (not in force as of October 2007). Japan is currently negotiating agreements with Korea and ASEAN. These agreements would cover 6 percent and 13 percent of Japanese trade, respectively, and 2 percent and 8 percent of Japanese investment, respectively. Japan is also considering a broader East Asian agreement among 16 countries as a way station to an Asia-Pacific pact. An FTAAP would cover 66 percent of Japanese trade and roughly 70 percent of Japanese investment.

From the beginning, Japan has given priority to the ASEAN region in its FTA policy; this reflects Japan's substantial investments in the region, and its reliance on ASEAN resources. Japan has used trade agreements to strengthen these ties, to further political security in Southeast Asia, and to forestall China from becoming the only serious commercial partner for the ASEAN group.

The ASEAN Hub

ASEAN was created in 1967 with five members (Indonesia, Malaysia, Philippines, Singapore and Thailand). Subsequently, ASEAN has added five new members (Brunei Darussalam, Vietnam, Lao PDR, Myanmar and Cambodia), bringing large disparities in economic development levels between the 10 constituent countries and complicating the process of regional economic integration. In its early decades, the main purpose of ASEAN was to end guerilla wars between the founding members, and thereby enhance the security of Southeast Asia. Over the past decade, the members have put more emphasis on internal economic ties; moreover, since 2000, ASEAN has pursued FTAs with large trading partners, namely Japan, China, Korea and Australia-New Zealand (CER). Individual ASEAN countries have also pursued agreements with the United States. While ASEAN's external FTA policy seeks to expand trade and investment, ASEAN has been very careful to ensure that its external FTAs do not undermine its

internal integration efforts. In October 2003, the member states of ASEAN signed Bali Concord II, which reiterates ASEAN's commitment to create a stable, prosperous and highly competitive ASEAN economic region. In August 2007, the ASEAN Ministers issued a declaration calling for the elimination, by 2015, of market access barriers on the establishment of a commercial presence in the service sector. When accomplished, this will greatly liberalize FDI in the service industries.

Currently, ASEAN has two FTAs in force, namely with China and Korea (only for goods), which cover 13 percent and 6 percent of ASEAN's total external two-way trade respectively and roughly 14 percent and 2 percent of its FDI stocks. ASEAN is considering arrangements that would expand the free trade zone to include Korea (for services), and Japan (ASEAN + 3). Under this scenario 37 percent of current ASEAN trade would be covered, along with 32 percent of ASEAN FDI stocks. ASEAN is also considering the FTAAP; if created the FTAAP would cover 67 percent of ASEAN's external two-way trade and 85 percent of its FDI stocks. In geopolitical terms, ASEAN would benefit from an FTAAP since the arrangement would, to some extent, balance the major powers (United States, China and Japan) and give ASEAN more scope for playing the role of "honest broker" between Asia-Pacific powers.

The Korea Hub

Over the course of five decades, the tactics of Korea's trade policy have changed significantly, but engagement with the world economy has always been the driving force in Korea's economic ascent. During the post Korean war period of the 1960s, Korea adopted an outward-looking strategy focusing on export growth. This was a departure from the import-substitution strategies then popular among other developing countries.

Following its accession to the GATT in 1967, Korea became a vocal supporter of the multilateral trading system. It flirted with a bilateral US deal on several occasions over the past two decades due to concerns about trade diversion resulting from the US-Canada FTA and the NAFTA. Each time preliminary consultations stalled over the inclusion of agriculture. By the late 1990s, however, the global proliferation of RTAs, coupled with the Asia financial crisis, shifted the

focus of Korean policy toward regionalism.⁶ FTA initiatives have now become a major pillar of Korea's trade policy. The main objective of Korean FTA policy is to address the competitive challenges of China and India and to counter the adverse demographic trends facing Korean society over the next generation (Schott, Bradford and Moll 2006).

Currently Korea has three FTAs in force -- with Chile, Singapore and ASEAN (only for goods). Together, these cover about 10 percent of Korea's total two-way trade and roughly 6 percent of its FDI stocks. In June 2007, Korea signed an FTA with the United States. If ratified, it will cover about 13 percent of Korea's total two-way trade and roughly 33 percent of its FDI stocks. If extended into an FTAAP, the resulting pact would cover about 65 percent of Korea's total two-way trade and roughly 67 percent of its FDI stocks.

Korea's roster of current and potential FTA partners spreads broadly across the world; Korea is negotiating FTAs with the European Union, Canada and Japan and pursuing FTAs with the Persian Gulf countries and Mercosur to secure energy supplies.

The India Hub

In the mid 1990s, after decades of mediocre performance, India began to reform its internal economic regulation and reduce its sky-high tariffs. At the same time, knowledge-based industries took off -- especially information technology (IT) services and pharmaceuticals. India has now become the new emerging power in the world, gaining much attention in commercial and financial circles.

India's FTA policy historically emphasized the South Asia region, but since the early 1990s, India has adopted a "Look East" policy, attempting to strengthen ties with East Asia. India has ten trade agreements in force and several of them are overlapping in terms of partner countries: a non-reciprocal agreement with Nepal; a preferential trade agreement with Afghanistan; four FTAs with Singapore, Sri Lanka, Bhutan and SAFTA;⁷ and five "framework" agreements --

⁶ WTO, Trade Policy Review-Republic of Korea, August 2004

⁷ The South Asian Association for Regional Cooperation (SAARC) was established in 1985 with seven members (Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka). The South Asian Free Trade Area (SAFTA) among SAARC members was launched in 2006. SAFTA

those with BIMSTEC,⁸ Thailand, ASEAN, Singapore and Bangladesh. Except for the framework agreement with ASEAN, which accounts for 9 percent of India's two-way trade, the trade agreements with other partners cover small shares of India's two-way trade, ranging from zero to 4 percent. Moreover, these agreements are riddled with exceptions, so that trade between India, Pakistan and Bangladesh is far more restricted by barriers than, for example, trade between India and Europe.

India is eager to join APEC, but existing members have their reservations; in any event, no new members will be considered until 2010 at the earliest. From a geopolitical standpoint, China would find it hard to put out the welcome mat; from an economic standpoint, the United States is not enthusiastic about a new APEC member that maintains some of the highest trade barriers in the world. Unless India dramatically changes its commercial policy, and reaches a geopolitical accommodation with China, India will not be invited to join APEC or the FTAAP. However, as an alternative to participation in a regional pact, India is pursuing bilateral FTAs with Korea and Japan, and is considering an FTA with China. In addition, EU-India negotiations on an Economic Partnership Agreement began in 2007.

Regionalism Scenarios

Tables 2 and 3 summarize the foregoing discussion. In these tables, current and prospective FTAs are classified under three different scenarios: agreements now in force (scenario 1); scenario 1 plus agreements signed and under negotiation (scenario 2); and scenario 2 plus agreements under consideration including, most importantly, a possible FTAAP (scenario 3).

In scenario 1, among dominant countries, the United States shows the largest coverage of two-way trade by FTAs now in force (33 percent). Partner countries generally conduct a larger

is a traditional trade agreement, which covers tariffs, rules of origin, safeguards, institutional structure, and dispute settlement. So far the extent of liberalization within SAFTA is limited. For more details, see appendix A in Hufbauer and Burki (2006).

⁸ The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is a sub-regional grouping with seven members (Bangladesh, India, Myanmar, Sri Lanka, Thailand, Bhutan and Nepal). It was created in June 1997, with four initial members: Bangladesh, India, Sri Lanka, and Thailand (BIST-EC or BIST-Economic Cooperation). After three new members (Myanmar, Nepal and Bhutan) joined, its name was changed to BIMSTEC.

fraction of their two-way trade with the dominant partner than vice versa. China shows the largest coverage of FDI by FTAs now in force (54 percent). A similar pattern for partner countries is present for FDI stocks as for merchandise trade, but it is not as pronounced.

In scenario 2, FTAs (and other agreements) already signed and under negotiation are added to the FTAs already in force. In this scenario, the United States and China do not show much increase in their coverage of total two-way trade, by comparison with scenario 1, but both Japan and ASEAN make an impressive jump. Japanese two-way total trade coverage increases from 6 percent to 22 percent, mainly due to FTAs with ASEAN and Korea, now under negotiation. The agreements signed and under negotiation by ASEAN with Japan, Korea, Australia and New Zealand would raise ASEAN's coverage of total two-way trade from 19 percent to about 41 percent. A similar pattern exists for FDI stocks.

Scenario 3 in tables 2 and 3 depicts the coverage of present and prospective Asia-Pacific FTAs, including, most importantly, a possible FTAAP. In this scenario, FTAs would cover more than 60 percent of total two-way trade of each dominant country except India (where the coverage is about 50 percent). Under scenario 3, FDI coverage would be similar in magnitude to trade coverage, except for the United States where only 30 percent of FDI stocks would be covered. Taking intra-FTAAP trade into account, scenario 3 also shows a large increase of the total two-way trade coverage of partner countries, expanding from about 50 to around 80 percent of their world commerce.⁹ Since India is not a current member of APEC, in scenario 3, we put India in the FTAAP but *only* in calculating India's potential trade linkages. We do not include India in the FTAAP scenario for existing APEC members. If APEC members show genuine signs of creating a FTAAP, the prospect of being "left out" might prompt India to radically reorient its trade policy.

Table 4 shows a matrix of "overlapping trade" among dominant countries via FTAs already in force and potential FTAs. "Overlapping trade" is defined to occur when two dominant countries have the same partner. The percentages in the table indicate the share of trade of the dominant country listed in the row that overlaps, via the common partner, with the dominant country listed

⁹ Due to the substantial gaps in FDI data we do not have intra-FTAAP FDI shares. Table 3 only provides the share of FDI stocks of all FTAAP partners specifically with the dominant country.

in the column. The rationale for this concept is that intermediation through the common partner may provide a limited conduit for integration between two dominant partners. However, table 4 indicates that the current extent of overlapping trade is quite low (and, in the case of India, nonexistent). This reflects both the regional emphasis of each dominant country, and the limited reach of FTAs in force. Table 4 also indicates that the potential for overlapping trade would be quite high in a FTAAP scenario.

APEC Initiatives

The Asia-Pacific Economic Cooperation (APEC) forum, established in 1989 with 12 founding members, has grown to become the leading regional grouping in the Asia-Pacific with 21 member economies.¹⁰

In November 1994, leaders of the APEC nations gathered in Bogor, Indonesia and declared common goals (known as the Bogor goals), including free trade and investment in the region by 2010 for industrialized economies and 2020 for developing economies. To advance the Bogor goals, APEC has adopted a series of interim strategies, but none of them has proved highly successful. The absence of binding commitments as a negotiating principle may have slowed progress in achieving the Bogor vision.

In 1995, APEC adopted the Osaka Action Agenda, which established a framework for reaching the Bogor goals through unilateral trade and investment liberalization, business facilitation, and economic and technical cooperation (known together as the three pillars). Unilateral steps were modest and, in 1997, at their fifth meeting in Canada, the APEC trade ministers endorsed another proposal, labeled Early Voluntary Sectoral Liberalization (EVSL). The EVSL initiative identified 15 sectors in which members agreed to strive for liberalization. Again, achievements were modest.

Subsequent meetings of the APEC ministers were less noteworthy. According to Bergsten (2001),

¹⁰ The current membership of APEC consists of 21 countries and territories: Australia, Brunei, Canada, Chile, China, Chinese Taipei, Hong Kong, Indonesia, Japan, Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore, Thailand, the United States, and Vietnam.

the Kuala Lumpur summit in 1998 broke the momentum of trade liberalization by terminating the effort to open additional sectors. At the Auckland summit in 1999, APEC members were in disarray over the merits and content of a new WTO trade round. The Seattle debacle ensued three months later.¹¹

Government leaders left the next few APEC meetings empty-handed. However, in response to the proliferation of regional trade agreements, APEC ministers, meeting in Santiago in 2004, endorsed a call for high-level standards for free trade agreements (FTAs) and regional trading agreements (RTAs). At the meeting in Busan, Korea in 2005, APEC leaders adopted “the Busan Roadmap towards the Bogor Goals.” The Roadmap endorses specific strategies, such as a strong multilateral trading system, high-quality FTAs and RTAs, and measures to promote sustainable development. At the APEC trade ministers meeting in Jeju, Korea in 2005, the ministers endorsed a ministerial statement which expressed APEC support for the WTO Doha Development Agenda and a breakthrough for Non-Agricultural Market Access (NAMA) negotiations. The meeting of APEC Economic Leaders held in Vietnam, in 2006, reaffirmed strong support for the Doha Round and announced the Hanoi action plan, designed to implement the Busan Roadmap.

In 2005, the Center for International Economics (CIE) evaluated APEC’s achievements and concluded that both tariff and non-tariff barriers have been reduced to a great extent. Applied tariff barriers in the APEC region have fallen from an average of about 16 percent in 1988 to about 6 percent in 2004; many non-tariff barriers have been either removed or converted to tariffs or (in the case of agriculture) to tariff-rate quotas. The CIE also found that linkages among APEC members and with the rest of world, in terms of trade and investment flows, have been strengthened. Importantly, lower-income members have grown at particularly rapid rates.¹²

These beneficial outcomes largely reflect forces other than APEC. Foremost, led by China, Asia has become a pole for rapid economic growth. APEC embraces United States and Canada as well, and North America has enjoyed enormous productivity gains since the early 1990s. Moreover,

¹¹ For more details, see Bergsten (2001).

¹² For more details, see CIE (2005).

the Asia-Pacific region is the locus of vigorous liberalization initiatives through bilateral and regional trade agreements: NAFTA, ANZCERTA and ASEAN (already in place) and ASEAN +3, ASEAN+6 and a possible Northeast Asian FTA (under study).¹³

Whatever its accomplishments in the trade and investment field, APEC provides a unique forum for bringing together top leaders for dialogue on political and economic issues. The newest initiative, still in an exploratory phase, is a possible FTAAP that would embrace all APEC members. This initiative has been actively promoted by the APEC Business Advisory Council (ABAC) since 2004. The FTAAP has been discussed among APEC members as a catalyst to spur the revival of the Doha Round or as “Plan B” to restart of the process of liberalization if the WTO negotiations falter.¹⁴

¹³ For a descriptive picture, see figure 1.

¹⁴ For more details, see Bergsten (2007). At the summit meeting in Sydney in September 2007, the APEC leaders endorsed steps to enhance coordination on free trade agreements and to explore an FTAAP with further studies, even though Japan and China seemed skeptical of the FTAAP concept. For details, see *Inside US Trade*, September 14, 2007.

Gravity Model Estimates¹⁵

Model Mechanics

With the proliferation of preferential trading arrangements, the gravity model has been widely used to analyze their consequences.¹⁶ The basic gravity model evaluates thousands of one-way or two-way bilateral merchandise trade flows, measured in a common currency (and adjusted for inflation), against the gravitational "mass" of core explanatory variables, such as distance and combined GDP. Additional explanatory variables are specified as well, and these are of greatest interest. The additional variables show how much one-way or two-way trade is enlarged or reduced from the quantity predicted by the basic core variables on account of institutional or policy features of the partners. For instance, trading partners that share a common language or currency, or have a free trade agreement, typically enjoy greater mutual trade.

To analyze customs unions and free trade agreements, a dichotomous (0, 1) explanatory variable – often called a “dummy” or indicator variable – is introduced on the right hand side of the regression equation to represent a preferential agreement. If the coefficient on the dummy variable is positive and significant, then the agreement is judged to expand two-way trade between the agreement members. Additional dummy variables are introduced to assess the effect of the agreement on a member country’s imports from and exports to a non-member country.¹⁷

Analytical Framework

Our gravity model results are initially used to summarize the effects of existing trade agreements

¹⁵ The gravity model analysis was carried out by Dean A. DeRosa.

¹⁶ For an introduction to gravity models applied to trade agreements see Greenaway and Milner (2002), Rose (2004), and Baldwin and Taglioni (2006). Our method follows the approach of Frankel (1997) and Choi and Schott (2001) using the general framework of the Rose (2004) gravity model with extensions from Rieder (2006) to assess the impact of a trade agreement on non-member countries.

¹⁷ The extent of trade expansion is usually measured in percentage terms. Given the log-linear specification of dummy variables in a gravity model regression equation, the impact of a free trade agreement on bilateral trade can be computed in percentage terms as $100 * [\exp(\mathbf{b}_{fta}) - 1.00]$. In this expression, \mathbf{b}_{fta} is the estimated coefficient for the dummy variable representing the presence of a free trade agreement, and $\exp(\mathbf{b}_{fta})$ is the value of the natural number e raised to the exponent \mathbf{b}_{fta} . For example, if the coefficient \mathbf{b}_{fta} is 0.33, then the value of $\exp(\mathbf{b}_{fta})$ is 1.39, and the percentage expansion in trade is estimated as $100 * [1.39 - 1.00]$, which equals 39 percent.

within the Asia-Pacific region. Following this, the results are used to extrapolate the future effects of possible new agreements within the region.¹⁸

Data Set

Our econometric results are based on bilateral trade flows worldwide from 1976 to 2005, at the 1-digit Standard International Trade Classification (SITC) level. This data set was compiled by DeRosa (2007) from the UN Comtrade database (using the World Integrated Trade Solution of the World Bank). Bilateral trade flows (either one-way or two-way), the dependent variable, are paired with several explanatory variables, shown in table 16. Year and country specific data for the core gravity variables, such as joint-GDP and distance, and secondary gravity variables, such as common language and common border, are taken from an extensive data set compiled by Rose (2004). Data for free trade agreements are based on historical notifications of the date the agreements entered into force and their contemporary participants.¹⁹ Following Rieder (2006) among others, we include “not in agreement” indicator variables alongside the “in agreement” indicator variables to determine the amount of trade diversion (if any) resulting from an agreement.

We round out our data set with information on FDI stocks compiled by DeRosa (2007) from data underlying the UNCTAD *World Investment Report*. FDI stock figures are considerably sparser than bilateral trade data, resulting in a much smaller data set, about 325,000 observations over 30 years rather than nearly 2 million observations for bilateral trade. FDI stock data is typically missing from smaller and less developed countries. Narrowing the data set in this way means that the resulting coefficients emphasize trade relations between larger and more advanced countries. However, there are payoffs: we can investigate the effect of FDI stocks on bilateral trade, and we can also investigate the effect of a trade agreement on bilateral FDI stocks.

Calculation Scheme

Gravity model studies often aggregate customs unions (CUs) and free trade agreements (FTAs)

¹⁸ “Future agreements” includes signed agreements which have not been ratified, agreements under negotiation, major agreements under consideration, and a possible FTAAP.

¹⁹ To illustrate, the NAFTA dummy for US-Mexican trade would not have a value of 1 until 1994.

into one, two or three types of agreements to assess the impact of different degrees of preference on bilateral trade.²⁰ However we go further and use individual dummy variables for nine prominent CUs and FTAs (or FTA types), both to identify differences between them and to better predict the effect of potential future FTAs based on the experience of existing FTAs. For example, we assume that the effect of a potential Japan-Korea trade deal is better predicted by using ASEAN Free Trade Area (AFTA) coefficients than by using a generic FTA coefficient that also reflects the experience of NAFTA and the EU. As mentioned, we distinguish nine prominent CUs and FTAs (or FTA types) in our regression analysis.²¹ This provides coefficients for an analysis of current and future trade agreements in the Asia-Pacific region and insight into actual and potential trade diversion effects.

Table 5 summarizes our organization of actual and potential trade agreements in the Asia-Pacific region. We differentiate between “prime partners”—larger countries—and their associates. FTAs are separated into agreements currently in force, signed but not ratified, under negotiation, major agreements under consideration, and a possible FTAAP. The last column indicates which coefficient from our regression analysis was used to calculate the effect of the FTA in a given row. The results are discussed in the next section.

Results for Bilateral Trade

We use our gravity model coefficient estimates (discussed later in this section) and our calculation scheme to estimate the impact on two-way trade of existing and potential FTAs. Another way of making such estimates is to use a computable general equilibrium (CGE) model. CGE models have the great advantage that they are built on consistent structural equations that describe economic activity in each economy. But CGE models are considerably more costly to

²⁰ See Hufbauer and Baldwin (2006) and Hufbauer and Burki (2006).

²¹ The distinct trade agreements are: European Union (EU), European Free Trade Area (EFTA), EU bilateral free trade agreements (EU FTAs), North American Free Trade Area (NAFTA), Southern Common Market (Mercosur), Chile, Mexico, Australia, and Singapore bilateral free trade agreements (CMAS FTAs—separately distinguished because these are truly free trade countries), ASEAN Free Trade Area (AFTA), South Asia Free Trade Agreement (SAFTA), and all other customs unions and free trade agreements.

construct and maintain than gravity models.²² Moreover “plain vanilla” CGE models usually generate very modest trade impact estimates since they ignore monopolistic competition, economies of scale, and any inducement to investment flowing from trade liberalization. When resources permit, we prefer to use both CGE and gravity models to estimate trade impacts. However, in this paper, we had resources only for gravity model analysis.

Table 6 shows average annual dollar trade, over the period 2001-2005, for selected Asian-Pacific countries and regions. These amounts serve as the base figures to calculate the percentage impacts displayed in tables 8, 10, and 12. Table 7 presents the estimated dollar impact of the distinct FTAs on the total trade of major countries and regions in the Asia-Pacific. The first column of table 7 (like tables 8 through 12) provides the estimated dollar or corresponding percentage impact to trade of agreements currently in force on a given country or region; the other six columns provide the predicted impacts of potential FTAs (based on the assumed correspondence between actual and potential FTAs provided in table 5).²³ Predicted impacts shown in table 7 are divided into aggregate trade between FTA partners (thus *excluding* any trade diversion effects),²⁴ exports to partners, and imports from partners.²⁵

Implementing the FTAAP, according to these results, would augment trade for most countries region by roughly 50 percent. This translates into an estimated increase in two-way merchandise trade for the United States of nearly \$1.2 trillion, an increase for China of nearly \$600 billion, and for Japan nearly \$900 billion. This agreement would increase two-way merchandise trade in the region as a whole by \$4.8 trillion. Of the major countries, the impact on China would be the smallest in percentage terms and the impact on Japan would be the largest.

²² The data set and statistical analysis underlying the gravity models results reported here cost approximately \$25,000. Constructing and maintaining a CGE model covering the same ground could cost \$200,000.

²³ The Japan-Chile FTA went into force on September 3rd, 2007. Table 5 reflects this fact but tables 7 through 16 do not.

²⁴ Trade diversion effects are discussed separately under the next subheading.

²⁵ The reader should be forewarned that a simple combination of the estimates in table 16 and the scheme in table 5 *cannot* be used to arrive at the impact calculations provided in tables 7 through 15. Computing the impact calculations requires far more information and resources than could reasonably accompany this paper.

Korea stands to gain significantly from bilateral FTAs even without the FTAAP. If the Korea-US FTA is ratified, it will increase global Korean two-way trade by an estimated \$70 billion (16 percent). Korea would gain a similar amount (\$63 billion) if the Japan-Korea FTA and the Korea-ASEAN FTA are both agreed to. In percentage terms, the United States stands to gain far less than its proposed partners in future US-ASEAN and US-Japan agreements; not surprising, the smaller party shows larger gains in percentage terms. However, our model estimates that the US-Japan agreement would increase two-way trade between the countries by \$300 billion, and the US-ASEAN agreement would increase US two-way trade by \$150 billion and ASEAN two-way trade (calculated as the sum of its members) by \$310 billion.²⁶

The one-way trade panels shown in table 7 (and the corresponding percentage impacts in table 8) indicate impacts of similar magnitude on total exports and on total imports for most of the countries and regions identified. The United States is the notable exception. Table 8 suggests that in every FTA classification the estimated percentage impact on US exports exceeds the estimated percentage impact on US imports. We point this out to ease fears – now widespread in the American political class – that the United States might create a web of FTAs that would asymmetrically increase US imports, more to the benefit of FTA partners than US producers.²⁷

Tables 9 through 12 show the estimated impact of FTAs on members' agriculture and manufactures trade – the two sectors which typically arouse the most political concern during the course of negotiations. According to these calculations, the FTAAP would increase agricultural trade by roughly 65 percent (\$260 billion) and manufactures trade by roughly 85 percent (\$5.2 trillion).²⁸ In percentage terms, the agreements currently in force are estimated to have increased

²⁶ The large difference between the two-way trade estimates for the US-ASEAN agreement (\$150 billion vs. \$310 billion) is caused by the predicted increase in trade *among* ASEAN members as a result of the agreement

²⁷ Our dollar estimates of the effect on one-way trade show a larger increase in imports, simply because the current US import base is much larger than the US export base.

²⁸ The estimated impact of the FTAAP on manufactures trade is larger than the estimated impact on total trade because we use coefficient estimates from different regressions in our calculations. As will be discussed later in this section we run separate gravity model regressions with total trade, trade in agriculture, and trade in manufactures as our dependent variables. Separate regressions allows for analysis of the most politically sensitive sectors (agriculture and manufacturing), but lead to estimated sector impacts that differ from our estimates for total trade.

manufactures trade more than agricultural trade, but by no more than 10 percentage points in any one country or region. The same pattern prevails for potential future agreements, but with larger differences between the two sectors. Since manufactures trade far exceeds agriculture trade in dollar value, a comparison of the effects of FTAs on the two sectors in dollar terms does not accurately reflect the exaggerated political sensitivity of agriculture. However, some of the more notable dollar effects in the sectors can be summarized as follows: a \$30 billion increase in US agriculture trade due to agreements currently in force; a predicted \$50 billion increase in agriculture trade among the potential members if ASEAN+3 is enacted; a \$500 billion increase in US manufactures trade due to agreements currently in force; and a \$1.3 trillion increase in manufactures trade among the potential members if ASEAN+3 is enacted.

Expressed in both dollar and percentage terms, export and import effects are similar for manufactures trade. But export and import effects are quite dissimilar in agriculture trade. For instance, the calculations suggest that a US-Japan agreement would increase US agriculture exports by roughly \$20 billion (35 percent) but US imports by only \$1 billion (1 percent).

Trade Diversion Estimates

Table 13 displays the estimated trade diversion effects on countries and regions by the various FTAs in our sample. Table 13 (along with tables 14 and 15) is structured much like the tables discussed under the preceding subheading, but there is an important difference. For any country or region the diversion effects displayed are those caused by *all* agreements under a column heading (e.g. “in force”) to which the country or region is *not* a party.²⁹ Diversion effects are displayed both for one-way trade flows (exports and imports separately) and for two-way trade flows. Moreover, positive and negative diversion effects are displayed separately as well as combined total of positive and negative effects.

Table 13 shows that, in the aggregate, there is no decline in any non-member country’s two-way merchandise trade on account of FTAs for which it is an “outsider”. Negative trade diversion is

²⁹ The FTAAP is not displayed in tables 13 through 15 because almost all countries in these tables would be members. Hence, diversion from the group as a whole would be trivial. Moreover, our tables do not report trade diversion that might be experienced by countries *outside* the Asia-Pacific area, e.g. the European Union.

present for several countries and regions, but is strongly outweighed by trade creation. Some of the notable estimates include a projected \$18 billion increase in Chinese two-way trade if a US-Japan FTA is enacted, and a projected \$260 billion increase in US two-way trade if ASEAN+3 is enacted.

We do not place a great deal of weight on the foregoing estimates, but we do believe that the available evidence refutes a common assumption that an FTA inevitably decreases trade between “outsiders” and “insiders”. For selected PTAs and particular products (notably agriculture, and textiles and clothing), trade diversion no doubt occurs on a substantial scale. When it occurs, it should be compensated under WTO principles -- though in practice that rarely happens. The overall pattern, however, is trade *creation* vis-à-vis “outsiders” rather than trade diversion.

Table 14 provides estimates of trade diversion in agriculture trade. According to these calculations, several Asia-Pacific countries and regions would be negatively impacted by FTAs with respect to their agricultural trade. Large differentials between preferential tariff rates and MFN rates, coupled with discriminatory favoritism of FTA-partners with respect to other barriers (e.g. TRQs and TBTs), may explain these results. Surprisingly, the United States would appear to be unscathed in agricultural trade by other FTAs in agriculture trade. In fact, non-US agreements currently in force are estimated to increase US two-way agriculture trade by some \$8 billion. Moreover, the ASEAN+3 FTA is projected to increase US two-way agriculture trade by \$7 billion if enacted. Other countries and regions are not so fortunate. Japan, for example, is estimated to have lost \$9 billion in two-way agriculture trade due to existing FTAs for which it is an “outsider”, and the US-ASEAN FTA, if enacted, is projected to cost Japan another \$4 billion in two-way agriculture trade.

Table 15 displays the estimated impacts of FTAs on the manufactures trade of non-members. The estimates are similar to those for total merchandise trade. This reflects the dominant role of manufactures in total merchandise trade. However, due to our separate analysis of total trade, agriculture trade, and manufacture trade, the magnitude of our estimates of the impact on non-FTA-members’ manufactures trade do not “add up” to our estimates of the impact on total trade. In fact, the estimated impact on manufactures trade often *exceeds* the estimated impact on total

trade. That anomaly simply reflects differing data sets for estimating the coefficients. The more important point is that our estimates of “trade diversion” vis-à-vis outsiders, in the realm of manufactures trade, all turn out to show either trade creation or very little impact.

Regression Coefficients for Bilateral Trade

Table 16 presents the regression coefficients calculated with two-way bilateral trade as the dependent variable. The results are as expected for the core variables: for example, greater distance reduces bilateral trade and a larger joint economy (joint GDP) enhances trade. Table 16 also presents regression coefficients for two-way bilateral agriculture and manufactures trade taken separately as dependent variables. These estimates are included to provide insight into the most contentious areas of trade politics. Large countries generally prize self-sufficiency in agriculture, and this may explain the finding that larger joint GDP is associated with *less* bilateral agriculture trade. Other core coefficients mostly follow the sign and magnitude of coefficient estimates for total bilateral trade.³⁰

We now turn to the coefficients that estimate the impact of FTAs on bilateral trade. The primary-FTA coefficients for two-way bilateral trade in all commodities (first column in table 16) generally indicate an increase (the exception is EFTA). Mercosur provides the largest estimated gain with a 120 percent increase and NAFTA is close behind with a 117 percent increase.

The estimated increase in two-way bilateral agricultural trade (second column in table 16) from participation in an FTA is substantial.³¹ For example, the stimulus to agricultural trade from AFTA is estimate to exceed 125 percent. For the EU it is 65 percent, which is far beyond the percentage effect on total bilateral trade, estimated at 31 percent. The impact on manufactures trade is small for the EU and the CMAS FTAs, but over 100 percent for NAFTA, Mercosur and

³⁰ A notable exception is found for the common country dummy variable. The model estimates that if two countries were formerly one their bilateral manufacturing trade will be approximately 250 percent higher, while both their agricultural trade and total bilateral trade will be lower.

³¹ The coefficient estimate for agricultural trade in SAFTA is negative in sign but not statistically different from zero. This reflects the tense relationship between Pakistan and India, the dominant economies in SAFTA. The effect of EFTA is also zero, probably reflecting the disjointed nature of membership in this arrangement.

AFTA.³²

Table 16 also displays coefficients that estimate the impact of each FTA (or FTA group) on “outsiders”, countries not members to the agreement. Two variables are used for this purpose, one showing the impact of exports from the FTA member to outsiders (FTA_x) and the other showing the impact on imports by the FTA member from outsiders (FTA_m).³³ Perhaps surprising to economists who have grown up on a diet of Vinerian trade diversion, or have spent long hours absorbing Bhagwati and Panagariya on the evils of FTAs,³⁴ the coefficients for only three agreements indicate diversion of total trade that is statistically different from zero at the one percent level.³⁵ The EFTA caused member’s imports from non-member countries to fall by 37 percent, the NAFTA caused member’s exports to non-member countries to fall by 12 percent, and the CMAS FTAs caused exports to non-members to fall by 7 percent.

Estimates of trade diversion for manufactures mimic the trade diversion effects for total trade. Only one agreement, SAPTA, shows significant trade diversion in manufactures that was not present for total trade.³⁶ On the other hand, estimates of trade diversion for agriculture are common: diversion appears in six of the nine FTA groupings. Only AFTA and Mercosur clearly show an absence of trade diversion in agriculture.³⁷ Trade diversion in agriculture is not surprising given the high degree of MFN protection prevalent in this sector. The largest estimate of agriculture trade diversion occurred in the EFTA, with an estimate of 50 percent fewer imports from “outsiders” than would have otherwise occurred. Again, this is not surprising given the very high agricultural protection characteristic of EFTA members (Switzerland, Iceland, and Norway). Agricultural trade diversion effects associated with the EU and the NAFTA are remarkably

³² As a reminder, the percentage impact of a dummy variable coefficient is found by $(e^{\text{coefficient}} - 1.00) * 100$.

³³ The coefficient estimates from these variables are the estimates used to make the trade diversion calculations discussed under the previous subheading.

³⁴ See Bhagwati and Panagariya (1996).

³⁵ The model estimates that EU membership caused external imports to decline by 2 percent; this effect is statistically different from zero with 95 percent confidence.

³⁶ The coefficient estimate of SAFTA member imports from non-members was negative, indicating trade diversion, but the effect was not statistically different from zero.

³⁷ The CMAS FTAs_x variable indicates trade diversion, but the effect is not statistically different from zero.

similar. These agreements caused members to reduce their agriculture exports to, and imports from, “outside” countries by roughly 13 percent.

To conclude this section: trade diversion *is* important for agriculture, but it is *not* important for total trade. The likely explanation is that FTA liberalization reduces the cost of manufacturing components, and boosts the productivity of manufacturing firms, thereby stimulating both exports to and imports from non-members. We would expect the same positive results in services trade, if sufficient bilateral data was available to estimate gravity model coefficients.

Table 16 also provides coefficients for joint FDI stocks as an explanatory variable. For this variable the coefficients represent implied elasticity values. According to the coefficients, a 1.0 percent increase in joint FDI stocks leads to an increase of 0.1 percent in two-way bilateral trade in all commodities. Differentiating by sector, the implied impact is an increase of 0.08 percent in agriculture trade; and an increase of 0.14 percent in manufactures trade. The greater sensitivity in manufactures is unsurprising given the importance of network investment and cross-supply of components and finished goods by multinational enterprises.

The Impact of FTAs on FDI

An important motivation for entering an FTA pact – particularly for the smaller and less developed member – is to attract foreign direct investment, not only from the larger partner but also from third countries. We have applied the gravity model framework to evaluate the success of this strategy.³⁸

Table 17 shows the coefficient estimates for the core gravity variables, using the inward FDI stock from the bilateral partner (either an FTA member or an outsider) as the primary dependent variable. The sign and magnitude of the core coefficients are similar to estimates with bilateral trade as the dependent variable, with a few notable exceptions. If two countries were formerly one country, the inward FDI stock in each country is close to 800 percent higher than otherwise; by contrast, the trade model estimates that two-way trade would be 18 percent lower. A common

³⁸ So far as we are aware, the gravity model was first applied to evaluate the FDI attraction strategy in a study published by the Australian Productivity Commission by Adams et al. (2003). The method used here tracks the APC method.

language brings about 150 percent higher FDI stocks but only 7 percent more trade. Table 17 also provides estimates of the impact of total two-way trade and the existence of an FTA on FDI stocks. Those coefficients are of greatest interest.

The first point to note is that trade is the mother of inward direct investment, with an elasticity estimate of 0.52. In other words, when a country increases its trade with the world by 10 percent, its inward FDI stock also increases by 5 percent. Intuition might suggest that the primary FTA coefficients would uniformly indicate larger FDI stocks from the bilateral partner when an FTA is in place. While this is true for several agreements (e.g. EU, Mercosur, and AFTA), surprisingly some FTA coefficients indicate a negative impact on the bilateral FDI stock. Most noteworthy, the CUSFTA coefficient suggests a sharp reduction in the bilateral FDI stock between Canada and the United States.³⁹ We attribute this to two factors. First, the growth of trade often leads the growth of FDI. As table 17 shows, the elasticity of inward FDI stocks with respect to joint trade with all partners is very high, namely 0.52. A big FTA, such as CUSFTA, substantially and quickly increases the trade of each member. It may take a while for the inward FDI stock of each member to catch up. Hence the primary FDI coefficient may be negative, given the new and higher level of trade. Second, there could have been substantial investment in both directions between the two partners long before they formed a FTA, simply to “jump” the tariff wall. Very likely this was the case between the United State and Canada in the 1960s, 1970s and 1980s. That particular motivation came to an end once the CUSFTA entered into force in 1989. Since the agreement assures firms based in either country that they will have unfettered access to markets across the border, CUSFTA may have led to disinvestment in small and inefficient “branch plants”.

In the Mexican case, the NAFTA coefficient is also negative, but statistically insignificant.⁴⁰ Of more importance to Mexico, the FDI_m coefficient attached to NAFTA is strongly positive – reflecting the spur that NAFTA provided to European and Asian investment stakes in Mexico.

³⁹ For a longer discussion of Canada’s poor performance in attracting FDI, see Mintz and Tarasov (2007).

⁴⁰ The primary coefficient for SAFTA is also negative – attributable to strained relations between India and Pakistan. The primary coefficient for EFTA is zero, not surprising given the disjointed membership and that Switzerland is heavily invested in the European Union.

The gravity model can also be adapted to indicate the effect that an FTA has on a country's outward FDI to a non-member (FTA_x) simply by using outward investment to the partner country as the dependent variable. Combining the various results tabulated in table 17, it appears that membership in the EU increases FDI stocks between two member countries by 62 percent, as shown by the primary EU variable. According to the same model, EU membership also increases inward FDI from non-members by 27 percent (the EU_m term). Finally, outward FDI from an EU member to non-members increases by 21 percent (the EU_x term).⁴¹ Overall, some 18 of the FTA_x and FTA_m coefficients are statistically significant (at the 90 percent or better level). Of these 8 are negative. In some cases that might reflect the tendency of total trade to expand faster than FDI stocks in the wake of a substantial free trade agreement. Nevertheless, the negative coefficients point to possible investment diversion -- a matter that deserves further investigation.⁴²

⁴¹ None of these figures reflects the impetus given by the EU to FDI through the conduit of expanded trade, both internally and externally.

⁴² Instrumental variable techniques might be used to sort out the causality from trade to inward FDI stock, and vice versa. We did not attempt such research for this paper.

Policy Implications

The burst of activity detailed in the previous sections of this paper will likely continue, and could well accelerate in the aftermath of meager results from the Doha Round. In this section, we examine how regional trade agreements in the Asia-Pacific could be better designed and implemented to complement the multilateral trading system. We start with basic observations on the diverse types of agreements already in force or under construction. We then examine options for “multilateralizing” Asia-Pacific regionalism both by using WTO rules to shape or discipline RTAs, and by constructing RTAs that limit discrimination and promote multilateral “building blocks.”

Asian *versus* American Regionalism

Before analyzing whether Asia-Pacific regionalism can be “multilateralized”, it is important to note that there is no such thing as a single Asia-Pacific model of integration. How Asian countries “do” trade agreements is substantially different than the US or EU model, and attempts to harmonize them—primarily in the APEC context—have not progressed very far (as discussed later).

Compared to the self-professed “gold standard” FTA model pursued by the United States, intra-Asian pacts tend toward political commitments more than legal obligations, and foresee a longer time horizon for the integration process. East Asian trade pacts also differ markedly in terms of coverage and participation. These temporal and substantive differences merit elaboration.

First, East Asian initiatives have an aspirational quality and the time horizon is measured in decades -- look at the drawn out process of the ASEAN FTA (AFTA), or the “vision” of free trade projected in the Bogor Declaration of APEC; by contrast, US initiatives are more concrete and focus on near to medium term results. The “Asian” approach to integration is incrementalist: building consensus takes time; similarly, adjusting to new competition requires moderation to buffer political regimes from the backlash of those left behind. Asian-style regionalism *follows* the evolution of trade and investment in the marketplace and *pauses* to accommodate political responses to the adjustment process. It reflects an historical perspective that twenty years is not

particularly long. This measured tempo now clashes with the commercial reality of a rapidly growing China and the near-term consequences for trade and investment in the region.

Second, compared to the comprehensive scope and legal detail of provisions contained in FTAs that the United States has negotiated, most of the Chinese and ASEAN pacts have much more limited coverage and are replete with exceptions. Japan's Economic Partnership Agreements (EPAs) cover a broader range of economic activities but tread softly on agricultural reforms, on services, and on domestic regulatory issues. In large measure, East Asian pacts ratify the *status quo* and, in some sense, codify the integrated production networks already operating in the region – networks that are linked by expanding flows of intra-regional trade and investment. In other words, regional integration is evident in the marketplace, and government pacts essentially represent a catch-up effort, both to acknowledge that fact and facilitate its further evolution.

However, there is an important common thread to the fabric of Asia-Pacific regionalism. In all cases, the trade initiatives are driven by a combination of economic and political considerations, just as APEC was at its founding almost 20 years ago. In that era, as today, many countries pursued Asia-Pacific accords to keep the United States politically, economically, and militarily engaged in East Asia. That was the core objective of APEC in 1989; it is still central to the broader initiatives that are under discussion including the long-term trade initiatives put forward at the APEC meeting in Australia in September 2007, ranging from ASEAN-plus accords to the US trans-oceanic proposal for a Free Trade Area of the Asia Pacific (FTAAP). It is also a key reason why the Bush Administration has advocated an FTAAP, particularly at a time when the future trends of US trade policy are in doubt both because new leaders have taken control of Congress and because a new president will occupy the White House in January 2009.

Adapting Asia-Pacific RTAs to the WTO

Regional integration arrangements were born and raised in a multilateral world. Some of them have loosely complied with the lax disciplines of the GATT/WTO system; most are still in their formative years—seemingly obedient but potentially rebellious to multilateralism. This section examines incentives or disciplines that have been or could be incorporated into the WTO to reinforce the consistency and compatibility of RTAs with the WTO, and specific provisions that

might “multilateralize” Asia-Pacific RTAs.⁴³

We first examine what has been done to “enhance” the WTO requirements for an RTA to qualify for the WTO’s special exemption from the most-favored-nation (MFN) principle. We then turn to proposals to “improve” the construction of RTAs so that they complement and reinforce the multilateral trading system.

Enhancing WTO Requirements for RTAs

The WTO has flexible disciplines, contained in GATT Article XXIV and GATS Article V, that allow RTAs to derogate from the system’s fundamental MFN principle. The language of those articles is vague and their application has been prone to abuse. RTAs have included important sectoral exceptions (e.g., agriculture) and embody rules of origin that effectively discriminate against third country trade and investment. Countries have consistently bent the multilateral disciplines without fear of significant GATT/WTO surveillance, much less enforcement via dispute settlement cases. Only one RTA has passed muster and affirmatively deemed to be GATT/WTO consistent; none have been condemned as GATT/WTO illegal. Most inhabit a legal limbo in which WTO member countries “reserve their rights” to return to the matter some time in the future — though no member has ever exercised that right.

A vast literature explores these problems and offers numerous creative but ultimately impractical ideas for fixing them. The definitions and standards by which RTAs are judged against WTO norms are deliberately fuzzy and are likely to remain so. To date, efforts to negotiate new multilateral disciplines on RTAs have yielded modest and mostly hortatory results.

The Uruguay Round included an “Understanding on the Interpretation of Article XXIV of the General Agreement on Tariffs and Trade 1994” which attempted *inter alia* to clarify key obligations regarding the transition period for phasing in RTA liberalization (“should exceed 10 years only in exceptional cases”) and the use of weighted average applied tariffs to determine whether the RTA raised barriers to third-country trade. In addition, the Uruguay Round created a

⁴³ Note that some of these provisions could involve “harmonization” of RTA texts. Whether such harmonization promotes multilateralism will depend on the standard to which the texts converge.

new Trade Policy Review Mechanism to monitor the trade policies of member countries, including “their impact on the functioning of the multilateral trading system.” However, with the exception of the world’s largest RTA, the European Union, the policies and practices of RTAs generally have not been the subject of periodic TPRM reviews. In any event, WTO members firmly stated that the TPRM was not “intended to serve as a basis for the enforcement of specific obligations under the Agreements or for dispute settlement procedures, or to impose new policy commitments on Members” (Annex 3 of the Marrakesh Agreement).⁴⁴

In the Doha Round, rules on RTAs again have been vetted, pursuant to paragraph 29 of the Doha Ministerial Declaration of November 2001, with the aim of “clarifying and improving disciplines and procedures under existing WTO provisions applying to regional trade agreements.” In this area, the Doha negotiations have surprisingly produced some results. In December 2006, the WTO General Council established a new “Transparency Mechanism for Regional Trade Agreements” that is being implemented on a provisional basis pending completion of the comprehensive Doha Round accords. This approach follows the precedent of the TPRM, which was authorized and applied provisionally, after the Montreal mid-term review in 1988, until the Uruguay Round accords were signed in 1994.

Will the transparency mechanism help promote the consistency of future RTAs (and changes in existing RTAs) with the WTO disciplines of GATT Article XXIV and GATS Article V? As drafted, the new obligations are constructive and marginally useful. Their main objective is to get countries to notify the WTO when they are negotiating RTAs and then supplement that notice with details about the pact once it is signed (para. 1). Article XXIV already obligates members to notify RTAs; the provisional accord seeks to speed up the process and specifies that notifications generally should be made “no later than” the time of ratification and “before the application of preferential treatment between the parties” (para. 3). Either the Committee on Regional Trade Agreements or the Committee on Trade and Development (for pacts between developing countries) will then review the submissions based on a “factual presentation of the RTA” prepared by the WTO Secretariat, normally within one year of the notification date. However, the mechanism forbids the Secretariat report from making “any value judgement” and precludes the

⁴⁴ For a detailed assessment of the TPRM, see Keasing (1998).

use of the report in any dispute settlement procedure (paras. 9 and 10).

Importantly, the new mechanism also requires that members of existing RTAs notify “changes affecting the implementation of an RTA” as soon as possible after they occur, and submit a final report on the completion of the implementation of the pact (paras. 14 and 15). These submissions will alert WTO members when RTA preferences, or RTA provisions such as rules of origin, are modified, and afford members the opportunity for additional consultations on the RTA (para. 16).⁴⁵

The biggest problem with the new mechanism is not the notification procedures but rather the notification requirements. The data required relate primarily to tariffs on goods and other traditional border measures (including quotas and safeguard measures). For services, RTA members are supposed to submit general economic statistics; however regulatory policies and practices that confer preferences on firms from RTA member countries are not included. “Relevant statistics on foreign direct investment (FDI)” are required only for services—odd, since many developing countries complain that a major problem caused by RTAs is investment diversion in manufacturing!

In sum, despite the new transparency mechanism, WTO members continue to favor their traditional “don’t ask too much, don’t tell too much” policy toward RTAs. Moreover, they are adamant that Secretariat reports must not lay the groundwork for WTO disputes that would challenge RTA practices. These limits reflect in large measure the old “glass house syndrome”: countries are reticent to “throw stones” at others for fear that their own agreements will come under scrutiny. The malady is ubiquitous in the WTO, since almost every member belongs to one or several regional arrangements.

Making RTAs more WTO Friendly

Can incentives to reinforce multilateralism be built into Asia-Pacific pacts? To answer this question, we examine efforts to harmonize policies through the development of APEC guidelines

⁴⁵ Schott (1996, 22) noted that WTO surveillance of RTAs fails “to track regional pacts after they are signed, when transition provisions or rule changes can significantly affect market access for third-country suppliers.” New procedures should help remedy that problem.

on RTA “best practices.” We then address rule-making provisions (e.g., accession clauses; rules of origin) that seek to broaden access to preferential treatment until the regional pact approximates the MFN principle of the multilateral trading system.

APEC Guidelines for Bilateral Arrangements.

The Asia-Pacific region is home to a large and growing number of RTAs. Almost all countries in the region also are members of the WTO and thus obligated to construct and implement their RTAs in compliance with WTO rules. Given the diverse nature of their pacts, APEC members have sought to develop guidelines for rights and obligations covered by RTAs that would encourage the harmonization of regional pacts toward a high standard and thus promote the achievement of the Bogor vision of free trade and investment in the Asia-Pacific region (Scollay 2006).

At the APEC Ministerial Meeting in Santiago, Chile in 2004, member countries agreed to develop a set of non-binding “best practices” guidelines for FTAs. The Best Practices guidelines should contain the following characteristics (APEC 2004):

- Consistency with APEC principles
- Exceed WTO commitments
- Transparency
- Dispute Settlement Mechanism
- Cooperation (i.e. information sharing)
- Open to Accession
- Consistency with WTO regulations
- Comprehensiveness (tariffs and non-tariffs)
- Trade Facilitation (unified regulations)
- Simple Rules of Origin
- Sustainable Development
- Periodic Reviews

Despite concerns that such vague objectives would foster hortatory declarations, the APEC Committee on Trade and Investment (CTI), which is responsible for drafting the specific guidelines, has produced several model chapters (trade in goods, technical barriers to trade, transparency, government procurement, cooperation, dispute settlement, trade facilitation, rules of origin, sanitary and phytosanitary standards, and E-commerce) and several more are being considered or drafted (CTI 2006, 2007b). In many respects these guidelines follow precedents set in corresponding chapters of the US FTAs with Chile and Australia.

The Best Practices guidelines fall under an APEC mandate to create “high-quality RTAs”. There is no agreed definition for high-quality RTAs, but it has been suggested that a high-quality RTA should exhibit the following qualities (Park 2005):

- Promote market access, and the economic development of members, without an adverse impact on non-members. In other words, be consistent with the objectives of GATT Article XXIV and GATS Article V.
- Contain “WTO-plus” chapters, including, but not limited to, investment, labor, and environmental standards.
- Provide for accession by future members.
- Time implementation to coincide with deadlines for the Bogor Goals.

A draft for a model FTA chapter on investment has already been circulated for review by APEC countries, and work on drafts for sensitive chapters covering the environment, competition policy, and temporary entry of business persons has already begun (CTI 2007a). Unfortunately, the initial reactions to the investment draft echo the fractious debates that ended up in past failures to negotiate investment agreements, both in the OECD and the WTO.

To date, the guidelines have not had a perceptible impact on trade negotiations. National initiatives continue to follow national templates. Attempts to harmonize existing pacts have failed to bridge the basic divide over the appropriate standard. APEC efforts to craft model provisions for WTO-plus issues have fallen afoul of the same controversies that have limited progress within the WTO. The most positive impact may be educational: the “best practices” exercise may help government officials learn lessons from the experience of other countries in their respective RTA ventures. But it remains an open question whether those lessons will support the process of multilateralizing regionalism.

Open-ended Accession Clauses

Following the NAFTA model established in the early 1990s, RTAs in the Asia-Pacific region have sometimes included accession clauses that supposedly afford other countries an opportunity

to join the agreement. None of them have ever been utilized. Why?

From an academic perspective, the ability to expand the customs territory of an RTA by allowing new members to sign onto existing obligations seems desirable; the RTA rules would then cover a larger market and the implicit protection afforded by some RTA provisions, especially rules of origin, would be diluted. In practice, however, the process is far from automatic. Member countries almost always resist gratuitous entry by “outsiders,” mainly because that would reduce the implicit protection provided by the original deal. The “guts” of any accession, whether to an RTA or to the WTO, is the negotiation of a national schedule for implementing reforms, coupled with specific and agreed exceptions to the liberalization timetable. No country has ever totally committed to free trade and investment in an RTA—not even Hong Kong thanks to its restrictions on trade and investment in the service sector! So the concept of “open regionalism”—long bruited in the Asia-Pacific context—is really an ideal end point rather than a pathway to achieving the Bogor Goal of free trade and investment. Strong resistance to adoption of the “cumulation” concept for meeting rules of origin tests in US FTAs illustrates the lack of political will to expand RTAs without mercantilist “payment” through reciprocal concessions.

Rules of Origin

Rules of origin were aptly called “tools of discrimination” by a senior US Treasury official during the NAFTA negotiations. While necessary to determine which goods qualify for RTA preferences, they inherently limit the application of the preferences to a targeted class of products based on their specific requirements. To coin a phrase, “the devil *is* the details”! The more complex and industry-specific the origin requirements, the more the rules will have a chilling effect on trade, in large part by raising the cost of compliance. Indeed, in the US-Canada context, some firms have decided that the additional transactions costs would be higher than the MFN tariff and thus have not applied for the FTA preferences.

As we have argued elsewhere, the best solution to discriminatory origin rules on merchandise trade is to eliminate the source of the problem: the margin of preference between MFN tariffs and the RTA rate. Even though the United States initially proposed the elimination of industrial tariffs in the Doha Round, few countries were willing to accept the challenge (and US officials

no longer revive that proposal). As a half-way measure to that desirable result, we have suggested in the NAFTA context that the North American partners should harmonize, over a short period of time, the tariffs that each member applies to third countries on an MFN basis. If that happens, then rules of origin are no longer necessary to avert “trade deflection.”⁴⁶ The key to this approach, however, is that the standard of convergence should be the lowest rate applied by any of the RTA members. Such an approach might be achieved in the NAFTA context, and perhaps in other regional groupings as well. It could be a problem, however, in some APEC countries that have large gaps between their own WTO tariff bindings and their applied tariff rates on the one hand, and the WTO tariff bindings and applied rates of their RTA partners on the other.

Perhaps the best news on rules of origin is that, for most services (apart from Mode 4 -- movement of natural persons), the negotiated rules do *not* discriminate strongly against third country suppliers. Fink and Molinuevo (2007) provide a comprehensive account of East Asian trade agreements in services. The happy result just summarized flows from the general absence of tracing mechanisms that seek to identify the ultimate owners of service firms. Thus, a service firm with “outside” equity participation, based in one RTA partner, generally enjoys preferential access to the scheduled service market of another RTA partner. Moreover, in many cases, RTA provisions contain an MFN clause for access to service markets. Thus, if an RTA member subsequently concedes better access terms to a third country, the original RTA partner will enjoy the same concession. Since services represent a growing share of world trade, these provisions -- which clearly facilitate multilateral trade and investment -- will assume greater importance in the years ahead.

Asia-Pacific Regionalism: Prospects going forward

“Competitive liberalization” is thriving in East Asia, propelled by a strengthening of regional integration among the members of the Association of Southeast Asian Nations (ASEAN) and the new wave of Chinese initiatives with other Asian countries, following China’s accession to the

⁴⁶ To be sure, even with a harmonized external MFN tariff, member governments would be faced with pressure to maintain rules of origin so as to discourage the purchase of inputs from “outside” suppliers. However, the call for maintaining rules of origin would then be exposed for what it is -- not a legitimate response to trade deflection but rather pure protection.

World Trade Organization (WTO) in 2001. China's trade talks with the ASEAN group and India have prompted Japan and Korea to emulate the Chinese initiatives. Like Japan and Korea, China also has concluded a FTA with Chile and is pursuing trade initiatives (though not "free trade" agreements) in other regions. Its policies are designed to enhance security of access to raw materials and to diversify its rapidly growing export markets.

APEC is now considering broader integration initiatives, including the FTAAP. The September 2007 meeting of APEC leaders in Australia discussed what might be called competitive liberalization studies, assessing the political and economic merits of variant trading agreements, ranging from ASEAN+3 to a possible FTAAP. The previous APEC meeting already delivered a mandate to begin looking into these alternatives, and the process of research and development could well accelerate if the Doha Round talks stall or lead to shallow results.

The APEC study process will inevitably uncover widely differing ambitions and scope among the Asia-Pacific agreements profiled in table 5. However, all the models suggested – ASEAN+1, ASEAN+3, ASEAN+6, or even FTAAP – have at their heart the ASEAN FTA.⁴⁷ Yet even today AFTA is not an integrated unit. An inevitable conclusion is that further integration will take time, and market forces will more often lead policy initiatives than the other way around.

Evolution of integration in East Asia and the Asia-Pacific region will depend importantly on what happens in the WTO and the outcome of the Doha Round. If the WTO process collapses, or delivers meager results, it will have important implications for regional economic integration. On balance, either a WTO collapse or shallow outcome will likely spur the creation of new pacts in East Asia and the Asia-Pacific region.

The big question mark is whether the WTO outcome and the competitive liberalization spirit will

⁴⁷ ASEAN+1 is really three individual ASEAN agreements with China, Japan, and Korea. ASEAN+3 is a possible free trade area encompassing ASEAN, China, Japan, and Korea. ASEAN+6 is a possible free trade area encompassing ASEAN, China, Japan, Korea, Australia, New Zealand and India. FTAAP is a possible free trade area among all the current members of APEC.

spawn a trilateral deal between China, Korea, and Japan. Such a pact is currently under study. Whether the results of that effort will pave the road to FTA negotiations remains to be seen. We are skeptical, since such studies often are commissioned simply to defer decisions on politically sensitive matters—much like the recent ASEAN decision with respect to the Japanese proposal for the ASEAN+6 initiative. But a Northeast Asian FTA would link three powerful manufacturing economies with substantial financial resources and all but ensure eventual expansion to the “ASEAN+3” East Asian free trade zone, since each Northeast Asian country is conducting parallel negotiations with ASEAN members.

None of these agreements include Taiwan, and in fact they all discriminate against Taiwan. The US-Korea FTA will likely cause significant trade diversion away from Taiwanese exports to both Korean and US exports. Future agreements that Japan might reach with Korea and the United States will do the same. That may not be a big economic problem for everyone else, but does raise important political questions. The FTAAP is the only option vetted to date that could accommodate the intractable Taiwan problem.

Will all this bilateral activity lead to the fulfillment of the original APEC vision of free trade and investment by 2020, agreed at Bogor in 1994? The APEC Business Advisory Council is not so sure and accordingly advocated a fresh look at the FTAAP option in a report to the APEC leaders when they met in Santiago, Chile, in November 2004. Not surprisingly, the official reaction was muted. No American or Japanese politician wants to talk about free trade with China—even as a long-term proposition. But events may propel reconsideration, particularly if the Doha Round goes into hibernation and subsequent efforts at trade liberalization are centered on bilateral FTAs. That outcome could easily create an atmosphere of commercial discrimination in the Asia-Pacific region which would make an FTAAP look quite attractive.

Conclusions

The process of economic integration in the Asia-Pacific region will proceed in an incremental fashion and will struggle with the task of melding trade arrangements that differ widely in terms of coverage and participation. Attempts to harmonize existing and prospective RTAs in the region risk a “least common denominator” approach that limits the scope of liberalization,

weakens the force of rules, and harbors numerous sector-specific and product-specific exemptions.

We are skeptical that sufficiently forceful WTO obligations will be adopted to shape the evolving regional framework in a multilateral direction. The new RTA transparency mechanism implemented on a provisional basis by WTO members in December 2006 represents a step forward but ultimately will have minimal effect because of its weak notification requirements.

Will Asia-Pacific countries themselves adopt a set of rules that help make their RTAs more WTO friendly? Judging by the evidence to date, such discipline is easier to discuss than to legislate. Model provisions designed to harmonize future RTA initiatives proffer detailed guidance concerning tertiary issues but voice only vague exhortations on the key substantive issues. Accession clauses are rarely invoked, because they do not meet the practical test of reciprocal bargaining. Cumulating content requirements across RTAs with a common hub runs afoul of political lobbies that insist on restrictive origin rules in each pact. Fortunately, however, RTA service provisions generally do not discriminate strongly against “outsiders,” and in this sense the agreements contain a welcome “pro-multilateral” tilt. Perhaps the best solution for multilateralising regionalism in the realm of merchandise trade still remains viable: to reduce substantially the margin of preference between the RTA tariff schedules and the most-favored nation tariff rates. Harmonizing the MFN tariffs of each member down to the level of the lowest rate applied by any of the RTA members would both make the RTA more WTO friendly, eviscerate the “trade deflection” argument for restrictive rules of origin, and strengthen the drive toward multilateral trade liberalization.

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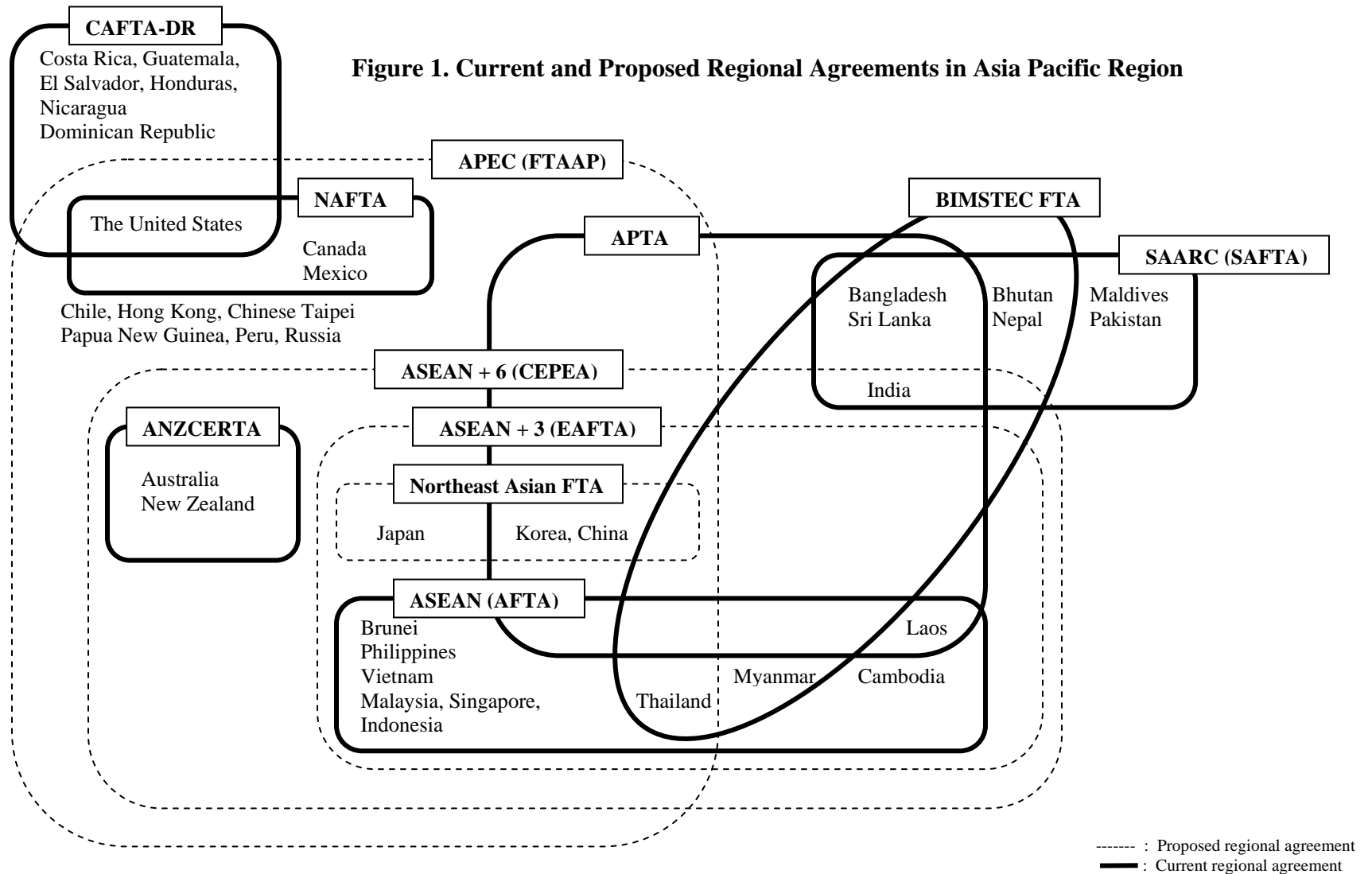
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Figure 1. Current and Proposed Regional Agreements in Asia Pacific Region



ANZCERTA : Australia and New Zealand Closer Economic Relations Trade Agreement
 APEC : Asia Pacific Economic Cooperation
 ASEAN : Association of Southeast Asian Nations
 CAFTA-DR : Central America Free Trade Agreement and The Dominican Republic
 EAFTA : East Asia Free Trade Area
 NAFTA : North American Free Trade Agreement
 SAFTA : South Asian Free Trade Area

AFTA : ASEAN Free Trade Area
 APTA : Asia Pacific Trade Agreement (Known as Bangkok Agreement)
 BIMSTEC : Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation
 CEPEA : Comprehensive Economic Partnership in East Asia
 FTAAP : Free Trade Area of the Asia-Pacific
 SAARC : South Asian Association for Regional Cooperation

Table 1. Concluded bilateral and plurilateral trade agreements^a

	Africa ^b	Americas	East and South Asia	Oceania	Europe	Former Soviet Union	Mideast ^b	World
XXth Century	52	111	17	8	156	95	54	374
1913-54	4	2	0	0	3	0	1	10
1955-74	19	16	3	3	29	1	9	57
1975-89	14	45	7	4	21	1	12	78
1990-99	15	48	7	1	103	93	32	229
XXIst Century								
2000-07	24	55	37	6	76	24	38	185
Memorandum								
Total	76	166	54	14	232	119	92	559

a. Agreements are classified into regions of its parties. Agreements involving parties from different regions are recorded for each region. The world total figure corrects the double counting implicit in the regional values. Reshaped agreements

b. Agreements of North African Countries from Morocco to Egypt are counted in both regions.

Source: The underlying data is available from the World Trade Institute, Bern, Switzerland.

Table 2. Percent of two-way merchandise trade covered by FTAs under various scenarios^a

Dominant Country	<u>Scenario 1</u> Covered by FTAs in Force		<u>Scenario 2</u> Covered by FTAs in Force, Signed and Under Negotiation		<u>Scenario 3</u> Covered by FTAs in Force, Signed, Under Negotiation and Under Consideration ^b		
	Dominant Country	Partner Countries	Dominant Country	Partner Countries	Dominant Country	Partner Countries	
						Only with Dominant Country	With all parties in the FTAAP
United States	32.9	46.7	39.4	35.0	61.9	45.2	84.4
China	19.3	17.9	21.4	16.8	62.5	17.8	60.8
Japan	6.1	5.7	21.8	11.1	66.1	13.9	57.0
ASEAN ^c	19.0	8.4	41.4	10.7	67.0	11.6	60.5
Korea	10.4	6.0	40.1	3.6	64.8	6.1	51.6
India	6.3	3.1	11.3	1.2	40.1	1.5	49.7

Notes:

a. Based on Appendix Table A.1. When a dominant country has an FTA with a partner country both bilaterally and plurilaterally, the trade share of a partner country is taken into account only one time.

b. We include a possible FTAAP. We consider the FTAAP not as an independent partner but as a group of plurilateral partners. In the denominator, total FTAAP trade with the world includes intra FTAAP trade among partner countries.

c. We consider ASEAN as one dominant partner and do not include intra ASEAN trade in total ASEAN trade with the world.

Table 3. Percent of two-way FDI stocks covered by agreements under various scenarios ^a

Dominant Country	<u>Scenario 1</u> Covered by FTAs in Force		<u>Scenario 2</u> Covered by FTAs in Force, Signed and Under Negotiation		<u>Scenario 3</u> Covered by FTAs in Force, Signed, Under Negotiation and Under Consideration ^b	
	Dominant Country	Partner Countries	Dominant Country	Partner Countries	Dominant Country	Partner Countries
United States	20.0	57.0	22.2	53.6	31.3	39.0
China	53.5	23.1	53.6	19.1	73.5	6.9
Japan	5.0	7.1	11.7	11.0	69.5	6.7
ASEAN^c	15.8	7.1	32.6	6.5	85.1	4.2
Korea	5.6	1.6	50.3	0.9	68.0	1.7
India	6.4	0.4	22.3	0.4	81.5	0.2

Notes:

a. Based on Appendix Table A.2. When a dominant country has a FTA with a partner country both bilaterally and plurilaterally, the FDI stock of a partner country is taken into account only one time.

b. We include a possible FTAAP.

c. We consider ASEAN as one dominant partner and do not include intra ASEAN FDI stocks.

Table 4. Comparison between current and potential overlapping agreements: dominant partner A's two-way merchandise trade with countries that currently or potentially have FTAs with dominant partner B^a (percent of overlapping trade)

Dominant Partner A \ Dominant Partner B	US		China		Japan		ASEAN ^b		Korea		India	
	<i>Current^c</i>	<i>Potential^d</i>	<i>Current^c</i>	<i>Potential^d</i>	<i>Current^c</i>	<i>Potential^d</i>	<i>Current^c</i>	<i>Potential^d</i>	<i>Current^c</i>	<i>Potential^d</i>	<i>Current^c</i>	<i>Potential^d</i>
US			1.9	61.2	13.0	61.2	0.0	61.2	1.9	61.2	1.4	61.2
China	2.8	61.2			5.0	62.5	9.2	61.2	9.7	62.5	2.3	62.5
Japan	3.6	66.1	5.3	66.7			0.0	66.1	5.3	66.7	2.3	66.7
ASEAN^b	0.0	67.0	13.0	67.0	0.0	67.0			6.0	67.0	0.0	67.0
Korea	2.9	64.8	10.4	66.0	3.0	66.0	9.8	64.8			2.3	66.0
India	3.6	37.3	3.6	37.3	3.6	37.3	0.0	37.3	3.6	37.3		

Notes:

a. Based on Appendix Table A.1. Overlapping agreements include agreements between dominant partners themselves.

b. We consider ASEAN as one dominant partner and do not include the intra ASEAN trade share.

c. *Current* indicates percent of overlapped trade via FTAs currently in force.

d. *Potential* indicates percent of overlapped trade via FTAs in force plus other agreements in force, signed, under negotiation and under consideration (including a possible FTAAP).

Table 5. Scheme for trade impact calculations for Asia-Pacific FTAs in force, signed, and under negotiation versus major FTAs under consideration and a possible FTAAP

Prime Partner	Status	Year	Partner	FTA Name	Gravity Coefficients Assumed
Australia	In force	1977	PNG	PATCRA	CMAS
Australia	In force	1983	New Zealand	ANZCERTA	CMAS
ASEAN	In force	1992	ASEAN	AFTA	AFTA
US	In force	1994	NAFTA	NAFTA	NAFTA
Chile	In force	1998	Peru	Chile-Peru	CMAS
Chile	In force	1999	Mexico	Chile-Mexico	CMAS
Mexico	In force	1995	Peru	Mexico-Peru	CMAS
Canada	In force	1997	Chile	Canada-Chile	CMAS
New Zealand	In force	2001	Singapore	NZ-Singapore	CMAS
Australia	In force	2002	Singapore	Australia-Singapore	CMAS
Chile	In force	2004	Korea	Chile-Korea	CMAS
Australia	In force	2005	Thailand	Australia-Thailand	CMAS
New Zealand	In force	2005	Thailand	NZ-Thailand	CMAS
Korea	In force	2006	Singapore	Korea-Singapore	CMAS
US	In force	2004	Singapore	US-Singapore	NAFTA
US	In force	2004	Chile	US-Chile	NAFTA
US	In force	2005	Australia	US-Australia	NAFTA
China	In force	2004	Hong Kong	China-Hong Kong	AFTA
China	In force	2005	ASEAN	China-ASEAN	AFTA
China	In force	2006	Chile	China-Chile	CMAS
Japan	In force	2002	Singapore	Japan-Singapore	CMAS
Japan	In force	2005	Mexico	Japan-Mexico	CMAS
Japan	In force	2006	Malaysia	Japan-Malaysia	AFTA
Japan	In force	2006	Chile	Japan-Chile	CMAS
US	Signed	2006	Peru	US-Peru	NAFTA
US	Signed	2006	Colombia	US-Colombia	NAFTA
US	Signed	2006	Panama	US-Panama	NAFTA
US	Signed	2006	Korea	US-Korea	NAFTA
Japan	Signed	2005	Thailand	Japan-Thailand	AFTA
Japan	Signed	2007	Indonesia	Japan-Indonesia	AFTA
US	Under Neg	2004	Thailand	US-Thailand	NAFTA
US	Under Neg	2006	Malaysia	US-Malaysia	NAFTA
China	Under Neg	2004	Australia-NZ	China-CER	AFTA
China	Under Neg	2006	Singapore	China-Singapore	AFTA
Japan	Under Neg	2003	Korea	Japan-Korea	AFTA
Japan	Under Neg	2006	ASEAN	Japan-ASEAN	AFTA
Japan	Under Neg	2007	India	Japan-India	AFTA
ASEAN	Under Neg	2004	CER	ASEAN-CER	AFTA
ASEAN	Under Neg	2004	Korea	ASEAN-Korea	AFTA
US	Major Under Con	...	ASEAN	US-ASEAN	NAFTA
US	Major Under Con	...	Japan	US-Japan	NAFTA
ASEAN	Major Under Con	...	ASEAN+3	ASEAN+3	AFTA
FTAAP	Possible	...	FTAAP	FTAAP	NAFTA

Table 6. Average levels of merchandise trade in the Asia-Pacific region by commodity category, 2001-2005

(billions of US dollars at 2005 prices)

Region	All Traded Goods SITC 0 to 9	Food and Agriculture SITC 0, 1	Raw Materials SITC 2,4	Fuels SITC 3	Manufactures SITC 5 to 8	
Exports + Imports						
Asia-Pacific	US	2,286	118	67	211	1,816
	China	1,111	28	53	50	974
	Japan	994	50	34	95	798
	Korea	432	12	15	55	344
	APEC	7,944	393	316	774	6,275
Asia	ASEAN	988	51	45	118	755
	CER	215	31	24	30	122
	SAFTA	204	15	18	14	148
	Other Asia	904	35	28	115	703
Pacific	NAFTA	3,244	174	108	306	2,550
	Other America	466	75	48	76	260
Exports						
Asia-Pacific	US	842	57	40	22	709
	China	688	20	8	13	643
	Japan	567	3	6	3	548
	Korea	232	3	2	9	215
	APEC	3,934	188	160	284	3,212
Asia	ASEAN	535	30	31	60	403
	CER	105	25	22	21	32
	SAFTA	103	10	7	5	80
	Other Asia	432	9	15	88	305
Pacific	NAFTA	1,342	88	67	91	1,055
	Other America	268	60	41	52	110
Imports						
Asia-Pacific	US	1,443	61	28	189	1,108
	China	423	8	45	37	332
	Japan	426	48	28	92	250
	Korea	200	9	12	46	129
	APEC	4,010	205	156	490	3,063
Asia	ASEAN	453	21	13	58	352
	CER	110	6	2	9	89
	SAFTA	101	4	11	9	68
	Other Asia	471	26	13	27	398
Pacific	NAFTA	1,902	86	41	215	1,495
	Other America	198	15	7	24	150

Source: Peterson Institute trade and investment gravity model data set.

Table 7. Average annual impacts of selected FTAs in the Asia-Pacific region on total merchandise trade (SITC 0 through 9) by region and selected countries, 2001-2005 (billions of US dollars at 2005 prices)

Region	Selected Asia-Pacific FTAs Combined			Major FTAs under Consideration			Possible	
	In Force	Signed	Under Negotiation	US-ASEAN	US-Japan	ASEAN+3	FTAAP	
Exports + Imports								
Asia-Pacific	US	492	83	61	151	301	0	1,190
	China	147	0	19	0	0	174	598
	Japan	31	36	142	0	301	247	883
	Korea	2	71	63	0	0	94	245
	APEC	1,482	228	695	456	601	714	4,839
Asia	ASEAN	248	35	379	311	0	203	644
	CER	31	0	40	0	0	0	143
	SAFTA	0	0	5	0	0	0	0
	Other Asia	113	0	0	0	0	0	597
Pacific	NAFTA	906	83	61	151	301	0	1,698
	Other America	11	14	0	0	0	0	30
Exports								
Asia-Pacific	US	229	45	25	64	112	0	496
	China	121	0	13	0	0	95	377
	Japan	21	19	90	0	188	136	513
	Korea	1	36	30	0	0	45	132
	APEC	741	117	347	227	301	357	2,420
Asia	ASEAN	116	16	176	167	0	83	327
	CER	11	0	18	0	0	0	68
	SAFTA	0	0	3	0	0	0	0
	Other Asia	10	0	0	0	0	0	225
Pacific	NAFTA	458	45	25	64	112	0	763
	Other America	5	3	0	0	0	0	15
Imports								
Asia-Pacific	US	262	38	36	87	188	0	694
	China	26	0	6	0	0	79	222
	Japan	10	17	52	0	112	111	371
	Korea	1	35	33	0	0	49	113
	APEC	742	111	349	229	301	357	2,420
Asia	ASEAN	132	19	203	144	0	120	317
	CER	20	0	22	0	0	0	75
	SAFTA	0	0	2	0	0	0	0
	Other Asia	102	0	0	0	0	0	372
Pacific	NAFTA	448	38	36	87	188	0	935
	Other America	6	10	0	0	0	0	15

Source: Calculated from regression estimates displayed in table 16, and applied to all observations in the gravity model data set on intra-bloc trade by 1-digit categories over 2001-2005.

Table 8. Average annual percentage impacts of selected FTAs in the Asia-Pacific region on total merchandise trade (SITC 0 through 9) by region and selected countries, 2001-2005 (percent)

Region	Selected Asia-Pacific FTAs Combined			Major FTAs under Consideration			Possible	
	In Force	Signed	Under Negotiation	US-ASEAN	US-Japan	ASEAN+3	FTAAP	
Exports + Imports								
Asia-Pacific	US	21.5	3.6	2.7	6.6	13.2	0.0	52.1
	China	13.2	0.0	1.7	0.0	0.0	15.7	53.9
	Japan	3.1	3.6	14.3	0.0	30.3	24.8	88.9
	Korea	0.5	16.3	14.6	0.0	0.0	21.7	56.7
	APEC	18.7	2.9	8.8	5.7	7.6	9.0	60.9
Asia	ASEAN	25.1	3.5	38.4	31.5	0.0	20.5	65.2
	CER	14.2	0.0	18.5	0.0	0.0	0.0	66.5
	SAFTA	0.0	0.0	2.4	0.0	0.0	0.0	0.0
	Other Asia	12.5	0.0	0.0	0.0	0.0	0.0	66.1
Pacific	NAFTA	27.9	2.6	1.9	4.6	9.3	0.0	52.4
	Other America	2.4	2.9	0.0	0.0	0.0	0.0	6.5
Exports								
Asia-Pacific	US	27.2	5.3	3.0	7.6	13.3	0.0	58.9
	China	17.6	0.0	1.9	0.0	0.0	13.9	54.8
	Japan	3.7	3.3	15.8	0.0	33.2	24.0	90.4
	Korea	0.4	15.5	12.7	0.0	0.0	19.3	57.1
	APEC	18.8	3.0	8.8	5.8	7.6	9.1	61.5
Asia	ASEAN	21.7	3.0	32.9	31.2	0.0	15.5	61.1
	CER	10.3	0.0	17.2	0.0	0.0	0.0	64.4
	SAFTA	0.0	0.0	2.5	0.0	0.0	0.0	0.0
	Other Asia	2.4	0.0	0.0	0.0	0.0	0.0	52.0
Pacific	NAFTA	34.2	3.3	1.9	4.8	8.4	0.0	56.9
	Other America	2.0	1.2	0.0	0.0	0.0	0.0	5.5
Imports								
Asia-Pacific	US	18.2	2.6	2.5	6.0	13.1	0.0	48.1
	China	6.2	0.0	1.5	0.0	0.0	18.7	52.4
	Japan	2.3	4.0	12.2	0.0	26.3	26.0	87.0
	Korea	0.5	17.3	16.7	0.0	0.0	24.5	56.3
	APEC	18.5	2.8	8.7	5.7	7.5	8.9	60.3
Asia	ASEAN	29.1	4.1	44.9	31.9	0.0	26.4	70.0
	CER	18.0	0.0	19.7	0.0	0.0	0.0	68.5
	SAFTA	0.0	0.0	2.4	0.0	0.0	0.0	0.0
	Other Asia	21.7	0.0	0.0	0.0	0.0	0.0	79.0
Pacific	NAFTA	23.5	2.0	1.9	4.6	9.9	0.0	49.2
	Other America	2.9	5.2	0.0	0.0	0.0	0.0	7.7

Source: Percentage changes relative to the average levels of merchandise trade over 2001-2005 in table 6.

Table 9. Average annual impacts of selected FTAs in the Asia-Pacific region on trade in food and agriculture (SITC 0 and 1) by region and selected countries, 2001-2005 (billions of US dollar at 2005 prices)

Region	Selected Asia-Pacific FTAs Combined			Major FTAs under Consideration			Possible	
	In Force	Signed	Under Negotiation	US-ASEAN	US-Japan	ASEAN+3	FTAAP	
Exports + Imports								
Asia-Pacific	US	28	5	4	9	21	0	72
	China	6	0	2	0	0	14	20
	Japan	1	5	10	0	21	18	50
	Korea	0	3	3	0	0	5	8
	APEC	87	19	59	28	42	52	261
Asia	ASEAN	19	4	34	20	0	16	34
	CER	5	0	9	0	0	0	20
	SAFTA	0	0	1	0	0	0	0
	Other Asia	3	0	0	0	0	0	20
Pacific	NAFTA	50	5	4	9	21	0	102
	Other America	3	3	0	0	0	0	6
Exports								
Asia-Pacific	US	10	4	1	3	20	0	43
	China	5	0	1	0	0	12	16
	Japan	0	0	1	0	1	1	3
	Korea	0	0	3	0	0	3	3
	APEC	43	10	29	14	21	26	130
Asia	ASEAN	9	4	19	11	0	10	20
	CER	4	0	5	0	0	0	16
	SAFTA	0	0	1	0	0	0	0
	Other Asia	0	0	0	0	0	0	6
Pacific	NAFTA	23	4	1	3	20	0	62
	Other America	3	2	0	0	0	0	5
Imports								
Asia-Pacific	US	17	1	3	6	1	0	29
	China	1	0	0	0	0	1	4
	Japan	1	5	9	0	20	17	48
	Korea	0	3	0	0	0	2	5
	APEC	43	10	30	14	21	26	130
Asia	ASEAN	10	0	15	9	0	6	14
	CER	1	0	4	0	0	0	4
	SAFTA	0	0	0	0	0	0	0
	Other Asia	3	0	0	0	0	0	14
Pacific	NAFTA	27	1	3	6	1	0	40
	Other America	0	1	0	0	0	0	1

Source: Calculated from regression estimates displayed in table 16, and applied to all observations in the gravity model data set on intra-bloc trade by 1-digit categories over 2001-2005.

Table 10. Average annual percentage impacts of selected FTAs in the Asia-Pacific region on trade in food and agriculture (SITC 0 and 1) by region and selected countries, 2001-2005 (percent)

Region	Selected Asia-Pacific FTAs Combined			Major FTAs under Consideration			Possible	
	In Force	Signed	Under Negotiation	US-ASEAN	US-Japan	ASEAN+3	FTAAP	
Exports + Imports								
Asia-Pacific	US	23.4	4.4	3.0	7.7	17.7	0.0	60.5
	China	22.5	0.0	5.5	0.0	0.0	49.6	72.8
	Japan	2.1	10.2	19.5	0.0	41.5	35.6	100.0
	Korea	0.9	27.3	25.3	0.0	0.0	41.0	68.4
	APEC	22.1	4.9	15.0	7.2	10.7	13.2	66.5
Asia	ASEAN	37.0	8.3	66.3	39.5	0.0	31.3	66.9
	CER	16.5	0.0	28.6	0.0	0.0	0.0	64.1
	SAFTA	0.0	0.0	6.0	0.0	0.0	0.0	0.0
	Other Asia	9.4	0.0	0.0	0.0	0.0	0.0	58.4
Pacific	NAFTA	28.7	3.0	2.0	5.2	12.0	0.0	58.6
	Other America	4.0	3.7	0.0	0.0	0.0	0.0	7.7
Exports								
Asia-Pacific	US	18.3	7.0	1.7	5.7	35.4	0.0	75.6
	China	25.3	0.0	5.3	0.0	0.0	61.0	79.0
	Japan	6.9	6.1	28.6	0.0	29.5	40.3	110.8
	Korea	1.4	14.8	103.8	0.0	0.0	107.4	118.7
	APEC	23.0	5.1	15.4	7.5	11.2	13.8	69.6
Asia	ASEAN	28.4	13.6	63.6	37.9	0.0	33.7	66.5
	CER	15.2	0.0	20.8	0.0	0.0	0.0	61.9
	SAFTA	0.0	0.0	8.4	0.0	0.0	0.0	0.0
	Other Asia	0.5	0.0	0.0	0.0	0.0	0.0	71.0
Pacific	NAFTA	26.5	4.5	1.1	3.7	22.8	0.0	69.9
	Other America	4.5	2.8	0.0	0.0	0.0	0.0	7.8
Imports								
Asia-Pacific	US	28.2	1.9	4.2	9.5	1.3	0.0	46.5
	China	15.0	0.0	6.1	0.0	0.0	19.1	56.3
	Japan	1.8	10.5	19.0	0.0	42.2	35.3	99.4
	Korea	0.7	30.7	3.8	0.0	0.0	22.8	54.6
	APEC	21.2	4.7	14.7	7.0	10.2	12.7	63.7
Asia	ASEAN	49.2	0.8	70.0	41.8	0.0	27.8	67.3
	CER	22.1	0.0	64.6	0.0	0.0	0.0	74.2
	SAFTA	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Other Asia	12.6	0.0	0.0	0.0	0.0	0.0	53.9
Pacific	NAFTA	31.0	1.4	3.0	6.8	0.9	0.0	46.9
	Other America	2.2	7.4	0.0	0.0	0.0	0.0	7.2

Source: Percentage changes relative to the average levels of merchandise trade over 2001-2005 in table 6.

Table 11. Average annual impacts of selected FTAs in the Asia-Pacific region on trade in manufactures (SITC 5 through 8) by region and selected countries, 2001-2005 (billions of US dollars at 2005 prices)

Region	Selected Asia-Pacific FTAs Combined			Major FTAs under Consideration			Possible	
	In Force	Signed	Under Negotiation	US-ASEAN	US-Japan	ASEAN+3	FTAAP	
Exports + Imports								
Asia-Pacific	US	494	91	82	189	338	0	1,310
	China	294	0	32	0	0	331	709
	Japan	33	51	254	0	338	464	938
	Korea	0	79	130	0	0	192	284
	APEC	1,838	274	1,118	573	675	1,304	5,327
Asia	ASEAN	354	50	589	402	0	328	730
	CER	24	0	58	0	0	0	118
	SAFTA	0	0	7	0	0	0	0
	Other Asia	243	0	0	0	0	0	715
Pacific	NAFTA	898	91	82	189	338	0	1,806
	Other America	8	12	0	0	0	0	26
Exports								
Asia-Pacific	US	254	41	30	71	88	0	502
	China	256	0	26	0	0	176	456
	Japan	29	40	197	0	249	297	651
	Korea	0	48	57	0	0	91	163
	APEC	916	140	555	283	338	650	2,663
Asia	ASEAN	159	10	242	224	0	94	360
	CER	4	0	23	0	0	0	30
	SAFTA	0	0	3	0	0	0	0
	Other Asia	22	0	0	0	0	0	270
Pacific	NAFTA	456	41	30	71	88	0	725
	Other America	2	1	0	0	0	0	8
Imports								
Asia-Pacific	US	240	49	52	117	249	0	808
	China	39	0	6	0	0	156	253
	Japan	5	10	57	0	88	167	287
	Korea	0	31	73	0	0	101	121
	APEC	922	134	562	290	338	654	2,663
Asia	ASEAN	195	40	347	178	0	234	370
	CER	20	0	36	0	0	0	88
	SAFTA	0	0	5	0	0	0	0
	Other Asia	221	0	0	0	0	0	444
Pacific	NAFTA	442	49	52	117	249	0	1,081
	Other America	6	10	0	0	0	0	18

Source: Calculated from regression estimates displayed in table 16, and applied to all observations in the gravity model data set on intra-bloc trade by 1-digit categories over 2001-2005.

Table 12. Average annual percentage impacts of selected FTAs in the Asia-Pacific region on trade in manufacture (SITC 5 through 8) by region and selected countries, 2001-2005 (percent)

Region	Selected Asia-Pacific FTAs Combined			Major FTAs under Consideration			Possible	
	In Force	Signed	Under Negotiation	US-ASEAN	US-Japan	ASEAN+3	FTAAP	
Exports + Imports								
Asia-Pacific	US	27.2	5.0	4.5	10.4	18.6	0.0	72.1
	China	30.2	0.0	3.3	0.0	0.0	34.0	72.8
	Japan	4.2	6.3	31.8	0.0	42.3	58.1	117.6
	Korea	0.1	22.9	37.7	0.0	0.0	55.7	82.4
	APEC	29.3	4.4	17.8	9.1	10.8	20.8	84.9
Asia	ASEAN	46.9	6.7	78.0	53.2	0.0	43.4	96.7
	CER	20.1	0.0	48.0	0.0	0.0	0.0	97.3
	SAFTA	0.0	0.0	5.1	0.0	0.0	0.0	0.0
	Other Asia	34.6	0.0	0.0	0.0	0.0	0.0	101.7
Pacific	NAFTA	35.2	3.6	3.2	7.4	13.2	0.0	70.8
	Other America	3.1	4.5	0.0	0.0	0.0	0.0	10.0
Exports								
Asia-Pacific	US	35.8	5.9	4.2	10.1	12.5	0.0	70.8
	China	39.8	0.0	4.1	0.0	0.0	27.4	71.0
	Japan	5.2	7.3	36.0	0.0	45.5	54.2	118.8
	Korea	0.1	22.3	26.3	0.0	0.0	42.3	75.9
	APEC	28.5	4.4	17.3	8.8	10.5	20.2	82.9
Asia	ASEAN	39.4	2.6	59.9	55.5	0.0	23.4	89.3
	CER	12.9	0.0	69.8	0.0	0.0	0.0	93.2
	SAFTA	0.0	0.0	3.3	0.0	0.0	0.0	0.0
	Other Asia	7.2	0.0	0.0	0.0	0.0	0.0	88.7
Pacific	NAFTA	43.2	3.9	2.8	6.8	8.4	0.0	68.8
	Other America	2.1	1.2	0.0	0.0	0.0	0.0	7.3
Imports								
Asia-Pacific	US	21.7	4.4	4.7	10.6	22.5	0.0	72.9
	China	11.7	0.0	1.8	0.0	0.0	46.9	76.3
	Japan	1.8	4.1	22.8	0.0	35.3	66.9	114.8
	Korea	0.2	24.1	56.5	0.0	0.0	78.0	93.3
	APEC	30.1	4.4	18.4	9.5	11.0	21.3	87.0
Asia	ASEAN	55.6	11.4	98.7	50.6	0.0	66.4	105.3
	CER	22.7	0.0	40.2	0.0	0.0	0.0	98.8
	SAFTA	0.0	0.0	7.2	0.0	0.0	0.0	0.0
	Other Asia	55.5	0.0	0.0	0.0	0.0	0.0	111.8
Pacific	NAFTA	29.6	3.3	3.5	7.8	16.7	0.0	72.3
	Other America	3.9	6.9	0.0	0.0	0.0	0.0	12.0

Source: Percentage changes relative to the average levels of merchandise trade over 2001-2005 in table 6.

Table 13. Trade Diversion -- Average Annual Impacts of Selected FTAs in the Asia-Pacific Region on Total Merchandise Trade (SITC 0 through 9) of Non-Member Countries by Region and Selected Countries, 2001-2005 (billions of US dollars at 2005 prices)

Region		Selected Asia-Pacific FTAs Combined									Major FTAs under Consideration								
		In Force			Signed			Under Negotiation			US-ASEAN			US-Japan			ASEAN+3		
Non-Member Exports + Imports																			
		Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total
Asia-Pacific	US	0	287	287	0	286	286	0	756	756	0	0	0	0	0	0	0	263	263
	China	0	105	105	0	146	146	0	255	255	-6	17	11	-10	28	18	0	0	0
	Japan	0	288	288	-49	146	97	0	303	303	-19	52	33	0	0	0	0	0	0
	Korea	0	83	83	0	62	62	0	105	105	-4	10	6	-8	11	3	0	0	0
	APEC	-30	1,258	1,227	-97	1,101	1,004	0	2,250	2,250	-62	145	83	-73	141	67	0	501	501
Asia	ASEAN	-10	116	106	0	124	124	0	174	174	0	0	0	-16	29	13	0	0	0
	CER	0	34	34	0	27	27	0	61	61	-3	4	1	-4	7	3	0	26	26
	SAPTA	0	26	26	0	14	14	0	40	40	-2	3	1	-1	3	2	0	13	13
	Other Asia	0	207	207	0	133	132	0	445	445	-9	19	9	-14	19	5	0	172	172
Pacific	NAFTA	-19	419	400	-47	459	412	0	898	898	-19	42	23	-21	45	24	0	299	299
	Other America	-21	56	34	-19	51	32	-2	50	48	-7	12	4	-8	13	5	0	14	14
Non-Member Exports																			
		Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total
Asia-Pacific	US	0	76	76	0	37	37	0	101	101	0	0	0	0	0	0	0	33	33
	China	0	84	84	0	84	84	0	91	91	0	17	17	0	28	28	0	0	0
	Japan	0	217	217	0	146	146	0	143	143	0	52	52	0	0	0	0	0	0
	Korea	0	51	51	0	30	30	0	37	37	0	10	10	0	11	11	0	0	0
	APEC	0	773	773	0	641	641	0	630	630	0	145	145	0	141	141	0	64	64
Asia	ASEAN	0	93	93	0	80	80	0	57	57	0	0	0	0	29	29	0	0	0
	CER	0	15	15	0	19	19	0	22	22	0	4	4	0	7	7	0	6	6
	SAPTA	0	14	14	0	12	12	0	10	10	0	3	3	0	3	3	0	2	2
	Other Asia	0	100	100	0	68	68	0	79	79	0	19	19	0	19	19	0	19	19
Pacific	NAFTA	0	208	208	0	210	210	0	197	197	0	42	42	0	45	45	0	38	38
	Other America	0	56	56	0	51	51	0	32	32	0	12	12	0	13	13	0	3	3
Non-Member Imports																			
		Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total
Asia-Pacific	US	0	211	211	0	249	249	0	655	655	0	0	0	0	0	0	0	230	230
	China	0	22	22	0	62	62	0	164	164	-6	0	-6	-10	0	-10	0	0	0
	Japan	0	71	71	-49	0	-49	0	160	160	-19	0	-19	0	0	0	0	0	0
	Korea	0	32	32	0	32	32	0	68	68	-4	0	-4	-8	0	-8	0	0	0
	APEC	-30	485	455	-97	460	363	0	1,620	1,620	-62	0	-62	-73	0	-73	0	436	436
Asia	ASEAN	-10	24	13	0	45	45	0	117	117	0	0	0	-16	0	-16	0	0	0
	CER	0	19	19	0	8	8	0	39	39	-3	0	-3	-4	0	-4	0	20	20
	SAPTA	0	12	12	0	2	2	0	30	30	-2	0	-2	-1	0	-1	0	12	12
	Other Asia	0	108	108	0	65	65	0	366	366	-9	0	-9	-14	0	-14	0	153	153
Pacific	NAFTA	-19	211	192	-47	249	202	0	701	701	-19	0	-19	-21	0	-21	0	261	261
	Other America	-21	0	-21	-19	0	-19	-2	18	16	-7	0	-7	-8	0	-8	0	10	10

Source: Calculations based on gravity model estimates of the impacts of major customs unions and free trade agreements on extra-bloc trade by 1-digit categories.

Table 14. Trade Diversion -- Average Annual Impacts of Selected FTAs in the Asia-Pacific Region on Trade in Agriculture (SITC 0 and 1) of Non-Member Countries by Region and Selected Countries, 2001-2005 (billions of US dollars at 2005 prices)

Region	Selected Asia-Pacific FTAs Combined									Major FTAs under Consideration							
	In Force			Signed			Under Negotiation			US-ASEAN		US-Japan		ASEAN+3			
	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total		
Non-Member Exports + Imports																	
Asia-Pacific	US	0	8	8	0	9	9	0	22	22	0	0	0	0	0	7	7
	China	-1	2	1	-1	3	2	0	7	7	-1	0	-1	-1	0	0	0
	Japan	-9	0	-9	-12	0	-12	0	1	1	-4	0	-4	0	0	0	0
	Korea	-1	1	-1	-1	1	0	0	1	1	0	0	0	-1	0	-1	0
	APEC	-23	13	-10	-28	15	-13	-3	44	41	-10	0	-10	-9	0	-9	13
Asia	ASEAN	-3	0	-3	-2	0	-2	-1	3	2	0	0	0	-2	0	-2	0
	CER	0	1	1	-1	1	0	0	4	4	-1	0	-1	-1	0	-1	2
	SAPTA	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
	Other Asia	-2	1	-1	-3	1	-2	0	5	5	-1	0	-1	-1	0	-1	2
Pacific	NAFTA	-6	8	3	-8	9	1	-2	23	21	-3	0	-3	-3	0	-3	8
	Other America	-7	0	-7	-7	0	-7	-2	1	-1	-2	0	-2	-2	0	-2	1
Non-Member Exports																	
Asia-Pacific	US	0	7	7	0	9	9	0	17	17	0	0	0	0	0	6	6
	China	0	2	2	0	3	3	0	7	7	0	0	0	-1	0	-1	0
	Japan	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Korea	0	1	1	0	1	1	0	1	1	0	0	0	0	0	0	0
	APEC	-4	11	7	-5	15	9	-1	36	35	-3	0	-3	-6	0	-6	10
Asia	ASEAN	-1	0	-1	-1	0	-1	0	2	2	0	0	0	-1	0	-1	0
	CER	0	1	1	0	1	1	0	4	4	-1	0	-1	-1	0	-1	2
	SAPTA	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
	Other Asia	0	1	1	0	1	1	0	3	3	0	0	0	0	0	0	1
Pacific	NAFTA	-2	7	5	-3	9	5	-1	18	17	-1	0	-1	-2	0	-2	7
	Other America	-4	0	-4	-4	0	-4	-1	1	0	-1	0	-1	-2	0	-2	1
Non-Member Imports																	
Asia-Pacific	US	0	1	1	0	1	1	0	5	5	0	0	0	0	0	1	1
	China	-1	0	-1	-1	0	-1	0	0	0	0	0	0	0	0	0	0
	Japan	-9	0	-9	-12	0	-12	0	1	1	-4	0	-4	0	0	0	0
	Korea	-1	0	-1	-1	0	-1	0	0	0	0	0	0	0	0	0	0
	APEC	-19	1	-18	-23	1	-22	-2	9	6	-7	0	-7	-4	0	-4	3
Asia	ASEAN	-2	0	-2	-2	0	-2	0	0	0	0	0	0	-1	0	-1	0
	CER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	SAPTA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Other Asia	-2	0	-2	-3	0	-3	0	2	2	-1	0	-1	-1	0	-1	1
Pacific	NAFTA	-4	1	-2	-5	1	-4	-2	5	4	-1	0	-1	-1	0	-1	1
	Other America	-3	0	-3	-3	0	-3	-1	0	-1	-1	0	-1	-1	0	-1	0

Source: Calculations based on gravity model estimates of the impacts of major customs unions and free trade agreements on extra-bloc trade by 1-digit categories.

Table 15. Trade Diversion -- Average Annual Impacts of Selected FTAs in the Asia-Pacific Region on Trade in Manufactures (SITC 5 through 8) of Non-Member Countries by Region and Selected Countries, 2001-2005 (billions of US dollars at 2005 prices)

Region		Selected Asia-Pacific FTAs Combined									Major FTAs under Consideration								
		In Force			Signed			Under Negotiation			US-ASEAN			US-Japan			ASEAN+3		
		Non-Member Exports + Imports																	
		Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total
Asia-Pacific	US	0	731	731	0	723	723	0	1,777	1,777	0	0	0	0	0	0	0	640	640
	China	0	177	177	0	275	275	0	477	477	-1	20	19	-2	30	28	0	0	0
	Japan	0	463	463	-6	172	165	0	439	439	-2	59	57	0	0	0	0	0	0
	Korea	0	164	164	0	151	151	0	221	221	-1	12	11	-1	12	10	0	0	0
	APEC	0	2,460	2,460	-6	2,133	2,126	0	4,675	4,675	-10	147	138	-13	124	110	0	1,180	1,180
Asia	ASEAN	0	205	205	0	266	266	0	360	360	0	0	0	-3	27	24	0	0	0
	CER	0	65	65	0	51	51	0	114	114	-1	2	1	-1	2	1	0	50	50
	SAPTA	0	51	51	0	29	29	0	79	79	0	4	4	0	4	3	0	28	28
	Other Asia	0	456	456	0	295	295	0	999	999	-2	21	19	-3	20	18	0	400	400
Pacific	NAFTA	0	923	923	0	917	917	0	2,050	2,050	-3	33	29	-4	33	30	0	723	723
	Other America	0	49	49	0	48	48	0	99	99	-1	6	4	-1	6	4	0	30	30
		Non-Member Exports																	
		Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total
Asia-Pacific	US	0	50	50	0	25	25	0	84	84	0	0	0	0	0	0	0	27	27
	China	0	86	86	0	90	90	0	87	87	0	20	20	0	30	30	0	0	0
	Japan	0	234	234	0	172	172	0	155	155	0	59	59	0	0	0	0	0	0
	Korea	0	54	54	0	31	31	0	38	38	0	12	12	0	12	12	0	0	0
	APEC	0	721	721	0	610	610	0	567	567	0	147	147	0	124	124	0	49	49
Asia	ASEAN	0	90	90	0	83	83	0	47	47	0	0	0	0	27	27	0	0	0
	CER	0	4	4	0	5	5	0	6	6	0	2	2	0	2	2	0	2	2
	SAPTA	0	17	17	0	14	14	0	12	12	0	4	4	0	4	4	0	2	2
	Other Asia	0	101	101	0	71	71	0	79	79	0	21	21	0	20	20	0	18	18
Pacific	NAFTA	0	150	150	0	157	157	0	155	155	0	33	33	0	33	33	0	29	29
	Other America	0	26	26	0	24	24	0	15	15	0	6	6	0	6	6	0	1	1
		Non-Member Imports																	
		Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total	Neg	Pos	Total
Asia-Pacific	US	0	682	682	0	698	698	0	1,693	1,693	0	0	0	0	0	0	0	613	613
	China	0	90	90	0	186	186	0	390	390	-1	0	-1	-2	0	-2	0	0	0
	Japan	0	229	229	-6	0	-6	0	284	284	-2	0	-2	0	0	0	0	0	0
	Korea	0	111	111	0	120	120	0	182	182	-1	0	-1	-1	0	-1	0	0	0
	APEC	0	1,739	1,739	-6	1,522	1,516	0	4,108	4,108	-10	0	-10	-13	0	-13	0	1,131	1,131
Asia	ASEAN	0	115	115	0	183	183	0	313	313	0	0	0	-3	0	-3	0	0	0
	CER	0	61	61	0	46	46	0	107	107	-1	0	-1	-1	0	-1	0	49	49
	SAPTA	0	35	35	0	15	15	0	67	67	0	0	0	0	0	0	0	26	26
	Other Asia	0	355	355	0	224	224	0	920	920	-2	0	-2	-3	0	-3	0	382	382
Pacific	NAFTA	0	773	773	0	760	760	0	1,896	1,896	-3	0	-3	-4	0	-4	0	694	694
	Other America	0	23	23	0	24	24	0	84	84	-1	0	-1	-1	0	-1	0	28	28

Source: Calculations based on gravity model estimates of the impacts of major customs unions and free trade agreements on extra-bloc trade by 1-digit categories.

Table 16. Fixed effect estimates for trade by product categories specifying principal customs unions (CUs) and free trade agreements (FTAs), 1976-2005

	SITC 0-9 (All Merchandise)	SITC 0-1 (Agriculture)	SITC 5-8 (Manufactures)
Distance	-1.00 ***	-1.11 ***	-1.03 ***
Joint GDP	0.02 ***	-0.03 ***	0.04 ***
Joint GDP per capita	0.01 ***	0.02 ***	-0.03 ***
Common language	0.07 ***	0.25 ***	-0.05 ***
Common border	0.38 ***	-0.01	0.37 ***
Landlocked	-1.00 ***	-1.10 ***	-0.77 ***
Island	0.56 ***	0.60 ***	0.43 ***
Land area	0.24 ***	0.30 ***	0.20 ***
Common colonizer	-0.59 ***	-0.53 ***	-1.26 ***
Colony	0.58 ***	0.59 ***	0.55 ***
Ever a colony	1.13 ***	1.66 ***	1.12 ***
Common country	-0.20 *	-1.17 ***	1.26 ***
GSP	0.26 ***	0.12 ***	0.47 ***
Joint FDI stocks	0.10 ***	0.08 ***	0.14 ***
EU	0.27 ***	0.50 ***	0.06 ***
EU_x	0.03 ***	-0.13 ***	0.03 ***
EU_m	-0.02 **	-0.16 ***	0.04 ***
EFTA	0.00	0.00	0.00
EFTA_x	0.00	0.00	0.00
EFTA_m	-0.46 ***	-0.64 ***	-0.39 ***
EU FTAs	0.09 ***	0.08 ***	0.08 ***
EU FTAs_x	0.00	0.12 ***	0.07 ***
EU FTAs_m	0.00	-0.05 ***	0.09 ***
NAFTA	0.78 ***	0.71 ***	0.89 ***
NAFTA_x	-0.13 ***	-0.16 ***	-0.02 **
NAFTA_m	0.20 ***	-0.11 ***	0.21 ***
Mercosur	0.79 ***	1.01 ***	0.80 ***
Mercosur_x	0.16 ***	0.37 ***	0.06 ***
Mercosur_m	0.68 ***	0.65 ***	0.78 ***
CMAS FTAs	0.24 ***	0.63 ***	0.06 ***
CMAS FTAs_x	-0.07 ***	-0.02	-0.09 ***
CMAS FTAs_m	0.03 ***	0.01	0.01
AFTA	0.62 ***	0.82 ***	1.04 ***
AFTA_x	0.50 ***	0.18 ***	0.97 ***
AFTA_m	0.18 ***	0.23 ***	0.17 ***
SAFTA	0.16 ***	-0.07	0.41 ***
SAFTA_x	0.01	0.12 ***	0.26 ***
SAFTA_m	-0.01	-0.30 ***	-0.16 ***
Other CUs & FTAs	0.24 ***	0.26 ***	0.22 ***
Other CUs & FTAs_x	0.04 ***	-0.07 ***	0.13 ***
Other CUs & FTAs_m	0.12 ***	0.11 ***	0.16 ***
Constant	8.25 ***	9.29 ***	10.28 ***
R-squared	0.91	0.91	0.95
Observations (Thousands)	325	65	140
Clusters (Thousands)	35	7	15

Notes: Fixed effects estimates are obtained by a method of vector decomposition, based on a 3-step FE/OLS routine developed by Plumper and Troeger (2007). The dependent variable is log real trade. Distance, joint real GDP, joint real GDP per capita, joint land area, and joint real FDI stocks are measured in log terms. *, **, *** denote statistical significance at the 10, 5, and 1 percent levels.

Trade agreements represented by dummy variables are: European Union (EU), European Free Trade Area (EFTA), EU bilateral free trade agreements (EU FTAs), North American Free Trade Area (NAFTA), Southern Common Market (Mercosur), Chile, Mexico, Australia, and Singapore bilateral free trade agreements (CMAS FTAs), ASEAN Free Trade Area (AFTA), South Asia Free Trade Agreement (SAFTA), and all other customs unions and free trade agreements.

Observations are the number of individual country years of trade data.

Clusters are the number of export country-import country-SITC category combinations in the panel data set underlying the fixed-effects estimation procedure.

Table 17. Fixed effect estimates for inward direct investment stocks specifying principal customs unions (CUs) and free trade agreements (FTAs), 1976-2005.

	Estimated Coefficient	Implied Percent Change	Implied Elasticity
Distance	-0.48 ***	n.a.	-0.48
Joint GDP	-0.10 ***	n.a.	-0.10
Joint GDP per capita	0.22 ***	n.a.	0.22
Common language	0.94 ***	156%	n.a.
Common border	0.60 ***	83%	n.a.
Landlocked	-0.30 ***	-26%	n.a.
Island	0.58 ***	79%	n.a.
Land area	0.16 ***	n.a.	0.16
Common colonizer	-0.41 ***	-34%	n.a.
Colony	-0.43 *	-35%	n.a.
Ever a colony	1.78 ***	495%	n.a.
Common country	2.18 ***	784%	n.a.
GSP	0.21 ***	24%	n.a.
Joint trade with all partners	0.52 ***	n.a.	0.52
EU	0.49 ***	62%	n.a.
EU_x	0.19 ***	21%	n.a.
EU_m	0.24 ***	27%	n.a.
EFTA	0.00	0%	n.a.
EFTA_x	-0.45 ***	-37%	n.a.
EFTA_m	0.00	0%	n.a.
EU FTAs	0.15 ***	16%	n.a.
EU FTAs_x	-0.20 ***	-18%	n.a.
EU FTAs_m	0.04 *	4%	n.a.
Canada-US FTA (CUSFTA)	-0.83 ***	-56%	n.a.
CUSFTA_x	-0.34 ***	-29%	n.a.
CUSFTA_m	0.03	3%	n.a.
US-Mexico FTA (USMXFTA)	-0.08	-8%	n.a.
USMXFTA_x	-0.03	-3%	n.a.
USMXFTA_m	0.26 ***	29%	n.a.
Canada-Mexico FTA (CMXFTA)	0.35 *	42%	n.a.
CMXFTA_x	0.22 ***	25%	n.a.
CMXFTA_m	-0.11 *	-10%	n.a.
Mercosur	1.27 ***	257%	n.a.
Mercosur_x	-0.10 **	-10%	n.a.
Mercosur_m	-0.16 ***	-15%	n.a.
CMAS FTAs	0.50 ***	65%	n.a.
CMAS FTAs_x	0.13 ***	14%	n.a.
CMAS FTAs_m	0.11 ***	12%	n.a.
AFTA	0.88 ***	142%	n.a.
AFTA_x	0.35 ***	42%	n.a.
AFTA_m	-0.15 ***	-14%	n.a.
SAFTA	-0.99 ***	-63%	n.a.
SAFTA_x	-0.25 ***	-22%	n.a.
SAFTA_m	0.09 **	10%	n.a.
Other CUs & FTAs	0.10 ***	10%	n.a.
Other CUs & FTAs_x	-0.02	-2%	n.a.
Other CUs & FTAs_m	0.13 ***	14%	n.a.
Constant	-14.29 ***	n.a.	n.a.
R-squared	0.93		
Obs. (Thousands)	36		
Clusters (Thousands)	4		

Notes: See Table 9 notes.

The dependent variable is the inward stock of FDI in the subject country from its bilateral partner when estimating the primary coefficients (e.g. EU, EFTA, etc.) and the inward FDI diversion coefficients (e.g. (EU_m, EFTA_m, etc.). The dependent variable is the outward stock of FDI from the subject country to a partner country that is not a member of the CU or FTA in question when estimating the outward FDI diversion coefficients (e.g. EU_x EFTA_x, etc.).

In the case of CUSFTA and NAFTA members, the "entry dates" of the respective trade agreements are advanced by two years, on the argument that new flows of FDI anticipated the signing of the respective agreements.

The implied elasticity values apply to the non-dummy variables since both the dependent variable (FDI stocks) and the independent variables are expressed in logarithmic terms. The elasticity value can be interpreted as the percentage impact on inward FDI stocks from a 1.00 percent increase in a given independent variable.

Appendix Table A.1. FTAs, in the Asia-Pacific region, organized by dominant partner, GDP and trade flows

Dominant Partner	Status (as of Sep. 2007)	Year since	Counterparty	Dominant Partner's GDP and Two-Way Merchandise Trade (2005)				Partner Country's GDP and Two-Way Merchandise Trade (2005)			
				GDP (billions)	Total Trade (billions)	Trade with Partner		GDP (billions)	Total Trade (billions)	Trade with Dominant Partner	
						Dollar amount (billions)	Share of Total Trade (%)			Dollar amount (billions) ^a	Share of Total Trade (%)
United States	In force	1994	Canada/Mexico (NAFTA)	12,456	2,636.8	795.0	30.2	1,901	1,155.1	795.9	68.9
		2004	Singapore			36.0	1.4	117	397.1	36.0	9.1
		2004	Chile			12.6	0.5	115	71.9	12.6	17.5
		2005	Australia			23.4	0.9	709	236.0	23.4	9.9
	Signed	2006	Peru			7.7	0.3	79	30.5	7.7	25.2
		2006	Colombia			14.8	0.6	122	42.4	14.8	34.9
		2006	Panama			2.5	0.1	16	5.1	2.5	49.0
		2007	Korea			73.2	2.8	788	545.5	73.2	13.4
	Under negotiation	2004	Thailand			28.3	1.1	173	228.3	28.3	12.4
		2006	Malaysia			45.1	1.7	131	254.6	45.1	17.7
	Under consideration		ASEAN			153.0	5.8	883	870.4	153.0	17.6
			Japan FTAAP ^b			197.4 1614.8	7.5 61.2	4,567 12,654	1,110.1 3,562.3	197.4 1,614.8	17.8 45.3
China	In force	2004	Hong Kong	2,234	1,422.6	136.7	9.6	178	589.5	136.7	23.2
		2005	ASEAN			130.5	9.2	883	870.4	130.5	15.0
		2006	Chile			7.1	0.5	115	71.9	7.1	9.9
	Under negotiation	2005	Australia-New Zealand			29.9	2.1	817	283.9	29.9	17.2
		2006	Singapore			33.2	2.3	117	397.1	33.2	8.4
	Under consideration		India FTAAP ^b			18.7 870.5	1.3 61.2	772 22,876	232.6 4,776.5	18.7 870.5	8.0 18.2
Japan	In force	2002	Singapore	4,567	1,110.1	25.2	2.3	117	397.1	25.2	6.3
		2005	Mexico			9.4	0.8	768	458.2	9.4	2.1
		2006	Malaysia			27.3	2.5	131	254.6	27.3	10.7
		2007	Chile			5.9	0.5	115	71.9	5.9	8.2
	Signed	2005	Thailand			38.1	3.4	173	228.3	38.1	16.7
		2006	Indonesia			30.1	2.7	281	143.3	30.1	21.0
	Under negotiation	2003	Korea			71.1	6.4	788	545.5	71.1	13.0
		2005	ASEAN			148.7	13.4	883	870.4	148.7	17.1
		2007	India			6.7	0.6	772	232.6	6.7	2.9
	Under consideration		FTAAP ^b			733.9	66.1	20,542	5,088.9	733.9	14.4

Appendix Table A.1 FTAs in the Asia-Pacific region, organized by dominant partner, GDP and trade flows (continued)

Dominant Partner	Status (as of Sep. 2007)	Year since	Counterparty	Dominant Partner's GDP and Two-Way Merchandise Trade (2005)				Partner Country's GDP and Two-Way Merchandise Trade (2005)			
				GDP (billions)	Total Trade (billions)	Trade with Partner		GDP (billions)	Total Trade (billions)	Trade with Dominant Partner	
						Dollar amount (billions)	Share of Total Trade (%)			Dollar amount (billions) ^a	Share of Total Trade (%)
ASEAN	In force	2005	China	883	870.4	113.1	13.0	2,234	1,422.6	113.1	8.0
		2007	Korea (only goods)			52.2	6.0	788	545.5	52.2	9.6
	Under negotiation	2004	CER			38.4	4.4	814	272.4	38.4	14.1
		2005	Japan			153.9	17.7	4,567	1,110.1	153.9	13.9
	Under consideration		ASEAN+3 ^c FTAAP ^{bd}			319.2	36.7	7,589	3,078.2	319.2	31.4
						582.9	67.0	24,249	5,010.4	582.9	11.6
Korea	In force	2004	Chile	788	545.5	3.4	0.6	115	71.9	3.4	4.7
		2006	Singapore			12.7	2.3	117	397.1	12.7	3.2
		2007	ASEAN goods			53.5	9.8	883	870.4	53.5	6.1
	Signed	2007	United States			72.3	13.3	12,456	2,636.8	72.3	2.7
	Under negotiation	2003	Japan			72.4	13.3	4,567	1,110.1	72.4	6.5
		2005	Canada			6.1	1.1	1,132	703.9	6.1	0.9
		2006	Mexico			4.2	0.8	768	451.2	4.2	0.9
	2006	India	6.7	1.2	772	232.6	6.7	2.9			
	Under consideration		FTAAP ^b			353.4	64.8	24,322	5,653.5	353.4	6.3
India	In force	2001	Sri Lanka	772	232.6	2.4	1.0	24	15.2	2.4	15.7
		2005	Singapore			8.3	3.6	117	397.1	8.3	2.1
		2006	Bhutan			0.2	0.1	1	n.a.	0.2	n.a.
		2006	SAFTA ^c			6.4	2.8	205	82.7	6.4	7.7
	Under negotiation	2006	Korea			5.8	2.5	788	545.5	5.8	1.1
		2007	Japan			5.8	2.5	4,567	1,110.1	5.8	0.5
		Under consideration				China	16.3	7.0	2,234	1,422.6	16.3
			FTAAP ^b			86.8	37.3	25,110	6,199.1	86.8	1.4

Notes:

Chart does not include Framework agreements, PTAs, or non-reciprocal agreements

a. Figures are based on two-way trade with a partner country as reported by the dominant partner.

b. Data for Chinese Taipei is not available. Dominant partner is not included in calculation of a possible FTAAP's total trade and GDP.

c. India is not included in calculation of SAFTA's total trade and GDP.

d. Dominant partner includes member countries of either APEC or ASEAN (For convenience, Laos, Cambodia and Myanmar, which are not APEC members but ASEAN members, are included). Partner country includes APEC member countries which are non ASEAN member countries.

e. Refers to an expansion of ASEAN to include China, Japan, and Korea.

Source: IMF World Economic Outlook Database, September 2006, IMF Direction of Trade Statistics, January 2007.

Appendix Table A.2. FTAs in the Asia-Pacific region, organized by dominant partner, FDI stocks, 2005

Dominant Partner	Status (as of Sep. 2007)	Year since	Counterparty	Dominant Country's Two-Way (Outward & Inward) FDI Stocks (2005)			Partner Country's Two-Way (Outward & Inward) FDI Stocks (2005)		
				Total FDI Stocks (billions)	FDI Stocks with Partner		Total FDI Stocks (billions)	FDI Stocks with Partner	
					Dollar amount (billions)	Share of Total FDI Stocks (%)		Dollar amount (billions)	Share of Total FDI Stocks (%)
United States	In force	1994	Canada/Mexico (NAFTA)	3,613.8	498.5	13.8	829.6	498.5	60.1
		2004	Singapore		50.5	1.4	137.9	50.5	36.6
		2004	Chile		16.2	0.4	69.8	16.2	23.2
		2005	Australia		157.4	4.4	230.7	157.4	68.2
	Signed	2006	Peru		3.9	0.1	18.0	3.9	21.7
		2006	Colombia		3.4	0.1	5.8	3.4	58.6
		2006	Panama		16.6	0.5	22.6	16.6	73.5
		2006	Korea		30.3	0.8	93.1	30.3	32.5
	Under negotiation	2004	Thailand		8.7	0.2	35.3	8.7	24.6
		2006	Malaysia		16.1	0.4	53.3	16.1	30.2
	Under consideration		ASEAN		92.2	2.6	264.1	92.2	34.9
			Japan		225.0	6.2	506.0	225.0	44.5
		FTAAP ^b	1,110.9	30.7	2,869.7	1,110.9	38.7		
China	In force	2004	Hong Kong	492.5	227.1	46.1	806.8	227.1	28.1
		2005	ASEAN		36.4	7.4	264.1	36.4	13.8
		2006	Chile		0.0	0.0	69.8	0.0	0.0
	Under negotiation	2004	Australia/New Zealand		0.6	0.1	239.7	0.6	0.3
		2006	Singapore		28.1	5.7	137.9	28.1	20.4
	Under consideration		India		0.0	0.0	15.7	0.0	0.0
		FTAAP ^b	362.2	73.5	5,242.2	362.2	6.9		
Japan	In force	2002	Singapore	506.0	13.9	2.7	137.9	13.9	10.1
		2005	Mexico		3.6	0.7	98.6	3.6	3.7
		2006	Malaysia		5.6	1.1	53.3	5.6	10.5
		2006	Chile		2.4	0.5	69.8	2.4	3.4
	Signed	2005	Thailand		11.7	2.3	35.3	11.7	33.1
		2006	Indonesia		7.7	1.5	30.1	7.7	25.6
	Under negotiation	2003	Korea		9.2	1.8	93.1	9.2	9.9
		2005	ASEAN		42.4	8.4	264.1	42.4	16.1
		2007	India		1.8	0.4	15.7	1.8	11.5
	Under consideration		FTAAP ^b		349.8	69.1	5,216.3	349.8	6.7

Appendix Table A.2 FTAs, in the Asia-Pacific region, organized by dominant partner, FDI stocks, 2005 (continued)

Dominant Partner	Status (as of Sep. 2007)	Year since	Counterparty	Dominant Country's Two-Way (Outward & Inward) FDI Stocks (2005)			Partner Country's Two-Way (Outward & Inward) FDI Stocks (2005)		
				Total FDI Stocks (billions)	FDI Stocks with Partner		Total FDI Stocks (billions)	FDI Stocks with Partner	
					Dollar amount (billions)	Share of Total FDI Stocks (%)		Dollar amount (billions)	Share of Total FDI Stocks (%)
ASEAN	In force	2005	China	264.1	36.4	13.8	492.5	36.4	7.4
		2007	Korea (only goods)		5.2	2.0	93.1	5.2	5.6
	Under negotiation	2004	CER		2.0	0.8	239.7	2.0	0.8
		2004	Japan		42.4	16.1	506.0	42.4	8.4
	Under consideration		ASEAN+3 ^e	84.0	31.8	1,091.6	84.0	7.7	
			FTAAP ^{bd}	224.8	85.1	5,321.3	224.8	4.2	
Korea	In force	2004	Chile	93.1	0.0	0.0	69.8	0.0	0.0
		2006	Singapore		0.7	0.8	137.9	0.7	0.5
		2007	ASEAN goods		5.2	5.6	251.9	5.2	2.1
	Signed	2007	United States		30.3	32.5	3,613.8	30.3	0.8
	Under negotiation	2003	Japan		9.2	9.9	506.0	9.2	1.8
		2005	Canada		1.1	1.2	733.9	1.1	0.1
		2006	Mexico		0.3	0.3	98.6	0.3	0.3
		2006	India		0.7	0.8	15.7	0.7	4.5
Under consideration		FTAAP ^b	62.6	67.2	3,664.7	62.6	1.7		
India	In force	1991	Sri Lanka	15.7	n.a.	n.a.	0.3	n.a.	n.a
		2005	Singapore (2004 data)		1.0	6.4	258.8	1.0	0.4
		2006	Bhutan		n.a.	n.a.	0.0	n.a.	n.a
		2006	SAFTA ^c		0.0	0.0	5.6	0.0	0.0
	Under negotiation	2006	Korea		0.7	4.5	93.1	0.7	0.8
		2007	Japan		1.8	11.5	506.0	1.8	0.4
	Under consideration		China		0.0	0.0	492.5	0.0	0.0
		FTAAP ^b	12.8	81.5	5,372.5	12.8	0.2		

Notes:

Chart does not include Framework agreements, PTAS, or non-reciprocal agreements

a. Figures are based on FDI stock with a partner country as reported by the dominant partner.

b. Data for Chinese Taipei is not available. Dominant partner is not included in calculation of a possible FTAAP's total FDI and GDP.

c. India is not included in calculation of SAFTA's total FDI and GDP.

d. Dominant partner includes member countries of either APEC or ASEAN (For convenience, Laos, Cambodia and Myanmar, which are not APEC members but ASEAN members, are included). Partner country includes APEC member countries which are non ASEAN member countries.

e. Refers to an expansion of ASEAN to include China, Japan, and Korea.

Source: Database constructed at the Peterson Institute.

Appendix Table A.3. Trade and FDI Gravity Model Regression Variables

Variable	Description
Dependent Variables	
Dependent variable (table 16, trade regression)	Log value of bilateral trade by 1-digit SITC, real US dollars
Dependent variable (table 17, FDI regression)	Log value of bilateral inward stock of FDI, real US dollars
Explanatory Variables	
Distance	Log of distance between partners, expressed in kilometers by the great circle route
Joint GDP	Log of product of real GDP of the partners
Joint GDP per capita	Log of product of real GDP per capita of the partners
Common language	Common language dummy (0 or 1)
Common border	Common border dummy (0 or 1)
Landlocked	Number of countries in pair that are landlocked (0, 1 or 2)
Island	Number of island countries in the partner pair (0, 1 or 2)
Land area	Log of product of land areas of the partners (million square kilometers)
Common colonizer	Dummy for common colonizer, post-1945 (0 or 1)
Colony	Dummy for country pairs currently in colonial relationship (0 or 1)
Ever a colony	Dummy for country pairs ever in a colonial relationship (0 or 1)
Common country	Dummy for same nation or a continuing colony (0 or 1)
GSP	Dummy for country pairs using generalized system of preferences (GSP) between the partners (0 or 1)
Joint FDI stocks (table 16 only)	Log of product of total inward FDI stock from the world of the partners, real US dollars
Joint trade with all partners (table 17 only)	Log of product of total merchandise trade with the world of the partners, real US dollars
FTA Variables	
FTA primary (e.g. EU)	Dummy variable indicating an FTA is in place for a country pair (0 or 1)
EU_m (e.g. EU_m)	Dummy variable (0 or 1) indicating that an FTA country is importing from a country other than its FTA partner (e.g., a value of 1 is given for the NAFTA_m variable for the US imports from Japan in 1999 because Japan is not a member of NAFTA.)
FTA_x (e.g. EU_x)	Dummy variable (0 or 1) indicating that an FTA country is exporting to a country other than its FTA partner (e.g., a value of 1 is given for the NAFTA_x variable for the US exports to Japan in 1999 because Japan is not a member of NAFTA)
Fixed Effects Variables	
Ordered country pair dummy, by trade category (fixed-effect, not in tables)	Dummy for each exporting-to-importing country pair, by 1-digit SITC (e.g. US exports to Japan of chemical products, SITC 5)
Year dummy (fixed-effect, not in tables)	Dummy for a specific year (e.g. 1999)