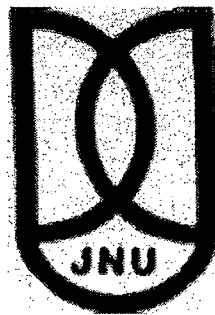


**A COMPARATIVE STUDY OF NORTH-SOUTH
AND SOUTH-SOUTH RTAs: TWO CASE STUDIES**

**Dissertation Submitted to the School of Social Sciences
Jawaharlal Nehru University in Partial Fulfillment of
the Requirements for the Award of the Degree of**

MASTER OF PHILOSOPHY

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DECLARATION

This dissertation entitled "A Comparative Study of North-South and South-South RTAs: Two Case Studies" being submitted to the Centre for Economic Studies and Planning, School of Social Sciences, Jawaharlal Nehru University, New Delhi, in partial fulfillment of the requirements for the award of the degree of MASTER OF PHILOSOPHY, is my original work and it has not been submitted in part or full for any other degree of this or any other University.

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To
Baba, Ma and Ria

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Chapter 1: Introduction

Chapter 1: Introduction

The concept of regionalism, by itself, is not new. Evidence of some sort of a trade agreement has been visible from as early as the 18th and the 19th century, when Austria signed free trade agreements with five of its neighbours. However, the features of the current 'wave' of regionalism are starkly different from what was prevalent at that time. Modern day FTAs include many 'beyond the border' measures which would have been almost unimaginable in earlier agreements.

The following dissertation would attempt to deal at length with the whole subject of regionalism. There will be an attempt to answer three important questions. The first deals with the benefits from and costs of regionalism. In this regard major topics dealing with the theory of assessment of FTA benefits will be investigated. As mentioned above, recent FTAs are much more complex than what had been seen in the past. A correct assessment of an FTA would have to include trade measures as well as non-trade clauses in its evaluation.

The second question that would be discussed, would be the question of 'with whom to trade' posed especially by developing countries. All pros and cons of signing an agreement with a developing country (South-South agreement) as well as that with a developed country (North-South agreement) will be investigated in detail. The features of the new trend in regionalism and its impact on the costs and benefits of signing an agreement with a specific type of partner will be delved into in detail. The impact of trade clauses as well as non-trade clauses, on developing countries once they enter into a specific type of agreement would also be investigated.

The third question that would be dealt with would relate to the motivations behind the signing of the agreement for the developed partner as well as the developing partner even if the agreement is found to be 'ineffective' from the standard viewpoint.

Before beginning the discussion, an important point needs to be highlighted. It should be noted that initial conditions with which the two types of countries are starting their movement towards the 'second wave of regionalism' are not the same. The north has had a typically open economy with low general tariffs. The tariff structure is however, also consisting of tariff peaks and escalations that plague the developing countries. The developing countries are, on the other hand, starting from a much lower level of liberalization as well as development. Most developing countries have high tariff levels with many sensitive sectors heavily protected. Following the infant industry argument, many nascent industries are subsidized as well as protected from external competition. When trade opens up following an FTA, the developing countries' sensitive sectors come into direct competition with the typically more competitive (or artificially more competitive) sectors in the North. Thus, if both types of countries jump into the regionalism bandwagon, the effects obviously wouldn't be the same. In addition, a Southern country has to also make an especially tough choice between signing an agreement with a developed country or a developing country. Both types of agreements have their own positive as well as negative effects. Some theoretical arguments however assert, "why not sign with all?" This would, however, lead to the world becoming one giant spaghetti bowl, to borrow Bhagwati's (1995) phrase, of regional trade agreements.

At the end of the day it should be remembered that trade is an instrument for convergence of incomes. It is not as if a country couldn't have survived in autarchy, it is just that with free trade a higher level of welfare is achievable by the economy. Thus, the movement to regionalism should be looked upon as an attempt by developing nations to climb up this developmental ladder. However, care should be taken so that the cost incurred during the traverse to the higher optimal point does not become too heavy for the nation to bear, thus, subverting the gains accruing from higher levels of growth.

The chapter scheme of the following dissertation is as follows. **Chapter Two** gives an overview of all standard literature relating to regionalism. The chapter deals with the traditional models as well as the newer models. The stand of each of these models on the choice between North-South and South-South agreements is also put forward.

Additionally the difference between the trends of old regionalism and new regionalism is also depicted. Another section in the chapter discusses the merits of multilateralism versus preferentialism. Since multilateralism has been in a deadlock over some time, for countries willing to move forward preferentialism offers the seemingly obvious way. There are however, certain costs involved with preferentialism that have to be borne by partner countries. Sections in the chapter also refute many of the arguments given in support of the North-South agreements by giving evidence from empirical studies. A discussion of the typically extractive clauses of a North-South agreement is also included.

Chapter Three mainly deals with the India-Thailand and US-Chile bilateral agreements. A comparison is made between the two agreement' members at the time of inception of the agreement and using the evidence, the differences in economic strengths of typical North-South and South-South partners is illustrated. Evaluations of formal studies on the potential effects of the two agreements are also mentioned. The texts of the two documents are discussed in detail and some of important clauses included in the two agreements are also highlighted.

Chapter Four provides the empirical backbone to many of the previously made conjectures. Since the two agreements are quite new in origin, their analysis would be done according to the traditional Viner-Meade model. The gravity equation has been used to model import flows and assess the impact of bilateral agreement on these flows. Theoretically, a significant dummy coefficient means that the specific FTA has been largely trade creating. The derivation of a suitable gravity model as well as the appropriate econometric methodology to be followed is also discussed in detail.

Chapter Five analyses actual data on direction and composition of trade for the countries involved in the two agreements. Changes in the trading patterns, both in aggregate flows as well as commodity flows, are also examined. Different indices are used to draw conclusions about the nature of the two agreements. The indices used reveal trends about the intensity of trade as well as efficiency of trade flows. Data is then matched ascertain to whether or not it follows the efficiency criterion.

Chapter Six provides the summary and conclusions of all the above-mentioned chapters.

Chapter 2: Review of Literature

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Regional trade agreements are rapidly becoming the most important form of trade negotiations in the current world trade scenario. Recent trade flow trends indicate that trade between RTA partners constitutes nearly 40% of total global trade. In fact, there has been a phenomenal surge in the number of RTAs since the early 1990s. Of the 149 members of the WTO, all but Mongolia are signatories to one or more RTAs, with some signing up to 20 or more.

Up till December 2006, some 368 RTAs had been notified to the GATT/WTO. Of these, 292 RTAs were notified under Article XXIV of the GATT, 22 under the Enabling Clause and 54 under Article V of the GATS. On that same date, out of all these notified agreements, some 215 agreements were in force. The WTO estimates that by 2010 a mammoth total of 400 RTAs will be implemented. It takes into account the RTAs that are in force but have not been notified, those signed but not in force, those currently being negotiated and those in the proposal stage, and adds this number to the figure of 368 arrived at earlier. Of these RTAs, free trade agreements (FTAs) and partial scope agreements account for over 90% of the total, while customs unions account for less than 10%.

According to official definitions, “Regional Trade Agreements (RTAs)” or “Regional Integration Agreements (RIAs)” are terms that refer to the whole spectrum of levels of economic integration. The lowest level of integration is represented by partial scope agreements, which liberalise trade in only a subset of commodities or sectors. These are referred to as Preferential Trade Agreements (PTA). Preferential Trade Agreements can be defined as agreements between two or more countries for reducing barriers to trade on a reciprocal and preferential basis for those in the group. In comparison, a Free Trade Agreement (FTA) involves a greater degree of integration. Under an FTA, each country abolishes tariffs imposed on trade among member countries. Since external tariffs imposed on the third countries may vary from one member to another, the rules of origin arrangements become important in the case of the FTA. In a Customs Union even the

common external tariffs are harmonized between member countries. Customs Union, thus, involve an even higher degree of integration as compared to FTAs.

Article XXIV of GATT allows regional trading arrangements to be set up as a special exception to the MFN rule. The main criteria upon which this exception is made are 1) “substantially all trade” must be included, 2) the “general incidence of duties and other regulations of commerce” must not on the whole be higher or more restrictive against third parties than before the formation of the RTA, and 3) internal tariffs should be reduced to zero and “other restrictive regulations of commerce” other than those permitted by other GATT articles must be removed. The reasoning behind the requirement for substantial inclusion is to prevent members from including only those sectors in which they anticipate export growth. The condition on reducing internal tariffs to zero helps defend the MFN clause by making it subject to an “all-or-nothing” exception.

The Enabling Clause (1979) produced by the GATT in its Tokyo Round subjects developing countries to comparatively less stringent criteria when they enter into FTAs and thus, seeks to dilute Article XXIV clauses. It drops the conditions on the coverage of trade and allows developing countries to reduce tariffs on mutual trade in any way they wish and to employ non-tariff measures in accordance with the criteria that may be prescribed by the other GATT members.

It should be noted that Article XXIV was originally envisaged as an exception to the MFN principle. Current trends of proliferation of FTAs, however, have resulted in the MFN principle itself, rather than the Article XXIV, becoming more of an exemption than the rule.

In addition, even the nature of the FTAs being entered into has also been changing overtime. The following chapter discusses the changing trends in the nature of FTAs and its bearing on the question of whether or not a developing country should enter into a agreement, and whom it should choose as a partner for its highest welfare gain.

2.1 Traditional Trade Theories: An Overview

International trade theory has had a long tradition of analysis of the impact of shallow integration, i.e., liberalisation of barriers to commodity trade. Theoretical analysis of shallow regions trade agreements is based on the principles of “second best” analysis. The core theoretical analysis of shallow RTAs is based on the Theory of Customs Union, with seminal contributions by Viner (1950), Meade (1955), and Kemp and Wan (1976).

The classical theory on gains from trade says that global free trade allows consumers and firms to purchase from the cheapest source of supply since production is ideally located according to comparative advantage. In contrast, traditional barriers discriminate against foreign producers in favour of domestic suppliers. Domestic import-competing producers are induced to expand even though their costs are higher than the cost of imports. This misallocation deprives domestic export sectors of resources, raises their costs, and causes these sectors to be smaller than they should have been. Hence, doing away with trade barrier is unequivocally good for the economy.

However, the gains from trade arguments do not deal with what happens if there is only a partial and discriminatory reduction in barriers, like in an RTA. This definitely complicates the picture. One of the earliest analysis of the effects of membership in an FTA was done by Viner (1950), who established the ideas of trade creation and trade diversion. He noted that the membership in an FTA changes the sources from which products are supplied to the FTA’s member country markets. It increases the supply from the partner countries as these receive preferential treatment but it also possibly reduces the supply from domestic production and from the rest of the world. To the extent that overall supply is increased and lower cost imports from the partner country replace higher cost domestic production, welfare gains from trade creation can be expected. However, to the extent that increased imports form partner countries displace lower cost imports from the rest of the world, the country experiences the welfare loss from trade

diversion. Thus, he established the fact that the effect of an FTA on welfare is ambiguous and would depend on the relative strengths of these two opposing forces.

Another important model in traditional theoretical framework is the Meade (1955) model. Meade's model brought in the effect of prices into the analytical framework examining the welfare effect of RTAs. In this model, the "terms of trade" of at least one of the two (or even both) member countries of an RTA, may improve after the formation. Consequently, the outside country loses. Thus, the Meade model says that when one or more of the members are large trading countries, RTA trade policies can have appreciable spillover effects on the economies of non-member countries through the diversion of trade flows and more importantly through the world prices of the trade commodities.

To summarize, the two models say that the welfare impact of an RTA is determined by a few crucial variables, viz. changes in commodity trade in the countries within the RTA (trade creation effects), changes in trade between the RTA and the rest of the world (trade diversion effects), and changes in international prices facing the countries (terms of trade effects). Here trade creation and terms of trade gains are welfare enhancing and trade diversion and terms of trade losses are potentially damaging. It should also be noted that according to the two models the formation of an RTA might result in harmful effects on the welfare of outside countries, that is, the countries that are not the part of the RTA.

Kemp and Wan (1976) in their seminal paper lay these apprehensions of welfare loss, resulting from RTA formation, to rest. They prove that a customs union that adjusts its common external tariff so as to leave the volume of trade with outside countries unchanged and introduces a system of lump-sum payments among members only, will make households in both member and non-member countries better off or at the least no worse off. The existence of a common external tariff preserves trade with outside countries at the pre-RTA levels and removes any harm to these countries. In short, Kemp and Wan showed that it is possible to eliminate trade diversion entirely if a customs union adopts a sufficiently low set of common external tariffs at the same time that they liberalise internal trade.

It should be noted that all of the above mentioned theories adhere closely to the standard general equilibrium trade theory in the Heckscher-Ohlin-Samuelson framework. There have been major strides made towards explaining the welfare effects of RTA formation since then. Baldwin and Venables (1995) have provided a useful classification of general equilibrium trade theories down the ages. They classify old and new general equilibrium trade models into three generations. The first generation models comprise of traditional trade models like the Viner-Meade models that assume constant returns to scale, perfect competition and a fixed number of goods. The second generations of models form a part of the New Trade Theory that emerged in the 1980s. This theory introduces the assumption of increasing returns to scale in some industries, imperfect competition and the endogeneity of the number of the varieties of goods, into the framework. The third generation models consist of the later generation models that introduced investment and growth effects. It needs to be mentioned that despite the rapid strides made in theoretical knowledge, the above mentioned first generation models like the Viner and Meade models are still relevant today because they are the precursors of many of the subsequent computable general equilibrium models and hold the power to explain trade discrimination quite aptly.

2.2 Old and New Regionalism

The development in theory mentioned earlier has been mainly driven by the changing nature of FTAs as well as the greater sophistication achieved in research methodology overtime. In this regard the distinction between the concepts of deep integration and shallow integration needs to be mentioned. These two concepts are generally used to explain the shift from old to new regionalism in modern trade history.

In the first wave of regionalism or old regionalism, trade was used as a means of achieving regional specialization of commodities. Shallow integration, involving reducing or eliminating barriers to trade in commodities, was the tune of the day. In time other factors, also called the 'trade-plus factors', started dominating the setting up of FTA and shallow integration slowly lost its paramount importance. It is in this scenario deep

integration policies came into vogue. Deep integration, involving elements of harmonization of national policies between countries, became the general form in which negotiations took. This trend of movement towards deeper integration and the inclusion of “trade plus” conditions such as intellectual property rights, investment, government procurement, etc. into FTAs, has been termed by many as “new regionalism” or the second wave of regionalism.

Ethier (1998) notes and discusses the following stylized facts of new regionalism:

1. Recent RTAs typically feature one or more developing countries linking up with a developed country.
2. Membership in an RTA often follows significant unilateral liberalisation by developing countries including both trade and macro policy reforms.
3. RTAs seldom address only trade barriers. The degree of trade liberalisation may be modest and they invariably incorporate elements of deep economic integration.
4. RTAs do not involve a direct movement towards free trade. The degree of liberalisation is generally modest; and
5. Developing countries make bigger trade concessions in RTAs often because developed countries have low tariffs to begin with. The agreements are, thus, one sided.

Ethier, in fact, states “*regional integration consists of reform-minded small countries “purchasing,” with moderate trade concessions, deep links with large countries that confer relatively minor trade advantages.*”

The emergence of the phenomenon of new regionalism both globally and regionally, has led to the rapid development of new trade theory. It has sought to incorporate the impact of forces that go beyond efficiency gains from reallocating resources according to comparative advantage. The work has been stimulated partly by the observation that while efficiency gains from various regional schemes have been significant, they are quite small in relation to national product of member countries. Hence, it is insufficient for explaining the rapid economic growth that has accompanied trade expansion in many

countries in recent times. To summarize, while old trade theory focuses on commodity trade and prices, new trade theory considers a variety of other effects of trade. New trade theory considers trade productivity links, imperfect competition, and rent seeking behavior.

2.3 Multilateral v/s Preferential Agreements

With the emergence of RTAs, there has been concern in some quarters that the position of multilateral platforms is being undermined. Larger countries are using the bilateral or the regional platform to obtain consent over the multilateral issues they are most interested in. Bhagwati's (1990) characterization of regional trade agreements as "building blocs or stumbling blocs" for multilateralism is part of this ongoing debate on whether new regionalism helps or hurts prospects for continuing global liberalisation. FTAs that accelerate trade liberalisation, while not upsetting the balance of rights and obligations in the WTO could be adjudged to be building blocs.

An independent report on the future of the WTO acknowledges that some FTAs act as "spurs to the more hesitant development of the multilateral system" and that "small groups of developing countries may see value in liberalising within regional trade arrangements as a means of working their way up to the harsher competitive realities of the global economy." On the other hand, to the extent that FTAs detract from WTO rights, or contain rules of origin and other trade diversionary provisions that create vested interests against multilateral liberalisation, they could be said to be "stumbling blocks."

There may also be the issue that once a preferential arrangement is created, it may become dominated by vested interests that feel threatened and thus, oppose subsequent multilateral liberalisation. It is also possible that the creation of a number of separate trading blocs would heighten international policy conflicts and frictions. Therefore, this argument suggests that there are higher chances that the formation of RTAs would pose a stumbling block to multilateralism.

For most developing countries negotiating on a multilateral platform would be unarguably fairer and higher welfare inducing than negotiating bilaterally or regionally. However, most of these countries are constrained by a sort of a “prisoner’s dilemma” wherein despite knowing the optimal behavior they are forced to consider a sub-optimal behavior of entering into an RTA with a few countries .It is factors like the ‘fear of exclusion’ that drive this choice. This topic will be taken up in detail later.

It should be noted that a balance of sorts between the two arguments has been achieved by the Chilean trade policy following the arguments of Wonnacott and Wonnacott (1981). Wonnacott and Wonnacott show that if a country negotiates FTAs with all of its trade partners, it would end up with zero effective tariffs on all imports, or free trade, despite the existence of positive MFN tariffs. Chile has followed such a strategy of sequentially negotiating bilateral FTAs with all of its significant trade partners. This sequencing of FTAs, titled “additive regionalism” by Harrison, Rutherford and Tarr (2001), may produce gains that are significantly larger than unilateral free trade. In a later paper Harrison, Rutherford and Tarr (2003a) estimate that Chile’s strategy of individually negotiating an FTA with each of it significant trading partners results in gains to Chile, that were many multiples of its gains from unilateral trade liberalisation.

However, a word of caution is required before developing countries jump headlong into the “additive regionalism” bandwagon. It should be noted that multiple FTAs could result in overlapping RTAs and lead to what has been termed as “Spaghetti Bowl Regionalism”. Overlapping RTAs may lead to confusing administrative requirements and complicated rules of origin certification requirements.

2.4 The Debate on North-South v/s South–South Integration

With the emergence of new regionalism, the question of “with whom to trade” has assumed impressive dimensions. An important theory that sheds light on the matter is the “natural trading partner” hypothesis propounded by Wonnacott and Lutz (1989), and Summers (1991). They believe that with prohibitive intercontinental transport costs, continental agreements increase welfare unambiguously. Member countries of a

continental agreement would be close enough to each other to reap savings on transportation costs, and were thus, “natural” trading partners. With regionalism the chances of conflict with neighbours would be reduced and past tensions would be replaced with an institutional framework that promotes cooperation. A regional market could also be created for goods that for reasons of taste or excessive transport costs are not tradable with the rest of the world. If an RTA includes all potential suppliers of such a good, it is equivalent to multilateral free trade and hence, for small countries it would be welfare improving.

Another branch of theory uses the Theory of Comparative Advantage to decide upon the most advantageous trading partners. This school of thought draws a distinction between developed countries (called ‘North’) and developing countries (called ‘South’). Most of the papers in this genre advocate for North-South agreements and against South-South agreements. Here, a North-South agreement refers to an RTA where one of the partners is a developed country while the other is a developing country. In a South-South agreement both members are developing economies.

The core of the argument lies in the fact that endowment differences are usually larger between members of a North-South RTA than between members of South-South RTA. Thus, a developing country or the Southern partner in an agreement is likely to exploit its comparative advantage better in a North-South RTA than in South-South one.

For the above argument to hold true, it needs to be assumed that domestic import-substituting products of a Southern country and imports from partners and non-partners are perfect substitutes. Then if the Southern partner in a North-South RTA reduces its tariffs on imports, the Northern partner is large enough to satisfy many of its needs at little more than the prevailing international costs. If it imports only from the Northern partner after the bloc is formed, its domestic prices fall to Northern levels and it benefits from increased consumption and reduced production of high-cost domestic substitutes. There is, thus, substantial trade creation, and to the extent that the Northern country is the most efficient producer of the imported good, there is no trade diversion too. Hence, in

the commodities for which this is true, the South can enjoy gains from a North-South RTA much like those from unilateral liberalisation on an MFN basis.

In this regard, it should be mentioned that the Theory of Comparative Advantage has some serious shortcomings. The theory is purely static in nature, i.e., it describes the structure of foreign trade of a country at a point of time. It, thus, cannot forecast what the country ought to export and import in order to increase its dynamic efficiency or rate of growth. Griffin (1969) postulates that the primary reason why the theory has little prescriptive power is that market prices frequently and sharply diverge from long-run social costs. The theory, on the other hand, assumes that a country's present comparative costs are permanent in nature.

A natural prerequisite for the successful application of the theory of comparative advantage is that the North too should be keener to sign agreements with the South rather than other Northern regions. If the current trends are anything to go by, this is precisely what is happening. The spate of North-North agreements has slowed down with the slowing down of the enlargement of the EU. North-South FTAs have definitely marched ahead as far as figures are concerned.

Agreement documents, however, reveal that the North has been assiduously signing agreements with the South for far more important reasons than merely following the comparative advantage theory. The most important reason is that North-South FTAs allow it to negotiate on terms that are 'WTO Plus'. There has been a noticeable attempt by developed countries, through their participation in North-South FTAs, to expand and modify the trade agenda beyond what has currently been agreed in the WTO. There has been an attempt to bind smaller countries to commitments regarding many issues that have either been rejected in the negotiations or have drawn vehement protest from the developing countries in multilateral platforms. More often than not, the drawn agreements encroach upon domestic policy space covering sanitary measures, trade facilitation, liberalisation of trade in services, investments and competition disciplines, IPRs and government procurement.

Some economists also emphasize the fact that the reason for the phenomenal drive towards RTAs initiated by the North has often been non-trade related, such as: i) concerns related to long-term energy security; ii) desire to reward developing countries for supporting global foreign policy objectives of the concerned Northern country; and iii) mitigating pressures for migration by lifting living standards in poorer neighboring countries (Abugattas Majluf 2004). It is said that the great majority of US FTA negotiations initiated since 2001 have nothing to do with trade. The agreements are mostly with countries that fall into either one of the following two categories. The first consists of Middle Eastern countries that cooperated with the United States in the regional peace process. The second category consists of countries that support the US war efforts in Iraq by participating in the “Coalition of the Willing”. For example, all countries in Latin America that joined the coalition have become FTA negotiating partners.

Another reason for the tearing hurry the North seems to be in to sign more and more agreements lies in the advantage of being a hub. The issue of “hub and spoke” is particular to the case of FTAs and does not arise in a CU. A country is a hub if it has signed several FTAs, and its partners are spokes if they have not signed FTAs between themselves. In that case, investors will prefer to invest in the hub because they can reach all other spokes from there, while they cannot do so if they are located in one of the spokes. Spokes have less market access than the hub, as the hub enjoys preferential access to all spokes but a spoke has preferential access to only the hub. Hence, for import trade, a hub gets unrestricted imports from all spokes whereas each spoke gets unrestricted imports only from its spoke partner sources. This allows the hub to procure inputs at the cheapest rate from all its FTA members (spokes) and also reap in the gains from large-scale entrepôt trade.

From the South’s standpoint the story is still complicated. There have been theories put forward by economists that propound North-South agreements while many insightful arguments exist that favour South-South agreements. The next two sections are devoted

to listing out the dominant arguments advocating North-South agreements and South-South agreements.

2.5 Arguments for North-South agreements

Mainstream theories down the ages have extolled the virtues of North-South agreements. The crux of the argument is that if an FTA contains a high-income member then the lower income members are likely to converge with the high-income partner. Though, different theories may propose different routes for achieving this convergence.

The Viner framework opines that in the case of two developing countries getting together, called the “small union” case, the home country has no domestic production of the traded good (hence no possibility of trade creation), and the RTA partner cannot supply all of the imports demanded. Some imports would continue to come from the non-RTA partner, which is a large country and the price setter. There would, consequently, be a welfare loss as consumers in the importing countries do not benefit from a lower import price and the countries lose the tariff revenue on imports from the respective RTA partner. The case would be quite different if the small country had formed an RTA with the large country itself.

Since a North-South RTA mostly involves arrangements between one or more developing countries and a large trading bloc or a country say, the EU or the US, the possibility of gains from trade increases. These two trading blocs include a high proportion of the world’s most efficient producers of many products, they operate behind relatively low tariffs for manufactures and are capable of supplying the bulk of the needs of the Southern economies. Thus, agreements involving one of these two trading blocs should theoretically result in an insignificant amount of trade diversion. In this regard, a point that needs reiteration is that the comparative production costs between countries are static in nature and do not reflect potential future production capabilities. Thus, the theorem is subject to some caveats that make its blind application harmful.

Meade's theory also endorses North-South agreements. The argument states that if goods are sufficiently strong substitutes the demand for third party goods will decrease. As a result, in order to clear markets the price of third-party goods will have to fall which (as long as no member country's price decreased by too much) will create a positive terms of trade effect for the member countries. Thus, this potential "beggar thy neighbor" effect of RTA will make it an attractive proposition for potential Southern members.

The above two arguments are part of the earlier discussed first generation theories. With the increase in sophistication of research methodology, it seems as if evidence has been piling up in support of North-South agreements. The second and third generation models according to the Baldwin and Venables' classification, have been especially concerned about estimating the positive or negative effects of forming an RTA.

The second-generation models incorporate imperfect competition, economies of scale and differentiated goods into the framework. These theories state that gains from RTAs will accrue from the increased size of the market and would lead to greater productive efficiency for any industry with economies of scale. This factor would make RTAs relatively more attractive for small countries than large ones.

Smaller countries may expect to reap substantial benefits from the increased market size resulting from an RTA, particularly if prior to the RTA that country's firms were producing solely for the domestic market. Many developing countries may be too small for industries that are subject to large economies of scale to reach an efficient size. It could also be that even if the economy is large enough to support one optimally sized firm, such a firm would be a monopoly. The negative effects of a monopoly, like higher prices etc., are well known. Regional integration helps in overcoming the disadvantages of smallness by pooling resources or combining markets. Countries can benefit from a combination of scale effects and changes in the intensity of competition. With trade opening up, the monopoly will be cut down to size in a scenario of heightened competition. Still, it needs mentioning that entering into an RTA is not necessarily the

best or the only way of increasing competition. This feat can be accomplished successfully by unilateral trade liberalization also.

The third generation of models mainly deal with growth effects from FTAs for developing countries. These theories highlight the effects of growth in domestic and foreign investments and the resultant positive externalities that would accrue from it.

It is believed that an RTA could stimulate investment by reducing distortion in domestic production. In addition, by increasing the size of the potential market, it could increase the quantity of investment made both by domestic and outside investors. This effect is particularly important for “lumpy” investments like a factory, which might only be economic above a certain size.

Schiff and Winters (2003) in their book *Regional Integration and Development*, give an alternate view to explain the factors leading to increases in investment. They suggest that the rate of return on capital (and on investment) can rise in all integrating countries regardless of capital abundance. They note that regional integration typically reduces the transaction costs of tradables more than those of non-tradables and thus, shifts both demand and supply toward tradables. If tradables are more capital-intensive than non-tradables, trade liberalisation will raise the relative demand for capital and also its rate of return. Moreover, increased competition in tradable goods sectors may induce improvements in efficiency, lower markups and a greater demand for inputs in those sectors, further increasing the relative demand for capital. Integration may also affect the prices of capital goods. Lower tariffs and trading costs on imports of capital equipment may reduce the price of investment goods, raising the rates of return and accumulation. Increased competition from capital goods imports could also stimulate the domestic capital goods industry to greater efficiency.

Another important argument states that if a developing country wants to raise the credibility of its economic reforms, it is more likely to benefit from an RTA with a large Northern partner (such as the US or EU) than with a Southern partner. Potential investors

in most developing countries are likely to be suspicious of the government's stated intentions and this lack of faith or credibility may lead to the failure of domestic economic reforms for higher growth. Moreover, credibility may take a long time to be achieved by a small developing country standing on its own. A quicker way of reducing uncertainty would be to anchor reforms through a credible binding commitment. North-South RTAs can provide this credible lock-in mechanism and do more to improve policy credibility.

Such an outcome comes about either because the RTA increases the rewards for good policy or the costs of a bad policy, or because it permits "punishment" by other RTA members if the country breaks "club rules" such as democracy and civil rights (Fernandez and Portes 1998). In the latter case, an important prerequisite for punishments being wielded out is that the larger partner must have the power and commitment to enforce the necessary reforms. The partners need to be large and stable, and should have a sufficiently strong interest in the RTA, to make it worth their while to discipline the target country. This precondition may not hold true in many cases, for example, the Cotonou Agreement of 2000 between the ACP countries and the EU. In case everything goes well and the reforms are a success, the policy commitments may result in greater FDI and lower risk premia for the developing country.

Thus, the above argument also implies that a North-South RTA is likely to be better from the viewpoint of inflows of FDI also. In recent times the need to attract foreign investment has become a strong impetus for RTAs. The importance of developing country's preferential access in a North-South RTA as a means of attracting FDI flows has also been stressed by Ethier (1998). Developing countries hope that their trade pacts will attract foreign direct investment (FDI) from developed countries ("investment creation"), which would carry with it prospects for the transfer of global technology and increased productivity.

The FDI inflows might come into the developing country to take advantage of local factors of production (such as local labour) and to set up export platforms. These motives

are obviously greater if a developing country forms an RTA with a developed country rather than another developing country. Additionally, the removal of internal barriers in the RTA allows firms to allocate operations across member countries more efficiently. Thus, if RTA members differ in their endowments (North-South agreements), the RTA may stimulate vertical FDI. This potentially important aspect of North-South arrangements lies at the heart of Ethier's (1998) theoretical exploration of the benefits of regionalism. With guaranteed preferential access to the Northern market, the Southern country becomes an attractive location for labour-intensive activities.

According to theory, the case is quite the reverse for South-South agreements. It has been noted that though a South-South RTA may attract FDI it would be more likely to tariff-jumping FDI wherein the prospects of larger integrated market of the RTA convinces a local multinational to locate there. However, this may lead to a welfare loss. Though selling behind a protective wall may be very profitable for the multinational, the social return on such investment, which include the loss of tariff revenues associated with the reductions in imports and the reduction in labour's and other inputs' social productivity, is much lower than the private one and may even be negative. Moreover, by flowing into these protected sectors in which the RTA does not have comparative advantage, and by causing other factors of production to flow into those sectors, the FDI flow reduces output in those sectors in which it is more competitive. It should be noted that like most of the earlier mentioned arguments, this theory also has certain shortcomings. Counter-arguments against this theory state that for developing countries, foreign capital cannot be relied on to initiate growth or to satisfy high priority needs. These arguments will be dealt in detail in later sections.

It should be remembered that an important positive externality that flows from greater FDI is greater knowledge generation. The knowledge-generated by trade and FDI has been assigned great importance in convergence theories. It is said that while accumulation of physical capital can have little effect on long-term growth because physical capital eventually encounters diminishing returns, human capital always generates positive returns.

Schiff, Wang, and Olarreaga (2002b) show that Southern countries' TFP responds more strongly to North-South trade than South-South trade. Further, high R&D-intensive industries in the South learn mainly from trade with the North and that industries with low R&D intensities learn mainly from trade within the South. Thus, North-South RTAs tend to favour the development of high R&D-intensive industries, while South-South RTAs tend to favour the development of low R&D-intensive industries. The authors conclude that forming a South-South RTA may delay the transformation of member countries to a high R&D economy by reducing technology spillovers from the North.

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Coe, Helpman, and Hoffmaister's (1997) work also supports this argument. They show that any trade policy, including formation of an RTA, that switches a developing country's imports of machinery and equipment from countries with high stocks of knowledge to countries with lower stocks, retards growth. Conversely, an increase in openness is likely to result in faster TFP growth. They conclude that the countries seeking to accelerate TFP growth should pursue trade policies that increase openness and avoid switching trade from countries with high knowledge stocks to countries with lower stocks. Consequently, a developing country contemplating forming an RTA would be better off choosing a partner with high-and quickly growing stock of knowledge. It should, however, be noted that in many cases the gains made by the developing country in technical knowledge after entering into an RTA may not be suited to the needs of the country. Developing indigenous technology, tailored to its need, rather than just copying technology from the North may serve the Southern country better.

Another dynamic gain that can accrue to the developing country after signing a North-South agreement is the gain from industrialization and agglomeration. It is assumed that the agreement would improve the profitability of domestic industries because of cheaper access to imported intermediate goods and an assured market access to the developed country's markets. If coupled with that, there are large wage differences between the developed and the developing country partners, industries would then move from North to the South.



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Moreover, the industries that move South may find it easier to supply customers from a few locations. This would result in agglomeration of industries. This may manifest itself in two different ways. One way would be that particular sectors become more spatially concentrated. If it does happen, it will create considerable adjustment costs as the industrial structure of different locations will change, but it may also yield aggregate benefits because of the real efficiency gains from spatial concentration. This sectoral agglomeration need not be associated with increases in intra- RTA inequalities as each country or region may attract activity in some sectors.

An alternative possibility is that instead of there being relatively small sectors, each clustering in different locations, manufacturing as a whole may come to cluster in one or few locations, leading to de-industrialization of the less favoured regions. The second possibility has arisen in some South-South agreements leading to rifts between members. It has been noted that in South-South RTAs, the leading industry tends to agglomerate in the relatively richer and the initially more industrialized member.

2.6 Arguments for South-South Integration

The simplest case that could be made for South-South integration is that North-South agreement makes the South countries bear a disproportionately large burden of the tariff liberalisation. It should keep in mind that much of the South's trade in manufactured goods enters rich-country markets duty-free under the Generalized System of Preferences (GSP). Bound MFN tariff rates in the rich countries of the Organisation for Economic Cooperation and Development (OECD) are quite low. This implies that the marginal gain from their elimination is minimal, while the bound rates in the developing countries are often considerably higher. The cutbacks in higher tariff rates lead to substantial losses in tax revenue for the developing countries. For many developing countries, like some of the smaller African countries, these tariffs are the primary source of revenue. Moreover, most of the North-South agreements do not even have a compensation mechanism for reimbursing some portion of the loss in tariff revenue. Thus, if for some reason the gains from FTA formation don't accrue, it could imply sizable and largely unnecessary losses

to the government coffers. In addition, the revenues arising from the import tariffs would have ideally been plowed back to the society through the provision of public goods. Hence, the foregone government revenues entail an indirect reduction in welfare too.

Another argument can be that there is always an element of trade diversion involved in signing a North-South agreement regardless of the size of the Northern partner. This happens because the developed country partner in question cannot be the most efficient producer of all traded commodity lines. This results in an inefficient situation as even more efficient producers of a particular commodity exists among the outside countries. In North-South FTAs, trade diversion is more often generated in sectors where MFN trade barriers are high, such as textiles, clothing and agriculture. Unfortunately, these are the particular sectors that are of widespread export interest for developing countries.

Another argument favouring greater South-South integration could be that most of the developing countries have low per capita incomes. Following Linder's (1961) hypothesis, because of the similarity of per capita incomes, there may be a larger subset of commodities that the southern countries can trade in. Typically, most southern countries have large markets wherein people are willing to sacrifice higher product quality for cutbacks in prices. This gives rise to a huge potential for South-South trade. Since, both countries are poor the commodity basket may be similar, or most importantly, similarly priced. Most of the northern commodities are, on the other hand, high in quality as well cost.

The most important argument that can be put forward in favour of South-South agreement and against North-South, is that the former are built up on the foundations of equality or 'level playing field'. The multilateral trade platform grants the developing countries the concession to trade according to the principles of special and differential treatment. It also recognizes less than full reciprocity vis-à-vis market access issues. This implies that developing countries are not obliged to open up their markets to the same degree as developed countries. However, these 'development principles' are usually absent in a typical North-South FTA or are only reflected by longer implementation

periods for the developing country. These FTAs are, therefore, fully based on the principle of reciprocity. This is pernicious towards the development efforts of the South as it cannot compete at the same level as the North and following Infant industry argument still needs some degree of protection.

Leaving aside the issue of reciprocal access to domestic markets being asked for, most of the North-South FTAs contain many items that are not even subject to rules in the WTO. Many North-South FTAs include rules on investment, government procurement and competition law, which have so far been rejected by developing countries as subjects for WTO negotiations or rules. Developing countries have also been opposed to making labour standards and environment standards subjects of discussion in the WTO.

Even where issues are already the subjects of rules in the WTO (e.g. intellectual property and services), there were many 'flexibilities' and options open to developing countries in interpreting and in implementing obligations in these areas. However, there are attempts by developed countries to remove these 'flexibilities' and options open to developing countries in interpreting and in implementing obligations in these areas. If these attempts succeed, the 'policy space' for developing countries to pursue development and socio-economic goals would be significantly reduced.

Another important reasoning dictating the formation of South-South FTAs is greater combined bargaining power. It is obvious that this point is significantly related to the aforementioned point. Regional cooperation can strengthen the voices of small nations. These countries often face severe disadvantages in dealing with rest of the world because of their low bargaining power and high negotiation costs. Bilateral and multilateral negotiations often require substantial financial resources, time, and expert knowledge, which are limited in small countries. Small countries can substantially reduce their negotiation costs and at the same time increase their market and negotiating power by pooling their resources. By trading support for each other's preferred issues, countries can get more than they could have obtained unilaterally.

In addition to the weighty arguments given above, South-South regionalism also contains developmental aspects. It promotes competitiveness and facilitates a 'safe landing' for economies into the international trade arena. Some of these arguments are discussed below.

Arguments favouring South-South trade can be made under both inward-oriented and outward-oriented development schemes. Under an inward-oriented development scheme, South-South trade is promoted to lessen the South's dependence on the dominant North. It is argued that the South's export structure will be marginalized toward lower-technology, lower-value primary commodities in its trade with the North. As a result, the South will become highly dependent on imports of higher-technology capital and other manufactured goods from the North, with inevitable worsening in terms of trade against the South. In addition, institutional redirection of the South's trade flows and the protection of the domestic "infant industries" are regarded as necessary to build "self reliance" and improve their competitiveness viz. developed countries' exports.

Proponents of South-South trade also stress the need for the South to develop externalities or economies of scale to break into the North's manufactures markets. Thus, as more and more developing countries join together they can reap in the benefits of a larger market to cater to. As the domestic industries become strong enough they can compete with the developed countries' exports on an equal footing.

Frances Stewart (1978) has also presented a "technology terms of trade" argument for an expansion of South-South trade. The dominance of the North as the source of new technologies makes it impossible for the South to catch up in this area. In addition, the production processes and finished products involving new technologies originating in the North are often inappropriate for the South's factor endowments and patterns of consumption. In this context, an expansion of South-South trade could encourage development of technology more suitable for the South.

Structuralist arguments say that an expansion of South-South trade leads to a more “equitable distribution of the fruits of trade.” North-South trade is seen to result in an asymmetric distribution of the gains from trade due to stronger bargaining power and monopolistic price settings on the part of the North, and lead to terms of trade that are unfavourable to the South.

Thus, there are very important gains that can be realized through South-South trade negotiations. Both the partners are at a level playing field and their aspirations are also similar. Thus, the chances of any sort of exploitative conditions put in the agreement are meagre. As has been mentioned in the North-South agreements, an element of exploitation may creep in because of the differences in the relative bargaining strengths. Unequal terms in a North-South agreement may adversely affect the developing countries’ economy. In this regard, Streeten (1962) once stated that, “the rules of equality do not apply to relations between unequals.” In addition to the above, because of the North’s economic might it would be difficult for the developing country partner to renegotiate the terms of the agreement in case of substantial “economic injury”. In most cases the agreement terms is held to be final and binding.

2.7 Fear of Exclusion: Tilting the Balance

The previous sections show that weighty arguments can be made for both North-South and South-South type of agreements. A deciding factor could be a glance towards the number of FTAs being negotiated in either genre. It reveals that the scales are tilted towards the formation of higher number of North-South agreements. It is of crucial importance to mention that, rather than the earlier mentioned mainstream arguments; it is the ‘fear of exclusion’ and uncertainty over the future of unilateral preference that is promoting this herd like behavior of the South towards signing more North-South agreement.

The ‘fear of exclusion’ relates to the advantages accruing from being the first-mover. The first few countries to establish a number of FTAs with economically significant economies (i.e., EU and the US) ensure that the country would not be discriminated ex-

post in the event that the developed partner enters into FTAs with 'competitors'. Being a first-mover could mean that its agreement will usually be used as a 'template' for subsequent FTAs. Precedents set with the more willing first mover may create difficulties for less developed countries or those with different economic and social structures. Such latecomers are faced with the task of challenging established models that may not reflect their needs and interests. When developed countries negotiate FTAs on the basis of 'template' agreements, negotiations tend to centre only on securing minor departures from such models to take into account some specific interest of the developing country partner concerned. The fear of exclusion is most acute at the sectoral level when FTAs provide significant margins of preference to competitors. The industries that stand to be affected consider their very survival threatened and exert heavy political pressure to pursue the FTA route. The impact on such sectors, particularly those subject to high tariffs, is pressing and urgent, while the negative consequences for public health; economic development and national sovereignty in general only become apparent over the longer term.

Another way in which an FTA can contribute to the welfare of its members is if it is seen as providing at least one of them with insurance against possible future events. This may also help to explain why some agreements, particularly those involving a large and a small country have the smaller entering on worse terms. Smaller countries seek to join an FTA as "insurance" against generalized world trade war in which they would be largest losers.

It is also noticed that developing countries generally choose partner that are already important markets for one's exports and appear to be moving towards protectionism. In this way, the FTA is used to secure for the home country continuous access to an important market even if the partner country decides to raise its tariff levels at some future time. This is tantamount to buying guarantees for continued market access. This "safe haven" rationale gained additional force because of the perception that the world economy may be breaking down into three large trading areas centered around Europe, North America and East Asia.

There is, thus, a strong case for joining FTAs for “defensive reasons”. It can be noticed that all the three arguments, that is- fear of exclusion, insurance and safe haven-involve elements of defensive reasoning. To further explain the phenomenon, Rajan and Sen (2005) quote “FTAs are like street gangs; you may not like them, but if they are in your neighbourhood, it is safer to be in one.”

This southern response of joining in the RTA bandwagon in a big way has been termed by many as “domino regionalism”. The idea is that one act of regional integration can stimulate the next because the larger a bloc is, the greater the cost to excluded countries on not belonging to it. These costs relate to the adverse implications on trade and the resulting investment diversion and reduction in their terms of trade. Baldwin (1995) first coined this phrase to describe the process by which, after three decades of resistance, three Scandinavian countries decided in the late 1980s to seek EU membership. Although these countries were still uncomfortable with the EU politically, the economic pressures from the Single Market Programme were overwhelming, and as one Scandinavian country joined, the pressures on the next increased.

2.8 North-South agreements: Refutation of Arguments

Up to this point, the chapter has stressed the point that for a developing country the impact of entering into North-South or South-South agreements differ. There has been a discussion of the most popular arguments advocating the setting up of more South-South agreements and also those that favour more of North-South agreements. It has also been mentioned that most developing countries are entering into North-South agreements due to the “fear of exclusion” as also for the supporting mainstream arguments.

This last section is devoted to presenting the true picture of many of North-South arguments. It proves that many of the arguments that the Southern countries are naively following may simply not hold true. The counter arguments given in this section are divided according to their static and dynamic natures. They are as follows:

2.8.1 Static Arguments

1) There is a loss of tariff revenues for the developing country partner- This point has not been disputed anywhere in the traditional literature. The losses occur because the developing country partner generally has higher tariff levels as compared to the Northern partner. Thus, when trade is freed or if the tariffs are reduced, there is an automatic reduction in the government's tax revenues. The problem is exacerbated when the negotiations are done according to a negative list approach. This opens up most of the traded product lines all at once for trade with the Northern partner and at the tariff levels decided upon. As a result, the developing country partner gets lesser time to acclimatize to the changing scenario in respect to the changes brought upon by opening up of trade.

2) South-South agreements lead to net trade diversion- As has already been shown earlier, most of the traditional literature concludes that South-South agreements lead to substantial trade diversion. Actual empirical studies, however, suggest otherwise. There have been significant cases of South-South agreements that have been net trade creating. In addition, there have been studies that show that the much favoured North-South agreements have not been net trade creating.

Both Soloaga and Winters (2001) and Krueger (1999) find that the changes in the intra-bloc trade for NAFTA have not been significant. Krueger finds that those commodity categories in which Mexican exports to the US grew rapidly were also the categories in which exports grew more rapidly with the rest of the world.

Studies by Frankel (1997) and Yeats (1998) find that for Mercosur, the trade between the RTA and non-member countries increased during the respective study periods. Yeats also found that the fastest growing products in intra-bloc trade are capital-intensive goods in which the MERCOSUR countries did not previously display strong export performance. Frankel's estimates for ASEAN reveal a significant

apparent intra-regional bias, suggesting that the RTA boosted trade among its members by an estimated fivefold.

Elbadawi (1997) in his study of the SADC notes, “economic integration [in Africa] could generate the threshold scales necessary to trigger the much-needed strategic complementarities...within the region”. Some other studies have also found positive net effects of regional integration initiatives in Southern Africa.

2.8.2 Dynamic Arguments

1) North-South agreements lead to market access gains- Theory reveals that one of the main driving forces behind the North-South agreements have been the hopes of the Southern partner for achieving increased market access. Some studies reveal this to have occurred in reality for cases like Mexico in NAFTA. However, this does not hold true in most cases. Most developing countries have their comparative advantage in primary products (agriculture, mining, etc.) and in textiles and clothing. Since these items have been either excluded from the negotiations or are struggling against the developed countries’ tariff peaks and escalation, the hopes for heightened market access are bleak. There is also the question of domestic agricultural subsidies given by the developed countries like the EU, US and Japan that have rendered the developing countries’ exports uncompetitive. Further, reduction in tariffs of a product line is no guarantee that non-tariff barriers would not be levied against it. In addition to tariffs, developing countries’ exports also have to surmount the barriers of sanitary and phyto-sanitary regulations, and the threats of anti-dumping and countervailing duties actions. Thus, major gains in market access are a possibility but no ways a certainty.

In fact, if even a developed country like Australia could not have its way in the Australia-US FTA negotiations (it wanted greater market access for its sugar), it is highly improbable that a small and economically weak country would be able to get its word in. In an important paper Freund (2004) claims that, “*preferential trade agreements involve some degree of reciprocity because both sides are expected to*

make full trade concessions. But unlike traditional multilateral negotiations, this does not necessarily yield equivalent concessions since an agreement can involve members of various sizes with vastly different trade barriers, yielding gains in market access that are far from symmetric. In addition, some sensitive sectors are typically excluded, and many other types of trade barriers, such as anti-dumping claims or technical standard can remain in place, or even increase to offset tariff concessions.

Our results show little evidence of reciprocity in North-South agreements. In particular, among North-South partners, preferences in one country are not correlated with preferences in the other country. There is, however, a modified form of reciprocity; North countries extract significantly more market access in South countries than South countries extract from the North. Specifically, a ten percent reduction in the developing country tariff yields only about a two percent reduction in the rich-country tariff; in contrast, a 10 percent reduction in the large country tariff leads to a 33 percent reduction in the poor country tariffs.” Thus, the promise of a commensurate increase in the developed country market access is far from real.

2) North-South FTAs increase the developed country’s credibility and also its FDI- Many developing countries believe that having an FTA with developed countries will result in increased investment flow, but the empirical basis for this view is unconvincing. The World Bank points out, “countries that had concluded a Bilateral Investment Treaty (BIT) were no more likely to receive additional FDI than were countries without such a pact.” UNCTAD’s World Development Report 2003 also states that its aggregate statistically analysis did not reveal a significant independent impact of BITs in determining FDI flows. However, the “fear of exclusion” works well in this area, as those outside the FTAs are concerned that FDI will be concentrated in those countries that sign FTAs with developed countries and thus, rush headlong into entering into one themselves.

According to Griffin (1969) foreign capital is attracted in large volume to growing markets and not just to large ones. This implies that if the economy is growing then

capital will in all probability flow in, but relying on an RTA, by itself, for kick-starting the growth process is naïve. Even if capital flows in after the formation of the RTA, there is no a priori guarantee that this capital will flow to the regions or industries where it is most needed. Griffin thus, states that the RTA member countries cannot rely on foreign capital either to initiate growth or to satisfy high priority needs.

Making matters even worse is the fact that investment incentives given by developing countries to attract FTA may be substantial and way beyond their means. Competition for FDI by developing country members may become intensive and result in subsidy wars among members. This would provide disproportional benefits to foreign investors and eliminate or reduce the potential gains for developing countries.

3) Technology diffusion and productivity gains are higher in North-South FTAs-

As a related point, developing countries also believe that they would gain substantially by way of technology diffusion and productivity when they enter into North-South FTA and the expected FDI would flow in. Evidence, however, reveals that even the much-awaited technological diffusion does not materialize. In a paper, Schiff and Wang (2004a) show that trade-related technology diffusion and productivity gains tend to be regional. They examine the natural trading partner hypothesis for three developing countries- Korea, Mexico and Poland. This implies that having a North-South agreement across continents wouldn't work. In another paper Schiff, Wang and Olarreaga (2002) investigate into the impact of R&D spillovers. They find that North-South and South-South R&D spillovers have a positive impact on TFP, though the former is larger. They find that North-South R&D spillovers raise TFP mainly in the high R&D intensive industries and South-South R&D spillovers raise TFP mainly in the low R&D intensity industries. Thus, high R&D intensive industries learn mainly from trading with the North and low R&D intensity industries learn mainly from trading within the South.

As is obvious from the argument, there might arise technology compatibility issues for the developing country. The technology that the South gets may not be in accordance to its specific needs and endowments. And to modify the technology to suit its needs, some initial level of technical know-how would have to be presupposed. This assumption may or may not hold true.

This argument also suffers from circular reasoning if the traditional theories are held to be true. A South country would want to get high R&D intensive industries so that it may consume the high-tech products as well as export it. Even if the South country starts the production of the high-tech good, the North would continue to have comparative advantage in its production (at least initially). The only way forward for the South country then would be to dole out subsidies (infant industry argument) or to enter into free trade agreements (provision of captive markets) in order to encourage the production of the high-tech goods. Then, since this South country is relatively less efficient than the North, it would lead to trade diversion. This leads back to the initial question that should a country participate in an agreement if it leads to trade diversion. In this scenario, a South-South agreement would be better since it would enable the developing country to climb the technological ladder one step at a time.

4) North-South FTAs involve many ‘beyond the border’ clauses- These clauses seriously undermine the sovereignty of the developing country’s government. This is a very serious criticism. For example, despite being heralded as the first North-South agreement that would bring manifold benefits to its partner, NAFTA had also been one of the first agreements that included ‘WTO-Plus clauses’ that were contestable in nature. Mexico had shown vocal dissatisfaction regarding the TRIPS clauses it had to sign in the NAFTA agreement. There had been rifts regarding the environmental and labour clauses as well. In the US-Chile agreement, in addition to the aforementioned TRIPS provision, Chile’s capital controls have also been disallowed. This may be considered to be a serious blow to any developing country since recent evidence (e.g. Malaysia) proves that capital controls are an effective tool to check the shocks

occurring due to hot money floating around. In the initial stages of the US-Chile agreement there had been a talk of having restrictions on the frequent usage of anti-dumping and countervailing duties by the US government against Chilean exports. This, however, came to naught as the US continued to use this tool as an effective and powerful protectionist tool.

2.9 North-South Agreements: A Sectoral Overview

As has been pointed out throughout this chapter, North-South agreements contain many beyond the border clauses that overstep the purview of the WTO Clauses. This section attempts to highlight some the difference between multilateral agreements and regional agreements using trade as well as trade-plus clauses included in the agreement texts.

2.9.1 Market Access

Both multilateral as well as bilateral agreements encourage cutbacks in tariff levels. The most significant difference between the two is that most bilateral agreements are negotiated on reciprocal terms. Multilateral agreements, on the other hand, give certain leeway to the least-developed nations as part of the Special and Differential Treatment (S&DT) arrangement. This should imply that ideally in a North-South agreement both countries enter on equal terms despite differing economic size. However, even this does not occur. There are usually conditions of unequal bargaining power in typical developing-developed country bilateral negotiations, with the developing countries in a weaker position. Thus, even the reciprocity clauses may be diluted with the agreement favouring the North disproportionately, as the developing country is unable to bargain effectively for terms suitable to it.

A developing country while entering an FTA believes that it will gain greater access into the markets of the developed country partner. In return for this, it opens its, hitherto protected markets for the developed countries' exports. Thus, for the developing country to gain in this sort of an agreement, the precondition is that the developing country should have adequate production and export capacities to exploit the new opportunities open to it. However, the products that the developing countries are most competitive in are the

ones that are most heavily protected (textiles) or artificially subsidized (agriculture) in the developed countries. Since even multilateral negotiations have not been able to make a sizable difference in reducing the developed countries' mindset towards agricultural subsidies and textiles, it would be difficult to expect that bilateral negotiations would be able to achieve it. Signing an FTA would have definitely helped if tariff peaks and escalations were the root cause for not exporting developed countries' markets earlier. This would assume that the developing countries already have the strength and the ability with respect to technological know-how to significantly increase the value addition of their exports.

Another difference between bilateral and multilateral agreements is that many bilaterals are comprehensive in nature. This is true for most North-South agreements. Thus, at one stroke these agreements free all or almost all the product lines from tariffs. This is in direct contrast to the multilateral platform that only specifies the allowable maximum level of tariffs a country can set. Thus, countries are free to set their own tariff levels in accordance with their desires and also on the commodities that they choose.

2.9.2 Agriculture

In an ideal situation FTAs should provide meaningful access for key agricultural exports from developing countries, shield poor producers from disruptive surges in imports and reflect food security concerns unambiguously. However, developing countries do not get as much market access as hoped because the developed countries' agricultural sector products have been made artificially competitive with the government's subsidies. Agricultural trade negotiations with the developed countries have been in a deadlock with respect to the issue of the massive subsidies, applied by developed countries to their production and export, for quite some time now. This issue does not lend itself to bilateral solutions. Many developed countries, like the US, do not commit in any way against anti-dumping actions also.

Many North-South agreements are comprehensive in their approach. They cover almost all agricultural product lines. The only exemptions given are for sensitive (from the point

of view of the developed countries) products like sugar. Developing countries need to identify products deemed most crucial for food security and ensure that they are included on a list of exceptions.

Another important issue in regard to agriculture negotiations is the issue of sanitary and phyto-sanitary requirements. Overtime a trend is evident toward more stringent regulations, particularly with respect to food safety. This is truer for FTAs involving the EU. Such FTA clauses often present insurmountable trade restrictions on exports by poor producers. Additionally, North-South bilateral platforms generally provide no relief against anti-dumping and countervailing duties actions also.

As mentioned earlier, the multilateral platform has been in a deadlock over the question of agricultural subsidies for some time. Even bilaterally no solutions seems to be in sight. As most agreements are comprehensive in nature even agricultural commodities are freed alongside all other traded commodities. This implies that when freed, the developing countries' commodities come into direct competition with the artificially cheapened developed countries products. This directly hurts the sensitive sectors without offering any sort of protection. Developing countries need to identify products deemed most crucial for food security and ensure that they are included in a list of exceptions.

2.9.3 Services

Multilateral commitments in the services sector are still quite limited in their sectoral and modal coverage. Bilateral agreements, on the other hand, encompass wide-ranging commitments towards services trade liberalisation. This is true for both South-South as well as North-South agreements.

Within North-South agreements it has been recognized that developing countries are structurally disadvantaged in their attempts to get a balanced outcome in services trade. This is because they have a much weaker capacity to supply services for export than developed countries. Developing countries trying to export services to developed countries generally have to face barriers to market access such as lack of commitments on

movement of natural persons due to strict and discretionary visa and licensing requirements, and lack of recognition of qualifications; prohibition of foreign access to service markets reserved for domestic suppliers; technical standards and licensing with restrictive effect; discriminatory access to information channels and distribution networks; etc.

An additional concern is that some North-South FTAs that cover services base the commitments on a 'negative list' basis, i.e., all services sectors are assumed to be fully liberalised except those listed in an annex. This tends to bind the developing-country partner to commit faster and in more sectors, as compared to the 'positive list' approach used in the WTO (in which no sector or type of liberalisation is committed unless specified). The FTA negative list approach also makes it difficult for the developing country to choose by itself the sectors to liberalise and the pace of liberalisation, as is allowed in the WTO.

Many North-South agreements also commit the developing country to give market access to the specific services the developed country has advantage in. These include telecom, e-commerce, financial services, audiovisuals and legal and professional services.

2.9.4 Investment

In recent times most bilateral FTAs between developing and developed countries include investment provisions that incorporate the elements and 'standards' set by the developed countries. In fact some provisions are included that undermine WTO rights relating to the use of performance requirements and favour foreign over domestic investors. This may entail major costs to the developing country in an FTA in terms of loss of policy space and the use of policy instruments such as regulation of entry of foreign investment, performance requirements, regulation of the flow of funds, etc. The threat of expropriation cases by investors can also have an adverse effect on the national policies. In many cases the foreign investor can take the national government to court if it proves that the government's policies have been detrimental to the valuation of his investment.

To illustrate the point, a standard FTA with the US includes six core principles: (a) prohibition on a variety of performance requirements permitted by TRIMS and GATS; (b) the right of establishment, unless excluded in a negative list; (c) the right to expropriation compensation; (d) selection of top management; (e) assured access to investor-state arbitration; (f) the right to free transfer of all transfer related to the investment, e.g., interest, dividends, proceeds for exports, needed imports and so forth (Khor (2003)).

Since these investment clauses are hugely detrimental to their welfare, the developing countries have since then moved to oppose bilateral obligations on investment in Bilateral Investment Treaties and FTAs. Nevertheless, still many of the North-South agreements unflinchingly comprise of such clauses.

2.9.5 Intellectual Property Rights

Conventional Intellectual Property Rights (IPR) categories include patents, copyrights, trademarks, industrial designs, layout designs of integrated circuits, and geographical indications. The basic principle behind IP protection is to award exclusive rights for exploitation of information to innovators so as to give them the incentive for further research.

Most North-South agreements include clauses that are way beyond the already exacting obligations in the WTO's intellectual property rules. These costs are losses to the nation since most patents, copyright and other forms of intellectual property are owned by foreigners. The costs can be in terms of increased royalty and license payments to the intellectual property owner (with resulting loss in foreign exchange) or higher prices of the protected products (with the consequent social costs of decreased access to medicines, decreased access to knowledge, decrease in farmers' rights to seeds and other resources, and decrease in food security possibilities).

There is also policy flexibility that is under threat in bilateral FTAs. When grounds for issuing compulsory licenses are restricted to national emergencies or are made

conditional on other factors, such as adherence to anti-competitive laws, they unduly restrict the TRIPS and Public Health Declaration, which gave countries the “freedom to determine the grounds upon which such licenses are granted.” These provisions in FTAs limit the access of the poor to essential medicines. This is particularly grave when such provisions curb the use of compulsory licensing and prevent parallel imports of patented products.

Other TRIPS-plus provisions incorporated in North South FTAs include patent term extensions beyond the 20-year limit in TRIPS Agreements and prevention of the use of clinical trial data by generic producers. In fact, some provisions require that the patent terms should be extended to account for the delay in approvals also.

2.9.6 Rules of Origin

Rules of Origin (ROO) ensure that imports from third parties do not benefit from negotiated preferential treatment. The problem of rules of origin is not specific to bilateral agreements as they can pose a problem in multilateral agreements as well. However, the specific dimension that this requirement takes is different between the two.

It is known that ROO can lead to the problem of additional trade diversion and welfare loss. This happens because unless the home country does not comply with the ROO requirements with respect to imported inputs it would not receive trade preferences on its exports. It is also true that ROO are typically quite complex and enforcing them can be very costly for the authorities. Overlapping FTAs are likely to complicate things further and significantly raise the cost of the administration of ROO

A new problem that emerges in bilateral agreements is that- ROO are often being used as protectionist devices. For instance, in order to protect its textile industry from Mexican imports, the US insisted in the NAFTA negotiations on the “triple transformation test,” whereby the yarn, the cloth and the garments all had to be fully produced within NAFTA in order for Mexican exports to be conferred NAFTA origin and enter the US duty-free.

2.9.7 Other issues

There can also be considerable loss of policy space and options with regard to the other non-trade issues that could be covered by an FTA, such as competition policy, labour and environmental standards, as well as in terms of effects on the competitive position of local enterprises. There is an immense loss of policy space resulting from a North-South FTA's stringent government procurement provisions. This is because procurement policy is a major social and economic instrument for boosting the domestic economy and to redress social imbalances.

The requirement in an FTA to treat foreign goods, services and firms no less favourably than their local counterparts can result in loss of market share of local firms. There can be loss of effect of fiscal policy, e.g. an increase in government spending to boost economic growth will have reduced effect if there is higher 'leakage' through increased imports of goods and services procured by government.

Summary

There have been scores of models down the ages attempting to explain the costs and benefits of FTAs. With higher sophistication in research methodology, the models have become more and more complex. The need for more complex models has arisen because the nature of regionalism has been changing overtime. In the current regionalism picture, trade-plus factors rather than trade, appear to more important. It is these factors that are explaining the formation of many FTAs.

From the South's standpoint, a choice emerges between having a South-South or a North-South agreement. The pros and cons of both types of agreements have been discussed. However, it has been noticed that it the 'fear of exclusion', rather than any of the above theoretical arguments, that is driving the formation of a multitude of North-South FTA. It should be remembered that many of the promises that the North-South agreements make may not come true. In return, while signing the agreement, the developing country agrees to adhere to many unequal provisions relating to trade as well as 'beyond the border' clauses. Many of the typical extractive clauses have been mentioned.

**Chapter 3: The US-Chile and India-
Thailand Bilateral Trade Agreements**

Chapter 3: The US-Chile and India-Thailand Bilateral Trade Agreements

The previous chapter has discussed the different theories that attempt to explain the welfare effects of preferential agreements. It has also examined the major arguments given for both North-South and South-South agreements. This chapter attempts to highlight the stark differences in the clauses of these two types of agreements' texts by taking actual examples of bilateral agreements. The India-Thailand bilateral has been used to illustrate the workings of a 'South-South' arrangement while the US-Chile treaty is taken to be an example of a 'North-South' agreement.

Technically, the India-Thailand is not much older than the US-Chile FTA bilateral agreement. While the India-Thailand agreement was signed in October 2003, the US-Chile agreement was signed only a few months later i.e., in January 2004. In addition, a protocol to amend the Framework Agreement between India and Thailand was signed a year later, in August 2004.

The two agreements are poles apart in letter and also in spirit. While US-Chile trade agreement is a highly detailed document spanning 24 lengthy chapters, the Indo-Thai agreement document is much more looser and general in its articles. For example the investment chapter in the US-Chile agreement has 38 pages while the Indian agreement deals with the question of investment in just 5 lines.

The scope of the two documents differs as well. While the US FTA covers all goods, the Indo-Thai treaty covers only 82 product lines. It should be noted that sensitive agro commodities have not been included in the Indo-Thai treaty. Articles like vegetable oils and natural rubber have been kept off the negotiating table. In the Chile-US treaty the condition is just the opposite. Primary commodities form around 85% of Chile's export basket. With the opening up of trade Chile has had to withdraw any kind of support it was giving earlier. Chile had to remove its "Price Band System" which was the mainstay for providing protection to the Chilean agricultural system from external shocks.

The following sections deal with the provisions under the US-Chile and the India-Thailand agreement. As mentioned earlier, the US-Chile treaty is comparatively much more technically detailed than the other agreement. In the India-Thailand agreement the articles emphasize only upon trade in goods, trade in services and investment, and the amendment discusses at length the applicable rules of origin. The US-Chile FTA document on the other hand deals with almost all topics in the trade arena. The detailing is so elaborate that the agreement deals with trade in services and trade in financial services in two separate chapters. In addition, it discusses sanitary and phyto-sanitary measures, safeguards, e-commerce, labour, transparency etc.

3.1 A Comparison of the Four Countries

Table 3.1: Snapshot view of the four countries in 2004

	India	Thailand	Chile	US
GDP (bn. US\$)	696	162	95	11679
GDP growth rate (%)	8.33	6.17	6.16	4.23
Population (in mn.)	1080	63.7	16.1	294
PC GNI	630	2490	4930	41060
Merchandise Trade (% of GDP)	24.8	117.9	60.1	20.1
FDI (bn. US \$)	5.47	1.72	7.17	133
High Technology Exports (% of manufactured Exports)	4.9	28.1	4.8	32.3

Source: World Bank World Development Indicators (WDI), 2007

A simple glance at the above table suffices to show the differences between the two agreements' members. The values for the indicators have been taken for the year 2004 so as to illustrate to some degree the differences in economic characteristics of the members at the time the agreements came into being.

India was comparatively a much larger economy than Thailand and was also growing at a faster rate. The difference in populations is quite stark. This explains the attractiveness India held for Thailand as a potential market for its exports. Compared to India, though,

Thailand is much more trade oriented. This is expected since larger economies have much lesser trade dependence, as domestic markets suffice domestic consumption and production needs (absorption effects). Taking the share of high technology exports to be an indicator of greater technology embodied in exports, Thailand scores higher. A point could be made that because of the large difference in per capita incomes there might not be a large market for Thai commodities in India and vice-versa. Even so, India's gigantic population ensures that there will always be a sizable market having that sort of a market power i.e. per capita income.

The US-Chile agreement, on the other hand, is clearly a North-South agreement. The difference between the two countries with respect to most of the indicators is clearly visible. The GDP of US is approximately 123 times larger than that of Chile and the per capita income around 8 times higher. The share of high technology exports is also greater in the US. Chile is, nonetheless, growing much faster and is also more trade oriented. Thus, an FTA with a large partner like the US potentially meant a lot for the Chilean economy.

3.2 Results from the Feasibility Studies of the Two Agreements

At the time of the signing of the agreement, Thailand accounted for just over one percent of total Indian exports. India's share as a Thai export destination was also equally small. Additionally, despite the fact that Thailand ranked third among ASEAN countries in terms of FDI source country, it accounted for a mere 0.01% percent of India's total investment. It was hence believed that potentials for greater trade linkages between the two countries existed.

In order to evaluate the effects of an FTA between India and Thailand, a feasibility study was prepared in 2002. The study used GTAP, a static multi-commodity and multi-region CGE model, to evaluate the effects of the FTA. The study's simulations results showed encouraging positive trends if the FTA was undertaken.

The results showed that the India-Thailand FTA could result in significant trade creation. It was expected that there would be a 113.87 percent surge in Thailand's exports to India while Thailand's imports from India will rise by 42.78 percent. The results indicated that tariff elimination between Thailand and India would boost Indian total exports by 1.02 percent. The increase in the total exports of Thailand would be to the tune of 0.52 percent. The India-Thailand FTA would also cause some trade diversion. The exports of Thailand to ASEAN members would decline in the range of 0.29 - 0.43 percent. The exports to China and Japan were expected to drop by 0.53 percent and 0.41 percent respectively. India would increase its import value from Thailand by 113.8 percent; the value of imports from Japan would decline by 0.94 percent, Indonesia by 1.99 percent and China by 2.11 percent.

An important point noted in the study was the whole question of trade complementarity and production similarity between the two countries. The production similarity indices showed the value of 0.84. The index of production similarity was calculated by applying the cosine measure to the production data of the two countries. The report concluded that despite the fact that production structures of the two economies were similar, the potentials for trade expansion were still high. This was because higher production similarity also meant greater potential for intra-industry trade. The report identified many product lines that had high intra-industry trade index values.

The United States International Trade Commission also conducted an investigation upon the potential economy-wide effects of a US-Chile FTA in 2003. At the time the report was prepared, Chile's economy was about 1.5 percent of the size of the United States in GDP terms. Despite the fact that Chile was quite small relative to the US economy, it still outperformed most other Latin American countries. Chile's average annual GDP growth rate of 3.0 percent during 2000-02 was significantly higher than the overall Latin American average of 1.2 percent during the same period. Chile thus, was a major contender for a viable FTA partner from the region.

Conversely, the United States was the single largest market for Chilean exports. Chilean exports of merchandise to the United States were valued at nearly \$3.7 billion in 2002, or one-fifth of Chile's 2002 export earnings (the equivalent of 5.5 percent of Chile's GDP). Japan, the second leading destination of Chilean exports, accounted for 10.6 percent of Chilean shipments, or just over one-half the shipments sent to the United States. The United States was also the single largest investor in Chile, accounting for nearly one-third of actual foreign direct investment (FDI) in Chile. The importance of the US from the Chilean point of view can be gleaned from this very fact. Chile, on the other hand, ranked merely as the 37th largest market for US exports and as the 36th largest US supplier of imports during 2002. The importance of Chile as a trade partner from the US's standpoint was negligible.

The results of the general equilibrium analysis conducted in the investigation suggested that US-Chile bilateral trade would increase as a result of the tariff removals under the FTA. The results indicated that following the total removal of tariffs in the US-Chile FTA total US exports to Chile would increase by 18.0 percent to 51.7 percent, while total US imports from Chile could increase by 5.7 percent to 13.7 percent. Since the US-Chile trade was small relative to total US trade, and that trade barriers in both countries were relatively low, the impact of the tariff removals under the FTA on total US trade would be small. In fact, total US exports and imports were estimated to increase by a mere 0.03 percent to 0.09 percent.

3.3 The US-Chile FTA

In many respects this agreement can be called an almost a 'copybook' North-South agreement. Thus, the motives behind this particular agreement are no different from any typical North-South agreement. From the north's standpoint 'trade plus' motivations dominate, while the southern country enters into the agreement with hopes of greater market access.

The US's interest in Chile was derived from its desire to maximize the precedential effects in its region, Latin America. It should be noted that the US signed broadly similar

agreements with Singapore and Chile at the same time. The two countries were promising candidates as both were largely successful and open economies. By seeking to enter into FTAs with these two economies, the US succeeded in giving a quiet nudge to other economies of the two regions to also seek similar agreements with the US so as to avoid discrimination while exporting their products to the US. Thus, it was largely a strategy to capitalize on the southern countries' 'fear of exclusion'.

The desire to enter into numerous agreements was, however, not the motive. It was the means for getting more southern countries to enter into the same terms or even more stringent terms. Thus, the US-Chile agreement was concluded so as to serve as a "template" for subsequent agreements in the region. Looking at the agreement text, it can be noticed that the agreements contain even more restrictive terms than what was there in the NAFTA document. Most of the controversial elements of the NAFTA, like the labour and environment clauses, have been included in the text. The agreement, moreover, adds many fresh stringent clauses in other disciplines as well like e-commerce, capital controls, etc. It can, thus, be concluded that, each bilateral agreement that contains provisions on certain severe themes reinforces their inclusion in subsequent agreements.

Another reason generally given for the agreement was that the US did not want to lose its share in the Chilean market to the European Union and Canada, as these two had already signed FTAs with Chile. Hence, it was due to defensive reasons also that US wanted to enter into an FTA with Chile.

From the Chilean standpoint, the motivations are comparatively quite simple. There were many reasons why Chile wanted to enter into an agreement with the US. The first reason was greater market access. Chile felt that it could not gain proper access to the US markets because of tariff peaks and escalations. Signing the agreement also meant that the Chilean exports would not have to rely on periodic congressional reauthorization of the GSP for reduced tariff treatment. Approximately 14 percent of US imports from Chile, valued at \$513 million, entered duty free under GSP during 2002. In addition to all this, Chile expected that with the agreement the perceived legal security for foreign

investment would increase and thus, FDI would flow in. This agreement was also expected to improve Chile's country risk rating.

Furthermore, Chile had been hurt in the past by the US' frequent usage of antidumping measures. The USITC investigation report notes that there were three outstanding US antidumping duty orders with respect to Chile in effect as of April 7, 2003. They were for individually quick-frozen red raspberries (effective date of original action July 9, 2002), preserved mushrooms (December 2, 1998), and fresh Atlantic salmon (July 30, 1998). By signing the agreement Chile expected that it could gain reciprocal exemption from the application of antidumping laws. Recapitulating the last chapter, it should be noted that most of the Chilean hopes from the agreement are the same as what has been promised by the North-South arguments. In fact, the then ruling government held the signing of this agreement to be one of the greatest achievements in its tenure.

3.3 North-South agreement: The Fine Print

As has been stated in the last section, for Chile, the agreement promised plenty. It provided access to the affluent US markets, restricted the frequent usage of anti-dumping duties and, most importantly, improved the country's image and set it aside from its 'bad neighborhood'. It was expected that signing of the agreement would signify increased legal security of foreign investment and improvement in the Chilean risk rating and thus, FDI would flow in. These hopes were, unfortunately, belied in the course of time.

The following section highlights many of the provisions of the US-Chile agreement and its probable effect on the Chilean economy. The extractive nature of many of the clauses is quite clearly apparent.

3.3.1 Agriculture and Market Access

According to the USITC (2003) summary of the agreement, "*duties on more than 85% of two-way trade will be eliminated on entry into force of the agreement, and for other products duty elimination will take 4,8,10 or 12 years. For the most sensitive agricultural*

imports, the phase out of US duties will take 12 years; and for many agricultural products, tariff-rate quotas on imports from Chile will increase annually over 12 years.”

Thus, with the FTA, Chile had to give up the 6% flat tariff rates it used to impose as also the Price Band System that provided some degree of protection to the domestic agriculture. The commensurate benefits were not spectacular. Most of the goods composing the Chilean export basket were already entering the US market at near 0% tariffs and therefore the benefits due to elimination of tariffs were at best moderate. Additionally, even the rationale that the agreement would help circumvent the tariff escalation problem for higher value added commodities, did not hold true. In fact, in most cases the applicable tariff rates are the same.

Initially it was expected that the free trade agreement with the USA would be a major instrument in the development of an export commodity composition that contained higher value added products. The argument was that the reduction of escalating tariffs for products having greater value added would make Chile increase the export of these products. This was expected to be true for products and services linked to natural resources. This did not happen. This idea presupposed that tariffs were a serious hindrance to the export of value added goods; and that Chile had the actual capacity to produce these products and compete in the North American market. Both of these claims proved to be questionable. Access to markets did not necessarily occur when tariffs were lowered. It also required the actual capacity to enter the new market (Pizarro 2006).

Thus, despite having signed agreements with practically all the major markets including the USA and the European Union, even today 87% of Chilean exports are low value-added natural resources. It would seem that the Chilean process of integration has only strengthened the development strategy centered on the export of unprocessed natural resources.

From the US's standpoint liberalisation of agricultural trade remains difficult, as it does for other developed countries that subsidize their farmers either domestically, to promote

exports, or both. The United States had a modestly easy time when dealing with Chile since many of Chile's products are not seasonally competitive with US products. Nevertheless, the United States dragged the agricultural import transition for product after product to the maximum of 12 years allowed under the agreement. Thus, as far as the demands for reciprocity from both parties is concerned, agriculture seems to have been kept aside as an exception.

The market access issue could be made clearer using a simple cost benefit analysis. The analysis of formal models suggests that lowering of tariffs generated only limited benefits as far as market access gains are concerned. Results of the USITC study have already been mentioned. Another study by the University of Michigan identified benefits of only US\$500 million for Chile, and in the case of the United States, of around US\$4,000 million; amounts hardly significant for either country. There were, on the other hand, high revenue costs. Tariff reduction adversely impacted Chilean fiscal income, forcing the Government to increase value added tax from 18% to 19%. The overall estimated loss of revenue from the reduction of tariffs on US products was estimated at US\$240 million. Thus, the market access benefits for Chile, was at best, meagre.

3.3.2 FDI

Another important benefit associated with the FTA was the potential increase in investments to Chile, due to the increased legal security for foreign investment and the improvement in the Chilean risk rating.

It was argued that the FTA with the United States would take Chile out of the 'bad neighborhood', i.e. Latin America and thereby help the country to attract foreign investment not only from the US, but also from all other countries. The truth is that there is no evidence to show that the free trade agreement improved Chile's country risk rating. But even if it were to do so, Chile already had a very low country risk rating to begin with. Even when compared to other countries in the region, Chile's rating was found to be much lower. So, even though an improvement in rating due to the FTA might have had some impact, most probably it would have been marginal. Moreover, since the US is

already the largest source of investment for Chile, it would have been more beneficial if Chile had encouraged investment from other countries. This would have helped in diversifying the sources of FDI to counter any future eventuality.

As regards the US' standpoint on Investment, it had faced a lot of hue and cry in the past due to NAFTA's Chapter XI. The issues of the settlement of disputes between investors and states, indirect expropriation ("tantamount to expropriation"), and procedural amendments to allow more participation of civil society in the dispute settlement process, were especially controversial. As a result, the US-Chile FTA sets newer guideline for handling of these issues. On the controversial topic on indirect expropriation, for example, the agreement has developed a careful understanding as to how to interpret the question in the light of overriding public policy objectives. This, therefore, is an example of subsequent agreements drawing up more stringent requirements for the southern state.

The investment chapter also deals extensively with investor-State disputes and calls for consultation, negotiation and ultimately arbitration if necessary. The procedures for arbitral proceedings are set forth in considerable detail. The handlings of investor-State disputes in NAFTA have been controversial. It has been felt by many economists that the possibility of directly suing the State has permitting the broadening of investor rights far and beyond what was advisable, and is directly affecting the capacity of governments to regulate for the common good. The private sector could use these treaties to open up markets and restrict legitimate regulations on the part of the State. It, thus, seems that the treaty has placed private interests and rights above public interests and rights. Nevertheless, the issue is included in the Chile-US agreement.

3.3.3 Intellectual Property

Chile accepted strong intellectual property protection rights far and beyond TRIPS, which has already generated direct costs of implementation and indirect costs because of higher prices. The US-Chile agreement extends IP protection into new areas not included in North-South agreements currently in effect, enforced by a strong dispute settlement mechanism. The text mandates that the two countries will adhere to certain international

IP conventions in specified time frames and that they will make efforts to conform to others. The text develops further the obligations existing in TRIPS and NAFTA regarding transparency and cooperation; it also provides protection in cutting-edge areas such as domain names on the web and limitations on liability for Internet service providers. The US-Chile agreement expands many of the obligations existing in NAFTA or TRIPS relating to patents, trademarks, well-known marks, copyrights and related rights, satellite signals, and border measures. Many of these provisions can be found in US law and in World Intellectual Property Organization treaties and recommendations but not under trade agreements subject to strong dispute settlement provisions.

The Chilean pharmaceutical industry is particularly affected from these obligations because it needs to increase the prices of its medicines. According to estimates by the pharmaceutical industry, the TRIPS clauses would lead the prices of medicines in Chile to increase by more than 75%. Another sector especially affected will be the small-and medium-sized industry that will have to pay for patents and royalties for software, increasing their production costs considerably.

3.3.4 Capital Controls

Another issue inserted at US insistence in the agreement was a provision prohibiting the use of capital controls. This was the first time such an obligation has been included in a US trade agreement. Chile used its controls, called 'encaje', to make it more costly for 'hot money' to enter Chile and be withdrawn before a year has passed. It was, therefore, an important domestic mechanism to deter short-term capital volatility and this had been one of the reasons why Chile had been hurt less by the Asian crisis. With the prohibition of the control, Chilean economy faces higher risks from external sources. It also affects autonomous economic policy making in Chile.

3.3.5 Antidumping and Countervailing Duties

It has been mentioned, that for Chile, this agreement meant a binding document that provided an assurance against resort to protection at the urging of a US competitor. In the final agreement, however, there is no concession on the part of the USA regarding

antidumping and countervailing duty measures; it was implicitly taken out of the negotiation. Not even a panel was established to discuss differences in application, which was the Chilean proposal. All that the agreement has to say on this score is, “ Each party retains its rights and obligations under the WTO Agreement with regard to the application of antidumping and countervailing duties.”

3.3.6 Services

The central focus of the agreement is on the services liberalised. These include financial services, such as banking, insurance, securities, and related areas; computers; direct selling; telecommunications; audiovisual services; construction and engineering; tourism; advertising; etc.

The use of a negative list for determining which services are included in the agreement is a particularly notable development. A negative list signifies the inclusion of all services except those specifically excluded. The US is highly competitive in exporting sophisticated, high value added services such as those included in the agreement. Consequently, this area is seen as being particularly promising for future US trade.

3.3.7 Government procurement

With respect to government procurement, the agreement opens many more government agencies to competitive bidding by the signatories than has been the norm in past agreements. These include many state and local, as well as central government agencies.

While the US, by using exceptions like relatively high thresholds, exclusions of state and county level procurement opportunities and exceptions for the set aside programs for small and minority businesses, has effectively blocked the niches where potential Chilean suppliers could have had an opportunity of ever winning a bid. The ability for Chilean suppliers to compete effectively in US procurement markets is already very limited due to factors like distance, language, culture, lack of specific knowledge of US procedures and lack of competitiveness of potential suppliers vis-à-vis US suppliers.

3.3.8 Labour and Environment

The inclusion of labour and environment had been a major bone of contention from the Mexican side in the NAFTA agreement. However, Chile said from the outset of its free trade negotiations with the United States that it had no objections to including these issues in the agreement or in side agreements, but would not consent to using trade sanctions as the remedy for noncompliance. Thus, the agreement uses conciliation and then fines instead of trade sanctions to deal with labour and environmental infractions that cannot otherwise be resolved. There has been a lot of protest against the inclusion of labour and environment in FTAs as they are largely non-trade issues.

3.4 India-Thailand FTA

In the India-Thailand case, unlike the US, politics rather than economics became the main driving force for the agreement. The India-Thai agreement was the result of India's much publicized 'look east' foreign policy and Thai 'look west' policy. India's foreign policy had felt the need to increase India's influence in its dynamic eastern neighborhood. The East Asian region is very important from the point of view of resources, trade potential and GDP and India needed to increase its influence to avoid losing out against China and other Asian countries. For India's emergence as a major player in the continent, secure duty free access to the Asian markets was required. The Indo-Thai agreement was one of the first attempts made in pursuit of this objective. India is currently in negotiations with the ASEAN for the establishment of a free trade area.

Additionally, after Malaysia and Singapore, Thailand is the third largest investor in India from the ASEAN region. Thus, India hoped to increase the amount of FDI sourced from Thailand. Thailand, on the other hand, quite simply wanted to gain greater market access into the large Indian markets. It had its interest in the Indian food processing, pharmaceuticals, petrochemicals, steel, auto and IT sectors.

The trade ministers of both sides signed the India-Thailand framework agreement (see Appendix B) for establishing FTA between the two countries on October 9, 2003 in Bangkok. As per this framework agreement it was conceived that the process would

begin from March 1, 2004 under the 'early harvest scheme' (EHS). But since there was delay in finalizing the interim rules of origin by both parties the implementation was subsequently delayed by six months.

According to the agreement, entrepreneurs from India and Thailand can freely import and export 84 "early harvest" items (see Appendix B). As per the early harvest program, a common list of items for exchange of tariff concessions at 6-digit level was prepared and it was agreed that the tariff on these identified items would be progressively phased out. The 84 items covered by the agreement include mangoes, gear boxes, TV picture tubes, refrigerators, wrist watches, textiles spindles, spinning rings, ball bearings, pulleys, signaling equipment and printed circuit boards. The covered items were later reduced to 82 in the protocol to amend the framework agreement.

3.5 South-South agreement: The Traverse Argument

Trade volumes between India and Thailand of 82 early harvest items (EHI) under the FTA expanded by 33.7 per cent in 2004-05. But the trade gains that accrued to the two countries were vastly different. The feasibility study mentioned earlier had forecasted that the agreement would favour India and India would be able to maintain its trade surplus position with respect to Thailand. The situation, however, changed rapidly after that point. After 2001-02 India has continued to remain in deficit with respect to trade flows between India and Thailand. Once the agreement was signed the deficit only increased in value. India's balance of trade with Thailand was US\$ 18.2 million in deficit in 2003-04. In the following two years, i.e. the period after the agreement came into being, the deficit jumped to US\$ 104.7 million in 2004-05 and to US\$ 186.9 million in 2005-06. This widening chasm has given rise to widespread criticism both from Indian economists as well as the business communities who believe that the agreement has benefited Thailand more than India and should thus, be scrapped.

Indian businesspersons complain that certain provisions in the India-Thailand FTA have worked against the interests of local industry and it is due to this fact that India has lost out against Thailand. However, even Thailand is also not very happy with the current

situation. This is because of the large number of items in the 'negative list' (currently around 1,000) that are excluded from the FTA. The conflicting interests of the two parties have led to the agreement reaching an impasse. Fresh negotiations with respect to rules of origin too have been stalled.

In 2005, FICCI published a report, 'India-Thailand FTA - Emerging Issues', which said that the cost of production for Indian companies manufacturing the 82 items placed in the early harvest scheme was too high for them to compete effectively with Thai ones. Based on a survey conducted in April-May 2005, the report said that amongst the hardest hit by the FTA were companies making colour-picture tubes for television sets, colour TV sets and auto components. The report pointed out that Thai companies had the advantage of substantially cheaper electricity and interest rates.

The agreement has provided large Thai companies with easy access to large Indian markets. Many MNC companies find doing business with India attractive because they have major manufacturing units in Thailand and using the FTA channels makes it easier to launch their products in India. Toyota, Honda and Proctor & Gamble are the three multinational corporations that have benefited the most from the Indo-Thai FTA. Indian products, on the other hand don't have a large market in Thailand even if they have the required certification. This is the prime reason for Thai trade surpluses viz. India. The situation is made worse by the fact that China, the Philippines, Malaysia, Indonesia and even Taiwan use neighboring Thailand as a conduit to route into India a wide variety of products such as textiles, engineering items, processed food products and electronic goods.

Additionally, It has been argued that the soaring growth of Thai exports of the EHS commodities constitutes Japan's proxy foray into the Indian market. Most of these products are produced by Japanese subsidiaries in Thailand and not by Thai companies. For instance, in the automobile sector, Japanese firms account for about 80% of the Thai market and in consumer electronics even more.

If trade was held as the measure for gauging the extent of success of an FTA then the US-Chile agreement is comparatively more successful than the India-Thailand agreement. Official estimates show that in the first year itself US exports to Chile grew by 35% and that of Chile to the US increased by 32%. In the two years that the agreement came into effect the total bilateral trade between the United States and Chile rose 85 percent. The United States exported \$5.2 billion in goods in 2005, a 91 percent increase over 2003. It should, however, be noted that US has been increasing its trade deficit alarmingly vis-à-vis most countries of the world and thus, the case of Chile is no exception.

Rather than absolute figures or even the growth rates, changes in the share of Chile in total US trade would reflect the changes in Chile's position much more accurately. Data reveals that the share of Chile in US total exports is miniscule even after two years of the formation of the bilateral. Moreover, the high growth rates noted above are in relation to small bases and thus, are not astounding in absolute terms. An additional point needing reiteration is that, these high growths have been achieved at a very high cost from the Chilean side. This chapter has highlighted some of the very extractive clauses that were included. Thus, just looking at the trade flow figures gives limited insight into the workings of, as well as the benefits accruing to a developing country from signing, a bilateral agreement.

Another point that needs reiteration is that when South-South agreements are signed, the question of trade complementarities and production similarities naturally emerges. There can never be a case where the export baskets of two countries are perfectly complementary. When free trade agreements are signed some sectors would obviously be out-competed, as the partner country is a more efficient producer of the product. This should be good for the welfare of the country (trade creation argument) and thus, constitutes no reason for scrapping an agreement.

When South-South agreements are signed, the potential similarity of production structures is greater and there are bound to be adjustment issues as some manufacturing industries in the two countries become out-competed. However, this is not necessarily a

bad thing. This shift could be thought of as being akin to frictional unemployment. The movement of resources from the production of the inefficient commodity to that in which it has greater competitiveness is welfare inducing. Since the economy is growing from more efficient allocation of resources, greater alternate employment opportunities open elsewhere which may employ the displaced factors of production. In addition, there is also the scope for intra-industry trade keeping in mind the consumers' desire for variety in all markets. In previous chapters the Linder hypothesis and its effects have already been mentioned. To recapitulate, countries with similar levels of income trade more. Thus, within South-South agreements the potential to trade is greater as the countries have a similar per capita income and thus, markets for similar goods (with similar levels of quality) flourish.

A word of caution is nonetheless required. The country should however, take a step backwards if it feels that signing the agreement would leave long term harmful effects on its economy. It should be remembered that for an economy signing an FTA ideally implies a movement from its current consumption point to a higher welfare point. These FTAs also involve some sort of costs for the traverse like adjustment costs, etc. The government then needs to make a decision on whether or not the costs are too high to bear for signing the agreement. In the crossover time, displacements are bound to happen. However, if after the adjustment the country is in a better state than before then the costs are worthwhile. Sometimes a country can decide that the traverse implies more costs than it can bear and hence, decides not to enter into an agreement. It believes that the higher costs would subvert the gains for the country from reaching the higher welfare point. This could be when signing an agreement meant hurting those parts of the population that are the most vulnerable, i.e. the poor. Typical problems faced in this regard in a South-South agreement are relocation of industries, farmers and other vulnerable sections of the society hurt and the production of sensitive products affected.

To summarize, a static comparison of two points does not reveal much about the way the benefits would accrue. The above-mentioned movement to a higher point is a dynamic phenomenon. The trajectory to the higher state involves a set of points rather than points

corresponding to just one period. It is the comparison of the costs and benefits overtime of the traverse that ultimately decides whether or not agreement is fruitful. It should not be so high so as to nullify the positive effects (upset the traverse). Thus, as far as the benefits are concerned, the feasibility study on the India-Thailand agreement shows that there are positive results expected from the Indo-Thai agreement. The only reason for scrapping an agreement should be that it entails a cost too large to borne with respect to its impact on the vulnerable sections of the society.

Summary

It is true that the two agreements are widely divergent in almost all spheres and a comparison is difficult. However a point that these two agreements highlight is that there are many other considerations, in addition to trade, that govern modern day trade negotiations. In most cases it is these factors that decide whether or not an agreement would be signed. As far as additional trade creation as a measure of an FTA's success goes, both type of agreements, i.e. North-South and South-South, pass the test. However, 'North-South' agreements involve much more extractive clauses than the 'South-South' agreements. The chapter has highlighted some of these clauses and their potential effects.

The South-South agreements also have certain unresolved bones of contention. In the India-Thailand case it is the unequal trade gains accruing to one of the trading partners, in this case Thailand. It should be noted that in this case the root cause of these disagreements lies in the similarity of composition of traded commodities. The chapter has shown that this is not necessarily a bad thing. The traverse arguments shows that benefits of a South-South agreement become apparent over a period of time and a static comparison may be erroneous. The negative long-term effects of a North-South agreement, on the other hand, are clear from their inception itself.

Appendix A

Following is the official summary of the text of the agreement provided by the United States International Trade Commission (2003)-

Summary of Tariff Commitments

Under the proposed agreement and its schedules of concessions, Chile would immediately eliminate its own duties on most originating US exports and would eliminate such duties on other goods in stages, while the United States would implement a more complex schedule of concessions involving several categories of duty elimination on goods originating in Chile. Many Chilean goods would be guaranteed existing duty-free access or be made immediately free of duty; sensitive agricultural products would be subject to tariff-rate quotas, or TRQs (there are mutual TRQs on beef, as a sensitive product); some apparel categories (mainly those goods of cotton or of man-made fibers) would receive reduced rates up to stated tariff preference levels; a few named rate lines would have stated commitments; and other products would receive staged duty reductions over 2, 4, 8, 10, or 12 years.

These tariff benefits will be given only to “originating goods” under the terms and rules of the agreement—namely, those comprising inputs only from the two parties or containing only de minimis third-country content, and those complying with rules of origin based largely on stated changes in tariff classification from foreign inputs to finished goods.

Chapter 3: National Treatment and Market Access for Goods

The agreement includes schedules of the duty treatment to be given by the parties, with related legal notes and staging timetables, which can be very briefly summarized. Industrial goods are primarily covered by the schedules themselves and most have relatively short duty elimination schedules. Chile also agrees that it would end its luxury tax on certain originating goods of the United States.

Agricultural goods

While some goods in this sector are affected only by ordinary duty staging and rules of origin, others are covered by tariff-rate quotas that would apply separately from Uruguay Round commitments of market access (that is to say, without changing the existing concessions). Thus, with respect to imports from Chile into the United States, the previously agreed duty treatment under the Uruguay Round would continue and an additional quantity of certain goods would be accorded a measure of preferential access during the transition period. Both parties would provide specific treatment for particular goods such as sugar, dairy products, and meat. Many goods would be accorded duty-free entry immediately, and others would be accorded staged reductions without limitation on quantity.

Textiles

In the agreement, most basic textile products would be accorded duty-free treatment by both parties, with a few products given staged reductions and with shipments of some apparel goods, notably those of cotton or of man-made fibers, controlled by tariff preference levels. This sector has a separate annex indicating rules of origin for the sector and setting out, for textile goods in chapters 42, 50 through 63, 70 and 94, the specific changes of tariff subheadings at the 6-digit international Harmonized System (HS) level that will be deemed to confer origin. These tariff shifts are accomplished by means of processing or assembly operations in the country attempting to claim origin and involving third-country inputs or materials. The rule is applied by noting the classification of those inputs or materials and also the classification of the advanced or finished good that is shipped from one FTA party to the other, and verifying that the rules for the heading applicable to the latter good.

Chapter 4: Rules of Origin and Origin Procedures

The duty benefits of the FTA would apply to originating goods, unless otherwise provided. Such goods are those wholly obtained or produced entirely in one or both parties, those meeting the requirements of the origin rules in the related annex, and those

produced entirely in one or both parties from originating materials. As with the NAFTA, goods that contain only inputs attributable to the parties would be considered eligible without regard to tariff shifts or other criteria, and the rules of the annex apply to goods that contain inputs sourced from nonparties. Certain goods are considered to be originating materials for purposes of meeting the stated requirements. The origin chapter sets forth the rules and formulas for computing regional value content, with two types of computations, the build-down method and the build-up method, provided for some manufactured goods; these methods start at different points in the processing of the goods in question and either add or subtract particular inputs or components.

The chapter likewise deals with the verification and documentation of origin needed under the agreement. In essence, an importer can claim FTA benefits if he knows the good qualifies or if information in his possession so indicates, and he can be required to submit statements to establish qualification if asked by customs authorities.

Rules of Origin

The agreement deals with various aspects of the origin determination process and sets tests that relate to common commercial practices. First, a good that otherwise originates under agreement rules will not be disqualified because its accessories, spare parts or tools delivered with it do not originate, if the latter are in customary quantities, are invoiced with the good, and the good still meets any regional value test (treating the accessories, parts, or tools as non-originating). Second, the treatment of fungible materials is covered in a flexible manner, so that either physical segregation or inventory management (averaging, LIFO or FIFO) can be used to track them. Third, goods that contain de minimis foreign content that does not undergo the requisite tariff shifts (limited in the aggregate for all such materials to 10 percent of the adjusted value of the good, or higher than the 7 percent NAFTA standard, except for textiles and apparel where the 7 percent limit is applied) can also qualify as originating, though the value of such foreign content is still counted as non-originating when a regional value content test applies. A limited number of exceptions—all in the agricultural sector and relating primarily to commodities covered by US tariff-rate quotas (such as dairy or sugar products)—cover goods not

allowed to be entered under the de minimis rule. Fourth, goods of section XI of the tariff schedule are covered by the textile annex to the Market Access chapter, given the particular problems of multicountry assembly and processing as well as multicountry sourcing arising with goods of this sector. Fifth, indirect materials are treated as originating, and packaging materials and containers are generally to be disregarded in terms of their origin and thus do not affect the treatment of the goods concerned. Last, goods undergoing subsequent production in a non-party are ineligible for benefits of the agreement, though non-substantive handling (such as mere transfers between vessels) or operations to preserve the goods are generally ignored.

Annex II to the origin chapter contains product-specific rules at an HS heading or subheading basis, relying in part on the draft harmonized rules of origin being developed under the WTO Agreement on Rules of Origin (ROO). The notes to this annex provide that the most specific rule prevails over more general ones, so that if a subheading rule exists and the good meets it that good will be deemed originating. Originating materials are not covered by tariff shift rules. The annex then contains the heading-by-heading tariff shift and subsidiary rules. The rules must be examined in conjunction with the related tariff provisions in order to assess their effects, and some specific knowledge of the industries in each party, the types of processing they perform, and their sources of inputs is needed. Using normal trade relations (NTR) trade (goods considered to be “products of” Chile in the ordinary customs sense) overstates the likely volume of goods that would qualify for benefits under the FTA. Given that an FTA’s intent is to eliminate duties on qualifying goods between the parties, the rules of origin come to play a significant part in determining which goods, and in what quantity, will receive such benefits.

Chapter 5: Customs Administration

The chapter on customs administration rests on the principle of cooperation and would establish a Free Trade Commission and a related Committee on Trade in Goods to administer the agreement. The parties commit to the publication and notification of rulings and other customs actions; to the administration of the agreement in a uniform,

impartial, and reasonable manner; to provide advance rulings, review and appeal; and to set up contact points to facilitate communication. Provisions on customs issues such as confidentiality, penalties, release and security, risk analysis or targeting, and efficient customs clearance procedures and express shipments are likewise indicated.

In addition, the provisions deal with trade in used goods (wherein Chile would commit to eliminating its 50 percent surcharge on imports of used originating goods of the other party), duty waiver and refund programs, temporary admission of goods, duty drawback and deferral (with provisions apparently modeled upon those of NAFTA and intended to “equalize” advantages otherwise available due to differing external/NTR duty rates), and other customs matters. The United States would also agree to end its “user fee” on imports of originating goods of Chile. Other provisions cover “distinctive products” and their labeling, with specified distilled spirits given protected access. Agricultural export subsidies and marketing and grading standards are discussed, without substantive new commitments other than beef grading. Specific provisions allowing bilateral emergency actions in response to agreement-related trade surges cover textiles and apparel.

Chapter 6: Sanitary and Phyto-sanitary Measures

This chapter is intended to conform to the WTO Agreement on the Application of Sanitary and Phyto-sanitary Measures. The parties agree to establish a bilateral committee to provide a forum for consultation and cooperation. In addition to reiterating the applicability of WTO commitments, the chapter provides that no dispute settlement actions can be taken under the FTA regarding these measures.

Chapter 7: Technical Barriers to Trade

This chapter covers technical barriers to trade, and is intended to conform to the WTO agreement on the same subject. It rests on enhanced cooperation and consultations, and establishes a bilateral committee to address issues of this subject. One particular provision of note is the listing of various conformity assessment mechanisms the parties agree to recognize in their bilateral trade. Transparency obligations specific to these measures are enumerated, including access by persons of each party in proceedings or

reviews by bodies in the other; however, non-governmental standards bodies cannot be mandated to comply. The chapter establishes a Committee on Technical Barriers to Trade with responsibilities for implementing and administering the chapter and facilitating consultations between the parties. Such consultations are to be considered as meeting requirements under the dispute settlement chapter where that set of procedures is invoked.

Chapter 8: Trade Remedies

Under this set of provisions, a party is authorized to impose a bilateral safeguard measure (by suspending staging or increasing a duty rate, not to exceed the most-favoured-nation (MFN) level) when imports of an originating good of the other party constitute a substantial cause of serious injury or threat thereof to a domestic industry producing a like or directly competitive product. Notification of the other party and of the WTO is required, and parties must supply copies of public documents relevant to the investigations in such situations. A safeguard can be imposed for no more than three years, including extensions, and only one safeguard can ever be imposed on a particular originating good. At the end of the safeguard, the party must return the rate of duty to the level that would have applied without the safeguard. Notification and transparency are required, and compensation is mandated.

Chapter 9: Government Procurement

Each party would be obliged to accord national treatment to goods, services, and suppliers of the other party. Advance notice would need to be given of intended procurement. The treaty provides for time periods, technical requirements, conditions, and tendering procedures. Each party would provide for domestic review of supplier challenges and at the request of either party, a bilateral working group on government procurement shall be convened. The Agreement does not cover non-contractual agreements or any form of governmental assistance not specifically covered under this chapter, but does cover build-operate-transfer contracts and public works concession contracts and provides for monetary thresholds for coverage. Both parties have annexes of reservations and exceptions by government entity, goods and/or services. The

provisions of this chapter are not limited to originating goods with regard to bilateral trade; origin would be determined on an NTR basis.

Chapter 10: Investment

Each party would be obliged to accord to investors of the other party and covered investments treatment no less favourable than that it accords to its own investors and investments, i.e., national and MFN (known here as normal trade relations) treatment.

The chapter provides that treatment of investors must be in accordance with customary international law, including fair and equitable treatment and full protection and security. Neither party could impose or enforce performance requirements to: export a given level or percentage of goods; achieve a given level or percentage of domestic content; purchase, use, or accord preference to goods produced or sold in its territory; relate the volume or value of imports to the volume or value of exports or to the amount of foreign exchange associated with such investment; transfer a technology or proprietary knowledge to someone within its territory; or control distribution from its territory. Likewise, neither party could require that the senior management of an enterprise of that party be of a particular nationality, but may require that a majority of the board of directors be nationals or residents. Each party must permit all transfers relating to a covered investment to be made freely and without delay. Expropriation can occur only for a public purpose and must be non-discriminatory upon payment of prompt, adequate compensation in accordance with due process of law. In the event of an investment dispute, the claimant and respondent should initially seek to resolve the dispute by consultation and negotiation, which may include the use of non-binding third party procedures. Investment disputes may be submitted to arbitration. The chapter has several subsections on dispute resolution and arbitration procedure and references the International Centre for Settlement of Investment Disputes.

Chapter 11: Cross-Border Trade in Services

This chapter deals with cross-border trade in services and begins with an enumeration of the types of services covered by the agreement and the measures to which the chapter

applies. Significantly, the measures covered by the agreement include those by national and sub-national governments and also by non-government bodies, but not measures dealing with financial services, air services in most cases, government procurement, subsidies and grants. No obligation of employment is created, and the provisions do not apply to “services supplied in the exercise of governmental authority” (non-commercial and noncompetitive services). National and MFN treatment on covered services are guaranteed. Among the rules is the prohibition on any limit on the number of service suppliers, value, operations, or output. The agreement provides that the parties cannot require a local presence by a service provider. However, existing nonconforming measures are exempt from certain requirements. The chapter provides that regulations shall be developed and applied in a transparent manner, and that mutual recognition of authorization licensing or certification must not be applied in a discriminatory manner. There are provisions applicable to certain professions, notably to lawyers and engineers.

Chapter 12: Financial Services

The agreement would impose several specific obligations on the parties. It provides that each party will accord national treatment and MFN treatment to investors of the other party and grant market access for financial institutions without limitations on the number of financial institutions, value of transactions, number of service operations, or number of persons employed. Moreover, each party must permit cross-border trade in financial services and permit a financial institution of the other party to provide new financial services that it would permit its own institutions to provide without additional legislative action. Neither party is required to furnish or allow access to information related to individual customers or confidential information the disclosure of which would impede law enforcement, be contrary to the public interest, or prejudice legitimate commercial concerns. A party may not require financial institutions of the other party to hire individuals of a particular nationality or require more than a minority of the board of directors to be nationals or residents of the party. Existing nonconforming measures and exceptions are addressed. The parties agree that transparent regulations and policies are important and agree to publish in advance regulations of general application and to maintain or establish mechanisms to respond to inquiries from interested persons.

Consultations and dispute resolution are discussed and cross-referenced to the chapters on Investment and Dispute Settlement, but special dispute settlement provisions are provided for matters arising under this chapter; the agreement establishes a financial services committee to oversee this substantive area. There are annexes dealing with banking and other financial services, and with insurance and insurance-related services; branching and allowable activities are among the matters covered by these annexes.

Chapter 13: Telecommunications

The parties agree to ensure that enterprises of the other party would have access to and use of any public telecommunications transport network and service offered in its territory or across its borders. Such enterprises would be permitted to provide services to individual or multiple end users, connect leased or owned circuits with public communication networks, purchase or lease equipment, use public communication transport networks, and have access to network elements on a unbundled basis. Under the chapter, each party's telecommunications regulatory body must determine which network elements to make available in accordance with national law. Each party agrees to ensure that major suppliers in its territory provide interconnection for suppliers of the other party under non-discriminatory terms, at any technically feasible point, in a timely fashion, and of no less favourable quality than that provided by such major supplier for its own services. The agreement would apply to submarine cable systems and landing stations where provided under national law and regulation. Each Party must make licensing criteria, procedures, terms and conditions, and normal time frames publically available; each must also ensure that its national telecommunications regulatory body maintains appropriate procedures and authority to enforce domestic measures relating to the obligations set out in this chapter and provide for dispute resolution. The provisions provide clearly that the parties are not agreeing to compel enterprises to provide certain services, and the parties retain their right to prohibit persons from operating private networks. In addition, the parties agree to try to avoid restricting suppliers of these services in their choice of technologies.

Chapter 14: Temporary Entry for Business Persons

In this chapter, each party agrees to grant temporary entry to business persons (including visitors, traders and investors, intra-company transferees and professionals) who are otherwise qualified for entry under applicable measures relating to public health and safety and national security and maintain or establish points of contact or other mechanisms to respond to interested persons regarding regulations. The agreement establishes a subcommittee on temporary entry to review the operation of this chapter. Under these provisions, the United States would grant up to 1,400 applications per year for temporary business entry for persons from Chile. An appendix to the chapter sets out minimal education standards for certain professions and other criteria for evaluating which persons are covered and on what basis.

Chapter 15: Electronic Commerce

Under this chapter, a party cannot apply customs duties or other duties, fees or charges on or in connection with the importation or exportation of digital products by electronic transmission. Also, a party must not accord less favourable treatment to some digital products that it accords to other like digital products on the basis on the nationality of the author, performer, producer, developer or distributor of the products or the grounds that the digital products were created, stored, transmitted or published outside its territory. Nonconforming measures have a one-year phase-out period. Again, provisions for additional cooperation between the parties are included.

Chapter 16: Competition Policy, Designated Monopolies, and State Enterprises

Under the chapter, each party must adopt or maintain competition laws to proscribe anticompetitive business conduct and also take appropriate action with respect to such conduct. The parties must establish or maintain an authority responsible for the enforcement of such measures. A party may designate a monopoly or establish or maintain a government enterprise. The agreement provides for transparency, information requests and consultations, but bars access to FTA dispute settlement as to many of the chapter's provisions in favour of mechanisms under the WTO or perhaps an arbitration treaty.

Chapter 17: Intellectual Property Rights

Under this chapter each party agrees to ratify or accede to the Patent Cooperation Treaty (1984), the International Convention Relating to the Distribution of Programme-Carrying Signals Transmitted by Satellite; the International Convention for the Protection of New Varieties of Plants (1991); and the Trademark Law Treaty (1994). Each party further agrees to undertake reasonable efforts to ratify or accede to the Patent Law Treaty, the Hague Agreement Concerning the International Deposit of Industrial Designs (1999), and the Protocol relating to the Madrid Agreement Concerning the International Registration of Marks (1989). National treatment and transparency are required. Trademarks, for purposes of this agreement, are defined as including sound marks, collective marks, and certification marks and may include geographical marks and scent marks. Parties agree to provide that trademark applications can be opposed. Article 20 of the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) is cited for use in dealing with common names of products. The owner of a registered mark is given the exclusive right to prevent third parties not having the owner's consent from using identical or similar signs where such use would result in a likelihood of confusion, with limited exceptions such as fair use of descriptive terms. The parties must establish procedures to prevent or cancel registration of a mark that is identical or similar to a well-known trademark. The Paris Convention is cited for the protection of marks not identified with well-known trademarks. In addition, the parties must adopt procedures for settling disputes involving domain names on the Internet. The agreement sets out procedures for the application/petition for geographical indications.

Specific provisions of the Berne Convention are cited for the protection of copyrights and related rights. Authors, performers, and producers have exclusive rights to authorize or prohibit all reproductions and all communications to the public of their works. The term of protection of a work must be not less than the life of the author and 70 years after the author's death or not less than 70 years from the end of the calendar year of the first authorized publication of the work, if the term is not based on the life of a natural person. Related rights are extended to performers and producers of phonograms as regards physical copies of their works. The knowing circumvention of effective technological

measures to protect works, and trafficking in devices intended to circumvent such measures will result in criminal and civil liability. Certain non-infringing good faith activities are exempt from sanctions. Removing or altering management information has been removed or altered will likewise result in criminal and civil liability. Criminal and civil sanctions protect encrypted program-carrying satellite signals.

Each party would make patents available for any invention, whether a product or process, in all fields of technology. The parties agree to undertake reasonable efforts, through a transparent and participatory process, to propose legislation for patent protection of plants within four years of entry into force of the agreement. Limited exceptions to exclusive patent rights are allowed but may not unreasonably prejudice the legitimate rights of the patent owner. Use of a subsisting patent of a pharmaceutical product by a third party must be limited to meeting requirements for marketing approval or sanitary permit. Export of such pharmaceutical products would be limited to meeting marketing approval or sanitary permit requirements. Each party agrees to adjust patent terms to allow for unreasonable delays encountered in granting the patent. The parties cannot use public disclosure by the applicant within 12 months of application to bar patentability. Special provisions apply to patents for pharmaceutical or agricultural products if a party requires the submission of undisclosed information as part of the application process. Laws and regulations pertaining to the enforcement of intellectual property rights must be published and made publicly available. Each party is directed to publicize information on its efforts to provided effective enforcement. In civil, administrative, and criminal proceedings each party must provide for a presumption that the natural person or entity indicated as the author is the designation rights holder. In civil judicial proceedings, the rights holder may request destruction of goods that have been found to be pirated or bear counterfeit marks, except in exceptional cases. Donation to charity is only allowed with the permission of the right holder and in the case of trademark goods, with the removal of the trademark. Judicial authorities must be given the authority to order the infringer to identify third parties involved in the production or distribution of the infringing goods or services and may fine or imprison persons who fail to abide by valid court orders. The applicant for any provisional measure may be required to provide evidence security to protect the

defendant. In dealing with border authorities, the applicant must provide adequate evidence to show prima facie infringement and may be required to provide security. The competent authorities may initiate border measures ex officio and take action against goods passing in transit. Goods determined to be pirated or bearing counterfeit marks must be destroyed. The simple removal of a counterfeit trademark will not be considered sufficient to permit release of goods into channels of commerce. Parties cannot allow the export of goods bearing counterfeit marks or pirated goods. Each party must provide criminal procedures and penalties at least to cases of willful trademark counterfeiting or copyright or related rights piracy on a commercial scale.

Further, the parties must provide legal incentives for Internet service providers to cooperate with rights holders and limitations on liability. The parties must also establish appropriate procedures through open and transparent processes for effective notifications of claimed infringement and counter-notification. The time frames established for full implementation of the obligations of this chapter are two years from entry into force for trademarks, geographical indications, patents, and some aspects of copyright protection; 4 years from entry into force for enforcement, border measures, related rights; and five years from entry into force for effective technological measures.

Chapter 18: Labour

The parties reaffirm their obligations as members of the International Labour Organization and shall strive to ensure that their respective domestic laws are consistent with international standards and will strive to improve those standards. They would commit to effective enforcement of labour laws “in a manner affecting trade between the parties”; that is, no broader obligation in this respect would be created.

Each party agrees to ensure access to entities charged with enforcement and promote public awareness of labour laws. The chapter establishes a Labour Affairs Council to review issues raised under the agreement and to facilitate consultations. Either party may request consultations; application of the chapter on dispute resolution is limited to the effective enforcement of labour laws by a party, insofar as that affects trade between the parties, and can occur only after consultations under the auspices of the Labour Affairs Council. No other dispute settlement on this subject can be pursued under the agreement.

An annex to this agreement establishes a labour cooperation mechanism to address, among other issues, child labour.

Chapter 19: Environment

Each party is obliged to ensure that its environmental protection laws provide for high levels of protection and strive to improve those laws, provide appropriate and effective remedies and sanctions for violations of environmental protection laws, and provide opportunities for public participation. However, the obligation of effective enforcement is linked, as with those on labour, to trade between the parties rather than being broad new commitments. The chapter creates an Environmental Affairs Council to pursue cooperative environmental activities, assist in information sharing, and provide for environmental consultations. Environmental disputes relating to the parties' enforcement of environmental laws, insofar as it affects trade between the parties, must first be addressed in consultations under this chapter prior to any action under the chapter on dispute settlement; no other dispute settlement on this subject can be pursued under the agreement. The chapter is notable for the many provisions dealing with increased cooperation in environmental matters.

Chapters 20 and 21: Transparency and Administration

To reiterate the parties' commitment to transparency, advance notice, and access to both information and review, separate obligations are included on inter party communication, publication, and notification. Both administrative proceedings and review and appeal rights are provided. As noted above, the parties agree to establish a Free Trade Commission to handle all matters arising under the agreement. Issues of "transparency" are addressed, starting with the official contact points in each government and the publication of laws, regulations, procedures, and administrative rulings. Each party is required to provide for review and appellate processes. General provisions on taxation, disclosure of information, and definitions of terms used in the agreement are set forth in this chapter. The FTA would enter into force 60 days after the exchange of written notifications that all respective internal arrangements have been fulfilled, unless otherwise agreed.

Chapter 22: Dispute Settlement

In a dispute that arises under this agreement, another FTA or the WTO agreement, unless otherwise provided, the complaining party would be entitled to select the forum, which must then be used to the exclusion of all others. Either party may request consultations, and alternative dispute resolution provisions are included. The Free Trade Commission can intervene in matters arising under the chapter, and procedures to request an arbitral panel, panel selection and rules of procedure for the selected panel are provided. If the final report of a panel is not implemented, a suspension of benefits under the agreement may result. Remedies for failure to enforce domestic labour laws or domestic environmental laws are provided for in a separate article. The Free Trade Commission must review the operation of certain provisions of this agreement not later than five years after the agreement enters into force or within six months after benefits have been suspended or monetary assessments have been imposed in five proceedings, whichever occurs first. Specific provisions deal with allegations of nullification and impairment of rights under certain agreement chapters and the express availability of dispute settlement.

Chapter 23: General Exceptions

The chapter contains provisions exempting matters dealing with essential national security; health and welfare for humans, plants, and animals; taxation; and balance of payments measures on trade in goods.

Chapter 24: Final Provisions

The text includes mechanisms for amendments, adjustment to WTO amendments, entry into force, and termination. The agreement would enter into force 60 days after the exchange of notifications of signature, ratification, and implementation; termination would occur 180 days after delivery of a notice. English and Spanish texts of the agreement are declared equally authentic.

Appendix B

Following is the summary of the India-Thailand FTA Framework Agreement. The agreement document states, “the Parties agree to expeditiously negotiate for establishing an India-Thailand FTA with a view to strengthening and enhancing liberalisation of trade through the following: progressive elimination of tariffs and non-tariff barriers in substantially all trade in goods between the Parties; progressive liberalisation of trade in services between the Parties with substantial sectoral coverage; establishment of an open and competitive investment regime that facilitates and promotes investment within and between the Parties; establishment of effective trade and investment facilitation measures, including, but not limited to, simplification of customs procedures and development of mutual recognition arrangements; expansion of economic co-operation in areas as may be mutually agreed between the Parties that will complement the deepening of trade and investment links between the Parties and formulation of action plans and programmes in order to implement the agreed sectors/areas of cooperation.”

Article 3, 4 and 5 of the framework agreement deal with trade in goods; trade in services, and Investment. **Article 3**, dealing with trade in goods, states that tariffs on listed products will be gradually reduced and later eliminated. All goods that have not been covered by the Early Harvest Scheme will be categorized into two tracks, namely, the normal track and the sensitive track. The negotiations between the two parties covering trade in goods will also include issues like the detailed rules for tariff reduction and elimination programme for the normal track and sensitive track goods; the rules of origin; non-tariff barriers; safeguards; subsidies; and antidumping and countervailing measures.

Article 4 covering the trade in services states that the two countries will negotiate to liberalise trade in services with substantial sectoral coverage. They will work towards elimination of discrimination between parties, expanding the depth and scope of services liberalised and enhancing cooperation in services so as to improve efficiency and competitiveness.

Article 5 deals with Investment and hopes to promote investments and to create a liberal, facilitative, transparent and competitive investment regime. It also says that the Parties will progressively liberalise their respective investment regimes; strengthen co-operation in investment, facilitate investment and improve transparency of investment rules and regulations; and provide for the protection of investments.

Article 6 presents some other areas of economic cooperation, namely, Trade Facilitation constituting Mutual Recognition Arrangements (MRAs), accreditation procedures, standards and technical regulations; Removal of non-tariff barriers (NTBs); Customs cooperation and Trade finance. It also highlights the probable sectors of Cooperation, namely, Fisheries and Aquaculture, Information & Communications Technology, Biotechnology, Tourism, Infrastructure Development, etc.

Article 7 dealing with the Early Harvest Scheme (EHS) is the most important article in the agreement. It lists out the product coverage, tariff reduction and elimination, implementation timeframes, Rules of Origin, trade remedies and emergency measures applicable to the Early Harvest Scheme. There are 84 products covered in the Early Harvest Scheme. The tariffs on these 84 items will be reduced to 50% by March 2004; to 75% by March 2005 and will be totally eliminated by March 2006.

Interim Rules of Origin were left by the agreement for further negotiations. Article 7 also covers trade remedies and emergency measures. It states, "If any product, which is covered under EHS, is imported into the territory of a Party in such a manner or in such quantities as to cause or threaten to cause, serious injury to the domestic producers of such product in the importing Party, the importing Party may, after prior consultations, to be concluded within 90 days or on any mutually agreed timeframe, from the date of notifying the other Party, suspend provisionally without discrimination the preferential treatment so accorded."

Article 8 covers the timeframes for the elimination of tariffs and for the commencement of negotiations. It states that for trade in goods, the negotiations for tariff reductions or elimination shall commence in January 2004 and be concluded by March 2005 in order to

establish the India-Thailand FTA covering trade in goods by 2010. For trade in services and investments, the negotiations on the respective agreements shall commence in January 2004 and be concluded by January 2006. The identification and liberalisation of the sectors of services and investment shall be finalised for implementation subsequently in accordance with the timeframes to be mutually agreed, taking into account the sensitive sectors of the Parties. A specially established India-Thailand Trade Negotiating Committee will conduct the program of negotiation set out in the agreement. Article 11 of the framework agreement deals with these institutional arrangements for the negotiations.

The protocol to amend the India-Thailand Framework Agreement was signed on the 30th August 2004 and it lists the amendments in the Early Harvest Scheme. It postpones the period of tariff reduction and elimination of applied MFN tariff rate. According to the amendment the process of tariff reduction on the EHS items will commence from September 2004 and will become duty free by the September of 2006. It also removes 2 products, namely- Polypropylene and Polyethylene Terephthalate, from the 84 items covered in the early harvest scheme. Thus, the total number of items covered reduces to 82. The amendment delves in detail into the whole procedure of Rules of Origin (ROO). The provided interim rules of origin will be replaced in future by another set of rules to be negotiated and implemented by parties under article 3(6)(ii) of the agreement. The interim rules of origin specify local value added content of 40 per cent and a change in tariff heading from the production processes at the 4-digit HS level, for deeming the exported product “originating” and, thus, eligible for a tariff concession. It also gives “product specific criteria” for origination on 25 items in its first annexure. The second annexure discusses in detail the whole certification procedure i.e., the procedure for the procurement of certification of origin, the conditions for validity, etc.

For trade in services and investments, the negotiations on their respective agreements were supposed to commence from January 2004 and be concluded by January 2006. It was agreed that the identification and liberalisation of the sectors of services and investment would be finalized for implementation subsequently in accordance with the timeframe to be mutually agreed taking into account the sensitive sectors of the parties.

In addition to the main agreement India and Thailand signed four other accords for enhancing cooperation in agriculture, tourism and science. The two countries signed a MOU on agricultural cooperation, a MOU on tourism cooperation, an agreement on visa exemption for diplomatic and official passport holders, and a program for cooperation in biotechnology.

The Agricultural co-operation MOU provides for joint activities between the two states, covering agricultural and forestry research, biotechnology soil and water conservation, watershed management, land use planning and horticulture. The agreement was to be valid for five years from the date of signing. The agreement on tourism sought to create conditions for long-term bilateral cooperation on this sector through reciprocal establishment of representative offices of the tourism department of the India as well as Thailand. The agreement on biotechnology envisaged the establishment of an India-Thailand biotechnology panel for formulation, approval, monitoring and review of action plans.

An India-Thailand Trade Negotiating Committee (TNC) was constituted and discussions to be held on the text of FTA, rules of origin, dispute settlement mechanism and sensitive list. 10 rounds of negotiations have so far been held in this regard. The framework agreement prescribed that the FTA in Goods would commence from March 2004. However, due to difference of opinion on certain issues, this deadline could not be met. Negotiations for FTA in services and investments have also recently begun. Last meeting of the India Thailand trade negotiating committee was held on Chiang Mai from 9-13 January 2006.

Chapter 4: Gravity Modeling

Chapter 4: Gravity Modeling

The discussion till now has been on the potential effects of joining an FTA on a developing country. This chapter seeks to quantify the effects of joining with the help of actual trade data. The gravity model is used to estimate the effects of joining an FTA. The gravity model is an often-used econometric model that seeks to estimate the trade creation and trade diversion effects of an FTA.

Some of the initial studies to apply the gravity equation to analyze international trade flows were Tinbergen (1962) and Pöyhönen (1963). Since then, many empirical papers studying foreign trade have successfully used the gravity model. The model has been used to analyze flows of varying types such as migration, foreign direct investment and more specifically, international trade flows. Essentially, the model seeks to explain imports to country i from country j using their economic sizes (GDP), their populations, direct geographical distances and a set of dummies incorporating certain types of institutional characteristics common to specific flows. Eichengreen and Irwin (1997) note that the gravity equation has “long been the workhorse for empirical studies of the pattern of trade.” For the current study’s purpose, the model developed by Baier and Bergstrand (2002), and Carrère (2004), have been used.

From the current study’s point of view, i.e. studying the effects of the formation of the US-Chile and India-Thailand FTA, the importance of the gravity model lies in its ability to model the effects of free trade agreements (FTAs) on bilateral merchandise trade flows. The gravity model for this purpose would explain cross-sectional variation in country pairs’ trade flows in terms of the countries’ incomes, populations, bilateral distance, and dummy variables for common languages and common land borders, and for the presence or absence of an FTA. Thus, in order to formally analyse the effects of these bilaterals, import flows of 50 countries would be regressed against various factors including FTA dummies. A large and positive coefficient of the FTA dummy would indicate that the agreement has had a strong trade effect. The regression would also shed

some light on how far difference in relative factor endowments and similarity in economic sizes of partners helps explain bilateral trade.

4.1 The Derivation of the Gravity Model

The Baier and Bergstrand (2002) “standard” gravity model is derived from a framework where monopolistic competitive firms maximize profits and consumers maximize utility according to Dixit–Stiglitz preferences. They use a model of world trade with two industries, two factors, differentiated commodities produced under increasing returns to scale, and multiple countries with international transportation costs. They show that international trade within each of the two monopolistically competitive sectors is generated by the interaction of consumers having a taste for diversity and production being characterized by economies of scale.

Thus, according to Baier and Bergstrand (2002), if the representative profit-maximizing firms in country j set product prices delivered to market i according to Equation (2), the following equilibrium trade flow for each goods-producing firm in country j selling to market i can be obtained:

$$M_{ij} = \left[\frac{\gamma}{\phi(1-\sigma)} \right] \frac{Y_j}{P_j} Y_i \left[\frac{P_j \theta_{ij}}{P_i} \right]^{1-\sigma} [s_j(1+t_i)(1+t_{ij})^{-\sigma}] \quad (1)$$

Where

M_{ij} : c.i.f value of the aggregate merchandise trade flow imported by country i from exporter j ;

σ : the elasticity of substitution in consumption in goods (Dixit–Stiglitz preferences);

γ : the Cobb–Douglas preference parameter for goods;

ϕ : fixed cost facing each firm (including both capital and labour) of country j ;

$Y_{i(j)}$: gross domestic product of country i (j);

P_j : exporter (country j) price level of it representative good.

t_{ij} : ad-valorem tariff rate by country i on the good produced in j ($t_{ii} = 0$ assumed);

s_j : real share of goods output in national product in country j ;

t_i : share of tariff revenue relative to income.

The price level of this good in country i (c.i.f. price) is given by:

$$P_{ij} = p_j \theta_{ij} \quad (2)$$

with θ_{ij} being a barrier-to-trade function between i and j . Baier and Bergstrand assume that the international transportation costs of shipping goods and services are of the nature of Samuelson-type “iceberg” costs. Thus, θ_{ij} represents the ratio of output exported by country j that is “consumed” (or lost) due to international transport to country i , as a proportion of the total that arrives safely.

The P_i term has been referred to as the “multilateral resistance term” in the literature (Anderson and Van Wincoop 2003). It can be interpreted as an output-weighted measure of the remoteness (in terms of trade costs) of country i :

$$P_i = \left[\sum_{k=1}^N n_k [p_k \theta_{ik} (1 + t_{ik})]^{1-\sigma} \right]^{1/1-\sigma} \quad (3)$$

As shown by Anderson and Van Wincoop (2003), assuming that $t_{ij} = t_{ji}$ and $y_{ij} = y_{ji}$, the implicit solution to equations (1) and (3) is derived as:

$$p_j^* = \left(\frac{s_j Y_j}{n_j Y_w} \right)^{1/1-\sigma} P_j^{-1} \quad (4)$$

Here n_j is the number of varieties of goods produced in j .

Substituting p_j^* into equation (1), and assuming $t_i = 0$, i.e. tariff revenue is a trivial share of GDP, yields:

$$M_{ij} = \left[\frac{\gamma}{\varphi(1-\sigma)} \right] \frac{1}{Y_w} s_j Y_i Y_j \theta_{ij}^{1-\sigma} (1+t_{ij})^{-\sigma} [P_i P_j]^{\sigma-1} \quad (5)$$

where Y_w is world output of goods.

Excepting the multilateral resistance term, this equation is identical to another gravity model developed by Feenstra in an earlier paper. Thus, the above explanation suggests that the proper specification of the gravity model should include:

- (1) the logarithm of the product of the GDPs of countries i (Y_i) and j (Y_j);
- (2) per capita GDP or population of the exporting country, N_j ; as a proxy for share of goods in national output i.e. s_j ;
- (3) a proxy for the term θ_{ij} ;
- (4) the product of the multilateral resistance term for each country-pair.

Traditional literature proxies θ_{ij} , or the “barrier-to-trade” function, either by distance between trading partners, and the presence of a common border; common colonizer and a common language (Baier and Bergstrand (2002) and Anderson and Van Wincoop (2003)). Variables like common border, common language and common colonizer are taken as proxies for the ‘psychic distance’ between countries (Linneman 1966). It is believed that a common cultural background between countries would promote similarity of tastes and therefore, also bilateral trade. The barrier-to-trade function, between countries i and j , is modeled as follows:

$$\theta_{ij} = (\text{distcap})^{\delta_1} (\text{com_lang})^{\delta_2} (\text{adj})^{\delta_3} (\text{comcol})^{\delta_4} \quad (6)$$

with distcap = distance between countries i and j ;

adj = 1 if i and j share a common border, otherwise 0;

com_lang= 1 if country i and j share the same language, otherwise 0;

comcol= 1 if country I and j have been colonies of the same colonizer, otherwise 0.

For modeling of $[P_i P_j]$, the following proxies for the multilateral resistance terms (called “remoteness” variables by Baier and Bergstrand (2002)), are introduced:

$$R_i = \left[\sum_{k=1, k \neq i}^N Y_k (D_{ik})^{1-\sigma} \right]^{1/1-\sigma} \quad (7a)$$

$$R_j = \left[\sum_{k=1, k \neq j}^N Y_k (D_{kj})^{1-\sigma} \right]^{1/1-\sigma} \quad (7b)$$

It has been said that if a measure of the average distance between a country and its main partners as well as the absolute distance in assessing the effects of RTAs is not used, the trade between faraway countries would be underestimated and thus, the estimated RTA coefficient would be biased (Polak 1996). Thus, in the gravity equation both the remoteness variable as well as the distance variable should be included.

For estimation purposes the central elasticity value of $\sigma= 4$ has been chosen. This value corresponds to the estimates proposed in empirical literature, i.e. $2 \leq \sigma \leq 6$. (e.g. Obstfeld and Rogoff, 2001).

Another important variable included in the gravity equation is for measuring the similarity in per capita incomes. It has been mentioned earlier that according to the Linder hypothesis, countries having similar income levels tend to trade more. This coefficient would thus, also serve as an instrument for investigating the possibility of greater South-South trade. This coefficient would, however, include cases of greater North-North trade also and thus, should be treated with caution.

$$abspcygap = \left| \frac{Y_i}{N_i} - \frac{Y_j}{N_j} \right|$$

An important point that needs to be made is that the model estimates a counterfactual to isolate the effects of an RTA. Hence, if the sample of countries is appropriately selected, the gravity equation would suggest a “normal” level of bilateral trade for the sample. Then, dummy variables would capture the “atypical” levels resulting from an RTA. The introduction of dummy variables in the model can be used to isolate trade creation and trade diversion effects of an RTA also (Carrere 2002).

From theory it is expected that an FTA’s trade creation and trade diversion will be reflected in trade flows as follows: (i) under pure trade creation, intra-regional trade increases and imports from the rest of the world (ROW) remain unchanged; (ii) under pure trade diversion, the increase in intra-regional trade is entirely offset by a corresponding decrease in imports from the ROW; (iii) if there is both trade creation and trade diversion, increase in intra-regional trade exceeds the decrease in imports from the ROW. Since the evaluation of the effects of RTAs on trade is central to this study, an approach similar to Soloaga and Winters’ (2001) is adopted. They demonstrated that the correct ex-post assessment of an RTA on the volume of trade requires the following dummy variables:

- (i) $D_1 (\alpha_1)=1$ if both partners belong to the same RTA, otherwise 0 (capturing intra-bloc trade);
- (ii) $D_m (\alpha_m)=1$ if importing country i belongs to the RTA and the exporting country j , to the ROW, otherwise 0 (capturing bloc imports from the ROW);
- (iii) $D_x (\alpha_x)=1$ if exporting country j belongs to the RTA and the importing country i to the ROW, otherwise 0 (capturing bloc exports to the ROW).

A positive coefficient for D_1 , i.e. $\alpha_1 > 0$, reveals that there is more intra-bloc trade than predicted by the model. An additional inference is that that higher intra trade comes in as a substitute for domestic production or exports from the ROW. Hence, to conclude on this basis whether or not the results correspond to trade creation or trade diversion is difficult, the signs of the coefficients α_m and α_x also need to be examined. Thus, $\alpha_1 > 0$

along with a lower propensity to import from the ROW ($\alpha_m < 0$) indicates diversion, and if the increase in intra-regional trade is entirely offset by a decrease in regional imports from the ROW, there is pure trade diversion. Hence, if intra-regional trade increases more than the fall in imports from the ROW, there is both trade creation and trade diversion. Similarly with $\alpha_1 > 0$ and $\alpha_m \geq 0$ there is pure trade creation. Inferences about welfare of nonmembers can be drawn by Comparing α_1 and α_x . For example, $\alpha_1 > 0$ and $\alpha_x < 0$ would indicate a dominant export diversion and hence a decrease in welfare for non-members. To summarize, in an RTA, [$\alpha_1 > 0$, $\alpha_m \geq 0$ and $\alpha_x \geq 0$] indicates pure trade creation while [$\alpha_1 > 0$, $\alpha_m < 0$ and $\alpha_x < 0$] indicates trade diversion in terms of imports.

In the current analysis effects of ten FTAs, including the two bilaterals, have been considered. In order to assess the total effect of these bilaterals, trade between members and non-members has been considered even before the implementation of the agreements. This is because it is likely that there would be an increase in trade between members a few years just before the official implementation of an agreement, signaling an “anticipation effect”. For clearer analysis it was necessary to look at intra-FTA trade before the implementation of the agreement to avoid an “artificial break point”.

Another important point is that the analysis includes only a subset of countries (see Appendix A). Since all members of a particular FTA (excluding the bilaterals) have not been included in the dataset, the coefficients of an FTA dummies leave a margin for error. However, using dummies for different FTAs was essential, as higher trade between members (i.e. those included in the dataset) could not have been attributed to any other factor. If these dummies had not been included, the other coefficients would have been biased.

Taking into account all the theory given earlier, the gravity equation to be estimated boils down to:

$$\ln M_{ij} = \beta_0 + \beta_1 \ln \text{gdp}_{ij} + \beta_2 \text{pop}_j + \beta_3 \text{distcap}_{ij} + \beta_4 \text{com_lang} + \beta_5 \text{adj} + \beta_6 \text{comcol} + \beta_7 \ln \text{abspcygap} + \beta_8 \ln \text{mul_res_i} + \beta_9 \ln \text{mul_res_j} + \sum_k \phi_k D_k(\alpha_1) + \sum_k \delta_k D_k(\alpha_m) + \sum_k \rho_k D_k(\alpha_x) + \omega_{ij}$$

where $[\gamma/\varphi(1-\sigma)]1/Y_w$ is absorbed in the constant term, ω_{ij} is the error term (assumed to have a standard normal distribution), and with the expected signs.

In the above equation, gdp_{ij} is the product of the GDPs of the exporter and importer countries, pop_j is the exporter country's populations, $distcap$ measures the distance between the two countries' capitals (or economic centers) and in order to minimise worries about the effects of omitted variables, dummies have been put in for common border (adj), common colonizer ($comcol$) and common language (com_lang). The mul_resist term denotes multilateral resistance. The $linder$ term or the term measuring the impact of similarity of per capita incomes ($abspcygap$) has also been included. In addition, 3 dummies per FTA, i.e. 30 FTA dummies, have been included.

As regards the expected signs, it is expected that the coefficient of gdp_{ij} would be positive. This is because a high level of income in the importing country would imply a higher level of imports. A high level of income in the exporting country would, on the other hand, indicate a high level of production, which increases the availability of goods for export. The coefficient estimate for population of the exporters, pop_j , may be negatively or positively signed, depending on whether the country exports less when it is big (absorption effect) or whether a big country exports more than a small country (economies of scale). The distance coefficient is expected to be negative since it is a proxy of all possible trade costs. Frankel, Stein, and Wei (1995 and 1996) showed theoretically that in a world with symmetric economies two countries that are "natural" trading partners (i.e., close in distance) would benefit more from an FTA than two countries that are "unnatural" partners (i.e., far apart). This suggests that the gains from an FTA are greater the smaller the distance between two countries due to more trade creation.

The coefficient of common border is expected to be positive as it is expected that countries sharing the same border would engage in larger volumes of border trade. Since the dummies for common language and common colonizer are proxies for countries'

cultural affinity, it is expected that their coefficients would also be positive. The dummy for multilateral resistance should have an expected negative coefficient. This is because countries with many nearby sources of goods, i.e. with high value of *mul_resist*, will import less from one particular source. Also, for the Linder Hypothesis to hold true, the coefficient of *lnabspcygap* would have to be negative indicating that countries with lesser differences in per capita incomes would trade more.

4.2 Data and estimation

The model is estimated using bilateral imports data for 50 countries over the period 2000-05. The dataset is an unbalanced panel with a maximum of 14700 observations ($50 \times 49 \times 6$). These 50 countries include the four countries in question and 46 other countries that have highest trade levels with these four countries. The bilateral import data has been collected from the Direction of Trade Statistics (DOTS) of the International Monetary Fund (IMF). Data for GDP and population have been amassed from the World Bank World Development Indicators (WDI). The data for distance, common language, common colonizer and common border has been collected from Centre D'etudes Prospectives Et D'informatins Internationales (CEPII) website.

4.2.1 Panel Specification

It has been argued by many papers that panel specification is unambiguously better than pooled OLS. Important empirical papers observe (Polak (1996), Matyas (1997), and Bayoumi and Eichengreen (1997)) that regional dummy variables in cross-country estimates capture all effects specific to the importing or exporting countries not captured by the explanatory variables included in the OLS equation. Thus, the RTA dummy variables capture the effects of historical, cultural, ethnic, political or geographical factors in addition to the trade effects of the RTA. This is erroneous since the dummy variables should ideally isolate trade diversion and trade creation effects. Hence, omitting countries' heterogeneity, or the effects specific to country-pairs in bilateral trade relations, may introduce a bias in the estimated coefficient. By contrast, the panel data method enables the identification and isolation of country-pair specific effects and thus, is far superior. In the model specified for panel data, a bilateral term μ_{ij} specific to each

pair of countries and common to each year (and different according to the direction of trade $\mu_{ij} \neq \mu_{ji}$) is included. Thus the regression equation is specified as-

$$\ln M_{ijt} = \alpha_0 + a_t + \beta_1 \ln \text{gdp}_{ijt} + \beta_2 \ln N_{jt} + \beta_3 \ln \text{mul_resist}_{it} + \beta_4 \ln \text{mul_resist}_{jt} + \beta_5 \text{Indistcap} + \beta_6 \text{com_lang} + \beta_7 \text{adj} + \beta_8 \text{comcol} + \beta_9 \ln \text{abspcygap} + \sum_k \phi_k D_k(\alpha_1) + \sum_k \delta_k D_k(\alpha_m) + \sum_k \rho_k D_k(\alpha_x) + \mu_{ij} + v_{ijt}$$

α_0 : effect common to all years and pairs of countries (constant);

a_t : effect specific to year t but common to all the pairs of countries to capture common shocks;

μ_{ij} : effect specific to each pair of countries and common to all the years;

v_{ijt} : error term assumed to be log-normally distributed.

4.2.2 Econometric Methods

However, even in panel specification there is a choice to be made between random effects and fixed effects model. The fixed effects within estimator is obtained from a transformed model. This is a regression model in deviations from individual means and it does not include individual effects. Since, the fixed effects within equation treats the bilateral specific effects as fixed, it gives unbiased parameter estimates for time-varying variables. However, since the regional dummies are defined over the whole period of the FTA, these variables vary only when there are changes in membership during the period. So the fixed-effects model does not allow the estimation of the effects of FTAs with fixed membership.

Hence, modeling the bilateral effects as random effects is more appropriate. In the absence of correlation between the explanatory variables and the specific bilateral effects (μ_{ij}), the Generalized Least Squares (GLS) estimation provides consistent estimates of the coefficients. However, there is a possibility that the GDP variable may be correlated with bilateral specific effects. In fact, if cultural, political or historical ties between countries increase their propensity to form a trade agreement as well as their bilateral volume of trade then there would also be a bias in the coefficient for intra-RTA trade. The Hausman

Test (1978), based on differences between within and GLS estimators, confirms whether that GLS estimator is biased and that some explanatory variables are endogenous. The usual way to deal with this issue is to consider instrumental variables estimation such as that proposed by Hausman and Taylor (henceforth HT) (1981). In the current study the Hausman test, based on differences between within and GLS estimators, reveals a Chi-square(16) statistic equaling 331.75. This value is highly significant. Hence, this test rejects the null hypothesis according to which there should be no correlation between the bilateral specific effects and the explanatory variables. The GLS estimator is thus biased, and the use of the HT method is justified.

4.2.3 Hausman-Taylor Estimator

The HT estimator is based upon an instrumental variable estimator that uses both the between and within variation of the strictly exogenous variables as instruments. More specifically, the individual means of the strictly exogenous variables are used as instruments for the time-variant variables that are correlated with the bilateral specific effects. Hence, Hausman and Taylor (1981) estimator provides an alternative that avoids the ‘all or nothing’ choice between FE and RE. The resulting instrumental variable estimator explicitly accounts for the fact that some explanatory variables are correlated with the country-specific effects α_i and others not.

To describe the general approach, consider a linear model with four groups of explanatory variables

$$Y_{it} = \beta_0 + X_{1,it} \beta_1 + X_{2,it} \beta_2 + Z_{1i} \gamma_1 + Z_{2i} \gamma_2 + \mu_i + v_{it}$$

The HT estimator assumes that some of the explanatory variables are correlated with α_i , but none with v_{it} . Their approach is based on the notion that the regressors can be divided into four categories: time varying (X) / time invariant (Z) and uncorrelated (index 1) / correlated with v_{it} (index 2). Thus, $X_{2,it}$ are those time-varying regressors that are correlated with μ_i , but not with v_{it} .

The HT approach consists in using the explanatory variables that are uncorrelated with α_i as instruments for the correlated explanatory variables. That is, $X_{2,it}$ is instrumented by its deviation from individual means (as in the FE approach) and Z_{2i} is instrumented by the individual average of $X_{1,it}$. The resulting HT estimator estimates the effects of time-invariant variables, even though the time-varying regressors are correlated with μ_i . The main advantage of the HT approach is that external instruments do not have to be used. The HT approach allows the estimation of the impact of time-invariant effects on bilateral exports and imports, and results in coefficients that are more efficient than the FE approach (Slootmaekers (2004), Carrere (2002)).

In order to obtain the coefficients of the time-invariant variables using the HT estimation, the first step consists of determining which variables are uncorrelated with the unobserved country effects (*'doubly exogenous'* variables) and which are correlated (*'singly exogenous'* variables). It is known that the unobserved country-characteristics include several elements that are difficult to measure, e.g. linguistic and cultural links, and history. Thus, it follows from above that *com_lang* is correlated with the unobserved individual effects, since common language is actually used as a proxy for cultural, historical, and linguistic linkage. In addition, population of the exporting country could also be considered as *singly exogenous*. There is also a definite possibility that the factor for difference in per capita income, i.e. *lnabspcygap*, is also *singly exogenous*. It is expected that countries with similar levels of income would be trading more. This could be due to taste similarities, similarity of technological advancements etc.

According to Egger (2000), GDP and distance are the most important sources of correlation between explanatory variables and unobserved country-effects. Even, "the FTA dummy variables may be endogenous by being correlated with unobservable (omitted) variables that are correlated also with the decision to trade" (Baier and Bergstrand, 2002). Thus, theory dictates that the HT regression should include *lngdpij*, *lnpopj*, *lnabspcygap*, *Indistcap*, *com_lang* and the FTA dummies as *singly exogenous* variables. The final decision about which variables are *doubly exogenous* and which are

singly exogenous rests upon a comparison of FE estimates with HT estimates and requiring that the latter should not differ too much from the former.

For a correct estimate, the HT regression has been run with various combinations of the regressors assumed to be singly exogenous. Different combinations of regressors have been tried so as to minimize the Wald Chi-square statistic and also reduce the difference between the FE and HT coefficients. Repeated estimates reveal *lngdpij*, *Indistcap*, *com_lang* and the 2 bilateral intra-trade dummies to be singly endogenous variables.

4.3 Results of the Random Effects and Hausman-Taylor Estimator

The results of the two estimates are given in Table 4.1 below:

Table 4.1: Comparison of results of the RE and HT estimation techniques

Explanatory variables	RE		HT	
	Coefficient	t-ratio	Coefficient	t-ratio
<i>lngdpij</i>	0.90**	50.1	0.56**	17.54
<i>lnpopj</i>	-0.02	-0.76	-0.15	-0.85
<i>Indistcap</i>	-0.88**	-15.87	-1.63*	-1.17
<i>com_lang</i>	0.78**	7.91	-7.03	-0.81
<i>adj</i>	0.42**	2.24	2.54	0.71
<i>comcol</i>	0.65**	4.55	2.02	0.93
<i>lnabspcygap</i>	-0.03**	-2.3	-0.02*	-1.76
<i>lnmul_res i</i>	-0.12**	-2.34	-0.72**	-3.91
<i>lnmul_res j</i>	0.09*	1.58	0.84**	4.47
<i>naftadum</i>	-0.55	-0.92	-0.20	-0.06
<i>naftadum_x</i>	-1.06**	-7.37	1.04	0.71
<i>naftadum_m</i>	-0.25*	-1.76	1.16	0.85
<i>eudum</i>	1.18**	5.63	1.83	0.85
<i>eudum_x</i>	1.34**	11.27	2.93**	5
<i>eudum_m</i>	0.53**	4.37	0.60	1.02
<i>aseandum</i>	0.96**	4.24	-2.12	-0.88
<i>aseandum_x</i>	0.35**	3.42	-0.46	-0.66
<i>aseandum_m</i>	0.03	0.31	-0.86**	-1.23
<i>andeandum</i>	1.17*	1.95	4.97	0.73
<i>andeandum_x</i>	-0.39**	-2.89	-0.52	-0.52
<i>andeandum_m</i>	-0.16	-1.16	0.24	0.24
<i>saarcum</i>	0.12	0.26	-1.66	-0.53

saarc dum_x	0.24*	1.8	0.41	0.56
saarc dum_m	-0.09	-0.74	0.09	0.13
apecdum	2.18**	16.11	4.28**	4.41
apecdum_x	1.29**	13.25	2.44**	3.55
apecdum_m	0.62**	6.32	1.70**	2.65
mercosurdum	0.79*	1.33	1.25	0.39
mercosurdum_x	0.17*	1.24	0.43	0.45
mercosurdum_m	-0.38**	-2.81	0.51	0.54
gccdum	0.51	0.83	4.10	0.68
gccdum_x	0.23*	1.64	-0.60	-0.5
gccdum_m	0.24*	1.78	-0.44	-0.42
indothaidum	0.18	0.42	0.21	0.55
indothaidum_x	0.18*	3	0.20*	3.46
indothaidum_m	-0.01	-0.12	0.02	0.32
uschiledum	0.07	0.17	0.05	0.13
uschiledum_x	0.12**	2.01	0.10*	1.79
uschiledum_m	-0.09*	-1.45	-0.07*	-1.25
Year	-0.05**	-9.09	0.02**	2.88
constant	55.85	5.91	-51.58	-3.44
Number of observations	14700		14700	
Number of groups	2450		2450	
Wald Chi2 (40)	10524.06		2158.78	

Note: ** and * denote significance at 1% and 5% levels respectively

Hausman-Taylor estimator. Endogenous variables= lngdp_{ij}, Indistgap, com_lang, and the two bilateral intra-trade dummies

A simple glance at the two results suffices to show that for most variables the trend direction between the estimates is the same. The numerical value of the coefficients as well as the statistical significance levels, however, differ widely. For example, in the RE results most of the variables appear to be significant at 1% or 5% levels. Coefficients with significant t ratios are on the other hand much fewer in the HT estimator results. The following sub-section would concentrate upon interpreting the results of the Hausman-Taylor estimator. Only major differences between the HT estimator and the RE estimator would also be remarked upon.

The HT estimates show lngdp_{ij} to be the single most important factor explaining bilateral trade. The results show the imports-GDP elasticity to be 0.56. The coefficient of lnpop_j

is, on the other hand, found to be negative and insignificant. Thus, the population of the exporting country does not have too much impact on import flows.

The coefficient of distance between the two trading countries is found to be negative as anticipated and also significant, at 5% levels of significance, in explaining bilateral import flows. Interestingly, the coefficient of common language is found to be negative and insignificant. Since common language is included as a proxy for cultural affinity, its positive value had been expected. The RE results, on the other hand, finds the coefficient of common language to be positive as well as highly significant at 1% levels. The coefficient of common border (adj) is positive as expected. The coefficient for common colonizer is also positive. It should be noted that both the above factors are found to be highly significant in explaining bilateral trade in the RE model.

Interestingly, the coefficient for the absolute gap in per capita incomes of trading partners, i.e. $\ln \text{abspcygap}$, is negative as hypothesized. It lends credence to the supposition that, countries with the same level of income trade more with each other. Thus, as the gap between per capita incomes reduce; a country imports more from the partner country. The coefficient is also significant at 5% levels of significance.

It had been expected that the coefficient for multilateral resistance would be negative for both trading countries. The estimates however, tell a different story. Though both the coefficients for multilateral resistance are highly significant (1% levels), the coefficient is found to be negative for the importing country but positive for the exporting country. This result implies that a country's "nearness" to other countries leads it to import less and export more from a nearby source.

As regards FTA dummies, only a few of the coefficients are found to be significant. The HT estimates suggest that between 2000-05, the formation of the NAFTA has led to a 17.8% ($=100*(e^{-0.20}-1)$) drop in imports between agreement members. All other coefficient values can be interpreted similarly. Results show that there been a remarkable

increase in exports to NAFTA non-members. The propensity to import from NAFTA non-members has also improved greatly.

Estimates also show that in the concerned time period, EU has been largely trade creating. The coefficients for intra-trade display an increase of an astounding 523.5%(=100*($e^{1.83}-1$)). Even the extra-trade dummies are positive and highly significant (for eudum_x). This means that not only has intra-trade increased, the propensity of the EU members (those considered in the dataset) to export to as well as import from the ROW has also increased. In this way it is trade creating as well as trade expanding.

Nowhere has the difference between the RE estimates and the HT estimates been as clearly visible, as it is in the case of ASEAN. The HT estimate shows that all ASEAN dummy coefficients to be negative. The model thus, implies that in the period under consideration, ASEAN has been purely trade diverting as well as trade contracting, since both imports as well as exports of the partner countries are falling. This is contrary to expectation and needs to be investigated further. The dummy for imports from the rest of the world is significant at 1% levels of significance. The RE estimate, on the other hand, paints a diametrically opposite picture. It shows ASEAN to be both trade creating as well as trade expanding in the relevant time period.

The Andean community coefficients suggest that while there has been a whopping increase in intra-trade between the Andean community members, its exports to the ROW have been declining overtime. Since its imports from the ROW have been increasing overtime. It would be safe to conclude that the FTA has been primarily trade creating.

It can be said that the case of SAARC is different from the lot as it is not merely a trade agreement but rather a regional cooperation association. Despite the agreement, SAARC members have seen a major fall in the amount of intra-trade to the tune of 81.0%(=100*($e^{-1.66}-1$)). SAARC imports from the rest of the world have, on the other hand, witnessed a rise. SAARC exports to the rest of the world have also increased by a very respectable 50.9%.

The case of APEC is different from the others as it is only example of an intra-continental FTA included in the current dataset. All the three dummy coefficients for this FTA are large, positive and highly significant. In fact, in the period from 2000 to 2005 there has been a spectacular increase in intra-trade between members. APEC export to and imports from the ROW have also been rising overtime. This implies that APEC has both been trade creating as well as trade expanding in nature.

The dummies for Mercosur, like APEC, show an undoubtedly rising trend. Though the coefficients for the three dummies are not comparable as high or significant. The coefficient values indicate that in the time period 2000-05, Mercosur has been trade creating as well as trade expanding.

For the GCC, dummy for measuring intra trade reveals a high positive coefficient. The other two variables i.e., the extra-trade dummies, however, display a negative trend. This implies that there has been some trade diversionary effect of the GCC. But, since the coefficient for intra-trade is greater than that for imports from the rest of the world, effect of GCC has not been purely trade diverting.

The last remaining two cases are those of Indo-Thai FTA and US-Chile FTA. Since these two are central to the analysis they will be taken up together and in detail. Considering the India-Thai agreement first, it can be noticed that there has been an unambiguous increase of 23.4%(=100*($e^{0.21}$ -1)) in intra trade between the two countries. Additionally, even the coefficient for imports from the rest of the world shows a positive value. This implies that the agreement has been purely trade creating. The bilateral agreement members have also been increasing their exports to the ROW by 21.6% overtime. This fact is clearly reflected by positive and significant (5% levels) coefficient of dummy `indotheidum_x`. The RE estimate also exhibits a similar result. The only difference is that it shows that there has been a very small amount (-0.8%) of trade diversion effect in the agreement as well.

The picture of the US-Chile FTA is diametrically different and somewhat shocking. The estimates show that there has been a small increase in intra trade between the two members after signing the agreement. The HT model estimates indicate the increase to be 5.0%(=100*(e^{0.05}-1)). The extra-trade dummies, however, turn the story around. The dummy for FTA members' imports from the rest of the world shows an overpowering 6.8% decline. This leads to the conclusion that the US-Chile agreement has been purely trade diverting. The coefficient for members' exports to the ROW, on the other hand, shows a rise of 10.6%. The RE estimates also tell a similar tale.

4.4 Summary

The gravity equation is a highly sophisticated tool to evaluate the effects of an FTA. The equation models trade as a function of GDPs, populations, distance, cultural similarities, etc. Putting in dummies for an FTA into the gravity model and examining its coefficient enables the effect of an FTA to be observed.

The gravity model shows that for both India-Thailand and US-Chile agreements there has been increases in intra trade. The two bilaterals, however, differ in their impact on extra trade. For both India-Thailand as well as the US-Chile agreement there may be some degree of trade diversion involved, but in the US-Chile case, the trade diversion effect is predominant. This evidently proves that while the India-Thailand agreement has been mainly trade creating, the US-Chile agreement has been purely trade diverting.

As far as the other agreements are concerned, the HT estimator doesn't show any definitive trends that allow conclusions being made about the welfare effects of North-South and South-South FTAs. Results show that barring ASEAN and SAARC, the other South-South agreements included in the study are net trade creating. These include the Andean community, Mercosur and GCC. The HT estimator also reveals that the other North-South agreements included in the model, i.e. the NAFTA and the APEC, have displayed differing trends. While the NAFTA members have witnessed a fall in trade amongst themselves, APEC has proven to be both trade creating as well as expanding.

EU, the only example of North-North agreement considered in the sample, has shown a positive trend with respect to trade creation as well as expansion.

Appendix A: Countries and FTAs Included In the Dataset

The 50 countries considered for estimation of the gravity model are as follows-

Angola, Argentina, Australia, Bangladesh, Belgium, Brazil, Cambodia, Canada, Chile, China, Hong Kong, Macao, Colombia, Ecuador, Finland, France, Germany, India, Indonesia, Iran, Ireland, Israel, Italy, Japan, Korea, Malaysia, Mexico, Myanmar, Netherlands, Nigeria, Oman Pakistan, Peru, Philippines, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sri Lanka, Sweden, Switzerland, Thailand, Turkey, United Arab Emirates, United Kingdom, United States, Venezuela, Vietnam and Yemen.

The FTAs and its members covered in the dataset were as follows-

1. NAFTA- Canada, Mexico and United States
2. EU- Belgium, Finland, France, Germany, Ireland, Italy, Netherlands, Spain, Sweden, Switzerland and United Kingdom
3. ASEAN- Cambodia, Indonesia, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam
4. Mercosur- Argentina, Brazil and Venezuela
5. Andean community- Colombia, Ecuador and Peru
6. SAARC- Bangladesh, India, Pakistan and Sri Lanka
7. APEC- Argentina, Australia, Canada, Chile, China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Mexico, Peru, Philippines, Russia, Singapore, Thailand, United States and Vietnam
8. GCC- Oman, Saudi Arabia and United Arab Emirates
9. India-Thailand FTA- India and Thailand
10. US-Chile FTA- Chile and United States

**Chapter 5: Direction and Composition of
Trade**

Chapter 5: Direction and Composition of Trade

The previous chapter has primarily dealt with measuring the effects of the two bilaterals using econometric tools. The current chapter compares the actual and relative trade figures for both of these bilaterals. The chapter is divided into three parts: the first deals with the direction of trade for the four countries in question, i.e. Chile, India, Thailand and US, and the second deals with the composition. The third subsection assesses the efficiency of production of different commodities that figure significantly in the export bundle.

5.1 Direction of trade

As far as absolute figures go, Table 5.1 depicting the direction of trade, clearly reveals the increase in trade flows between the respective bilateral FTA partner countries. For example, between 2000 and 2005 the flow of exports from Chile to the US nearly doubled. The increase in exports is especially pronounced in the period after signing the FTA. From the US's side too the flow of exports to Chile has been increasing. However, the flow has been fluctuating and does not reveal a clear upward trend like the flow from Chile.

The data for Indian exports to Thailand shows a significant jump in figures after 2003, i.e. after the signing of the agreement. It is, however, a matter of contention whether the increase has been primarily due to the signing of the bilateral agreement, since the Early Harvest Scheme (EHS) still comprises of only a small subset of the total product lines traded. From Thailand's side too a marked improvement can be noticed after 2003. As compared to the trade figures in 2000, Thai exports to India have virtually tripled. Overall, the data in Table 5.1 reveals a greatly increased relative importance of intra-trade.

Table 5.1: Direction of trade for the four countries (2000-2005)

Exporter	Year	World	Chile	India	Thailand	USA
Chile	2000	19295.9	-	123.1	37.0	3243.3
	2001	18554.6	-	111.1	45.4	3428.4
	2002	18285.1	-	179.7	50.8	3484.4
	2003	21463.6	-	222.3	56.4	3467.7
	2004	32547.6	-	426.3	138.2	4567.9
	2005	39544.2	-	493.1	130.7	6248.4
India	2000	42625.8	98.5	-	510.0	9083.3
	2001	45227.2	68.4	-	611.7	9355.0
	2002	50496.3	74.9	-	691.7	10308.3
	2003	61118.5	80.3	-	801.6	11363.9
	2004	75385.2	99.5	-	850.0	12839.3
	2005	97918.1	140.4	-	1022.0	16362.5
Thailand	2000	68962.7	76.8	566.0	-	14705.7
	2001	65113.2	64.3	481.9	-	13245.6
	2002	68849.8	96.0	413.2	-	13521.8
	2003	80318.2	109.0	640.9	-	13668.8
	2004	96242.2	104.0	910.3	-	15497.7
	2005	110174.0	122.1	1519.8	-	16949.9
USA	2000	772124.0	3381.8	3652.7	6537.8	-
	2001	731002.0	3130.9	3764.2	5995.2	-
	2002	693226.0	2612.0	4098.0	4859.6	-
	2003	723704.0	2719.3	4986.4	5841.8	-
	2004	816471.0	3624.6	6095.0	6363.0	-
	2005	904257.0	5197.7	7957.9	7233.1	-

Source: DOTS, IMF

Following from the above table, other tables can be created to look at the figures for balance of trade for the two bilaterals. Table 5.2 shows that US has had a trade deficit with Chile that has been increasing overtime. The amount of trade deficit has actually doubled from 1.7 billion to 3.5 billion in just three years. At first it would seem like evidence to prove that north south agreements definitely work. However, recalling results from the previous chapters it should be remembered that the US has been maintaining a large trade deficit vis-à-vis most countries of the world. A look at the changing Chilean share in US markets would provide a better tool for analyzing the success of the agreement.

Table 5.2: The value of bilateral trade between US and Chile

	2001	2002	2003	2004	2005	2006
US Exports	3130.9	2612.0	2719.3	3624.6	5197.7	6789.9
US Imports	4083.1	4350.2	4323.1	5421.5	7446.4	10291.1
BOT	-952.2	-1738.2	-1603.8	-1796.9	-2248.7	-3501.2

Source: DOTS, IMF

From the India-Thailand standpoint the story is quite clear. Table 5.3 shows that in all the five years of data available, India has remained in trade deficit with respect to Thailand. However, the mammoth jump in the negative balance after the formation of the FTA (i.e. after 2004-05) is clearly visible. In fact, the figure jumped from 18 million to 104.7 in a single year. The extent of trade deficit has in turn generated a large amount of hue and cry in Indian trading circles that feel that they are being out-competed by the cheaper Thai exports.

Table 5.3: The value of India-Thailand EHS trade

	2001-02	2002-03	2003-04	2004-05	2005-06
India Exports	33.0	36.5	65.4	47.2	88.1
India Imports	34.1	48.5	83.6	152.0	274.9
BOT	-1.1	-12.0	-18.2	-104.7	-186.9

Source: Department of commerce, GOI

5.1.1 Trading Patterns

This section is devoted to analyzing the changes in share of imports and exports. The above table clearly outlines that absolute figures have been increasing; this section investigates whether or not relative shares have been changing as well.

Since both bilaterals are quite new in origin, the evidence on FTA effects is available only for 2 years. Thus, the picture is still quite hazy. This will however change with time, and with the data that is available at least the preliminary trends of trade flows can be depicted. The following tables show the shares of Chile in US's exports and imports and the shares of Thailand in India's exports and imports.

Table 5.4 shows that despite the absolute increases, trade with Chile till now forms a miniscule part of US's trade. Still, an emerging positive trend is the improvement in Chile's share in total US imports. As far as US exports to Chile are concerned, the difference before and after the signing of the FTA is clearly visible. In the Chilean imports case, however, the major break came in the year 2005. The average share of Chile in exports and imports was 0.44% and 0.36% respectively. Even in the two years after the formation of the FTA, the share of Chile did not cross 1%. Thus, it can be concluded from the following data that despite the formation of the FTA, Chile has not been able to make a dent in US markets.

Table 5.4: Share of Chile in US exports and imports

	Share of Chile					
	2001	2002	2003	2004	2005	Average
US Exports	0.43%	0.38%	0.38%	0.44%	0.57%	0.44%
US Imports	0.35%	0.36%	0.33%	0.36%	0.54%	0.36%

Source: USITC

Table 5.5 shows the case for India and Thailand. Data reveals that the share of Thailand in India's exports has not been increasing much. In fact, in the first year of the formation of the bilateral, India's exports to Thailand actually dipped. This was however, made up in the next year i.e. 2005. The share of Thailand in Indian imports, on the other hand, has shown a consistently upward trend. The increase after 2003 is clearly visible. Within two years, i.e. from 2003 to 2005, the share of Thailand has virtually doubled. It should be kept in mind that all of this is occurring in a background of constantly growing economies, and thus, maintaining and increasing the share in imports is no mean feat.

Table 5.5: Share of Thailand in India's EHS exports and imports

	Share of Thailand					
	2001	2002	2003	2004	2005	Average
India EHS Exports	2.63%	2.24%	2.95%	1.83%	3.20%	2.57%
India EHS Imports	2.60%	2.88%	3.85%	4.49%	5.97%	3.96%

Source: Department of commerce, GOI

5.1.2 Trade Intensity Index

An important point to be noted is that the above-mentioned figures are bare statistics. These need to be combined to construct relevant indices so that changes in trade can be appropriately studied. An important measure in this regard is the trade “intensity” index proposed by Yeats (1998). Trade intensity indices provide insights into the nature and importance of changes in bilateral trade flows. These indices can highlight the relative importance of even minor changes in trade between countries that have relatively small global trade shares. If the trade intensity index takes a value above (below) unity, the countries have greater (smaller) bilateral trade than would be expected based on the partner's share in world trade. When computed for a given single point of time the measure is of obvious limited utility since it does not incorporate the influence of time varying factors. However, analysis of changes in these indices over time can show whether two countries are experiencing an increased, or decreased, tendency to trade with each other. Thus, the magnitude of the change in this index can provide a useful "yardstick" for assessing the importance of the expansion of intra-trade.

The intensity of trade index (I_{ij}) is defined for country i 's exports to country j , as the share of i 's exports going to j (X_{ij}/X_i) relative to the share of j 's imports (M_j) in world imports (M_w). That is,

$$I_{ij} = (X_{ij} / X_i) / (M_j / M_w)$$

Table 5.6 reports the intensity ratios, which were computed using the direction of trade statistics for the member countries of the two bilateral agreements. The table provides the changes overtime in the index. It also provides the average for all years as well as the average since the signing of the agreement.

It is apparent from Table 5.6 that Chile has heavy dependence on the US for its trade flows. The rise in the intensity of trade index is quite clear up to 2003, during which time it peaked in 2002. However, after the signing of the FTA, it would seem that the tendency to trade with US has declined somewhat. Though, even at the current levels the figures are quite impressive. From the US's point of view, Chile comprises of an infinitesimal

part of its trade balance. Thus even though there has been some increase in the index, the increase is too small to be significant.

In the Indian case, however, there has been a fall in the index. The index had maintained a level above unity till 2004. However, in 2005, the tendency to trade with Thailand fell below unity. This signifies that Indian exports had a smaller share in Thailand's imports than can be explained by the increase in the share of Thailand in global imports. For Thailand, however, the case is just the opposite. It can be seen that the index levels had been maintained at roughly the same levels from 2000 to 2004. However, in 2005 the share of Thai exports in our import basket rapidly increased. It increased from below unity to just above unity. This means that Thai exports have a higher share in bilateral trade than could be expected based on India's share in world trade. A point to remember is that the trade intensity ratio for these two countries is for all commodity lines and not just the EHS items.

Table 5.6: Trade Intensity Index

Intensity of trade Index	2000	2001	2002	2003	2004	2005	Avg.(all years)	FTA avg.
Chile to US	59.8	66.2	74.4	64.6	53.7	52.5	61.86	53.10
US to Chile	0.023	0.023	0.021	0.022	0.028	0.036	0.03	0.03
India to Thailand	1.6	1.5	1.5	1.4	1.1	0.8	1.31	0.95
Thailand to India	0.9	0.8	0.6	0.8	0.9	1.3	0.88	1.10

Source: Direction of Trade Statistics (DOTS), IMF

Table 5.7 shows the other side of the coin, i.e. how the rest of the world was affected due to the formation of the two bilaterals. A simple glance at the last column would show that the imports from the rest of the world had also been increasing through out the period after the formation of the FTAs. Using this table together with the earlier tables on intra-trade figures, an inference can be made about the sign of $D_m(\alpha_m)$ (defined in the previous chapter). Since in both FTAs the value of intra-trade is rising as the imports from the rest of the world is increasing, it can be said that from the traditional Viner-Meade approach

both the agreements have been trade creating. This is contrary to the results derived in the earlier gravity model chapter.

In this regard, it should be noted that these figures have been taken in conditions of a growing world economy. Hence, it is expected that in a growing world economy shifts in demand and supply would result in increased or reduced shares, rather than in absolute declines. These imply that the scope of traditional FTA theories in concluding the presence of trade creation is limited.

Table 5.7: Imports from Rest of the World

	2000	2001	2002	2003	2004	2005	FTA average growth rate
Chile	15.2	14.9	14.4	16.8	21.3	27.5	27.8%
US	1234.6	1176.0	1198.0	1300.9	1520.0	1725.0	15.2%
India	50.0	58.5	58.5	73.5	99.0	133.5	34.8%
Thailand	60.6	60.7	63.4	74.5	93.1	116.8	25.2%

Source: Direction of Trade Statistics (DOTS), IMF

5.2 Composition of Trade

This section lists the commodities that have proven to be the most important in intra-trade since the FTA was signed. It also shows their share in the composition of the export/import basket overtime. The tables given below list the product groups that account for the highest shares in the bilateral intra-trade flows. For the US, the data is available for three years, i.e. 2004,2005 and 2006. The commodities have been sorted on the basis of their value in 2006.

In the time period under consideration, the primary export commodity from the US to Chile was nuclear reactors, boilers and machinery. The exports of this category were valued at 1.4 billion in 2006. The other important commodities, in order of importance, were mineral fuels (US\$1.1bn), aircrafts (US\$0.9bn), vehicles (US\$0.6 bn) and electrical equipments (US\$ 0.5 bn). On the imports side, the commodity of primary interest was copper. In 2006, US imported copper products worth US\$ 4.1 bn. The other important

commodities were edible fruits (US\$ 1.5 bn), wood articles (US\$ 1.1 bn), fish (US\$ 1.0) and pearls (US\$ 0.4 bn).

It should be noted that the increase in US exports of electronic equipment and transportation equipment had been largely expected. The USITC investigation (2003) had predicted that with the opening up of trade between US and Chile, US exports of transportation equipment and electrical equipment would increase by 34.8% and 17.2% respectively. The report also predicted that US imports from Chile would grow the maximum in textile, apparel and leather goods. However, the derived high percentage changes in these goods could have been due to the small base effect.

Another important fact noticed is that though the bilateral agreement with the US has been in force for 3 years, there is no signs of Chilean export diversification. The top five imported commodities are still primary commodities involving little or no degree of processing and copper is still the single largest exported commodity.

Table 5.8: Top Five exported and imported commodities from Chile to the US

US exports to Chile (in US\$mn.)				US imports from Chile (in US\$mn.)			
Commodity	2004	2005	2006	Commodity	2004	2005	2006
Nuclear reactors, boilers, mchy & m (84)	1115.4	1294.6	1422.5	Copper and articles thereof. (74)	743.7	1721.4	4171.2
Mineral fuels, oils & product of th (27)	324.3	867.4	1068.7	Edible fruit and nuts; peel of citr (8)	1190.2	1344.9	1535.2
Aircraft, spacecraft, and parts the (88)	59.3	334.6	916.3	Wood and articles of wood; wood ch (44)	1006.7	980.2	1138.6
Vehicles o/t railw/tramw roll-stock (88)	303.5	535.0	628.7	Fish & crustacean, mollusc & other (3)	779.8	872.3	1039.6
Electrical mchy equip parts thereof (85)	355.2	435.7	510.5	Natural/cultured pearls, prec stone (71)	146.4	260.7	425.6
Total	3624.7	5197.7	6789.9	Total	5421.5	7446.3	10291.1

Source: USITC

Note: Two-digit HS codes in parentheses

Table 5.9 shows a similar analysis done for exports and imports to India from Thailand for the EHS commodities. The data is available for two years, i.e. 2004-05 and 2005-06. The commodities have been sorted on the basis of their value in 2005-06.

Data shows that the product group of gear boxes (870840) was the most important export item from India to Thailand. In 2005-06 exports in this commodity line totaled US\$31.5 million. The other important exported items were iron and steel products (US\$ 8.7 mn), jewellery (US\$ 5.5 mn), aluminium oxides (US\$5.4 mn) and aluminium ores (US\$ 5.2 mn). A noticeable fact in the data shown below is that after gear boxes; the next most important commodity is valued at almost one-fourth its level.

From the imports side, the commodity line that has the highest value in the Indian EHS imports basket is reception parts for TV. This commodity's imports are valued at US\$ 85.9 mn. It is noticeable that the value of reception parts is more than double of the value of gear boxes, the highest value export item. Other important imported items are polycarbonates (US\$ 27.8 mn), iron and steel wire (US\$ 27.87), air conditioning machines (US\$ 21.6 mn) and cathode-ray TV picture tubes (US\$ 17.0 mn). This table also displays a very interesting trend. It shows that India is both exporting as well as importing iron and steel products to and from Thailand. This can be taken to be a sign of greater intra-industry trade between the two countries.

Table 5.9: Top Five exported and imported commodities from Thailand to India

Indian EHS exports to Thailand (in US\$ mn.)			Indian EHS imports from Thailand (in US\$ mn.)		
Commodity	2004-05	2005-06	Commodity	2004-05	2005-06
Gear Boxes (870840)	9.06	31.53	Reception parts for TV. Etc. colour (852812)	46.03	85.92
Other products containg by wt<0.25% crbn. (720719)	1.65	8.7	Polycarbonates in Primary forms (390740)	13.04	27.87
Articles of jewellery and parts thereof (711319)	3.39	5.53	Other articles of Iron or Steel wire (732690)	16.35	22.05
Other Aluminum Oxide (281820)	4.11	5.47	Air conditioning machines (841510)	10.55	21.64
Aluminium Alloys (760120)	0.75	5.26	Cathode-ray TV. Picture tubes (854011)	5.28	17.08
Total	47.24	88.06	Total	151.97	274.92

Source: Department of commerce, GOI

Note: Six-digit HS codes in parentheses

Mentionable in this regard is the list of commodities found by the India-Thailand FTA Feasibility Study (2002) to have the largest export potential for India once an India-Thailand Bilateral Agreement came into place. The list of commodity groups are: (i) fish and crustaceans, molluscs and other aquatic invertebrates (HS chp.3), (ii) edible fruit and nuts; peel or citrus fruit or melons (chp.8), (iii) coffee, tea, mate and spices (chp.9), (iv) articles of apparel and clothing accessories, knitted or crocheted (chp.61), (v) articles of apparel and clothing accessories, not knitted or crocheted (chp.62), (vi) raw hides and skins (other than furskins) and leather (chp.42), (vii) articles of apparel and clothing accessories, not knitted or crocheted (chp.63), (ix) footwear, gaiters and the like; parts of such articles' (chp.64), (x) vehicles other than railway or tramway rolling-stock, and parts and accessories thereof (chp.87). These are the commodities in which India has export competitiveness and Thailand has high levels of MFN tariffs.

A similar list for Thailand was also prepared which identified the different commodity groups in which Thailand would be able to get market access in India owing to the FTA. The commodity groups are: rice (HS chp.10), rubber and articles thereof (HS chp.40), plastic and plastic products (chp.39), fish and fish products (chp.3), articles of apparel and clothing accessories, knitted or crocheted (chp.61), articles of apparel and clothing accessories, not knitted or crocheted (chp.62), footwear, gaiters and the like; parts of such articles (chp.64), natural or cultured pearls, precious or semi-precious stones, precious metals, metal clads etc. (chp.71), electrical machinery and equipment and parts thereof (chp.85), and vehicles other than railway or tramway rolling-stock, and parts and accessories thereof (chp.87).

5.2.1 Commodity Trading Patterns

Similar to the analysis done earlier, this subsection displays the commodity wise change in share of a member country's exports and imports to the partner country. The share has been calculated as a percentage of total trade (i.e. exports and imports) in a particular commodity line. The first table of the subsection, i.e. Table 5.10 lists Chilean exports and imports as a percentage of US' total exports and imports. The table also lists the average share of particular commodities in the period from 2004-06, i.e. the period after the signing of the FTA. For India and Thailand, i.e. Table 5.11, the time period is 2004-05 and 2005-06 and the list comprises of EHS items only.

The commodity wise share analysis reveals Chile's unimportance to US exports. Most of the items exported cover only 3% of the total US trade in that product line. The commodity with the highest average share is cork and articles of cork with a share of 2.86%. Other commodities with high shares were mineral fuels (2.6%), fertilizers (2.3%), other textile products (2.2%) and lac (1.6%).

Chile is however, quite important from the US' point of view as far as imports are concerned. More than one-fifth or 21% of total US imports of copper products are sourced from Chile. Another comparably important Chilean import item is edible fruits and nuts, which accounts for 20% of the share of all imports of this item. Other

commodities with high average share are fish (8.9%), cereals (8.15%) and, ores, slag and ash (7.9%).

Table 5.10: Commodity wise share of US exports and Imports to Chile

US exports to Chile		US imports from Chile	
Commodity	Average share	Commodity	Average share
Cork and articles of cork. (45)	2.86%	Copper and articles thereof. (74)	21.04%
Mineral fuels, oils & products (27)	2.68%	Edible fruit and nuts; peel of citr (8)	20.29%
Fertilizers.(31)	2.37%	Fish & crustacean, mollusc & other (3)	8.91%
Other made up textile articles; set (63)	2.26%	Cereals (10)	8.15%
Lac; gums, resins & other vegetable (13)	1.67%	Ores, slag and ash (26)	7.94%
All commodities	0.56%	All commodities	0.44%

Source: USITC

Note: Two-digit HS codes in parentheses.

Analogous to the above table, Table 5.11 deals with Thai EHS exports and imports taken as a percentage of India's total exports and imports. Looking at the table creates an impression that Thailand is very important, in fact almost indispensable, to Indian trade. In both imports as well as exports, the share of Thailand in the top three commodities ranges between 37-56%. This is a very high share. However, it should be kept in mind that the EHS commodities are very detailed in their specification and since each of these six digit product lines composes of a very small part of the total, these high share figures are not surprising.

Exports of Indian mackerel to Thailand, constitutes the largest share of exports in its subgroup. In fact, more than half of all exports (56.2%) in this subgroup comprises of exports to Thailand. Some of the other important commodities are disc harrows (45.5%), gear boxes (39.39%), precious and semi-precious stones (10.5%) and other organic acids (6.3%).

On the imports side, Thai sardines make up the largest share, exactly half, in Indian imports of that product. This implies, trade in different types of fish products figures very highly in EHS trade between India and Thailand. The other important import items are reception parts of TV (48.4%), rambutans (37.4%), air conditioners (32.9%) and fresh mangosteens (27.7%). It should be remembered that the TV reception parts producers lobby is one of the most important producer groups voicing their disapproval against the India-Thailand agreement. The primary reason for their displeasure lies in the high import, both in value as well as share, of Thai TV parts.

Table 5.11: Commodity wise share of Indian exports and Imports to Thailand

Indian EHS exports to Thailand		Indian EHS imports from Thailand	
Commodity	Average share	Commodity	Average share
Mackerel, whole or in pieces (160415)	56.25%	Sardines, Sardenella, whole or in pieces (160413)	50.00%
Disc Harrows (843221)	45.55%	Reception parts for TV. Etc colour (852812)	48.40%
Gear Boxes (870840)	39.39%	Fresh Rambutans, longans, Pomegranates (081090)	37.40%
Precious and semi-precious stones, unworked or simply sawn or roughly shaped (710310)	10.50%	Air conditioning machines (841510)	32.95%
Other Inorganic Acids (281119)	6.31%	Fresh Mangosteens, Mangoes (080450)	27.78%
All commodities	2.51%	All commodities	5.23%

Source: Department of commerce, GOI

Note: Six-digit HS codes in parentheses.

5.2.2 Efficiency Assessment Indices

Till this point sufficient data has been put forward to indicate that there has been an expansion of trade, both absolutely and as a percentage of total trade. However, the question of whether these increases are along lines that are consistent with efficiency and the true comparative advantage of member countries has not been answered. The increase

in bilateral trade witnessed could have been due to the formation of the FTA or simply due to fact that global exports and imports have been rising overtime. Thus, the following section evaluates the extent to which these bilaterals solely accounted for the change in trade patterns. It also investigates the extent to which the increase in trade among the four FTA partners reflects “trade creation” and shifts of production to locations with comparative advantage, and to what extent it reflects trade diversion and a shift from low-cost producers in the rest of the world to higher cost producers in the partner country. Aggregate data has already been checked to confirm the existence of trade creation.

5.2.2.1 Regional Orientation Index

One way of settling the question of efficiency would be to determine whether or not the respective FTA member countries were also able to successfully export their fastest growing products in intra-trade to third countries also. Yeats (1998) phrased this question as-does the exchange in these goods meet the ‘test of the marketplace’? An important measure used in this context is the "regional orientation" index (R_j) for exports of country j , which is defined as,

$$R_j = [x_{rj} / X_{tr}] / [x_{oj} / X_{to}] * 100$$

where x_{rj} and x_{oj} represent the value of exports of j in total intra-trade flows and to third countries respectively. Similarly, X_{tr} and X_{to} , reflect the total value of member countries' exports within and outside the arrangement. Since the index is constructed in the context of two bilaterals, it would mean that the X_{tr} and X_{to} values would be computed by adding the relevant exports of the two countries together. This regional orientation (RO) index takes the ratio of the share of bilateral exports of j in total exports in the bilateral (or regional) arrangement and the share j 's exports to third countries to the total exports to third countries of all the countries in the arrangement. The index value ranges between zero and infinity with a value of unity indicating the same tendency to export to members and nonmembers, while increasing values indicate a greater tendency to export to regional markets.

Several specific points should be noted with regard to the properties of this index. First, it conveys only limited information about trade patterns if computed for a single point in time. Inter-temporal comparisons of this index over relatively short periods can provide useful information on the way the geographic pattern of trade is changing. The percentage changes in exports of different goods within a regional arrangement could be misleading if examined in isolation. This is because they convey no indication as to how demand for products in third markets was changing. The regional orientation index does not suffer from this defect and can, hence, convey useful information about changing trade patterns.

The regional orientation index of the four countries is given below. The average index for all years and FTA years has also been provided. As obvious, the case of US-Chile and India-Thailand are diametrically different. The figures reveal that Chilean exports are much more oriented for the US markets than third country market. This is expected to certain extent because US is the largest trade partner for Chile. As indicated by the index value, the significance of Chile for the US's trade flows is comparatively quite low. Thus, while the index value for Chile is quite high, the figure for US is miniscule. In fact, the figures for US suggest that its tendency to trade with Chile is even lesser than the tendency to trade with non-members.

The trade between India and Thailand is, on the other hand, just at the borderline. This means that the two countries trade with each other just like they would if the agreement was not signed, i.e. Thailand was a non-member. There is no added impetus to trade with each other following the bilateral agreement.

Cross checking these figures with the $D_x (\alpha_x)$ coefficient estimated in the previous chapter, it can be concluded that the figure should have been positive for both FTAs. In the US-Chile case, the Chilean index has been falling in the period after the FTA. Thus, there is no evidence of export diversion from its side. For the US, the share of Chile is even lesser than unity meaning that the propensity to trade with Chile is even lesser than the ROW. So no export diversion can be concluded. In the Indo-Thai agreement too, the

propensity to trade with the ROW has not improved. This can be inferred from the approximately unity value of the regional orientation index.

Table 5.12: Regional Orientation Index

Regional Orientation Index	2000	2001	2002	2003	2004	2005	Avg. (all years)	FTA avg.
Chile to US	23.93	25.67	27.24	23.02	16.76	15.29	21.98	16.02
US to Chile	0.52	0.49	0.44	0.45	0.46	0.47	0.47	0.46
India to Thailand	1.24	1.37	1.49	1.29	1.10	0.85	1.22	0.98
Thailand to India	0.85	0.74	0.65	0.78	0.92	1.13	0.85	1.03

Source: DOTS, IMF

5.2.2.2 Revealed Comparative Index

Another related point, which may arise from the above discussion, is that the countries' rising intra-trade may or may not be in sectors where the countries have their highest comparative advantage. Thus, this gives rise to the question whether the increased bilateral trade was in sectors where the countries had demonstrated an ability to compete in markets where they were not shielded by preferential trade arrangements. (Yeats 1998)

To answer this question, a second index, which reflects "revealed" comparative advantage, could be computed for each country in the arrangement and for each traded product. This index was developed by Balassa (1965) who first theorized that a country's comparative advantage was "revealed" by its observed trade patterns. Thus, unobservable pre-trade relative prices were not necessarily required for calculating comparative advantage.

This measure (C_j) for "revealed" comparative advantage is defined as,

$$C_j = [x_{rj} / X_r] [x_{wj}^* / X_w^*] \cdot 100$$

where x_{wj} and X_w represent world exports of product j and total world exports. The index compares the share of product j 's exports in total domestic exports with the share of product j 's world exports to total world exports. An RCA equal to unity would indicate that the share of the commodity is the same in the domestic export basket as also the world total export basket. There is thus no comparative advantage in the production of this commodity. This index can be considered to be an indirect measure of trade diversion. This is because the index reveals whether or not the additional trade generated by the FTA was in the products that had high competitiveness in third markets. In case it was not so, it suggests that the additional trade created was of diversionary nature since it could have been replaced by more efficient outside suppliers.

Like the Regional Orientation index, there have been some criticisms leveled against the Revealed Comparative Advantage index too. First is that since the index measures differences in shares, it reveals nothing about the absolute levels of trade flows. Thus, two countries may have the same RCA indices of products despite having totally different production capacities. Another criticism may be that the RCA index values cannot be strictly compared overtime. This is because while the numerator, i.e. the share of a product, is changing with time, the denominator too would be changing overtime. Thus, it is the effect of both the changes that is displayed by the changes in RCA values overtime. However, this index remains quite popular among economist because of its relative simplicity and the astute insight of commodity trading patterns provided by it.

Table 5.13 shows the commodities with the highest RCA values for Chile as well as the US. The RCA has been computed for the year 2003, so as to provide a starting point for the analysis. Thus, the computed RCA would help in indicating whether or not trade has actually grown in those areas in which the countries had their highest efficiency. In the Chilean case, most of the commodities with high RCA values are primary products, the only exception to the rule being the case of plastics. Thus, an argument could be made that Chile is exporting to the US, products in which it is most efficient.

From the US' standpoint, the commodity in which it is the most competitive is plastics in primary forms. Another important commodity in this regard is arms and ammunition. The other three top commodities are astonishingly all agricultural commodities. The US has been admonished time and again for its domestic subsidies to agriculture by the WTO. Thus, it would not be surprising if the high competitiveness of US in primary commodities had something to do with these payments.

Table 5.13: Chile and US Export Commodities with the highest RCA indices (SITC classification)

Chile		US	
Commodities	RCA Index (2003)	Commodities	RCA Index (2003)
Copper (682)	58.5	Other plastics, in primary forms (575)	74.3
Wood in chips or particles and wood waste (246)	23.8	Arms and ammunition (891)	5.3
Fish, fresh (live or dead), chilled or frozen (034)	20.8	Maize (not including sweet corn), unmilled (044)	4.7
Other plastics, in primary forms (575)	18.4	Oil-seeds and oleaginous fruits (222)	4.3
Fruit and nuts (not including oil nuts), fresh or dried (057)	17.3	Cereals, unmilled (other than wheat, rice, barley and maize) (045)	4.1

Source: International Trade Statistics, International Trade Center and WITS, COMTRADE

Note: Three-digit SITC codes in parentheses.

It is of interest to note that for both India as well as Thailand, plastics rank as the product with the highest comparative advantage. Rice also figures in this list for both the countries. Thus, the similarity of export bundle between countries involved in South-South trade is quite openly visible.

Rubber, tea and rice are important and sensitive products for both the countries and thus, they have not yet been included in the EHS list. In the Indian case, high competitiveness of precious and semi-precious stones is largely expected. All other entries for both the countries are chiefly primary commodities.

Table 5.14: India and Thailand Export Commodities with the highest RCA indices (SITC classification)

India		Thailand	
Commodities	RCA Index	Commodities	RCA Index
Other plastics, in primary forms (575)	50.3	Other plastics, in primary forms (575)	51.5
Pearls and precious or semiprecious stones (667)	16.9	Natural rubber (231)	41.9
Stone, sand and gravel (273)	15.6	Rice (042)	24.3
Rice (042)	15.2	Fish, crustaceans, molluscs (037)	18.2
Tea and maté (074)	13.9	Natural abrasives (277)	15.0

Source: International Trade Statistics, International Trade Center and WITS, COMTRADE

Note: Three-digit SITC codes in parentheses.

5.2.2.3 Competitiveness Versus Actual Growth Rates

The following tables form the most important part of the subsection. These tables deal with whether or not the commodity lines growing the fastest after the formation of the FTA, have been the ones with the highest RCA.

In the case of the US-Chile agreement, the data has been streamlined to include only those commodities whose value in 2006 exceeded one million US dollars. Additionally, commodities displaying wildly volatile trends have also been excluded.

Precious and semi-precious stones, is the commodity line in which US exports to Chile has grown the fastest. The related RCA however reveals that the share of this commodity line is much smaller than the share of this commodity in total world exports. Thus, this indicates that the highest growing commodity line is the one in which it has less than average competitiveness. Another such product line, i.e. with a high growth rate but low RCA, is alcohols, phenols and phenol-alcohols. For all the other high growing commodities, the RCA index is more than one. For animal Oils and fats, the RCA index is at the highest at 3.32.

As regards US imports to Chile, the fastest growing commodity was non-ferrous base metal waste. It also had a high RCA index as far as Chile's comparative advantage was concerned. Of the top five rapidly growing commodity lines, three had RCA indices

above one. Interestingly, the data shows that US imports aircrafts and spacecrafts from Chile. As has been mentioned above the trade in this commodity exceeds 1 million and grew at an average rate of 274.6% in the three years after the signing of the FTA. Chile's low RCA in this commodity line is clearly visible.

Table 5.15: Comparison of Commodity Growth Rates with the Corresponding RCA Values (SITC Classification)

US exports to Chile			US imports from Chile		
Commodity	Growth rate	RCA Index	Commodity	Growth rate	RCA Index
Pearls and precious or semiprecious stones, unworked or worked (667)	1081.8%	0.97	Non-ferrous base metal waste and scrap (288)	1029.2%	4.87
Animal oils and fats (411)	879.1%	3.32	Pig-iron, spiegeleisen, sponge iron, iron or steel granules and powders and ferro-alloys (671)	282.5%	1.11
Steam or other vapour-generating boilers (711)	398.2%	1.31	Aircraft and associated equipment; spacecraft (including satellites) and spacecraft launch vehicles; parts thereof (792)	274.6%	0.06
Alcohols, phenols, phenol-alcohols and derivatives (012)	347.9%	0.84	Wood in the rough or roughly squared (247)	255.5%	1.52
Steam turbines and other vapour turbines (712)	340.9%	1.12	Other textile fabrics, woven (654)	190.1%	0.42

Source: USITC and International Trade Statistics, International Trade Center

Note: Three-digit SITC codes in parentheses.

In the Indian case an approximate matching has been done between growth rates calculated for 6 digit HS code items and RCA indices calculated for 3 digit SITC items. As regards Indian exports to Thailand, aluminium exports register at the top of the list. Both the fastest as well as the second fastest growing commodity groups are related to aluminium.

For Thai imports into India, iron and steel products figured at the top of the list. Digital automatic data processing machines stood second. It should be noted that the RCA for most of the items is very low, the maximum being 0.67. This is because EHS is a preliminary step before a full-fledged FTA. Thus, mostly items of low importance or of a non-controversial nature have been included in the list.

Table 5.16: Comparison of Commodity Growth Rates with the Corresponding RCA Values (SITC Classification)

Indian exports to Thailand			Indian imports from Thailand		
Commodity	Growth rate	RCA Index	Commodity	Growth rate	RCA Index
Aluminium Alloys (710510)	37.0%	0.67	Othr Prdcts Contng By WT<0.25% Of Carbon (390810)	8.75%	0.08
Other Aluminium Oxide (281820)	19.5%	0.67	Othr Dgntl Automatic Data Procesng Machns (841490)	8.5%	0.10
Weighng Mchn Weights & Prts of the Mchnry (840490)	14.0%	0.25	Receptn Parts for TV (852812)	5.125%	0.29
Printed Circuits (848079)	3.8%	0.28	Ball Bearings (843780)	3.5%	0.04
Othr Parts of Fltrng/Purfyng Mchnry (760120)	3.0%	0.25	Mchnry for Moulding/ Retreading Pneumatic Types (841990)	3%	0.14

Source: Department of commerce, GOI and International Trade Statistics, International Trade Center

Note: Three-digit SITC codes in parentheses.

5.3 Summary

Data for the direction and composition of trade shows that there has been an increase in intra-trade. It also shows that for most cases the goods that are being exported the most are also the ones with the highest competitiveness. However, the situation is not similar for the fastest growing commodities.

The constructed indices show that, excepting in a few sectors, Chile is quite unimportant for the US as a trade partner. This clearly shows that the US' desire to form an FTA with Chile is governed by factors other than trade. For Chile, US is the largest and most important partner. However, it too is diversifying away from the US toward other countries. Aggregate data also shows that Thailand and India are carrying on business as usual. This means that there is not much added impetus to trade after the formation of the FTA.

Comparing the results obtained in this chapter with the ones derived in the previous one, leads to the conclusion that for both FTAs there has been an increase in intra-trade. Data is however non conclusive about the prevalence of trade diversion. Additionally, figures show that for North-South agreements, trade is a very small part of the agreement. In the case of the South-South agreements, on the other hand, the correct trade potential cannot be correctly estimated using just the current figures. The product lines opened for free bilateral trade, are still too less for a general statement being made. The potential for higher intra-trade is however, visible to some degree.

Chapter 6: Summary and Conclusions

Chapter 6: Summary and Conclusions

The above study had started with the objective of finding answers to three questions. To recapitulate, the first question related to the costs of and benefits from regionalism, the second related to the assessment of effectiveness of the two types of agreements, and the third and final question dealt with the topic of motivations for an agreement even if it is deemed ineffective.

Attempts at answering most of the above-mentioned questions have been made in the study. **Chapter Two** has shown the development of models down the ages, imbibing higher and higher theoretical sophistication that seek to explain the costs and benefits of FTAs. The movement towards 'new regionalism' from 'old regionalism' has especially spurred the impressive development of models.

There has also been a development of theories advocating North-South agreements and South-South agreement. This makes the choice for a South country regarding 'with whom to trade' even more confusing. The study brings together a substantial amount of empirical work that provides ample proof for the statement that South-South agreements are superior to North-South agreements. Most of the claims of the typical North-South arguments are also found to be refutable. On top of the alleged ineffectiveness, the situation is made worse by the fact that North-South agreements typically involve many extractive 'beyond the border' clauses that encroach upon domestic government policy space. In addition, despite the above-mentioned 'ineffectiveness', the Southern countries still seem to be in a rush to sign North-South agreement. The most important reason spurring such a movement seems to be the 'fear of exclusion' of the developing countries.

The theoretical claims made in the second chapter, are investigated further in the third, fourth and the fifth chapters. **Chapter Three** uses the evidence of India-Thailand and

US-Chile agreements to bring out the differences between North-South and South-South agreements. It should be noted that the India-Thailand bilateral illustrates the example of a South-South agreement while the US-Chile agreement shows the workings of a North-South agreement. The texts of both the agreements are discussed in detail in this chapter. The extractive clauses of the US-Chile agreement are clearly noticeable. Additionally, many of the clauses included in this bilateral are even more stringent than those included in the NAFTA text. This might provide a glimpse of the things to come if developing countries keep on rushing to form North-South agreement wherein the clauses of subsequent agreements keep on becoming more extractive and unequal towards the southern partner.

In the India-Thailand bilateral too some unresolved bones of contention have been noticed. The dissatisfaction is rooted in the belief that the agreement is benefiting one partner at the cost of the other. However, it should be noted that the development is just an example of the trade creation effects and for India it is largely welfare inducing. The traverse argument further shows that the benefits of a South-South agreement become apparent over a period of time and a static comparison may be erroneous. The negative long-term effects of a North-South agreement, on the other hand, are clear from their inception itself.

As has been mentioned earlier, **Chapter Four** provides the empirical backbone for the conjectures made in the previous chapters. The much-used gravity model is used to evaluate the trade effects of the Indo-Thai agreement and the US-Chile agreement. The equation models trade as a function of GDPs, populations, distance, cultural similarities, etc. Putting in dummies for an FTA into the gravity model and examining its coefficient enables the effect of an FTA to be observed.

The gravity model results show that for both the India-Thailand and US-Chile agreements there have been increases in intra trade. The two bilaterals, however, differ in their impact on extra trade. While in the India-Thailand agreement there may be a minor degree of trade diversion involved, in the US-Chile case, the trade diversion effect is

predominant. This evidently proves that while the India-Thailand agreement has been mainly trade creating, the US-Chile agreement has been purely trade diverting.

Chapter Five provides an analysis of actual bilateral trade data for the four countries in question. Data for the direction and composition of trade reveals that there has been an increase in intra-trade. Data is however non conclusive about the prevalence of trade diversion. Figures also show that for most cases the goods that are being exported the most are also the ones with the highest competitiveness. Though, the situation is not similar for the fastest growing commodities

The constructed indices show that, excepting in a few sectors, Chile is quite unimportant for the US as a trade partner. This clearly lends support to the hypothesis that the US' desire to form an FTA with Chile has been governed by factors other than trade. For Chile, US is the largest and most important partner. However, it too is diversifying away from the US toward other countries. Aggregate data shows that Thailand and India are carrying on business as usual. This means that there is not much added impetus to trade after the formation of the FTA.

It should be noted that in the India-Thailand case, the trade potential cannot be correctly estimated using just the current figures. The product lines opened for free bilateral trade, are still too small in number for a general statement to be made. The potential for higher intra-trade is however, visible to some degree.

Bibliography

Bibliography

- Abugattas Majluf, Luis. 2004. "Swimming in the Spaghetti bowl: Challenges for Developing Countries in New Regionalism." Study Series No. 27, UNCTAD, Geneva.
- Amjadi, Azita, and L. Alan Winters. 1999. "Transport Costs and 'Natural' Integration in Mercosur." *Journal of Economic Integration*, Vol. 14(4), pp. 497-521.
- Anderson, James E., and Eric van Wincoop. 2003. "Gravity with Gravitas: A Solution to the Border Puzzle." *American Economic Review*, Vol. 93, pp. 170-192.
- Avila, John Lawrence, Michael Lynch, and George Manzano. 2003. "Looking Before Leaping into Bilateral FTAs: Issues in Asian Bilateralism." PASCN Working Paper, Philippine APEC Study Center Network, Makati City.
- Baier, S.L., and J.H. Bergstrand. 2002. "On the Endogeneity of International Trade Flows and Free Trade Agreements." American Economic Association Annual Meeting.
- Baier, S.L., and J.H. Bergstrand. 2004. "Do Free Trade Agreements Actually Increase Members International Trade?" Working Paper No. 2005-03, Federal Reserve Bank of Atlanta.
- Balassa, B. 1965. "Trade Liberalization and 'Revealed' Comparative Advantage." *The Manchester School of Economic and Social Studies*, Vol. 33, pp. 92-123.
- Baldwin, Richard E. 1997. "The Causes of Regionalism." *World Economy*, Vol. 20 (7), pp. 865-88.
- Baldwin, Richard E. 2003. "Asian Regionalism: Promises and Pitfalls." presented at conference "Prospects for Economic Cooperation in East Asia." KIEP, Seoul, September 27 2002.
- Baldwin, Richard E., 1995. "A Domino Theory of Regionalism." In Richard E. Baldwin, Pertti Haaparanta, and Jaakko Kiander, eds., *Expanding Membership of the European Union*. Cambridge University Press. Cambridge, U.K.
- Baldwin, Richard E., and Anthony J. Venables. 1995. "Regional Economic Integration." In Gene Grossman and Kenneth Rogoff, eds., *Handbook of International Economics*, Vol. 3, Pp. 1597-1644. Amsterdam: North-Holland.
- Bayoumi, Tamim, and Barry Eichengreen. 1997. "Is Regionalism Simply a Diversion? Evidence from the Evolution of the EC and EFTA." In Takatoshi Ito and Anne O. Krueger, eds., *Regionalism versus Multilateral Trade Arrangements*. NBER-East Asia Seminar on Economics, vol. 6, University of Chicago Press, Chicago.

Bhagwati, Jagdish, Pravin Krishna, and Arvind Panagariya, eds. 1999. "Trade Blocks. Alternative Approaches to Analyzing Preferential Trade Agreements." MIT Press, Cambridge, Massachusetts.

Bhagwati, Jagdish. 1990. *The World Trading System at Risk*. Princeton University Press, Princeton, N.J.

Bhagwati, Jagdish 1995. "US Trade Policy: The Infatuation with Free Trade Areas." in Jagdish Bhagwati and Anne O. Krueger. eds. *The Dangerous Drift to Preferential Trade Agreements*, AEI Press, pp. 1-18.

Brown, Drusilla K., Alan V. Deardorff, and Robert M. Stern. 1998. "Computational Analysis of the Accession of Chile to the NAFTA and Western Hemisphere Integration." Discussion Papers Series No. 9820, Department of Economics, Tufts University.

Burfisher, Mary E., Sherman Robinson, and Karen Thierfelder. 2004. "Regionalism: Old and New, Theory and Practice" MTID Discussion Paper No. 65, Markets, Trade and Institutions Division, International Food Policy Research Institute.

Carrère, Cèline. 2004. "Revisiting the Effects of Regional Trade Agreements on Trade Flows with Proper Specification of the Gravity Model." *European Economic Review*, Vol. 50, pp. 223–247.

Carrillo, Carlos and Carmen Li. 2002. "Trade Blocks and the Gravity Model: Evidence from Latin American Countries." Discussion Paper, University of Essex.

Cernat, Lucian. 2001. "Assessing Regional Trade Arrangements: Are South-South RTAs More Trade Diverting?" Policy Issues in International Trade and Commodities Study Series No. 16, United Nations Conference on Trade and Development (UNCTAD), Geneva.

Cernat, Lucian. 2003. "Assessing South-South Regional Integration: Same Issues, Many Metrics." Policy Issues in International Trade and Commodities Study Series No. 21, United Nations Conference on Trade and Development (UNCTAD), Geneva.

Coe, David T., Elhanan Helpman, and Alexander W. Hoffmaister. 1997. "North- South R&D Spillovers." *Economic Journal*, Vol. 107, Pp. 134-49.

Das, Ram Upendra, Somchai Ratanakomut, and Sothitorn Mallikamas. 2002. " A Feasibility Study on A Free Trade Agreement between India and Thailand." Research and Information System for the Non-Aligned and Other Developing Countries (RIS) and Faculty of Economics, Chulalongkorn University. Prepared for the Joint Working Group on India-Thailand Free Trade Agreement (Ministry of Commerce, Govt. on India and Ministry of Commerce, Govt. of Thailand).

- Deardorff, A. 1998. "Determinants of Bilateral Trade: Does Gravity Work in a Neoclassical World? In Frankel, J.A. (Ed.), *The Regionalization of the World Economy*. University of Chicago Press, Chicago (Chapter 1).
- DeRosa, Dean A. 1998. "Regional Integration Arrangements: Static Economic Theory, Quantitative Findings, and Policy Guidelines" Policy Research Working Paper No. 2007, World Bank, Washington D.C.
- DeRosa, Dean A. and John P. Gilbert. 2005. "Predicting Trade Expansion under FTAs and Multilateral Agreements" Working Paper No. WP 05-13, October 2005, Institute for International Economics.
- Dinopoulos, Elias, and Paul Segerstrom. 2006. "North-South Trade and Economic Growth" CEPR Discussion Paper No. 5887, October 2006, Centre for Economic Policy Research (CEPR), London.
- Economic Commission for Latin America and the Caribbean. 2002. "The Chilean Strategy of Trade Liberalization and Market Access." prepared for the PECC Trade Forum, May 17-19 2002, Lima, Peru.
- Eichengreen, Barry and Irwin, Douglas A. 1998. "The Role of History in Bilateral Trade Flows," in Jeffrey A. Frankel, ed., *The Regionalization of the World Economy*. University of Chicago Press, Chicago, pp. 33-57.
- Egger, P. 2000. "A Note on the Proper Econometric Specification of the Gravity Equation" *Economic Letters*, Vol. 66, pp. 25-31.
- Egger, P. 2002. "An Econometric View on the Estimation of Gravity Models and the Calculation of Trade Potentials." *The World Economy*, Vol. 25, pp. 297-312.
- Egger, Peter, and Michael Pfaffermayr. 2003. "The Proper Panel Econometric Specification for the Gravity Equation: A Three-Way Model with Bilateral Interaction Effects." *Empirical Economics*, Vol. 28 (3), pp. 571-580.
- Elbadawi, I. 1997. "The Impact of Regional trade and Monetary Schemes on Intra-SubSaharan Africa Trade." in A. Oyejide, I. Elbadawi, and P. Collier (Eds.), *Regional Integration and Trade Liberalization in Sub-Saharan Africa: Framework, Issues and Methodological Perspectives*, Vol. 1, pp. 210-255.
- Ethier, W. J. 1998. "Regionalism in a Multilateral World." *Journal of Political Economy*, Vol. 106(6), pp. 1214-45.
- Feenstra, Robert C., James A. Markusen, and Andrew K. Rose. 2000. "Using the Gravity Equation to Differentiate Among Alternative Theories of Trade." *The Canadian Journal of Economics*, Vol. 34, No. 2 (May, 2001), pp. 430-447.

Fernandez, Raquel, and Jonathan Portes. 1998. "Returns to Regionalism: An Analysis of Nontraditional Gains from Regional Trade Agreements." *World Bank Economic Review* 12 (2), pp. 197-220.

Federation of Indian Chambers of Commerce and Industry. 2005. "FICCI Survey on India Thailand FTA - Emerging Issues." FICCI, New Delhi.

Findlay, Christopher, Haflah Piei and Mari Pangestu. 2003. "Trading With Favourites: FTA in the Asia Pacific." *Pacific Economic Paper No.335*, Australia-Japan Research Centre, The Australian National University, Canberra.

Foroutan, Faezeh. 1998. "Does Membership in a Regional Preferential Trade Arrangement Make a Country More or Less Protectionist?" *World Economy*, Vol. 2, pp. 305-36.

Frankel, J.A. 1997. "Regional Trading Blocs in the World Economic System." Institute for International Economics. Washington. DC.

Frankel, Jeffrey A., Ernesto Stein and Shang-jin Wei. 1995. "Trading Blocs and the Americas: The Natural, the Unnatural, and the Super-natural?" *Journal of Development Economics*, Vol. 47, pp. 61-95.

Frankel, Jeffrey A., Ernesto Stein, and Shang-Jin Wei., 1996 "Regional Trading Arrangement: Natural or Super-Natural?" NBER Working Papers 5431, National Bureau of Economic Research.

Freund, Caroline. 2004. "Reciprocity in Free Trade Agreements." Working Paper No. 279, Central Bank of Chile.

Gibbs, Murray and Swarnim Waglé. 2005. "The Great Maze: Regional and Bilateral Free Trade Agreements in Asia." Policy Paper, Asia-Pacific Trade and Investment Initiative, UNDP Regional Center, Colombo.

Griffin, Keith. 1969. "Underdevelopment in Spanish America: An Interpretation." George Allen and Unwin Ltd.

Harrison ,Glenn W., Thomas F. Rutherford and David G. Tarr. 2003a. "Chile's Regional Arrangements: the Importance of Market Access and Lowering the Tariff to Six Percent" Working Paper No. 238, Central Bank of Chile, Santiago.

Harrison, Glenn W., Thomas F. Rutherford, and David G. Tarr. 2001. "Chile's Regional Arrangements and the Free Trade Agreement of the Americas: The Importance of Market Access." World Bank Policy Research Working Paper No. 2634., The World Bank, Washington, DC.

- Hausman, A., and E. Taylor. 1981. "Panel Data and Unobservable Individual Effects." *Econometrica*, Vol. 49, pp. 1377-1398
- Hausman, J. A. 1978. "Specification Tests in Econometrics." *Econometrica*, Vol. 46, pp. 1251-1271.
- Kemp, M. C., and H. Wan, Jr. 1976. "An Elementary Proposition Concerning the Formation of Customs Unions." *Journal of International Economics*, Vol. 6, pp. 95-97.
- Khor, Martin. 2003. "The WTO Singapore Issues: What's at stake and why it matters." TWN briefing paper No.16.
- Krueger, A.O., 1999. Trade creation and trade diversion under NAFTA. NBER Working paper No. 7429, National Bureau of Economic Research, Cambridge.
- Linder, B.S. 1961. "An Essay on Trade and Transformation." Almqvist and Wiksell, Stockholm
- Linnemann, Hans. 1966. "An Econometric Study of International Trade Flows" Amsterdam, North-Holland.
- Lloyd, P. J., and Donald MacLaren. 2003. "The Case for Free Trade and the Role of RTAs" paper presented at the Seminar on Regionalism and the WTO, Geneva, 14 November 2003.
- Lo Turco, Alessia. 2003. "South-South Regional Trade Agreements and Growth. A Panel Data Approach to the Evaluation of Three Latin American Trade Agreements." Working Paper No. 190, Università Politecnica delle Marche (I), Dipartimento di Economia
- Lo Turco, Alessia. 2005. "South-South Trade Agreements, Location of Production and Inequality in Latin America." Discussion Paper No. 127, November 2005, Ibero-America Institute for Economic Research.
- Madani, Dorsati H. 2001. "South-South Regional Integration and Industrial Growth: The Case of the Andean Pact." World Bank Policy Research Working Paper No. 2614, World Bank, Washington, D.C.
- Matyas, L. 1997. "Proper Econometric Specification of the Gravity Model." *The World Economy*, Vol. 20, pp. 363-368.
- Meade, J.E. (1955), *The Theory of Customs Unions*, North-Holland, Amsterdam.
- Mehta, Rajesh. 2002. "Potential of India's Bilateral Free Trade Arrangements: A Case Study of India and Thailand." RIS Discussion Paper No. 24/2002, Research and Information System for the Non-Aligned and Other Developing Countries (RIS).

- Obstfeld, M., Rogoff, K., 2001. "The six major puzzles in international macroeconomics. Is there a common cause?" NBER Working paper 7777, National Bureau of Economic Research (NBER), London.
- Panagariya, Arvind. 1999. "Preferential Trade Liberalization: The Traditional Theory and New Developments." *Journal of Economic Literature*, Vol. 38, No. 2, pp. 287-331
- Pizzaro, R. 2006. "The free trade agreement between US and Chile, The Ideas Working Paper Series, Paper No.02/2006, IDEAs RePEc Website.
- Polak, J.J. 1996. "Is APEC a natural regional trading bloc?" *The World Economy* 19, pp. 533-543.
- Pöyhönen, P. 1963. "A tentative model for the flows of trade between countries." *Weltwirtschaftliches Archiv*, Vol. 90(1).
- Rajan, Ramkishan S., and Rahul Sen. 2005. "The New Wave of FTA in Asia." ADB Volume on Asian Economic Cooperation and Integration, pp. 123-160, Asian Development Bank, Manila.
- Schiff, Maurice. 1996. "Small Is Beautiful : Preferential Trade Agreements and the Impact of Country Size, Market Share, Efficiency, and Trade Policy." Policy Research Working Paper No. 1668, World Bank, Washington, D.C.
- Schiff, Maurice. 2002. "Chile's Trade Policy: an Assessment." Working Paper No. 151, Central Bank of Chile, Santiago.
- Schiff, Maurice, and L. Alan Winters. 2003. *Regional integration and development.* Oxford University Press, Oxford.
- Schiff, Maurice, and Yanling Wang. 2002a. "Regional Integration and Trade-Related Technology Diffusion: The Case of NAFTA." World Bank, Development Research Group, Trade, Washington, D.C. Processed.
- Schiff, Maurice, and Yanling Wang. 2002b. "Technology Diffusion and Productivity Gains: Mexico and Poland's Trade with CUSFTA and the E.U." World Bank, Washington, D.C.
- Schiff, Maurice, and Yanling Wang. 2004a. "North-South Technology Diffusion, Regional Integration, and the Dynamics of the "Natural Trading Partners" Hypothesis." IZA Discussion Paper No. 1384, Institute for the Study of Labor (IZA).
- Schiff, Maurice, and Yanling Wang. 2004b. "On the Quantity and Quality of Knowledge Diffusion: The Impact of Openness and Foreign R&D on North-North and North-South

R&D Spillovers." Policy Research Working Paper No. 3190, World Bank, Washington, D.C.

Schiff, Maurice, Yanling Wang, and Marcelo Olarreaga. 2002. "Trade-Related Technology Diffusion and the Dynamics of North-South and South-South Integration." Policy Research Working Paper No.2861. World Bank, Development Research Group, Trade, Washington, D.C.

Schott, Jeffrey, ed. 2004. "Free Trade Agreements. US Strategies and Priorities" Institute for International Economics, Washington, D.C.

Slotmackers, Veerle. 2004. "Trade Effects of the EU- Mexico FTA." ASP Working Paper No.416, Kiel Institute for World Economics, Germany.

Soloaga, Isidro, and L. Alan Winters. 2001. "Regionalism in the Nineties: What Effect on Trade?" Policy Research Working Paper 2156. World Bank, Washington, D.C.

Stewart, F., 1978, *Technology and Underdevelopment*, London: MacMillan.

Streeten, Paul. 1962. "Economic Integration: Aspects and Problems." *The American Economic Review*, Vol. 52, No. 3, pp. 610-612.

Summers, Lawrence H. 1991. "Regionalism and the World Trading System." In *Policy Implications of Trade and Currency Zones: A Symposium Sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, August 22-24, 1991*.

Tinbergen, J. 1962. "Shaping the World Economy: Suggestions for an International Economic Policy." New York: The Twentieth Century Fund.

United States International Trade Commission. 2003. "US Chile Free Trade Agreement: Potential Economywide and Selected Sectoral Effects." Investigation No. TA-2104-5, USITC Publication 3605.

Venables, Anthony J. 1999. "Regional Integration Agreements: A Force of Convergence or Divergence." Policy Research Working Paper No.2260, World Bank, Washington, D.C.

Viner, Jacob. 1950. "The Customs Union Issue." *Carnegie Endowment for International Peace*, New York.

Wonnacott, Paul, and Mark Lutz. 1989. "Is There a Case For Free Trade Areas?" In Jeffrey Schott, ed., *Free Trade Areas and US Trade Policy*, 59-84. Institute for International Economics, Washington, D.C.

Wonnacott, Paul, and Ronald Wonnacott. 1981. "Is Unilateral Tariff Reduction Preferable to a Customs Union? The Curious Case of the Missing Foreign Tariffs." *American Economic Review*, Vol. 71(4), pp. 704-14.

Wooldridge, J.M., 2002. "Econometric Analysis of Cross-section and Panel Data." MIT Press, Cambridge, MA.

Yeats, A. 1998. "Does Mercosur's Trade Performance Raise Concerns About the Effects of Regional Trade Arrangements?" *World Bank Economic Review*, Vol. 12, Pp. 1-28.