

**THE IMPACT OF  
SUBREGIONALISM  
IN APEC**

**Economic Committee  
Asia-Pacific Economic Cooperation**

November 1997

Published by the APEC Secretariat  
438 Alexandra Road  
#14-00 Alexandra Point  
Singapore 119958  
Tel: (65) 276 1880  
Fax: (65) 276 1775  
E-mail: [info@mail.apecsec.org.sg](mailto:info@mail.apecsec.org.sg)  
Website: <http://www.apecsec.org.sg>  
© 1997 APEC Secretariat

APEC #97-EC-01.4

ISBN 981-00-9646-1

# CONTENTS

<b>FOREWORD</b>	<b>i</b>
<b>EXECUTIVE SUMMARY</b>	<b>iii</b>
<b>Chapter 1</b>	
<b>INTRODUCTION</b>	<b>1</b>
<b>Chapter 2</b>	
<b>ISSUES RAISED BY SUBREGIONAL TRADE ARRANGEMENTS</b>	<b>5</b>
<b>Chapter 3</b>	
<b>SUBREGIONAL TRADE ARRANGEMENTS IN APEC</b>	<b>9</b>
Asia-Pacific Economic Cooperation	9
North American Free Trade Arrangement	11
Asean Free Trade Arrangement	14
Australia-New Zealand Closer Economic Relations	17
Southern China-Hong Kong, China-Chinese Taipei Growth Area	19
Indonesia-Malaysia-Singapore Growth Triangle	21
<b>Chapter 4</b>	
<b>CONTRIBUTION OF SRTAS AND GROWTH TRIANGLES TO TRADE LIBERALIZATION</b>	<b>23</b>
<b>Chapter 5</b>	
<b>PROSPECTS FOR SRTAS AND GROWTH TRIANGLES</b>	<b>27</b>
<b>Chapter 6</b>	
<b>CONCLUSIONS</b>	<b>30</b>
APPENDIX A Subregional Economic Interdependence in APEC	
APPENDIX B Chile-Mexico Free Trade Agreement	
APPENDIX C Canada-Chile Free Trade Agreement	
APPENDIX D Impact Of MAPA : Simulation Of CGE Model	



## FOREWORD

Since its establishment by APEC Ministers in Jakarta in November 1994, the Economic Committee has undertaken a broad range of research and analysis in support of APEC's work both on trade and investment liberalization and facilitation and on economic and technical cooperation.

In 1997, the Committee has completed several trade and investment-related analytical projects. It is intended that this body of work provide analytical support for APEC's work on trade and investment liberalization and facilitation.

A key component of this package is the present study on *The Impact of Subregionalism on APEC*, prepared by scholars in Chinese Taipei. The study examines in both theoretical and empirical terms the interaction between trade and investment liberalization on a subregional basis through agreements such as NAFTA, AFTA and CER as well as through informal "growth triangles" and more broadly-based liberalization through APEC and the WTO. The key issue under review is whether these trade groupings within the APEC region support APEC's firm objective of "open regionalism," and contribute to ongoing multilateral trade liberalization at the global level.

Related Economic Committee projects this year include *The Impact of Trade Liberalization in APEC*, for which Japan and Singapore took primary responsibility, and *The Impact of Investment Liberalization in APEC*, prepared by another team in Chinese Taipei. The former study uses computable general equilibrium (CGE) model simulations to assess the impact of APEC's trade and investment liberalization and facilitation measures as set out in the Manila Action Plan for APEC (MAPA). The latter draws on case studies from several APEC economies and sectors to derive lessons about the process of opening investment regimes.

In addition, the *1997 APEC Economic Outlook*, prepared under the leadership of Korea, also includes a discussion of the concept of "open regionalism" in its chapter on structural issues and provides some supporting evidence also drawn from CGE model simulations on comparative benefits of alternative approaches to APEC trade liberalization.

Broadly speaking, this package of studies confirms that APEC's agenda of trade and investment liberalization and facilitation will bring substantial benefits to APEC members and that APEC's commitment to open regionalism remains as strong as ever. Liberalization within APEC will not harm non-members, and subregional arrangements within the APEC region support ongoing APEC-wide and global liberalization.

As an institution that has been created at the dawning of the information age, APEC has pioneered a "virtual" mode of operation. It functions with only a very small Secretariat and relies accordingly on the voluntary contributions of the time and energy of experts in member economies to carry out the large majority of its work.

In the case of the present study, particular thanks are due to the principal drafter, Dr. Hu Chun-Tien of Chinese Taipei's Academia Sinica. Dr. Hu received important assistance from Dr. Fang Chen-Ray, of Chung-Hsing University, and Dr. Huang Deng-Shing, also of Academia Sinica. Thanks are also due to Tom Engle, Program Director at the APEC Secretariat, who has provided logistical and technical support to the Economic Committee in this work and, in particular, taken responsibility for seeing the study through to publication; and to Dan Ciuriak, Coordinator Asia Pacific Research at the Department of Foreign Affairs and International Trade in Canada, who has assisted me in my role as Chair of the Committee and taken particular responsibility for coordinating the incorporation of comments from member economies on drafts of this study and for the final editing of the text.

John M. Curtis  
Chair  
APEC Economic Committee  
Ottawa, November 1997

## EXECUTIVE SUMMARY

The APEC region is one of the world's most diverse and dynamic economic groupings and one whose evolution may have far-reaching implications for the structure of world trade. One issue for APEC concerns the presence within it of subregional trading arrangements (SRTAs) and the impacts they may have on APEC's commitment to "open regionalism" and the evolution of an open trading order at the global level. The present study takes up this issue with respect to three SRTAs within APEC: the North American Free Trade Agreement (NAFTA), the ASEAN Free Trade Area (AFTA), and the Australia-New Zealand Closer Economic Relations Trade Arrangement (CER). The analysis also covers two "growth triangles," within APEC where distinct subregional economies have emerged more informally through the combination of market-led integration and supportive government policies. These include the Indonesia, Malaysia, and Singapore Growth Triangle (IMS-GT) and the growth area encompassing southern China, Chinese Taipei and Hong Kong, China (CHT).

APEC has continually reaffirmed the spirit of open regionalism since it was established in 1989. In repeated Declarations, APEC Economic Leaders have emphasized their resolute opposition to an inward-looking trading bloc that would divert from the pursuit of global free trade, and committed themselves to firmly maintaining open regional cooperation.

Nonetheless, questions have been raised as to whether SRTAs and growth triangles detract from open regionalism or are building blocks toward an open, multilateral trading system. Generally speaking, the answers will turn on several considerations:

- What are the relative weights of the trade creation and trade diversion effects from SRTAs and thus the potential for resource misallocation?
- Do SRTAs contribute to or detract from the momentum towards global trade liberalization?

The main conclusions that have emerged from study are as follows:

- The SRTAs and growth triangles have on balance advanced global liberalization through a number of channels, including by having a net trade-creating effect, generating political momentum for the multilateral process, and creating competitive pressures amongst each other for more rapid and deeper liberalization.
- There is a positive interaction between global liberalization through the WTO, regional MFN liberalization through APEC, and preferential liberalization on a subregional basis. The latter two, in effect, constitute building blocks for the first.
- Because the various SRTAs in the region have different "success stories," there is scope for transfer of "best practices" among them to facilitate further the more rapid evolution of an open regional and global trading system.

The analysis has clearly pointed to market forces as the key factor in successful subregional economic integration, whether in the context of formal or informal arrangements, but supportive public policy is also important.

Although the results support that, in general, all the SRTAs studied have made a positive contribution to international economic cooperation, some features of these arrangements may raise issues for non-member economies, especially in terms of application of trade-related measures such as rules of origin..

Simulations using the computable general equilibrium (CGE) model indicate that APEC's implementation of the MAPA's trade liberalization commitments would increase the overall level of merchandise exports by APEC member economies by 3.0 percent in 2010. For AFTA, which would benefit the most among the three free trade areas from implementation of MAPA, exports would increase by 6.7 percent. The corresponding figures for CER are 2.4 percent and for NAFTA 2.0 percent. The results show that developing economies would receive comparatively greater benefit in terms of increases in exports than the industrial economies.

Several exercises were also performed in which only one subregion, e.g. NAFTA, implements MAPA commitments. The results are similar to those of the APEC-wide case. Specifically, the subregion that implements MAPA will benefit the most in terms of changes in its exports. Implementing MAPA's trade facilitation commitments as well as its liberalization plans will result in larger export increases than liberalization only.

The world trading system is moving in the direction of global free trade. APEC's commitment to free and open trade and investment in the Asia-Pacific region is a key in the fulfillment of this trend. Within APEC, the more-rapid liberalization within the SRTAs could be regarded as accelerating this process on a subregional basis. Given that some SRTAs can at times go faster than either APEC or the world trading system, by accelerating liberalization in certain sensitive sectors, they may develop disciplines for other SRTAs and eventually the whole APEC region to follow.

At the same time, APEC's MFN-based liberalization is an important complement to the sub-regional liberalization within the SRTAs in the Asia-Pacific region by explicitly confirming the commitment toward global liberalization of the members of these sub-regional groupings.

In conclusion, this report's findings show that an open global trading system can be best achieved by pursuing, in a complementary manner, both global liberalization efforts consistent with WTO rules and liberalization efforts in the SRTAs that meet the criteria regarding their positive contribution to global liberalization.

# Chapter 1

## INTRODUCTION

The APEC region is one of the world's most diverse and dynamic economic groupings. Its population of more than 2.1 billion accounts for 38.3 percent of the world total. The combined GDP of the region is more than one-half of the world economy. The share of world trade accounted for by APEC members has risen sharply from 45.6 percent in 1980 to 56.2 percent in 1995<sup>1</sup>. With 18 member economies and great diversity in terms of population size, GDP, culture, and level of development, APEC's evolution may have far-reaching implications for the structure of world trade.

During the latter stage of the Uruguay Round negotiations, there was a surge in formation of new regional trade arrangements. Although the development of those arrangements was considered by many as an "insurance policy" in case of failure of the Uruguay Round negotiations, many observers at the time took it as a sign of a possible evolution of the world economy toward inward-looking trading blocs.

According to a World Trade Organization study (WTO 1995), among the more than 100 regional integration agreements notified to GATT, there are currently five reciprocal trade arrangements within the APEC region: the North American Free Trade Agreement (NAFTA)<sup>2</sup>, the ASEAN Free Trade Area (AFTA), the Australia-New Zealand Closer Economic Relations Trade Arrangement (CER), the Chile and Mexico Free Trade Agreement, and the Canada-Chile Free Trade Agreement.<sup>3,4</sup>

---

<sup>1</sup> See Table A1 of Appendix A for detailed changes.

<sup>2</sup> NAFTA subsumed the Canada-United States Free Trade Arrangement (Canada-U.S. FTA) in 1994.

<sup>3</sup> The Canada-Chile Free Trade Agreement was signed in December 1996 and entered into force

Since the new free trade agreement (FTA) between Chile and Mexico follows the NAFTA scheme, and the Canada-Chile FTA has only recently entered into force, this report will focus mainly on the three subregional trading arrangements (SRTAs) of the reciprocal type, namely NAFTA, AFTA and CER<sup>5</sup>.

The significance of the major preferential SRTAs within the APEC region is demonstrated by the fact that trade within these groups accounts for 29 percent of total intra-APEC trade, the bulk of this accounted for by intra-NAFTA trade (see Figure 2).

In addition to the above formal trade arrangements, there are various “growth areas” or “growth triangles” within the APEC region where distinct subregional economies are emerging through the combination of market-led integration and supportive government policies. These include the Indonesia, Malaysia, and Singapore Growth Triangle (IMS-GT), in which specified areas in the member economies form a special trade and investment zone.<sup>6</sup> In addition, there is a growth area encompassing

---

on July 5, 1997.

<sup>4</sup> There are some other free trade areas in which some APEC members are involved. For instance, Mexico, Colombia and Venezuela signed a free trade agreement in June 1994 known as the Group of Three Agreement. Others include those free trade arrangements signed by Mexico and Chile under the aegis of the Latin American Integration Association (LAIA), the South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA), and the Trade Agreement between Thailand and the Lao People's Democratic Republic (see OECD, 1995). Since this report focuses on subregionalism's impact on APEC, it only deals with those arrangements that are predominately composed of APEC members.

<sup>5</sup> Two short briefings upon the Chile-Mexico FTA and the Canada-Chile FTA are presented in Appendix B and Appendix C respectively.

<sup>6</sup> Many growth triangles in Asia involve non-APEC members and hence are not discussed in this report. For example, the Greater Mekong subregion comprises Cambodia, the Lao PDR, Myanmar, Thailand, Vietnam, and Yunnan Province of China. The Tuman River Area Development Program involves China, the Democratic People's Republic of Korea, and Russia. Many initiatives have been proposed and some work programs are being undertaken in these areas. The Indonesia-Malaysia-Thailand Growth Triangle, which contains DI Aceh and north Sumatra of Indonesia, northern

southern China, Chinese Taipei and Hong Kong, China (CHT), where no formal arrangement exists but where regional integration is being driven by a variety of forces, including common culture, proximity, economic complementarity, and supportive government policies. This study also incorporates a review of these informal growth areas.

Questions have been raised as to whether such SRTAs and growth triangles (GTs) detract from open regionalism or whether they are building blocks toward an open multilateral trading system. Questions have also been raised as to what might be the implications for APEC of subregional integration. These issues are taken up in this report.

Generally speaking, the conclusion as to whether or not SRTAs undermine or detract from the global trading system will turn on several considerations:

- What are the relative weights of the trade creation and trade diversion effects and thus the potential for resource misallocation?<sup>7</sup>
- Do SRTAs contribute to or detract from the momentum towards global trade liberalization?

If the trade effects of SRTAs are on balance positive, then there is no serious concern about the development of such arrangements. If, on the contrary, the effects are negative, their impact on open regionalism needs to be assessed. Once the APEC goals of free and open trade and investment in the Asia-Pacific region are reached, the preferential elements of SRTAs within APEC will cease to have any effect. This implies that the SRTAs within APEC are only temporarily relevant until full realization of the Bogor goals of free and open trade.

The study's primary findings are:

- In the case of all the SRTAs considered, trade creation and dynamic effects dominate trade diversion effects.
- Market forces are essential to successful regional integration whether in the context of formal or informal arrangement.
- Cooperation at the public policy level is also required to support market-led integration.
- APEC and SRTAs can be, and have been, complementary to each other, and there is no evident reason why SRTAs in the APEC region should become a stumbling block to the realization of free trade and investment.
- There is some evidence that the interaction between multilateral liberalization through the WTO, regional liberalization through APEC and sub-regional liberalization through SRTAs can accelerate the overall pace of liberalization and thus add momentum towards realization of an open global trading environment.

The rest of this report is organized as follows. Chapter 2 provides a theoretical review of the issues raised by SRTAs. Chapter 3 reviews each of the major SRTAs in the APEC region identified above, commenting on their nature, key features, and

---

Malaysia, and southern Thailand, is a relatively new one compared with the IMS-GT, and hence is not discussed in this report.

<sup>7</sup> One of the issues that SRTAs raise is the complications for the investor raised by the multiplicity of regimes. This issue has not received as much attention as the trade effect has in the literature.

empirical findings regarding their impact on trade and investment patterns of the member economies. Chapter 4 considers the possible significance of these SRTAs for the APEC region and investigates recent developments in each subregion. The progress toward liberalization and facilitation as called for by APEC is also examined. The prospects of APEC and the subregional trading groups, and their interrelationship, are covered in Chapter 5. Chapter 6 summarizes major findings and key conclusions.

## Chapter 2

### ISSUES RAISED BY SUBREGIONAL TRADE ARRANGEMENTS

This Chapter reviews the theoretical issues raised by SRTAs, the WTO rules affecting them, and their impact on the global trade policy environment.

#### *Welfare Implications of SRTAs*

The resource allocation implications of SRTAs have been heatedly debated. Whether an SRTA brings about a gain in welfare or not depends on the balance between trade creation and trade diversion that results from its formation. An SRTA creates trade to the extent that high-cost domestic suppliers lose market share to more cheaply produced imports from other members within the arrangement. It causes trade diversion by shifting demand away from low-cost products imported from the rest of the world to alternative higher-cost suppliers within the region who gain competitive advantage from the reduction in tariffs that they face within the SRTA. Since these effects depend on the specific circumstances facing the economies entering into the SRTA, including both the height of the tariff barriers facing third parties and the range of ancillary policies maintained by the SRTA-partner economies, categorical conclusions are not possible.<sup>8</sup>

In addition to trade creation and trade diversion, SRTAs have a number of dynamic effects. By lowering barriers to trade, a larger internal market is created, increasing the degree of competition between regional suppliers. This may lead to further dynamic effects, including lower prices, investment in R&D, and product innovation. A larger internal market also enhances opportunities for exploiting scale economies by allowing a higher degree of specialization in production. All of these factors may enhance the international competitiveness of the region, and render the region more attractive to foreign investors.<sup>9</sup>

There are a number of potential benefits of an SRTA to its members:

- It may enable member economies to attain economies of scale by allowing them to consolidate production, and thus to increase their domestic and export competitiveness.
- As trade barriers are lowered within the SRTA, increased competition in particular product markets may improve economic efficiency.
- Capital investment and technology transfer may be boosted and thus contribute to modernization of the local economy.
- Employment may be increased (in the long run), as may consumption.

---

<sup>8</sup> Even trade diversion might, in broad circumstances, increase welfare for the world economy as a whole. Wannacott (1996) argues that "(trade diversion) also triggers a process of trade liberalization between partners in which standard effects of increased competition, specialization, and trade over the FTA domain may reduce a partner's cost enough to make it the lowest-cost source and increase world welfare by reducing the cost of producing the Good" (p.62).

<sup>9</sup> See EAAU (1994) for a discussion.

The realization of benefits will depend on the particular circumstances and assorted policies of the economies entering the SRTAs. The net trade effect of SRTAs on non-member economies will tend to differ from case to case. Even if trade diversion dominates trade creation, non-members may still benefit from longer-term dynamic effects that SRTAs may have on regional growth and incomes. Providing the SRTA does not raise its external trade barriers, rising regional incomes will lead to greater demand for imports from the rest of the world, and therefore raise real incomes of non-member economies.

### ***SRTAs and GATT/WTO Rules***

Regional trade arrangements are addressed in the GATT and WTO rules. In the 1996 Singapore WTO Ministerial Declaration, Ministers reaffirmed “the primacy of the multilateral trading system” and renewed their commitment to ensure that regional trade arrangements are complementary to it and consistent with its rules. The main thrust of these rules appears to be to protect the MFN principle. The provisions in the GATT rules that govern regional arrangements (in this report, free trade agreements) are contained in various Articles as summarized below:

- The establishment of a free trade area is acceptable under GATT so long as its purpose is to facilitate trade within the region and not to raise barriers to trade with outside economies. (Article XXIV: 4)
- Duties and other restrictive regulations of commerce shall not be higher or more restrictive than the corresponding duties and other regulations of commerce existing in the same constituent territories prior to the formation of the free trade area. (XXIV: 5b)
- Duties and other restrictive regulations of commerce shall be eliminated on substantially all trade between the constituent territories in respect of products originating in such territories. (XXIV: 8b)
- Entry into an FTA shall be promptly notified to the WTO. (XXIV: 7a)

Regional agreements among less developed economies are accorded special treatment, through the so-called Enabling Clause:

- A mutual reduction or elimination of tariffs and non-tariff measures may be permitted notwithstanding the provisions of Article I of the GATT.
- Members shall not raise barriers to, or create undue difficulties for, the trade of any other contracting parties.
- The arrangement shall not constitute an impediment to the reduction or elimination of tariff and non-tariff barriers on an MFN basis.
- Members shall notify the arrangement to the WTO.
- The contracting parties shall afford adequate opportunity for prompt consultation.

The WTO includes several additional rules governing the formation of regional trading blocs through interim agreements:

- An interim agreement must provide a plan and a schedule for the formation of an FTA, normally within 10 years.
- Members benefiting from a reduction of duties consequent upon the formation of an interim agreement are not obligated to provide compensatory adjustment to its constituents.

The provisions in the GATS related to SRTAs are contained in Article V.

Economic integration is allowed provided such an agreement:

- (a) has substantial sectoral coverage, and
  - (b) provides for the absence or elimination of substantially all discrimination between or among the parties, in the sectors covered under (a). (Article V:1)
- Where developing countries are parties to an agreement of the above type, flexibility shall be provided for in accordance with the level of development of the parties concerned, both overall and in individual sectors and subsectors. (Article V:3)
  - An agreement shall not in respect of any member outside the agreement raise the overall level of barriers to trade in services within the respective sectors compared to the level applicable prior to such an agreement. (Article V:4)

In light of the above GATT/WTO and GATS rules, additional features of an SRTA that might help emphasize the positive aspects would be:

- MFN liberalization in conjunction with the creation of an SRTA in order to reduce concerns about trade diversionary effects, especially when tariffs facing non-members are high;
- A clear timetable for liberalization and facilitation in order to provide greater certainty to the private sector and mitigate against a reversal in policy; and
- Regular review of unilateral and collective actions in order to push forward the process of liberalization.

So far, no formal ruling has been made by the WTO on the consistency or inconsistency of the existing SRTAs with its rules.

### ***Impact of SRTAs on the Global Trade Policy Environment***

Whether or not SRTAs promote or detract from open regionalism depends in part on whether they contribute to, or detract from, momentum towards global trade liberalization. If SRTAs foster continued movement towards global free trade, then, as noted above, their significance will in any case wither away as the margin of preference over MFN tariff rates declines. Arguments have been advanced in both directions.

Frankel and Wei (1995) summarize the arguments as to how the development of regional free trade arrangements might undermine movement toward multilateral liberalization as follows:

- The negotiation process to form an SRTA provides opportunities for manipulation by special interests arising from the SRTA;<sup>10</sup>
- The negotiation process to form an SRTA draws on scarce negotiator resources;<sup>11</sup> and
- Political energy may be diverted to the SRTA process, depriving the multilateral process of the support it requires.<sup>12</sup>

---

<sup>10</sup> This argument points out that the process of instituting an FTA features opportunities for trade-sensitive industries to manipulate the process.

<sup>11</sup> It is argued that the time, capital and energies available for multilateral negotiations may be reduced by the competing demand from regional free trade negotiations.

On the other hand, it can be argued that the development of regional free trade areas tends to reinforce movement toward further liberalization more generally. As also summarized in Frankel and Wei, these arguments are as follows:

- The treaties that give effect to SRTAs tend to "lock in" unilateral liberalization that member governments may have achieved.<sup>13</sup>
- The formation of SRTAs can increase the efficiency of multilateral negotiations.<sup>14</sup>
- In cases where there is popular support for regional solidarity, the formation of an SRTA can draw on this support to achieve liberalization that would otherwise be impossible.
- By helping to create export-oriented constituencies, SRTAs can generate domestic political momentum for multilateral liberalization.
- The formation of SRTAs can lead to "competitive" liberalization as the expected costs of exclusion from groupings draws economies into multilateral negotiations.

In view of these arguments and recent history, it has in fact been suggested that the main arena for trade liberalization in the next instance may well be through the SRTA process -- for example, via the broadening of NAFTA into a Free Trade Area of the Americas (FTAA), the further deepening and broadening of the EU, continued deepening in the Asia-Pacific through APEC, and, subsequently, through linkages between these regional groupings.<sup>15</sup>

---

<sup>12</sup>Bhagwati (1993) argues that it is very likely that both business and government negotiators, after having achieved a regional free trade agreement, might not be willing to make the further effort required to advance multilateral negotiations.

<sup>13</sup> Panagariya (1995, pp 22-26) and others have acknowledged this while at the same time arguing that tariff bindings under the GATT/WTO are still better devices for locking-in reforms .

<sup>14</sup> The formation of SRTAs, it is argued, by reducing the number of independent negotiating partners, leads to more efficient negotiations. The usual example cited is that of the European Union, which provides a common external position for its 15 member economies.

<sup>15</sup> For example, a Transatlantic Free Trade Agreement or TAFTA linking NAFTA and the EU has been the subject of speculation, and in September 1994, the ASEAN Economic Ministers agreed to examine possible linkages between AFTA and other regional groupings to enhance multilateral trade.

## Chapter 3

### SUBREGIONAL TRADE ARRANGEMENTS IN APEC

This Chapter provides historical background and a review of the major features of APEC and the main SRTAs and growth triangles within APEC. A more detailed comparison profile of the NAFTA, AFTA, and CER Trade Arrangements is provided in USTR (1996).<sup>16</sup>

#### ASIA-PACIFIC ECONOMIC COOPERATION

APEC was established in 1989 for the purpose of trade and investment facilitation and liberalization through cooperation and consultation. The Joint Statement of the first APEC Ministerial Meeting in Canberra noted that "every economy represented in Canberra relies heavily on a strong and open multilateral trading system, and none believes that Asia-Pacific Economic Cooperation should be directed to the formation of a trading bloc." The spirit of open regionalism has been constantly reaffirmed since then.

The objectives of APEC, as originally stated in the subsequent Seoul Declaration, are:

- To sustain the growth and development of the region (and) of the world economy;
- To enhance the positive gains, both for the region and the world economy, resulting from increasing economic interdependence, including by encouraging the flow of goods, services, capital and technology;
- To develop and strengthen the open multilateral trading system in the interest of Asia-Pacific and all other economies;
- To reduce barriers to trade in goods and services and investment among participants in a manner consistent with GATT principles and without detriment to other economies.

At Bogor, the Leaders of APEC member economies set a number of specific goals and objectives, including:

- Free and open trade and investment in the Asia-Pacific no later than 2010/2020; and
- Expansion and acceleration of trade and investment facilitation programs, to attain sustainable growth for the APEC region.

In the 1995 Osaka Declaration, the APEC Economic Leaders again emphasized (their) resolute opposition to an inward-looking trading bloc that would divert from the pursuit of global free trade, and committed (themselves) to firmly maintaining open regional cooperation.

At Osaka, the leaders endorsed the Osaka Action Agenda (OAA), which seeks to:

- Encourage and concert the evolving efforts of voluntary liberalization in the region;

---

<sup>16</sup> A profile of these agreements was compiled by USTR and presented in the APEC CTI Trade Policy Dialogue in Manila, October 17, 1996.

- Take collective actions to advance the liberalization and facilitation objectives; and
- Stimulate and contribute to further momentum for global liberalization.

Nine fundamental principles were agreed in the OAA to guide the achievement of liberalization and facilitation:

- comprehensiveness
- WTO consistency
- comparability
- non-discrimination
- transparency
- standstill
- simultaneous start, continuous process, and differentiated time table
- flexibility
- cooperation

In addition, each economy was asked to develop its own Individual Action Plan (IAP) elaborating steps toward achieving the goals. It was also agreed that each member would submit its Individual Action Plan to the 1996 Ministerial Meeting in the Philippines. Implementation of IAPs was to (and did) begin as of January 1997 (APEC, 1995).

The main features of the IAPs are:

- significant unilateral tariff reductions that provide greater market access and predictability;
- a reaffirmation of the standstill on new measures of protection;
- commitments under non-tariff measures, investment and services (including measures that complement and go beyond the GATS agreement in both coverage and depth of commitment);
- a broad range of trade and investment facilitation measures, including under customs, standards and conformance, etc.;
- greater transparency and effective liberalization through various channels; and
- reaffirmation of Uruguay Round commitments, including under the GATS.

In 1996 APEC elaborated its approach to implementing the OAA and entered its action phase with the adoption of the Manila Action Plan for APEC (MAPA). MAPA represented a compilation of the IAPs, as well as collective action plans for trade and investment liberalization and facilitation, and joint activities on economic and technical cooperation.

Since APEC is committed to liberalization along MFN lines, APEC unequivocally contributes to global trade liberalization. Moreover, given the wide-ranging initiatives for deregulation and trade facilitation -- which will benefit all of APEC members' trading partners -- the impact of APEC liberalization will represent a major positive influence on global trade. Even the requirements under the OAA that members seek to liberalize first in those areas where trade is primarily with APEC partners in order to minimize the free rider benefits to third parties, do not detract from this positive assessment, since third parties will inevitably benefit to some degree.

## NORTH AMERICAN FREE TRADE AGREEMENT

NAFTA came into being in two stages, first with the signing of the Canada-United States Free Trade Agreement in 1988 and the subsequent evolution of this agreement through the trilateral negotiations on Mexico's entry into the trading arrangement.

The three economies had very different motives for joining the arrangement. For the United States, as the largest partner in the agreement, the promotion of a regional free trade agreement was in part a strategic response to the emergence in 1985 of the Delors plan for a European Single Market ("Europe 1992"). The latter initiative, which for some observers created the specter of a "Fortress Europe," would provide European trading partners with scope for competitive gains through economies of scale and secure access to European markets for European producers. The North American free trade arrangement, first with the United States' largest trading partner, Canada, and subsequently with Mexico, would provide similar benefits for American producers. In the case of Mexico, a major consideration for the United States was also cross-border immigration.

For Canada, entry into negotiations with the United States on a free trade arrangement marked an historic change in economic policy thinking. Previously, Canada had seen tariff barriers vis-a-vis the United States as a means to promote national economic integration. Economic nationalism had also led Canada to be cautious about foreign direct investment. However, the recognition that foreign investment motivated by jumping a tariff barrier resulted in branch plant production for local markets with no export potential, and the concern about securing access to its main trading partner, resulted in a reorientation of economic policy.

For Mexico, entry into NAFTA negotiations was associated with an even more dramatic shift in economic policy orientation, which also involved rejection of economic nationalism as a model and the desire to put Mexico's economy on the same export-led growth path that had proven so successful in East Asia.

Given the nature of the policy debate in North America during the formation of NAFTA, which took place in the context of an uncertain outcome for the Uruguay Round, this regional trade arrangement evoked for some observers the same concern as had the EU single market, namely that of a "Fortress North America" that would be inimical to the multilateral trading system.<sup>17</sup>

The objectives of NAFTA are as follows:<sup>18</sup>

- to eliminate barriers to trade in the region covered by the agreement;
- to promote fair competition within the region;
- to expand investment opportunities in the region;
- to ensure the proper protection and exercise of intellectual property rights within the region;

---

<sup>17</sup> See Funabashi (1993), who questioned whether NAFTA was a strategic U.S. initiative to create a "North American Greater Co-prosperity Sphere."

<sup>18</sup> See OECD (1995).

- to establish effective procedures for the execution of agreements and the settlement of disputes; and
- to create a framework for diversified regional cooperation among the three economies, so as to increase the benefits produced by the agreement.

NAFTA is one of the most comprehensive regional trade arrangements. The agreement is much wider in scope and coverage than other free trade agreements, going beyond market access in goods and services and investment, to incorporate new issues such as customs harmonization, intellectual property rights protection, competition policy, the environment<sup>19</sup>, and labor (workers' rights).

Recognizing the differences in trade patterns between member economies, NAFTA contains separate bilateral agreements on products such as automobiles, clothing and textiles, telecommunications, and agriculture (PECC, 1995a). It also allows its members to phase out tariffs and non-tariff barriers over different timetables. Simple average tariffs in the NAFTA region have declined from 6.4 percent in 1988 to 4.9 percent in 1996.

The reason for specific NAFTA obligations in various sectors differs depending upon the sector, and is not necessarily a reflection of whether the product is considered sensitive or not. For example, the NAFTA chapter on autos is a carry-over from the Canada-U.S. FTA, which was itself a reflection of the already deep integration of the Canada-U.S. auto industry resulting from the Auto Pact.<sup>20</sup>

NAFTA is unique in that it provides for free trade among economies at very different income levels. The general conclusions of existing studies on the impact of NAFTA are that all three members will experience welfare gains.

For Canada and the United States, which have already realized trade gains (efficiencies, economies of scale, pro-competitive effects, and reduced uncertainty) as a result of the Canada-U.S. FTA, the additional benefits from NAFTA will be modest. For Mexico, which undertook substantial liberalization commitments under NAFTA, the gains will be much greater. Mexico's speedy recovery from the peso crisis was in part due to its membership in NAFTA. Third parties will also benefit by the trade creation flowing from the aforementioned gains though some analysts believe that this trade creation for third parties may be partially offset by trade diversion.

---

<sup>19</sup> See Garber (1993) p.2. NAFTA recognises the importance of ensuring that trade rules are consistent with domestic and international environmental objectives. The Agreement allows governments to take steps to protect the environment, even when these steps conflict with their trade obligations, as long as such steps do not involve unnecessary discrimination or introduce disguised restrictions on trade. It establishes that obligations in certain international environmental agreements can override obligations in the NAFTA. It preserves the rights of governments to set high environmental standards. Any panel established to address an environmental issue will have access to environmental experts. Further, a North American Commission on the Environment was established on a parallel track. The North American Agreement on Environmental Cooperation sets out a broad cooperative work program; details the obligations of all three countries to ensure compliance with domestic environmental laws and policies; provides mechanism for consultation and resolution of disputes over trade related environmental issues and recourse if a NAFTA partner fails to enforce its own environmental laws.

<sup>20</sup> The WTO also treats these sectors separately, recognizing the special policy considerations unique to the sectors.

The NAFTA member economies have the highest intra-regional trade dependence of all the APEC subregions, although this dependence on internal trade is still less than that of the EU. As indicated in Table A3a, over 30 percent of NAFTA members' exports go to other NAFTA members while, as shown in Table A3b, over 30 percent of NAFTA members' imports are sourced from other NAFTA partners. The latter ratio has been rising since 1986, which may reflect in part the effect of the Canada-U.S. FTA, which came into force in 1988.

NAFTA members also have a high trade dependence on APEC, with over 70 percent of their exports going to APEC partners (including NAFTA partners) and over 70 percent of their imports sourced from APEC partners. Of particular note is the rising share of CHT in NAFTA trade, which reflects to some extent the natural result of the resumption of trade with China since the end of the 1970s.

As regards foreign direct investment (FDI), Table A4a shows that the share of inward FDI of NAFTA member economies that was sourced from other NAFTA members declined steeply in the 1980s, from 41.5 percent in 1980 to only 22 percent in 1990, before picking up somewhat to 23.1 percent in 1992. The reversal of the downward trend may also reflect to some extent the effect of the Canada-U.S. FTA.

NAFTA members' inward FDI links with APEC as a whole also declined over the 1980s, but only marginally as the intra-NAFTA regional decline was almost entirely offset by an increase in the share of FDI sourced from other APEC members, most notably Japan and Korea, from 4.4 percent in 1980 to 20.8 percent in 1992. The distribution of outward FDI from NAFTA members was stable over the period 1980 to 1992, as indicated by Table A4a.

In summary, NAFTA member economies have seen their trade and FDI links with other APEC members, including the trans-Pacific links as well as the intra-North American links, strengthen since the 1980s. The impact of NAFTA, which came into effect in 1994, on these relationships remains to be seen.

Intuitively, the regions most affected by the creation of NAFTA are those traditionally dependant on the U.S. market, such as Latin America and the East Asian developing economies. Kim and Weston (1993) concluded that third economies will experience a small amount of trade diversion. They found that total losses for East Asian economies' exports are small (US\$121 million). Among East Asian economies, the NIEs would be deprived more than other economies in both absolute and relative terms.

Using the UNCTAD and World Bank model, Safadi and Yeats (1994) measured the trade diversion that South Asia could experience as a result of NAFTA. They forecast only about a one percent decline in South Asia's total exports. They also argued that "a successful completion of the Uruguay Round would considerably reduce South Asia's potential losses since it would lower the preference margins that NAFTA could provide member economies. To put events in perspective, this report notes that the trade gains South Asian economies could experience from a successful completion of the Uruguay Round are around 100 times greater than the losses they might incur from NAFTA."

## **ASEAN FREE TRADE ARRANGEMENT**

The Association of Southeast Asian Nations (ASEAN) was established in 1967 by the five original member economies, namely Indonesia, Malaysia, the Philippines, Singapore and Thailand. Brunei Darussalam and Vietnam joined in 1984 and 1995 respectively. Laos and Myanmar joined in 1997.

The three main objectives of ASEAN are to:

- promote the economic, social and cultural development of the region;
- safeguard the political and economic stability of the region; and
- serve as a forum for the resolution of intra-regional differences.

The ASEAN Free Trade Arrangement represented an evolution of ASEAN from a forum aimed mainly at promoting peace and stability in the region to one aimed at deepening the economic partnerships in the region. Both internal and external considerations played a role in the creation of AFTA.

AFTA evolved in three steps. First was the initiative to put into place the Preferential Trading Arrangements (PTA) in 1977. However, the ASEAN PTA covered only a small number of tariff lines and had limited scope to promote regional economic liberalization. Meanwhile, the rapid economic development of ASEAN members in the 1980s and into the 1990s had substantially increased the volume of trade of member economies. Plans for NAFTA and the European Community's Single Market raised concerns about access to those markets, particularly given the still uncertain outcome of the Uruguay Round at that time. Accordingly, the second step occurred in 1992 when ASEAN members agreed to set up the ASEAN Free Trade Area within 15 years, using the Common Effective Preferential Tariff (CEPT) as the main mechanism. The CEPT covered many more items than the PTA had.

Key features of the original AFTA agreement are as follows:

- A number of important areas, including unprocessed agricultural products, were not covered by liberalization measures. Moreover, the elimination of non-tariff barriers was not taken into serious consideration. Thus the agreement was not comprehensive.
- Since there were no formal restrictions on adding strategic sectors to the Temporary Exclusion List, as has been done in the case of the automotive sector, the agreement did not guarantee a standstill on new restrictive measures.
- Members had the right to decide the rate of annual tariff reduction on their own.
- The agreement did not include mechanisms to enforce rulings -- indeed, members could exempt products from the application of these rulings -- or monitor members' policies, which created transparency issues.

The 1992 CEPT Agreement excluded unprocessed agricultural products totaling 2,025 tariff lines. However, the 1994 ASEAN Economic Ministers Meeting decided to bring unprocessed agricultural products into the CEPT Scheme on a gradual basis. The process of tariff reduction for some of these products has already begun. By

2003, products representing 87 percent of tariff lines for unprocessed agricultural goods are to be brought into the CEPT Scheme, and by 2010 all products are to be in the scheme.

The original aim of AFTA was to develop ASEAN economies as a free trade area by 2008. Through AFTA, ASEAN sought to:

- secure market access within the region for its members and attract foreign direct investment; and
- strengthen its credibility and negotiating weight in global and regional fora.

The stated objectives of AFTA are to:

- enhance intra-ASEAN economic cooperation to sustain the economic growth and development of all members; and
- reduce or eliminate trade and non-trade barriers.

These goals are to be achieved by reducing effective tariffs to under five percent and removing all non-tariff barriers.

Two major economic developments prompted ASEAN to speed up the AFTA process and extend its coverage, the third step in its evolution. One was the conclusion of the Uruguay Round negotiations in 1993. The other was the declaration by APEC in 1994 of its commitment to liberalize trade and investment in APEC by 2010/2020. These events may have sparked ASEAN fears of dilution in a wider regional organization and of being overshadowed by the larger economies. In 1994, ASEAN decided to reduce the implementation period of AFTA from 15 years to 10 years, or by January 1, 2003. This decision resulted in the 1995 Protocol to amend the 1992 Agreement.

AFTA has adopted the following agenda for greater economic integration:

- to further accelerate the progress of AFTA;
- to schedule the elimination of non-tariff barriers beginning on January 1, 1996;
- to introduce greater transparency in standards and conformance, to align product standards, and to facilitate mutual recognition agreements;
- to harmonize tariff nomenclature and implement the GATT Valuation System by 1999;
- to intensify its economic linkages with other regional groups, such as CER, the EU and NAFTA;
- to support subregional arrangements;
- to move toward cooperation and free trade in services by negotiation on market access, although member economies will be allowed to decide the extent and sectors to be offered;
- to work toward establishing an ASEAN investment region;
- to cooperate closely on trade issues in international fora, such as the WTO and APEC; and
- to adopt a General Dispute Settlement Mechanism.

Based on the member economies' tariff reduction schedules for products under the CEPT, AFTA estimates that 88 percent of tariff lines will reach the goal of tariffs of zero to five percent by 2000. These tariff lines accounted for 98 percent of intra-

ASEAN imports for the year ending in June 1995. AFTA has also encouraged members to consider accelerating the tariff reduction for remaining products to this level by 2000, particularly for the three important sectors of machinery and electrical appliances, base metals and metal articles, and plastics. These three sectors accounted for 60 percent of intra-regional imports in the same period. The bold liberalization programs which many AFTA members have already carried out have lowered the average tariffs of the APEC members of AFTA<sup>21</sup> from 15.9 percent in 1988 to below 9.5 percent in 1996.

Liberalization and facilitation measures in the action plans of most ASEAN economies include unilateral tariff reduction, implementation of the Uruguay Round TRIPS Agreement, and a number of items to fulfill the GATS. Liberalization of trade and investment rules is used as a tool for economic development and implemented by each economy at its own pace rather than as a legislative requirement or collective action. There has been no unilateral action taken which goes beyond Uruguay Round commitments.

Besides tariff reduction and elimination of non-tariff measures, AFTA also seeks progress on trade facilitation. There has been varied progress made in areas such as the Green Lane System, Agreement on Customs, Common Customs Forms, Elimination of Customs Surcharges, etc. An alternative to the Rules of Origin for Textiles and Textile Products was introduced in 1996, allowing an exporter to select the existing 40 percent criterion of the CEPT or the new transformation process criterion when applying for the ASEAN CEPT Certificate of Origin.

AFTA has also decided to establish a Dispute Settlement Mechanism (DSM) to enhance transparency, equity and accountability in the AFTA process. The ASEAN DSM, which is patterned after the WTO Dispute Settlement Understanding, will apply to all past and future ASEAN economic agreements. Under the ASEAN DSM, the entire process of dispute settlement has a maximum length of 290 days. An important feature of the ASEAN DSM is that rulings on disputes are by simple majority and not by consensus, the first formal use of non-consensual rule-making in ASEAN.

Despite the slow progress in advancing liberalization within AFTA, integration in the region has deepened considerably. Growth in intra-regional trade has increased in recent years, with the the bulk of this trade accounted for by Singapore and Malaysia. The emergence and rapid expansion of cross-border production operations by multinational enterprises has contributed a lot to this development within ASEAN. As regards FDI, since the late 1970s, the ASEAN region has also become an attractive investment location, particularly in export-oriented manufacturing, with Japan and East Asian NIEs replacing western industrialized economies as the main sources since the mid-1980s. Japan and the NIEs account for half of FDI into ASEAN.

Trade between ASEAN and other regions has increased much faster than world trade in total. From 1988 to 1995, the foreign trade of ASEAN economies grew almost 1.6 times faster than that of the world as a whole. Intra-ASEAN trade has grown very fast in this period, though no acceleration since 1992. The main change in foreign

---

<sup>21</sup> Vietnam is not included because it is not a member of APEC. See MAPA, 1996.

direct investment that occurred between 1980 and 1992 was the increasing influence of the NIEs in the region, especially Chinese Taipei. Geographic connection does seem to play a role here, since ASEAN's outward capital mainly goes to the NIEs.

Given the fact that AFTA has been in place only a short time, assessment of its impact on trade and investment flows of ASEAN members is difficult. The empirical work on AFTA at this stage is still very limited. Imada (1993) estimated that intra-ASEAN trade would increase by 25 percent, but that the impact on total trade and production would be small.<sup>22</sup> This result suggests substantial trade diversion. However, her study does not incorporate dynamic considerations such as effects on economies of scale and learning by doing.

## **AUSTRALIA-NEW ZEALAND CLOSER ECONOMIC RELATIONS**

The Australia-New Zealand Closer Economic Relations (CER) Agreement is the oldest of the SRTAs in the Asia-Pacific region, dating from January 1, 1983. It was developed to replace an earlier and more limited arrangement, the New Zealand-Australia Free Trade Agreement (NZAFTRA), which was first put in place in 1965. The earlier agreement had only applied to forest products and a limited range of manufactured goods.

The original objectives of the CER agreement, as stated in Article 1, are to:

- strengthen the broader relationship between Australia and New Zealand;
- develop closer economic relations between Australia and New Zealand through a mutually beneficial expansion of free trade;
- eliminate barriers to trade between Australia and New Zealand in a gradual and progressive manner under an agreed timetable and with a minimum of disruption; and
- develop trade between New Zealand and Australia under conditions of fair competition.

The CER agreement originally contemplated the gradual elimination of tariffs by January 1, 1988, and import quotas by June 30, 1995. However, in the 1988 review of CER, the Protocol on the Acceleration of Free Trade in Goods was adopted to eliminate all tariffs, import licensing, and quantitative restrictions for trans-Tasman trade in virtually all goods by July 1, 1990. The 1988 Protocol also included an agreement to replace anti-dumping arrangements with competition law effective from July 1990. The 1988 review of CER also resulted in the adoption of the Protocol on Trade in Services, effective from January 1, 1989, which brought services within CER on the basis of clearly stated rules that ensure the extension of national treatment to service providers of each member. The objectives of the Protocol were to improve the efficiency and competitiveness of Australian and New Zealand service industries through increased competition in services trade.<sup>23</sup> The services Protocol contains an inscription annex listing services not covered by the Protocol, such as aviation,

---

<sup>22</sup> Ramasamy (1995) also estimated the effect of AFTA on resource allocation in ASEAN.

<sup>23</sup> See BIE (1995b) pp. 24-26 for a discussion.

shipping, telecommunications, and financial industries. This list is revised on a regular basis and items are removed in line with each member's domestic reform process. Since 1989, no services can be added to the list -- only deletions can be made. The Protocol automatically includes any new service industry.

CER is exceptional in that it was the first SRTA to include agriculture. Both CER members are important exporters of agricultural products, and their level of protection of agriculture is in any case the lowest among the OECD economies (WTO, 1995).

CER has generally been considered as a successful example in regard to trade liberalization. For example, as stated in the WTO (1995), "... A notable example is the comprehensive reduction in both tariff and non-tariff barriers carried out by Australia and New Zealand after the CER Agreement came into effect..." In terms of its effects on third economies, the CER agreement is compatible with GATT. Independently of CER, Australia and New Zealand have unilaterally reduced their barriers to trade with the rest of the world, helping to minimize potential trade diversion. Falling barriers to imports regardless of the source have also increased pressure on governments to achieve international best practice in the provision of infrastructure and business regulations, which has in turn helped to raise international competitiveness in third markets. In fact, elimination of trade barriers to trans-Tasman trade has been accompanied by a progressive reduction in tariffs against third economies (MERT, 1993, and BIE, 1995b).

BIE (1995b) concluded that positive aspects of CER are:

- a timetable for the elimination of tariffs, quotas and export subsidies;
- a negative list approach: all goods and services are included except those specifically mentioned for exclusion;
- comprehensive product coverage;
- the imposing of disciplines on quantitative restrictions;
- replacement of anti-dumping law with competition policy;
- provision for mutual recognition agreements to facilitate trade;
- a rules-based system for services trade, such as the right of establishment, national treatment, etc.;
- provision for regular comprehensive reviews of the agreement: CER was reviewed and refined in 1988, 1992, and 1995;
- falling barriers to imports from the rest of the world; and
- limited bureaucracy or supranational organizations.

Trade within CER has generally grown steadily, strengthening CER economic links, particularly from the perspective of New Zealand. In the case of Australia, the share of its total exports to New Zealand stayed more or less constant during 1983-1995.

Both Australia and New Zealand have experienced an increase in the share of trade with Pacific Rim economies, at the expense of the rest of the world. Table A7a reports on exports from CER to APEC subregions in 1980-1995. It shows that exports from CER to NAFTA increased at first, then declined starting in 1990. Exports to ASEAN declined gradually early in this period, then increased rapidly after 1986. Exports to APEC members do not show any clear-cut pattern. Exports to the rest of the world (ROW) declined sharply during 1983-1995.

Although there was no formal agreement to assure free and open investment between Australia and New Zealand, Table A8 does show a trend of growth in trans-Tasman investment. This may have resulted from the liberalization of trade in services in the 1988 review of CER, since opportunities for services trade often result in some form of FDI to establish a commercial presence in the host economy.

The impact of the CER agreement on trade is addressed in various studies. In an appraisal of CER, Bollard (1986) concluded that trade creation was likely to dominate trade diversion and the trade effects would be stronger in New Zealand than in Australia. In a recent review of the performance of CER, BIE (1995b, chapter 5) used a quantitative analysis of trans-Tasman trade with particular emphasis on manufactures trade, and concluded that overall CER had a small but positive effect on the GDP and welfare of CER partners. Similar results are also obtained in other studies, such as Menon (1994) and PECC (1995). Sources of difficulties with CER, which were reviewed in BIE (1995b) and are still considered to exist, deal primarily with continuing exemptions in services trade.

Over the last two decades, economic integration in certain geographically contiguous areas has been fostered through the device of "growth triangles." The basic concept of the growth triangle is that by linking geographically proximate areas of several economies with different factor endowments, a larger regional market can be created to exploit economic complementarities. To date, growth triangles have mostly been formed in Asia. Some have been formed through deliberate initiatives of related governments. Others have been driven mainly by the private sector and market forces. Most studies conclude that economic complementarity, geographical proximity, political commitment, and infrastructure development are key factors in determining the success of the growth triangles (Tang and Thant, 1994; Chen and Ho, 1994; and EAAU, 1995). Indeed, these factors are considered preconditions to winning over commitment from the private sector.

### **SOUTHERN CHINA-HONG KONG, CHINA-CHINESE TAIPEI GROWTH AREA**

One such market-driven growth triangle involves southern China along with Hong Kong, China; and Chinese Taipei (CHT). This group of economies has experienced continued strong growth over a long period in spite of recessions in other parts of the world at times during this period. The boom has been driven primarily by the rapid economic development in southern China resulting from China's "open-door" policy. At the same time rising labor and land costs in Chinese Taipei and Hong Kong, China have caused the private sectors in these economies to exploit economic complementarities in China, resulting in the development of a regional growth triangle.

Two noteworthy features of the CHT growth triangle are:

- its informality -- no formal negotiations taken place among the members; and
- its vertical economic integration, a phenomenon observed in most growth triangles.

Compared with other growth triangles formed mostly through deliberate initiatives of the authorities, economic integration of CHT has been driven by the private sector and market forces. However, public policies have also been important in determining the extent to which the economic integration has advanced (Tang and Thant, 1994, p.13). For China, after economic reform and the open-door policy were initiated in 1978, Guangdong and Fujian provinces were authorized in 1979 to implement special autonomous policies, namely Special Economic Zones (SEZs), to attract foreign investment. As discussed in Chen (1994), a number of preferential policies related to tax reduction, land use, finance, etc. were applied in these SEZs. As for Hong Kong, China, the government had been implementing very liberal economic policy, with virtually no restrictions on firms relocating their manufacturing processes to China. In Chinese Taipei, government controls on trade and investment have been gradually liberalized since 1987, a key factor in the emergence of this growth triangle.

The choice of Guangdong and Fujian as the locations for SEZs was due in part to considerations of geographical proximity, linguistic affinity, cultural similarity, and -- most importantly -- economic complementarity to the neighboring economies of Chinese Taipei and Hong Kong, China. This economic complementarity derives from the members' differing stages of development and/or factor endowments. Guangdong and Fujian are abundant in natural resources and labor. Chinese Taipei and Hong Kong, China have strong industrial sectors, well-established financial markets, rich "soft" and "hard" technological capability, a large pool of technical and managerial personnel, and plentiful capital. As a result, many manufacturing firms and labor-intensive industries in Chinese Taipei and Hong Kong, China have relocated their activities to southeast China. As these industries shifted production in accordance with comparative advantage, they also brought foreign direct investment and technology to China.

Chinese Taipei and Hong Kong, China, which had provided two-thirds of the cumulative realized external direct investment in mainland China at end-1996, have thus played a crucial role in China's economic take-off. In particular, Hong Kong, China, as the financier, investor, supplier, and provider of technology for southern China, has helped to smooth the transition from central planning to a market-oriented economy. Infrastructure development is another key factor in the success of a growth triangle. In the case of CHT, the preparation of the SEZs involved, among other things, large-scale land development and capital construction, navigation lines, and telecommunications (see Tang and Thant, 1995, for a discussion).

An indication of the impact on international trade of the dynamism in CHT is shown by the fact that CHT's share of world trade grew from about 3.0 percent in 1980 to about 8.4 percent in 1996. At the same time, intra-CHT trade grew from about 10 percent of those economies' total trade in 1978 to over 30 percent by 1995.<sup>24</sup>

Chinese Taipei's total indirect trade with China increased from less than US\$50 million in 1978 to US\$11.5 billion in 1995, with a substantial surplus in favor of

---

<sup>24</sup> Since there is difficulty in decomposing economy-wide data into subregional figures, the study used data of the respective economies to study the interdependence of the CHT area.

Chinese Taipei. Imports from China, which are restricted primarily to raw materials, accounted for only 1.5 percent of total Chinese Taipei imports in 1995.<sup>25</sup>

According to China's statistics, the cumulative value of realized direct investment by Hong Kong, China in China amounted to US\$100 billion, accounting for 56 percent of total external direct investment, at the end of 1996. Hong Kong, China's investment is concentrated in Guangdong, where an estimated 5 million employees are working for Hong Kong, China firms at present.

China's statistics show that at end-1996, Chinese Taipei was the second largest investor in China just after Hong Kong, China accounting for about 8 percent of total realized external direct investment. Chinese Taipei's cumulative direct investment in Guangdong alone was estimated at around US\$1.5 billion.

While China investment is not permitted yet in Chinese Taipei, it has become significant in Hong Kong, China. China is now the second largest external investor in Hong Kong, China just after the United Kingdom. Hong Kong, China's latest survey shows that at end-1995, China's cumulative realized direct investment in Hong Kong, China amounted to US\$14 billion. The corresponding figures for Japan and the United States were US\$11 billion and US\$9 billion, respectively. The size of China's direct investment in Hong Kong, China is therefore much smaller than that of Hong Kong, China's direct investment in China.

Between 1978 and 1996, China's merchandise trade grew at an average annual rate of 15.8 percent, Chinese Taipei's at 13.1 percent, and Hong Kong, China's at 19.6 percent. World merchandise trade grew, on average, by about 7 percent per year. Thus all three economies increased their shares of global trade. China and Chinese Taipei increased theirs by almost 100 percent, and Hong Kong, China its by almost 200 percent.

In summary, CHT represents a market-led and vertically integrated growth triangle, in which the three economies play different roles and exploit complementarities among themselves. At the same time, the SEZ policy and the accommodation of the growing trade and regional integration by governments have played an important role in the economic success of the region. However, to the extent that the SEZ policy has resulted in unbalanced investment in the different parts of China, it is possible that some internal distortions may have arisen with resulting sub-optimal allocation of resources.

## **INDONESIA-MALAYSIA-SINGAPORE GROWTH TRIANGLE**

The second growth triangle of particular interest is the one initially involving Singapore, Johor (the southern Malaysian state), and Riau (the Indonesian island) (SIJORI hereafter). The SIJORI economic zone was proposed in December 1989 by Singapore's then Deputy Prime Minister Goh Chok Tong as a new form of sub-regional economic cooperation within ASEAN to exploit economic complementarities in the region.

---

<sup>25</sup> Direct trade, which consists of smuggling and "minor trade" in ships of less than 100 tons, is also thought to have increased, although it is difficult to measure.

Singapore, as the principal force behind this triangle, possessed excellent infrastructure, well-developed financial markets, comprehensive sea and air transport, and advanced telecommunication facilities. It had easy access to world markets for investors and was an important financial and business services center of the region. However, with rapid industrialization, it faced shortages of labor, land and water as well as rising production costs. Johor and Riau, on the other hand, had low-cost land and labor available. Under the growth triangle arrangements, the products of plants in Johor and Riau could be designed, marketed, and distributed by service industries in Singapore, where they would benefit from the excellent infrastructure.

SIJORI developed effectively through the links between Singapore and Johor on the one hand, and between Singapore and Riau on the other (EAAU 1995). Singapore and Johor had had a long history of economic interaction driven mainly by market forces. By contrast, the Singapore-Riau link was created by government-led initiatives. In August 1990, a bilateral agreement between Singapore and Indonesia was signed jointly to develop Riau. In June 1991, a further agreement was signed to develop jointly and share Riau's water resources. As regards the third link in the growth triangle, between Johor and Riau, economic links hardly existed before 1993. However, the emerging shortage of labor in Johor led it to consider the possibility of firms in the plantation sector investing in Indonesia. Eventually, official trilateral agreement on the development of the Indonesia-Malaysia-Singapore Growth Triangle (IMS-GT) was signed in December 1994.<sup>26</sup>

The objectives of the IMS-GT agreement, as stated in Article 1 of the Memorandum of Understanding (MOU), are to promote development, expansion and integration in the areas of trade and transport, tourism, shipping and communications, agriculture, forestry, development of industrial infrastructure, and supporting industries.

The SIJORI triangle sought to exploit economic complementarities by reducing regulatory barriers in order to gain a competitive edge in attracting domestic and foreign investment and to promote exports. With rapid industrialization and development progressing, governments involved in SIJORI had to start to invest in infrastructure and human resource development to meet the growing requirements of the private sector. In addition, they began work towards harmonization and simplification of investment rules, taxes, land laws, labor market policies, and immigration and customs procedures, to improve their competitiveness and to attract foreign investment.

---

<sup>26</sup> Hereafter SIJORI and IMS-GT are used synonymously in this report.

## Chapter 4

# CONTRIBUTION OF SRTAs AND GROWTH TRIANGLES TO TRADE LIBERALIZATION

This chapter considers the contribution to overall trade and investment liberalization within the Asia-Pacific region made by the various SRTAs and growth triangles. Because the former are formal arrangements and subject to WTO rules, whereas the latter are informal and cannot be assessed against WTO criteria, SRTAs and growth triangles are considered separately.

Within the Asia-Pacific region, the APEC initiative to achieve free and open trade and investment in the Asia Pacific region by 2010/2020 provides an overall context of comprehensive MFN-based liberalization. To consider the role of preferential trading arrangements in a region such as APEC that is committed to open regionalism, two approaches are used. First, the features of the SRTAs in the APEC region are reviewed to see if they generally work to promote global liberalization. Secondly, CGE simulations are undertaken to assess (i) the impact of overall MAPA implementation, and (ii) the impact of unilateral MAPA implementation in each of these subregional groupings separately.

### *Contribution of SRTAs to Liberalization*

The contribution towards global trade liberalization of the SRTAs in the APEC region is assessed against the following criteria, namely whether:

1. the arrangements adhere to WTO Article XXIV (as described in Chapter II);<sup>27</sup>
2. the new arrangements are preceded or accompanied by MFN liberalization, especially when protection against non-members is high;
3. exceptions are based on the negative list approach;
4. a clear time table for liberalization and facilitation is established to provide the private sector with a certain environment, and to prevent a reversal of policy; and  
In the case of agreements which are not broadly comprehensive, a fifth criterion may be added, namely:
5. for agreements that are not broadly comprehensive, regular review of unilateral and collective actions is undertaken to push forward the process of liberalization.

Regarding the first two criteria, given the fact that all the members of the three SRTAs considered are founding members of the WTO and part of the APEC process, it is not surprising that they fulfill the criterion that MFN liberalization precede or accompany the formation of the trading arrangement. At the same time, as the WTO has not formally confirmed either consistency or inconsistency with WTO Article XXIV, no definitive statement can be made in respect of this criterion.

---

<sup>27</sup> Harmsen and Leidy (1995), however, suggest even stronger conditions for an SRTA to be considered a building block toward global liberalization. These conditions go beyond the GATT Article XXIV and are: coverage of all sectors (without exception); transparent rules of origin; liberal rules of accession; and strengthened disciplines on the use of anti-dumping action against third parties.

NAFTA would appear to meet criteria 3 and 4. It has broad coverage of sectors and issues, indeed the broadest of any of the SRTAs, and exceptions are based on the negative list approach it has also established a clear timetable to lower and eventually eliminate, all trade barriers among the three members. The NAFTA agreement will eliminate essentially all tariffs in trade between the United States and Canada by January 1998 and, within a 10-year phase-out period, 99 percent of tariffs in trade between Mexico and Canada and between Mexico and the United States.

AFTA also appears to meet criteria 3 and 4. Its development of Exclusion Lists makes it consistent with the negative list approach. A schedule has also clearly been set to reduce tariffs to 0-5 percent for all products by the year 2003. Regarding criterion 5, product coverage was far from comprehensive initially but has been expanded over time. The 1995 Protocol extended the 1992 Agreement to all manufactured products, including capital goods and agricultural products. It also covers intellectual property protection and trade in services. In addition, other issues which contribute positively toward free and fair trade, such as the establishment of the DSM, have also been dealt with.

CER also meets criteria 3 and 4. It has broadly comprehensive product coverage and features a negative list approach for exceptions. It has achieved free trade in goods and is now moving toward progressive liberalization of services. CER might, in fact, be considered one of the most successful trading arrangements in the world. It has been in effect longer than either NAFTA or AFTA, and is pursuing deeper forms of integration. For example, it has replaced anti-dumping law with competition policy, removed regulatory barriers to trade through mutual recognition agreements and harmonization of standards, eliminated preferences with regards to government purchasing, and established a rules-based system for services trade. Moreover, a process of regular reviews has been established.

In view of the above, it can be concluded that the SRTAs in the APEC region have met some of the criteria on global liberalization, although their consistency with WTO rules has not yet been formally confirmed.

### ***Contribution of Growth Triangles to Liberalization***

As noted, the growth triangles cannot be judged according to the same criteria as the SRTAs as regards their role in promoting global liberalization. Criterion 2 would, however, appear to be relevant. In respect of this criterion, all members of the CHT and IMS growth triangles are part of the APEC process of MFN liberalization and have substantially reduced tariffs in recent years.

Indeed, according to the assessment by PECC (1996), several members of these two groups (including China; Hong Kong, China; Indonesia; and Singapore) are considered "champions" in their IAPs for either low tariffs or extensive tariff reductions. In respect of tariffs, both Hong Kong, China and Singapore, which already had zero tariffs in 1996, committed to binding their tariffs at zero. The other members of these two growth triangles all have made substantial reductions in tariffs over the recent period. Between 1988 and 1996, China reduced its average applied tariff from 39.5 percent to 23 percent; Indonesia from 18.1percent to 13.4 percent;

Malaysia from 13.6 percent to 9 percent; and Chinese Taipei from 12.6 percent to 8.6 percent.<sup>28</sup>

More generally, by broadening the scope for inter-economy cooperation, growth triangles tend to promote trade among the partners and to strengthen the external orientation of the members. By exploiting scope for improved factor utilization, they also promote growth, expanding their markets for other partners, and improve their ability to participate in formal liberalization processes. Accordingly, while the informal growth triangles do not factor into the formal liberalization process, they can be seen as having a positive, albeit modest, facilitating effect.

### ***Quantitative Analysis: CGE Model Simulation***

This section provides a quantitative perspective on the contribution to overall trade and investment liberalization within the Asia-Pacific region made by the various SRTAs. This complements the qualitative review of the features of the SRTAs above. The CGE simulations described below assess: (i) the impact of overall MAPA implementation, and (ii) the impact of unilateral MAPA implementation in each of these subregional groupings separately.

To illustrate the significance of the SRTAs, it is helpful to consider their quantitative impact in the context of overall APEC liberalization. As noted in Chapter 1, the three SRTAs combined account for 29 percent of intra-APEC trade. The liberalization that has already been carried out within the SRTAs and/or is scheduled to take place represents an accelerated liberalization compared to the APEC process for the portion of the trade of SRTA member economies that is conducted with fellow members. This covers a significant portion of intra-APEC trade but still leaves the bulk of the full liberalization of trade within the region to the APEC process.

Utilizing a computable general equilibrium (CGE) model,<sup>29</sup> the simulation results indicate that MAPA commitments would increase the overall level of merchandise exports of the APEC economy 3.0 percent in 2010.<sup>30</sup> For AFTA, which would benefit the most among the three SRTAs from implementation of MAPA commitments, the increase in exports is 6.7 percent in 2010. The corresponding figures for CER are 2.4 percent, and for NAFTA 2.0 percent. The results are generally consistent with the finding that developing economies would receive comparatively greater benefit in terms of increases in exports than the industrialized economies.

Several exercises were also performed in which only one subregion, e.g. NAFTA, implements MAPA commitments. The results, presented in Appendix D, are in general similar to those of the APEC case. Specifically, the subregion which implements MAPA will benefit the most in terms of changes in its exports. Liberalization plus facilitation will result in larger welfare gains in terms of export

---

<sup>28</sup> MAPA Highlights (APEC Home Page).

<sup>29</sup> Collaborating with a separate APEC Economic Committee study on the topic of the Impact of Trade Liberalization in APEC, this report simulated the results of the MAPA impact on each subregion. For detailed methodology and analytical framework, see APEC (1997).

<sup>30</sup> Appendix D provides statistics about the MAPA impact on each subregion. With regard to the impact on non-APEC economies, the results also show that their exports will also be increased with the MAPA commitments, though the magnitudes are relatively lower than those of the APEC economies.

increases than liberalization only. This finding not only echoes the results in the report of the Trade Liberalization Project (APEC, 1997), but also supports the focus on facilitation in the OAA. Moreover, the gains of liberalization will also spread to other subregions, though with relatively smaller magnitudes.

**Table 1: Impact of MAPA (% Change in Volume)**

Economies	GDP	Export
APEC region	0.4	3.0
NAFTA	0.2	2.0
AFTA	3.6	6.7
CER	0.5	2.4
Latin America	<0.1	0.6
West Europe	<0.1	0.7
Rest of World	<0.1	0.4
World Total	0.2	1.8

## **Chapter 5**

### **PROSPECTS FOR SRTAs AND GROWTH TRIANGLES**

APEC now has entered the era of implementation of the Bogor goals in line with the Osaka principles. Individual action plans and collective action plans are an on-going and evolving process and subject to constant review to ensure that they remain on the right track towards the goals.

Given the presence of the various SRTAs in the Asia-Pacific region, the APEC process can be considered as particularly important in order to cement the market-driven integration of the Pacific Basin as a whole and thus to ensure that the region continues to evolve in an open manner. APEC's support for, and contribution to, the WTO process is also key as it shapes the evolution of the Asia-Pacific economic region as part of an open global system. In this regard, APEC Leaders have called on WTO members to build on the process of progressive liberalization and enhanced transparency that APEC has initiated. They also urged all members to make determined efforts to complete outstanding negotiations in the telecommunications and financial services sectors, and to establish a substantive and balanced program of further work that will move the WTO forward.

The sections below consider some of the possible directions that the SRTAs in the Asia-Pacific region may take over the coming years and how these relate to and affect the APEC process.

#### ***NAFTA***

The most prominent issue concerning the future of NAFTA has been the possibility of its expansion. There have been informal indications of interest in joining NAFTA from a number of economies within and outside of APEC. Chile, which has already signed free trade agreements with Mexico and Canada, has been the economy most prominently mentioned in this regard. NAFTA accession is also one of several modes that has been suggested for proposed realization of the Free Trade Area of the Americas (FTAA) by 2005. The process to develop this agreement is well underway with concrete progress to be achieved by the year 2000 (USTR, 1997). The expansion of NAFTA in the direction of Asia is possible and has from time to time been the subject of speculation. However, no formal negotiations have been opened.

The concept of a trans-Atlantic link between NAFTA and the European Union (sometimes referred to as TAFTA) has also surfaced in recent years but has not progressed beyond the idea stage.

#### ***AFTA***

The key challenges facing AFTA are to implement fully the accelerated schedules for the CEPT schemes and to integrate its new members, all of which lag in economic development terms. AFTA has considerable scope to deepen and broaden its cooperation in a number of areas that have been addressed by other SRTAs, including

liberalization of agriculture, services, and investment, as well as harmonization of members' competition policies.<sup>31</sup>

As in the case of NAFTA, links between AFTA and other regional trading arrangements have been considered. The ASEAN Economic Ministers and Ministers from the CER economies agreed to establish region-to-region linkages between the two areas, reflecting the "open regionalism" concept of AFTA and the CER. Several areas of cooperation between AFTA and external linkage have been identified, such as exchange of information, customs valuation, standards and conformance, competition policy, industrial cooperation, etc. Regarding standards and conformance, mutual recognition of test results and certification regimes and cooperation on the development of testing and accreditation systems can be implemented. For customs matters, cooperation on customs procedures, valuation, and nomenclature could facilitate the flow of goods between regions. These areas of cooperation are similar to those in APEC.

### ***CER***

A strong consensus exists between Australia and New Zealand that further improvement of the trans-Tasman relationship can and should enhance the capacity of both economies to play a constructive role in Asia-Pacific and global affairs. While it has been suggested that CER has reached the point where its members have to decide whether to move towards a customs union (Hawke, 1996) or even further towards a common market such as the European Community (Lloyd ,1995 and BIE ,1995b), CER members have so far found it neither necessary nor desirable to move in this direction.

It has been suggested that the future agenda for cooperation between Australia and New Zealand will focus on purely bilateral issues and on how they can work together constructively in developing external relationships, especially in the Asia-Pacific region. Completion of the CER agenda will assist the efforts of both economies to become less dependent on protection and more competitive in global trade and investment (Hawke, 1996).

After achieving free trade in goods and moving toward progressive liberalization of services, Australia and New Zealand are also endeavoring to make progress in next-generation issues such as harmonization of regulatory policies. These include passenger facilitation and immigration, mutual standards recognition, etc. In terms of truly open regionalism, CER may also need further reduction in discriminatory tariff preferences and exemptions, although there are very few.

The above-mentioned CER-AFTA dialogue is being approached with an open mind, and the current priority is to promote economic and trade co-operation through practical trade and business-facilitation activities. The CER/AFTA economic ministers in 1996 invited the respective business communities to play an active role in the CER-AFTA process.

---

<sup>31</sup> See EAAU (1994), p49.

### ***Growth Triangles: Prospects for CHT***

The challenge facing further development of the CHT area lies in the wide differences in the political, legal and economic systems among its members and uneven economic integration of the various pairs in the triangle (Sung 1996).

Within CHT, the movement of goods is relatively open, whereas controls on capital and foreign exchange are stricter and controls on migration are strictest of all. The dynamic performance of CHT is to some extent the result of the re-establishment of trade links (albeit still indirect in the case of China-Chinese Taipei) among these geographically close and economically complementary economies, following China's adoption of its open-door policy in 1979 and the gradual liberalization of trade and investment policies in Chinese Taipei starting in 1987. As such, the emerging trade patterns have tended to be in line with comparative advantage. With the resumption of direct shipping between Fuzhou and Xiamen in China and Kaohsiung in Chinese Taipei, and further liberalizing steps under consideration, it is expected that trade between China and Chinese Taipei will grow more rapidly in the future.

The further development of services trade and financial flows among the CHT economies will depend on the facilitation of people-to-people contacts, an essential feature of the service sector, and China's continued movement towards a liberalized foreign exchange market.

The sustainable prosperity of Hong Kong, China is a key to the continued dynamism of the CHT area. This will depend in part on the confidence of local entrepreneurs and foreign investors in the success of the "one country, two systems" policy. Most indicators in 1997 were favorable on this score.

## Chapter 6

### CONCLUSIONS

This report has examined the role of formal, preferential SRTAs and of both formal and informal growth triangles that have emerged in the APEC region. The main issue of interest was whether these trading arrangements advance or hinder the development of an open global trading system and, in particular, the implications for APEC and open regionalism in the Asia-Pacific. The main conclusions that have emerged from this analysis are as follows:

- The SRTAs and growth triangles have on balance advanced global liberalization through a number of channels, including by having a net trade-creating effect, generating political momentum for the multilateral process, and creating competitive pressures amongst each other for more rapid and deeper liberalization.
- There is a positive interaction between global liberalization through the WTO, regional MFN liberalization through APEC and preferential liberalization on a sub-regional basis. The latter two, in effect, constitute building blocks for the first.
- Because the various SRTAs in the region have different "success stories", there is scope for transfer of "best practices" among them to facilitate further the more rapid evolution of an open regional and global trading system.

The analysis has clearly pointed to market forces as the key factor in successful economic integration, whether in the context of formal or informal arrangements but supportive public policy is also important, for instance in the area of supporting infrastructure, land laws, etc.

Although the results support the conclusion that, in general, all the SRTAs considered in this report have made a positive contribution to international economic cooperation, some features of these arrangements may raise issues for non-member economies, especially in terms of application of trade-related measures such as rules of origin.

The world trading system is moving in the direction of global free trade. APEC's commitment to free and open trade and investment in the Asia Pacific region is a key component in the fulfillment of this trend. Within APEC, the faster liberalization within the SRTAs could be regarded as accelerating this process on a sub-regional basis. Given the fact that some SRTAs can at times go faster than either APEC or the world trading system, by accelerating liberalization in certain sensitive sectors, they may develop disciplines for other SRTAs and eventually the whole APEC region to follow.

At the same time, APEC's MFN-based liberalization is an important complement to the sub-regional liberalization within the SRTAs in the Asia-Pacific region because it explicitly confirms the commitment toward global liberalization of the members of these sub-regional groupings,

In conclusion, this report's findings show that an open global trading system can be best achieved by pursuing, in a complementary manner, both global liberalization efforts consistent with WTO rules and liberalization efforts in the SRTAs that meet the criteria on global liberalization.

## **APPENDIX A**

### **SUBREGIONAL ECONOMIC INTERDEPENDENCE IN APEC**

#### ***APEC***

The role of the Asia-Pacific region in world trade has become increasingly significant since 1980, as indicated by its increasing economic interdependence. Two main driving forces of interdependence are the growth of trade and of foreign direct investment. In this Appendix, subregional statistics are used to examine interdependence in the APEC region. Table A1 shows the trade matrix. In 1980, the APEC-related share of world trade accounted for 45.5 percent (i.e., 100 percent - 54.5 percent), but increased steadily to 56.2 percent in 1995. Table A2a shows that the ratio of intra-regional trade within APEC also increased steadily, surpassing that of the EC/EU for most of the years after 1981. A similar pattern can be seen in Table A2b, which also indicates that intra-regional trade within AFTA, CHT and CER has been growing more intensive.

Among APEC's subregions, NAFTA has the highest ratio of intra-regional trade, as depicted by Tables A2a and A2b. AFTA had the second-highest until 1983, when it was replaced by CHT. Given that ASEAN is a formal subregional organization while CHT is an informal one, this phenomenon to some extent reflects the importance of the forces of market-led integration.

#### ***NAFTA***

As noted above, NAFTA has the highest intra-regional trade ratio among the APEC subregions, although the ratio is still less than that of the EU. NAFTA exports rely heavily on its member countries, as indicated in Table A3a, with over 30 percent of its exports going to the region itself. However, it should be noted that the export share to CHT has increased steadily since 1980. Moreover, APEC economies receive more than 50 percent of NAFTA's exports, and that ratio seems to be set in a long-term upward trend.

NAFTA's imports also come primarily from the region itself, at more than 30 percent over the whole period from 1980 to 1995. As shown in Table A3b, that share has steadily increased since slipping to a low of 31.7 percent in 1986. However, the import share from CHT has shown the strongest increase, climbing steadily from 4.7 percent in 1980 to 10 percent in 1994. Meanwhile, the import share from the EU has been on the decline since reaching a high of 20.1 percent in 1986.

In sum, the status of APEC economies in NAFTA's trade relations is obviously rising, a well-known phenomenon to many observers.

As for to foreign direct investment (FDI), Table A4a indicates that FDI into a NAFTA member from one of the other two members decreased dramatically from 41.5 percent

in 1980 to 22 percent in 1990 and 23.1 percent in 1992. In contrast, the inward FDI from other regions such as CHT and CER and other APEC economies such as Japan and Korea (as defined by the variable APEC in Table A4) increased many times over during the same period. The share increased from 0.2 percent to 0.9 percent for CHT, from 0.3 percent to 1.5 percent for CER, and from 3.9 percent to 18.5 percent for OAPEC.

The distribution of outward FDI from NAFTA remained fairly stable during the period 1980-1992, as indicated by Table A4a.

Clearly, the investment interdependence between NAFTA and other APEC subregions is still looser than that between NAFTA and the EU. This is also indicated in Table A4, which shows that NAFTA's inward and outward FDI with respect to the EU accounts for more than 35 percent for virtually the whole period and ranks as the highest. However, the rising interdependence with other APEC subregions is not negligible.

As with trade, the FDI distribution confirms the expanding contacts between NAFTA and other APEC economies.

### ***AFTA***

As AFTA only came into being in 1993, there is no clear-cut evidence yet to verify if this organization results more in trade diversion or trade creation. Although product coverage of the CEPT has been expanded and the timeframe for full completion has been shortened, member economies are still granted the right to exempt products from the application of these rulings and to make their own yearly decisions on rates of tariff reduction. Thus, some of the industrialized economies asked that the CEPT be discussed at the GATT Council in 1993.

The direction of foreign investment in and out of ASEAN is shown in Table A5. The main change that occurred between 1980 and 1992 was the decreasing influence of Europe in this area. Europe's share of foreign direct investment into ASEAN went down to 12.2 percent in 1992 from 26.1 percent in 1980. The same pattern was also observed for Japan. On the other hand, the newly industrialized economies (NIEs), especially Chinese Taipei, have increased their investment in this region. Japan and the NIEs together account for half of FDI into ASEAN, though FDI has skyrocketed to complement local resources since 1980. The NIEs also served as an important host for ASEAN's outward capital.

The purposes of FDI can be divided broadly into two categories: one type of investment is to meet the demand of the host economy and the other type is looking for the chance to improve efficiency, i.e. the kind of investment driven by exploring comparative advantages. Thus, the major attraction of regional integration via AFTA lies in opportunities to relocate production processes among economies with a view to reducing costs. The greatest potential of AFTA in promoting foreign investment seems to lie in the sphere of the efficiency-improving type, mostly of the export-oriented variety. To rationalize the production process, Indonesia, Thailand, and the Philippines would be able to supply abundant labor, while Malaysia and Singapore

would be capable of attracting capital-intensive industries. Once the production process becomes more vertically integrated, there is a clear need for policy changes to harmonize technical standards, customs valuation, investment rules, etc.

Tables A6a and A6b give data on AFTA's direction of trade. Several features stand out from these two tables. First, between 1980 and 1995, the total value of AFTA exports more than quadrupled (from US\$74 billion in 1980 to US\$314 billion in 1995), while imports more than quintupled (from US\$67 billion to US\$340 billion), far above the world's average trade growth rate (2.5 times) during this period. This is clear evidence of the growing significance of the region's role in world trade.

Second, although NAFTA is still an important export market for ASEAN (Table A6a), the ASEAN market itself and the CHT region have become increasingly important since the mid-1980s. More specifically, the export share to ASEAN itself surged to 22.4 percent in 1995, compared with the 20.5 percent share of exports to NAFTA.

Third, ASEAN as a group enjoyed a trade surplus for the period up to 1989. Like most of the other APEC members, ASEAN ran up a trade surplus with NAFTA throughout the period. Trade with Japan was in surplus until 1989 and then slipped into deficit. As a result, the region as a whole experienced a trade deficit after 1990. In contrast, trade with CHT exhibited a reverse pattern: that is, ASEAN's early trade deficit began to narrow and eventually turned into a surplus from 1993 on.

### ***CER***

Patterns of inter- and intra-regional trade are shown in Tables A7a and A7b. Table A7a reports on exports from CER to APEC subregions in 1980-1995. It shows that exports from CER to NAFTA increased at first, then declined starting in 1987. Exports to ASEAN declined gradually at first, then increased rapidly after 1986, except in 1993. Exports to CHT began to increase after 1990, and exports to other APEC members do not show any clear-cut pattern. Exports to the rest of the world (ROW) declined sharply, from 23.65 percent in 1980 to 12.00 percent in 1995. Trade within CER generally remained stable and grew overall during this period, as also indicated by Table A2.

Exports from New Zealand to Australia between 1983 and 1993 grew steadily, from 0.039 percent of world exports in 1983 to 0.055 in 1993. During the period 1983-1993, exports from New Zealand to ASEAN and CHT also grew; however, exports from New Zealand to NAFTA and ROW declined steadily.

In the case of Australia, exports (as a percentage of world trade) to New Zealand stayed rather constant during 1983-1993. During the same period, exports to ASEAN expanded substantially except in 1993. Exports to NAFTA increased at first, followed by a decline after 1990. Exports to ROW declined.

The above pattern of inter- and intra-regional trade within CER may indicate the following:

- Owing to fast growth among East Asian economies in the past 15 years, exports from Australia and New Zealand to these economies grew dramatically. This has been associated with a decline in exports to remote economies such as the United States and Britain.
- Even in the presence of fast growth in the Asia-Pacific rim and their economic links with Australia and New Zealand, trade with CER also grew steadily, particularly in the case of New Zealand.

Tables A8a and A8b report CER foreign direct investment flows in 1980, 1990, and 1992. As shown in Table A8a, capital inflows from ASEAN, CHT, and other APEC economies increased, while inflows from NAFTA decreased moderately but still played an important role. Capital outflows to NAFTA increased. Capital outflows to other APEC economies and between the CER partners decreased at first, then increased. Capital outflows to ASEAN fell dramatically, and then remained fairly stable.

Although there was no formal agreement to assure free and open investment between Australia and New Zealand, Tables A8a and A8b do show a trend of growth in trans-Tasman investment. This may have resulted from the liberalization of trade in services in the 1988 review of CER, since opportunities for services trade often result in some form of FDI to establish a commercial presence in the host economy.

### *CHT*

Since there is difficulty in decomposing economy-wide data into subregional data, we use data of each respective economy as proxies to study the interdependence of the CHT area.

China's exports to Hong Kong, China increased by almost nine times between 1979 and 1990, with goods re-exported from Hong Kong, China accounting for 90 percent of the increase. The value of Chinese goods exported to Hong Kong, China as a final destination has actually fallen since 1987. While Chinese statistics show Hong Kong, China as its largest export market and supplier of imports, it falls to third place behind the United States and Japan when re-exports are attributed to their final destination. In 1996, 68 percent of Chinese shipments to the United States passed through Hong Kong, China.

Chinese Taipei's total indirect trade with China increased from less than US\$50 million in 1978 to US\$11.5 billion in 1995, with a substantial surplus in favor of Chinese Taipei. Imports from China, which are restricted primarily to raw materials, accounted for only 1.5 percent of Chinese Taipei imports.

**Table A1 : Direction of Trade among APEC Subregions  
( Percentage of World Trade )**

**Unit: %**

		<u>1980</u>				
From \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	5.515	0.500	0.634	0.289	1.740	7.529
AFTA	0.686	0.499	0.212	0.105	1.270	0.922
CHT	0.763	0.303	0.398	0.073	0.411	1.093
CER	0.175	0.111	0.096	0.092	0.382	0.572
OAPEC	2.187	0.765	0.863	0.230	0.539	3.504
ROW	7.024	1.128	0.785	0.487	3.659	54.461
		<u>1981</u>				
From \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	6.266	0.512	0.639	0.374	1.902	7.922
AFTA	0.671	0.540	0.241	0.111	1.222	0.931
CHT	0.940	0.339	0.499	0.088	0.495	1.083
CER	0.170	0.121	0.092	0.102	0.417	0.516
OAPEC	2.680	0.870	0.921	0.313	0.592	3.950
ROW	7.397	1.246	0.746	0.515	3.743	50.834
		<u>1982</u>				
From \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	6.054	0.612	0.621	0.364	1.971	8.073
AFTA	0.652	0.748	0.255	0.137	1.290	0.907
CHT	1.071	0.359	0.524	0.097	0.511	1.148
CER	0.174	0.119	0.112	0.100	0.438	0.555
OAPEC	2.768	0.938	0.799	0.339	0.540	4.047
ROW	6.392	1.258	0.766	0.538	3.397	51.324
		<u>1983</u>				
From \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	6.936	0.635	0.639	0.296	2.092	7.249
AFTA	0.830	0.772	0.239	0.089	1.201	0.909
CHT	1.292	0.371	0.598	0.087	0.515	1.079
CER	0.160	0.112	0.094	0.096	0.443	0.492
OAPEC	3.279	0.979	0.938	0.314	0.595	3.925
ROW	6.503	1.261	0.844	0.459	3.368	50.308
		<u>1984</u>				
From \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	7.971	0.585	0.710	0.328	2.143	6.900
AFTA	0.894	0.694	0.263	0.102	1.240	0.966
CHT	1.546	0.379	0.766	0.105	0.565	1.026
CER	0.177	0.105	0.129	0.110	0.447	0.519
OAPEC	4.204	0.874	1.142	0.355	0.713	3.631
ROW	7.403	1.106	0.922	0.490	3.218	47.273
		<u>1985</u>				
from \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	8.065	0.488	0.703	0.353	1.997	6.370
AFTA	0.823	0.619	0.271	0.089	1.122	0.874
CHT	1.541	0.399	0.825	0.094	0.599	0.995
CER	0.182	0.106	0.127	0.098	0.459	0.521
OAPEC	4.602	0.737	1.394	0.362	0.686	3.546
ROW	7.495	0.815	1.112	0.489	2.607	48.432

**Table A1 (continued)**

			1986			
from \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	7.018	0.466	0.684	0.350	2.070	5.932
AFTA	0.742	0.509	0.278	0.081	0.833	0.832
CHT	1.759	0.360	0.875	0.099	0.603	1.230
CER	0.179	0.084	0.133	0.096	0.420	0.480
OAPEC	5.179	0.699	1.351	0.351	0.847	3.881
ROW	7.240	0.815	1.198	0.475	2.461	49.391
			1987			
from \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	6.890	0.473	0.748	0.263	1.957	5.631
AFTA	0.799	0.577	0.334	0.067	0.852	0.870
CHT	1.804	0.396	1.081	0.106	0.741	1.409
CER	0.198	0.090	0.137	0.105	0.408	0.462
OAPEC	4.695	0.771	1.325	0.290	0.970	3.714
ROW	6.760	0.865	1.192	0.398	2.538	50.084
			1988			
from \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	6.965	0.531	1.000	0.333	2.207	5.863
AFTA	0.839	0.610	0.397	0.091	0.841	0.955
CHT	1.673	0.449	1.575	0.068	0.832	1.509
CER	0.195	0.114	0.088	0.111	0.508	0.463
OAPEC	4.390	0.905	1.449	0.320	1.059	3.785
ROW	6.178	0.842	1.192	0.436	2.372	48.854
			1989			
from \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	6.982	0.633	0.933	0.363	2.440	6.062
AFTA	0.956	0.693	0.414	0.101	0.930	1.039
CHT	1.745	0.499	1.426	0.127	0.840	1.512
CER	0.201	0.135	0.140	0.118	0.487	0.456
OAPEC	4.305	1.049	1.371	0.350	1.116	3.525
ROW	6.216	0.940	1.197	0.478	2.539	47.684
			1990			
from \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	6.833	0.637	0.811	0.334	2.322	5.844
AFTA	0.908	0.755	0.427	0.088	0.953	1.084
CHT	1.557	0.569	1.790	0.104	0.794	1.525
CER	0.209	0.160	0.116	0.114	0.467	0.446
OAPEC	3.680	1.168	1.205	0.283	0.981	3.446
ROW	6.211	1.207	1.027	0.453	2.995	48.496
			1991			
from \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	6.832	0.689	0.931	0.314	2.233	6.090
AFTA	0.944	0.860	0.502	0.100	1.027	1.206
CHT	1.638	0.595	2.208	0.103	0.875	1.809
CER	0.192	0.178	0.146	0.111	0.495	0.389
OAPEC	3.606	1.353	1.448	0.266	1.029	3.696
ROW	5.659	1.152	1.060	0.373	2.587	47.303

**Table A1 (continued)**

		<u>1992</u>				
from \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	7.506	0.719	0.988	0.305	2.062	5.853
AFTA	1.059	0.892	0.570	0.107	0.964	1.275
CHT	1.785	0.603	2.493	0.119	0.905	1.880
CER	0.186	0.198	0.151	0.111	0.437	0.374
OAPEC	3.482	1.365	1.727	0.265	0.889	3.669
ROW	5.373	1.190	1.237	0.364	2.329	46.569
		<u>1993</u>				
from \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	7.984	0.778	1.014	0.277	2.032	5.518
AFTA	1.188	1.040	0.641	0.103	1.018	1.395
CHT	2.082	0.637	2.486	0.129	1.006	2.050
CER	0.164	0.191	0.159	0.117	0.427	0.351
OAPEC	3.626	1.538	2.011	0.289	0.894	3.423
ROW	5.829	1.267	2.102	0.376	2.024	43.833
		<u>1994</u>				
from \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	8.503	0.801	1.038	0.297	2.076	5.248
AFTA	1.267	1.296	0.714	0.121	1.006	1.438
CHT	2.128	0.694	2.648	0.143	1.152	1.905
CER	0.147	0.196	0.161	0.128	0.428	0.335
OAPEC	3.549	1.654	1.986	0.286	0.982	3.095
ROW	5.610	1.444	1.583	0.415	2.400	43.128
		<u>1995</u>				
from \ to	NAFTA	AFTA	CHT	CER	OAPEC	ROW
NAFTA	7.953	0.865	1.044	0.293	2.214	5.194
AFTA	1.231	1.351	0.752	0.123	1.061	1.501
CHT	1.940	0.737	2.554	0.134	1.273	1.947
CER	0.118	0.187	0.148	0.122	0.388	0.299
OAPEC	3.114	1.779	2.000	0.251	1.048	3.044
ROW	5.320	1.594	1.495	0.436	2.710	43.779

Notes:

1. Figures in the Table are export shares from the row to the column over the world trade total.
2. OAPEC refers to those APEC economies not included in NAFTA, AFTA, CHT or CER. ROW refers to the rest of the world.
3. Each subregion is composed of all the corresponding members in 1996, even for the years before its formation.
4. Data are from UN Statistics, compiled by Canada Statistics.

**Table A2a: Ratio of Intra-regional Trade to World Trade** **Unit: %**

Year	NAFTA	AFTA	CHT	CER	OAPEC	APEC	EU
1980	5.515	0.499	0.398	0.091	0.539	18.837	22.680
1981	6.264	0.540	0.499	0.101	0.592	21.117	20.484
1982	6.053	0.748	0.524	0.100	0.540	21.594	21.359
1983	6.935	0.772	0.598	0.095	0.595	23.604	21.708
1984	7.969	0.694	0.766	0.109	0.713	26.546	20.954
1985	8.064	0.619	0.825	0.097	0.686	26.743	22.524
1986	7.017	0.509	0.875	0.095	0.847	26.066	25.614
1987	6.889	0.577	1.081	0.105	0.970	26.079	26.967
1988	6.964	0.610	1.575	0.111	1.059	27.550	27.333
1989	6.981	0.693	1.426	0.118	1.117	28.354	27.190
1990	6.832	0.755	1.790	0.113	0.981	27.264	28.674
1991	6.830	0.860	2.209	0.111	1.029	28.676	28.638
1992	7.505	0.892	2.493	0.110	0.889	29.888	28.119
1993	7.983	1.040	2.486	0.117	0.894	31.833	25.069
1994	8.502	1.296	2.648	0.128	0.982	33.401	25.116
1995	7.952	1.351	2.554	0.122	1.048	32.680	24.988

Notes:

1. Data source is the same as for Table A1.
2. Each subregion is composed of all the corresponding members in 1996, even for the years before its formation.
3. Figures in this table are ratios of intra-regional exports (=imports) to world exports (=imports).

**Table A2b : Ratio of Intra-regional Trade to Total Regional Trade** **Unit:%**

Year	NAFTA	AFTA	CHT	CER	OAPEC	APEC	EU
1980	33.879	14.266	13.204	6.701	6.698	58.519	57.782
1981	35.059	14.700	15.160	6.880	6.690	60.087	55.832
1982	34.782	18.640	15.448	6.471	6.144	61.459	56.984
1983	37.645	18.891	16.387	6.941	6.519	64.404	58.230
1984	39.036	17.556	18.419	7.338	7.414	66.971	58.038
1985	39.641	17.771	18.566	6.513	7.299	68.297	59.684
1986	36.324	16.403	18.531	6.658	8.672	67.989	62.919
1987	37.132	17.312	20.874	7.918	10.088	68.631	64.589
1988	37.504	16.984	26.682	7.774	10.739	70.016	65.250
1989	36.920	17.148	24.521	7.642	11.127	70.294	65.047
1990	37.769	17.336	30.563	7.829	10.183	69.224	65.861
1991	37.992	18.172	32.657	7.958	10.476	70.478	65.879
1992	40.763	18.147	33.344	8.069	9.366	71.743	65.991
1993	41.496	19.195	29.594	8.639	9.323	72.346	63.036
1994	43.418	21.728	31.525	9.163	10.025	73.998	63.784
1995	42.708	21.554	30.805	9.306	10.517	73.519	63.564

Notes:

1. Data source is the same as for Table A1.
2. For convenience, each subregion is composed of all the corresponding members in 1996, even for the years before its formation.
3. Figures in this table are ratios of total intra-regional trade (exports + imports) to the sum of the corresponding region's total exports and imports.

**Table A3a: Distribution of NAFTA's Exports to APEC Subregions and Others** Unit : %

Year	NAFTA	AFTA	CHT	CER	OAPEC	EU	ROW	Sum	Total Exports (\$million)
1980	34.029	3.086	3.913	1.780	10.734	24.670	21.787	100.00	(326353.78)
1981	35.566	2.904	3.631	2.124	10.798	22.385	22.593	100.00	(348079.19)
1982	34.208	3.460	3.512	2.059	11.137	21.849	23.775	100.00	(330299.16)
1983	38.861	3.557	3.582	1.658	11.725	20.332	20.285	100.00	(323212.03)
1984	42.762	3.140	3.809	1.759	11.501	19.052	17.976	100.00	(357058.22)
1985	44.861	2.713	3.913	1.967	11.108	18.866	16.572	100.00	(354124.06)
1986	42.479	2.824	4.138	2.116	12.533	20.147	15.763	100.00	(353794.19)
1987	43.161	2.963	4.688	1.650	12.260	20.193	15.085	100.00	(399197.81)
1988	41.210	3.142	5.918	1.973	13.058	20.269	14.429	100.00	(483289.59)
1989	40.091	3.637	5.357	2.084	14.015	21.127	13.690	100.00	(533625.50)
1990	40.713	3.795	4.833	1.990	13.840	21.813	13.016	100.00	(582410.19)
1991	39.973	4.032	5.450	1.835	13.068	21.824	13.819	100.00	(610121.81)
1992	43.053	4.124	5.666	1.751	11.830	19.595	13.981	100.00	(673543.44)
1993	45.350	4.423	5.761	1.572	11.547	17.561	13.786	100.00	(696860.69)
1994	47.334	4.460	5.781	1.652	11.557	16.406	12.810	100.00	(787099.63)
1995	45.278	4.925	5.947	1.669	12.606	16.379	13.197	100.00	(916694.88)

Notes :

1. Data source is the same as for Table A1.
2. Numbers in parenthesis are the total exports of NAFTA for the corresponding years.

**Table A3b: Distribution of NAFTA's Imports from APEC Subregions and Others** Unit : %

Year	NAFTA	AFTA	CHT	CER	OAPEC	EU	ROW	Sum	Total Imports (\$million)
1980	33.730	4.196	4.665	1.070	13.377	15.372	27.590	100.00	(329242.25)
1981	34.567	3.701	5.190	0.940	14.787	16.022	24.793	100.00	(358136.63)
1982	35.375	3.808	6.261	1.020	16.179	17.562	19.795	100.00	(319399.88)
1983	36.502	4.369	6.802	0.841	17.258	16.927	17.302	100.00	(344100.81)
1984	35.906	4.030	6.967	0.798	18.941	17.529	15.828	100.00	(425233.25)
1985	35.510	3.623	6.788	0.803	20.268	19.480	13.528	100.00	(447379.69)
1986	31.727	3.354	7.955	0.808	23.419	20.142	12.595	100.00	(473688.25)
1987	32.581	3.780	8.533	0.936	22.203	19.685	12.283	100.00	(528833.94)
1988	34.409	4.144	8.265	0.965	21.690	19.395	11.132	100.00	(578826.50)
1989	34.213	4.684	8.554	0.987	21.098	18.220	12.243	100.00	(625302.31)
1990	35.222	4.680	8.027	1.078	18.971	18.641	13.381	100.00	(673206.50)
1991	36.198	5.002	8.681	1.020	19.109	17.422	12.568	100.00	(673747.19)
1992	38.704	5.462	9.207	0.961	17.957	16.878	10.830	100.00	(749221.19)
1993	38.245	5.690	9.975	0.786	17.375	16.839	11.089	100.00	(826317.44)
1994	40.100	5.976	10.036	0.692	16.738	16.645	9.813	100.00	(929084.44)
1995	40.414	6.256	9.862	0.602	15.826	16.281	10.759	100.00	(1027023.94)

Notes :

1. Data source is the same as for Table A1.
2. Numbers in parenthesis are the total imports of NAFTA for the corresponding years.

**Table A4: Distribution of FDI Into and Out of NAFTA**

**Distribution of Inward FDI Stock (%)**

<b>Year</b>	<b>NAFTA</b>	<b>AFTA</b>	<b>CHT</b>	<b>CER</b>	<b>OAPEC</b>	<b>EU</b>	<b>ROW</b>	<b>World</b>
1980	41.48	0.07	0.17	0.33	3.9	39.47	14.58	100
1990	22.7	0.07	0.69	1.43	16.66	47.79	10.96	100
1992	23.14	0.09	0.91	1.46	18.45	44.34	11.61	100

**Distribution of Outward FDI Stock (%)**

<b>Year</b>	<b>NAFTA</b>	<b>AFTA</b>	<b>CHT</b>	<b>CER</b>	<b>OAPEC</b>	<b>EU</b>	<b>ROW</b>	<b>World</b>
1980	26.93	1.7	1.08	3.65	3.34	34.65	28.65	100
1990	25.16	1.7	1.81	4.02	6.22	38.54	22.55	100
1992	22.69	1.97	2.21	3.81	6.84	38.25	24.23	100

Source: Industry Canada compilations using data from various sources.

**Table A5**  
**Distribution of Direct Investment Stock Into and Out of ASEAN**      **Unit: %**

Year	1992	1990	1980
<b>Inward Direct Investment Stock from:</b>			
NAFTA	8.86	9.81	11.43
Japan	22.55	26.10	28.62
CHT	16.62	18.19	10.00
AFTA	1.23	1.20	4.36
CER	2.32	1.83	0.95
European Union	12.23	13.17	26.10
Rest of the World	36.19	29.70	18.54
<b>Outward Direct Investment Stock to:</b>			
NAFTA	9.82	10.05	11.39
Japan	0.21	0.03	.. ..
CHT	18.55	23.95	29.10
AFTA	18.51	17.82	10.30
CER	5.67	7.53	4.54
European Union	20.43	2.17	0.20
Rest of the World	26.81	38.45	44.47
<b>Total Direct Investment Stock:</b>			
NAFTA	8.91	9.88	11.43
Japan	21.30	24.62	27.34
CHT	16.74	14.57	10.87
AFTA	2.20	2.14	1.03
CER	2.51	2.16	2.83
European Union	12.69	12.54	14.91
Rest of the World	35.65	34.09	31.59

... Data not available

Source: Industry Canada compilations using data from various sources

**Table A6a : Distribution of AFTA's Exports to APEC Subregions and Others** Unit : %

Year	NAFTA	AFTA	CHT	CER	OAPEC	EU	ROW	Sum	Total Exports (\$million)
1980	18.577	13.521	5.744	2.822	34.380	13.271	11.686	100.00	(74370.09)
1981	18.052	14.525	6.498	2.983	32.878	11.535	13.528	100.00	(73432.03)
1982	16.339	18.749	6.384	3.430	32.349	10.913	11.835	100.00	(74430.38)
1983	20.545	19.100	5.913	2.209	29.731	11.006	11.497	100.00	(73178.48)
1984	21.498	16.675	6.330	2.463	29.799	11.020	12.215	100.00	(79704.55)
1985	21.666	16.288	7.129	2.339	29.553	11.900	11.126	100.00	(74820.60)
1986	22.655	15.552	8.482	2.475	25.432	14.394	11.011	100.00	(70123.89)
1987	22.843	16.503	9.550	1.909	24.340	14.916	9.939	100.00	(87503.93)
1988	22.466	16.344	10.639	2.439	22.524	15.579	10.010	100.00	(106774.85)
1989	23.132	16.770	10.019	2.433	22.501	15.528	9.616	100.00	(126625.59)
1990	21.535	17.913	10.126	2.090	22.610	16.128	9.598	100.00	(146304.69)
1991	20.348	18.542	10.826	2.152	22.140	16.466	9.526	100.00	(165622.81)
1992	21.758	18.332	11.715	2.194	19.813	16.965	9.223	100.00	(188081.31)
1993	22.057	19.313	11.901	1.920	18.911	15.932	9.967	100.00	(213180.55)
1994	21.686	22.176	12.226	2.077	17.217	14.782	9.835	100.00	(256026.50)
1995	20.448	22.435	12.500	2.042	17.633	14.500	10.442	100.00	(314223.13)

Notes :

1. Data source is the same as for Table A1.
2. Numbers in parenthesis are the total exports of AFTA for the corresponding years.

**Table A6b : Distribution of AFTA's Imports from APEC Subregions and Others** Unit : %

Year	NAFTA	AFTA	CHT	CER	OAPEC	EU	ROW	Sum	Total Imports (\$million)
1980	15.122	15.098	9.169	3.369	23.125	12.555	21.561	100.00	(66598.04)
1981	14.102	14.879	9.338	3.340	23.995	11.665	22.680	100.00	(71686.02)
1982	15.176	18.531	8.890	2.956	23.258	12.224	18.966	100.00	(75305.76)
1983	15.368	18.687	8.988	2.715	23.710	12.545	17.986	100.00	(74797.08)
1984	15.634	18.535	10.128	2.793	23.344	12.552	17.014	100.00	(71706.27)
1985	15.410	19.551	12.621	3.354	23.302	14.964	10.797	100.00	(62332.76)
1986	15.898	17.353	12.266	2.878	23.835	15.025	12.746	100.00	(62845.47)
1987	14.911	18.204	12.474	2.844	24.295	14.929	12.342	100.00	(79327.82)
1988	15.383	17.678	13.001	3.308	26.229	14.746	9.655	100.00	(98716.82)
1989	16.035	17.544	12.636	3.409	26.567	13.990	9.819	100.00	(121039.02)
1990	14.164	16.795	12.665	3.553	25.970	14.507	12.345	100.00	(156049.80)
1991	14.271	17.816	12.329	3.694	28.021	14.310	9.559	100.00	(172374.95)
1992	14.473	17.965	12.143	3.987	27.473	14.566	9.392	100.00	(191915.61)
1993	14.282	19.079	11.681	3.497	28.214	16.292	6.956	100.00	(215794.20)
1994	13.169	21.297	11.404	3.217	27.184	15.499	8.230	100.00	(266603.47)
1995	13.281	20.740	11.324	2.866	27.318	15.255	9.216	100.00	(339912.00)

Notes :

1. Data source is the same as for Table A1.
2. Numbers in parenthesis are the total imports of AFTA for the corresponding years.

**Table A7a : Distribution of CER's Exports to APEC Subregions and Others Unit : %**

Year	NAFTA	AFTA	CHT	CER	OAPEC	EU	ROW	Sum	Total Exports (\$million)
1980	12.265	7.812	6.720	6.342	26.770	16.432	23.658	100.00	(28718.36)
1981	12.014	8.547	6.506	7.085	29.436	14.579	21.833	100.00	(28014.44)
1982	11.648	7.959	7.482	6.635	29.238	15.863	21.176	100.00	(27964.52)
1983	11.441	8.031	6.761	6.802	31.755	17.117	18.093	100.00	(25288.45)
1984	11.926	7.037	8.696	7.348	30.082	15.509	19.403	100.00	(28458.87)
1985	12.210	7.110	8.495	6.495	30.753	15.943	18.994	100.00	(29407.93)
1986	12.846	6.073	9.547	6.801	30.199	16.727	17.807	100.00	(29783.78)
1987	14.137	6.446	9.821	7.433	29.171	17.880	15.113	100.00	(35004.40)
1988	13.202	7.716	5.961	7.459	34.363	17.823	13.477	100.00	(42315.77)
1989	13.101	8.762	9.137	7.640	31.706	15.520	14.132	100.00	(47085.61)
1990	13.841	10.573	7.654	7.478	30.905	14.769	14.780	100.00	(52445.32)
1991	12.721	11.792	9.683	7.310	32.747	13.359	12.389	100.00	(54003.48)
1992	12.792	13.594	10.346	7.552	30.015	14.231	11.470	100.00	(56288.73)
1993	11.631	13.523	11.313	8.274	30.329	12.747	12.182	100.00	(55804.77)
1994	10.524	14.045	11.559	9.149	30.706	12.246	11.771	100.00	(61063.28)
1995	9.385	14.782	11.731	9.660	30.727	11.722	11.995	100.00	(65897.41)

Notes :

1. Data source is the same as for Table A1.
2. Numbers in parenthesis are the total exports of CER for the corresponding years.

**Table A7b : Distribution of CER's Exports to APEC Subregions and Others Unit : %**

Year	NAFTA	AFTA	CHT	CER	OAPEC	EU	ROW	Sum	Total Imports (\$million)
1980	22.663	8.185	5.767	7.104	18.036	23.256	14.989	100.00	(25637.83)
1981	24.911	7.379	5.886	6.686	20.822	20.296	14.020	100.00	(29683.89)
1982	23.146	8.691	6.173	6.316	21.515	22.125	12.035	100.00	(29379.52)
1983	22.072	6.658	6.516	7.086	23.426	22.879	11.363	100.00	(24276.12)
1984	22.011	6.880	7.040	7.328	23.818	22.988	9.935	100.00	(28535.13)
1985	23.808	5.982	6.329	6.530	24.414	26.209	6.729	100.00	(29251.48)
1986	24.105	5.587	6.850	6.521	24.200	25.993	6.744	100.00	(31061.20)
1987	21.443	5.437	8.636	8.471	23.634	25.855	6.524	100.00	(30717.16)
1988	24.526	6.696	5.032	8.117	23.541	26.945	5.143	100.00	(38885.36)
1989	23.628	6.547	8.268	7.645	22.762	24.524	6.627	100.00	(47060.57)
1990	24.268	6.403	7.559	8.213	20.603	24.981	7.972	100.00	(47751.41)
1991	24.769	7.883	8.173	8.732	21.005	22.563	6.874	100.00	(45205.41)
1992	24.038	8.411	9.396	8.663	20.862	21.956	6.675	100.00	(49070.64)
1993	21.441	8.009	10.024	9.036	22.385	23.081	6.024	100.00	(51099.11)
1994	21.363	8.738	10.278	9.177	20.583	23.629	6.232	100.00	(60872.06)
1995	21.580	9.048	9.840	8.978	18.461	24.629	7.465	100.00	(70901.18)

Notes :

1. Data source is the same as for Table A1.
2. Numbers in parenthesis are the total imports of CER for the corresponding years.

**Tables A8a and A8b**  
**Distribution of Foreign Direct Investment Stock**  
**Inward FDI Stock (%)**

<b>Year</b>	<b>NAFTA</b>	<b>AFTA</b>	<b>CHT</b>	<b>CER</b>	<b>OAPEC</b>	<b>EU</b>	<b>ROW</b>	<b>World</b>
1980	39.34	0.22	1.18	5.01	5.59	39.24	9.42	100
1990	31.39	0.37	1.28	4.24	15.38	35.59	11.24	100
1992	30.90	0.41	1.57	7.85	17.46	30.77	11.85	100

**Outward FDI Stock (%)**

<b>Year</b>	<b>NAFTA</b>	<b>AFTA</b>	<b>CHT</b>	<b>CER</b>	<b>OAPEC</b>	<b>EU</b>	<b>ROW</b>	<b>World</b>
1980	17.41	18.45	0.80	31.36	4.97	25.79	1.22	100
1990	19.30	3.37	0.65	21.00	3.61	34.45	16.62	100
1992	23.45	3.55	-2.10	26.92	4.19	40.97	3.02	100

## **APPENDIX B**

### **CHILE-MEXICO FREE TRADE AGREEMENT**

Under the aegis of LAIA, Mexico and Chile signed an FTA in September 1991 that entered into force in January 1992. It contemplated the progressive reduction of tariffs on goods.

By January 1, 1996, most products were traded duty-free. A list of 181 items have a maximal tariff of two percent and are to be duty-free by January 1, 1998.

The automotive sector has a zero tariff since January 1, 1996, with a rule of origin of 32 percent of local content over the FOB value.

The reciprocal exceptions, that is the products that are not liberalized cover 27 tariff headings (100 items): crustaceans, dairy products, beans, grapes, fresh apples, wheat, barley, corn, used apparel, wheat flour, malt, vegetable oils, sugar, cigarettes, tobacco, oil and its derivatives.

Between 1991 and 1996, bilateral trade increased by 451 percent. Chile's exports to Mexico increased by 237 percent and its imports from Mexico by 571 percent. Chile's bilateral deficit increased with the financial crisis and subsequent devaluation in Mexico in 1994.

The FTA is being renegotiated for the elimination of the exceptions in goods liberalization, and for the inclusion of bilateral disciplines in new areas. Those areas are non-financial services, investment, government procurement, technical standards and conformance, sanitary and phytosanitary standards, customs procedures, anti-dumping and safeguards, and temporary entry of business people. Negotiations are scheduled to finish at the end of 1997.

## APPENDIX C

### CANADA-CHILE FREE TRADE AGREEMENT

Canada and Chile signed an FTA on December 5, 1996, that entered into force on July 5, 1997. They also signed two separate agreements on cooperation on labor and environmental matters, including the commitment to comply with and enforce each Party's legislation and standards, and with provision for a wide range of cooperation in some areas.

The FTA was negotiated on the basis of the structure and language of NAFTA. The main areas covered are MAGSI. It also has a DSM and contemplates some general exceptions.

#### *Market Access*

##### i. Tariff liberalization

92 percent of the exports of Chile to Canada will be duty-free upon entry into force of the agreement. The rest of the products are to be liberalized within time periods ranging from two to six years. Dairy and poultry products are not liberalized; nevertheless, these products have the benefit of a zero tariff quota.

Potential for exports increase is very high taking into account, for example, that before the entry into force of the agreement, the average duties in Canada were 23.6 percent on textiles and 21.4 percent on footwear.

76 percent of the exports of Canada to Chile will be duty-free upon entry into force of the agreement. 91 percent will be duty free at the seventh year and the remaining nine percent will have their tariffs gradually eliminated in line with Chile's negotiations with Mercosur. This nine percent includes some agricultural products: wheat and wheat flour (18 years), sugar (16 years), vegetable oils (10 years), and meat (15 years). Currently, Chile has a flat tariff rate of 11 percent that will soon be reduced to eight percent.

The automotive sector has the benefit of a zero tariff rate at the entry into force of the agreement and flexible rules of origin of 20 percent for totally assembled vehicles and 30 percent for parts and components. Chile maintains its right to prohibit the import of used vehicles.

With respect to computers, Chile and Canada agreed to eliminate tariff duties for these products on an MFN basis.

##### ii. Trade disciplines

Unlike NAFTA, Chile and Canada decided to maintain their right to have drawback of duties.

In general, rules of origin are more flexible than those of NAFTA, except in sectors such as textiles, clothing, footwear and plastics. In addition, exporters are responsible for certifying their exports, and there are detailed rules and procedures for verification.

Chile and Canada agreed to eliminate subsidies on agricultural products by 2003. They also agreed on a reciprocal exemption of anti-dumping investigations and duties, and of safeguards once tariffs are zero for a given product.

### ***Services and Investment***

In both areas, the agreement establishes national treatment and most favored nation treatment. The existing non-conforming measures are listed and grandfathered (on the negative list principle). They can be modified only to improve market access.

The agreement contemplates free trade in cross-border services. Chile gained the same market access as Mexico and the United States in the Canadian market.

In investment, performance requirements were eliminated. Chile reserved the right to apply measures to preserve the stability of its currency, such as a reserve requirement of not more than 30 percent for one year on portfolio investment, and a limitation on repatriation of capital within one year (which does not affect profits), applied to foreign direct investment.

### ***Other issues***

The agreement also contains chapters on telecommunications, temporary entry of business people, competition policy, and general exceptions.

Two geographical indications on spirits were reciprocally protected: Chilean Pisco and Canadian Whisky.

Finally, a very thorough dispute settlement system is envisaged to settle complaints between the Parties, while an arbitral mechanism for complaints of an investor against the recipient state was established.

## APPENDIX D

### IMPACT OF MAPA: SIMULATION OF CGE MODEL

**Table D1a: Estimated Changes in Merchandise Exports in 2010**  
(% in Volume)

Economies	Dynamic Version	Static Version (Memorandum)
Australia	2.01	1.62
Canada	1.74	1.40
Chile	11.95	6.98
China	9.55	8.07
Hong Kong, China	1.59	1.04
Indonesia	3.71	1.12
Japan	1.07	0.90
Korea	2.97	2.18
Malaysia	8.87	1.89
Mexico	2.62	1.82
New Zealand	4.23	3.17
Philippines	22.11	17.63
Singapore	4.38	2.49
Chinese Taipei	3.82	2.76
Thailand	5.06	1.81
USA	1.93	1.69
APEC MAPA Total	2.99	2.14
Latin America	0.59	0.56
Western Europe	0.65	0.59
Rest of World	0.38	0.41
World MAPA Total	1.84	1.38

**Table D1b: Impact to APEC**

Initiatives	Dynamic Version	Static Version
UR Commitments	9.12	8.58
MAPA Total	2.99	2.14
(MAPA Liberalization)	(1.12)	(0.89)
(MAPA Facilitation)	(1.87)	(1.25)
UR and MAPA	12.11	10.73

**Table D1c: Impact to the World**

Initiatives	Dynamic Version	Static Version
UR Commitment	7.25	6.65
MAPA Total	1.84	1.38
(MAPA Liberalization)	(0.60)	(0.47)
(MAPA Facilitation)	(1.25)	(0.91)
UR and MAPA	9.09	8.03

Notes:

1. Based on a static model assuming constant returns to scale and perfect competition.
2. MAPA covers IAPs, CAPs, Osaka Initial Actions and ITA. (Not including UR commitment)
3. "UR and MAPA" is the sum of the impacts of UR commitment and MAPA (liberalization and facilitation)

**Table D2a: Estimated Changes in Merchandise Export Volume Following ASEAN Liberalization and Facilitation in 2010**

	(%)	
	Dynamic Version	Static Version
Economies		(Memorandum)
Australia	0.16	0.11
Canada	0.03	0.02
Chile	0.10	0.05
China	-0.03	-0.06
Hong Kong, China	-0.04	-0.03
Indonesia	3.18	0.98
Japan	0.09	0.04
Korea	0.34	0.20
Malaysia	7.45	1.52
Mexico	0.03	0.07
New Zealand	0.25	0.05
Philippines	21.13	16.69
Singapore	3.38	1.63
Chinese Taipei	0.16	0.04
Thailand	4.30	1.26
USA	0.13	0.08
APEC Region Total	0.77	0.35
Latin America	0.02	0.03
Western Europe	0.13	0.09
Rest of World	0.05	0.06
World Region Total	0.45	0.22

**Table D2b: Impact to APEC – Change in Export Volume**

(%)

Initiatives	Dynamic Version	Static Version
UR Commitment	9.12	8.58
MAPA Total	0.78	0.34
(MAPA Liberalization)	(0.30)	(0.20)
(MAPA Facilitation)	(0.48)	(0.15)
UR and MAPA	9.90	8.93

**Table D2c: Impact to the World – Change in Export Volume**

(%)

Initiatives	Dynamic Version	Static Version
UR Commitment	7.25	6.65
MAPA Total	0.45	0.22
(MAPA Liberalization)	(0.16)	(0.10)
(MAPA Facilitation)	(0.29)	(0.12)
UR and MAPA	7.70	6.87

**Table D2d: Impact to the Subregions – Change in Export Volume**

(%)

Subregion	Dynamic Version	Static Version
NAFTA	0.10	0.07
ASEAN	5.70	2.50
CER	0.18	0.10
Other APEC Members	0.10	0.04
Non-APEC World	0.10	0.08

Notes:

1. Based on a static model assuming constant returns to scale and perfect competition.
2. MAPA covers IAPs, CAPs, Osaka Initial Actions and ITA. (Not including UR commitment)
3. “UR and MAPA” is the sum of impact of UR commitment and MAPA (liberalization and facilitation)

**Table D3a: Estimated Changes in Merchandise Export Volume Following  
ASEAN Liberalization in 2010**

(%)

Economies	Dynamic Version	Static Version
Australia	0.04	0.01
Canada	-0.01	-0.02
Chile	0.02	-0.01
China	-0.03	-0.04
Hong Kong, China	-0.07	-0.07
Indonesia	0.74	0.25
Japan	0.01	0.00
Korea	0.22	0.13
Malaysia	1.03	0.47
Mexico	-0.04	-0.03
New Zealand	0.05	-0.01
Philippines	18.80	15.89
Singapore	1.32	0.97
Chinese Taipei	-0.01	-0.01
Thailand	1.36	0.52
USA	0.00	-0.02
<b>APEC Region Total</b>	<b>0.30</b>	<b>0.19</b>
Latin America	-0.04	-0.03
Western Europe	0.02	0.01
Rest of World	0.00	0.00
<b>World Region Total</b>	<b>0.16</b>	<b>0.10</b>

**Table D3b: Impact to APEC – Change in Export Volume**

(%)

Initiatives	Dynamic Version	Static Version
UR Commitment	9.12	8.58
MAPA Total	0.30	0.20
(MAPA Liberalization)	(0.30)	(0.20)
(MAPA Facilitation)		
UR and MAPA	9.42	8.78

**Table D3c: Impact to the World – Change in Export Volume**

(%)

Initiatives	Dynamic Version	Static Version
UR Commitment	7.25	6.65
MAPA Total	0.16	0.10
(MAPA Liberalization)	(0.16)	(0.10)
(MAPA Facilitation)		
UR and MAPA	7.41	6.75

**Table D3d: Impact to the Subregions – Change in Export Volume**

(%)

Subregion	Dynamic Version	Static Version
NAFTA	-0.01	-0.02
ASEAN	2.41	1.68
CER	0.04	0.01
Other APEC Members	0.02	0.00
Non-APEC World	0.01	0.00

Notes:

1. The dynamic version model assumes constant returns to scale and perfect competition with allowing capital accumulation through income-investment linkage.
2. The static version assumes constant returns to scale and perfect competition without capital accumulation.
3. MAPA covers IAPs, CAPs, Osaka Initial Actions and ITA. (Not including UR commitment)
4. “UR and MAPA” is the sum of impact of UR commitment and MAPA (liberalization and facilitation)

**Table D4a: Estimated Change in Merchandise Export Volume Following NAFTA Liberalization and Facilitation in 2010**

(%)

Economies	Dynamic Version	Static Version (Memorandum)
Australia	0.26	0.25
Canada	1.65	1.32
Chile	0.29	0.19
China	0.18	0.14
Hong Kong, China	0.25	0.27
Indonesia	0.28	0.16
Japan	0.21	0.19
Korea	0.29	0.26
Malaysia	0.61	0.28
Mexico	2.47	1.55
New Zealand	0.24	0.18
Philippines	0.57	0.54
Singapore	0.46	0.49
Chinese Taipei	0.36	0.26
Thailand	0.40	0.35
USA	1.51	1.34
APEC Region Total	0.86	0.73
Latin America	0.34	0.32
Western Europe	0.29	0.28
Rest of World	0.22	0.22
World Region Total	0.58	0.51

**Table D4b: Impact to APEC – Change in Export Volume**

(%)

Initiatives	Dynamic Version	Static Version
UR Commitment	9.12	8.58
MAPA Total	0.86	0.78
(MAPA Liberalization)	(0.11)	(0.09)
(MAPA Facilitation)	(0.76)	(0.64)
UR and MAPA	9.99	9.31

**Table D4c: Impact to the World – Change in Export Volume**

(%)

Initiatives	Dynamic Version	Static Version
UR Commitment	7.25	6.65
MAPA Total	0.58	0.51
(MAPA Liberalization)	(0.06)	(0.06)
(MAPA Facilitation)	(0.52)	(0.45)
UR and MAPA	7.83	7.16

**Table D4d: Impact to the Subregions – Change in Export Volume**

(%)

Subregion	Dynamic Version	Static Version
NAFTA	1.60	1.35
ASEAN	0.46	0.36
CER	0.25	0.24
Other APEC Members	0.23	0.20
Non-APEC World	0.27	0.26

Notes:

1. The dynamic version model assumes constant returns to scale and perfect competition with allowing capital accumulation through income-investment linkage.
2. The static version item assumes constant returns to scale and perfect competition without capital accumulation.
3. MAPA covers IAPs, CAPs, Osaka Initial Actions and ITA. (Not including UR commitment)
4. “UR and MAPA” is the sum of impacts of UR commitments and MAPA (liberalization and facilitation)

**Table D5a: Estimated Changes in Merchandise Export Volume Following NAFTA Liberalization Only in 2010**

(%)

Economies	Dynamic Version	Static Version (Memorandum)
Australia	0.01	0.01
Canada	0.30	0.25
Chile	0.01	-0.01
China	0.03	0.02
Hong Kong, China	-0.01	-0.01
Indonesia	0.01	0.00
Japan	0.02	0.01
Korea	0.00	0.00
Malaysia	0.06	0.01
Mexico	0.25	0.21
New Zealand	0.00	0.00
Philippines	-0.01	-0.01
Singapore	-0.03	-0.03
Chinese Taipei	0.06	0.03
Thailand	0.04	0.03
USA	0.20	0.18
APEC Region Total	0.11	0.09
Latin America	0.03	0.02
Western Europe	0.02	0.01
Rest of World	0.02	0.01
World Region Total	0.06	0.05

**Table D5b: Impact to APEC – Change in Export Volume**

(%)

Initiatives	Dynamic Version	Static Version
UR Commitment	9.12	8.58
MAPA Total	0.11	0.09
(MAPA Liberalization)	0.11	0.09
(MAPA Facilitation)		
UR and MAPA	9.23	8.67

**Table D5c: Impact to the World – Change in Export Volume**

(%)

Initiatives	Dynamic Version	Static Version
UR Commitment	7.25	6.65
MAPA Total	0.06	0.06
(MAPA Liberalization)	0.06	0.06
(MAPA Facilitation)		
UR and MAPA	7.31	6.71

**Table D5d: Impact to the Subregions – Change in Export Volume**

(%)

Subregion	Dynamic Version	Static Version
NAFTA	0.22	0.19
ASEAN	0.01	0.00
CER	0.01	0.01
Other APEC Members	0.02	0.01
Non-APEC World	0.02	0.02

Notes:

1. The dynamic version model assumes constant returns to scale and perfect competition with allowing capital accumulation through income-investment linkage.
2. The static version item assumes constant returns to scale and perfect competition without capital accumulation.
3. MAPA covers IAPs, CAPs, Osaka Initial Actions and ITA. (Not including UR commitment)
4. “UR and MAPA” is the sum of impacts of UR commitment and MAPA (liberalization and facilitation)



**Table D6a: Estimated Change in Merchandise Export Volume Following CER Liberalization and Facilitation in 2010**

(%)

Economies	Dynamic Version	Static Version
Australia	1.32	1.06
Canada	0.01	0.01
Chile	0.00	0.01
China	0.07	0.05
Hong Kong, China	0.01	0.01
Indonesia	0.05	0.03
Japan	0.03	0.02
Korea	0.05	0.04
Malaysia	0.08	0.03
Mexico	0.02	0.02
New Zealand	3.33	2.82
Philippines	0.04	0.04
Singapore	0.03	0.03
Chinese Taipei	0.04	0.03
Thailand	0.03	0.03
USA	0.00	0.00
APEC Region Total	0.08	0.06
Latin America	0.01	0.01
Western Europe	0.02	0.02
Rest of World	0.01	0.01
World Region Total	0.05	0.04

**Table D6b: Impact to APEC – Change in Export Volume**

(%)

Initiatives	Dynamic Version	Static Version
UR Commitment	9.12	8.58
MAPA Total	0.08	0.06
(MAPA Liberalization)	0.04	0.04
(MAPA Facilitation)	0.04	0.03
UR and MAPA	9.20	8.65

**Table D6c: Impact to the World – Change in Export Volume**

(%)

Initiatives	Dynamic Version	Static Version
UR Commitment	7.25	6.65
MAPA Total	0.05	0.04
(MAPA Liberalization)	0.02	0.02
(MAPA Facilitation)	0.03	0.02
UR and MAPA	7.30	6.69

**Table D6d: Impact to the Subregions – Change in Export Volume**

(%)

Subregions	Dynamic Version	Static Version
NAFTA	0.00	0.00
ASEAN	0.05	0.03
CER	1.72	1.41
Other APEC Members	0.04	0.03
Non-APEC World	0.02	0.02

Notes:

1. The dynamic version model assumes constant returns to scale and perfect competition with allowing capital accumulation through income-investment linkage.
2. The static version assumes constant returns to scale and perfect competition without capital accumulation.
3. MAPA covers IAPs, CAPs, Osaka Initial Actions and ITA. (Not including UR commitment)
4. “UR and MAPA” is the sum of impacts of UR commitment and MAPA (liberalization and facilitation).

**Table D7a: Estimated Changes in Merchandise Export Volume Following CER Liberalization Only in 2010**

(%)

Economies	Dynamic Version	Static Version
Australia	0.74	0.68
Canada	0.00	0.00
Chile	-0.01	0.00
China	0.06	0.05
Hong Kong, China	0.00	0.00
Indonesia	0.03	0.02
Japan	0.02	0.01
Korea	0.04	0.02
Malaysia	0.03	0.02
Mexico	0.01	0.00
New Zealand	2.54	2.51
Philippines	0.02	0.02
Singapore	0.00	0.00
Chinese Taipei	0.02	0.01
Thailand	0.01	0.01
USA	-0.02	-0.02
<b>APEC Region Total</b>	<b>0.04</b>	<b>0.04</b>
Latin America	0.00	0.00
Western Europe	0.01	0.00
Rest of World	0.00	0.00
<b>World Region Total</b>	<b>0.02</b>	<b>0.02</b>

**Table D7b: Impact to APEC – Change in Export Volume**

(%)

Initiatives	Dynamic Version	Static Version
UR Commitment	9.12	8.58
MAPA Total	0.04	0.04
(MAPA Liberalization)	(0.04)	(0.04)
(MAPA Facilitation)		
UR and MAPA	9.16	8.62

**Table D7c: Impact to the World – Change in Export Volume**

(%)

Initiatives	Dynamic Version	Static Version
UR Commitment	7.25	6.65
MAPA Total	0.02	0.02
(MAPA Liberalization)	(0.02)	(0.02)
(MAPA Facilitation)		
UR and MAPA	7.27	6.67

**Table D7d: Impact to the Subregions – Change in Export Volume**

(%)

Subregions	Dynamic Version	Static Version
NAFTA	-0.02	-0.02
ASEAN	0.01	0.01
CER	1.10	1.04
Other APEC Members	0.02	0.02
Non-APEC World	0.00	0.00

Notes:

1. The dynamic version model assumes constant returns to scale and perfect competition with allowing capital accumulation through income-investment linkage.
2. The static version assumes constant returns to scale and perfect competition without capital accumulation.
3. MAPA covers IAPs, CAPs, Osaka Initial Actions and ITA. (Not including UR commitment)
4. “UR and MAPA” is the sum of impacts of UR commitment and MAPA (liberalization and facilitation)

## Glossary

AFTA	ASEAN Free Trade Area
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
AEM	ASEAN Economic Ministers
BIE	Bureau of Industry Economics
CER	Australia-New Zealand Closer Economic Relations Trade Arrangement
CEPT	Common Effective Preferential Tariff
CHT	China-Hong Kong,China-Chinese Taipei Growth Area
Canada-U.S. FTA	Canada-United States Free Trade Arrangement
DSM	Dispute Settlement Mechanism
EU	European Union
EAAU	East Asia Analytical Unit
FDI	Foreign Direct Investment
FTA	Free Trade Agreement, or Free Trade Area
FTAA	Free Trade Area of the Americas
GATT	General Agreement on Tariffs and Trade
GATS	General Agreement on Trade in Services
GDP	Gross Domestic Product
IMS-GT	Indonesia-Malaysia-Singapore Growth Triangle
IAPs	Individual Action Plans
ITA	Information Technology Agreement
LAIA	Latin American Integration Association
MFN	Most Favored Nation
MAPA	Manila Action Plan for APEC
MNEs	Multinational Enterprises
MERT	Ministry of External Relations and Trade
MOU	Memorandum of Understanding
NAFTA	North American Free Trade Agreement
NIEs	Newly Industrialized Economies
NTBs	non-tariff barriers
NTMs	non-tariff measures
NZAFTA	New Zealand-Australia Free Trade Agreement

OAPEC	APEC Economies not included in NAFTA, AFTA, CHT or CER
OECD	Organization for Economic Cooperation and Development
PECC	Pacific Economic Cooperation Council
PTA	Preferential Trading Arrangement
QRs	Quantitative Restrictions
ROO	Rules of Origin
ROW	rest of the world
SEZs	Special Economic Zones
SIJORI	Singapore-Johor-Riau Growth Area
SRTA	Subregional Trading Arrangement
SPARTECA	South Pacific Regional Trade and Economic Cooperation Agreement
TAFTA	Transatlantic Free Trade Agreement
TC	Trade Creation
TD	Trade Diversion
TEL	Temporary Exclusion List
TRIMS	Trade Related Investment Measures Agreement
TRIPS	Agreement on Trade Related Aspects of Intellectual Property Rights
UNCTAD	United Nations Conference on Trade and Development
UR	Uruguay Round
USTR	U. S. Trade Representative
WTO	World Trade Organization

## References

- Anderson, J.E., 1979, "A Theoretical Foundation for the Gravity Equation," *American Economic Review* 69: pp.106-116.
- APEC, 1991, *Seoul Declaration*, APEC Secretariat.
- , 1993, *A Vision for APEC: Towards an Asia Pacific Economic Community*, Report of the Eminent Persons Group to APEC Ministers, APEC Ministers, October.
- , 1994, *Achieving the APEC Vision: Free and Open Trade in the Asia Pacific*, Second Report of the Eminent Persons Group, APEC Ministers, August.
- , 1995, *Implementing the APEC Vision*, Third Report of the Eminent Persons Group, APEC Secretariat, August.
- , 1996, *Manila Action Plan for APEC*, APEC Secretariat, November.
- , 1997, *Impact of Trade Liberalization*, Economic Committee, APEC secretariat.
- Asian Business. 1992. "Trading on ASEAN Future" July.
- Asian Business. 1994. "ASEAN Accelerates AFTA Future" November.
- Bergstrand, J. H., 1985, "The Gravity Equation in International Trade: Some Microeconomics Foundations and Empirical Evidence," *Review of Economics and Statistics* 67:pp. 474-481.
- Bhagwati, J., 1993, "Regionalism and multilateralism: An Overview," in J. de Melo and A. Panagariya, eds. *New Dimensions in Regional Integration*, New York: Cambridge University Press.
- Bhagwati, J. and A. Panagariya, 1996a, "The Theory of Preferential Trade Agreements: Historical Evolution and Current Trends," *American Economic Review*, Vol. 86: No2, May.
- Bhagwati, J. and A. Panagariya, 1996b, "Preferential Trading Areas and Multilateralism: Strangers, Friends or Foe?" in Bhagwati, J. and A. Panagariya, eds., *Free Trade Areas or Free Trade? The Economics of Preferential Trading Agreements*. Washington, DC: American Enterprise Institute Press.
- Bollard, A. 1986, "The Economic Relations Agreement Between Australia and New Zealand: A Tentative Appraisal," *Journal of Common Market Studies*, Vol. 25, No. 2.
- BIE ( Bureau of Industry Economics), 1995a, *Potential Gains to Australia from APEC: Open Regionalism and the Bogor Declaration*, Occasional Paper no. 29, AGPS, Canberra.
- , 1995b, *Impact of the CER Trade Agreement: Lessons for Regional Economic Cooperation*, Research Report 17, AGPS, Canberra.
- Chen, D., 1994, "Chinese Public Policy and the Southern China Growth Triangle," in That, Tang, and Kakazu, eds. *Growth Triangles in Asia: A New Approach to Regional Economic Cooperation*, Oxford University Press, Hong Kong.
- Chen, E. and A. Ho, 1994, "Southern China Growth Triangle: An Overview," in That, Tang, and Kakazu, eds. *Growth Triangles in Asia: A New Approach to Regional Economic Cooperation*, Oxford University Press, Hong Kong.
- Common Wealth of Australia, 1995, *A Proposal for the Trans-Tasman Mutual Recognition of Standards for Goods and Occupations*. A discussion paper circulated by the Council of Australia Governments and the Government of New Zealand, AGPS, Canberra.
- Corbet, H., 1995, "APEC at the Crossroad," mimeo, George Washington University.
- Dean, J. ,1987, "The ASEAN Preferential Trading Arrangement: Some Problems, Ex-ante Results, and A Multipronged Approach to Future Intra-ASEAN Trade Development," *ASEAN Economic Bulletin*, Vol. 4, No. 2.
- Dosch, J. and Manfred Mols, 1994, "Why ASEAN Cooperation Cannot Work as a Model for Regionalism Elsewhere - A Reply," *ASEAN Economic Bulletin*, Vol. 11, No. 2.

- EAAU, 1992, *Southern China in Transition*, East Asia Analytical Unit, Department of Foreign Affairs and Trade, Australia.
- EAAU, 1994, *Asean Free Trade Area: Trading Bloc or Building Block?* East Asia Analytical Unit, Department of Foreign Affairs and Trade, Australia.
- EAAU, 1995, *Growth Triangles of South-East Asia*, East Asia Analytical Unit, Department of Foreign Affairs and Trade, Australia.
- Economic Council, 1997, *The Spread of Globalization and Issues for the 21st Century (General Remarks)*," Report of The 21st Century Committee for the World Economic Vision, Japan.
- Elek, A., 1995, "APEC beyond Bogor: An Open Economic Association in the Asian-Pacific Region," *Asian-Pacific Economic Literature*, Vol. 9, No. 1, May.
- Feenstra, R. C. and A. K. Rose, 1993, *Trade with Mexico and Water Use in California Agriculture*, in P. Garber ed., 1993.
- Frankel, J., 1992, "Is Japan Creating a Yen Bloc in East Asia and the Pacific?" paper prepared for the NBER conference on *Japan and the U.S. in the Pacific Area*.
- Frankel, J. A. and S. J. Wei, 1995, "The New Regionalism and Asia: Impact and Options," Working Paper PB 95-10, Center for Pacific Basin Monetary and Economic Studies, Economic Research Department, Federal Reserve Bank of San Francisco.
- Garber, P., 1993, *The Mexico-U.S. Free Trade Agreement*. The MIT Press.
- Harmsen, R. and M. Leidy, 1994, "Regional Trading Arrangements," IMF, Washington.
- Hawke, G., 1996, "The Trans-Tasman Relationship," mimeograph, Victoria University, Wellington, New Zealand.
- Hinojosa-Ojeda, Raul, 1996, "NAFTA's Next Steps: Hemispheric and Global Implications," in *Regionalism and its Place in the Multilateral Trading System*, OECD, Paris.
- Hoekman, B. and P. Sauve, 1994a, "Regional and Multilateral Liberalization of Service Markets: Complements or Substitutes?" *Journal of Common Market Studies*, Vol. 32, No. 3.
- , 1994b, "Liberalizing Trade in Services," World Bank, Washington.
- Huang, D. S., 1996, "On the Measurement of Dynamic Impacts of Economic Integration," IEAS Working Papers, Institute of Economics, Academia Sinica, Taipei.
- Imada, P., 1993, "Production and Trade Effects of an ASEAN Free Trade Area," *The Developing Economies*, Volume 31, No.1.
- Khanna, J., 1995, *Southern China, Hong Kong, and Taiwan: Evolution of a Subregional Economy*, The Center for Strategic and International Studies, Washington D.C.
- Kim, H. S. and A. Weston, 1993, "A North American Free Trade Agreement and East Asian Developing Countries," *ASEAN Economic Bulletin*, Vol. 9, No. 3, pp. 287-300.
- Laird, S., 1996, "Fostering Regional Integration," in *Regionalism and its Place in the Multilateral Trading System*, OECD, Paris.
- Lall, D., 1993, "Trade Blocs and Multilateral Free Trade," *Journal of Common Market Studies*, Vol. 31, No. 3, pp. 349-58.
- Lee, T. Y., 1994, "The ASEAN Free Trade Area: the Search for a Common Prosperity," *Asian-Pacific Economic Literature*, Vol. 8, No. 1.
- Linneman, H., 1966, *An Econometric Analysis of International Trade Flows*, North-Holland: Amsterdam.
- Lloyd, P. J., 1991, *The Future of CER: A Single Market for Australia and New Zealand*, Committee for Economic Development of Australia, Monograph No. 96.
- , 1992, "Regionalisation and World Trade," *OECD Economic Studies*, No. 18, Spring.
- , 1995, "The Future of Trans-Tasman Closer Economic Relations," *Agenda*, Vol. 2, No. 3.

- Luhulima, C. P. F., 1993, "The Performance of ASEAN Economic Cooperation," *The Indonesian Quarterly*, Volume 22, No.1.
- Macaranas, F. M., 1997, "APEC Beyond Manila and Subic," paper presented at the *JIIA Conference on Asia-Pacific Cooperation in the Global Context*, March 10-11, Awashima, Japan.
- Menon, J., 1994, "Trade Liberalization, Closer Economic Relations and Intra-Industry Specialization," *Australia Economic Review*, No. 106.
- MERT (Ministry of External Relations and Trade), 1993, "New Zealand and Australia: Closer Economic Relations," *Information Bulletin*, No. 42, May 1993, Wellington.
- Naya, S. and P. Imada, 1992, "The Long and Winding Road ahead for AFTA," in *Asian Studies*.
- OECD, 1996, *Regionalism and the Multilateral Trading System*, OECD, Paris.
- Ooi, G. T., 1981, "ASEAN Preferential Trading Arrangements: An Analysis of Potential Effect on Intra-ASEAN Trade," *Research and Discussion Paper*, No. 26, Institute of Southeast Asian Studies, Singapore.
- Ostry, S., 1997, "APEC: Challenges and Capabilities," paper presented at the first APEC Senior Officials Meeting, Victoria, Canada.
- PECC, 1995a, *Milestones in APEC Liberalization: A Map of Market Opening Measures by APEC Economies*, PECC for the APEC Secretariat.
- PECC, 1995b, *Survey of Impediments to Trade and Investment in the APEC Region*, PECC for the APEC Secretariat.
- Ramasamy, B., 1995, "Trade diversion in an ASEAN free trade area," *ASEAN Economic Bulletin*, Vol. 12, No. 1.
- Safadi, R. and A. Yeats, 1994, "NAFTA: Its Effect on South Asia," *Journal of Asia Economics*, Vol. 5, No. 2, pp.197-216.
- Sampson, G., 1996, "Compatibility of Regional and Multilateral Trading Agreements: Reforming the WTO Process," *American Economic Review*, Vol. 86: No.2, May.
- Scollay, R., 1996, "Preferential Rules of Origin, Regional Trading Arrangements and APEC," PECC Trade Policy Forum IX, September, Seoul.
- Snape, Richard H., J. Adams and D. Morgan, 1993, *Regional Trade Agreements: Implications and Options for Australia*, Australian Government. Publishing Service, Canberra.
- Stephenson, S, 1996, "The Economic Impact of Rules of Origin in the Asia-Pacific Region," PECC Trade Policy Forum IX, September, Seoul.
- Sung, Y. W. 1996, "The China Circle and Subregional Economic Integration in East Asia," in *Regionalism and its Place in the Multilateral Trading System*, OECD, Paris.
- Supperamaniam, M., 1997, "Implementation of Bogor Goals: An Evaluation," paper presented at the *JIIA Conference on Asia-Pacific Cooperation in the Global Context*, March 10-11, Awashima, Japan.
- Tan., K.Y., M. H. Toh and L. Low, 1992, "ASEAN and Pacific Economic Cooperation," *ASEAN Economic Bulletin*, Vol. 8, No. 3.
- Tang, M and M. Thant, 1994, "Growth Triangles: Conceptual and Operational Considerations," in That, Tang, and Kakazu, eds. *Growth Triangles in Asia: A New Approach to Regional Economic Cooperation*, Oxford University Press, Hong Kong.
- USTR, 1996, "Profile of NAFTA, AFTA, and CER Trade Agreements," paper presented at the APEC CTI Trade Policy Dialogue, Manila, October 17.
- USTR, 1997, *USTR 1997 Trade Policy Agenda*, Washington, D. C.

- Wang, J., 1994, "Expansion of the Southern China Growth Triangle," in That, Tang, and Kakazu, eds. *Growth Triangles in Asia: A New Approach to Regional Economic Cooperation*, Oxford University Press, Hong Kong.
- Wonnacott, R., 1996, "Free-Trade Agreements: For Better or Worse?" *American Economic Review*, Vol. 86: No.2, May.
- World Trade Organization, 1995, *Regionalism and the World Trade System*, WTO Secretariat, Geneva.
- Yeung, Y., 1994, "Infrastructure Development in the Southern China Growth Triangle," in That, Tang, and Kakazu, eds. *Growth Triangles in Asia: A New Approach to Regional Economic Cooperation*, Oxford University Press, Hong Kong.